

HIGHWAY RESPONSE

I. PURPOSE

The purpose of this guideline is to provide specific information and procedures to allow for the safe and efficient resolution of incidents that occur in or near moving traffic. All (Departments Name) personnel should recognize the high risk they are exposed to while operating in or near moving traffic.

II. DEFINITIONS

Advanced Warning:

Notification given to motorists that they must transition from normal driving due to control measures ahead.

Transition Zone:

After an Advance Warning, the zone/area where motorists change speed and possibly lane position to comply with control measures.

Downstream:

Direction traffic is moving as it travels away from the incident.

Upstream:

Direction traffic is moving as it approaches the incident.

Block:

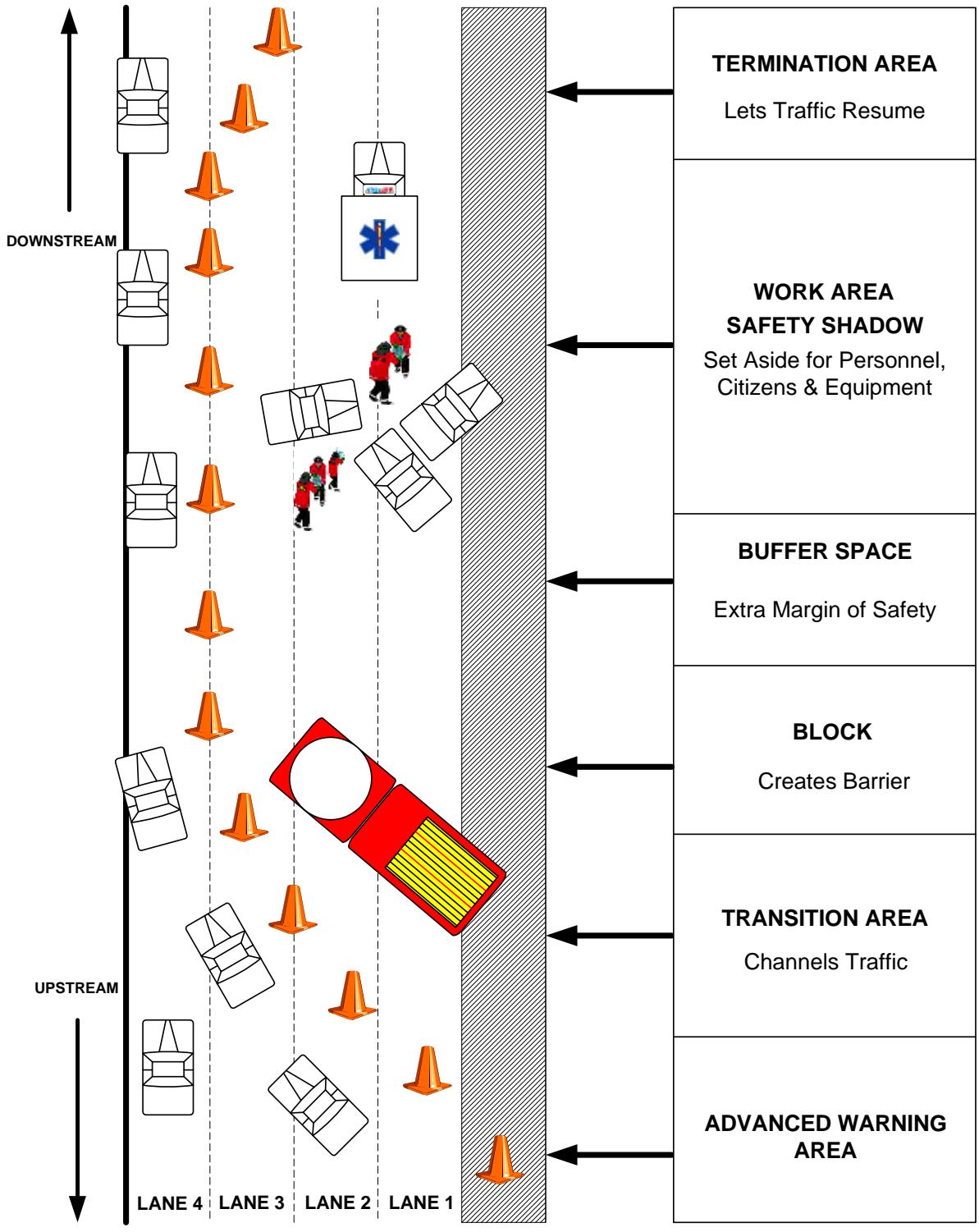
Positioning apparatus to create a physical barrier between upstream traffic and work area.

