

# **Guide to IAFC Model Policies and Procedures For Emergency Vehicle Safety**





## INTERNATIONAL ASSOCIATION OF FIRE CHIEFS

*Providing leadership for the fire and emergency services since 1873*

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Whether responding to a structure or wildland fire, medical emergency, hazardous materials release, building collapse, terrorist attack, or natural disaster, fire departments across the U.S. comprise the first line of defense for citizens in need. To effectively serve those we are charged to protect, it is first necessary to safely assemble onscene the required firefighters, emergency medical personnel, fire apparatus, and equipment; the foundation for successfully handling any incident, therefore, rests on emergency vehicle safety.

Our nation's fire service deserves sincere praise for the many collaborative efforts on which it has embarked over the years, with the common goal of improving firefighter safety, health, and survival. Yet we cannot afford to rest, since despite meaningful progress, we have much left to accomplish. For the past decade, an average of fifteen firefighters perished annually in vehicle-related incidents, while many others were injured; compounding this tragedy is the number of civilian casualties incurred each year. Beyond this very human toll, fire departments often experience significant damage to their facilities and apparatus when emergency vehicle safety is compromised.

The International Association of Fire Chiefs (IAFC) is honored to partner with the Department of Homeland Security (DHS)/United States Fire Administration (USFA) in this important venture to reduce the impact of vehicle-related incidents on the fire service and our communities. As chief fire officers, IAFC members shoulder considerable responsibility for ensuring the safety of both firefighters and citizens during emergency vehicle operations. The fact of the matter is that, working together, we can help prevent vehicle-related injuries, fatalities, and property damage through a combination of strategies, including the development and implementation of model policies and procedures for emergency vehicle safety.

The IAFC understands the challenges you and your department face with respect to emergency vehicle safety, and we hope you find the tools and resources provided here, in conjunction with the DHS/USFA, to be useful in our shared endeavor to improve the safety, health, and survival of firefighters and the citizens they serve.

Respectfully yours,

A handwritten signature in cursive script that reads "James B. Harmes".

Chief James B. Harmes, CFO  
IAFC President 2006-2007

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## Document Overview

This document provides guidance for developing the basic policies and procedures required to support the safe and effective operation of all fire and emergency vehicles; this includes fire apparatus, rescue vehicles, ambulances, command and support units, privately owned vehicles (POVs), and any other vehicles operated by fire department members in the performance of their duties.

- **Basic Driving Policies** – Driver qualifications and training, skills maintenance; duties and responsibilities; general traffic laws; reporting safety problems and violations.
- **Emergency Response Policies** – Authorized emergency response, special driver qualifications, applicable traffic laws and fire department driving policies, use of warning devices,
- **Riding Emergency Vehicles**– Permitted vehicle occupants, passenger behavior, and safety in emergency vehicles.
- **Special Safety Considerations** – Scene safety, backing up, parking, operation in high-risk areas.
- **Vehicle Accident Reporting and Investigation**– Accident scene procedures (information gathering, injury assessment, notification, etc.), reporting forms and documentation requirements, post-accident investigation (examination of scene, interviews with participants and witnesses, etc.), report preparation and dissemination.
- **Use of Personal Vehicles**– Authorized use and response, driver behavior, roadway operations, permitted vehicle occupants, reporting safety problems and violations.

*The Model Policies and Procedures for Emergency Vehicle Safety constitute general guidelines for the safe operation of emergency vehicles. Users should consult with their departmental counsel and/or other appropriate resource to assure compliance with any state or local requirements as well as determining the applicability to their equipment and individual circumstances. These policies and procedures in and of themselves do not constitute a standard subject to enforcement.*

## Vehicle Operations Policies

### Overview

The highest emphasis should be placed on safety, and particularly on safe vehicle operations when developing vehicle operations policies. These policies should apply to all vehicle operations, including emergency response. Fire department members are expected to comply with all applicable traffic laws, as well as departmental safety policies and standard operating procedures at all times.

The driving policies and procedures also apply to members who are operating any other vehicle, including a privately owned vehicle (POV), within the scope of their fire department duties and responsibilities.

### Responsibilities

**Driver Responsibility**– The driver of a fire department vehicle is responsible for the safe operation of the vehicle at all times, including compliance with all traffic laws, as well as fire department policies and SOPs.

**Officer Responsibility**– The officer-in-charge (OIC) of a fire department vehicle is responsible for supervising the driver and all other assigned members; this includes ensuring that the driver complies with traffic laws, fire department policies, and SOPs.

**Member Responsibility**– All department members are required to comply with all safety policies and procedures while operating, riding in or performing any function that involves a fire department vehicle.

*Note*– *The company officer or front seat passenger shall assist the driver by operating radios and conducting other activities such as map reading. The driver shall focus attention on safe operation of the vehicle.*

## **Seatbelts**

All persons driving or riding in fire department vehicles shall be seated in approved riding positions with seatbelts or safety restraints fastened at all times when the vehicle is in motion.

The driver shall not begin to move the vehicle until all passengers are seated and properly secured. All passengers shall remain seated and secured as long as the vehicle is in motion. Seatbelts shall not be loosened or released while en route to dress or don equipment.

Members shall not attempt to mount or dismount from a moving vehicle under any circumstances.

### **Exception:**

A fire department member who is providing direct patient care inside an ambulance shall be permitted to momentarily release the seat belt while the vehicle is in motion – **IF IT IS ESSENTIAL TO PROVIDE PATIENT CARE**. When the procedure has been completed, the fire department member shall refasten the seat belt. Time without the protection of a seat belt shall be minimized.

*Note–National Fire Protection Agency (NFPA) 1500 allows this exception for the ambulance patient compartment; however, effective restraint systems are now available for ambulances. NFPA 1500 also permits exceptions to the seatbelt policy for hose loading and tiller training, however, strict guidelines must be applied to these activities if the exceptions are included in a departmental policy. The fire department should carefully consider whether these exceptions should be included in the departmental policy statement.*

## **Emergency vs. Non-Emergency Response**

Fire department vehicle operations are classified as either “emergency” or “non-emergency.” During “non-emergency” operations, fire department vehicles shall comply with all of the traffic laws and rules of the road that apply to all other vehicles. The specific exceptions to traffic laws that apply to emergency vehicles shall only be exercised during authorized emergency operations.

Emergency response creates an increased risk to firefighters and to other users of the roadways. The increased risk must be balanced against the potential benefits of faster response in situations where lives and/or property are at risk. Emergency response shall be limited to situations where prompt response is likely to reduce the risk of death, serious injury or disability, or preventable damage to property.

Each response to an incident shall be classified as either “emergency” or “non-emergency” at the time of dispatch, based on the nature of the reported situation. The response classification shall be assigned according to pre-established criteria.

The response classification may be changed by the communications center at the time of dispatch or while units are en route, based on the receipt of additional information. The change of response classification may apply to all units or only to specified units.

The officer-in-charge of a company or unit that is en route to an incident is also authorized to change the response classification, based on reliable information that the change is appropriate. The communications center and all other responding units will be advised immediately of a change in response classification.

When multiple units are responding in emergency mode, the officer arriving at the scene and assuming command of the incident shall determine if it is appropriate to downgrade the response of any units that are still enroute. The additional units shall be directed to continue “at reduced speed” or non-emergency when the situation does not urgently require their presence at the scene.

The decision to transport a patient from an incident scene to a hospital utilizing the emergency or non-emergency response mode must consider the medical necessity of reduced travel time. Information on the stability of the patient, the distance to the hospital, the prevailing traffic conditions, the weather, and other factors shall be taken into account.

*Note—The fire department should adopt a written policy to define the specific types of incidents and situations for which emergency response is authorized. The state traffic laws should be consulted to determine the legal definitions that apply to authorized emergency response.*

*The determination of which types of calls justify emergency response must consider local factors and traffic conditions. In some cases, the difference between emergency response and non-emergency response could be measured in seconds, while in other cases the difference could be several minutes. In jurisdictions where traffic congestion is a major problem, a “reduced speed policy” could be implemented to reduce the risks of emergency response, while maintaining the ability to move through traffic.*

**Examples** of incident classifications are provided below:

#### Emergency Response Classifications

- Smoke or fire in a building
- Outside fire with exposures
- Gas leak inside a building
- Hazardous materials release with persons in distress
- Critical medical incident

## Non-Emergency Response Classifications

- Automatic fire alarm system activation – no human report of smoke or fire
- Residential smoke alarm sounding – no indication of smoke or fire
- Carbon monoxide alarm – no indication of person(s) in distress
- Outside fire without exposures
- Smoke in the area – no indication of source
- Outside gas leak
- Electrical wires arcing
- Hazardous materials release – no indication of person(s) in distress
- Water leak
- Unknown odor – no symptoms or persons in distress
- Relieve units at the scene of an incident that is under control

Fire departments should also consider the adoption of policies to limit certain vehicles, such as tankers (water tenders), support units and other large and/or heavy vehicles to non-emergency response mode.

Standardized triage protocols should be used to classify medical incidents. Policies should also define when emergency response is authorized for the transportation of patients to medical facilities. The following recommendations apply to the classification of medical incidents for emergency or non-emergency response.

**Decision Factors**– Standardized call taking procedures, triage criteria, and dispatch policies should all be employed to classify medical incidents for emergency or non-emergency response. The appropriate units should be assigned and respond to each request, based on the priority level determined in the call-taking process

**Emergency Dispatch (ED) program**– All Public Safety Answering Point (PSAP) call takers should be trained and certified under a recognized ED program. The necessary continuing education should be provided by the employer to meet the requirements for recertification.

**EMS Authority**– All protocols, guidelines and policies must be approved by the appropriate medical director, regional emergency medical authority, or coordinating agency.

**Systemized Caller Interrogation Process**– Call receipt should be methodical and should not deviate from the recognized ED program standards. Call takers should not deviate from the established protocols.

**Systemized Pre-Arrival Medical Instructions**– The provision of standardized pre-arrival medical instructions is a critical component of an ED program. Positive patient outcomes are likely to be influenced by the provision of basic instructions and medical assistance over the telephone.

**Tiered EMS Responses**– The appropriate utilization of EMS system resources is highly dependent on the ED process. Tiered response determines whether Advanced Life Support (ALS) and/or Basic Life Support (BLS) units will be dispatched to an incident, if first responders should be dispatched, and whether units should respond in emergency (lights and siren) or non-emergency mode.

**Quality Assurance / Case review process**– Quality assurance programs should include a mechanism to review and evaluate the ED policy and procedures. Records shall be maintained and utilized for the overall improvement of the system.

### **Emergency Response Driving**

State traffic laws include specific provisions for emergency vehicles, while they are engaged in emergency operations. Department policies and procedures should specify when and how these exceptions will be applied by fire department members (employees). The fire department driving policies and standard operating procedures are, in some cases, more restrictive than state traffic laws.

Responding to emergency incidents does not in any manner reduce the responsibility to operate vehicles safely. While prompt response to emergency incidents is an organizational priority, safety is always a higher priority. The responding units must arrive safely at the location where they are needed before they can deliver the required services. Unsafe operation of an emergency vehicle creates an unacceptable risk to fire department members, to the public, and to the individuals who are in need of assistance.

### **Traffic Laws – Emergency Vehicles**

The motor vehicle laws of many states grant specific allowances and exemptions to emergency vehicles, when they are responding to emergency incidents and using the required warning devices. These provisions only apply to officially recognized emergency vehicles, while they are responding to emergency incidents in compliance with all of the applicable laws and regulations.

For specific motor vehicle laws, please refer to the current version of the relevant state code or statutes (see State Traffic Laws-Links at the end of this document).

The motor vehicle laws in most states generally include a list of allowances and exemptions, such as:

The driver of an authorized emergency vehicle may:

- Park or stand, irrespective of the provisions of this law
- Proceed past a red or stop signal or stop sign, but only after slowing down as may be necessary for safe operation

*Note— In some states, the law requires an emergency vehicle to STOP before proceeding past a red light or stop sign. The specific laws of each state or jurisdiction must be consulted. State Laws must be considered the minimum and may not represent all that is necessary and required. Most fire department policies and procedures require drivers to come to a full stop before proceeding, even where a stop is not required by the state traffic laws.*

- Exceed the speed limits so long as he or she does not endanger life or property
- Disregard regulations governing direction of movement or turning in specified directions

No person shall drive a vehicle at a speed greater than is reasonable and prudent under the conditions and having regard to the actual and potential hazards then existing.

Notwithstanding such allowances and exemptions, the driver of the emergency vehicle is required to operate responsibly at all times. The emergency vehicle driver has a duty to drive with due regard for the safety of all other persons and property.

Many states have passed traffic laws requiring an emergency vehicle to be equipped with warning lights and audible warning devices (*refer to the applicable state law to determine what is required, what is permitted, and what is prohibited.*) These traffic laws also generally require drivers to yield the right-of-way to an emergency vehicle when its warning lights and audible warning devices are in operation.

The use of warning lights and audible warning devices does not automatically grant the right-of-way to an emergency vehicle. These devices are intended to make other drivers aware of the presence of an emergency vehicle. Other drivers are generally required to yield the right-of-way to an emergency vehicle; however, they cannot be expected to yield the right-of-way if they do not see or are not aware of the emergency vehicle.

The emergency vehicle driver must never assume that another vehicle will yield the right-of-way; it is always the emergency vehicle driver's responsibility to ensure that the other driver has yielded the right-of-way. The emergency vehicle driver is responsible for operating in a safe and prudent manner, recognizing that other drivers could be distracted, inattentive, or simply uncooperative. The emergency vehicle driver is not permitted to employ aggressive driving techniques to force another driver to yield the right-of-way.

While responding in an emergency mode, drivers are required to make their presence evident using audible and visual warning devices. Emergency vehicle drivers should also endeavor to make their intentions as clear as possible and their vehicles as visible as possible to other drivers.

The following policies should apply to employees/members who are driving fire department vehicles in an emergency response mode. (The same policies apply to the emergency operation of any other vehicle within the scope of a driver's fire department duties.)

**Use of Warning Devices:** Warning lights and audible warning devices shall be used when fire department vehicles are responding in an emergency mode. Generally speaking, both warning lights and audible devices must be operated in order to meet the legal definition of an emergency vehicle.

Warning lights shall be used at all times when fire department vehicles are operating in an emergency response mode. Audible warning devices (siren and/or horn) shall be used as necessary to warn other drivers and pedestrians of the approach of an emergency vehicle and request the right-of-way. Audible warning devices shall be used in moderation when they are not required to provide warning (light traffic or open road situations).

*Note— In some states the motor vehicle laws have been interpreted to require the siren or audible warning device to be sounded continually while operating in an emergency mode.*

Audible warning devices shall not be used when a vehicle is operating in a non-emergency mode. Warning lights shall be used when the fire department vehicle is maneuvering or stopped in a location where it creates a traffic hazard.

**Speed:** The driver shall never exceed a speed that is safe and prudent, based on road and weather conditions and other circumstances, including the design and capabilities of the vehicle. The posted speed limit may be exceeded only when the required warning devices are in use and when weather, traffic, and road conditions are favorable. **The posted speed limit shall not be exceeded under any other conditions.**

*Note— While most state traffic laws allow emergency vehicles to exceed posted speed limits, most fire departments establish internal policies that set maximum permissible speeds under specific conditions; vehicles should always be driven according to road and traffic conditions, never exceeding the maximum speed allowed by department policy.*

- 10 mph over the posted speed limit has been established by some departments as a maximum for emergency responses under normal road and traffic conditions, when traveling with the flow of traffic.

- When conditions are unfavorable, the posted speed limit shall not be exceeded and actual speed shall be determined by the conditions.
- The posted advisory speed for a curve shall be considered the maximum allowable speed under all conditions, regardless of response condition.

**Intersections:** The fire department emergency vehicle shall come to a full stop before entering a negative right-of-way intersection (red light, flashing red light, or stop sign), blind intersection, or any intersection where hazards are present and/or the driver cannot account for all oncoming traffic lanes. The emergency vehicle shall not enter the intersection until all approaching traffic has yielded the right-of-way and it is safe to proceed. The emergency vehicle driver shall ensure that all approaching vehicles in all lanes have yielded the right-of-way before advancing.

