CHAPTER 6I. CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS

Section 6I.01 General

Support:

A traffic incident is an emergency road user occurrence, a natural disaster, or a special event that affects or impedes the normal flow of traffic.

A traffic incident management area is an area of a highway where temporary traffic controls are imposed by authorized officials in response to a road user incident, natural disaster, or special event. It extends from the first warning sign or emergency warning lights on a vehicle to the last temporary traffic control device or to a point where vehicles return to the original lane alignment and are clear of the traffic incident.

Traffic incidents can be divided into three general classes of duration, each of which has unique traffic control characteristics and needs. These classes are:

A. Major—expected duration of more than 2 hours;

B. Intermediate—expected duration of 30 minutes to 2 hours; and

C. Minor—expected duration under 30 minutes.

The primary functions of temporary traffic control at a traffic incident management area are to move road users safely and expeditiously past or around the traffic incident, and to reduce the likelihood of secondary crashes. Examples include a stalled vehicle blocking a lane, a road user crash blocking the traveled way, a hazardous material spill along a highway, flood and severe storm damage, a planned visit by a dignitary, or a major sporting event.

Guidance:

In order to reduce response time for traffic incidents, highway agencies, appropriate public safety agencies (law enforcement, fire and rescue, emergency communications, emergency medical, and other emergency management), and private sector responders (towing and recovery and hazardous materials contractors) should mutually plan for occurrences of traffic incidents along the major and heavily traveled highway and street system. Special events should be planned for and coordinated in advance.

The first responders arriving at a traffic incident should, within 15 minutes of arrival on-scene, estimate the magnitude on the traffic incident and an expected length of traffic incident duration and then should set up the traffic controls appropriate for the expected traffic incident duration.

Figure 6I-1. Examples of Traffic Incident Management Area Signs

W4-2

W9-3

W20-7b

M4-8a

E5-2a

M4-9

M4-10

Option:

Warning and guide signs used for temporary traffic control traffic incident management situations may have a black legend and border on a fluorescent coral background (see Figure 6I-1).

Support:

While some traffic incidents might be anticipated and planned for, emergencies and disasters might pose more severe and unpredictable problems. The ability to quickly install proper temporary traffic controls might greatly reduce the effects of an emergency. An essential part of fire, rescue, spill clean-up, and enforcement activities is the proper control of road users through the traffic incident management area in order to protect responders while providing safe traffic flow. These operations might need corroborating legislative authority for the implementation and enforcement of appropriate road user regulations, parking controls, and speed zoning. It is desirable for these statutes to provide sufficient flexibility in the authority for, and implementation of, temporary traffic control to respond to the needs of changing conditions found in traffic incident management areas.

Option:

For unexpected traffic incidents, particularly those of an emergency nature, temporary traffic control devices on hand may be used for the initial response as long as they do not themselves create unnecessary additional hazards.

Section 6I.02 Major Traffic Incidents

Support:

Major traffic incidents are typically traffic incidents involving hazardous materials, fatal crashes involving numerous vehicles, and other natural or man-made disasters. These traffic incidents typically involve closing all or part of a roadway facility.

Guidance:

If the traffic incident is anticipated to last more than 24 hours, applicable procedures and devices set forth in Part 6 should be used.

Support:

A short-term road closure can be caused by a traffic incident such as a road user crash that blocks the traveled way. Road users are usually diverted through lane shifts or detoured around the traffic incident and back to the original roadway. A combination of traffic engineering and enforcement preparations is needed to determine the detour route, and to install, maintain or operate, and then to remove the necessary traffic control devices when the detour is terminated. Large trucks are a significant concern in such a detour, especially when detouring them from a controlled-access roadway onto local or arterial streets.

During traffic incidents, large trucks might need to follow a route separate from that of automobiles because of bridge, weight, clearance, or geometric restrictions. Also, vehicles carrying hazardous material might need to follow a different route from other vehicles.

Some traffic incidents such as hazardous material spills might require closure of an entire highway. Through road users must have adequate guidance around the traffic incident. Maintaining good public relations is desirable. The cooperation of the news media in publicizing the existence of, and reasons for, traffic incident management areas and their temporary traffic control can be of great assistance in keeping road users and the general public well informed.

