DIVISION OF TRAFFIC OPERATIONS
CALIFORNIA DEPARTMENT
OF TRANSPORTATION

Traffic Operations Manual

Chapter 130 Traffic Incident Management

July 2025

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Section 1 Introduction

Traffic Incident Management (TIM) provides coordinated strategies for detecting, responding to, and clearing traffic incidents on the State Highway System (SHS). TIM increases safety, improves traffic operations, and enhances communication, while also contributing to improvement in air quality, energy efficiency, and overall roadway system performance, as outlined by the Federal Highway Administration (FHWA).

This chapter is intended as a guide for traffic incident responders to help with decision-making in the field. The goal of TIM is for the California Department of Transportation (Caltrans), law enforcement, emergency medical services (EMS), personnel, and other incident responders to be dispatched as rapidly as possible and to clear traffic incidents from the traveled way and the state right-of-way as quickly and safely as possible. Safe, quick clearance of incidents depends on strong, coordinated, and cooperative multi-agency operations. The rapid response of Traffic Management Center (TMC) staff, first responders, and other field personnel can help prevent secondary incidents, such as end-of-queue collisions, and can drastically reduce congestion by decreasing incident clearance time, providing detailed and timely traffic information to the public, and using Changeable Message Signs (CMSs) and temporary signs to inform the public of available detours.

To support the goal of safe and quick incident clearance, it is important to build and maintain relationships and information sharing with all agencies and personnel involved in the incident clearance process.

Successful TIM can save lives, reduce non-recurring congestion, and save millions of dollars that would have been lost to travel delays. Caltrans and the California Highway Patrol (CHP) are committed to safeguarding the traveling public and those responding to traffic incidents while reducing congestion and traffic delays from incidents that occur on SHS.

Note: Per California Vehicle Code (CVC), Section 2400, CHP has primary jurisdiction over all traffic collisions on all toll highways and state highways constructed as freeways, including transit-related facilities located on or along the rights-of-way of those toll highways or freeways (with the exception of some incorporated areas).

Per California Streets and Highways Code (SHC), Sections 92, 124, and 127, Caltrans may do any act necessary, convenient, or proper for the maintenance of all highways which are under its jurisdiction, possession, and control. Caltrans may restrict the use of or close any state highway whenever Caltrans considers it necessary, and the CHP shall cooperate with Caltrans in the enforcement of the closing or restriction of use.

Disclaimer: This chapter is not intended as, nor does it establish a legal standard. It is subject to amendment as conditions and experience warrant. Certain situations may call for variations from the information in this chapter, subject to the approval called for herein.

The publication of this chapter does not create or impose any standard of conduct or duty to the public. Statements about the duties or responsibilities of any given organization, or its employees or officers, refer only to the duties or responsibilities owed by the organizations to each other, or owed by the employees and officers to their respective organizations.

Please submit any comments or questions on this chapter to the traffic incident management program coordinator.

Given the unique nature of each incident, these guidelines are not intended to replace technical expertise, experience, or professional judgment. Instead, every responder must evaluate each incident individually to determine the most suitable response, considering the specific conditions and challenges involved. Decision-making should be guided by situational awareness and the resources available in terms of equipment, material, and personnel.

Topic 1 Incident Command System

Agencies responding to incidents on SHS will utilize the National Incident Management System (NIMS) per Section 6I.01 of the *California Manual on Uniform Traffic Control Devices (CA MUTCD)*. NIMS requires the use of the Incident Command System (ICS), a standardized, on-scene, all-risk incident management concept. The first arriving emergency responder will establish command. Per CVC, Section 2400, upon arrival, CHP or the senior law enforcement official will assume command of the incident. Agencies will cooperate and work together for the safe and efficient mitigation of the incident. Caltrans, law enforcement, fire, and EMS representatives are expected to make decisions based on their experience and expertise in their respective fields to contribute to the successful management of the incident. Any decisions made will be communicated to other agency representatives to coordinate efforts. The CHP or other senior law enforcement official on scene will make the final determination for any disputes that may arise involving the incident. The senior Caltrans official on scene will make the final determination regarding any disputes that may arise involving transportation facilities.

Topic 2 Roles and Responsibilities

The roles and responsibilities described in this section illustrate how agencies and emergency service providers are typically involved in the traffic incident management process. Roles and responsibilities will vary based on the severity of incidents and jurisdictional boundaries.

Incident Commander

Uniformed CHP personnel shall assume incident command at incidents where they have primary investigative authority (CVC, Section 2400). The highest-ranking CHP official at the incident is the on-scene incident commander.

Typical incident commander responsibilities include:

- Directing resources to where they will be most effective.
- Ensuring emergency vehicles operate by the law and responding agency standard operational guidelines.
- Ensuring that the welfare of all involved parties takes precedence over collision investigation duties.
- Ensuring that the injured receive appropriate care and that a safe environment for the motoring public, involved parties, and emergency service providers is maintained.
- Ensuring that jurisdictions affected by hazardous material spills are contacted promptly. Monitoring the situation and confirming that a response from affected political subdivisions, allied agencies, or both has been received.

The responsibility for incident command may shift if the incident evolves into a widespread multi-jurisdictional emergency incident. However, the CHP incident commander shall maintain incident command duties, responsibilities, and investigative authority at the original site of the incident.

ICS responsibilities must continue until all traffic incident management operations at the scene have been terminated and the traffic flow has been restored. Discontinuing traffic incident management activities and protection of the scene before eliminating the emergency and associated hazards could lead to further injuries and property damage.

Law Enforcement

CHP has primary jurisdiction over all incidents that occur on the SHS with the exception of some large cities (CVC, Section 2400).

Typical CHP responsibilities include:

- Serving as incident commander.
- Securing the incident scene.
- Protecting the incident scene.
- Performing first responder duties.
- Assisting responders in accessing the incident scene.
- Establishing emergency access routes.

- Controlling arrival and departure of incident responders.
- Policing the perimeter of the incident scene and impact area.
- Conducting traffic incident investigations.
- Performing preliminary traffic control.

Coroner

The coroner has the duty to determine the circumstances, manner, and cause of all fatalities (Government Code, Section 27491).

Typical coroner responsibilities include:

- Determining the cause of death of a victim when there are fatalities involved in an incident.
- Identifying the decedent.
- Preserving decedent property.
- Notifying next of kin.

Fire and Rescue

Fire and rescue services are provided by local, city, county, and state fire departments and emergency management agencies.

Typical fire and rescue responsibilities include:

- Extinguishing fires.
- Protecting the incident scene until law enforcement arrives.
- Rescuing or extricating victims.
- Responding to and assessing incidents involving hazardous materials release.
- Containing or mitigating the release of hazardous materials.
- Assuming the role of incident commander, if appropriate.
- Supporting unified command, as necessary.

Emergency Medical Services

EMS personnel have primary responsibility for triaging, treating, and transporting incident victims.

Typical EMS responsibilities include:

- Providing medical treatment to those injured at the incident scene.
- Determining destination and transportation requirements for injured victims.

- Coordinating evacuation with fire, police, or airlift personnel.
- Transporting victims for additional medical treatment.
- Supporting unified command, as necessary.

Caltrans

Caltrans is responsible for transportation facilities and managing traffic around the incident using TMCs, maintenance staff, Traffic Management Teams (TMTs), and depending on the incident time and location, the Freeway Service Patrol (FSP). FSP is a joint program provided by Caltrans, CHP, and local transportation agencies. The FSP program is a free service of privately owned tow trucks that patrol designated routes on congested urban California freeways, primarily during commute hours, and remove disabled or stranded vehicles from the freeway, reducing traffic congestion and emissions.

Table 130-1 displays a detailed list of typical Caltrans responsibilities.

Table 130-1 Caltrans Responsibilities

Personnel	Responsibilities
TMC	Monitoring traffic operations Performing incident detection and verification Disseminating traveler information Developing alternate routes
FSP	Performing incident detection and verification Clearing minor incidents Removing vehicles from the traveled way
Maintenance	Performing incident detection and verification Protecting incident scene Performing first responder duties Clearing minor incidents Implementing traffic control strategies and providing supporting resources Assessing and directing incident clearance activities Mitigating small vehicle fluid spills Developing alternate routes Assessing and performing emergency roadwork and infrastructure repair Assuming the role of incident commander, if appropriate Supporting unified command as necessary
TMTs	Performing incident detection and verification Protecting incident scene Implementing traffic control strategies and providing supporting resources Disseminating traveler information Developing alternate routes Supporting unified command as necessary

Towing and Recovery

Towing and recovery services are responsible for the safe and efficient removal of wrecked or disabled vehicles and debris from the incident scene. Section 11 "Towing and Recovery" includes a vehicle classification guide to assist with providing the information needed to correctly dispatch towing and recovery units.

