

General Order Number: 06-23	Effective Date: December 31, 2023
Division: Emergency Operations	
Chapter: Safe Response to Roadway Incidents	
By Order of the County Fire Chief: Tiffany D. Green	Prior Revision: January 2010

PURPOSE

This General Order establishes policies and procedures for the response and operation to emergency incidents on roadways. Incidents on roadways pose significant and unique dangers to responders. This document identifies unique response challenges that occur on roadways and best practices to minimize the dangers.

SCOPE

The scope of this General Order is for all personnel in the Fire/EMS Department who respond to emergencies on any roadway.

DEFINITIONS

Advance Warning – Notification procedures that advise approaching motorists to transition from normal driving status to the required temporary emergency traffic control measures ahead of them.

Block – Positioning a Fire Department apparatus 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.

Flagger – A Fire Department member assigned to monitor or direct 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.

High Volume/High Speed Roadway – A divided highway with two or more lanes in each direction and a posted speed limit of more than 40 mph. For the purpose of Fire/EMS operations, these are only the roadways that have limited access.

Safety Vest - Hi-Visibility florescent vest that meets the ANSI (American National Standards Institute) Class II requirements. ANSI 207 certified vests are required to have at least 201 square inches of retro-reflective material (Scotchlite, Reflexite, etc.) and 450 square inches of hi-vis background fabric.

Taper – The action of merging lanes of moving traffic into fewer moving lanes.

Upstream – The direction that traffic is traveling from as the vehicles approach the incident scene.

POLICY/RESPONSIBILITIES

I. Responding to Incidents on the Roadways

- A. When members are operating at an emergency incident/drill/event and their assignment places them in potential conflict with motor vehicle traffic, all efforts shall be made to protect the members.
- B. Each Department shall establish, implement, and enforce standard operating procedures regarding emergency operations for traffic incidents.
- C. Members that operate on roadway incidents should be provided with vests or garments that ensure proper reflectivity such as a highly retro-reflective vest (strong yellow, green, and orange).

II. Use of High Visibility Safety Vests

- A. Safety vests shall be worn during day and night outdoor emergency incidents/drills/events, which expose members to vehicular traffic. Examples of when to wear them include, but are not limited to:
 - 1. While on roadways; such as vehicle accidents or EMS responses.
 - 2. While in parking lots; such as medical emergency in a parked vehicle.
 - 3. While on public service calls; such as a downed tree or power line.
 - 4. While re-racking hose lines on roadways.
 - 5. While operating at emergency incidents to distinguish fire and rescue providers from other personnel and/or agencies.
 - 6. Other situations involving traffic or the need to readily identify emergency responders.
- B. Members will not be required to wear safety vests in the following situations:
 - 1. Over firefighting bunker gear if you are wearing a SCBA.
 - 2. Other situations in which the incident commander deems the vest unsafe.
 - 3. The use of vests integrated into the Incident Command System may supersede the use of high-visibility apparel.

III. Highway Turnarounds

A. When responding on a divided roadway, apparatus may not use turnarounds that provide access from one direction to another. Apparatus that have used these turnarounds in the past have been subject to severe collisions with significant injury.

NOTE: The only exception to this mandate is when traffic in the oncoming direction (the direction the apparatus is turning around to) is confirmed by the Incident Commander to be at a complete stop, and authorizes the units to use the turnaround.

IV. Staging on High Volume/Speed Roadways

- A. When responding to limited access roadways with assignments responding in opposite directions, it is important for specialty apparatus on those incidents to safely stage at decision points in their response. Reporting parties are often confused about their location and committing specialty apparatus to one direction could significantly delay their arrival on the scene. Apparatus should find a location that gives them access to multiple directions or roadways (Example: "Rescue Squad 814 I'll be staging at the park and ride until units arrive on scene.").
- B. The first arriving unit on any limited access highway will confirm the location ("As dispatched" is acceptable) OR provide the corrected location on the assigned talk group.

V. Lane Identification and Terminology

A. Common understanding of lane identification and the terminology used can assist in highway operations. At times incidents are spread across multiple lanes or on different sides of the roadway. Announcing the location of the incident can assist responding units in arriving at the incident. Giving an additional responding unit an assignment will be easier with standardized terminology (Example: "Engine 801 to Engine 802 We're evaluating the vehicle in Lane 1 can you go to the vehicles in Lane 4.") This terminology has already been identified and is regularly used by law enforcement agencies. Attachment 1 is the Emergency Responder Safety Institutes Highway Lane Designation and Terminology reference card. When roadways have more than 3 lanes in any one direction, the lanes shall be identified and labeled with numbers, starting with the far-left lane. The far-left lane shall be called "Lane 1" and each lane to the right is numbered sequentially. Shoulders should be identified as "left/right" or "inside/outside." Separated lanes or roadways should be identified, for example, "Engine 810 to Paramedic Engine 841: they'll be in the exit lanes near Brooklyn Bridge Road."

