

Santa Barbara City Fire Department - Standard Operating Procedures Emergency Operations	Code: E-V-1
Incidents on Freeways	
Chpt: V Transportation Fires/Emergencies	Revised: 2/20/12 Pages: 7

I. PURPOSE

A. To establish response and operation guidelines for fire and medical incidents on freeways.

II. POLICY

A. The fire department shall follow these guidelines for the response criteria for both fire and medical incidents on the freeway.

B. The fire department shall follow these operation guidelines for emergency incidents on the freeway to insure the proper handling of the incident and safety of the personnel.

C. It shall be the policy of the SBFDD to position apparatus and other emergency vehicles at incidents on the freeway, or other locations where traffic can cause safety concerns, in a manner that best protects the incident scene and the work area.

D. 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.

E. 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

F. 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.

G. Exceptions:

1. 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.

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

H. Dispatch for any incident on the freeway will include 2 engines

III. SAFETY

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- A. Never trust approaching traffic
- B. Avoid turning your back to approaching traffic
- C. Always wear full turnout, orange safety vest, and structure helmet
- D. When walking around rigs, stop at the corner, check for traffic and proceed remaining as close to the rig as possible.
- E. Personnel should constantly remain cognizant of traffic and shall exercise caution when operating at the scene.
- F. 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.
- G. Always look before opening doors and stepping out of apparatus into any moving traffic areas.
- H. Use extreme caution when retrieving equipment from upstream side of apparatus, post lookouts if necessary.
- I. Whenever possible, work from the shoulder side of the incident and use the shoulder for staging and hose deployment if possible.

IV. TERMINOLOGY

- A. Block: positioning a fire apparatus on an angle to the lanes of traffic creating a physical barrier between upstream traffic and the work area.
- B. Buffer zone: the distance or space between personnel and vehicles in the protected work zone and nearby moving traffic.
- C. Downstream: the direction that traffic is moving as it travels away from the incident scene.
- D. 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)
- E. Shadow: the protected work area at an incident that is shielded by the blocking apparatus.
- F. Taper: the action of merging several lanes of traffic into fewer lanes

V. RESPONSE PROCEDURES

- A. With 2 engine response, efforts should be made to approach the reported scene from both the north and south. This provides adequate coverage of the reported area.

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- B. Flashing red lights and sirens should not be used when responding on a freeway.
- C. During periods of extreme congestion, when traveling against traffic flow or on shoulders, code 3 response may be utilized.

VI. PARKING PROCEDURES

- A. 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.
- B. Whenever possible, position first arriving engines to protect the scene.
- C. Initial apparatus placement should provide a work area protected from traffic approaching in at least one direction.
- D. Angle apparatus on the freeway with a “block to the right” to create a physical barrier between the crash scene and approaching traffic. The “Block to the right” should be used whenever possible as it protects the pump panel and the engineer.

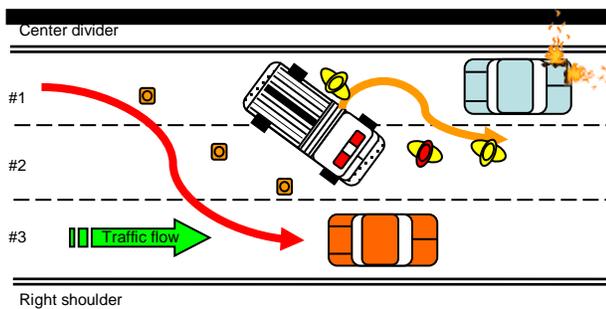


Fig. 1 – Eng. has “blocked right” and taken one additional lane. Engineer and pump panel are on the “downstream” side of the incident.

