


3.1.1.1 Driving Emergency Vehicles	
	YOUR ORGANIZATION STANDARD OPERATING PROCEDURES/GUIDELINES
TITLE: Driving Emergency Vehicles	SECTION/TOPIC: Operating Emergency Vehicles
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PREPARED BY: <div style="border: 1px solid black; height: 100px; width: 100%;"></div> <div style="position: relative; height: 100px;"> X </div> <hr style="border: 1px solid black;"/> Preparer	APPROVED BY: <div style="border: 1px solid black; height: 100px; width: 100%;"></div> <div style="position: relative; height: 100px;"> X </div> <hr style="border: 1px solid black;"/> Approver
These SOPs/SOGs are based on FEMA guidelines FA-197	

1.0 POLICY REFERENCE

CFR	
NFPA	
NIMS	

2.0 PURPOSE

This standard operating procedure/guideline addresses driver qualifications, skills maintenance, driver behavior, use of warning devices, roadway operations (traffic laws, intersections, speed, passing, following other vehicles), backing up, parking, operating in high-risk areas.

3.0 SCOPE

This SOP/SOG pertains to all personnel in this organization.

4.0 DEFINITIONS

These definitions are pertinent to this SOP/SOG.

5.0 PROCEDURES/GUIDELINES & INFORMATION

5.1 Driver Qualifications:

5.2 Skills Maintenance:

5.3 Driver Behavior:

Emergency Response Policy

Fire Department vehicles shall be operated in a manner that provides for the safety of all persons and property. Safe arrival shall always have priority over unnecessary speed and reckless driving enroute to an emergency incident.

Prompt, Safe Response Shall be Attained by:

1. Leaving the station in a standard manner:
 - quickly mounting apparatus
 - all personnel on board, seated and belts on
 - station doors fully open
2. Driving defensively and professionally at reasonable speeds.
3. Knowing where we are going.
4. Using warning devices to move around traffic and to request the right-of-way in a safe and predictable manner.

Fast Response Shall Not Be Attained By:

1. Leaving quarters before crew has mounted safely and before apparatus doors are fully open.
2. Driving too fast for conditions.
3. Driving recklessly or without regard for safety.
4. Taking unnecessary chances with negative right-of-way intersections.
5. Intimidating or scaring other drivers.

Emergency Response Criteria

1. Maximum 10 mph over posted speed limit.
2. Traveling in center or oncoming traffic lanes, 20 mph maximum.
3. Traveling in center or oncoming traffic, complete stop at all traffic lights/stop signs.

4. Posted speed limit when entering intersections with green light.
5. Complete stop at all red lights, stop signs.

It is the responsibility of the driver of each Fire Department vehicle to drive safely and prudently at all times. Vehicles shall be operated in compliance with the State Motor Vehicle Code. This code provides specific legal exceptions to regular traffic regulations, which apply to Fire Department vehicles only when responding to an emergency incident or when transporting a patient to a medical facility. Emergency response (Code 3) does not absolve the driver of any responsibility to drive with due caution. The driver of the emergency vehicle is responsible for its safe operation at all times.

Code 3 Driver and Co-Driver

Engine, ladder, ladder tenders, and rescues should have 2 FD members in the front seats of the apparatus whenever possible while responding Code 3. The driver is responsible for operating the vehicle safely. The Co-driver is responsible for being a second set of eyes and ears anytime a unit is responding Code 3. Driver and Co-drivers must be focused on intersection management any time a FD vehicle enters into an intersection Code 3.

Intersection management requires the Drivers and Co-drivers undivided attention. The Co-driver in addition to the Driver should be accounting for clearance in all traffic lanes, accounting for all pedestrian traffic and announce if it is clear or not clear to proceed.

Mobile Computer Terminal Enhancements

Accurate response codes will be displayed on the MCT, if no response code is designated, the response will be Code 2 unless directed by a company officer. Officers and rescue attendants must press the correlating response code button on the MCT.