*Note– The requirement for a full stop at red lights and stop signs is more restrictive than the motor vehicle laws in many states. This policy is incorporated in NFPA 1500 and has been adopted by a large number of fire departments.*

If necessary, due to traffic conditions or visual obstructions, the emergency vehicle driver shall cross the intersection in stages, treating each lane as a separate intersection. The driver shall stop the vehicle, as necessary, to ensure that each lane may be crossed safely

When passing through an intersection where the emergency vehicle has the right-of-way, by virtue of a green light in the direction of travel and/or a stop signal (stop sign) for cross-traffic, the emergency vehicle shall not exceed the posted speed limit. Emergency vehicle drivers should not assume that oncoming/opposing traffic has stopped, even when facing a green signal or “clear” route; emergency vehicle drivers must visually confirm that oncoming/opposing traffic is stopped while approaching any intersection, and be prepared to stop immediately, if necessary.

**Opposing Traffic Lanes:** Operating emergency vehicles in opposing traffic lanes is extremely hazardous under all conditions and should only be considered under exceptional circumstances (i.e., if there is no alternate route of travel).

Many departments have established a standard that when an emergency vehicle must travel in an opposing traffic lane, or in a center turn lane to maneuver around slow moving or stopped traffic, the emergency vehicle shall not exceed 20 miles-per-hour, at a maximum. If there is a median separating the emergency vehicle from the slow or stopped traffic, the emergency vehicle shall not exceed a maximum of 30 miles-per-hour. (Actual speed, up to the specified limit, should depend on the road, traffic and weather conditions, and local terrain.)

When approaching a controlled intersection (traffic lights or stop signs) in an opposing traffic lane or center turn lane, the emergency vehicle shall come to a full stop before entering the intersection, even if the traffic light is green in the direction of travel.

*Note– Please refer to your state motor vehicle code to ascertain whether or not emergency vehicle travel in opposing traffic lanes is allowed under the law.*

**Travel in an Opposing Direction:** Operating emergency vehicles against the normal flow of traffic requires extreme caution and should only be considered under exceptional circumstances (i.e., if there is no alternate route of travel). Travel against the normal direction of traffic flow on a one-way street shall be limited to short distances. Emergency vehicle drivers must proceed slowly and with extreme caution in these situations.

The emergency vehicle must come to a full stop before entering an intersection while traveling in an opposing direction.

*Note– Please refer to your state motor vehicle code to ascertain whether or not emergency vehicle travel against the normal traffic flow (i.e., the “wrong way” along a one-way street) is allowed under the law.*

**Passing:** When overtaking traffic that is moving in the same direction, the emergency vehicle driver shall give other drivers an opportunity to yield the right-of-way before passing. If it is necessary to pass a vehicle that has not yielded the right-of-way, the emergency vehicle shall provide as wide a clearance as possible.

A fire department emergency vehicle shall not overtake another emergency vehicle that is traveling in the same direction unless the driver of the lead vehicle has indicated that the other may pass. A following vehicle may contact a leading vehicle by radio to request permission to pass.

*Note–State motor vehicle laws vary widely with respect to the required actions a civilian driver must take when being overtaken by an emergency vehicle; some states require drivers to move to the side of the road and stop when encountering an emergency vehicle. In other cases, the driver is required to move to the closest shoulder, which could be to the left on a divided roadway or one-way street. Please check your state motor vehicle code and remember that under all circumstances an emergency vehicle must be operated with due regard for safety, whether or not a civilian driver yields the right-of-way.*

For more information regarding “move over” laws, refer to the following website:  
<http://www.respondersafety.com/moveover.php>

**Railroad Crossing:** The emergency vehicle shall come to a full stop at unguarded railway grade crossings. Caution shall be exercised at grade crossings where warning lights and/or gates are provided.

It is not always possible to hear an approaching train, due to the Doppler Effect\* and the type of locomotives used on some rail lines (particularly electric locomotives); otherwise “normal” appearing highway vehicles, equipped with rail wheels, are also used by railroads and may be encountered at grade crossings. Emergency vehicle drivers should become familiar with the specific characteristics of the rail lines in their area.

Warning devices and crossing gates are generally reliable, but they can fail due to the harsh conditions to which they are exposed—these devices are designed to fail in the “safe” mode. When approaching a grade crossing with lowered gates and/or active lights and no apparent rail traffic, the emergency vehicle shall come to a full stop prior to the crossing; before proceeding, the emergency vehicle driver shall visually confirm that no train or other rail vehicle is approaching on the tracks. Complete confirmation may require that members physically dismount the vehicle to visually check the tracks.

The railroad industry’s Operation Lifesaver community provides training and important information about grade crossing safety on its website: [www.operationlifesaver.com](http://www.operationlifesaver.com)

*\*The Doppler Effect is the perceptible change in the frequency and wavelength of a sound wave as it moves relative to an observer.*

**School Bus:** The emergency vehicle shall not pass a school bus that has stopped with red lights flashing to load or discharge passengers, unless the bus driver clearly signals that it is safe to pass.

When clearly signaled by the bus driver that it is safe to pass a stopped school bus, the emergency vehicle shall proceed slowly and with extreme caution past the school bus; all members must be vigilant for children while approaching and passing the bus. The emergency vehicle driver must be prepared to stop immediately while approaching, passing, and leaving the area in which the school bus is stopped.

**Pedestrian Crosswalk:** The emergency vehicle shall not exceed the posted speed limit when approaching a pedestrian crosswalk. If the crosswalk is occupied, the emergency vehicle shall slow down and be prepared to stop if the pedestrian does not yield the right-of-way.

**Law Enforcement Officer:** The emergency vehicle shall comply with the directions of a sworn law enforcement officer, including a signal to stop.

Law enforcement officials may also direct the specific positioning, or repositioning, of emergency vehicles on an incident scene in order to maintain traffic flow, reduce bottlenecks, enhance scene safety, and prevent secondary collisions. Compliance with such direction is generally required of emergency vehicle drivers; if a difference of opinion regarding scene safety arises, it should be resolved in a cooperative fashion with the ranking law enforcement officer on the scene.

*Note— State motor vehicle codes may contain provisions describing the onscene relationships between various public safety entities including fire departments, rescue squads, law enforcement agencies, highway departments, and others; fire department managers, supervisors, chiefs, and emergency vehicle drivers must become familiar with these specific provisions. Establishing positive and mutually supporting relationships, through training and exercises, with law enforcement and other members of the public safety community is highly recommended.*

**Aggressive Driving:** Emergency vehicle drivers shall not employ aggressive driving techniques to force other drivers to yield the right-of-way.

Emergency vehicles must be operated with due regard for the safety of civilian traffic at all times, and under all circumstances; the elimination of aggressive driving techniques is also critical for protecting the safety of other crew members assigned to the vehicle.

### **Special Driving Procedures**

**Backing:** Before backing a fire department vehicle, the driver shall ensure that the intended path is clear of hazards or obstructions.

One or more spotters shall be employed as guides in all situations where the driver does not have a clear vision of the path of travel. Two spotters should be assigned when backing large or heavy apparatus—one covering each side of the vehicle. When available, a third spotter can be used to monitor traffic or, especially in the case of aerial apparatus, watch the front of the vehicle for overhead obstructions.

A spotter is responsible for guiding the driver and ensuring that any potential hazards are avoided. Standard signals shall be used to communicate with the driver during the backing maneuver; hand signals or voice signals transmitted over a portable radio can be employed for this purpose. The spotter shall direct the driver to stop at any time the backing maneuver cannot be completed safely.

The spotter(s) shall be on the ground, to the rear of the vehicle, and shall remain visible to the driver at all times. If the driver loses sight of the spotter(s) at any time, the driver shall immediately stop the vehicle. Portable radios or tethered vehicle-mounted intercom systems are recommended for spotters' safety. In no case are cameras or safety devices a substitute for a spotter. (NFPA 1500 requires at least one spotter to have contact with the driver.)

If it is essential to back a vehicle with limited rearward visibility and no spotter is available, the driver shall stop, dismount, and visually perform a 360-degree check around the vehicle before backing, with emphasis on the area behind and to both sides. After checking the area, the driver shall back the vehicle at slow speed and with extreme caution, prepared to stop immediately if necessary.

**Maneuvering at an Incident Scene:** Drivers shall exercise extreme caution while maneuvering emergency vehicles at an incident scene; other drivers and pedestrians may be distracted or preoccupied by events and a variety of hazards (e.g., downed or low-hanging wires, limited visibility, hazardous materials, etc.) may be encountered. Vehicles shall be moved slowly and cautiously, with spotters assigned to guide the driver in tight situations.

When streets have been closed to regular traffic, the emergency vehicle driver remains fully responsible for the safe and prudent operation of the vehicle at all times.

When operating at an incident scene where the streets have not been closed to regular traffic, fire department vehicles shall be positioned, parked, or staged in a manner that considers safety as a primary factor.

**Check for Unsecured Personnel:** Before moving an emergency vehicle in any location, the driver shall ensure that all occupants are seated and properly secured in approved riding positions. The driver shall ensure and the officer shall verify that no one is in the process of mounting, dismounting, standing on top of, or on the outside of, the vehicle.

Under no circumstances shall members be allowed to ride on the outside of a moving apparatus, including the tailboard, roof, aerial platform/bucket, or a top-mounted pump panel.

**Return to Roadway:** Fire department vehicle operators shall be aware of the actions to be taken if the wheels of the vehicle leave the paved surface of the roadway. In these situations, the vehicle shall be slowed to a speed below 20 miles-per-hour before any attempt is made to return it to the roadway.

Depending on road conditions and the condition of the off-road surface on which the vehicle is moving, it may be necessary to carefully bring the vehicle to a complete stop before attempting a return to the roadway; under many circumstances, particularly involving heavy apparatus, this may be the safest course of action.

## Emergency Vehicle Drivers

**Driver Training Program:** Emergency vehicles shall only be driven/operated by individuals who comply with the applicable state driver's license requirements and have been trained and certified to operate the particular vehicle or type/class of vehicle through a comprehensive Emergency Vehicle Operators Course (EVOC).

It is recommended that departments require members to meet the following requirements before qualifying to operate department-owned emergency vehicles:

- Current state-issued driver's/operator's license valid for the type/class of the member's POV
- Successful completion of an EVOC

Before being allowed to operate a privately owned vehicle (POV) during emergency responses, department members must meet the following requirements:

- Current state-issued driver's/operator's license valid for the type/class of the member's POV
- Successful completion of a state-approved EVOC

*Note— Each state or territory determines specific licensing requirements for drivers of emergency vehicles. It is the responsibility of the individual fire department to ensure that drivers remain in full compliance with the applicable state licensing requirements for the duration of their employment or volunteer service.*

*The Commercial Motor Vehicle Safety Act of 1986 establishes minimum federal standards for the licensing of commercial vehicle drivers in the United States; however, the federal regulations allow states to waive the Commercial Driver's License requirements for fire fighters and other emergency response vehicle operators. Each state has the option of either applying or waiving the CDL requirements for emergency vehicle drivers.*

*Some states require only a basic driver's license to drive fire apparatus, while others have adopted special requirements that are similar or equivalent to the CDL requirements. Several states require emergency vehicle drivers to complete an Emergency Vehicle Operator's Course (EVOC) or equivalent training program.*

*In addition to the state licensing requirements, each fire department should adopt and enforce internal policies to regulate driver selection, training, and qualifications. In states that do not enforce special licensing requirements, the CDL requirements provide a valuable reference point for establishing these policies. The fire department is responsible for ensuring that drivers are properly trained and have the necessary skills and attitudes to safely operate emergency vehicles.*

*Emergency vehicle drivers should also be required to meet a medical standard that includes vision testing and ensures that the driver is not susceptible to any medical or physical conditions that could impair the individual's ability to operate a vehicle safely and skillfully. An annual or bi-annual medical examination should be required to maintain driver status.*

**Driving Record Review:** The fire department shall obtain and review a copy of the member's motor vehicle record from the state Department of Motor Vehicles for individuals who are assigned a driving position or must drive as a condition of employment. Each authorized driver's Motor Vehicle Record shall be reviewed periodically (at intervals of three years or less, with annual reviews recommended) to ensure that the individual maintains safe driving habits.

A fire department member with driving responsibilities who has been charged with an offense that could result in a suspension or revocation of his or her driver's license should be required to notify his or her supervisor or chief in a timely fashion. The individual may be suspended from driving emergency vehicles pending judgment, depending on the circumstances and existing department policy. Such charges could include:

- Driving while intoxicated or under the influence of drugs
- Negligent homicide or gross negligence
- Aggravated assault with a motor vehicle
- Reckless driving
- Leaving the scene of an accident

**Basic Driver Training:** Basic driver training shall be completed before a member is authorized to drive any fire department vehicle or to drive a POV on fire department business. The fire department shall ensure that the individual is properly licensed and insured with the necessary knowledge, skills, and abilities to operate an emergency vehicle safely. The initial driver training program shall include, at a minimum:

- Traffic laws
- Traffic and highway safety
- Basic vehicle dynamics
- Inspection and maintenance procedures
- Competency course
- Over-the-road evaluation

Upon completion of the basic driver program, a member is authorized to drive light duty vehicles in a non-emergency mode. This classification includes passenger vehicles, SUVs, vans, and pick-up trucks. Additional training shall be required before the member is qualified to drive larger vehicles or to operate any vehicle in the emergency response mode.

The fire department shall periodically review the performance of each member who is authorized to drive fire department vehicles. The authorization to drive may be suspended or revoked as a result of such reviews and/or additional training may be required to maintain driving status. Members, and Officers that supervise those members who repeatedly fail to comply with fire department driving policies and procedures or violate traffic laws while driving fire department vehicles, should be re-evaluated or disciplined if necessary.

**Emergency Vehicle Operator's Course:** Before being authorized to operate any fire department vehicle in an emergency response mode, the member shall successfully complete an Emergency Vehicle Operator's Course (EVOC). Following completion of the EVOC program, the individual must demonstrate an appropriate understanding of the specific policies, procedures, and considerations that apply to emergency response, before being authorized to operate vehicles in an emergency response mode. A refresher EVOC training class is required at intervals of not more than three (3) years to maintain emergency vehicle operator status.

**Authorization to Drive Fire Apparatus and Specialized Vehicles:** The driver training program requires the member to qualify progressively for each individual vehicle or class of vehicles. The member must demonstrate the necessary knowledge, skills, and abilities before being authorized to drive and/or operate such vehicles.

The member must complete the appropriate driver/operator training course(s) (*e.g., pump operator, aerial operator*) before becoming qualified on such vehicles. Driver/operator trainees shall practice under the direct supervision of a fully qualified driver/operator or a driver training instructor.

The final approval to drive/operate a vehicle or class of vehicles requires the member to pass an operational and over-the road test administered by an authorized evaluator.

### **Alcohol and Substance Abuse**

Fire department members are not permitted to be on duty, to respond to emergency incidents, to drive or operate fire department vehicles, nor to perform any other duty-related functions while under the influence of alcohol or drugs.

Fire department members shall not perform any duty-related functions for a minimum of eight (8) hours following the consumption of any alcoholic beverages. A longer period waiting period may be required to ensure that the individual is free of impairment. A blood alcohol concentration of 0.02 percent or higher, while on duty, shall create the presumption that the member is under the influence of alcohol.

The driver and the officer in charge of any fire department vehicle that is involved in an accident that causes measurable property damage, injury or death shall be tested for the presence of alcohol or drugs with the least possible delay. In addition, a chief officer may require a member to be tested for the presence of drugs or alcohol at any time, upon reasonable suspicion that the member could be under the influence of such substances.

**Reference:**

**Zero-Tolerance for Alcohol & Drinking in the Fire & Emergency Service**

*A Leadership Policy Statement from the International Association of Fire Chiefs (Adopted by the Board of Directors August 14, 2003)*

“This policy statement is most easily described as a "zero-tolerance" standard about the use of alcohol by members of any fire or emergency services agency/organization at any time when they may be called upon to act or respond as a member of those departments.

Basically, if someone has consumed alcohol within the previous eight (8) hours, or is still noticeably impaired by alcohol consumed previous to the eight (8) hours, they must voluntarily remove themselves from the activities and functions of the fire or emergency services agency/organization, including all emergency operations and training.

No member of a fire & emergency services agency/organization shall participate in any aspect of the organization and operation of the fire or emergency agency/organization under the influence of alcohol, including but not limited to any fire and emergency operations, fire-police, training, etc.

No alcohol shall be on the premises of any operational portion of the fire department including, but not limited to, the apparatus, the apparatus floor, the station living areas, etc.