Typical towing and recovery responsibilities include:

- Recovering vehicles and cargo.
- Removing disabled or wrecked vehicles and associated debris from the roadway (CVC, Section 27700).
- Mitigating non-hazardous material (cargo) spills.
- Mitigating small vehicle fluid spills.
- Supporting unified command, as necessary.

In the event of a fire involving an electric vehicle (EV) or hybrid-electric vehicle (HEV), The provider of the towing and recovery service shall adhere to specific protocols designed for handling EVs and HEVs.

Hazardous Waste Contractors

CVC, Section 2454 states that CHP has incident command at the site of a highway hazardous substance spill. CVC, Section 23113(a) states that the person who causes a material to be spilled on a highway shall immediately remove the material or have it removed. If the spiller cannot remove the material, CHP will notify the spiller and authorize Caltrans to remove the material at the spiller's expense. If the spill is beyond Caltrans' capabilities to clean up, Caltrans will request a hazardous waste contractor and will provide a liaison, trained at the first responder operations level, to work with the contractor.

Typical hazardous waste contractor responsibilities include:

- Containing and removing hazardous waste.
- Mitigating ongoing release of material into the environment.
- Coordinating with CHP to arrange for an escort to move collected hazardous waste to a location off the traveled way where transport paperwork can then be signed authorizing the contractor to transport the materials.

Section 2 Incidents

This section provides more information on traffic incidents and outlines typical components of an incident timeline. These are core incident management topics that all TIM stakeholders must be knowledgeable about prior to responding to incidents. All traffic incidents as well as any damage to state property or infrastructure must be reported to Caltrans as quickly as possible.

Topic 1 Immediate Notification Events

Upon arriving at the scene, TIM responders shall immediately notify the Caltrans district TMC of any of the following events:

- Fatality or serious-injury crash on a state highway.
- State highway closure.
- Lane closure. Number and type of lane(s) blocked or closed.
- Incident involving hazardous materials within the state right-of-way.
- Incident that is hazardous to the traveling public.

Topic 2 Timely Notification

Caltrans should be notified as soon as possible, or the next day if after hours, through the district's TMC of any damage to the roadway, state property, or any other incidents not identified as an immediate hazard.

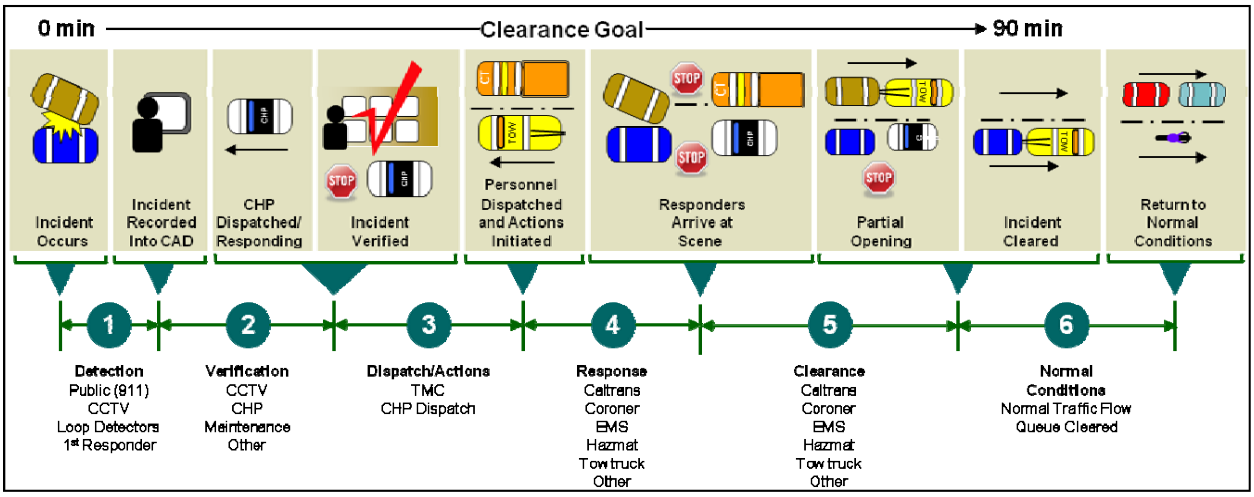
Topic 3 Incident Components

When a traffic incident occurs within the state right-of-way, there are six distinct components:

1. Detection
2. Verification
3. Dispatch
4. Response
5. Clearance
6. Normal Conditions

Refer to Figure 130-1 for additional information on incident components and the parties involved in each component.

Figure 130-1 Incident Components



Source: FHWA

Effective performance management of TIM involves several critical elements: data collection, data analysis, key performance indicators, improvement identification, and continuous process improvement. It all starts with data collection, which is essential for driving success. Comprehensive data collection enables TIM programs to track and reduce response times across all areas, enhancing overall efficiency. It also improves transparency and effectiveness, ensuring that resources are appropriately allocated and justified. Additionally, accurate data strengthens communication with stakeholders, providing clear insights into the program's performance and needs, while supporting continuous improvement and better decision-making. At Caltrans, our goal is to clear major incidents in less than 90 minutes.

Section 3 California Traffic Incident Management Laws in Plain Language

This section provides plain language interpretations of the California laws relevant to traffic incident management. Most of the relevant California state laws and codes are provided in Appendix 130 A.

Topic 1 Lane Closures

Caltrans can restrict access to any or all lanes on a state highway to protect the public or the highway itself. CHP will assist by directing traffic as needed.

Sources:

- SHC, Sections 90, 92, 124,125 and 127.
- CVC, Section 2410.

CHP can direct traffic and restrict access to any or all lanes on a state highway as necessary for fire, emergencies, or for the public's safety.

Sources:

- SHC, Section 127.
- CVC, Section 2410.

Topic 2 Hazardous Material Spills

CHP has control of the overall scene where hazardous waste has been spilled on the highway at all locations where they have primary investigative authority. CHP does not have directive authority over how hazardous waste specialized functions are provided by the various other responding agencies.

Source: CVC, Section 2454.

Topic 3 Clearance of Collisions with Property Damage Only

Vehicle drivers involved in a collision that results in property damage only shall immediately move the vehicle to the nearest location that does not impede traffic or cause safety issues to other motorists. Failure to do so is a misdemeanor punishable by either imprisonment of up to six months in the county jail, a fine not to exceed $1,000, or both.

Source: CVC, Section 20002.

Topic 4 Code 3 Response and Work Zones

Operation of authorized emergency vehicles in response to an incident is commonly known as "Code 3" among responder personnel. Code 3 drivers must slow down and obey the commands of any representative of Caltrans or the local law enforcement authority that has jurisdiction and is directing traffic in a work zone. This includes flaggers, Construction, Maintenance, and contract employers.

Sources: CVC, Sections 21055, 21056, 21367, 21806, and 21807.

Topic 5 Removal of Spilled Loads or Material from the Highway

The owner of the spilled load or material shall immediately remove or have someone remove the spilled load or material.

Caltrans may remove the spilled load or material and collect the actual cost of the removal operation from the owner if the owner is unable to immediately remove the spilled load or material.

If the owner or Caltrans cannot remove the spilled load promptly, CHP can designate a responsible party to remove the spilled load or material.

Caltrans, CHP, or anyone designated by CHP to remove the spilled load cannot, absent a showing of gross negligence or willful misconduct, be held liable for damage to the load or material.

Source: CVC, Section 23113.

Section 4 Incident Classification

According to the *CA MUTCD* 2014 Edition, traffic incidents are divided into three general classifications, mainly based on duration and not on severity.

1. Major traffic incident.
    - Expected duration of more than two hours.
    - Typically involves closing all or part of a roadway facility.
    - Typically involves hazardous materials, fatal traffic collisions involving numerous vehicles, and other natural or human-made disasters.
2. Intermediate traffic incident.
    - Expected duration of 30 minutes to 2 hours.
    - Full road closures may be required for short periods during incident clearance.
3. Minor traffic incident.
    - Expected duration of less than 30 minutes.
    - Typically results in lane closures that last less than 30 minutes.
    - Typically involves disabled vehicles and minor collisions.