BLS Medical Incidents

Response codes for all engines, ladders, ladder tenders and rescues will be determined by the company officer based on information received from alarm, time of day, traffic conditions, weather conditions and other factors. Rescue units will respond Code 2; **they do not have the authority to upgrade their response to Code 3 unless directed by the responding or on scene company officer.** When a rescue is the “first due” unit on a BLS incident they will respond Code 2 unless directed to upgrade to Code 3 by the responding company officer. Rescue crews should keep the responding company officer apprised (by radio) of excessive time delays or other conditions that may warrant an upgrade to Code 3.

ALS and BLS Medical Incident Transport

Response codes for rescue units during patient transport will be established by the on-scene company officer prior to the rescue unit leaving the scene. If the on-scene officer determines that a Code 3 transport is required, the officer should make every reasonable effort to have a crewmember in the codriver position. The MCT Code LV3 should be entered.

In the event a rescue must change the response status from Code 2 to Code 3 while enroute to a medical facility, the senior member should make every effort to reassign available personnel to the codriver position and rapid notification should be made to the Alarm Room.

When responding Code 3, warning lights must be on and sirens must be sounded to warn drivers of other vehicles, as required by the State Motor Vehicle Code.

5.4 Use of Warning Devices:

The use of sirens and warning lights does not automatically give the right-of-way to the emergency vehicle. These devices simply request the right-of-way from other drivers, based on their awareness of the emergency vehicle presence. Emergency vehicle drivers must make every possible effort to make their presence and intended actions known to other drivers, and must drive defensively to be prepared for the unexpected inappropriate actions of others.

5.5 Roadway Operations: (traffic laws, intersections, speed, passing, following other vehicles)

Fire Department vehicles are authorized to exceed posted speed limits only when responding Code 3 under favorable conditions. This applies only with light traffic, good roads, good visibility and dry pavement. Under these conditions a maximum of 10 mph over the posted speed limit is authorized.

Under less than favorable conditions, the posted speed limit is the absolute maximum permissible.

When emergency vehicles must travel in center or oncoming traffic lanes, the maximum permissible speed shall be 20 mph.

Intersections present the greatest potential danger to emergency vehicles. When approaching and crossing an intersection with the right-of-way, drivers shall not exceed the posted speed limit.

When emergency vehicles must use center or oncoming traffic lanes to approach controlled intersections, (traffic light or stop sign) they must come to a complete stop before proceeding through the intersection, including occasions when the emergency vehicle has green traffic lights.

When approaching a negative right-of-way intersection (red light, stop sign) the vehicle shall come to a complete stop and may proceed only when the driver can account for all oncoming traffic in all lanes yielding the right-of-way.

Code 3 response is authorized only in conjunction with emergency incidents. Unnecessary emergency response shall be avoided. In order to avoid any unnecessary emergency response, the following rules shall apply.

- When the first unit reports on the scene with "nothing showing" or an equivalent report, any additional units shall continue Code 3, but shall not exceed the posted speed limit.
- The first arriving unit will advise additional units to respond Code 2 whenever appropriate.

5.6 Backing Up:

VEHICLE BACKING AND SIGNALS

Backing of Fire Department vehicles should be avoided whenever possible. Where backing is unavoidable spotters shall be used. In addition, spotters shall be used when vehicles must negotiate forward turns with restrictive side clearances and where height clearances are uncertain.

Under circumstances where the vehicle is manned by only the driver, that vehicle driver shall attempt to utilize any available fire department personnel to act as spotters. Where no personnel are available to assist, the vehicle driver shall get out of the vehicle and make a complete 360 degree survey of the area around the vehicle to determine if any obstructions are present.

Where engine or ladder companies are backed, all crew members (except the driver/tiller person) will dismount the apparatus and act as spotters, including the Company Officer. Spotters should be located at as many corners as possible with at least one spotter at the left rear corner of the apparatus. Where only a single spotter is available, the spotter should be located off the left rear corner, and will act as the primary spotter. Spotters are not permitted to ride tailboard positions while backing fire apparatus.

Spotters will discuss the backing plan with the engineer/driver before proceeding. The communication/warning process will be agreed upon prior to backing. Both door windows (driver and front passenger) will be in the down position to allow for maximum communication/hearing between spotters and the engineer/driver. Fire radio volumes will be turned down.