Fire & emergency services agencies/organizations which raise funds by operating and/or renting social halls must provide a clear and distinct separation of facilities to help insure the zero-tolerance standard of alcohol consumption by their members who may be called upon to perform official duties.”

All fire and/or emergency service agencies/organizations should develop written policies and have procedures in place to support and enforce this policy recommendation. Included in such a policy should be provisions for blood alcohol testing of any individuals involved with any accident that causes measurable damage to apparatus or property or injury/death of agency/organization personnel or civilians.

**Privately Owned Vehicle Response**

The laws and regulations that apply to the use of privately owned vehicles (POVs) to respond to emergency incidents vary from state to state. While the specific regulations and requirements for each individual state must be consulted, the basic requirements can be described within three categories. The model SOP referenced in Appendix B is divided into three separate sections to apply to the basic alternative situations:

- States where POVs may be equipped with warning devices and recognized as emergency vehicles
- States where POVs may be authorized to use warning devices (courtesy lights), but are not authorized to be operated as emergency vehicles
- States where POVs are not authorized to use warning devices and may not be operated as emergency vehicles

The fire department's internal rules and regulations may be more restrictive than the state law. While the state may allow POVs to be equipped with warning devices, the fire department may prohibit or restrict their use by its members. The fire department directives should also specify whether members are permitted to drive POVs to an incident scene or if they are only permitted to drive to the firehouse in response to an alarm.

### **POV Recognized as Emergency Vehicle**

Several states permit POVs to be equipped with warning lights and sirens and operated as emergency vehicles or public safety vehicles. In these states, the traffic laws and regulations that apply to emergency vehicles also apply to properly designated POVs.

An official authorization from the fire chief or a designated local official is usually required before a POV may be equipped and operated as an emergency vehicle. The authorization form is submitted to a state agency, such as the department of motor vehicles or the state fire marshal, to certify that the vehicle and the vehicle owner have met the necessary requirements. In most cases, a special registration sticker is issued by the state and must be applied to the vehicle.

The authorization process makes the fire department responsible for ensuring that the vehicle meets the state requirements to be designated as an emergency or public safety vehicle. This would include verification that the vehicle is in proper mechanical condition and the warning devices are compliant with the applicable laws.

The fire department also has a duty to ensure that the driver of a designated POV has been properly trained and is capable of safely operating the vehicle in an emergency response mode. In the absence of specific state regulations, the fire chief should apply the same standards to qualify a driver to operate a POV or a fire department vehicle in an emergency mode. Drivers should be required to complete EVOC training, and submit to a medical examination, skills evaluation, and driving record check before being authorized to operate privately owned vehicles as emergency vehicles. Periodic refresher training, skills evaluations, medical examinations, and driving record checks should all be required to maintain this authorization.

It is very important to determine the insurance requirements that apply when a POV is designated as an emergency or public safety vehicle. There could be special coverage requirements imposed by the state as a condition of designating a vehicle. The vehicle owner's insurance company must be aware that the vehicle is being used for emergency response. The fire department's insurer or risk management agency should also be consulted to determine if additional coverage is required.

### **Courtesy/Warning Light Permitted**

Many states allow firefighters and emergency medical personnel to use colored warning lights on privately owned vehicles to request the right-of-way when responding to emergency incidents. The use of a courtesy/warning light does not provide any special privileges or exemptions to traffic laws. Other drivers are not required to yield the right-of-way to a vehicle that has a courtesy light in operation. The only purpose of the warning light is to request that other drivers yield the right-of-way; the POV driver is required to comply with all traffic laws.

The fire department should establish procedures to regulate the installation and use of warning lights on privately owned vehicles, in accordance with state laws and regulations. A member who is authorized to install and use a courtesy light must be made aware of the rules and legal limitations for its use. The fire department should retain the right to revoke the authorization to use a courtesy light if a member fails to comply with all of the requirements.

### **No Warning Devices Permitted or Authorized**

In states where warning devices are not permitted and/or members are not authorized to install or use warning devices on their privately owned vehicles, the fire department should ensure that all members understand and comply with the laws and regulations. Unauthorized installation and/or use of warning devices should be addressed as a disciplinary issue.

In each of the situations described above, the fire department should clearly specify when members are permitted or authorized to drive privately owned vehicles to the fire station or to an incident scene in response to an alarm.

The fire department should also determine the insurance regulations that apply to members using privately owned vehicles to respond to alarms or conduct other fire department business.

## **Collision Investigation**

The fire department should investigate all collisions and “near miss” situations involving departmental vehicles to determine the causal factors and identify measures that should be taken to prevent similar incidents in the future. The fire department’s internal examination should be separate from any law enforcement investigation or external analysis that is directed toward determining the legal responsibility for the occurrence. The internal investigation should focus on actions that are required to prevent future accidents through actions that can be accomplished within the fire department, such as changes in equipment and procedures, additional training, or enforcement of existing policies.

The internal investigation should begin as soon as possible after the occurrence. In many cases, where the situation is relatively uncomplicated and does not require any technical analysis, the internal investigation can be conducted within a few days. The investigation of a major crash involving injuries or fatalities will usually involve technical analysis that could be conducted by a collision reconstruction expert or an outside consultant.

The written investigation report should detail the root causes of the crash and provide a plan for corrective action to help prevent similar occurrences in the future.

The detailed procedures for conducting an investigation should be tailored to meet the needs and circumstances of the organization. The written policy and procedures for conducting an accident investigation should be reviewed by the fire department’s attorney or risk management organization to ensure that they do not create undesirable legal issues.

**Reference:** See the Collision Investigation Guidelines at – [www.nvfc.org/evsp/collision-investigation.html](http://www.nvfc.org/evsp/collision-investigation.html)

## **Highway Safety**

The fire department should develop and implement a system of policies and procedures to address the protection of personnel and incident victims at highway incident scenes. The policy should ensure that personnel wear high visibility clothing in all weather and light conditions. The procedures should address the use of warning lights and other devices to provide advance warning to motorists, and apparatus positioning to offer as much physical protection as possible for emergency responders.

Key points to consider when developing procedures are:

- Wearing of ANSI compliant reflective clothing by all personnel on scene
- Placement of upstream warning and traffic channeling devices
- Positioning of apparatus to protect the scene
- Use of warning lights and scene lighting
- Staging
- Prior planning with all agencies that could potentially be involved
- Unified Command - communications and coordination among all agencies on scene
- Coordinate training and SOG/SOP development with other agencies, (e.g., law enforcement, tow operators)
- Educate law enforcement of the necessity to protect emergency responders
- Minimize POV response to incident scenes

**Reference:** See [www.respondersafety.com](http://www.respondersafety.com)

### **Traffic Signal Preemption**

The safety of emergency vehicle responses can be increased and intersection delays can be reduced by installing traffic signal preemption systems at controlled intersections. These systems can be installed at particular intersections or locations that present special problems or they may be installed along certain corridors or on all of the intersections within a jurisdiction. In many cases, they are installed at intersections where vehicles have to exit from a fire station onto busy streets.

Several different types of systems are available to control traffic signals in a manner that will provide green lights for approaching emergency responders. These systems can be activated at individual intersections by special strobe light emitters or radio transmitters mounted on the apparatus or by devices that recognize approaching siren sounds. Other systems use a hard wired device to control the lights at particular intersections from the fire station or communications center. The newest systems utilize a GPS tracking device to transmit the location, speed, and direction of an emergency vehicle to a central computer that controls a series of intersections and can provide a sequence of green lights along the intended path of travel.

Where these systems are available, fire departments should develop specific policies and procedures to specify when and how they will be used. The preemption system should always be used during emergency mode responses to incidents and when transporting patients to medical facilities in the emergency mode. An effective preemption system will significantly reduce the risk of intersection crashes that can occur when emergency vehicles attempt to cross against red lights, as well as preventing traffic delays. Studies have shown that steady travel at a moderate speed involves less risk than frequent starts and stops for red lights and can also result in significant response time reductions. In some jurisdictions, the preemption system is also used to reduce delays during non-emergency mode responses.

Traffic signal preemption systems must be properly designed and installed and they must also be adequately maintained and tested regularly. In most cases, the agency that is responsible for the installation and maintenance of traffic signals is also responsible for the preemption equipment that is installed at intersections, however the fire department may be responsible for testing and immediately reporting any system malfunctions.

Emergency vehicle drivers should be required to follow very specific procedures when preemption systems are in use. The driver must not exceed a speed that will allow the system to properly activate and sequence the traffic signals to provide a green light before the emergency vehicle arrives at the intersection. Once the green light becomes available, if the path is clear, the emergency vehicle should proceed through the intersection at a reasonable speed, although the driver must always be prepared for the unpredictable actions of other drivers. The emergency vehicle driver must also be prepared to stop if the preemption system does not function properly or fails to detect the signal. The driver must not approach an intersection while going too fast to stop, with the assumption that the light will change in time to pass through the intersection on a green light.

A very dangerous situation can occur when two emergency vehicles approach an intersection at the same time from different directions. Fatal crashes between emergency vehicles have occurred in these circumstances. All traffic signal preemption systems are designed so that one vehicle will capture control of the intersection, generally the first input to be detected, and the signal from the other will be rejected. If a preemption system fails to provide a green signal as an emergency vehicle approaches, the driver must assume that another emergency vehicle will be coming through the intersection and the other vehicle has the green light. Some systems provide special indicator lights at the intersection to advise an approaching emergency vehicle when the signal has been received and whether or not the vehicle has successfully taken control of the intersection.

- Traffic preemption devices should be used whenever warning lights and sirens are activated.
- The preemption emitter is not to be used during non-emergency functions.
- All personnel qualified to drive vehicles with emitters must attend training before operating a vehicle with an emitter.
- Use of the emitter system **DOES NOT GUARANTEE** or **GRANT** the right-of-way.
- The emitter should automatically turn off when the transmission is in the park position or when the parking brake is applied.

- There should be a program for periodically checking the system to ensure it works.

Reference: Text adapted from the NVFC Traffic Preemption Guidelines – <http://www.nvfc.org/evsp/traffic-preemption.html>

## **Emergency Vehicle Maintenance**

### **Vehicle Inspection**

All Fire Department vehicles shall be regularly inspected and tested and preventive maintenance shall be conducted to ensure that vehicles are in proper operating condition. Safety and operational readiness are the highest priorities in inspecting and maintaining vehicles. Any fire department vehicle that is found to be unsafe at any time shall be placed out of service until it has been repaired.

A vehicle shall be considered unsafe and placed out of service if deficiencies are detected in one or more of the following areas:

- Brake system
- Steering
- Suspension
- Wheels or tires
- Throttle
- Transmission or driveline
- Cab and/or body mounting
- Door latches
- Seat belts
- Windshield, windshield wipers or defroster

Other deficiencies may or may not require a vehicle to be placed out of service. Any safety-related deficiency, which does not require the vehicle to be taken out of service, shall be repaired as quickly as possible.

All fire department vehicles shall be inspected at least weekly to identify and correct unsafe conditions. All inspections shall be recorded, indicating the date and time and the individual responsible for conducting the inspection.

- Vehicles that are in service for emergency response, with an assigned duty crew, shall be inspected by the driver at the beginning of each work shift or work period.
- Vehicles that are not in service with an assigned duty crew shall be inspected after each use or within 24 hours of being used.
- Vehicles that have been out of service for maintenance or repairs or are involved in an accident shall be inspected before being placed back in service.

All fire department vehicles shall be mechanically inspected and service tested at least annually, following the requirements of the appropriate NFPA standards, manufacturer's recommendations and state motor vehicle licensing and registration regulations.

**References:**

NFPA 1500 *Standard for Fire Department Occupational Safety and Health Program*

NFPA 1911 *Standard for Service Tests of Fire Pump Systems on Fire Apparatus*

NFPA 1914 *Standard for Testing Fire Department Aerial Devices*

NFPA 1915 *Standard for Fire Apparatus Preventive Maintenance Program* (NFPA 1915 will be replaced with NFPA 1911 in 2007. Users should check for applicable updates.)

**Vehicle Safety Program Implementation**

Successfully implementing emergency vehicle safety policies and procedures requires meaningful and continued attention by a department's executive leadership, managers, officers, first-line supervisors, drivers, firefighters, and other members. To assist with the implementation process, chief officers have a wide range of factors to consider, including:

- Identifying the problem
- Leveraging existing resources
- Setting the "tone at the top"
- Building "grassroots" support
- Engaging department members in customizing model policies and procedures
- Different vehicle types
- Enlisting member support for adopting policies and procedures
- Labor-management cooperation
- Training
- Technology
- Enforcement
- Reporting near-misses
- Celebrating positive accomplishments

Reinforcing the need for emergency vehicle safety is an ongoing process for every fire department, rescue squad, and other emergency service organization; focusing attention on safe emergency vehicle operation sets the stage for implementing relevant policies and procedures. Numerous opportunities exist for departments to proactively address this important topic:

- Safety Stand-Down
- Company training
- Department meetings
- Daily or weekly apparatus checks (preventive maintenance)
- Weekly or monthly training sessions
- Fundraisers
- Family events

- Awards ceremonies
- Officer installations
- Current events or news articles

A variety of resources to enhance emergency vehicle safety efforts are currently available to fire departments from organizations such as the:

- Department of Homeland Security (DHS)/United States Fire Administration (USFA)
- International Association of Fire Chiefs (IAFC)
- National Volunteer Fire Council (NVFC)
- International Association of Fire Fighters (IAFF)
- Emergency Responder Safety Institute ([www.respondersafety.com](http://www.respondersafety.com))

Additionally, departments may have access to resources from local, regional, and state fire chiefs' associations; cooperative local and state law enforcement agencies/organizations; and insurance companies. Forming positive relationships with local, regional, and state transportation/highway agencies can also prove extremely helpful in terms of improving overall safety at emergency incidents.

Beyond supporting the development of policies and procedures for emergency vehicle safety, chief officers and department managers/supervisors are highly influential during the implementation process. By making safe emergency vehicle operations a priority, department leaders create the "tone at the top" needed for success; just as important is the personal example demonstrated in their own behavior.

While emergency vehicle safety efforts will necessarily involve members from the upper levels of the organization, the implementation process is well-served by the early inclusion of members from throughout the department in building "grassroots" support for instituting policies and procedures to strengthen emergency vehicle safety.

Once the decision is made to adopt model policies and procedures for emergency vehicle safety, department members should be engaged in customizing them to the operating environment (i.e., state motor vehicle laws, department characteristics, and resources). This level of participation will facilitate "buy-in" among those affected by the policies and also help ensure the ultimate effectiveness of the procedures in use.

Departments operating multiple vehicle types (e.g., engines, ladders, heavy rescues/squads, staff vehicles, ambulances, POVs, etc.) should consider the need to address vehicle-specific items or issues while developing policies and procedures for emergency vehicle safety.

Once emergency vehicle-related policies and procedures are ready for implementation, department members who were involved in their development can be instrumental for supporting their adoption and daily use. Having these members assist with the "roll-out" process can help build credibility and trust among their peers.

Labor-management cooperation, in departments with organized labor groups, can positively affect the implementation of emergency vehicle safety policies and procedures. With safe emergency vehicle operation a key issue for both labor and management, meaningful opportunities for cooperation may also be created as a result of the implementation process.

The importance of training for safe emergency vehicle operations cannot be overstated. In addition to developing drivers' technical skills, training on relevant policies and procedures should be provided before, during, and after their adoption. Safe vehicle operation can also be reinforced during other types of training activities.

Departments should develop internal processes for evaluating technology with promise for enhancing emergency vehicle safety; examples include traffic signal preemption and apparatus design modifications. Once technology is adopted, policies and procedures should be updated to reflect the new state-of-the-art.

Violations of policies and procedures for emergency vehicle safety are certainly possible, but their likelihood can be reduced through effective and continuous training; when violations do occur, they must be handled swiftly and decisively, in accordance with the department's existing disciplinary processes.

Departments can reinforce the safe operation of emergency vehicles by celebrating positive accomplishments through established systems of member recognition, or by creating awards programs specific to emergency vehicle safety.

Identifying and addressing vehicle-related "near-miss" incidents is critically important. The National Fire Fighter Near-Miss Reporting System ([www.firefighternearmiss.com](http://www.firefighternearmiss.com)) offers an effective and non-punitive mechanism for sharing "lessons learned" with other fire departments, along with the opportunity to learn from others' experiences.

