

# Ohio QuickClear



## Best Practices Guide

Developed by the  
Ohio Lane Closure Protocol Committee:

AAA Ohio  
Buckeye State Sheriffs' Association  
Ohio Association of Chiefs of Police  
Ohio Department of Public Safety  
Ohio Department of Transportation  
Ohio Environmental Protection Agency  
Ohio Fire Chief's Association  
Ohio Fire Marshall's Office  
Ohio Trucking Association  
Towing and Recovery Association of Ohio

March 2003

## Premise

Traffic incidents are causing thousands of hours of congestion delay annually, and increasing the risk of secondary crashes. The problem will become worse as traffic on the state highway system grows. Given their authority to fully or partially close travel lanes, local public agencies must recognize the impact on traffic flow, and the importance of clearing the scene and reopening the road. These best practices were developed to promote efficient incident management in Ohio.

## Preface

In August 2002, the directors of the Ohio Departments of Public Safety and Transportation convened a working group of stakeholders with the mutual goal of reducing the duration of incident-related road closures. The working group has developed a checklist for incident responders, and this best practices guide for incident management.

The guide was developed from a literature review of other state and local agencies, Federal Highway Administration workshops, and input from numerous local Ohio agencies experienced with response to traffic incidents, clearance and recovery, and traffic management.

It is impossible, and not even preferable, to suggest a one-size-fits-all approach to traffic incident response: each incident is unique in its character and hazards. However, there are some preferred practices to protect the scene, to manage traffic, and to clear an incident efficiently. This guide reviews those best practices so that local agencies can adopt approaches for more rapid incident clearance. To be successful, all agencies must develop a mind-set that includes the restoration of traffic flow in incident management decision making.

## Introduction

Transportation analysts estimate that more than half of all congestion delay is caused by incidents: weather, crashes, spilled loads or disabled vehicles. Quickly clearing such incidents is universally regarded as the most effective approach to reducing congestion.

Traffic incidents and their related congestion create safety

hazards. A Minnesota study found that 13 percent of all peak-period crashes were in a backup from a previous incident—a so-called “secondary” crash.<sup>1</sup> A 1995 study in California found that each time a traffic accident occurred on the freeway, the potential for a secondary crash increased by at least 600 percent.<sup>2</sup>

Emergency response personnel are at risk of being struck by passing vehicles as they work an incident scene. In 1997, nearly 40 percent of all law enforcement officers who died in the line of duty, died in traffic.<sup>3</sup> The longer an incident is in place, the longer incident responders are vulnerable and exposed to injury.

In summary, traffic incidents pose three primary concerns:

- Traffic congestion delay, including delay to emergency responders;
- Increased risk of secondary crashes;
- Risk to incident responders.

“Incident management” is a term for the response, management and clearance of traffic incidents. The goal of efficient incident management is to:

- reduce the duration of traffic incidents, without compromising effective investigation by law enforcement agencies;
- protect traffic incident responders by limiting their time at a scene;
- reduce the risk of secondary crashes;
- manage traffic around incidents to reduce congestion delay, and minimize the amount of traffic flowing past the incident scene.

While efficient incident clearance is a laudable goal, in practice clearing incidents involves numerous local agencies. Sometimes, the work of these agencies impedes the quick clearance of traffic incidents, resulting in inordinate delay. And, communication and coordination are always a challenge when working with multiple entities.

The following is a guide to the best practices in incident management, which have been used effectively by other agencies. The first part outlines the best practices for each entity involved in incident management. The last part outlines incident scene command issues and the role of planning and major incident reviews.



## Best Practices by Agency

### *Transportation Agencies*

The mission of transportation agencies like the Ohio Department of Transportation is to provide safe and efficient roads. Relevant to incident management, transportation agencies respond to major incidents in order to repair damaged roadway and assist with traffic control.

As the traffic volume on state highways increases, there is an acute need for incident-related traffic management and the quick restoration of capacity. Transportation agencies are the only entity with the scope and expertise to effectively handle this need.

To improve incident management, the best practices for transportation agencies are to:

- Develop response protocols for freeway closures, which include pre-planned diversionary routes and traffic control in coordination with local public agencies. Meet with police, fire and other local officials before incidents to review such plans;
- Install urban freeway reference markers at 2/10th-mile increments, which will allow cellular telephone callers to report incident locations with greater accuracy.
- Deploy freeway service patrol vehicles to remove debris from travel lanes and assist motorists broken down on the freeway shoulder or in travel lanes; include arrow boards to assist with traffic control for incidents;
- Create video links from traffic management centers, to share with law enforcement and fire/rescue agencies. These video images can be used to minimize the amount of fire apparatus dispatched to a scene;
- Participate in the incident command system to communicate with fire and police agencies and advocate for the prompt clearance of the scene;
- Set up safe traffic control around the crash scene, divert traffic upstream of an incident through the use of changeable message signs, and provide traffic information to the media and general public.

### *Law Enforcement*

Law enforcement agencies are usually the first on the scene of a traffic incident, whether it is a broken down vehicle or major crash with personal injuries. Typically, these agencies direct traffic, conduct accident investigations, serve as inci-

dent commander, safeguard personal property and supervise scene clearance.