The vehicle shall not be backed until all spotters are in position and communicate their approval to start the backing. Spotters will remain visible to the engineer/driver. Anytime the driver loses sight of the primary spotter, the vehicle shall be stopped immediately until the spotter is visible, and the communication to continue backing is processed.

When vehicles must be backed where other vehicles traffic exists, the vehicle's emergency lights (if equipped with such lights) shall be operating and orange safety vests shall be worn by all spotters.

The company officer is responsible for compliance with this procedure and the safe backing of the apparatus.

SIGNALS

STRAIGHT BACK: One hand above the head with palm toward face, waving back. Other hand at your side. (Left or right hand optional) See Figure 1.

TURN: Both arms pointing the same direction with index fingers extended. See Figure 2. (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. See Figure 3. Be sure to yell the stop order loud enough that the engineer/driver can hear the warning.

5.7 Parking:

When stopped at the scene of an incident, vehicles should be placed to protect personnel who may be working in the street and warning lights shall be used to make approaching traffic aware of the incident. At night, vehicle mounted floodlights and any other lighting available shall be used to illuminate the scene. All personnel working in or near traffic lanes shall wear high visibility vests.

If it is not necessary to park vehicles in or near traffic lanes, the vehicle should be pulled off the road to parking lots, curbs, etc., whenever possible.

The officer in charge or driver of the vehicle is responsible for the safety of all vehicle operations and managing compliance of this procedure.

Overview

This procedure identifies parking practices for Fire Department apparatus 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 vehicle traffic.

IT SHALL BE THE POLICY OF THE REGIONAL FIRE DEPARTMENT TO POSITION APPARATUS AT THE SCENE OF EMERGENCIES IN A MANNER THAT BEST PROTECTS THE WORK AREA AND PERSONNEL FROM VEHICLE TRAFFIC AND OTHER HAZARDS.

All personnel should understand and appreciate the high risk that firefighters are exposed to when operating in or near moving vehicle traffic. We should always operate from a defensive posture. Always consider moving vehicles as a threat to your safety. Each day, emergency personnel are exposed to motorists of varying abilities, with or without licenses, with or without legal restrictions, and driving at speeds from creeping to well beyond the speed limit. Some of these motorists are the vision impaired, the alcohol and/or drug impaired. On top of everything else, motorists will often be looking at the scene and not the road.

Nighttime operations are particularly hazardous. Visibility is reduced, and the flashing of emergency lights tends to confuse motorists. Studies have shown that multiple headlights of emergency apparatus (coming from different angles at the scene) tend to blind drivers as they approach.

Safety Benchmarks

Emergency personnel are at great risk while operating in or around moving traffic. There are approaches that can be taken to protect yourself and all crewmembers:

1. Never trust the traffic
2. Engage in proper protective parking
3. Wear high visibility reflective vests
4. Reduce motorist vision impairment
5. Use traffic cones and flares

Listed below are benchmarks for safe performance when operating in or near moving vehicle traffic.

1. Always maintain an acute awareness of the high risk of working in or around moving traffic. Never trust moving traffic. Always look before you step! Always keep an eye on the traffic!
2. Always position apparatus to protect the scene, patients, emergency personnel, and provide a protected work area. Where possible, angle apparatus at 45 degrees away from curbside. This will direct motorist around the scene (See Figure 1). Apparatus positioning must also allow for adequate parking space for other fire apparatus (if needed), and a safe work area for emergency personnel. Allow enough distance to prevent a moving vehicle from knocking fire apparatus into the work areas.
3. At intersections, or where the incident may be near the middle of the street, two or more sides of the incident may need to be protected. Block all exposed sides. Where apparatus is in limited numbers, prioritize the blocking from the most critical to the least critical (See Figures 2, 3 and 4).
4. For first arriving engine companies where a charged hoseline may be needed, angle the engine so that the pump panel is "down stream," on the opposite side of on-coming traffic. This will protect the pump operator (See Figure 5).