#### Other Resources

- United States Fire Administration (2004) Emergency Vehicle Safety Initiative/FA-272, Emmitsburg, MD: [www.usfa.dhs.gov](http://www.usfa.dhs.gov)
- United States Fire Administration (1999) Guide to Developing Effective Standard Operating Procedures for Fire and EMS Departments/FA-197, Emmitsburg, MD: [www.usfa.dhs.gov](http://www.usfa.dhs.gov)
- United States Fire Administration & The National Volunteer Fire Council (2006) Emergency Vehicle Safe Operations for Volunteer & Small Combination Emergency Services Organizations, Washington, DC: [www.nvfc.org/evsp/index.html](http://www.nvfc.org/evsp/index.html)
- United States Fire Administration & The International Association of Fire Fighters (2006) Improving Apparatus Response and Roadway Operations Safety in the Career Fire Service, Washington, DC: [www.iaff.org/evsp/home.html](http://www.iaff.org/evsp/home.html)

## **Glossary of Terms**

**ALS – Advanced Life Support:** Emergency medical care for sustaining life, including defibrillation, airway management, and medications.

**BLS – Basic Life Support:** Emergency procedures performed to sustain life that include cardiopulmonary resuscitation, control of bleeding, treatment of shock, stabilization of injuries and wounds, and first aid.

**CDL – Commercial Driver’s License:** A CDL is required in the United States to operate many types of heavy-duty vehicles including (but not limited to) tow trucks, tractor trailers and buses.

A CDL is required for drivers of intrastate commerce (commerce completely within one state) and interstate commerce (commerce crossing a state line) and is accepted anywhere in North America. A driver may only have one CDL issued by one state. Although federal guidelines establish common regulations to achieve uniformity throughout the country, individual states determine license fees, renewal cycles, procedures, and continue to decide the age, medical, and other driver qualifications of intrastate commercial drivers. Thus, the criteria for such licenses may vary from state to state.

**Class 2 Leak –** A Class II leak is a leakage of fluid great enough to form a drop, but not enough to cause the drop to fall from the item being checked or inspected.

**Class 3 Leak –** A Class III leak is a leakage of fluid great enough to form drops that then fall from the item being checked or inspected.

**DHS/USFA – Department of Homeland Security (DHS)/United States Fire Administration (USFA):** As an entity of the Department of Homeland Security, the mission of the USFA is to reduce life and economic losses due to fire and related emergencies, through leadership, advocacy, coordination, and support. The USFA serves the Nation independently, in coordination with other Federal agencies, and in partnership with fire protection and emergency service communities. With a commitment to excellence, they provide public education, training, technology, and data initiatives.

**Doppler Effect –** The Doppler Effect is the perceptible change in the frequency and wavelength of a sound wave as it moves relative to an observer.

**ED – Emergency Dispatch**

**EVOC– Emergency Vehicle Operator’s Course**

**Guideline** – A statement, indication, guide, or outline of policy by which to determine a current or future course of action.

**IAFC – International Association of Fire Chiefs:** Established in 1873, the International Association of Fire Chiefs (IAFC) is a powerful network of more than 12,000 chief fire and emergency officers. Our members are the world's leading experts in fire fighting, emergency medical services, terrorism response, hazardous materials spills, natural disasters, search & rescue, and public safety legislation. The IAFC's mission is to provide leadership to career and volunteer chiefs, chief fire officers and managers of emergency service organizations throughout the international community through vision, information, education, services, and representation to enhance their professionalism and capabilities.

**IAFF – International Association of Fire Fighters:** The International Association of Fire Fighters has more than 2,900 affiliates, representing fire fighters in more than 3,500 communities in the U.S. and Canada. The 274,000 members of the IAFF are the nation's full-time professional fire fighters and paramedics, who protect the lives and property of 85 percent of the nation's population.

In addition to city and county fire fighters and emergency medical personnel, the IAFF represents state employees (such as the California Forestry fire fighters), federal workers (such as fire fighters on military installations), and fire and emergency medical workers employed at certain industrial facilities.

**MUTCD – Manual on Uniform Traffic Control Devices:** The *Manual on Uniform Traffic Control Devices* or MUTCD defines the standards used by road managers nationwide to install and maintain traffic control devices on all streets and highways. The MUTCD is published by the Federal Highway Administration (FHWA) under 23 Code of Federal Regulations (CFR), Part 655, Subpart F.

The MUTCD audience includes the insurance industry, law enforcement agencies, academic institutions, private industry, and construction and engineering concerns.

**NVFC – National Volunteer Fire Council:** The National Volunteer Fire Council (NVFC) is a non-profit membership association representing the interests of the volunteer fire, EMS and rescue services. The NVFC serves as the information source regarding legislation, standards, and regulatory issues.

### **OIC – Officer in Charge**

**Policy** – A guiding principle or course of action adopted toward an objective or objectives. Describes the general principle that will guide behavior or a definite course or method of action to guide and determine present and future decisions.

**POV – Privately Owned Vehicle-** a vehicle owned and operated by an emergency responder that is used for personnel transportation and responding to an incident scene.

**Procedure** – Prescribes specific ways of doing specific activities and regulates the formal steps of an action. It provides a series of steps followed in a particular order.

**PSAP – Public Safety Answering Point:** An agency in the United States, typically county or city controlled, responsible for answering 9-1-1 calls for emergency assistance from police, fire, and ambulance services.

There are roughly 6,500 PSAPs. Personnel working for PSAPs can become voting members of the National Emergency Number Association (NENA).

**Regulation** – A rule or order prescribed by an authority to regulate conduct.

**Rule** – A principle set up by authority, prescribing or directing action.

**SOG – Standard Operating Guidelines:** A set of guidelines having the force of a directive, covering those features of operations that lend themselves to a definite or standardized procedure without loss of effectiveness.

**SOP– Standard Operating Procedure:** A set of instructions having the force of a directive, covering those features of operations that lend themselves to a definite or standardized procedure without loss of effectiveness.

**Statutes** – A statute is a formal, written law of a country or state, written and enacted by its legislative authority, perhaps to then be ratified by the highest executive in the government, and finally published. Typically, statutes command, prohibit, or declare policy. Statutes are sometimes referred to as legislation or "black letter law."

## **Additional Resources**

### **Department of Homeland Security (DHS)/United States Fire Administration (USFA)**

<http://www.usfa.dhs.gov/research/safety/vehicle.shtm>

The “*Emergency Vehicle Safety Initiative*,” is a jointly sponsored project of the USFA and Department of Transportation (DOT) Federal Highway Administration, to develop materials that directly target their constituency - Chief Officers and Fire Department Leadership; the Career Fire Service, and the Volunteer Fire Service.

This outreach project to the fire service regarding vehicle safety will address issues such as seatbelt use, intersection safety, fire apparatus and emergency vehicle safety design, driver selection and training, policies involving alcohol and driving, and implementation of alternative response programs.

### **National Volunteer Fire Council (NVFC)**

<http://www.nvfc.org/evsp/sop-g.html>

Guidelines for developing Vehicle Standard Operating Procedures.

### **IAFF Emergency Vehicle Safety Program**

<http://www.iaff.org/evsp/>

<http://www.iaff.org/vehiclesafety> - Contains contents of the IAFC Model Policies & Procedures for Emergency Vehicle Safety CD

### **Responder Safety**

<http://www.respondersafety.com/>

Created as a Committee of the Cumberland Valley Volunteer Firemen's Association, the Institute serves as an informal advisory panel of public safety leaders committed to reducing deaths and injuries to America's emergency responders. Members of the Institute, all highly influential and expert in their fields, are personally dedicated to the safety of the men and women who respond to emergencies on or along our nation's streets, roads, and highways. Members of the Institute include trainers, writers, managers, government officials, technical experts, and leaders who through their individual efforts and collective influence in the public safety world can bring meaningful change.

## **National Fallen Firefighters Foundation**

<http://www.firehero.org/>

The United States Congress created the National Fallen Firefighters Foundation to lead a nationwide effort to remember America's fallen firefighters. Since 1992, the tax-exempt, non-profit Foundation has developed and expanded programs to honor our fallen fire heroes and assist their families and coworkers.

The Foundation is a 501(c) 3 nonprofit organization, located in Emmitsburg, Maryland. It is registered as a corporation in the State of Maryland. The Foundation receives funding through private donations from caring individuals, organizations, corporations, and foundations.

A grant from the Department of Justice's Bureau of Justice Assistance supports programs for survivors of fallen firefighters. The DHS/USFA partners with the Foundation to sponsor many of the National Memorial Weekend activities. The National Institute of Standards and Technology (NIST) supports work on a national research agenda to prevent line-of-duty deaths.

## **Everyone Goes Home**

<http://www.everyonegoeshome.com/>

Recognizing the need to do more to prevent line-of-duty deaths and injuries, the National Fallen Firefighters Foundation has launched a national initiative to bring prevention to the forefront.

In March 2004, the Firefighter Life Safety Summit was held in Tampa, Florida to address the need for change within the fire and emergency services. Through this meeting, 16 Life Safety Initiatives were produced to ensure that Everyone Goes Home.

The first major action was to sponsor a national gathering of fire and emergency services leaders. Organized by the National Fallen Firefighters Foundation, the event held in Tampa, Florida, in March 2004 produced 16 major initiatives that will give the fire service a blueprint for making changes.

The National Fallen Firefighters Foundation will play a major role in helping the U.S. Fire Administration meet its stated goal to reduce firefighter fatalities by 25 percent within five years, and by 50 percent within 10 years. The Foundation sees fire service adoption of the summit's initiatives as a vital step in meeting this goal.

**Operation Life Saver**

<http://www.operationlifesaver.com/>

Operation Lifesaver is a non-profit, international continuing public education program first established in 1972 to end collisions, deaths, and injuries at places where roadways cross train tracks, and on railroad rights-of-way.

Operation Lifesaver programs are sponsored cooperatively by federal, state, and local government agencies; highway safety organizations, and the nation's railroads.

**Firefighter Near Miss**

[www.firefighternearmiss.org](http://www.firefighternearmiss.org)

## State Traffic Laws - Links (current as of 8/27/06)

States	Statute Link
ALABAMA	<a href="http://www.legislature.state.al.us/Search/SearchText.htm">http://www.legislature.state.al.us/Search/SearchText.htm</a>
ALASKA	<a href="http://www.legis.state.ak.us/cgi-bin/folioisa.dll/statx02/query=?realquerydlg">http://www.legis.state.ak.us/cgi-bin/folioisa.dll/statx02/query=?realquerydlg</a>
ARIZONA	<a href="http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp">http://www.azleg.state.az.us/ArizonaRevisedStatutes.asp</a>
ARKANSAS	<a href="http://www.arkleg.state.ar.us/NXT/gateway.dll?f=templates&amp;fn=default.htm&amp;vid=bl r:code">http://www.arkleg.state.ar.us/NXT/gateway.dll?f=templates&amp;fn=default.htm&amp;vid=bl r:code</a>
CALIFORNIA	<a href="http://www.leginfo.ca.gov/calaw.html">http://www.leginfo.ca.gov/calaw.html</a>
COLORADO	<a href="http://198.187.128.12/colorado/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0">http://198.187.128.12/colorado/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0</a>
CONNECTICUT	<a href="http://search.cga.state.ct.us/dtsearch_lpa.html">http://search.cga.state.ct.us/dtsearch_lpa.html</a>
DELAWARE	<a href="http://198.187.128.12/delaware/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0">http://198.187.128.12/delaware/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0</a>
DISTRICT OF COLUMBIA	<a href="http://198.187.128.12/dc/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0">http://198.187.128.12/dc/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0</a>
FLORIDA	<a href="http://www.leg.state.fl.us/Statutes/index.cfm?Mode=Search%20Statutes&amp;Submenu=2&amp;Tab=statutes&amp;CFID=5505572&amp;CFTOKEN=75327966">http://www.leg.state.fl.us/Statutes/index.cfm?Mode=Search%20Statutes&amp;Submenu=2&amp;Tab=statutes&amp;CFID=5505572&amp;CFTOKEN=75327966</a>
GEORGIA	<a href="http://www.legis.state.ga.us/cgi-bin/gl_codes_detail.pl?code=1-1-1">http://www.legis.state.ga.us/cgi-bin/gl_codes_detail.pl?code=1-1-1</a>
HAWAII	<a href="http://www.capitol.hawaii.gov/site1/docs/docs.asp?press1=docs">http://www.capitol.hawaii.gov/site1/docs/docs.asp?press1=docs</a>
IDAHO	<a href="http://www3.state.id.us/legislat/idstat.html">http://www3.state.id.us/legislat/idstat.html</a>
ILLINOIS	<a href="http://www.ilga.gov/legislation/ilcs/ilcs.asp">http://www.ilga.gov/legislation/ilcs/ilcs.asp</a>
INDIANA	<a href="http://www.state.in.us/legislative/ic/code/">http://www.state.in.us/legislative/ic/code/</a>
IOWA	<a href="http://www.legis.state.ia.us/lowaLaw.html">http://www.legis.state.ia.us/lowaLaw.html</a>
KANSAS	<a href="http://www.kslegislature.org/legsrv-statutes/index.do">http://www.kslegislature.org/legsrv-statutes/index.do</a>
KENTUCKY	<a href="http://www.lrc.state.ky.us/Statrev/frontpg.htm">http://www.lrc.state.ky.us/Statrev/frontpg.htm</a>
LOUISIANA	<a href="http://www.legis.state.la.us/">http://www.legis.state.la.us/</a>
MAINE	<a href="http://www.legis.state.la.us/">http://www.legis.state.la.us/</a>
MARYLAND	<a href="http://mlis.state.md.us/cgi-win/web_statutes.exe">http://mlis.state.md.us/cgi-win/web_statutes.exe</a>
MASSACHUSETTS	<a href="http://www.mass.gov/legis/laws/mgl/mgllink.htm">http://www.mass.gov/legis/laws/mgl/mgllink.htm</a>
MICHIGAN	<a href="http://www.legislature.mi.gov/(ck0n4n452plp2v45fflsalmg)/mileg.aspx?page=chapterindex">http://www.legislature.mi.gov/(ck0n4n452plp2v45fflsalmg)/mileg.aspx?page=chapterindex</a>
MINNESOTA	<a href="http://ros.leg.mn/revisor/pages/search_text/doc_search.php?search=stat">http://ros.leg.mn/revisor/pages/search_text/doc_search.php?search=stat</a>
MISSISSIPPI	<a href="http://198.187.128.12/mississippi/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0">http://198.187.128.12/mississippi/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0</a>
MISSOURI	<a href="http://www.moga.mo.gov/statutesearch/">http://www.moga.mo.gov/statutesearch/</a>
MONTANA	<a href="http://opi.mt.gov/MCASearch/Index.html">http://opi.mt.gov/MCASearch/Index.html</a>
NEBRASKA	<a href="http://srvwww.unicam.state.ne.us/Laws2005.html">http://srvwww.unicam.state.ne.us/Laws2005.html</a>
NEVADA	<a href="http://www.leg.state.nv.us/law1.cfm">http://www.leg.state.nv.us/law1.cfm</a>
NEW HAMPSHIRE	<a href="http://gencourt.state.nh.us/rsa/html/indexes/search.html">http://gencourt.state.nh.us/rsa/html/indexes/search.html</a>
NEW JERSEY	<a href="http://lis.njleg.state.nj.us/cgi-bin/om_isapi.dll?clientID=116579443&amp;depth=2&amp;expandheadings=off&amp;headingswithhits=on&amp;infobase=statutes.nfo&amp;softpage=TOC_Frame_Pg42">http://lis.njleg.state.nj.us/cgi-bin/om_isapi.dll?clientID=116579443&amp;depth=2&amp;expandheadings=off&amp;headingswithhits=on&amp;infobase=statutes.nfo&amp;softpage=TOC_Frame_Pg42</a>
NEW MEXICO	<a href="http://198.187.128.12/newmexico/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0">http://198.187.128.12/newmexico/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0</a>
NEW YORK	<a href="http://public.leginfo.state.ny.us/menugeff.cgi?COMMONQUERY=LAWS">http://public.leginfo.state.ny.us/menugeff.cgi?COMMONQUERY=LAWS</a>
NORTH CAROLINA	<a href="http://www.ncleg.net/gascrpts/Statutes/Statutes.asp">http://www.ncleg.net/gascrpts/Statutes/Statutes.asp</a>
NORTH DAKOTA	<a href="http://www.legis.nd.gov/information/rules/admincode.html">http://www.legis.nd.gov/information/rules/admincode.html</a>
OHIO	<a href="http://onlinedocs.andersonpublishing.com/oh/lpExt.dll?f=templates&amp;fn=main-h.htm&amp;cp=PORC">http://onlinedocs.andersonpublishing.com/oh/lpExt.dll?f=templates&amp;fn=main-h.htm&amp;cp=PORC</a>
OKLAHOMA	<a href="http://www.oscn.net/applications/oscn/Search.asp?ftdb=STOKST&amp;quick=true">http://www.oscn.net/applications/oscn/Search.asp?ftdb=STOKST&amp;quick=true</a>
OREGON	<a href="http://www.leg.state.or.us/ors/home.html">http://www.leg.state.or.us/ors/home.html</a>

