



# Emergency Vehicle Operations

**Standard:** NFPA 1002, Standard for Fire Apparatus Driver/Operator Professional

*“Firefighters are more likely to die traveling to or from a fire, than fighting one, and motor vehicles pose a greater hazard than flames”.* National Fire Protection Association

## Indications:

Each year, approximately 22% of all firefighter injuries and deaths are caused by vehicle collisions while responding to or returning from emergency calls. Some of the reasons for these accidents include: excessive speed, unfamiliarity with the apparatus, and lack of a driver training program.

The first goal of the Driver Operator is to get the apparatus and crew to the scene in an expedient, safe, and efficient manner. Every driver should be familiar with the basic concepts of defensive driving including evasive tactics, anticipating other driver’s actions, braking and reaction times, and weight transfer.

Drivers shall operate all fire apparatus and other departmental vehicles in a safe and defensive manner, and in accordance with departmental policies and SOG’s, and the State of Tennessee Statutes. Recent legal decisions have held that a driver who violates these laws, can be subjected to criminal and civil prosecution.

*Most accidents involving fire apparatus occur during daylight hours on dry road conditions*

## Gross Vehicle Weights

The approximate vehicle weights for apparatus in Tennessee fully loaded with equipment and crew are as follows:

Engine:	34,900 lbs.
2 Door Rescue:	16,900 lbs.
4 Door Rescue:	19,340 lbs.
Quint:	53,700 lbs.
Tender:	86,000 lbs.
Air/Light:	25,120 lbs.
Rescue Pumper:	24,320 lbs.
Brush Truck:	29,700 lbs.

Keep in mind when driving these vehicles that they are extremely heavy, and do not handle or stop as fast as the privately owned vehicle you drive.



## **Apparatus Positioning on or Near Roadways**

In addition to specific departmental SOG's, the following guidelines regarding positioning of apparatus on or near roadways should be followed. Placement can be affected by weather, time of day, scene lighting, traffic speed and volume, hills, curves, and other obstructions. If police have not yet arrived, first control oncoming vehicular traffic by positioning apparatus, before addressing the emergency. Remember that smoke generated by fires can dramatically decrease visibility.

### General Roadway Incident Safety Rules:

- Limit your on scene exposure time to what is required to complete the assignment.
- Never trust traffic...be aware of your surroundings!
- Use apparatus, directional warning bar, emergency and scene lighting, safety cones, flares, and law enforcement personnel to gain control of the traffic.
- Avoid using firefighters to direct traffic.
- Position apparatus at 45 degrees to the roadway between the work zone and the traffic.
- Position apparatus to protect the loading area of transport vehicles.
- While working on scene at night, limit the use of apparatus headlights when facing oncoming traffic.
- Deploy floodlights to light the work area while not creating a hazard for other drivers.
- Personnel working around traffic should wear department approved traffic safety vests or bunker coat.
- Whenever possible, appoint a safety officer who is responsible for the safety of the work zone and the emergency responders.

### General Driving and Operating Safety Guidelines:

- When two or more emergency vehicles are traveling Code 3 in the same direction, maintain a distance of at least 300 feet apart.
- Do not pass another emergency vehicle that is responding Code 3 with you.



- Avoid passing on the right.
- Avoid the use of “wig-wags” at night.
- Keep doors and compartments closed when not in use, practice “good housekeeping” when operating on scene.

## Backing of Apparatus

Most accidents that occur to apparatus are from backing up. Whenever possible, drivers should avoid backing by planning their travel routes accordingly. Because of the potential to cause damage, injuries, and even death, we need to ensure that it is safe prior to backing an apparatus. Therefore, the following guidelines shall be followed regarding the backing of apparatus.

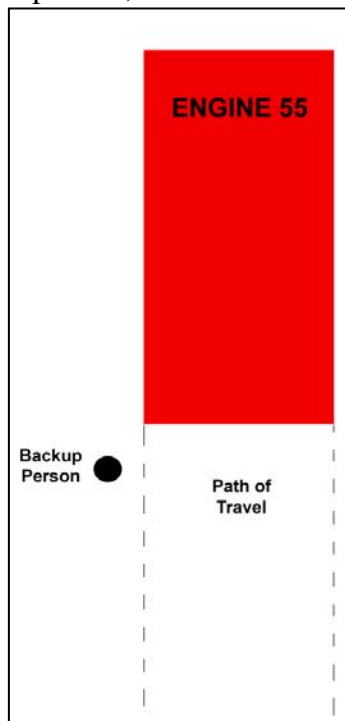
Prior to the actual backing of any apparatus, there shall be at least one person deployed at the rear of the apparatus to assist the driver with the backup operation. The default place for this person to station themselves shall be to the rear of the apparatus being backed up, on the left (driver’s) side and in such a position that the backup person is not in the path of the apparatus (see diagram).

Both the driver and the backup person shall have eye-to-eye contact with each other via the left outside mirror of the apparatus. To ensure the driver can communicate with the backup person, the driver’s side window should be lowered. If a portable radio is present, it shall also be used by the backup person in order that he/she will have a verbal communications backed. In EVERY backup situation, backup person shall be maintained. LOOSES VISUAL CONTACT DRIVER SHALL STOP remain stopped until such time that

When backing up an apparatus at a manner that allows the driver to see in the driver's eyes or mirror.

driver shall perform a 360-degree and visually check for any obstacles, be moved may hit. Such obstacles animals, vehicles, furnishings, utilities, overhead obstructions, etc.

The sounding of the vehicle's backing) and turning on the the extra care that should be taken alone.



link with the driver of the vehicle being visual contact between the driver and the IF AT ANY TIME THE DRIVER WITH THE BACKUP PERSON THE IMMEDIATELY. The apparatus will visual contact is restored.

night, the spotter should use a flashlight in the spotter. Avoid shinning the flashlight

When a backup person is not available, the walk around of the vehicle to be moved at or above ground level, that the vehicle to shall include, but are not limited to: people, buildings, rocks, holes, ditches, trees,

automotive horn (a short blast prior to emergency warning lights, are examples of when performing the backup operation