Topic 1 Major Incident Logging

Caltrans uses several systems, including the Major Incident Database (MIDB) and Traffic Management Center Activity Logging (TMCAL), while the California Highway Patrol relies on the Computer-Aided Dispatch (CAD) system to effectively manage and track real-time traffic incidents in California.

The current agreement between Caltrans and CHP is that incidents that are tracked and reported in the MIDB are all unplanned, non-recurring events that reduce highway capacity and require both agencies to respond to the incident scene.

Topic 2 Secondary Incidents

The FHWA *Traffic Incident Management Handbook* defines secondary incidents as "unplanned incidents beginning with the time of detection of the primary incident where a collision occurs either a) within the incident scene or b) within the queue, including the opposite direction, resulting from the original incident."

Section 5 Initial Scene Response

This section covers the essential knowledge and best practices for the initial response to a traffic incident on the State Highway System. It outlines the priorities in incident response and explains the necessary information to be collected at the incident scene. Effective communication of accurate information to the relevant parties is crucial for managing incidents efficiently, ensuring road safety, and minimizing delays for the public.

Topic 1 Work Zones and First Responders

CVC, Section 21367 authorizes representatives of Caltrans to restrict the use of and regulate the movement of traffic through or around work areas.

CVC, Section 21806 authorizes the right-of-way for emergency vehicles to respond to incidents.

CVC, Section 21807 states that the provisions of CVC, Section 21806 do not relieve the driver of an authorized emergency vehicle from the duty to drive with due regard to safety for all persons and property.

In order to travel in a work zone safely, vehicles operating in a Code 3 status must obey the direction of flaggers in work zones. Work zone flaggers will provide a clear lane for Code 3 vehicles as soon as possible once they are aware of the need. First responders can expedite this process by coordinating with the TMC in their region before reaching the work zone. Once a path has been cleared and permission has been given to proceed through the work zone, emergency vehicles should obey all directions of the personnel in the work zone and proceed at a safe speed to avoid endangering themselves or the workers in the work zone.

Topic 2 Incident Response Priorities

Priority 1: Safety

The primary objective of incident response is to preserve lives, including those of responders, incident victims, and passing motorists. Safety is the highest priority throughout the incident.

Priority 2: Incident Stabilization

Using best practices, stabilize the incident scene to prevent fire, eliminate ignition sources, contain hazardous materials, and stabilize vehicles involved in the incident. The following factors must be implemented to properly stabilize an incident:

- **Prevent Secondary Incidents** – Responders should use available traffic control devices and, if possible, position apparatuses to divert traffic around the incident scene. Pay special attention to the end of the traffic queue by using CMSs when available and portable changeable message signs (PCMSs) to warn motorists of slowed or stopped traffic as they approach the end of the queue.
- **Protect Evidence** – All incident sites are potential crime scenes and must be treated accordingly. Responders must minimize the impact of their presence on the incident scene.
- **Safe and Quick Clearance** – All responders should work to clear the scene as soon as possible and restore traffic flow to limit traffic diversions to other routes.

Priority 3: Protection of Property and the Environment

Responders should attempt to protect and preserve the highway infrastructure and limit damage to vehicles involved in incidents to what is necessary to stabilize and remove victims trapped in the vehicles. Property salvage operations should be conducted as soon as safely possible. For hazardous materials or potentially hazardous materials scenes, responders with the proper personal protective equipment and training should work to contain the spilled material while minimizing exposure.

Topic 3 Scene Size-Up

Upon arriving at the scene of an incident, the first responder should provide the emergency operations and dispatch center with the information outlined below as soon as possible. The first responder should provide as much of the following information as possible before first exiting the response vehicle:

- Location of the incident, including:
  - County
  - Route
  - Post mile and nearest intersection
  - Direction (NB, SB, EB, WB)
- Incident type (such as fire, radiological emergency, or hazardous material spill)
- Type of hazardous materials involved (if any)
- Impacts on traffic (such as the number of lanes blocked, and which lanes are blocked)
- Vehicle information (such as the number and type of vehicles involved and the level of damage)
- Number of people potentially affected by the incident
- Anticipated threats or hazards to emergency responders

- Lead agency
- Resources needed, including:
  - Personnel
  - Vehicles or equipment
  - Material or supplies
- Location of the incident command post or staging area (if established)
- Ingress and egress routes

Topic 4 Information Needed from the Field

The entities that may be called out to an incident are best qualified to identify what resources should be dispatched. The best way to ensure there are fewer delays in getting the right personnel, material, and equipment to the incident is to provide clear, accurate, complete, and quick information on the incident to dispatch and request that they relay it to the appropriate entities.

The first Caltrans person responding to the scene should capture essential visual information by taking photos. Use a smartphone, tablet, or other device to capture photos of the scene. Take photos in a safe manner. Transmit these photos to dispatch for appropriate response. Caltrans first responders shall not disclose personal information relating to individuals to unauthorized persons or entities or for unauthorized purposes. Improper disclosure of personnel information is cause for disciplinary action. Prioritize obtaining photos of the following critical information requirements below.

Overall Scene

Capture a photo that provides an overview of the incident scene, showing the entire context or the full scope of the incident. Figure 130-2 shows an example of an incident scene photo.

Figure 130-2 Example Scene Photo

Placards for Possible Hazardous Waste

Take a photo of any hazardous waste placards that may be present on the vehicles or materials involved in the incident. Placards are located on the outside of a vehicle and on bulk packages, which identify the hazard class of the cargo. Vehicles with placards must have at least four identical placards located on the front, rear, and both sides of the vehicle. See California Department of Motor Vehicles Commercial Driver Handbook, Section 9.3.3.

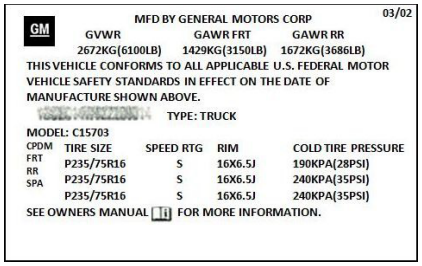
Figure 130-3 shows an example photo of hazardous waste placards.

Figure 130-3 Example Photo of Hazardous Waste Placards

Gross Vehicle Weight Rating

Take a photo of the gross vehicle weight rating (GVWR) placard, which can be found on the driver's side doorframe of the vehicle. Gross vehicle weight refers to the maximum weight of the vehicle, fuel, accessories, passengers, and cargo. Figure 130-4 shows an example gross vehicle weight rating placard.

Figure 130-4 Example Gross Vehicle Weight Rating Placard



Spilled Load

Take a photo of any spilled load with a description of what was spilled. Figure 130-5 shows an example photo of a spilled load.

Figure 130-5 Example Photo of Spilled Load

Topic 5 Role of Traffic Management Center Dispatch

TMC staff should assist with situational awareness of responders and decision-makers through the following steps (some of which can be done concurrently):

1. Determine the scope of the incident using CAD, closed-circuit television cameras, and CHP and Caltrans personnel that are on the scene.
2. Log the incident in TMCAL.
3. As needed, activate fixed CMS and highway advisory radio (HAR). Coordinate with TMT and Maintenance if PCMS is required.
4. If a semi-tractor trailer or big rig is involved in the incident, ask CHP if there is a leak or spill of fuel, hazardous material, or unknown (unidentified) material.
5. If hazardous waste is present (such as leaking fuels, fluids, or spilled hazardous waste loads) contact the district Hazmat team as soon as possible.
6. Dispatch Maintenance personnel.
7. Dispatch TMT if queues, detours, or both are anticipated.
8. If the incident involved Caltrans or contractor personnel, contact the appropriate district and Headquarters executives.
9. In the event of a work zone incident, contact the appropriate Maintenance, Construction, Traffic Operations, or Safety Programs deputy director.
10. If the incident has fatalities or lane closures, contact the Maintenance supervisor or superintendent immediately.
11. If there is damage to any Caltrans structure or building facility, contact Structures Construction within the Division of Engineering Services or Structures Maintenance and Investigation within the Division of Maintenance, or both.