<b>States</b>	<b>Statute Link</b>
PENNSYLVANIA	<a href="http://members.aol.com/StatutesPA/Index.html">http://members.aol.com/StatutesPA/Index.html</a>
RHODE ISLAND	<a href="http://www.rilin.state.ri.us/scripts/search/search.asp?SearchWhere=/Statutes/">http://www.rilin.state.ri.us/scripts/search/search.asp?SearchWhere=/Statutes/</a>
SOUTH CAROLINA	<a href="http://www.scstatehouse.net/cgi-bin/query.exe?first=FIRST&amp;querytext=&amp;category=Code">http://www.scstatehouse.net/cgi-bin/query.exe?first=FIRST&amp;querytext=&amp;category=Code</a>
SOUTH DAKOTA	<a href="http://legis.state.sd.us/statutes/StatutesTextSearch.aspx">http://legis.state.sd.us/statutes/StatutesTextSearch.aspx</a>
TENNESSEE	<a href="http://198.187.128.12/tennessee/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0">http://198.187.128.12/tennessee/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0</a>
TEXAS	<a href="http://www.capitol.state.tx.us/cgi-bin/cqcgi?CQ_STATCON_PROCESS_LOGIN=YES&amp;CQ_USER_NAME=70.190.203.16&amp;CQ_PASSWORD=statcon_pwd&amp;CQ_LOGIN=YES">http://www.capitol.state.tx.us/cgi-bin/cqcgi?CQ_STATCON_PROCESS_LOGIN=YES&amp;CQ_USER_NAME=70.190.203.16&amp;CQ_PASSWORD=statcon_pwd&amp;CQ_LOGIN=YES</a>
UTAH	<a href="http://www.livepublish.le.state.ut.us/lpBin22/lpext.dll?f=templates&amp;fn=main-j.htm&amp;vid=98&amp;2.0">http://www.livepublish.le.state.ut.us/lpBin22/lpext.dll?f=templates&amp;fn=main-j.htm&amp;vid=98&amp;2.0</a>
VERMONT	<a href="http://198.187.128.12/vermont/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0">http://198.187.128.12/vermont/lpext.dll?f=templates&amp;fn=fs-main.htm&amp;2.0</a>
VIRGINIA	<a href="http://leg1.state.va.us/000/src.htm">http://leg1.state.va.us/000/src.htm</a>
WASHINGTON	<a href="http://apps.leg.wa.gov/rcw/">http://apps.leg.wa.gov/rcw/</a>
WEST VIRGINIA	<a href="http://www.legis.state.wv.us/WVCODE/masterfrm3Banner.cfm">http://www.legis.state.wv.us/WVCODE/masterfrm3Banner.cfm</a>
WISCONSIN	<a href="http://www.legis.state.wi.us/rsb/stats.html">http://www.legis.state.wi.us/rsb/stats.html</a>
WYOMING	<a href="http://legisweb.state.wy.us:8765/">http://legisweb.state.wy.us:8765/</a>

**Appendix A – Selected excerpts from NFPA 1500, Standard for a Fire Department Occupational Safety and Health Program, 2002 edition**

6.2.7.1 Procedures for emergency response shall emphasize that the safe arrival of fire apparatus at the emergency scene is the first priority.

6.2.8\* During emergency response, drivers of fire apparatus shall bring the vehicle to a complete stop under any of the following circumstances:

- (1) When directed by a law enforcement officer
- (2) Red traffic lights
- (3) Stop signs
- (4) Negative right-of-way intersections
- (5) Blind intersections
- (6) When the driver cannot account for all lanes of traffic in an intersection
- (7) When other intersection hazards are present
- (8) When encountering a stopped school bus with flashing warning lights

6.2.9 Drivers shall proceed through intersections only when the driver can account for all lanes of traffic in the intersection.

6.2.10\* During emergency response or non-emergency travel, drivers of fire apparatus shall come to a complete stop at all unguarded railroad grade crossings. Drivers shall ensure that it is safe to proceed before crossing the railroad track(s).

6.2.11 Drivers shall use caution when approaching and crossing any guarded railroad grade crossing.

6.2.12 The fire department shall include information on the potential hazards of retarders, such as engine, transmission, and driveline retarders, in the driver training program and shall develop written procedures pertaining to the use of such retarders.

6.2.13 The fire department shall develop written procedures requiring drivers to discontinue the use of manual brake limiting valves, frequently labeled as a “wet road/dry road” switch, and requiring that the valve/switch remains in the “dry road” position.

6.4.1\* All fire apparatus shall be inspected at least weekly, within 24 hours after any use or repair, and prior to being placed in service or used for emergency purposes to identify and correct unsafe conditions.

6.4.2 A preventive maintenance program shall be established, and records shall be maintained as specified in Chapter 4 of this standard.

6.4.3 Inspection, maintenance, and repair of fire apparatus shall be conducted in accordance with NFPA 1915, *Standard for Fire Apparatus Preventive Maintenance Program*. (NFPA 1915 will be replaced with NFPA 1911 in 2007. Users should check for applicable updates.)

6.4.4\* The fire department shall establish a list of major defects to be utilized to evaluate when a vehicle shall be declared unsafe.

6.4.4.1 Any fire department vehicle found to be unsafe shall be placed out of service until repaired.

6.4.5 All repairs to fire department apparatus shall be performed by personnel meeting the requirements of NFPA 1071, *Standard for Emergency Vehicle Technician Professional Qualifications*, or personnel trained to meet the requirements identified by the manufacturers in their specifications and procedures for fire department vehicles and protective equipment.

6.4.6 Fire pumps on apparatus shall be service tested in accordance with the applicable requirements of NFPA 1911, *Standard for Service Tests of Fire Pump Systems on Fire Apparatus*.

6.4.7 All aerial devices shall be inspected and service tested in accordance with the applicable requirements of NFPA 1914, *Standard for Testing Fire Department Aerial Devices*.

*Note— Reprinted with permission from NFPA 1500, Fire Department Occupational Safety and Health Program, Copyright ©2002, National Fire Protection Association, Quincy, MA 02169. This reprinted material is not the complete and official position of the National Fire Protection Association on the referenced subject which is represented only by the standard in its entirety. NFPA 1500 is available from NFPA at [www.nfpa.org](http://www.nfpa.org) or (800) 344-3555.*

**APPENDIX B –  
Model Policies  
For  
Emergency Vehicle Response**

**MODEL POLICIES**

**EMERGENCY  
VEHICLE RESPONSE**

**XYZ Department**

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The *Model Policies and Procedures for Emergency Vehicle Safety* constitute general guidelines for the safe operation of emergency vehicles. Users should consult with their departmental counsel and/or other appropriate resource to assure compliance with any state or local requirements as well as determining the applicability to their equipment and individual circumstances. These policies and procedures in and of themselves do not constitute a standard subject to enforcement.

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## Vehicle Policies Overview

This document provides model policies and procedures required to support the safe and effective operation of all fire and emergency vehicles; this includes fire apparatus, rescue vehicles, ambulances, command and support units, privately owned vehicles (POVs), and any other vehicles operated by fire department members in the performance of their duties.

- **Basic Driving Policies** – Driver qualifications and training, skills maintenance; duties and responsibilities; general traffic laws; reporting safety problems and violations.
- **Emergency Response Policies – Authorized** emergency response, special driver qualifications, applicable traffic laws, and fire department driving policies, use of warning devices.
- **Riding Emergency Vehicles** – Permitted vehicle occupants, passenger behavior, and safety in emergency vehicles.
- **Special Safety Considerations** – Scene safety, backing up, parking, operation in high-risk areas.
- **Vehicle Accident Reporting and Investigation** – Accident scene procedures (information gathering, injury assessment, notification, etc.), reporting forms and documentation requirements, post-accident investigation (examination of scene, interviews with participants and witnesses, etc.), report preparation and dissemination.
- **Use of Personal Vehicles** – Authorized use and response, driver behavior, roadway operations, permitted vehicle occupants, reporting safety problems and violations.

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**Seatbelt Policy**

**Purpose:**

To establish appropriate and safe behavior regarding the use of safety belts when operating or riding in an emergency vehicle.

**Scope:**

All personnel.

**Policy:**

All persons driving or riding in fire department vehicles shall be seated in approved riding positions with seatbelts or safety restraints fastened at all times when the vehicle is in motion.

The driver shall not begin to move the vehicle until all passengers are seated and properly secured. All passengers shall remain seated and secured as long as the vehicle is in motion. Seatbelts shall not be loosened or released while enroute to dress or don equipment.

Members shall not attempt to mount or dismount from a moving vehicle under any circumstances.

**Exception:**

A fire department member who is providing direct patient care inside an ambulance shall be permitted to release momentarily the seat belt while the vehicle is in motion – **IF IT IS ESSENTIAL TO PROVIDE PATIENT CARE**. When the procedure has been completed, the fire department member shall refasten the seatbelt. Time without the protection of a seat belt shall be minimized.

*Note– NFPA 1500 allows this exception for the ambulance patient compartment; however, effective restraint systems are now available for ambulances. NFPA 1500 also permits exceptions to the seat belt policy for hose loading and tiller training, however, strict guidelines must be applied to these activities if the exceptions are included in a departmental policy. The fire department should carefully consider whether these exceptions should be included in the departmental policy statement.*

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**Emergency, Non-Emergency Response Policy**

**Purpose:**

To prioritize the response of emergency vehicles to ensure maximum utilization of resources and that units respond in a mode that corresponds with the prioritization level of the emergency request.

**Scope:**

All personnel

**Policy:**

*The fire department should adopt a written policy to define the specific types of incidents and situations for which emergency response is authorized. The state traffic laws should be consulted to determine the legal definitions that apply to authorized emergency response.*

*The determination of which types of calls justify emergency response must consider local factors and traffic conditions. In some cases, the difference between emergency response and non-emergency response could be measured in seconds, while in other cases the difference could be several minutes. In jurisdictions where traffic congestion is a major problem, a “reduced speed policy” could be implemented to reduce the risks of emergency response, while maintaining the ability to move through traffic.*

*Standardized triage protocols should be used to classify medical incidents. Policies should also define when emergency response is authorized for the transportation of patients to medical facilities. The following recommendations apply to the classification of medical incidents for emergency or non-emergency response.*

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### **Regulatory & Statute Compliance**

The **insert state** traffic laws include specific provisions for emergency vehicles, while they are engaged in emergency operations. The **XYZ** Department policies and procedures specify when and how these exceptions will be applied. The fire department driving policies and standard operating procedures may be, in some cases, more restrictive than state traffic laws.

Responding to emergency incidents does not in any manner reduce the responsibility to operate vehicles safely. While prompt response to emergency incidents is an organizational priority, safety is always a higher priority. The responding units must arrive safely at the location where they are needed before they can deliver the required services. Unsafe operation of an emergency vehicle creates an unacceptable risk to fire department members, to the public, and to the individuals who are in need of assistance.

The motor vehicle laws of **insert state** grant specific allowances and exemptions to emergency vehicles, when they are responding to emergency incidents and using the required warning devices. These provisions only apply to officially recognized emergency vehicles, while they are responding to emergency incidents in compliance with all of the applicable laws and regulations.

Notwithstanding such allowances and exemptions, the driver of the emergency vehicle is required to operate responsibly at all times. The emergency vehicle driver has a duty to drive with due regard for the safety of all other persons and property.

The **insert state** traffic laws require an emergency vehicle to be equipped with warning lights and audible warning devices (*refer to the applicable state law to determine what is required, what is permitted, and what is prohibited.*) The traffic laws also require drivers to yield the right-of-way to an emergency vehicle when the warning lights and audible warning devices are in operation.

The use of warning lights and audible warning devices does not automatically grant the right-of-way to an emergency vehicle. These devices are intended to make other drivers aware of the presence of an emergency vehicle. Other drivers are required to yield the right-of way to an emergency vehicle; however, they cannot be expected to yield the right-of-way if they do not see or are not aware of the emergency vehicle.

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The emergency vehicle driver must never assume that another vehicle will yield the right-of-way; it is always the emergency vehicle driver's responsibility to ensure that the other driver has yielded the right-of-way. The emergency vehicle driver is responsible for operating in a safe and prudent manner, recognizing that other drivers could be distracted, inattentive, or simply uncooperative. The emergency vehicle driver is not permitted to employ aggressive driving techniques to force another driver to yield the right-of-way.

While responding in an emergency mode, drivers are required to make their presence evident using audible and visual warning devices. Emergency vehicle drivers should also endeavor to make their intentions as clear as possible and their vehicles as visible as possible to other drivers.

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## **Traffic Laws – Emergency Vehicles**

The XYZ Department has established the following policies that apply to employees/members who are driving fire department vehicles in an emergency response mode. (The same policies apply to the emergency operation of any other vehicle within the scope of a driver's fire department duties.)

### **Use of Warning Device Policy**

#### **Purpose:**

To establish a policy on the use of warning devices.

#### **Scope:**

All personnel.

#### **Policy:**

Warning lights and audible warning devices shall be used when fire department vehicles are responding in an emergency mode. Both warning lights and audible devices must be operated in order to meet the legal definition of an emergency vehicle.

Warning lights shall be used at all times when fire department vehicles are operating in an emergency response mode. Audible warning devices (siren and/or horn) shall be used as necessary to warn other drivers and pedestrians of the approach of an emergency vehicle and request the right-of-way. Audible warning devices shall be used in moderation when they are not required to provide warning (light traffic or open road situations).

Audible warning devices shall not be used when a vehicle is operating in a non-emergency mode. Warning lights shall be used when the fire department vehicle is maneuvering or stopped in a location where it creates a traffic hazard.

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### **Speed Limitations Policy**

**Purpose:**

To establish practices that address the speed of emergency vehicles to increase the ability of the driver/operator to maintain safe control the vehicle at all times.

**Scope:**

All personnel.

**Policy:**

The driver shall never exceed a speed that is safe and prudent, based on road and weather conditions and other circumstances, including the design and capabilities of the vehicle. The posted speed limit may be exceeded only when the required warning devices are in use and when weather, traffic, and road conditions are favorable. The posted speed limit shall not be exceeded under any other conditions.

- The maximum speed for any XYZ Department vehicle, under favorable conditions, shall not exceed the posted speed limit by more than insert your departments maximum speed miles-per-hour.
- When conditions are unfavorable, the posted speed limit shall not be exceeded and actual speed shall be determined by the conditions.
- The posted advisory speed for a curve shall be considered the maximum allowable speed under all conditions, regardless of response condition.
- Water tenders shall not respond in emergency mode unless specifically directed by a command officer or dispatch.

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**Intersection Navigation Policy**

**Purpose:**

To establish procedures and guidelines for the safe operation of all emergency vehicles and apparatus when negotiating intersections.

**Scope:**

All personnel.

**Policy:**

The fire department emergency vehicle shall come to a full stop before entering a negative right-of-way intersection (red light, flashing red light, or stop sign), blind intersection, or any intersection where hazards are present and/or the driver cannot account for all oncoming traffic lanes. The emergency vehicle shall not enter the intersection until all approaching traffic has yielded the right-of-way and it is safe to proceed. The emergency vehicle driver shall ensure that all approaching vehicles in all lanes have yielded the right-of-way before advancing.

If necessary, due to traffic conditions or visual obstructions, the emergency vehicle driver shall cross the intersection in stages, treating each lane as a separate intersection. The driver shall stop the vehicle, as necessary, to ensure that each lane may be crossed safely

When passing through an intersection where the emergency vehicle has the right-of-way, by virtue of a green light in the direction of travel and/or a stop signal (stop sign) for cross-traffic, the emergency vehicle shall not exceed the posted speed limit. Emergency vehicle drivers should not assume that oncoming/opposing traffic has stopped, even when facing a green signal or “clear” route; emergency vehicle drivers must visually confirm that oncoming/opposing traffic is stopped while approaching any intersection, and be prepared to stop immediately, if necessary.

