



Orange County Emergency Services
Standard Operating Guidelines

SOG Name: Roadway Operations

SOG Number: GEN-004

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Approved By: F.R. Montes de Oca

Date Effective:

I. OBJECTIVE

1. To ensure all personnel operate in a safe manner while providing services in a roadway or in close proximity to a high traffic area.

II. SCOPE

1. The scope of the guideline will be to position emergency vehicles at roadway incidents on any street, highway or interstate in a manner that best protects the incident scene and work area. Such positioning shall afford protection to all personnel, victims and occupants of other vehicles when operations are conducted in or near moving traffic.

III. PROCEDURE

1. Definitions

- a. Directional Orientation: "Right" and "Left" shall be identified from the driver's point of view (driver's side = left).
- b. Lanes of traffic: are identified numerically as "Lane 1", "Lane 2", "Lane 3", Center "Turn Lane", etc. beginning from the right to the left as considered from the approaching motorist's point of view, typically, vehicles travel lower speeds in the lower number lanes.
- c. Upstream: the direction that traffic moves as it approaches the incident scene.
- d. Downstream: the direction that traffic moves as it travels away from the incident scene.
- e. Median and Shoulder: the median is the area between the left-most lanes of traffic; the shoulder is identified as the area to the right of lane. Directions should be included in this description (Northbound shoulder = right side of northbound lane).
- f. Block: positioning apparatus and emergency vehicles at an angle to open lanes of traffic to create a physical barrier between upstream traffic and the work area.
- g. Buffer Zone: the area between moving traffic and the protected work zone where emergency personnel and involved vehicles are located.

- h. Shadow: the protected area at a roadway incident that is shielded by the block created by fire apparatus or other emergency vehicle placement.
- i. Protected Work Zone: the physical area of a roadway within which emergency personnel perform fire, EMS and rescue tasks at a roadway incident.
- j. Advance Warning: use of warning devices such as markers, traffic cones or road flares to advise approaching motorists to transition from normal driving status to a slower temporary status due to emergency measures ahead of them.
- k. Taper: action taken (by use of warning devices or mechanisms) to merge several lanes of moving traffic to fewer lanes

2. Apparatus and Emergency Vehicle Positioning

- a. The first arriving unit shall establish an initial block to protect the scene, patients and emergency personnel.
- b. Position large apparatus to create a safe parking area (shadow) for EMS units and other small emergency vehicles. Operating personnel, equipment and patients should be kept within the shadow area created by the blocking apparatus at all times.
- c. EMS units shall be positioned within the protected work area with their rear patient loading door angled away from the nearest lanes of moving traffic. If the EMS unit is the first to arrive, consideration must be given to the eventual placement of fire and rescue apparatus so the smaller unit(s) can fall within the shadow area.
- d. Sources of vision impairment to approaching motorists shall be turned off at night time incidents if possible. These include white emergency lighting, particularly headlight flashers, rotating white lights as well as vehicle headlights and white strobe lights.
- e. Apparatus placement should protect the emergency scene, establish a work zone of sufficient size to include all damaged vehicles, roadway debris, the patient treatment and triage area, the extrication work area, personnel and tool staging areas and the EMS unit loading zone.
- f. Police vehicles and law enforcement personnel should be utilized to assist in directing traffic flow of moving traffic whenever possible.
- g. Command shall stage unneeded emergency vehicles off the roadway or return them to service whenever possible. On interstate accidents, bridge overpasses should be used as staging whenever possible to minimize the amount of apparatus on the interstate.
- h. When indicated traffic cones should be deployed, starting at the blocking apparatus upstream, to increase the advance warning provided to approaching motorists: Personnel shall place cones and retrieve cones while facing oncoming traffic. Traffic cones shall be deployed at 15-foot intervals upstream of the blocking apparatus.

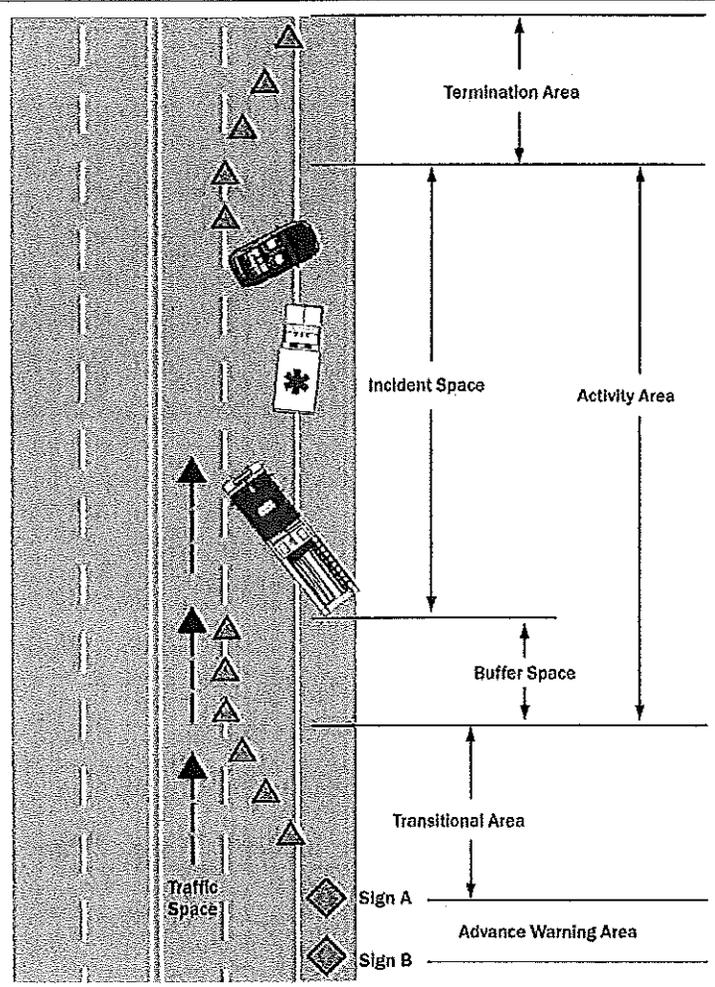
3. Incident Command Responsibilities:

- a. The incident commander must assure a safe and protected work environment is established and maintained. This responsibility includes:
 - Assuring that the first arriving emergency vehicle establishes an initial block to create an initial protected work area
 - Assigning parking locations for all units as well as additional arriving units later into the incident
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- Consider a staging area for additional apparatus and vehicles when dealing with a large, complex event including Mass Casualty Incidents (MCIs) requiring Triage, Treatment and Transport (TTT) Groups.
- Instructing EMS units to stage their unit appropriately so that the rear patient loading area is away from the closest lane of moving traffic
- Assuring that on-scene EMS units are parked within the protected work area set by the larger apparatus.
- Assuring that during nighttime operations, headlights and white emergency lights are turned off, and that other emergency lighting remains minimized where appropriate.
- Creating a LCES plan for all roadway operations: lookout posted to watch traffic; communication plan for evacuating area; evacuation route when oncoming traffic intrudes safety area; and safely regroup all personnel after intrusion incident

4. Personnel Safety:

- a. All personnel should take the following steps to protect themselves and others at an incident scene.
 - b. Never turn their back to approaching traffic.
 - c. Wear department-issued reflective vests during all roadway operations.
 - d. Always maintain an acute awareness of the high risk of working in or near moving traffic: never trust moving traffic, always look before moving, always keep an eye on moving traffic, and always be situational aware.
 - e. All personnel must exit and enter their units with extreme caution, remaining alert to moving traffic at all times.
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