Work Area-Safety Shadow:

Work area shielded from traffic by the Block from apparatus and other emergency vehicles.

Buffer Space:

Area between the BLOCK and the WORK AREA.



III. RESPONSIBILITIES

A. All Personnel – Listed below are safety benchmarks for all personnel operating in or near moving traffic:

1. Never trust approaching traffic. When working at the scene, look for escape routes in advance in case immediate, evasive action needs to be taken to avoid being hit by an errant driver.
2. Avoid turning your back on traffic.
3. Wear the proper Personal Protection Equipment (PPE) for the given conditions. Proper PPE always includes the firefighting helmet and upper body reflective wear in one of the following forms: The turnout coat shall be worn if conditions warrant. The duty jacket is an option if turnouts are not required. **Because the Class III reflective vest has superior reflective properties, it is recommended that it be worn over the turnout coat or the duty jacket. If conditions do not warrant the use of the turnout coat or duty jacket, the Class III vest shall be worn when working in or near moving traffic.**
4. Establish adequate advance warning and transition zones upstream to reduce speed of approaching traffic.
5. Use traffic cones and/or flares where appropriate for sustained traffic control and direction.
6. Use the following formula as a guideline for MINIMUM distance from your apparatus to the furthest cone or flare:

Posted Speed x 2 = Strides (1 stride = approx. 3 ft.)

Posted Speed	Strides	Furthest cone
25 mph or less	50	150 ft.
35	70	210
45	90	270
55	110	330
65	130	390
75	150	450

7. All personnel should make every effort to stay in the Safety Shadow at all times.
8. All personnel shall place cones and flares, and retrieve cones, while facing on-coming traffic. Begin your cone/flare pattern at the apparatus providing the Block, facing traffic as you advance. When you have

finished placing the cones/flares, walk to the shoulder of the road to return to the Safety Shadow.

9. All personnel must recognize that blind corners and elevation changes in the roadway will expose us to very dangerous situations.
10. All personnel need to remain alert for drivers who ignore emergency warnings and approach at dangerous speeds.
11. Always consider moving traffic a threat to your safety.

IV. DRIVERS

A. Listed below are some safety benchmarks that drivers shall consider when positioning apparatus in or near moving traffic:

1. Establish an initial Block with the first arriving apparatus to protect the scene, victims, and personnel as much as possible.
2. Turn off all sources of vision impairment (such as headlights, spotlights, and strobes) to approaching motorists.
3. Block at least one additional lane than is already being obstructed. For example, if the incident is on the shoulder, you will need to Block the shoulder and one lane to provide working room around the incident.
4. When practical, position the apparatus with the pump panel on the downstream side to protect the driver and to give him/her a clear view of the scene.
5. Upon arrival at the scene, drivers should consider turning the front wheels in a direction away from the incident. This will keep your vehicle from entering the Safety Area in the event your vehicle is struck from behind.
6. If an ambulance is responding, allow space so that it may be positioned completely inside the Safety Shadow.
7. At intersections, consider that more than one side of the incident will need to be protected. If the police or Oregon Department of Transportation (ODOT) are not on the scene, request them to assist in Blocking.
8. When parking apparatus in or near a lane with moving traffic, set the brakes, chock the wheels and turn on all warning lights. This includes directional arrows and four-way flashers. Keep the apparatus parked