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**Traveling in Opposing Traffic Lanes**

**Purpose:**

To establish practices that address when an emergency vehicle must travel in an opposing lane.

**Scope:**

All personnel.

**Policy:**

Operating emergency vehicles in opposing traffic lanes is extremely hazardous under all conditions and should only be considered under exceptional circumstances (i.e., if there is no alternate route of travel).

When an emergency vehicle must travel in an opposing traffic lane, or in a center turn lane to maneuver around slow moving or stopped traffic, the emergency vehicle shall not exceed insert your departments maximum speed miles-per-hour, at a maximum. If there is a median separating the emergency vehicle from the slow or stopped traffic, the emergency vehicle shall not exceed a maximum of insert your departments maximum speed miles-per-hour. (Actual speed should depend on the road, traffic, and weather conditions.)

When approaching a controlled intersection (traffic lights or stop signs) in an opposing traffic lane or center turn lane, the emergency vehicle shall come to a full stop before entering the intersection, even if the traffic light is green in the direction of travel.

*Note– Please refer to your state motor vehicle code to ascertain whether or not emergency vehicle travel in opposing traffic lanes is allowed under the law.*

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**Travel in an Opposing Direction**

**Purpose:**

To establish safe practices that address when an emergency vehicle must travel against the traffic flow on a one-way street.

**Scope:**

All personnel.

**Policy:**

Operating emergency vehicles against the normal flow of traffic is extremely hazardous under all conditions and should only be considered under exceptional circumstances (i.e., if there is no alternate route of travel).

Travel against the normal direction of traffic flow on a one-way street shall be limited to short distances. Emergency vehicle drivers must proceed slowly and with extreme caution in these situations.

The emergency vehicle must come to a full stop before entering an intersection while traveling in an opposing direction.

*Note– Please refer to your state motor vehicle code to ascertain whether or not emergency vehicle travel against the normal traffic flow (i.e., the “wrong way” along a one-way street) is allowed under the law.*

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**Passing Traffic in an Emergency Vehicle**

**Purpose:**

To establish safe practices that address when an emergency vehicle must pass traffic moving in the same direction.

**Scope:**

All personnel.

**Policy:**

When overtaking traffic that is moving in the same direction, the emergency vehicle driver shall give other drivers an opportunity to yield the right-of-way before passing. If it is necessary to pass a vehicle that has not yielded the right-of-way, the emergency vehicle shall provide as wide a clearance as possible.

A fire department emergency vehicle shall not overtake another emergency vehicle that is traveling in the same direction unless the driver of the lead vehicle has indicated that the other may pass. A following vehicle may contact a leading vehicle by radio to request permission to pass.

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## **Railroad Crossing Policy**

### **Purpose:**

To establish safe practices that address when an emergency vehicle comes to an unguarded railway grade crossing.

### **Scope:**

All personnel.

### **Policy:**

The emergency vehicle shall come to a full stop at unguarded railway grade crossings. Caution shall be exercised at grade crossings where warning lights and/or gates are provided.

It is not always possible to hear an approaching train, due to the Doppler Effect\* and the type of locomotives used on some rail lines (particularly electric locomotives); otherwise “normal” appearing highway vehicles, equipped with rail wheels, are also used by railroads and may be encountered at grade crossings. Emergency vehicle drivers should become familiar with the specific characteristics of the rail lines in their area.

Warning devices and crossing gates are generally reliable, but can fail due to the harsh conditions to which they are exposed—these devices are designed to fail in the “safe” mode. When approaching a grade crossing with lowered gates and/or active lights and no apparent rail traffic, the emergency vehicle shall come to a full stop prior to the crossing; before proceeding, the emergency vehicle driver shall visually confirm that no train or other rail vehicle is approaching on the tracks. Complete confirmation may require that members physically dismount the vehicle to visually check the tracks.

*\*The “Doppler Effect” is the perceptible change in the frequency and wavelength of a sound wave as it moves relative to an observer.*

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**Stopped School Bus**

**Purpose:**

To establish safe practices that address when an emergency vehicle comes to a school bus that has stopped with red lights flashing.

**Scope:**

All personnel.

**Policy:**

The emergency vehicle shall not pass a school bus that has stopped with red lights flashing to load or discharge passengers, unless the bus driver clearly signals that it is safe to pass.

When clearly signaled by the bus driver that it is safe to pass a stopped school bus, the emergency vehicle shall proceed slowly and with extreme caution past the school bus; all members must be vigilant for children while approaching and passing the bus. The emergency vehicle driver must be prepared to stop immediately while approaching, passing, and leaving the area in which the school bus is stopped.

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**Pedestrian Crosswalk**

**Purpose:**

To establish safe practices that address when an emergency vehicle comes to a pedestrian crosswalk.

**Scope:**

All personnel.

**Policy:**

The emergency vehicle shall not exceed the posted speed limit when approaching a pedestrian crosswalk. If the crosswalk is occupied, the emergency vehicle shall slow down and be prepared to stop if the pedestrian does not yield the right-of-way.

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**Law Enforcement Directions**

**Purpose:**

To establish safe practices that address when a law enforcement officer gives directions to an emergency vehicle.

**Scope:**

All personnel.

**Policy:**

The emergency vehicle shall comply with the directions of a sworn law enforcement officer, including a signal to stop.

Law enforcement officials may also direct the specific positioning, or repositioning, of emergency vehicles on an incident scene to maintain traffic flow, reduce bottlenecks, enhance scene safety, and prevent secondary collisions. Compliance with such direction is generally required of emergency vehicle drivers and their supervisors or chiefs; if a difference of opinion regarding scene safety arises, it should be raised in a cooperative fashion with the ranking law enforcement officer on the scene.

*Note– State motor vehicle codes may contain provisions describing the onscene relationships between various public safety entities including fire departments, rescue squads, law enforcement agencies, highway departments, and others; fire department managers, supervisors, chiefs, and emergency vehicle drivers must become familiar with these specific provisions. Establishing positive and mutually supporting relationships, through training and exercises, with law enforcement and other members of the public safety community is highly recommended.*

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**Aggressive Driving**

**Purpose:**

To establish safe practices that address when an emergency vehicle driver employs aggressive driving techniques.

**Scope:**

All personnel.

**Policy:**

Emergency vehicle drivers shall not employ aggressive driving techniques to force other drivers to yield the right-of-way.

Emergency vehicles must be operated with due regard for the safety of civilian traffic at all times, and under all circumstances; the elimination of aggressive driving techniques is also critical for protecting the safety of other crew members assigned to the vehicle.

Emergency vehicle drivers have been cited, fined, and sentenced to imprisonment for causing harm through aggressive driving.

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## Special Driving Procedures

### Backing Policy

#### **Purpose:**

To establish safe practices to ensure emergency vehicles are safely moved when operating in reverse mode.

#### **Scope:**

All Personnel.

#### **Policy:**

Before backing a fire department vehicle, the driver shall ensure that the intended path is clear of hazards or obstructions.

One or more spotters shall be employed as guides in all situations where the driver does not have a clear vision of the path of travel. Two spotters should be assigned when backing large or heavy apparatus—one covering each side of the vehicle. When available, a third spotter can be used to monitor traffic or, especially in the case of aerial apparatus, watch the front of the vehicle for overhead obstructions.

A spotter is responsible for guiding the driver and ensuring that any potential hazards are avoided. Standard signals shall be used to communicate with the driver during the backing maneuver; hand signals or voice signals transmitted over a portable radio can be employed for this purpose. The spotter shall direct the driver to stop at any time the backing maneuver cannot be completed safely.

The spotter(s) shall be on the ground, to the rear of the vehicle, and shall remain visible to the driver at all times. If the driver loses sight of the spotter(s) at any time, the driver shall immediately stop the vehicle. Portable radios or tethered vehicle-mounted intercom systems are recommended for spotters' safety. In no case are cameras or safety devices a substitute for a spotter. (NFPA 1500 requires at least one spotter to have contact with the driver.)

If it is essential to back a vehicle with limited rearward visibility and no spotter is available, the driver shall stop, dismount, and visually perform a 360-degree check around the vehicle before backing, with emphasis on the area behind and to both sides. After checking the area, the driver shall back the vehicle at slow speed and with extreme caution, prepared to stop immediately if necessary.

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## Signals

- **Straight Back:** One hand above the head with palm toward face, waving back. Other hand at your side. (Left or right hand optional)
- **Turn:** Both arms pointing the same direction with index fingers extended. (Driver will advise the spotter which way the turn will be made. The spotter then assists the driver in backing apparatus. The driver's intentions must be verbally communicated to the spotter.)
- **Stop:** Both arms crossed with hands in fist. Be sure to yell the stop order loud enough that the driver can hear the warning.

## Night Backing

Signals will be the same. The spotter will ensure that the spotlights on rear of apparatus are turned on before allowing apparatus to be backed. A flashlight may be carried, but at no time will it be directed toward the mirror.

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### **Maneuvering at an Incident Scene**

**Purpose:**

To establish safe practices that address when maneuvering an emergency vehicle at an incident scene.

**Scope:**

All personnel.

**Policy:**

Drivers shall exercise extreme caution while maneuvering emergency vehicles at an incident scene; other drivers and pedestrians may be distracted or preoccupied by events and a variety of hazards (e.g., downed or low-hanging wires, limited visibility, hazardous materials, etc.) may be encountered. Vehicles shall be moved slowly and cautiously, with spotters assigned to guide the driver in tight situations.

When streets have been closed to regular traffic, the emergency vehicle driver remains fully responsible for the safe and prudent operation of the vehicle at all times.

When operating at an incident scene where the streets have not been closed to regular traffic, fire department vehicles shall be positioned, parked, or staged in a manner that considers safety as a primary factor.

**Check for Unsecured Personnel:** Before moving an emergency vehicle in any location, the driver shall ensure that all occupants are seated and properly secured in approved riding positions. The driver shall also ensure that no one is in the process of mounting, dismounting, standing on top of, or on the outside of, the vehicle.

Under no circumstances shall members be allowed to ride on the outside of a moving apparatus, including the tailboard, roof, aerial platform/bucket, or a top-mounted pump panel.

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**Return to Roadway**

**Purpose:**

To establish safe practices that address when an emergency vehicle needs to return to the roadway when the wheels leave the paved surface of the roadway.

**Scope:**

All personnel.

**Policy:**

Fire department vehicle operators shall be aware of the actions to be taken if the wheels of the vehicle leave the paved surface of the roadway. In these situations, the vehicle shall be slowed to a speed below 20 miles-per-hour before any attempt is made to return it to the roadway.

Depending on road conditions and the condition of the off-road surface on which the vehicle is moving, it may be necessary to carefully bring the vehicle to a complete stop before attempting a return to the roadway; under many circumstances, particularly involving heavy apparatus, this may be the safest course of action.

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## **Emergency Vehicle Drivers**

### **Basic Driver Training**

#### **Purpose:**

To establish a comprehensive basic driver training and education program that must be successfully completed by all drivers in the organization.

#### **Scope:**

All personnel who drive light duty vehicles in non-emergency mode.

#### **Policy:**

Basic driver training shall be completed before a member is authorized to drive any fire department vehicle or to drive a privately owned vehicle on fire department business. The fire department shall ensure that the individual is properly licensed and insured and has the necessary knowledge, skills, and abilities to operate a vehicle safely. The initial driver training program shall include:

- Traffic laws
- Traffic and highway safety
- Basic vehicle dynamics
- Inspection and maintenance procedures
- Competency course
- Over-the-road evaluation

Upon completion of the basic driver program, a member is authorized to drive light duty vehicles in a non-emergency mode. This classification includes passenger vehicles, SUVs, vans, and pick-up trucks. Additional training shall be required before the member is qualified to drive larger vehicles or to operate any vehicle in the emergency response mode.

The department shall periodically review the performance of each member who is authorized to drive fire department vehicles. The authorization to drive may be suspended or revoked as a result of such reviews and/or additional training may be required to maintain driving status. Members, and Officers that supervise the members, who repeatedly fail to comply with fire department driving policies and procedures or violate traffic laws while driving fire department vehicles, should be re-evaluated or disciplined, if necessary.

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**Driver Training Program**

**Purpose:**

To offer a comprehensive and advanced driver training program to provide members with the skills and knowledge necessary to reduce vehicle accidents and limit injuries to themselves and the public.

**Scope:**

All personnel who drive department vehicles in emergency mode.

**Policy:**

Department vehicles shall only be driven/operated by individuals who comply with the applicable state driver's license requirements and have been trained and certified to operate the particular vehicle or type/class of vehicle through the Fire Department Driver Training Program.

The Department will train drivers on all apparatus used by the XYZ Department, including, but not limited to pumpers, ladders, off-road vehicles, command vehicles, and specialty units.

The Driver Training Program will meet or exceed the guidelines set forth by the insert state Department of Motor Vehicles Commercial Driver License Program and will prepare drivers to meet the requirements of NFPA 1002 Standard for Fire Department Vehicle Driver/Operator Professional Qualifications.

The State of            requires ....

The Department shall periodically review the performance of each member who is authorized to drive fire department vehicles. The authorization to drive may be suspended or revoked as a result of such reviews and/or additional training may be required to maintain driving status. Members, and Officers that supervise those members who repeatedly fail to comply with fire department driving policies and procedures or violate traffic laws while driving fire department vehicles, should be re-evaluated or disciplined, if necessary.

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**Emergency Vehicle Operator’s Course**

**Purpose:**

To set forth requirements to be a driver for emergency vehicles for the XYZ Department.

**Scope:**

All personnel who drive emergency vehicles for the organization.

**Policy:**

Before being authorized to operate any fire department vehicle in an emergency response mode, the member shall successfully complete an Emergency Vehicle Operator’s Course (EVOC). Following completion of the EVOC program, the individual must demonstrate an appropriate understanding of the specific policies, procedures, and considerations that apply to emergency response, before being authorized to operate vehicles in an emergency response mode. A refresher EVOC training class is required at intervals of not more than three (3) years to maintain emergency vehicle operator status.

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**Driving Record Review**

**Purpose:**

To set forth qualifications and requirements to be a driver for emergency vehicles for the XYZ Department.

**Scope:**

All personnel who drive emergency vehicles for the organization.

**Policy:**

The fire department shall obtain and review a copy of the member’s motor vehicle record from the state Department of Motor Vehicles prior to allowing an individual to begin driver training. Each authorized driver’s Motor Vehicle Record shall be reviewed periodically (at intervals of three years or less, with annual reviews recommended) to ensure that the individual maintains safe driving habits.

An individual who has been charged with an offense that could result in a suspension or revocation of his or her driver’s license should notify his or her supervisor or chief within 48 hours. The individual may be suspended from driving emergency vehicles pending judgment, depending on the circumstances and existing department policy. Such charges would include:

- Driving while intoxicated or under the influence of drugs
- Negligent homicide or gross negligence
- Aggravated assault with a motor vehicle
- Reckless driving
- Leaving the scene of an accident

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**Alcohol & Substance Abuse Policy**

**Purpose:**

To eliminate the abusive use of alcohol and illegal drugs through education, rehabilitation, and supervision techniques.

**Scope:**

All personnel.

**Policy:**

Fire department members are not permitted to be on duty, to respond to emergency incidents, to drive or operate fire department vehicles, nor to perform any other duty-related functions while under the influence of alcohol or drugs.

Fire department members shall not perform any duty-related functions for a minimum of eight (8) hours following the consumption of any alcoholic beverages. A longer period waiting period may be required to ensure that the individual is free of impairment. A blood alcohol concentration of 0.02 percent or higher, while on duty, shall create the presumption that the member is under the influence of alcohol.

The driver and the officer in charge of any fire department vehicle that is involved in an accident that causes measurable property damage, injury or death shall be tested for the presence of alcohol or drugs with the least possible delay. In addition, a chief officer may require a member to be tested for the presence of drugs or alcohol at any time, upon reasonable suspicion that the member could be under the influence of such substances.

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## **Privately Owned Vehicle Response**

### **Privately Owned Vehicle Response Policy**

**Purpose:**

To establish guidelines governing the response to department events/incidents in privately owned vehicles (POVs).

