



# Manhattan Fire Protection District

SOP #: 402-1	Effective Date: 01/22/06	Revised Date: 07/06/16
Section: Emergency Response Apparatus		
Subject: Roadway Safety		

## **PURPOSE:**

To establish response and operation guidelines for fire and medical incidents on highways, roadways, and or streets.

## **SCOPE:**

This standing operating procedure applies to all members responding to and operating on emergency incidents. This policy identifies safe parking practices for the Manhattan Fire Department apparatus which will provide maximum protection and safety for emergency personnel operating in or near moving vehicle traffic. Also this policy explains the use of the supplied traffic safety vests.

## **DEFINITIONS:**

**Block:** positioning a fire apparatus on an angle to the lanes of traffic creating a physical barrier between upstream traffic and the work area.

**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.

**Upstream:** the direction that traffic is traveling from as the vehicles approach the incident scene. (Think of the traffic flow as water in a river)

**Shadow:** the protected work area at an incident that is shielded by the blocking apparatus.

**Taper:** the action of merging several lanes of traffic into fewer lanes.

## **GUIDELINE:**

The fire department shall follow these guidelines for the response criteria for both fire and medical incidents on highway, roads, and or streets. The fire department shall follow these operation guidelines for emergency incidents on highway, roads, and or streets to ensure the proper handling of the incident and safety of the personnel. It shall be the procedure of the Manhattan Fire Department to position apparatus and other emergency vehicles at incidents on the highway, or other locations where traffic can cause safety concerns, in a manner that best protects the incident scene and the work area. Such positioning shall afford protection to fire personnel, law enforcement, medical workers, towing operators and the public from the hazards of working in or near moving traffic.

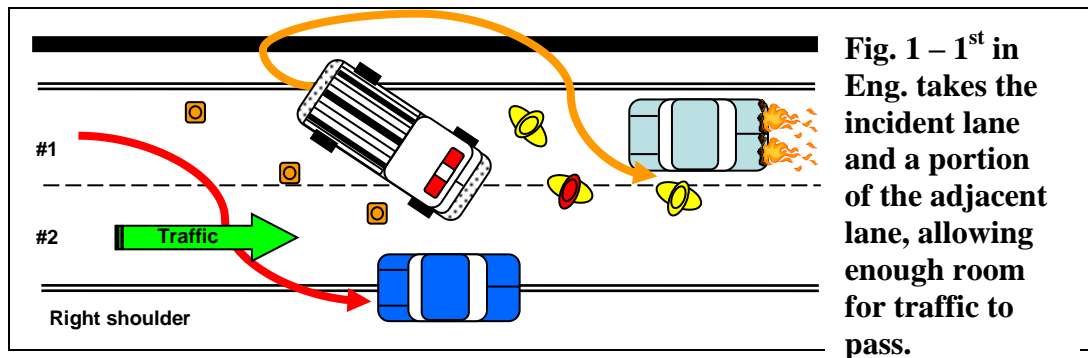


## Manhattan Fire Protection District

The Incident Commander shall implement this policy to every extent practically possible at any incident on or near public roadways, highways, and freeways which will include the mandated use of ANSI class II retro-reflective vests to enhance visibility of personnel engaged in mitigating the emergency incident. To increase the level of visibility of the emergency response personnel at the scene of a traffic-related incident on, or near a highway with motor vehicle traffic, all **personnel shall wear a highly-visible, highly-reflective ANSI rated vests over turnout coats.** As you approach the scene, determine the size of the work zone based on number and location of vehicles, debris field, patient triage and treatment area, extrication area and personnel and tool staging area. Whenever possible, position first arriving engine/squad to protect the scene, keeping in mind of other responding units. Initial apparatus placement should provide a work area protected from traffic approaching in at least one direction. The position of blocking apparatus shall take into consideration all factors that limit sight distance of the approaching traffic including lighting conditions, road conditions, curves, bridges and over and under passes. It will be up to the first arriving units to decide if blocking the scene with the apparatus or parking “Up hill, up wind” will provide the most safety for the crew. If “Up hill, up wind” takes the engine “downstream” from the scene, have the next in engine/squad block the scene from a safer distance. Keep in mind, until the next engine blocks, your crew has no barrier protecting them from oncoming traffic. **USE EXTREME CAUTION!** Blocking apparatus will keep all emergency warning lights on during the incident. This provides a visible warning to the physical barrier that the apparatus presents.