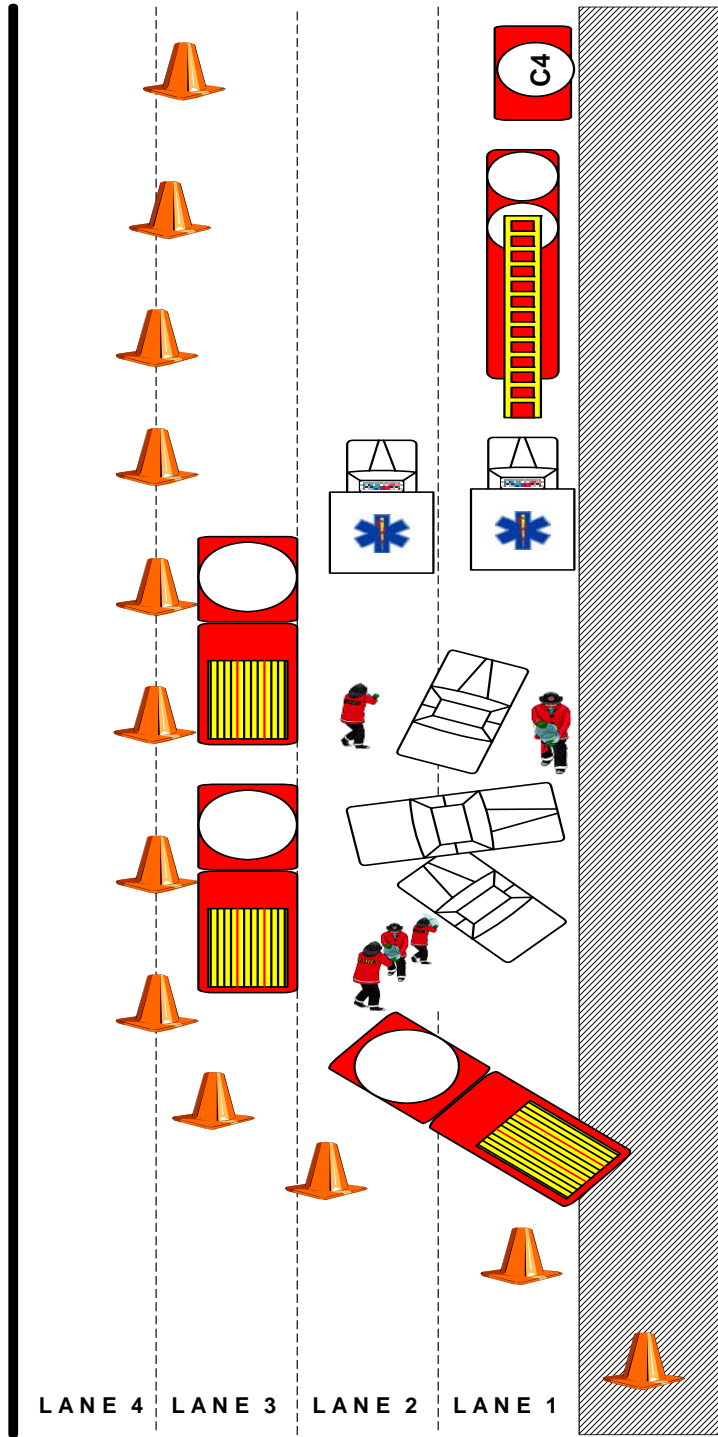
between fire personnel and traffic.

9. If a Safety Zone is not needed (i.e., a medical call at an apartment building), park the apparatus completely out of the traffic lanes and allow enough room for personnel to exit apparatus and retrieve equipment safely, without being exposed to moving traffic.

V. INCIDENT COMMAND

A. Listed below are safety benchmarks that the Incident Command (IC) must consider to assure a safe and protected work area for PF&R crews and other emergency responders:

1. Ensure that first arriving apparatus establishes an initial Block to create a safe work area.
2. Call for additional equipment if needed, i.e. Police, ODOT, the Corridor Management Teams (COMET- also known as Region 1 Incident Response or IR), Lifelight, etc.
3. Ensure that all ambulances are parked inside the Safety Shadow.
4. Ensure that all patient loading is done inside the Safety Shadow.
5. The first arriving company officer and/or I.C. must also assume the role of Safety Officer until this assignment is delegated.
6. ODOT can be contacted directly on the 800 MHz talkgroup (Enter); go to this talkgroup and state, "ODOT Dispatch from Engine 7". This Dispatcher can give you the number of the ODOT responder to your incident. You can then give instructions to the responding ODOT unit. ODOT can provide a variety of services including COMET, sanding equipment, cones, barricades, etc.
7. Assign one firefighter to control traffic as soon as possible. Flares and cones used to slow or divert traffic should be placed far enough upstream of the incident to provide safety for the personnel operating at the scene.