**Scope:**

All personnel.

**Policy:**

Personnel must follow all laws and regulations for the State of XYZ that apply to non-emergency vehicles, unless the state statute allows POVs to operate as an emergency vehicle.

Please reference the following state regulation:

[\[INSERT STATE REGULATION HERE\]](#)

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**Authorization to Operate a POV as an Emergency Vehicle**

**Purpose:**

To establish guidelines governing the official authorization allowing personnel to respond to department events/incidents in privately owned vehicles (POVs).

**Scope:**

All personnel.

**Policy:**

- Driver must own and operate a vehicle that complies with all state and local regulations, including, but not limited to; valid insurance & inspection.
- Driver must read and demonstrate an understanding of the Department’s policies regarding use of “lights & sirens.”
- The POV must be in proper mechanical condition and the warning devices in compliance with the applicable laws.
- Driver must wear a seatbelt at all times while operating the vehicle.
- Driver must complete an Emergency Vehicle Operator Course (EVOC).
- Driver must submit to a medical examination, skills evaluation, and driving record check.

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**Courtesy/Warning Light Policy**

**Purpose:**

To establish guidelines governing the use of a “Courtesy/Warning Light” in privately owned vehicles (POVs) responding to an incident.

**Scope:**

All personnel who are authorized to respond to an incident in a POV.

**Policy:**

To ensure the safety of its members, the authorization for use of a “Courtesy/Warning Light” must be approved by the department.

Installation and use of warning lights on privately owned vehicles must be in accordance with state laws and regulations.

An authorized driver may use colored warning lights on privately owned vehicles to request the right-of-way when responding to emergency incidents. The use of a courtesy/warning light does not provide any special privileges or exemptions to traffic laws. Other drivers are not required to yield the right-of-way to a vehicle that has a courtesy light in operation. The only purpose of the warning light is to request that other drivers yield the right-of-way; the POV driver is required to comply with all traffic laws.

**[INSERT APPLICABLE STATE REGULATIONS HERE]**

The Department will revoke the authorization to use a warning/courtesy light if a member fails to comply with all of the requirements and legal limitations.

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**Accident Reporting & Investigation**

**Purpose:**

To provide a standard system to report and investigate all department vehicular accidents and near misses (departmental or personal). (A near miss incident is defined as an incident in which no property damage and no personal injury occurred, but where, given a slight shift in time, position, or other circumstances, damage or injury would or may have occurred.)

**Scope:**

All personnel.

**Policy:**

All Department vehicular accidents should be reported to the communications center immediately.

The report should include the following:

- Unit ID or Apparatus Number
- Exact accident location
- An indication for need for additional medical assistance (e.g., BLS, ALS, etc...)
- An estimate of the extent and nature of the injuries and vehicle damage
- Indication on whether the vehicle is drivable
- Indication of need for cover assignment

While at the accident scene:

- Initiate appropriate medical care
- Do not discuss the incident with anyone other than fire and police representatives
- Do not move your vehicle unless it is creating a traffic hazard
- If you must move your vehicle, chalk the position of your tires prior to moving.
- Obtain witness names and contact information
- Remain at the scene until the police and fire representatives have completed their investigation

Based on the reported information, the Communications Center will:

- Dispatch any needed medical assistance
- Notify the Police Dispatcher of the incident
- Notify Department Chief Officers

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All department vehicle accidents will be investigated. The process will include the following:

- Fact Finding Review
  - Separate interviews with the driver, all crew members, accident witnesses
  - Notes recorded at each interview
  - Contact Information recorded at each interview
- Notification of any applicable City/Town Agencies (e.g., Risk Management, Insurance Adjuster, etc...)
- Department employees involved in the incident should be isolated from the general public, the other parties involved in the incident, and the media.
- Members may be placed on Administrative Leave or directed to take a leave of absence during the initial investigative process.

The investigating officer should attempt to collect the following:

- Photographs/Video of the incident
- Police Report
- Name and badge of investigating Police Officer
- Names and contact information for all parties involved (including witnesses)
- Applicable City/Town/Department Accident Reports/Forms

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## **Roadway and Roadside Scene Safety Policy**

### **Purpose:**

To establish guidelines for protection of personnel and incident victims at all roadway or roadside incident scenes.

### **Scope:**

All personnel.

### **Policy:**

This procedure identifies parking practices for fire department apparatus and vehicles that will provide maximum protection and safety for personnel operating in or near moving vehicle traffic. It also identifies several approaches for individual practices to keep firefighters safe while exposed to the hazardous environment created by moving traffic.

It shall be the policy of the XYZ Fire Department to position apparatus and other emergency vehicles at a vehicle-related incident on any street, road, highway, or expressway in a manner that best protects the incident scene and the work area. Such positioning shall afford protection to fire department personnel, law enforcement officers, tow service operators and the motoring public from the hazards of working in or near moving traffic.

All personnel should understand and appreciate the high risk that personnel are exposed to when operating in or near moving vehicle traffic. Responders should always operate within a protected environment at any vehicle-related roadway incident.

Always consider moving vehicles as a threat to your safety. At every vehicle-related emergency scene, personnel are exposed to passing motorists of varying driving abilities. At any time, a motorist may be driving without a legal driver's license.

Approaching vehicles may be driven at speeds from a creeping pace to well beyond the posted speed limit. Some of these vehicle operators may be vision impaired, under the influence of alcohol and/or drugs, or have a medical condition that affects their judgment or abilities. In addition, motorists may be completely oblivious to your presence due to distractions caused by cell phone use, loud music, conversation, inclement weather, and terrain or building obstructions. Approaching motorists will often be looking at the scene and not the roadway in front of them. Assume that all approaching traffic is out to get you until proven otherwise.

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Nighttime incidents requiring personnel to work in or near moving near traffic are particularly hazardous. Visibility is reduced and driver reaction time to hazards in the roadway is slowed.

### Terminology

The following terms shall be used during incident operations, post-incident analysis, and training activities related to working in or near moving traffic.

- *Advance Warning*- notification procedures that advise approaching motorists to transition from normal driving status to that required by the temporary emergency traffic control measures ahead of them.
- *Block*- positioning a fire department apparatus on an angle to the lanes of traffic creating a physical barrier between upstream traffic and the work area. Includes 'block to the right' or 'block to the left'.
- *Buffer Zone*- the distance or space between personnel and vehicles in the protected work zone and nearby moving traffic.
- *Downstream*- the direction that traffic is moving as it travels away from the incident scene.
- *Flagger*- a fire department member assigned to monitor approaching traffic and activate an emergency signal if the actions of a motorist do not conform to established traffic control measures in place at the highway scene.
- *Shadow*- the protected work area at a vehicle-related roadway incident that is shielded by the block from apparatus and other emergency vehicles.
- *Taper*- the action of merging several lanes of moving traffic into fewer moving lanes.
- *Temporary Work Zone*- the physical area of a roadway within which emergency personnel perform their fire, EMS and rescue tasks at a vehicle-related incident.
- *Transition Zone*- the lanes of a roadway within which approaching motorists change their speed and position to comply with the traffic control measures established at an incident scene.
- *Upstream*- the direction that traffic is traveling from as the vehicles approach the incident scene.

### Safety Benchmarks

All emergency personnel are at great risk of injury or death while operating in or near moving traffic. There are several specific tactical procedures that should be taken to protect all crew members and emergency service personnel at the incident scene including:

- Never trust approaching traffic
- Avoid turning your back to approaching traffic

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- Establish an initial “block” with the first arriving emergency vehicle or fire apparatus
- Always wear structural firefighting helmet
- Always wear the Class II or Public Safety highway safety vest at all vehicle-related emergencies or when working in or near a roadway
- Turn off all sources of vision impairment to approaching motorists at night time incidents including vehicle headlights and spotlights
- Use fire apparatus and police vehicles to initially redirect the flow of moving traffic
- Establish advance warning and adequate transition area traffic control measures upstream of incident to reduce travel speeds of approaching motorists
- Use traffic cones and/or cones illuminated by flares where appropriate for sustained highway incident traffic control and direction
- Establish a fire department member assigned to the “Flagger” function to monitor approaching traffic and activate an emergency signal if the actions of a motorist do not conform to established traffic control measures in place at the highway scene

**Apparatus and Emergency Vehicle Benchmarks**

Listed below are benchmarks for Safe Parking of apparatus and emergency vehicles when operating in or near moving traffic.

- Always position first-arriving apparatus to protect the scene, patients, and emergency personnel.
- Initial apparatus placement should provide a work area protected from traffic approaching in at least one direction.
- Angle apparatus on the roadway with a “block to the left” or a “block to the right” to create a physical barrier between the crash scene and approaching traffic.
- Allow apparatus placement to slow approaching motorists and redirect them around the scene.
- Use fire apparatus to block at least one additional traffic lane more than that already obstructed by the crashed vehicle(s).
- When practical, position apparatus in such a manner to protect the pump operator position from being exposed to approaching traffic.
- Positioning of large apparatus must create a safe parking area for EMS units and other fire vehicles. Operating personnel, equipment, and patients should be kept within the “shadow” created by the blocking apparatus at all times.
- When blocking with apparatus to protect the emergency scene, establish a sufficient size work zone that includes all damaged vehicles, roadway debris, the patient triage and treatment area, the extrication work area, personnel and tool staging area, and the ambulance loading zone.

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- Ambulances should be positioned within the protected work area with their rear patient loading door area angled away from the nearest lanes of moving traffic.
- Command shall stage unneeded emergency vehicles off the roadway or return these units to service whenever possible.

At all intersections, or where the incident may be near the middle lane of the roadway, two or more sides of the incident will need to be protected.

Law enforcement vehicles must be strategically positioned to expand the initial safe work zone for traffic approaching from opposing directions. The goal is to effectively block all exposed sides of the work zone. The blocking of the work zone must be prioritized, from the most critical or highest traffic volume flow to the least critical traffic direction.

For first arriving engine or truck companies where a charged hoseline may be needed, block so that the pump panel is “down stream,” on the opposite side of on-coming traffic. This will protect the pump operator.

At intersection incidents, consider requesting law enforcement response. Provide specific directions to law enforcement officers as to exactly what your traffic control needs are. Ensure that law enforcement vehicles are parked in a position and location that provides additional protection of the scene.

Traffic cones shall be deployed from the rear of the blocking apparatus toward approaching traffic to increase the advance warning provided for approaching motorists. Cones identify and only suggest the transition and tapering actions that are required of the approaching motorist.

Personnel shall place cones and flares and retrieve cones while facing oncoming traffic.

Traffic cones shall be deployed at 15-foot intervals upstream of the blocking apparatus with the furthest traffic cone approximately 75 feet upstream to allow adequate advance warning to drivers

Additional traffic cones shall be retrieved from law enforcement units to extend the advance warning area for approaching motorists.

### **Incident Command Benchmarks**

The initial-arriving company officer and/or the Incident Commander must complete critical benchmarks to ensure that a safe and protected work environment for emergency scene personnel is established and maintained including;

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- Ensure that the first-arriving apparatus establishes an initial block to create an initial safe work area.
- Assign a parking location for all ambulances as well as later-arriving apparatus.
- Lanes of traffic shall be identified numerically as “Lane 1”, “Lane 2”, etc., beginning from the right to the left when right and left are considered from the approaching motorist’s point of view. Typically, vehicles travel a lower speed in the lower number lanes.
- Directions “Right” and “Left” shall be as identified as from the approaching motorist’s point of view left or right.
- Instruct the driver of the ambulance to “block to the right” or “block to the left” as it is parked at the scene to position the rear patient loading area away from the closest lane of moving traffic.
- Ensure that all ambulances on-scene are placed within the protected work area (shadow) of the larger apparatus.
- Ensure that all patient loading into ambulances is done from within a protected work zone.
- The initial company officer and/or Incident Commander must operate as the Scene Safety Officer until this assignment is delegated.
- Command shall ensure that traffic signal preemption strobe systems (if so equipped) are turned OFF and that other emergency lighting remains ON.
- At residential medical emergencies, Command shall direct ambulances to park at the nearest curb to the residence for safe patient loading whenever possible.

**Emergency Crew Personnel Benchmarks**

Listed below are benchmarks for safe actions of individual personnel when operating in or near moving vehicle traffic.

- Always maintain an acute awareness of the high risk of working in or near moving traffic. Act as if they are out to get you!
- Never trust moving traffic
- Always look before you move
- Always keep an eye on the moving traffic
- Avoid turning your back to moving traffic
- Personnel arriving in crew cabs of fire apparatus should exit and enter the apparatus from the protected ‘shadow’ side, away from moving traffic.

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- Officers, apparatus operators, crew members in apparatus with individual jump seat configurations and all ambulance personnel must exit and enter their units with extreme caution remaining alert to moving traffic at all times.
- Class II or Public Safety vest and helmet must be donned prior to exiting the emergency vehicle.
- Always look before opening doors and stepping out of apparatus or emergency vehicle into any moving traffic areas. When walking around fire apparatus or emergency vehicle, be alert to your proximity to moving traffic.
  - Stop at the corner of the unit, check for traffic, and then proceed along the unit remaining as close to the emergency vehicle as possible.
  - Maintain a 'reduced profile' when moving through any area where a minimum 'buffer zone' condition exists.
- Law enforcement personnel may place traffic cones or flares at the scene to direct traffic. This action builds upon initial fire department cone deployment and can be expanded, if needed, as later arriving law enforcement officers arrive. Always place and retrieve cones while facing on-coming traffic.
- Placing flares, where safe to do so, adjacent to and in combination with traffic cones for nighttime operations greatly enhances scene safety. Where safe and appropriate to do so, place warning flares to slow and direct approaching traffic.

### **High-Volume, Limited Access, Highway Operations**

High-volume limited access highways include the expressways, toll ways, freeways, and multi-lane roadways within the fire department response area. Typically, law enforcement and Department of Transportation (DOT) agencies have a desire to keep the traffic moving on these high-volume thoroughfares. When in the judgment of fire department command it becomes essential for the safety of operating personnel and the patients involved, any or all lanes, shoulders, and entry/exit ramps of these limited access highways can be completely shut down. This, however, should rarely occur and should be for as short a period of time as practical.

Unique Safe Parking procedures at expressway, toll way, freeway, and limited-access, high-volume multi-lane roadway incidents;

- First-arriving engine company apparatus shall establish an initial block of the lane(s) occupied by the damaged vehicle plus one additional traffic lane.

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- A ladder truck apparatus shall be automatically dispatched to all vehicle-related incidents on all limited-access, high-volume expressways, tollway, freeway, and highways.
- The primary assignment of this Truck company apparatus and crew shall be to;
  - Establish an upstream block occupying a minimum of two lanes plus the paved shoulder of the highway or blockage of three driving lanes of traffic upstream of the initial block provided by the first-due apparatus.
  - The position of this apparatus shall take into consideration all factors that limit sight distance of the approaching traffic including ambient lighting conditions, weather-related conditions, road conditions, design curves, bridges, hills and over- or underpasses.
  - Traffic cones and/or cones illuminated by flares should be placed upstream of the ladder truck apparatus by the ladder truck crew at the direction of the company officer.
  - Traffic cones on limited-access, high-volume roadways shall be placed farther apart, with the last cone approximately 150 feet “upstream”, to allow adequate warning to drivers. Personnel shall place cones and flares and retrieve cones while facing the traffic.
  - Assign a Flagger person to monitor the response of approaching motorists as they are directed to transition to a slower speed and taper into merged lanes of traffic.
  - Notify Command on the incident operating channel of any approaching traffic that is not responding to the speed changes, transition, tapering and merging directions.
  - Flagger shall activate a pre-determined audible warning to operating personnel of a non-compliant motorist approaching.
  - Driver operator of ladder truck apparatus shall sound a series of long blasts on the apparatus air horn to audibly warn all operating personnel of the concern for the actions of an approaching motorist.
- Law enforcement vehicles will be used to provide additional blocking of additional traffic lanes as needed. Ambulances shall always be positioned within the safe work zone.
- Staging of additional companies off the highway may be required. Ambulances may be brought onto the highway scene one or two at a time. An adequate size multi-patient loading area must be established.

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- Command should establish a liaison with law enforcement as soon as possible to jointly coordinate a safe work zone and to determine how to most efficiently resolve the incident and establish normal traffic flows.
- The termination of the incident must be managed with the same aggressiveness as initial actions. Crews, apparatus, and equipment must be removed from the highway promptly, to reduce exposure to moving traffic and minimize traffic congestion.

