## **EXECUTIVE SUMMARY: Traffic Control Concepts for Incident Clearance**

Traffic control is the element of scene management that secures the scene, protects other motorists, and allows the first responders the opportunity to safely deploy the necessary actions. Responders that are first on the scene (law enforcement, fire-rescue, or transportation service patrols) implement traffic control utilizing the tools immediately available to them, highlighting the importance that they carry the right tools and have the training to safely implement traffic control under time-limiting conditions. It is also equally important to adapt the incident traffic control needs to changing conditions and to coordinate traffic control needs through the incident command system (ICS), a federally adopted approach for the systematic management of incidents. While the traffic control will fluctuate with the needs of the first responders, it still must be responsive to the impacts of traffic flow.

Where roadway incidents are involved, laws advocating proactive driver actions have been devised to maximize safety and minimize delay risks for vehicle drivers and others. These are categorized as:

- Move Over Laws—Directing drivers to slow down and/or safely move to an adjacent lane when approaching a stopped authorized emergency vehicle on or next to a highway.
- Move It or Steer It/Clear It Laws—Requiring motorists involved in property damage only crashes to take action by relocating the vehicles involved from the travel lanes to a safe location.
- Authority Removal /Hold Harmless and Authority Tow Laws— Establishing the authority of public agencies to immediately remove or cause to remove disabled / wrecked vehicles or split cargo blocking travel lanes by immediate means as well as to indemnify the agencies against damage claims caused in the process of the removal. "Authority Tow" laws are similar to authority removal laws, but specifically address tow service



liability exemption when directed by law enforcement to remove the vehicles / cargo and normally designate where the vehicle and / or cargo can be stored.

Some state agencies have formalized their commitment to the safe, quick clearance of incidents by entering into Open Roads policies—formally declaring the goal to work together to remove vehicles, cargo, and debris from roadways in order to restore safe, orderly traffic flow after vehicle crashes or other roadway incidents. Responding agencies have solidified their responsibility to do whatever is safe and reasonable to reduce the risk to responders, secondary crashes, and incident delays, yet recognize that roadways should not be closed or restricted any longer than absolutely necessary.

Even without a formal policy, planning between the affected jurisdictions and agency responsibilities are critical for effective response to incidents. All entities should have a clear understanding of roles, responsibilities, resources, communications protocols, and other aspects of the incident management program. Where roles overlap, addressing issues prior to an actual incident reduces conflicts and confusion. Another key is the commitment of all the responding entities to the ICS. Rather than just defining who is in charge, ICS provides the management structure for who is in charge of what.

An incident scene is a temporary work zone—an area of impact that must be secured and that must be balanced with the need to control traffic flow. The basic guidelines for traffic control in a temporary work zone can be found in Part 6 of the *Manual on Unified Traffic Control Devices (MUTCD)*. Some of the traffic control devices referenced in the *MUTCD* are used during the initial traffic control as a temporary measure; others are set up with longer term traffic control in mind. Whatever their intended duration, these traffic control devices help to secure the incident scene and provide protection for incident victims, responders, and the motorists passing by the incident.

Traffic control components at an incident, can be broken into four major areas: advance warning area (advance warning signs, cones, flares, or emergency vehicles); transition area (strategic use of tapers); activity area (channelizing devices) consisting of the work area and the buffer space (protected by energy absorption or attenuation devices or official vehicles); and the termination area (strategic use of tapers).

Accordingly, traffic control device placement is also determined by the expected duration of the incident. Upon arrival, responders

should estimate the expected duration for recovery using the *MUTCD* guidelines (Minor – under 30 minutes; Intermediate – from 30 minutes to 2 hours; Major – over 2 hours).

A traffic control set-up may call for various types of devices and configurations within these zones. The following devices are used either in the initial traffic control and/or for longer duration periods.

- Personal Protection Gear
- Vehicle Lights and Flares
- Arrow Panels
- Changeable Message Signs
- Highway Advisory Radio

Shadow Vehicles

On-scene traffic control can change dynamically as the response efforts progress. The first priority upon arrival is to establish initial traffic control to provide a safe work area for responders and minimize chances for secondary crashes. As resources with traffic control devices arrive, the traffic control should be adjusted to a more "standard" format. Without understanding basic traffic control concepts, responders may unintentionally increase the chances of secondary crashes.

Flagmen

Signs

Other practices that support and improve traffic control at incidents include: expansion of the incident response traffic control role of transportation department freeway service patrols; implementation of active traffic management techniques, such as remote signal timing adjustments, and alternate route planning; presigning or pre-staging traffic control devices; use of mobile command centers; focused planning, coordination, and cooperative efforts among responding agencies; and ongoing training for all responders.

This Primer is available from FHWA's Web site at <u>http://ops.fhwa.dot.gov/incidentmgmt/publications.htm</u>.



Traffic Cones and

**Emergency Vehicles** 

Barricades