5. The initial company officer (or Command) must assess the parking needs of later-arriving fire apparatus and specifically direct the parking and placement of these vehicles as they arrive to provide protective blocking of the scene. This officer must operate as an initial safety officer.
6. During daytime operations, leave all emergency lights on to provide warning to drivers.
7. For NIGHTTIME operations, turn OFF fire apparatus headlights. This will help reduce the blinding effect to approaching vehicle traffic. Other emergency lighting should be reduced to yellow lights and emergency flashers where possible.
8. Crews should exit the curb side or non-traffic side of the vehicle whenever possible.
9. Always look before stepping out of apparatus, or into any traffic areas. When walking around fire apparatus parked adjacent to moving traffic, keep an eye on traffic and walk as close to fire apparatus as possible.
10. Wear the safety vest any time you are operating in or near vehicle traffic.
11. When parking apparatus to protect the scene, be sure to protect the work area also. The area must be protected so that patients can be extricated, treated, moved about the scene, and loaded into Rescues safely.
12. Once enough fire apparatus have "blocked" the scene, park or stage unneeded vehicles off the street whenever possible. Bring in Rescue/Ambulance companies one or two at a time and park them in safe locations at the scene. This may be "down stream" from other parked apparatus, or the Rescue may be backed at an angle into a protected loading area to prevent working in or near passing traffic. At residential medical emergencies, park Rescue in driveways for safe loading where possible. If driveways are inaccessible, park Rescue to best protect patient loading areas. (See Figures 6 and 7).
13. Place traffic cones at the scene to direct traffic. This should be initiated by the first company arriving on the scene and expanded, if needed, as later arriving companies arrive on the scene. Always place and retrieve cones while facing on-coming traffic.
14. Placing flares, where safe to do so, adjacent to and in combination with traffic cones for nighttime operations greatly enhances scene safety. Place flares to direct traffic where safe and appropriate to do so. Listed below are general recommendations for the start of traffic cones/flares: Speed Distance 25 mph 65 feet 40 mph 105 feet 60 mph 160 feet
15. At major intersections a call for police response may be necessary. Provide specific direction to the police officer as to exactly what your traffic control needs are. Ensure the police are parking to protect themselves and the scene. Position Rescues to protect patient loading areas. (See Figure 8)

Freeway Operations

Freeway emergencies pose a particularly high risk to emergency personnel. Speeds are higher, traffic volume is significant, and motorists have little opportunity to slow, stop or change lanes.

The Department of Public Safety will also have a desire to keep the freeway flowing. Where need be, the freeway can be completely shut down. This, however, rarely occurs.

For freeway emergencies, we will continue to block the scene with the first apparatus on the scene to provide a safe work area. Other companies may be used to provide additional blocking if needed.

The initial company officer, or command, must thoroughly assess the need for apparatus on the freeway and their specific positions. Companies should be directed to specific parking locations to protect the work area, patients, and emergency personnel.

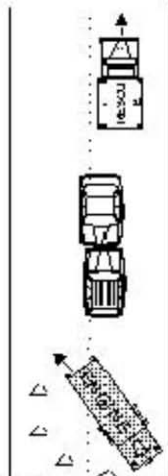
Other apparatus should be parked downstream when possible. This provides a safe parking area.

Staging of Rescue companies off the freeway may be required. Rescues should be brought into the scene one or two at a time. A safe loading area must be established.

Traffic cones should be placed farther apart, with the last cone approximately 160 feet "upstream," to allow adequate warning to drivers. Place and retrieve cones while facing the traffic. Command should establish a liaison with the Department of Public Safety as soon as possible to jointly provide a safe parking and work area and to quickly resolve the incident.

The termination of the incident must be managed with the same aggressiveness as initial actions. Crews, apparatus, and equipment must be removed from the freeway promptly, to reduce exposure to moving traffic.

Figure #1



Where possible, angle apparatus at a 45 degree angle from the curb.