The establishment, maintenance, and prompt removal of lane diversions can be effectively managed by inter-agency planning that includes representatives of highway and public safety agencies.

Guidance:

All traffic control devices needed to set up the temporary traffic control at the traffic incident with the proper traffic diversions, tapered lane closures, and upstream warning devices to alert approaching traffic of the end of a queue should be available so that they can be readily deployed for all major traffic incidents.

Traffic control should be provided by qualified flaggers using appropriate traffic control devices that are readily available or that can be brought to the traffic incident scene on short notice.

Attention should be paid to the end of the traffic queue such that warning is given to road users approaching the end of the queue.

The channelizing devices discussed in Section 6F.55 should be used whenever possible if a roadway is expected to be closed for more than 3 days.

When flares are used to initiate temporary traffic control at traffic incidents or for short-term temporary traffic control, more permanent traffic control devices should replace them as soon as practical. Both the flare and its supporting device should be removed from the roadway.

Section 6I.03 Intermediate Traffic Incidents

Support:

Intermediate traffic incidents are typically vehicle crashes, usually blocking travel lanes, and usually require traffic control on the scene to divert road users past the blockage. Full roadway closures might be needed for short periods during traffic incident clearance to allow traffic incident responders to accomplish their tasks. However, detours from the facility affected by the traffic incident to another facility are seldom implemented for intermediate incidents.

The establishment, maintenance, and prompt removal of lane diversions can be effectively managed by inter-agency planning that includes representatives of highway and public safety agencies.

Guidance:

All traffic control devices needed to set up the temporary traffic control at the traffic incident with the proper traffic diversions, tapered lane closures, and upstream warning devices to alert approaching traffic of the end of a queue should be available so that they can be readily deployed for intermediate traffic incidents.

Traffic control should be provided by qualified flaggers using appropriate traffic control devices that are readily available or that can be brought to the traffic incident scene on short notice.

Attention should be paid to the end of the traffic queue such that warning is given to road users approaching the end of the queue.

When flares are used to initiate temporary traffic control at traffic incidents or for short-term temporary traffic control, more permanent traffic devices should replace them as soon as practical. Both the flare and its supporting device should be removed from the roadway.

Section 6I.04 Minor Traffic Incidents

Support:

Minor traffic incidents are typically disabled vehicles and minor crashes. On-scene response generally consists of only law enforcement and towing companies.

Diversion of traffic into other lanes is often not needed or is needed only briefly. It is not generally possible or practical to set up a lane diversion with traffic control devices. Traffic control is the responsibility of on-scene responders.

Guidance:

On-scene responders should be trained in safe practices for accomplishing their tasks in and near traffic. Responders should always be aware of their visibility to oncoming traffic and take measures to move the traffic incident as far off the traveled roadway as possible or to provide for appropriate warning.

When a minor traffic incident blocks a travel lane, it should be removed from that lane to the shoulder as quickly as possible.

Section 6I.05 Use of Emergency-Vehicle Lighting (Flashing or Rotating Beacons or Strobes)

Support:

The use of emergency-vehicle lighting is essential, especially in the initial stages of a traffic incident, for the safety of emergency responders and persons involved in the traffic incident, as well as road users approaching the traffic incident. Emergency-vehicle lighting, however, provides warning only and provides no effective traffic control. It is often confusing to road users, especially at night. Road users approaching the traffic incident from the opposite direction on a divided facility are often distracted by emergency-vehicle lighting and slow their vehicles to look at the traffic incident posing a hazard to themselves and others traveling in their direction.

The use of emergency-vehicle lighting can be reduced if good traffic control has been established at a traffic incident scene. This is especially true for major traffic incidents that might involve a number of emergency vehicles. If good traffic control is established through placement of advanced warning signs and traffic control devices to divert or detour traffic, then public safety agencies can perform their tasks on scene with minimal emergency-vehicle lighting.

Guidance:

Public safety agencies should examine their policies on the use of emergency-vehicle lighting, especially after a traffic incident scene is secured, with the aim of reducing the use of this lighting as much as possible while not endangering those at the scene. Special consideration should be given to reducing or extinguishing forward facing emergency-vehicle lighting, especially on divided roadways, to reduce distractions to on-coming road users.