### **Officer's Safe Parking "Cue Card"**

- "Block" with first-arriving apparatus to protect the scene, patients, and emergency personnel
- Block at least one additional lane
- Block so pump panel is "down stream"
- Block most critical or highest traffic volume direction first
- Consider requesting additional law enforcement assistance
- Crews wear proper PPE w/Helmet
- Wear helmet at all times
- Always wear Class II or Public Safety vest when operating in or near a roadway
- Establish more than adequate advance warning
- Traffic cones at 15' intervals
- Deploy minimum 5 cones upstream
- Cones only "Suggest" they do not Block!
- Expand initial safe work zone
- Direct placement of ambulances
- Ensure ambulances park within shadow of larger apparatus as directed
- Lane 1 is furthest right lane, next is Lane 2, then Lane 3, etc. from approaching motorist's point of view
- Direct ambulance to "block to the right" or "block to the left" to protect loading doors
- Place ambulance patient loading area facing away from closest lane of moving traffic
- All patient loading into ambulances is done from within a protected work zone
- You are the Scene Safety Officer
- Consider assigning firefighter as upstream "Spotter" as necessary for approaching traffic

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### **Night or Reduced Light Conditions**

- Turn OFF vehicle headlights
- Turn OFF traffic signal preemption strobes (if so equipped)
- Provide overall scene lighting
- All personnel in PPE with helmets
- Illuminate cones with flares if possible
- Consider additional Truck company for additional upstream “Block”
- Limited access, high-volume highway incidents
- Establish initial block: minimum two lanes
- Ladder truck establishes upstream block
- Two lanes plus paved shoulder or three driving lanes
- Place cones and/or cones illuminated by flares upstream of ladder truck apparatus, last cone approximately 150 feet “upstream” of apparatus
- Establish Flagger position, monitor approaching traffic sound emergency signal as necessary
- Driver operator of ladder truck apparatus sound a series of long blasts on apparatus air horn as necessary
- Use law enforcement vehicles for additional blocking
- Stage additional companies off highway
- Establish liaison with law enforcement
- Terminate incident aggressively

For more information regarding safety for responders working in or near a roadway, refer to the following website: <http://www.respondersafety.com>

*Note– Public Safety reflective vests were under development at this time of publication. An ANSI standard is expected which will provide a specialized reflective vest for responders that includes a “breakaway” feature and optional color coding by discipline.*

*Note– Departments must comply with Section 6i of MUTCD (Manual of Uniform Traffic Code Devices) and ensure their SOPs are compliant.*

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### **Safe Driving Program**

#### **Purpose**

To establish a safe driving program to provide incentive to Department personnel to engage in safe driving habits.

#### **Scope**

All Personnel.

#### **Policy:**

Recognition awards will be offered to Department personnel that have no preventable accidents involving a department vehicle for a specified period of time. Recognition awards will also be offered to Department personnel that have no preventable accidents and no traffic violations while responding to the station or emergency incident in an authorized POV.

The awards schedule is as follows:

- 3 Years = Insert chosen award here
- 5 Years = Insert chosen award here
- 10 Years = Insert chosen award here
- 15 Years = Insert chosen award here
- 20 Years = Insert chosen award here
- 25 Years = Insert chosen award here

Preventability of a vehicle accident will be determined by the Department's Accident Investigator and/or Accident Review Committee, police reports and/or other internal investigations.

A vehicle accident is determined to be preventable if the Department member failed to exercise any reasonable defensive driving options and/or has operated the vehicle in any unsafe manner or violated any procedures.

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**Traffic Pre-Emption Policy**

**Purpose:**

To make responses by emergency vehicles safer and timelier, the jurisdiction has committed to installing and maintaining traffic signal pre-emption systems at various signalized intersections throughout the jurisdiction.

**Scope:**

All vehicle operators and officers.

**Policy:**

Department personnel must use the traffic pre-emption system on all dispatched emergency responses and when transporting all emergency class patients to medical facilities to prevent death, injury and property damage. Use of the emitter system DOES NOT GUARANTEE or GRANT right-of-way. Drivers must:

- Use traffic preemption devices, when warning lights/sirens are activated
- Turn off the traffic pre-emption emitter and warning devices when ordered to "reduce speed", or any order that means there is no longer an emergency
- Not use the emitter during non-emergency functions, e.g., parades, community functions, store/food runs, etc.
- Attend training before operating a vehicle with an emitter
- Install the emitter device so that it will automatically turn off when transmission is in the park position, or when the vehicle parking or emergency brake is applied, the emitter is turned off automatically

The Department must ensure:

- There is a method for checking the system periodically to ensure it works
- All emitters must have on/off switch to allow unit to be turned off when vehicle is in parade, for example
- Ensure that pre-emption equipped vehicles have parking brake or transmission automatic shutoffs

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## Vehicle Inspection Policy

### **Purpose:**

To ensure vehicle and equipment are in working order and that the vehicle is safe and ready to respond.

### **Scope:**

All Personnel.

### **Policy:**

Fire apparatus shall only be operated when their mechanical condition makes it safe to do so. The following list of vehicle defects has been developed to guide apparatus operators in making decisions related to the operational safety of a fire department vehicle. If an “out-of-service” condition is discovered, the vehicle shall be placed out of service and the condition of the vehicle shall be reported to the responsible officer. The vehicle shall not be returned to service until the problem condition is resolved by a qualified individual.

The following defects and deficiencies of the driving and crew areas, the apparatus body, and the compartmentation reduce the operational safety and performance of the fire apparatus and shall be considered out-of-service criteria (reference NFPA 1915):

- Body mounting that is defective
- Cab mounting that is defective
- Seat belts that are torn or have melted webbing, missing or broken buckles, or loose mountings. Due to the extreme safety-related consequences of a defective seat belt, and the fact that one defective seat belt (unless it is the driver’s seat belt) does not render a piece of apparatus unusable, the authority having jurisdiction shall take any seating position with a defective seat belt out of service
- Cracked or broken windshield that obstructs the driver’s/operator’s view
- Missing or broken rear-view mirrors that obstruct the driver’s/operator’s view
- Windshield wipers that are missing or inoperable
- Steering wheel that has a deficiency
- Oil pressure gauge or engine or transmission temperature gauges that have failed
- Air gauge or audio low air warning device that has failed
- Door latches that are defective
- Defrosters that are defective
- Foot throttle that is defective

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The following defects and deficiencies of the chassis, axles, steering and suspension systems, driveline, wheels, and tires reduce the operational safety and performance of the fire apparatus and shall be considered out-of-service criteria:

- Tires that have cuts in the sidewall that penetrate to the cord
- Tires that are defective
- Tires that have a tread depth of 4/32 in. (3.2 mm) or less on any steering axle or 2/32 in. (1.6 mm) or less on any non-steering axle at any two adjacent major tread grooves anywhere on the tire
- Suspension components that are defective
- Wheel fasteners that are missing or broken
- Wheels that are defective
- Axle flanges that have Class 3 leakage (Class 3-leak of fluid great enough to form drops that then fall from the item being checked/inspected.)
- An axle that has any Class 3 leakage
- Steering components that are defective
- A steering component that has Class 3 leakage
- Driveline components that are defective

The following defects and deficiencies of the *engine systems* reduce the operational safety and performance of the fire apparatus and shall be considered out-of-service criteria:

- Air filter restriction indicator that shows maximum restriction
- Engine that won't crank or start
- Engine system that has Class 3 leakage of oil
- Engine that is overheating
- Oil that contains coolant
- Oil that is diluted with fuel
- A fuel system component that has Class 2 leakage of fuel (Class 2-leak of fluid great enough to form a drop, but not enough to cause the drop to fall from the item being checked/inspected.)
- Fuel tank, mountings, or straps that are defective
- Stop-engine light that fails to turn off after engine is started

The following defects and deficiencies of the *engine cooling system* reduce the operational safety and performance of the fire apparatus and shall be considered out-of-service criteria:

- Cooling system component that has Class 3 leakage
- Coolant that contains oil
- Radiator that is defective
- Water pump bearing that is defective
- Cooling fan that is defective
- Coolant system components that are defective

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The following defects and deficiencies of the *transmission and clutch* reduce the operational safety and performance of the fire apparatus and shall be considered out-of-service criteria:

- Clutch components that are defective
- Transmission components that are defective
- Shift linkages that are defective
- Automatic transmission that overheats in any range
- Automatic transmission that has a “Do not shift” light on
- Transmission components that have Class 3 leakage of transmission oil

The following defects and deficiencies of the *low voltage electrical system and the line voltage electrical system* reduce the operational safety and performance of the fire apparatus and shall be considered out-of-service criteria:

- Federal Department of Transportation lighting that is defective
- Ignition system that is defective
- Charging system that is defective
- Grounding and bonding of the line voltage electrical system that is defective

The following defects and deficiencies of the *air brake system* reduce the operational safety and performance of the fire apparatus and shall be considered out-of-service criteria:

- Service brakes that have an air pressure drop of more than 2 psi (13.8 kPa) in 1 minute for single fire apparatus or more than 3 psi (20.7 kPa) in 1 minute for combination fire apparatus, with the engine stopped and the service brakes released
- Leak-down rate (time) of the applied side of the air brake that is more than 3 psi (20.7 kPa) in 1 minute for single fire apparatus or more than 4 psi (27.6 kPa) in 1 minute for combination fire apparatus, with the engine stopped and the service brakes applied
- Brakes that are out of adjustment
- Braking system components that are defective
- Braking operation that is ineffective
- Parking brake operation that is ineffective
- Air compressor that fails to build air pressure
- Air compressor that fails to maintain 80-90 psi (552-621 kPa) pressure in the system with the service brakes applied and the engine at idle, or air compressor that fails to fill the air system to the air compressor governor cutout pressure with the service and parking brakes released

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- Friction surfaces, brake shoes, or disc brake pads that have grease or oil on them
- Brake lining or pads that are worn beyond the brake system manufacturer’s minimum specifications
- Rotors and drums that are worn beyond the brake system manufacturer’s minimum specifications
- Antilock braking system (ABS) warning indicator that is activated

The following defects and deficiencies of the *hydraulic brake system* reduce the operational safety and performance of the fire apparatus and shall be considered out-of-service criteria:

- Brake system components that have Class 2 leakage of brake fluid
- Friction surfaces, brake shoes, or disc brake pads that have grease or oil on them
- Braking system components that are defective
- Braking operation that is ineffective
- Parking brake operation that is ineffective
- Brake warning light that is activated or brake pedal that falls away or drifts toward the flooring when brake pressure is applied
- Brake lining or pads that are worn beyond the brake system manufacturer’s minimum specifications
- Rotors and drums that are worn beyond the brake system manufacturer’s minimum specifications
- ABS warning indicator that is activated

The following defects and deficiencies of the *fire pump system* reduce the operational safety and performance of the fire apparatus and shall be considered out-of-service criteria:

- Pump test results that fall below 90 percent of the original rating of the pump when tested in accordance with NFPA 1911, *Standard for Service Tests of Fire Pump Systems on Fire Apparatus*
- Pump that will not engage
- Water tank that will not hold water
- Pressure control system that is not operational
- Pump transmission components that have Class 3 leakage of fluid
- Pump transmission lubricant that is contaminated
- Pump panel throttle that is defective

The following defects and deficiencies of the *aerial device and its systems* reduce the operational safety and performance of the fire apparatus and shall be considered out-of-service criteria:

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- Power takeoff (PTO) that will not engage
- Stabilizer system that is defective
- Aerial device that is defective
- Hydraulic system components that are defective
- Cable sheaves that are defective
- Cables that are defective or frayed
- Base and section rails that show ironing beyond the manufacturer's recommendations
- Aerial device that is structurally deformed
- Torque box structure or fasteners that are defective
- Turntable fasteners that are defective or missing

The visual inspections, operational tests, and load tests defined in NFPA 1914, *Standard for Testing Fire Department Aerial Devices*, shall be conducted at the following times:

- At least annually
- After major repairs or overhaul
- Following the use of the aerial device when the aerial device could have been subjected to unusual operating conditions of stress or load
- When there is reason to believe that usage has exceeded the manufacturer's recommended aerial device operating procedures

The complete inspections and tests including the non-destructive testing (NDT) defined in NFPA 1914, *Standard for Testing Fire Department Aerial Devices*, shall be conducted at least every 5 years. NDT shall be conducted whenever visual inspection or load testing indicates a potential problem or when there is a desire to further confirm continued operational safety.

If the fire apparatus is equipped with a *fire pump*, the pump shall be service-tested in accordance with NFPA 1911, *Standard for Service Tests of Fire Pump Systems on Fire Apparatus*, at least annually and whenever major repairs or modifications to the pump or to any component of the apparatus that is used in pump operations have been made.

Testing of the braking system, including antilock brake systems and auxiliary brake systems, shall be conducted at a prescribed interval, not to exceed the manufacturer's recommendations, at least annually, or whenever adjustments, repairs, or modifications have been performed on any component that can affect the proper operation of the braking system or systems. All testing shall be conducted at a location and in a manner that does not violate local, state, or federal traffic laws.

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## **Vehicle Design & Construction**

### **Purpose:**

The purpose of this procedure is to ensure that fire department vehicles incorporate safety features that will protect firefighters.

### **Scope:**

This procedure is intended to govern the purchase of all fire department vehicles.

### **Policy:**

Firefighter safety shall be a primary consideration in the specification and purchase of fire department vehicles.

Vehicles purchased by the fire department shall comply with applicable emergency service minimum standards. Fire apparatus shall comply with the latest edition of NFPA 1901, *Standard for Automotive Fire Apparatus*. Ambulances shall comply with General Services Administration standard Triple K-A-1822(E). These standards have numerous safety-related requirements.

When possible, supplemental safety systems such as air bags, stability systems, and antilock braking systems shall be incorporated into fire department vehicles.

Fire department vehicles shall be designed to limit the opportunity for firefighters to ride in unauthorized or unsafe positions on the vehicle.

Large vehicles that are likely to be operated by one person should be equipped with devices to aid the driver while in reverse. These devices may include cameras, sonic sensors, and other devices designed to minimize or eliminate backing crashes.

Fire apparatus with a Gross Vehicle Weight Rating (GVWR) of 32,000 pounds or greater should be equipped with an auxiliary braking device such as a transmission retarder, exhaust retarder, or driveline retarder.

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Fire apparatus and fire department vehicles shall be designed to allow the driver to concentrate on the task of driving with both hands on the steering wheel. The operational controls for emergency warning devices shall be oriented to allow operation by the officer in vehicles that will normally accommodate more than one firefighter. For vehicles that normally respond with one firefighter, the controls for emergency warning devices shall be designed to require minimal attention on the part of the driver to operate.

A speedometer shall be supplied and installed to be in the full view on the right side of all fire apparatus to allow the officer to effectively monitor the speed of the vehicle.

For vehicles with high centers of gravity, such as aerial ladders and ARFF apparatus, a rollover warning system should be provided to give the driver feedback on the stability of the vehicle, especially in turns.

For fire apparatus, an emergency brake activation switch shall be mounted within the reach of the officer to allow the vehicle to be stopped in the event that the driver becomes incapacitated.

Seat belt extensions shall be provided on the female end of seat belts in fire apparatus to allow firefighters to more easily connect seat belts while wearing protective clothing.

Provisions shall be made to carry equipment normally contained within the passenger compartment of fire apparatus and ambulances in brackets or compartments, which will limit damage and injury in the event of a collision.

When specifying and purchasing fire apparatus, particular attention shall be paid to the ability of firefighters to mount and dismount fire apparatus. Step heights and step depths shall be managed to provide for safety.

A placard with the height and loaded weight of fire apparatus shall be displayed in plain view of the driver of the vehicle. The weight of the loaded apparatus shall be expressed in pounds and in tons.

A small convex mirror shall be provided which permits the officer to view the firefighters riding in the rear of any fire apparatus cab with rear seats.

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## Vehicle Safety Program Implementation

### **Purpose**

To establish guidelines for the organization and operation of a vehicle safety program.

### **Scope**

All Personnel.

### **Policy:**

The vehicle safety program will handle the following responsibilities:

- Establish Vehicle Safety Procedures
- Provide safety input on the design of apparatus
- Assist Driver Training Officer with driver safety education/training
- Review vehicle accident/injury reports
- Develop intervention methods
- Manage and award the Recognition Awards