

# Shepherd Tri-Township Fire Department

## SAFE APPARATUS POSITIONING AND TRAFFIC VEST USE

### ***Purpose:***

This procedure identifies parking practices for 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.

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, alcohol and/or drug impaired. On top of everything else, motorists will often be looking at the scene and not at 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.

### **Terminology:**

The following terms should 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 motorist 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

**Policy:**

It shall be the policy 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.

It shall be the policy for all STTFD personnel while on scene for traffic control, working in any area that there is vehicular traffic including parking lots or other hazards that involve the roadway shall be in an ANSI / ISEA 107-2004 class II or class III safety vest along with their proper PPE.

**Exception:** Personnel directly involved in activities such as, fire suppression of a vehicle related fire on the roadway or working with extrication tools shall not be required to wear the ANSI / ISEA 107-2004 class II or class III safety vest.

**Note:** If vest are wet they must be dried before putting them back of the fire apparatus.

**Procedures:**

**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 crew members.

**Never Trust the traffic**

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.

Crews should exit the curb side or non-traffic side of the vehicle whenever possible

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.

**Engage in proper protective parking:**

Always position apparatus to protect the scene, patient, emergency personnel and provide a protected work area. Where possible, angle the apparatus with either “block to the right” or “block to the left”. This will direct the motorist around the scene. Apparatus positioning must 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.

The area must be protected so that patients can be extricated, treated, moved about the scene and loaded into ambulances safely. Remember to position ambulances to protect patient loading areas.

At intersections, or where the incidents 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 most critical to the least critical.

For the first arriving engine 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.

The Incident Commander (IC) or designee 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.

Once enough fire apparatus have “blocked” the scene, park or stage unneeded vehicles off the street whenever possible or on the same side of the roadway clear of the incident.

**Reduce motorist vision impairment:**

During daylight operations, leave all emergency lights on to provide warning to drivers. 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 emergency flashers when possible.

**Use of traffic cones and flares:**

MUTCD, NIOSH and NFPA require incident first responders to provide advance warning to motorists.

Place traffic cones at the scene to direct traffic. This should be done as soon as possible. Always place and retrieve cones while facing on-coming traffic. Traffic cones should be deployed at 15 foot intervals upstream of the blocking apparatus with the furthest traffic cone approximately 75 feet upstream to allow adequate advanced warning to drivers.

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.

### **Highway Operations:**

High volume limited access highways include the expressways and multi-lane roadways within the FD response area. The Police Department and Department of Transportation (DOT) have a desire to keep the traffic moving on these high volume roadways. When in the judgment of FD 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 limited-access and high-volume multi-lane roadway incidents;

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

The position of the apparatus should take into consideration all factors that limit sight distance of the approaching traffic including ambient lighting conditions, road conditions, weather-related conditions, design curves, bridges, hills and over or underpasses.

If on scene for an extended period of time, traffic cones and/or cones illuminated by flares should be placed upstream from the last blocking apparatus.

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 traffic.

A Flagger person with a radio should be assigned to monitor the response of approaching motorists as they are directed to transition to a slower speed and taper into merged lanes of traffic.

The Flagger person shall notify the IC or designee of any approaching traffic that is not responding to the speed changes, transition, tapering and merging directions.

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

***This policy is a guide, incidents are rarely the same, the Incident Commander has the authority to deviate from this policy if he/she sees fit and takes full responsibility in doing so.***