12. Coordinate with neighboring districts for CMS and HAR support if the incident will impact travelers in those districts.
13. Following the Highway Condition Reporting Requirements, complete the following as appropriate:
    - If there are sustained impacts to the traveling public, ensure the Caltrans Highway Information Network (CHIN) is updated.
    - If the incident requires calling in additional TMC personnel, contact the TMC manager.
    - If the incident will likely have high media interest or impact on Caltrans, contact the duty officer, appropriate district deputies, district and Headquarters executive staff, and the public information officer.
    - If the incident requires a large Maintenance response, contact the area Maintenance supervisor.
    - Notify the construction resident engineer.
    - Notify the public information officer.
    - Notify 511 and other regional traffic information providers.
14. If there will be an impact on city or county roads, coordinate with the district TMC and local agencies.
15. If there will be an impact on other modal operations, contact the affected operation centers.
16. Update CMS, HAR, and the CHIN as the incident progresses and new information is obtained.
17. When traffic conditions return to normal, close out the incident as applicable:
    - Deactivate incident-related messages on CMS and HAR.
    - Notify CHIN of the return to normal traffic conditions.
    - Notify neighboring districts of the return to normal traffic conditions.
    - Notify executive staff.
    - Notify city and county operations centers.
    - Notify 511 and other regional traffic information providers.

Section 6 Arrival and Vehicle Position

When arriving at an incident scene, it is crucial to understand the layout of the scene and safely position all emergency vehicles. This section provides information on the component areas of a scene, as well as other safety measures like emergency lighting and positive traffic control measures. TIM responders shall always work to keep themselves and others safe by being aware of their surroundings, making sure the incident scene is both safe and visible, and communicating clearly with all other responders while allowing traffic to navigate around the scene safely.

Topic 1 Component Areas of a Scene

Advance Warning Area

This area alerts motorists that there is a traffic incident or slowed or stopped traffic ahead that will require their attention.

Approach Area

This area identifies the nature of the equipment or vehicle that the motorist is about to encounter, allowing them to analyze the situation.

Transition Area

This area indicates the action motorists are expected to take. This helps them decide on a course of action to execute safe driving techniques before entering the activity area.

Activity Area

The activity area is comprised of the following parts:

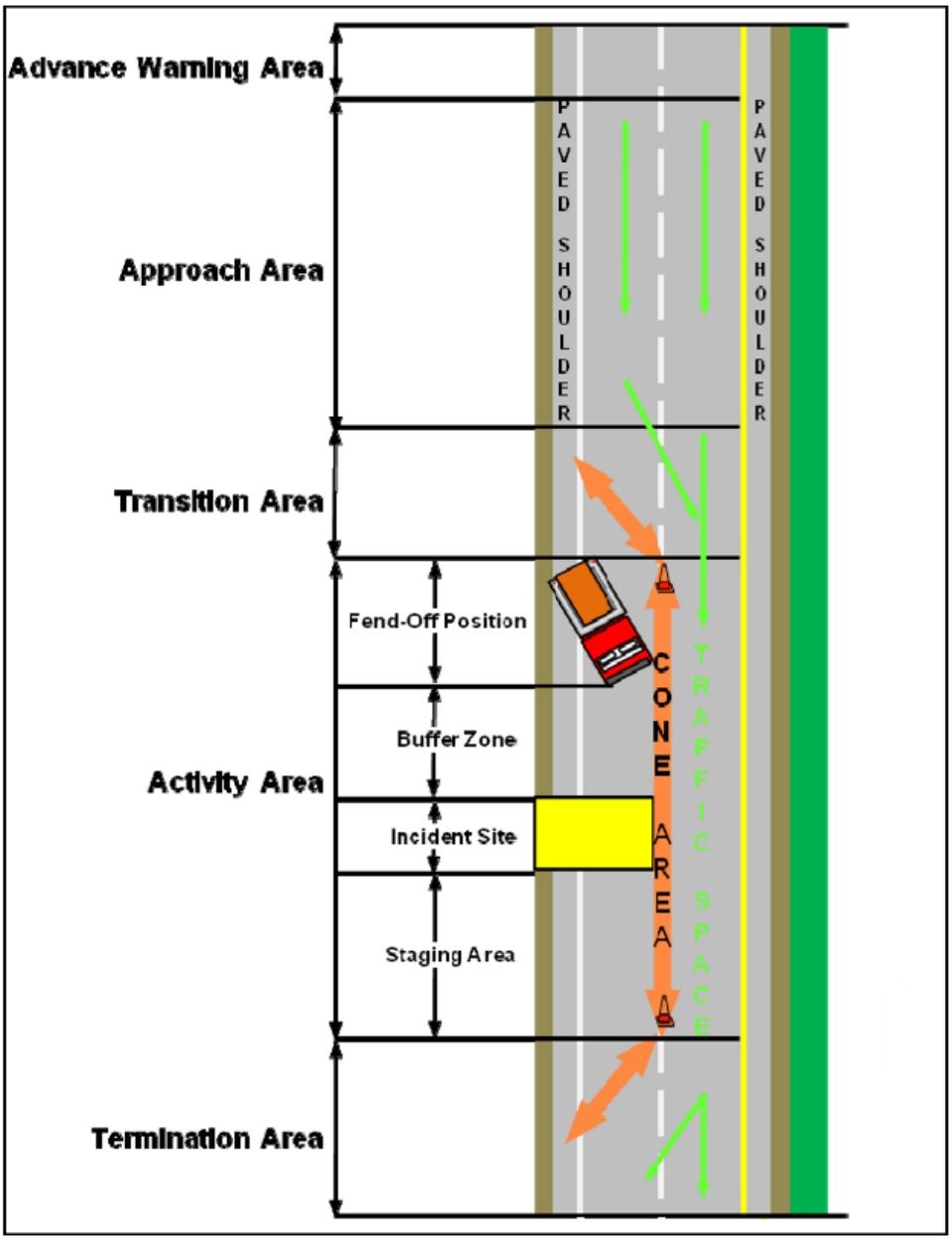
- **Fend-Off Position** – Position of the emergency vehicle that provides added protection of the incident scene.
- **Buffer Zone** – Scene protection area between the first emergency vehicle and the incident site.
- **Incident Site** – Area restricted to authorized personnel only.
- **Staging Area** – Area for emergency vehicles not immediately required to perform a function or provide shielding at the incident scene. This area should be upstream or downstream from the incident site and the location should not create a traffic hazard or obstruction.
- **Traffic Space** – Area where traffic is allowed to pass by the activity area.

Termination Area

The termination area is where traffic returns to its normal path. The termination area extends from the downstream side of the staging area to the point where normal traffic can resume.

Figure 130-6 illustrates all component areas. In certain locations within this area such as on-ramps and off-ramps, traffic control may be necessary to ensure motorist safety.

Figure 130-6 Component Areas



Topic 2 Activity Area

Fend-Off Position

The fend-off position requires emergency vehicles at an incident to be positioned in a way that provides added protection to the scene from traffic and allows approaching motorists the best visibility of emergency vehicles. This allows motorists to identify the incident, while also deflecting any high-speed impact from an errant vehicle that would otherwise crash into the scene.

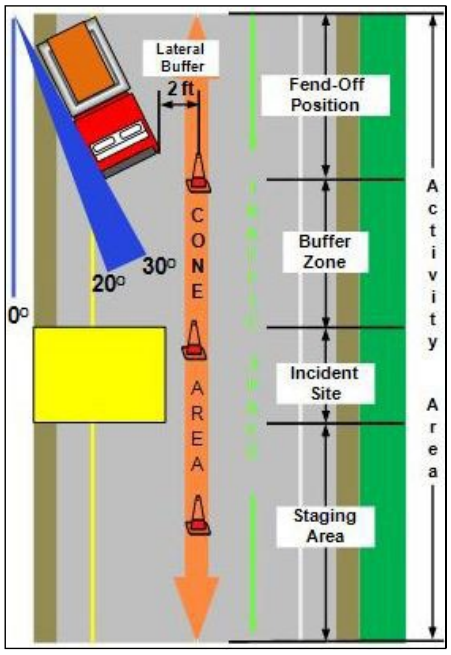
To assume the fend-off position in a response vehicle, pull as far to the right or left of the incident scene as possible, then place the vehicle in reverse while turning the steering wheel to position the vehicle at 20 to 30 degrees to the centerline of the roadway. Refer to Figure 130-7 for additional information on the fend-off position.

Response vehicles should only be parked on the opposite side of a divided highway from the scene of an incident when the incident commander determines the benefits outweigh the risks.

Vehicles not protecting the scene or responders should be staged in a safe area. Their location should not create a traffic hazard or obstruction or impede other emergency vehicles.

The responding fire department often closes an extra lane to protect the activity area. After a queue has developed, the fire apparatus should be moved to open the extra lane to reduce both congestion and the chances of secondary incidents.