Figure #3

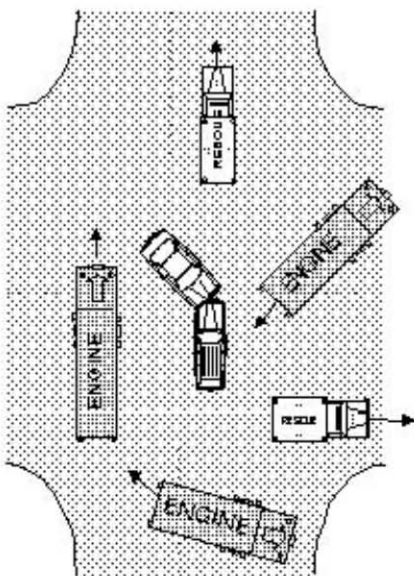


Figure #2

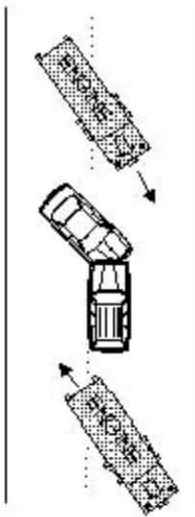
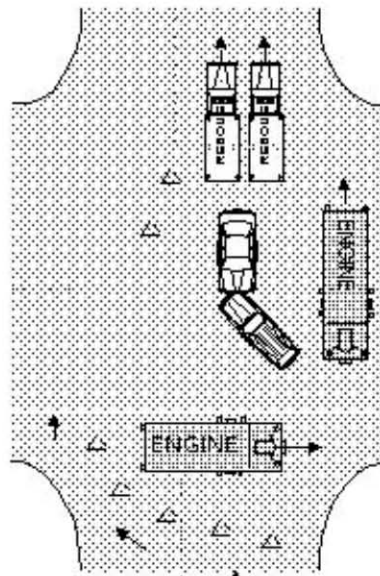
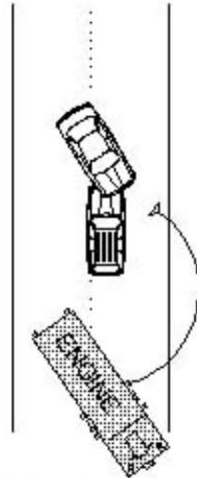


Figure #4



Often times two or more sides may need to be protected. Prioritize placement of the apparatus by blocking from the most critical to the least critical side.

Figure #5



To protect pump operator, position apparatus with the pump panel on the opposite side of on-coming traffic.