All other apparatus will park downstream from blocking apparatus in the shadow.

Blocking apparatus will take the incident lane and a portion of the adjacent lane. (See fig. 1) This procedure will allow traffic to use the remaining part of the lane and the shoulder to pass the incident.



The space immediately beyond the accident scene is reserved for the ambulance and fire/rescue vehicles.

As in all cases, the first arriving unit must use their best judgment when implementing this plan. Consider time of day, amount of traffic, and speed of traffic when deciding how to block the scene. Use of the shoulder or partially blocking an additional lane may be adequate, but only if this provides the safety barrier that the crews require to operate safely.



## Manhattan Fire Protection District

### Working with other agencies

Care must be exercised to prevent obstructing any more of the highway than is necessary to protect the accident scene.

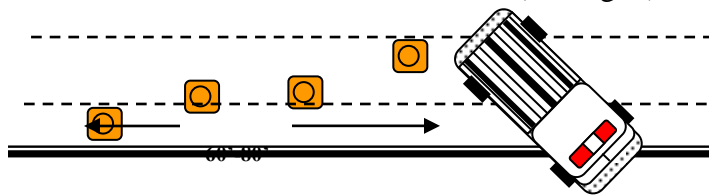
Once active firefighting operations are concluded (the fire has been knocked down and hose lines can be moved out of the traffic) or extrication operations are complete (victims removed and equipment moved out of traffic) and it is SAFE TO DO SO, reposition apparatus to free up adjacent lanes. It is important to work with law enforcement personnel in order to keep traffic flowing.

### Use of cones and flares

Cones and flares only suggest the transition and tapering into other lanes, they do not provide scene protection.

Cones and flares do provide advanced warning for approaching vehicles and should be used when possible in conjunction with blocking.

4 Cones at 15-20' intervals upstream of the blocking apparatus should provide adequate initial tapering until more cones or flares can be secured. (See fig. 2)



**Fig. 2 – The greater the traffic speed, the greater the upstream distance for cone placement**

Personnel placing and retrieving cones and flares must do so while facing oncoming traffic. Placing flares adjacent to and in combination with traffic cones for nighttime operations greatly enhances scene safety.

### Operations

The first arriving fire unit should size up the incident. Be sure you are at the right incident, sometimes there are multiple accidents in the same vicinity, and confirm the location.

The size-up should include the following:

- Size – Number of vehicles.
- Type of Collision – for example: Head-on, t-bone, rollover, etc.
- Occupancy/Type of vehicles – Car, van, motorcycle, semi, etc.
- Vehicle Damage/Extent – minor, moderate, heavy damage
- Exposures/additional problems – extrication, wires down, fire, fuel leak, etc.

Traffic conditions, identification of lanes blocked or obstructed, type of traffic control needed (on scene or road closures, slow down, etc.) may also be voiced on the size-up.

### **SAFETY CONSIDERATIONS:**

- Never trust approaching traffic
- Avoid turning your back to approaching traffic
- Always wear full turnouts, orange safety vest, and structure helmet



## Manhattan Fire Protection District

- When walking around rigs, stop at the corner, check for traffic and proceed remaining as close to the rig as possible.
- Personnel should constantly remain cognizant of traffic and shall exercise caution when operating at the scene.
- Avoid exiting the vehicle on the traffic side, firefighters in crew cabs should move across the cab to exit on the “shadow” side of the rig.
- Always look before opening doors and stepping out of apparatus into any moving traffic areas.
- Use extreme caution when retrieving equipment from upstream side of apparatus, post lookouts if necessary.
- Whenever possible, work from the shoulder side of the incident and use the shoulder for staging and hose deployment if possible.

### **SPECIAL CONSIDERATIONS:**

The supplemental retro-reflective vest is NOT designed or approved for use as fire resistant PPE, and shall not be worn by any employee engaged in fire suppression.

Crews working with extrication tools MAY choose not to wear the vests if they are seen to cause entanglement issues for extrication crews.

**Approved By:**

**Signature:** Daniel Forsythe

**Date:** 07/06/16