VI. On the Scene of Roadway Incidents

A. Positioning (Blocking)

1. When arriving on the scene of a roadway incident the initial unit should take a position behind the vehicle or person involved in the incident. For most incidents involving the Fire/EMS Department, lane plus one blocking, which is taking the lane involved and the next lane, is the preferred method. It's important to note that this should be established by the first arriving unit even if that unit is an ambulance. Subsequently arriving suppression apparatus can be utilized to block the ambulance to allow for safe patient loading into the ambulance.

- 2. Linear positioning is the other option for positioning on a roadway incident and is rarely warranted. Linear positioning involves pulling up directly behind the vehicle or person involved and does not include blocking any other lane. For any incident requiring a roadway work area where the Fire/EMS Department will conduct operations, linear positioning should not be considered a safe option. Linear positioning should be considered by specialty apparatus staging awaiting the announcement of a confirmed location.
- 3. Anytime apparatus is positioned on a roadway the apparatus driver should position the apparatus at least 15 feet from the incident with the wheels turned at a 25-degree angle away from the work area. Ideally, the wheels will be turned away from the work area and away from oncoming traffic if possible. Wheel positioning is an important consideration when blocking vehicles are struck by another vehicle as it won't send the apparatus into responders, or other passing motorists. When blocking it is important to take only as many lanes as you need for only the time you need those lanes. When blocking will take more than thirty minutes personnel should request Maryland DOT to send traffic control resources that can provide advanced warning signals to enhance scene safety. After positioning the apparatus, the unit driver should establish a buffer zone by deploying road flares or traffic safety cones.
- B. Dismounting the Apparatus
 - 1. When dismounting the apparatus, caution should be used to avoid active lanes, especially by the blocking apparatus personnel. In suppression apparatus with unobstructed rear cabs, personnel should only dismount using the side of the apparatus where there are no moving vehicles. Unit officers and drivers whose only option is to exit on the side of moving traffic should follow the apparatus' angle away from traffic and move around the apparatus, as opposed to putting themselves in between the apparatus and moving traffic.
- C. Establishing a Buffer Zone and Taper
 - 1. A taper is the action of merging lanes of moving traffic into fewer lanes. This is typically accomplished by the Fire/EMS Department using blocking apparatus and flares or cones. The taper area should be 100-120 feet and is established utilizing 3-5 cones or flares. To establish this area, walk that distance from the apparatus from the protected (traffic-free) side of the roadway and place the first flare or cone on the shoulder or lane line. While remaining in a protected area, walk 10 paces towards the incident then one pace in from the last placed device, and place the next device. Continue this until you've arrived back at the apparatus. Pace varies by person, but the typical pace is 3 feet. Utilizing this method will establish a safe taper allowing adequate advanced warning upstream to motorists which results in a safer work area. A diagram of this pace taper method can be seen in Attachment #2

D. Minimize Units and Time on Scene (Move It vs. Work It)

1. The initial unit's OIC should quickly evaluate the incident and anticipate the resources needed. Due to the risk presented at roadway incidents, dispatched units that aren't needed should be returned to service as soon as possible.

NOTE: Suppression Apparatus (i.e.: Engine, Truck, or Rescue Squad) shall remain attached to the call to provide blocking if ambulances are the initial arriving units.

- 2. Move It vs. Work It refers to the decision to move vehicles from the roadway or leave them in place to provide emergency care. Operating on roadways is inherently dangerous, and every effort should be taken to minimize roadway disruption and on-scene time. While this will not be achievable on prolonged or complex technical incidents, most roadway responses don't require prolonged on-scene times. Ambulances should perform a rapid assessment and make a transport decision as soon as possible. Unless there is an immediate clinical need, prolonged patient evaluations should not occur on high-speed roadways. Ambulances should perform a rapid assessment is needed it should be conducted after the ambulance moves from the high-speed roadway. If the incident is on a low-speed roadway, efforts should be made to reposition to a parking lot or other safe area without passing vehicles. The risk of Fire/EMS units prolonging on-scene times for patient evaluation is rarely if ever justified by the accomplishment of an in-depth clinical exam.
- E. Termination of Incidents
 - 1. Termination of roadway incidents returns the roadway and apparatus to its pre-incident condition. This could include returning equipment, racking hose lines, removing traffic control devices like cones or flares, and removing apparatus from a blocking position.
 - a) No blocking apparatus will terminate the incident or clear the scene of an incident on an active roadway where a Fire/EMS unit remains on scene.
 - b) Cones and/or flares should be removed from the roadway in the opposite order of their placement to ensure the safety of the personnel removing them.
 - c) Personnel should mount the apparatus in the same manner they dismounted, ensuring as much space as possible between the personnel and traffic.
 - d) While racking hose lines, the use of a flagger should be considered to watch for vehicles not conforming to the established traffic control measures.
 - e) Apparatus reopening the roadway should consider departing in the closed lane to ease into traffic.
 - i. In the event that a lane remains closed by a highway administration vehicle or a police agency, apparatus should use caution entering moving traffic and if necessary, utilize their audible warning devices to gain the attention of motorists.