VI. LIMITED ACCESS ROADWAYS (LAR) OR FREEWAY RESPONSE

- A. A LAR is any road or highway that has a limited number of entry or exit points. Examples are freeways, elevated roads, boulevards, and some parkways.
- B. When responding to incidents on a LAR, companies will be sent from both directions whenever appropriate (as per dispatch protocols). If possible, the apparatus dispatched in the direction of travel of the incident will handle the emergency. Listed below are the safety benchmarks that shall be considered when responding to a LAR:
1. The first company to arrive at the scene of the emergency shall give a brief initial "size-up" of the fire or accident situation. This should include the following information:
 - a. The exact location of the incident, lane, direction of travel, description of the accident, number of vehicles, rollover, etc.
 - b. Traffic conditions and best access for other companies responding.
 - c. The need for any additional resources such as police or ODOT.
 - d. Give updates as soon as possible (i.e. pin-in, number of patients, etc.).
 2. Determine the need for a water supply. Call for additional engine companies and/or Water Tenders and be prepared to direct them to hydrants that are nearby or adjacent to the freeway.
 3. When possible, utilize existing standpipe systems on elevated portions of bridges or freeway overpasses. This will require coordination for water supply with companies on the ground below these areas.
 4. Call for any additional resources that are needed as soon as possible. Remember, access to the scene may be compromised by traffic problems, resulting in delays.
 5. If you have committed to the LAR, stage your apparatus downstream in the Safety Shadow unless additional Blocking is needed. Non-committed apparatus should stage off the LAR near an on-ramp to facilitate response.

NOTE: Because ODOT has a number of video cameras that monitor the freeways, contacting them may give responders a better location of an incident.

VII. GENERAL PRECAUTIONS

A. Listed below are some safety benchmarks for response to LARs:

1. On LARs with high traffic volume, it may be necessary to close the roadway down completely and have additional resources enter the highway via an off ramp, and proceed against the normal flow of traffic to the incident.
2. Dispatch will immediately notify police and ODOT (during their normal operational hours) after dispatching companies onto a freeway.
3. If police are not on the scene when you arrive, notify dispatch and indicate where traffic control is needed. Turn traffic control operations over to police or IR as soon as possible and reassign firefighters as needed.
4. Apparatus shall get onto and off of LARs as safely and quickly as possible without unnecessary delay.
5. During ice or snow events, it is prudent not to expose crewmembers to motorists who are likely to lose control of their vehicles. For this reason an officer may decide not to establish a transition zone in order to keep all personnel in the Safety Zone.

VIII. CROSSING THE CENTER MEDIAN

A. Listed below are some safety benchmarks that shall be considered when crossing the center median:

1. Crossing a median to render aid without the benefit of a Safety Shadow is inherently dangerous. As a general rule, do not attempt to cross the center median strip if companies on the other side can handle the incident.
2. Exceptions may be justified following a “size-up” of the scene by the company officer.
3. Communicate with apparatus responding from the opposite direction. The inability of that apparatus to reach the scene in a timely manner is an important factor in deciding to cross the median.
4. Company officers must provide a Safety Shadow on the side of the highway their apparatus is on, keeping in mind the speed and volume of traffic and topography of the roadway.

5. If the decision is made by the company officer to cross the center median to perform critical life-safety functions, a Safety Shadow must be created on that side of the roadway. This can only be accomplished by completely stopping traffic in each lane you will have to cross. Assign a firefighter to control traffic until additional units arrive to create a Safety Shadow.

IX. LARS AS FIRE ROUTES

- A. A “first-in” company should not use a LAR unless it is the only available route to the emergency scene.
- B. LARs should not be used for emergency runs during periods of heavy traffic.
- C. A LAR may be used as a fire route or for move-ups even though the emergency is not on or near the route if, in the judgment of the company officer, it will provide a more prompt or efficient response.
- D. When using a LAR as a fire route and traveling in a regular traffic lane (in the normal direction of traffic flow), fire apparatus should not use the siren and emergency lights unless it is deemed necessary by the company officer. Apparatus should travel with the normal traffic flow.
- E. If a company should become stalled in traffic on a LAR while responding to an emergency, the company officer shall promptly notify dispatch of the situation.
- F. None of the foregoing is intended to take away the initiative or necessary actions by the company officer to protect our personnel while operating in or near moving traffic. There are too many different situations you might find when responding to freeway incidents to list. Following are some different diagrams to consider while working on various incidents.