Figure 130-7 Emergency Vehicle Fend-Off Position



Buffer Zone

A buffer zone is recommended between the incident scene and emergency vehicles. The suggested distance is 21 feet for every 10 miles per hour (MPH) of posted speed. Buffer zones are recommended for the following reasons:

- If an emergency vehicle is hit from behind, it is less likely to be pushed into the original incident scene.
- It allows firefighting apparatuses to remain functional for firefighting operations.
- It promotes scene preservation by preventing response personnel from driving inside the collision scene and destroying evidence.

Cones can be used to close off the buffer zone to vehicular traffic by placing them along the longitudinal traffic line.

Lateral Buffer Zone

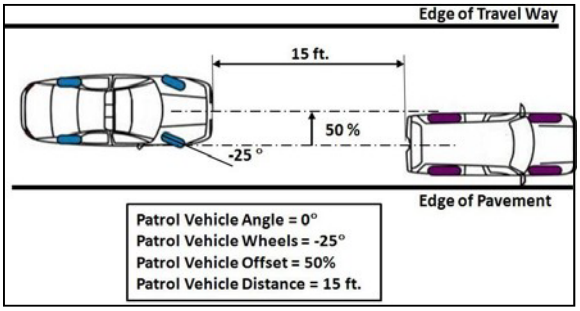
While arranging the fend-off position and the buffer zone, attempt to position the front bumper of the emergency vehicle at least 2 feet short of the adjacent longitudinal traffic line. This lateral buffer is used to reduce encroachment into the designated traffic lanes. Traffic cones should also be placed on the longitudinal traffic line beside the emergency vehicle to allow personnel safer access around the corner of the vehicle.

Figure 130-8 shows a CA MUTCD-compliant activity area that incorporates the elements of safe positioning. As shown, the larger fire apparatus in the left foreground is parked at a 30-degree angle with the wheels turned out. This placement creates the appropriate buffer and space for the incident work area. The vehicle's left front end is located approximately 2 feet from the cone, creating the lateral buffer area. Cones are placed to mark the incident and a law enforcement vehicle (with its wheels turned right) is placed between the buffer vehicle and the incident to help with traffic control. The EMS vehicle is parked midway and angled to protect the patient loading area.

Figure 130-8 CA MUTCD-Compliant Activity Area

Figure 130-9 shows the linear blocking position recommended in the International Associations of Chiefs of Police *2004 Law Enforcement Stops & Safety Subcommittee Staff Study*. The linear blocking position is used when a first responder does not need to be concerned with victim extrication or a passenger exiting the vehicle as in the case of an abandoned vehicle or a routine traffic stop. The first responder is positioned to block the scene from the approach of an errant vehicle, with 15 feet of space between the vehicles, a 50 percent offset between the vehicles, and the patrol vehicle's wheels turned to a 25-degree angle.

Figure 130-9 Linear Blocking Position



Topic 3 Emergency Lighting

Chapter 6I.05 of the *CA MUTCD* stresses that the use of warning lights is essential for warning the traveling public, especially at the initial stages of an incident. It further states that emergency lighting can be confusing to drivers, especially at night.

Drivers approaching from the opposite direction can be distracted, slowing down, and creating a queue on the non-incident side of the roadway that can lead to secondary incidents.

While some lighting is necessary to warn approaching motorists, too much or certain types of lighting can be distracting. Observe the following best practices when using emergency lighting:

- EMS personnel should consider turning off forward-facing emergency lights to reduce distraction to drivers traveling in the other direction (non-incident side of the roadway).
- At nighttime, emergency lighting should be reduced to only the levels needed to warn motorists. Headlights and fog lights should be turned off to avoid the "moth effect," where a motorist may steer in the direction of the lights.
- In all cases, emergency lighting should not be substituted for safe traffic control. CMS, PCMS, and TIM area signs should be used to warn the traffic ahead of the incident as soon as possible. Warning signs and traffic control devices such as cones should be placed according to the standard for lane closures.

Topic 4 Positive Traffic Control

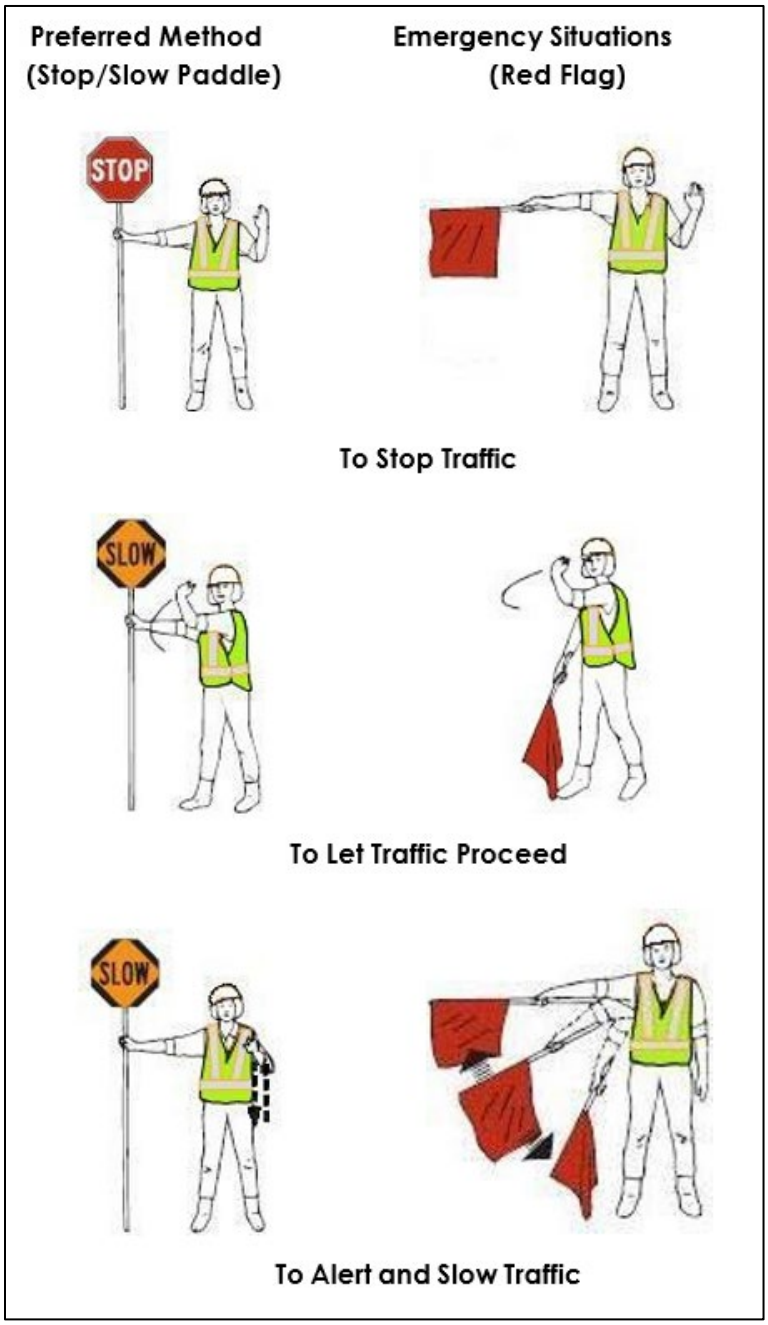
Except for unusual circumstances or emergencies, flaggers should not be used on freeways. Fixed CMS, PCMS, and TIM area signs should be used in advance of the incident whenever available. Flagging should be considered as a last resort and the red flag should only be used until a "Stop/Slow" paddle is available. Refer to the *Flagging Instruction Handbook* for additional information.

Using flagging at an incident scene reduces distractions and helps keep traffic moving safely past the scene. When using flagging, adhere to the following guidelines:

- Use qualified flaggers, if possible, but any response personnel can be flaggers if necessary.
    - Do not use bystanders or other untrained personnel for traffic control duties.
- Give commands or directions to traffic in a clear, courteous, but firm tone.
- Accompany verbal commands to "stop," "slow down," and "proceed" with appropriate hand movements or the use of a Stop/Slow paddle or flag.
- Whistles can also be an effective tool to attract motorist attention.
- Flaggers should be positioned at a safe location near the beginning of the taper when providing positive traffic control in the transition area.
- Flaggers should be positioned at a safe location adjacent to the crashed vehicles when providing positive traffic control in the activity area.
- Flaggers should make eye contact with the drivers of approaching vehicles to encourage them to pay attention to their driving and not the incident. This will increase the flow of traffic past the incident scene and reduce delays.
- Flaggers should avoid providing individualized directions to motorists as this can create more congestion by slowing traffic.