VII. Responsibilities

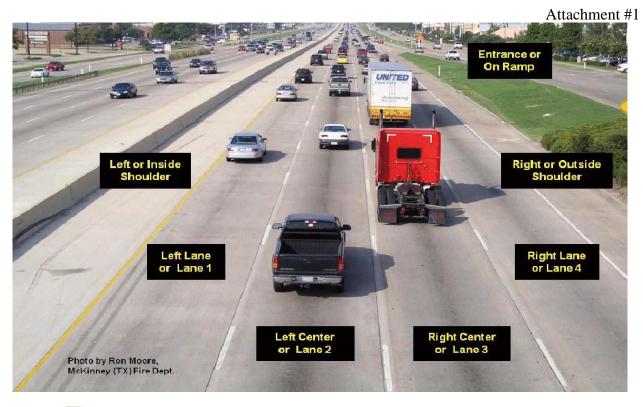
- A. Incident Commander
 - 1. The Incident Commander shall:
 - a) Ensure that safety vests are being worn on incidents as described in this policy.
 - b) Make the final decision on the use of a safety vest during an incident, keeping safety concerns as the first priority.
 - c) Ensure that personnel operating within the Incident Command System and assigned to Command Staff or ancillary positions are to be attired in the proper ICS vest and are not required to wear the florescent safety vest.
- B. Company Officer
 - 1. The Company Officer shall:
 - a) Make the determination if safety vests need to be used during an incident.
 - b) Ensure that crews are wearing safety vests if deemed necessary.
- C. Members
 - 1. All members shall:
 - a) Wear a safety vest on incidents to ensure high visibility on a scene.

REFERENCES

General Order 03-11 Standard Response Dispatch Procedure General Order 06-05 Departmental Driving Regulations General Order 06-21 MOVE IT Forms NFPA 1500 - Standard for a Fire Department Occupational Safety and Health Program NFPA 1521 - Standard for a Fire Department Safety Officer National Fire Academy - Incident Safety Officer (ISO) National Fire Academy - Health and Safety Officer (HSO) US Fire Administration

FORMS / ATTACHMENTS

Attachment #1 – Highway Lane Designations and Terminology Attachment #2 – Cone/Flare Taper Setup





Highway Lane Designations and Terminology

Traffic incident responders use plain English where possible to identify incident location and lane designations. On roadways with 3 or less lanes, they are named left, center, and right when facing in the direction of traffic flow.

- When roadways have more than 3 lanes in any one direction, the lanes shall be identified and labeled with numbers, starting with the far left lane.
- When using lane numbers, the far left lane shall be called "Lane 1". Each lane to the right is numbered sequentially 2 through n.
- Shoulders should be identified using "right/left" and/or "inside/outside" and the term "shoulder"; The left shoulder is the inside shoulder and the right shoulder is the outside shoulder. (i.e. inside (or left) shoulder, southbound interstate 75)
- Responders should also indicate the relative direction of travel (e.g. northbound or southbound) along
 with other incident location detail and any specific position assignments. For example an incoming unit
 might be told to safe park or "block upstream of the incident in Northbound (NB) Highway 75 Lane 3
 and right shoulder".
- Separated, high occupancy vehicle (HOV) or high occupancy toll (HOT), car pool, or bus only lanes that are physically separated shall be designated as HOV1 northbound (NB), HOV2, HOT1, HOT2, etc. as appropriate.
- The term "upstream" is defined as before the incident point or area. The term "downstream" is defined as past or beyond the incident point or area when facing in the direction of traffic flow.

Provided by the Emergency Responder Safety Institute, a Committee of the Cumberland Valley Volunteer Fireman's Assoc. www.respondersafety.com

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A typical "pace" is equal to approximately 3 feet 5 cones would provide 120' of taper

Attachment #2

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