Figure #6

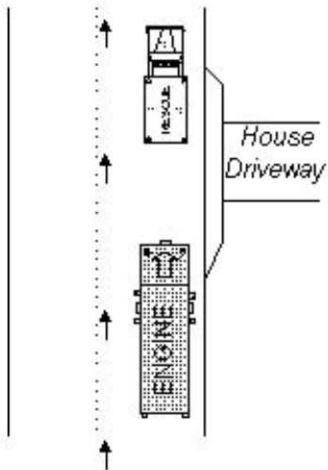
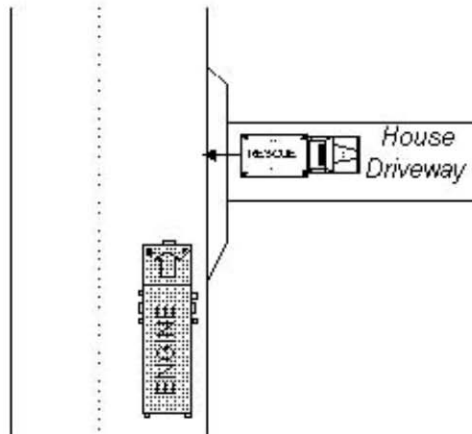
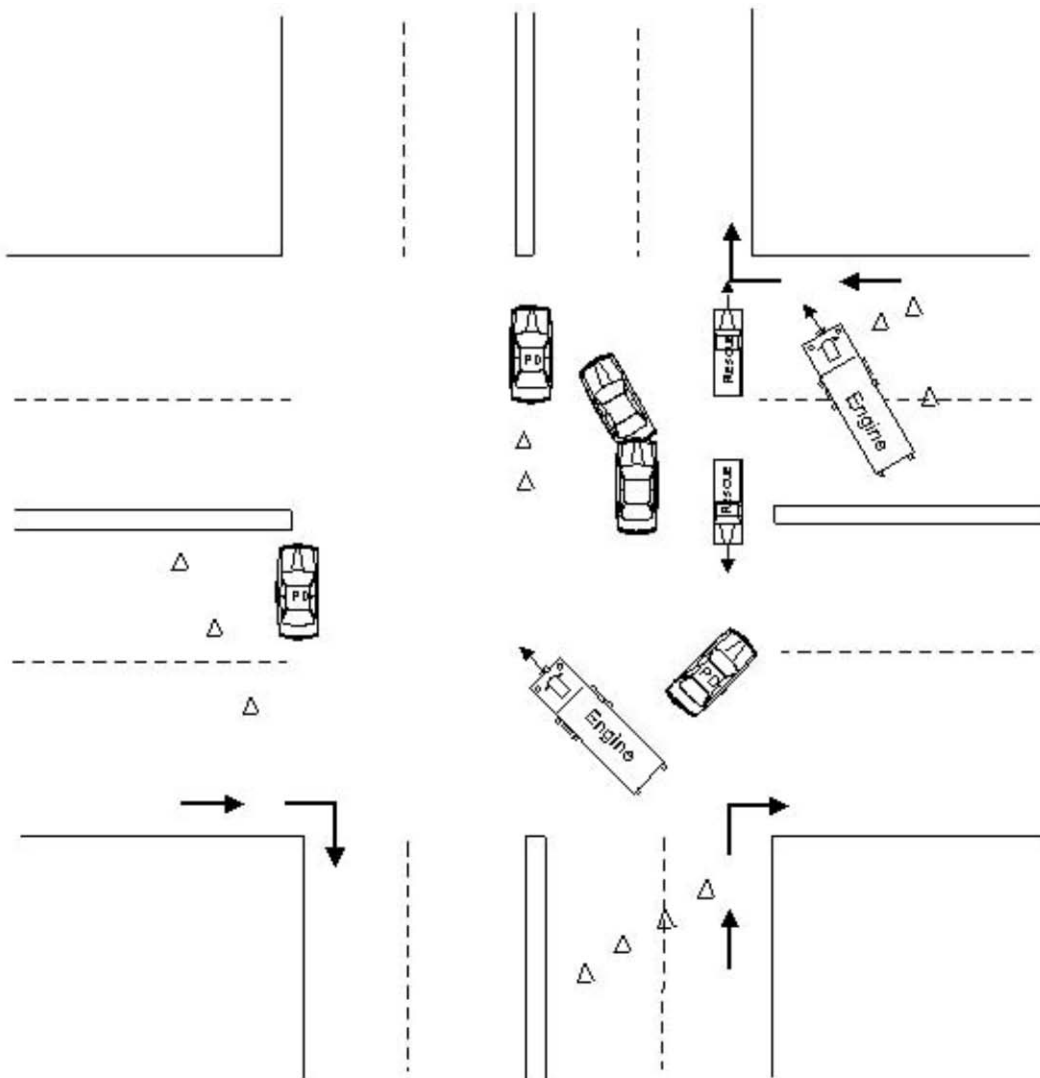


Figure #7



Where possible, park rescues in driveways or position rescue to protect patient loading area.



Provide specific direction to police as to what traffic control needs you have. Position rescues to protect patient loading areas.

5.8 Operating in High Risk Areas:

All City employees are required to use seat belts at all times when operating a City vehicle equipped with seat belts. Anyone riding as a passenger/attendant in a City vehicle is also required to use seat belts; i.e., rescue, engine, ladder, utility, service van, staff vehicle, etc. The Company Officer/driver of the vehicle will confirm that all personnel and riders are on-board, properly attired, with seat belts on, before the vehicle is permitted to move.

All personnel shall ride only in regular seats provided with seat belts. Riding on tailboards or other exposed positions is not permitted on any vehicle at any time.

During an emergency response, fire vehicles should avoid passing other emergency vehicles. If passing is necessary, permission must be obtained through radio communications, using the communications order model.

The unique hazards of driving on or adjacent to the fire ground requires the driver to use extreme caution and to be alert and prepared to react to the unexpected.

Drivers must consider the dangers their moving vehicle poses to fire ground personnel and spectators who may be preoccupied with the emergency, and may inadvertently step in front of or behind a moving vehicle.