Refer to Figure 130-10 for examples of flagging.

Figure 130-10 Flagging



Topic 5 Safety Standoff Distances for Explosives

Tables 130-2 and 130-3 show guidelines for standoff distances for possible explosives from the U.S. Office of the Director of National Intelligence, Joint Counterterrorism Assessment Team (JCAT) Counterterrorism Guide for Public Safety Personnel.

Table 130-2 JCAT Standoff Distance Guidelines for Possible Explosives

Threat	Explosive Capacity (lbs)	Mandatory Evacuation Distance (ft)	Shelter In Place Zone (ft)	Preferred Evacuation Distance (ft)
Pipe Bomb	5	70	71-1,119	+1,200
Suicide Bomb	20	110	111-1,699	+1,700
Briefcase	50	150	151-1,849	+1,850
Car	500	320	321-1,899	+1,900
SUV/Van	1,000	400	401-2,399	+2,400
Small Delivery Truck	4,000	640	641-3,799	+3,800
Container/Water Truck	10,000	860	861-5,099	+5,100
Semi-Trailer	60,000	1,570	1,571-9,299	+9,300

Table 130-3 JCAT Standoff Distance Guidelines for Liquid Petroleum Gas (LPG)

Threat	LPG Mass/Volume[1]	Fireball Diameter[2]	Safe Distance[3]
Small LPG Tank	20 lbs/5 gal 9 kg/19 l	40 ft 12 m	160 ft 48 m
Large LPG Tank	100 lbs/25 gal 45 kg/95 l	69 ft 21 m	276 ft 84 m
Commercial/Residential LPG Tank	2,000 lbs/500 gal 907 kg/1,893 l	184 ft 56 m	736 ft 224 m
Small LPG Truck	8,000 lbs/2,000 gal 3,630 kg/7,570 l	292 ft 89 m	1,168 ft 356 m
Semi-Tanker LPG	40,000 lbs/10,000 gal 18,144 kg/37,850 l	499 ft 152 m	1,996 ft 608 m

Notes: [1] Based on the maximum amount of material that could reasonably fit into a container or vehicle. Variations are possible.

[2] Assuming efficient mixing of the flammable gas with ambient air.

[3] Determined by US firefighting practices wherein safe distances are approximately four times the flame height. Note that an LPG tank filled with high explosives would require a significantly greater standoff distance than if it were filled with LPG.

Section 7 Damage to State Highways

Caltrans should be notified immediately when the following types of damage occur.

Topic 1 Bridges

Damage to abutments, columns, decks, railings, or other bridge infrastructure, including:

- Concrete damage, such as:
  - Significant fire damage.
  - A hit that creates or is suspected of chipping or cracking the concrete.
- Metal guardrails or bridge rail damage, such as:
  - Missing rails.
  - Significant fire damage.
  - Protruding or bent rails that could be a hazard to the public.

Topic 2 Guardrails and Crash Cushions

Any damage to the rail or posts of guardrails and other traffic safety devices.

Topic 3 Permanent Barriers or Temporary Barriers

- Damage to permanent barriers (including Jersey Walls), such as significant cracking or chipping.
- Damage to temporary concrete barriers, such as:
  - Any significant cracking or chipping.
  - Rails that have been moved enough to have an impact on traffic.

Topic 4 Electrical Lines or Power Poles

All electrical and traffic signal problems should be reported immediately. Unknown electrical hazards may be present and must be made safe by qualified electrical personnel to ensure the safety of the public. Notify the electric utility company as soon as possible.

Topic 5 Fences

- Damage to barbed wire or wire mesh fences, especially when:

  - Livestock is in the area.
  - Fence posts are bent towards traffic or create other hazards.
- Damage to chain-link fences, especially when:
  - Livestock is in the area.
  - It is in a school area.
  - It is in a residential or heavy-pedestrian area.
  - Fenceposts are bent towards traffic or create other hazards.
  - It will compromise the security of an adjacent business.

Topic 6 Large Debris

Report large debris that could have either a physical or visual impact on traffic. This could be either on the traveled way or the improved or non-improved shoulder. This includes dead animals.

Topic 7 Roadway Hazards

Report any hazards on the roadway that have either a physical or visual impact on traffic. This could be either on the traveled way or the improved or non-improved shoulder. This includes large potholes, slippery substances, and any fuel, oil, or other chemical spills, among other things.

Topic 8 Sand Barrels and Attenuators

Alert Caltrans of any damage to sand barrels or other impact attenuators.

Topic 9 Damaged or Missing Signs

Regulatory signs include signs regulating the movement, access, speed, stopping, or parking of vehicles. Regulatory signs are generally black and white or red, green, and white.

The following regulatory signs should be immediately replaced if missing or damaged:

- STOP
- YIELD
- WRONG WAY
- DO NOT ENTER
- All other regulatory signs that could adversely affect the traveling public if not replaced.

Due to local traffic conditions, other highway signs that are critical to traffic safety may need to be replaced as soon as possible. CHP officers reporting damaged highway signs should describe the sign and location in as much detail as possible. The following information will help TMC operators and dispatchers evaluate and respond to the situation.

- Highway name or number and nearest crossroad.
- Postmile marker if known.
- Type of sign by name (such as STOP or ONE WAY) or by description (for example, "A right curve arrow, black on yellow").
- Type and number of posts supporting the sign (for example, "The STOP sign is supported by one 4x4 post").
- Brief description of damage to the sign (for example, "The sign is okay, but the post is broken").
- If the sign is a "black on white" or "red on white" regulatory sign, check if there are other signs or pavement markings to direct traffic until the damaged sign can be replaced.

Any sign that is a hazard to the traveling public or pedestrians, or any regulatory sign that is damaged, knocked down, or in need of attention according to the CHP Officer's opinion, should be reported to the TMC as soon as possible. The TMC will notify the appropriate Caltrans Maintenance personnel and Maintenance will determine its priority to be replaced. Caltrans will inform the appropriate CHP communications center that action will be taken and will include an estimated time of arrival when possible.

Section 8 Adverse Weather Conditions

The CHP should notify the TMC immediately when adverse weather conditions are identified. When CHP requests CMS activation, Caltrans will decide on the appropriate CMS message. The Caltrans field supervisor will meet on-site with the CHP officer to resolve the issue if necessary. Refer to the *Changeable Message Sign Guidelines* for more information on changeable message sign policy and usage.

When requesting CMS activation for adverse weather conditions, the CHP officer should give specific locations affected by the adverse weather conditions (for example, "Visibility is less than 500 ft on State Route 99 between the Madera/Merced County line and State Route 145," or "Please turn on the fog signs in Tulare County north of State Route 198").

The CHP officer who requests CMS for adverse weather conditions is responsible for informing the TMC when the CMS can be turned off. If the adverse weather continues past the end of the requesting CHP officer's shift, the oncoming CHP officer and the nearest active CHP communications center should be notified of the need to monitor conditions and inform the TMC when the CMS can be blanked.

If the requesting CHP officer is out of position due to an emergency and cannot monitor the weather in the area covered by the activated CMS, the CHP officer should inform the TMC through the appropriate communications center. The TMC will attempt to verify weather conditions through alternate sources.

Guidelines for CMS messages used for adverse weather conditions are as follows.

Topic 1 Limited Visibility

Fog and Dust

Established criteria for "FOG" or "DUST" messages apply. Appropriate CMS Fog messages are activated when the CHP or other reliable sources report visibility of less than 500 ft, or when CHP must use "pacing" due to poor visibility conditions. Pacing refers to the practice of CHP vehicles slowing down traffic flow on a roadway by engaging emergency lights and reducing speed in front of multiple lanes.

High Winds

CMS will be activated at the request of a CHP officer or other reliable source. Sustained wind velocities of less than 20 MPH generally do not require CMS activation unless the CHP officer believes that a cautionary sign is required to ensure traffic safety.

Heavy Rain

If the CHP officer believes that heavy rain has reduced visibility or caused flooding and using a CMS would help prevent collisions, the TMC will activate the CMS with an approved message. Flooding can vary depending on the area but is generally considered to mean standing or flowing water on the roadway that presents a significant hazard to motorists.