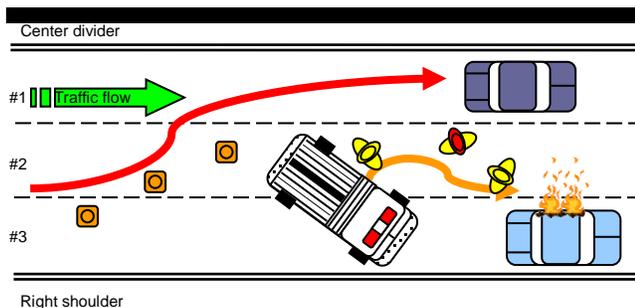


Fig. 2 – Eng. has “blocked right”. Note the “shadow” where crews can safely operate and deploy hose lines.

- E. Use fire apparatus to block at least one additional traffic lane more than that already obstructed by the crashed or involved vehicle. If the shoulder is available, block right and use the shoulder as the additional lane and approach from the shoulder side of the incident. (see fig. 1 and 2)

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F. 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.

G. It will be up to the captain 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 block the scene from a safer distance. (see fig. 3) Keep in mind, until the next engine blocks, your crew has no barrier protecting them from oncoming traffic. USE EXTREME CAUTION!

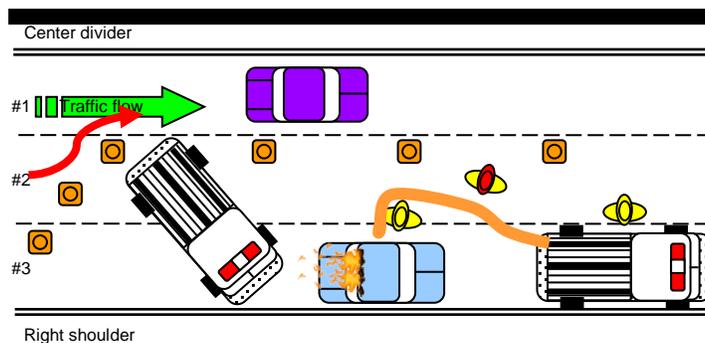


Fig. 3 – 1st in Eng. has parked downstream from incident. Next in engine blocks. (Diagram not to scale)

H. 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.

I. All other apparatus will park downstream from blocking apparatus in the shadow and turn off all emergency lighting except 4-ways.

J. In the event that the incident is on a 2 lane portion of the freeway the practice of taking one additional lane will be modified. Blocking apparatus will take the incident lane and a portion of the adjacent lane, allowing enough room for traffic to pass.

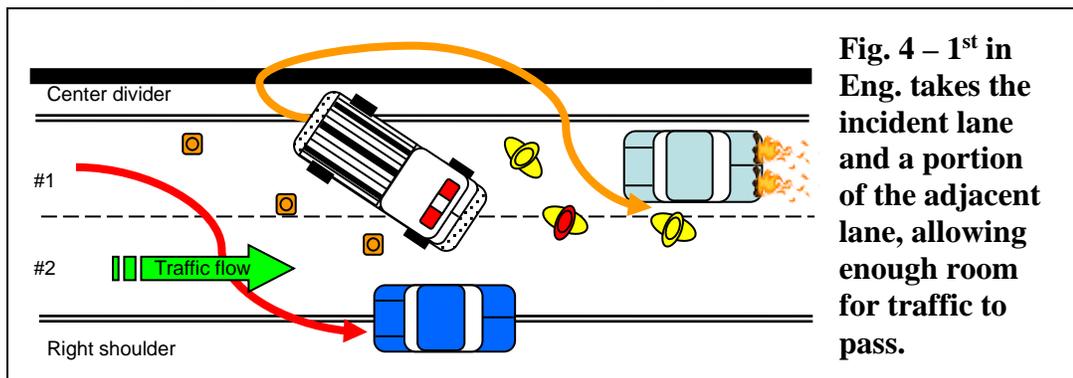


Fig. 4 – 1st in Eng. takes the incident lane and a portion of the adjacent lane, allowing enough room for traffic to pass.

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

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L. Consider the use of B/C vehicles for additional warning devices. The BC vehicles have directional lighting on the light bars that can aid in tapering.