Snow

If the CHP officer believes that snow will be falling and temperatures at that location will result in the snow sticking to the roadway, the officer should immediately advise the TMC. The following conditions should be communicated to the TMC so that the traveling public can be notified:

- Snow is imminent and the temperature is cold enough that snow is anticipated to stick to the roadway. In this situation, no traffic control is necessary, but an advisory to the public of possible delays should be issued.
- Snow is falling and may or may not be sticking to the roadway. In this situation, no traffic control may be necessary. (It is advisable to inform the public about possible delays.)
- Snow is falling and sticking to the highway. CHP is pacing or escorting convoys. (It is advisable to inform the public about delays ahead.)
- Snow has created unsafe conditions. CHP has closed the freeway. (It is advisable to inform the public about delays and any available detours.)

Section 9 Coroner Considerations

CHP should notify the coroner's office of any traffic fatality as soon as possible so there will not be a delay in the coroner's response. If the coroner's response is going to be delayed, certain steps need to be taken before the vehicle or victim can be relocated off the traveled way. In some cases, it may not be possible to relocate the vehicle or victim. In each case, the coroner should be contacted before moving any possible evidence.

CHP and the coroner's office should both be consulted before any movement or clean-up is conducted after a traffic fatality.

Topic 1 Coroner Investigation and Response

The coroner is responsible for determining if a victim is deceased and the cause and manner of death of the victim. They are also responsible for positively identifying the deceased, preserving property, and notifying the next of kin. Moving crashed vehicles or the deceased can greatly inhibit a coroner's ability to conduct an independent investigation into the traffic fatality. Incident response activities need to minimize the disturbance of the incident scene until the coroner arrives.

Topic 2 Criminal Versus Non-Criminal Conduct

If the fatality was or could have been caused by a criminal act, such as driving under the influence, road rage, or shooting, no items should be moved from the roadway without express authorization from CHP and the coroner's office.

CHP can call the coroner's office to brief them on the scene and request authorization to move a body or vehicle before the coroner's arrival.

If authorization to move the body or vehicle is granted, the coroner can provide specific instructions on how to document the scene prior to disturbing it. It is important to thoroughly photograph the scene and mark the original position of the wreckage and body (including those of pedestrians or motorists ejected from a vehicle) before moving anything.

Topic 3 Loss of Evidence or Property

Vehicles should only be moved to the nearest and safest shoulder or off-ramp and should be moved a minimal distance at a slow speed to preserve evidence.

Any items that break loose from the vehicle should be documented, collected, and preserved for the coroner. Even small items may help identify the decedent or their next of kin. It may also assist in determining the cause and manner of death.

Do not move or alter anything if doing so will cause any evidence or property to be lost.

If the environment (such as road conditions, weather, and traffic conditions) is causing possible destruction or loss of evidence, document and preserve the evidence to the greatest extent possible. CHP can coordinate this effort when the coroner is not at the incident scene.

Topic 4 Disruption of the Body

Privacy screens are the preferred method for covering the body to obscure it from public view. Unless life-saving measures require extraction, the coroner needs to see the body and vehicle in their original state at the scene.

If a vehicle is moved before the arrival of the coroner, the decedent should be left undisturbed in place within the vehicle.

If the movement of the vehicle disrupts the position of the body, this should be documented, and the information should be presented to the coroner.

Section 10 Hazardous Materials Considerations

As with all other aspects of traffic incident management, when dealing with hazardous material spills at a traffic incident scene, safety is the top priority. Handling hazardous materials requires specific knowledge and equipment, so specialized personnel must be dispatched to manage hazardous material leaks or spills.

Topic 1 Transporting Hazardous Waste

Unless specifically exempted, only a person who holds a valid registration issued by the Department of Toxic Substances Control (DTSC) can transport hazardous wastes. Custody of those wastes can only be transferred to and transported by another transporter that holds a valid DTSC registration. The DTSC registration is not transferable to any other person and is valid for one year only.

CHP issues permits for the transport of hazardous waste materials on state highways.

Topic 2 Hazardous Material Spills

If it is prudent and safe to do so, first responders should utilize the materials on hand to contain spills and prevent the spread of hazardous materials.

When a hazardous material spill comes to the attention of CHP or Caltrans, the department that first learns of the incident should immediately notify the other of the following information:

- Spill location.
- Type of material (if known).
- Approximate quantities of material spilled.

If CHP is unable to contact Caltrans (meaning three or more names have been called from the approved Caltrans call-out list with negative contact), the CHP incident commander will call the nearest cleanup contractor from Caltrans' approved list directly to handle the spill and will then notify Caltrans of the name of the contractor used and any pertinent data gathered in the field. Contractors who are not on the approved list shall not be called unless an extreme situation exists (such as a life-threatening or serious injury or significant environmental or property damage) and pre-approved contractors are not available.

Once a hazardous material spill is identified, CHP and Caltrans have the following responsibilities:

California Highway Patrol Responsibilities

- Request any mutual assistance that may be needed.

- Make any legally required notifications related to hazardous materials spills.
- Include Caltrans in command post operations and keep Caltrans advised of any new information.
- Attempt to identify the type of hazardous material by shipping documents, placards, or other means.

Caltrans Responsibilities

- Provide any required long-term traffic control.
- Either clean up the spill (if within their scope) or call one of Caltrans' hazardous waste contractors.
- Provide personnel trained at the first responder operations level to work with hazardous waste contractors.

Notification of the Office of Emergency Services

For all hazardous material spills within the state right-of-way, regardless of quantity, the law enforcement agency with traffic jurisdiction must notify the California Governor's Office of Emergency Services and obtain a control number for that incident.

Contractor Best Practices

The procedure and documentation must be completed for containerized hazardous waste to move on the roadway. CHP has the authority in the event of an emergency to escort the hazardous waste contractor with the container to a safe place. The hazardous waste contractor should coordinate early with CHP to ensure an additional CHP officer is called to the scene to escort them and the containerized materials off the traveled way. A person with authority to do so still needs to sign the documents, but it can be done off the traveled way if CHP escorts the transporter and the hazardous waste to the new location, allowing the lanes to be opened while the documents are completed off the roadway.

Section 11 Towing and Recovery

When requesting towing services at an incident scene, having the right information is key. This section addresses what details to provide and how to identify the correct vehicle classifications to ensure the appropriate tow truck can be dispatched to the incident scene without delay.

Topic 1 Information Needed to Request Towing

Information needed to request towing and recovery vehicles includes the GVWR of the vehicle itself, as well as any manifested load weights. Providing accurate information about the scene, vehicles, and loads can ensure quick and efficient scene clearance and less disruption to traffic flow. Refer to Table 130-4 and Figures 130-11 and 130-12 for vehicle classification information.

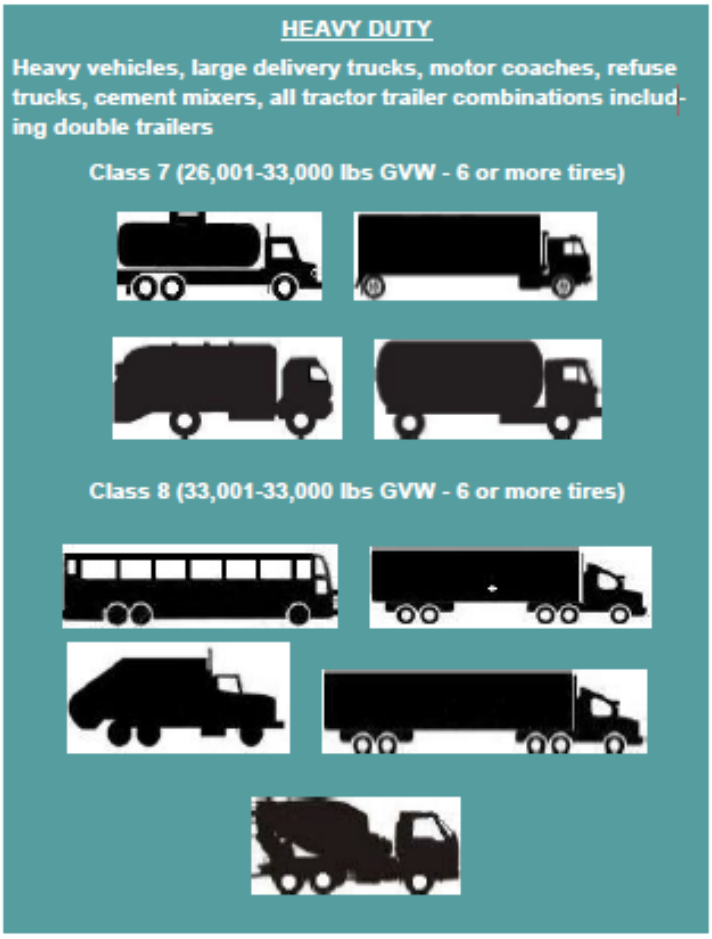
Table 130-4 Vehicle Classifications

Weight Class	Minimum GVWR (lbs)	Maximum GVWR (lbs)	VIUS[1] Category	Common Category
Class 1	-	6,000	Light-duty	Light Duty
Class 2	6,001	10,000	Light-duty	Light Duty
Class 3	10,001	14,000	Medium-duty	Medium
Class 4	14,001	16,000	Medium-duty	Medium
Class 5	16,001	19,500	Medium-duty	Medium
Class 6	19,501	26,000	Light-heavy	Medium
Class 7	26,001	33,000	Heavy-heavy	Heavy Duty
Class 8	33,001	-	Heavy-heavy	Heavy Duty

Note: [1] VIUS: United States Department of Transportation Vehicle Inventory and Use Survey.