M. As in all cases, the captains must use their best judgement 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.

N. See: [Highway parking PowerPoint](#) for more information

VII. WORKING WITH OTHER AGENCIES

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

B. 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 CHP and Caltrans personnel in order to keep traffic flowing.

C. CALIFORNIA HIGHWAY PATROL (CHP)

1. CHP is the IC on all emergency related incidents on all freeways and state highways and is ultimately responsible to coordinate the operations thereof.
2. Establish a liaison with CHP as soon as possible to jointly coordinate a safe work zone and to determine how to most efficiently resolve the incident.
 - a) In the absence of the CHP at the scene, fire personnel should attempt to protect evidence at the accident scene and perform necessary traffic control to prevent further accidents.
3. Fire personnel will work with CHP to complete necessary fire and rescue functions.
4. The Fire Department shall continue to respond whatever units they think are needed pending the arrival of a CHP or fire unit and a size-up is given.

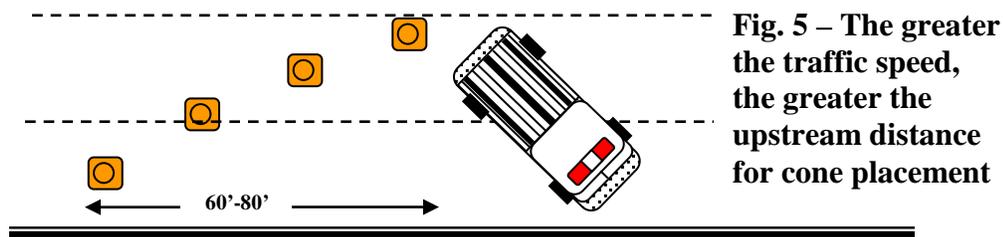
D. Caltrans

1. Caltrans can provide much needed resources on an extended incident including: cones, signs, arrow boards and additional safety equipment. Keep in mind that Caltrans response can be 20-30 minutes, so an early call for them should be made if you are involved in an extended incident. Capts. shall coordinate Caltrans response through CHP.

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VIII. USE OF CONES AND FLARES

- A. Cones and flares only suggest the transition and tapering into other lanes, they do not provide scene protection.
- B. Cones and flares do provide advanced warning for approaching vehicles and should be used when possible in conjunction with blocking.
- C. 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. 5)



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

IX. OPERATIONS

- A. The first arriving fire unit should size up the incident
 1. Be sure you are at the right incident, sometimes there are multiple accidents in the same vicinity, and confirm the location.
 2. Number, type and condition of accident vehicles.
 3. Number of victims, type of injuries (DOA, trapped, etc.).
 4. Traffic conditions, identification of lanes blocked or obstructed, type of traffic control needed (on scene or road closures, slow down, etc.).
 5. Hazards involved, fire, HAZMAT, debris
 6. Cancel any unneeded fire/ambulance units as soon as possible.
- B. Notify incoming units of best access
- C. Make sure that all fire units park properly and shut off unnecessary lights.
- D. Deploy resources to handle fire or toxic chemical hazards, remove and treat victims.

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X. WATER SOURCES

A. Fire Officers should be cognizant of the lack of water sources on the freeway and should consider alternative means of obtaining water.

1. Tank on fire apparatus.
2. Additional pumpers.
3. Hydrants on surface street adjacent to the interstate.
4. Relay pumping.

XI. HAZMAT

A. Hazardous material incidents on the highway are the responsibility of the Highway Patrol. They are the scene manager.

B. The Fire Department is the Incident Commander and is responsible for decisions concerning strategies that are needed to control the incident, i.e., ordering additional fire equipment only, evacuation, controlling efforts, etc.

C. The law enforcement (scene manager) makes decisions regarding agencies to be called and those required to respond to the scene.

D. This needs to be a coordinated effort, and a unified command may work to the best advantage.



Parking on freeways