Figure 130-11 Vehicle Classification Guide

Figure 130-12 Vehicle Classification Guide (Continued)



Section 12 Helicopter Considerations

The following guidelines should be used to assist an on-scene helicopter flight crew. Every situation will be unique. In some cases, a helicopter can be safely landed on the roadway, and in others, it will need to be landed on the side of the roadway. Always prioritize safety when assisting with a helicopter landing, even if it requires deviating from the following guidelines.

Topic 1 Landing Zone

When Caltrans is requested to prepare a landing zone (LZ), observe the following guidelines.

Surface

- Ensure the LZ has a surface that is flat, firm, and free from the following:
  - Overhead obstructions such as wires, poles, and antennas.
  - People, animals, and vehicles.
  - Loose debris, stumps, irrigation equipment, or any other obstruction that could interfere with the helicopter's landing gear.
- If dust is suspected or is present on the LZ, wet down the area with water and inform the helicopter flight crew of this potential hazard.

During Nighttime Operations

- Illuminate the LZ by positioning vehicle headlights toward the center of the LZ.
- Never use flares or other items that can be easily blown by the helicopter downwash.

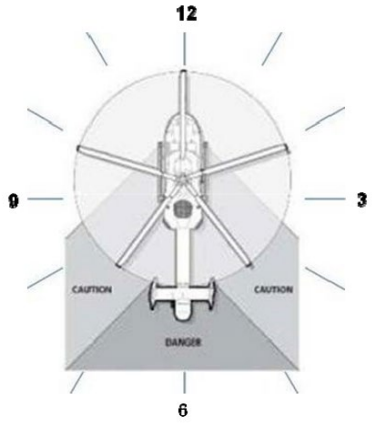
Size

- Use the following general guidelines for landing zone dimensions:
  - Daytime: 75 feet x 75 feet
  - Nighttime: 125 feet x 125 feet

Topic 2 Landing the Helicopter

Assist the flight crew by using proper radio terminology. State your position as referenced to "clock" positions relative to the helicopter. For example, the front of the helicopter is "12 o'clock," and the rear is "6 o'clock." Figure 130-13 displays information on positioning relative to a helicopter.

Figure 130-13 Position Relative to Helicopter



Once radio communication with the helicopter is established and the aircraft is circling overhead, the person responsible for the LZ should inform the crew of the following:

- Location of all nearby aerial hazards, such as wires, poles, and antennas.
- Description of the landing zone surface and specific touchdown area with special emphasis on any potential dust or loose debris.
- Description of the wind speed and directions.
- Description of any issue that could adversely affect flight safety.

Once the aircraft is on final approach, protect the air-to-ground frequency and never hesitate to announce any previously unseen hazard to the flight crew.

Topic 3 Assisting the Helicopter Crew

When assisting a helicopter flight crew, observe the following safety procedures:

- Never approach the helicopter unless escorted by a flight crew member.
- Always follow the directions of the flight crew.
- Always stay to the front of the helicopter and in eye contact with the pilot.
- Be aware that sloping terrain can increase the hazard of the helicopter's rotors.
- Secure loose items and never chase items that have been blown away.
- Wear hearing and eye protection.
- After the helicopter departs the LZ, never infiltrate the area until the pilot has called it "clear."

Figure 130-14 shows a guide to the area around a helicopter.

Figure 130-14 Area Around Helicopter

Section 13 Traffic Management Teams

TMTs improve safety and reduce congestion by warning and informing the public of real-time unexpected conditions on highways. They are typically deployed when traffic queues become lengthy or persistent, incidents last for an extended period, or the location presents complex traffic challenges requiring coordinated control to maintain safety and minimize delays.

Topic 1 Dispatch

When dispatching a TMT to a traffic incident, contact the following individuals:

- Contact Maintenance supervisors or superintendents as necessary to ensure rapid response of Maintenance personnel.
- Contact the TMT leader and provide as much detail as possible about the incident so that they can decide if a TMT or an incident response team (IRT) should be dispatched.
- During work hours, consult with the Maintenance supervisor to estimate how long it will take to dispatch a CMS truck. If the CMS truck is engaged at a maintenance worksite, the estimate should include the additional time required to secure the worksite, making it safe for the traveling public, before redeploying it to the traffic incident.
- After working hours, use call-out lists that show the geographic locations of responders and equipment to dispatch the nearest unit and ensure a rapid response. Consider queues and bypass routes when dispatching TMT or IRT personnel. The closest assets may not have the shortest response times.

Topic 2 Duties

End-of-Queue Management

TMTs and Maintenance IRTs are responsible for using truck-mounted CMS and PCMS to warn the traveling public of slowed or stopped traffic ahead due to congestion resulting from incidents. Signing for end-of-queue is extremely important as the advance notification reduces the risk of secondary incidents.

In many cases, it may be necessary to provide warning signs in advance of the queue in both directions due to travelers slowing on the non-incident side to look at the collision scene.

Detouring

TMT engineers are responsible for analyzing traffic patterns and coordinating with the TMC and other local agencies to identify detour routes, provide input to the TMC for detour messaging on fixed CMS, and work with the TMT, IRT, and field Maintenance to ensure detour routes are properly signed.

TMT leads are responsible for coordinating with the TMC and the district communication center to ensure that timely and accurate detour and delay information is provided to the public.

Planning

TMT personnel are responsible for coordinating with Traffic Operations, Maintenance, CHP, and other first responders and local agencies to help plan for incident management. Review the district's Incident Management Plan, where available, to refine strategies.

Data Gathering

A secondary function of the TMT is to gather information from the field. TMT and IRT personnel should try to gather as much information as possible about first responder arrival and departure times, incident clearance times, individual lane opening times, the time at which all lanes are opened, and the queue clearance time.

Topic 3 Reports

Whenever possible, the TMT leader should coordinate with the on-scene CHP officer, Caltrans maintenance personnel, and the TMC to obtain as much information as possible, including dispatch, arrival, and departure times for as many incident responders as possible.

Post-incident debriefs should be conducted off the highway whenever possible to determine what factors, if any, may have delayed incident clearance or early opening of lanes.

Secondary incidents that occur within queues that are caused by the primary incident should be documented on the original incident report. The absence of secondary incidents should also be documented when the TMT provides end-of-queue signing.

Section 14 Caltrans Districts and Traffic Management Centers

Figure 130-15 shows a statewide map of all Caltrans districts. Table 130-5 shows the location of all Traffic Management Centers statewide.

Figure 130-15 Caltrans District Map

Table 130-5 Caltrans Traffic Management Center Locations

District	Address
Headquarters Communication Center	1120 N Street, Room 3216 Sacramento, CA 95814
District 1	1656 Union Street Eureka, CA 95501
District 2	1657 Riverside Drive Redding, CA 96001
District 3	3165 Gold Valley Drive Rancho Cordova, CA 95742
District 4	111 Grand Avenue Oakland, CA 94612
District 5	50 Higuera Street San Luis Obispo, CA 93401
District 6	1352 West Olive Avenue Fresno, CA 93728
District 7	2901 West Broadway Los Angeles, CA 90041
District 8	13892 Victoria Street, Fontana, CA 92336
District 9	500 South Main Street Bishop, CA 93514
District 10	1976 E. Dr. Martin Luther King Jr Blvd Stockton, CA 95205
District 11	7183 Opportunity Road San Diego, CA 92111
District 12	6681 Marine Way Irvine, CA 92618