As the first responder to an incident, a law enforcement officer usually establishes an incident command system – authority that is shared with and sometimes superseded by fire and emergency medical personnel responding to the scene. Even if fire agencies assume command of an incident scene, that command usually returns to law enforcement when the rescue operations phase is complete.

It is most often the case that law enforcement officers request and direct the operation of towing and salvage companies, which are usually under contract to local governments and called out on a rotational basis.

The best practices for law enforcement agencies are:

- Meet with fire and transportation agencies to review predetermined incident response plans;
- Within the unified incident command system, communicate with transportation agencies to establish traffic management/detours, and direct a partial or complete reopening of the roadway as quickly as possible;

**Figure 1 - Freeway Reference Marker**



- For accident investigations, efficiently collect evidence and survey scene using Total Station equipment or aerial surveying;
- For minor (non-injury) crashes, have dispatchers provide guidance to drivers on local policy for moving vehicles from travel lanes, and exchanging information as per state law.

### *Fire and Emergency Medical Agencies*

Traffic incident response is only a small portion of the many responsibilities of fire and rescue agencies. At the traffic incident scene, fire and emergency medical agencies' first priority is the protection, rescue and treatment of the victims, followed closely by the protection of personnel at the incident scene. If fire agencies are involved in a rescue/treatment operation, incident command will shift to that agency until fire/rescue operations are complete.

Fire and emergency medical agencies handle traffic control differently, depending on preference and experience. Some agencies completely close all lanes of traffic for any type of incident, resulting in inordinate traffic congestion.

There are also inconsistent practices in handling crashes involving hazardous material. If agencies are inexperienced with haz mat, they are more likely to order a complete shutdown of travel lanes; in Ohio, this has been done even in cases of minor diesel fuel spills from tractor trailer rigs.

Best practices for fire and emergency medical agencies are:

- Dispatching the minimum amount of equipment necessary to reduce the exposure of personnel at the scene. (Fire agencies can be aided by the receipt of video images from DOT traffic management cameras);
- Effective training in the identification of hazardous materials, to avoid lengthy lane closures for material that does not pose a threat to people or the environment;
- Effective training in temporary traffic control around incidents, in order to keep lane(s) of traffic open when possible;
- Effective communication as part of the incident command system, so that partner response agencies are aware of progress in rescue efforts, can make correct decisions regarding traffic management and provide traveler information to local media.

### *Towing and Recovery*

At a traffic incident scene, towing and recovery companies

are responsible for the safe removal of vehicles from the scene, protection of victims' property and vehicles, and removal of debris from the roadway. Companies vary in their equipment and ability to perform different types of salvage operation.

Generally, towing companies are under contract to municipalities, which establish a roster of companies which respond to traffic incidents on a rotational basis. When a tow is required, the law enforcement officer notifies the dispatcher, who in turn notifies the towing company.

Commercial vehicle recovery involves unique considerations. Most importantly, commercial vehicle loads might still have value and there is an implicit right to salvage such cargo, which can delay the prompt reopening of travel lanes.

For recovery of some commercial loads, specialist companies are called in to handle a certain material, such as the case with a hazardous material or fuel spill. Other times, the trucking company or owner of the cargo will want to dispatch their own vehicles and personnel for the salvage operation. Involvement of such "third-party" recovery teams often take inordinate amounts of time, depending on the distance of the company from the incident.

Incidents involving hazardous materials, fuel spillage and other pollutants may require oversight by the Ohio Environmental Protection Agency (OEPA) Emergency Response and local hazmat where available. First responders involved with such an incident should call the OEPA Emergency Response Hotline at 800-282-9378.

Best practices for towing and recovery include:

- Pre-qualification of towing companies by municipalities, so the towing company called to an incident scene has the capability to handle the vehicles involved;
- Training law enforcement in the Towing & Recovery Association of America's vehicle identification guide, to ensure the correct equipment can be requested and dispatched to the incident;
- Weighing the cost-benefit of calling in third-party recovery teams, if their distance/time of travel will have excessive impact on the amount of time lanes remain closed;
- Move commercial vehicles or trailers to the roadside or shoulder to restore as many travel lanes as possible, as soon as possible; then perform any necessary salvage operations after the peak hour.

Figure 2 - Vehicle Identification Guide

## TRAA VEHICLE IDENTIFICATION GUIDE<sup>®</sup>

**CLASS 1 • LIGHT-DUTY • (6,000 lbs. or less GVW - 4 tires)\***



**CLASS 2 • LIGHT-DUTY • (6,001 - 10,000 lbs. GVW - 4 tires)\***



Classes 1 and 2 include passenger vehicles, light trucks, minivans, full size pickups, sport utility vehicles and full size vans.

**CLASS 3 • MEDIUM-DUTY • (10,001 - 14,000 lbs. GVW - 6 tires or more)\***



**CLASS 4 • MEDIUM-DUTY • (14,001 - 16,000 lbs. GVW - 6 tires or more)\***



**CLASS 5 • MEDIUM-DUTY • (16,001 - 19,500 lbs. GVW - 6 tires or more)\***



**CLASS 6 • MEDIUM-DUTY • (19,501 - 26,000 lbs. GVW - 6 tires or more)\***



Classes 3 through 6 include a wide range of mid-size vehicles, delivery trucks, utility vehicles, motorhomes, parcel trucks, ambulances, small dump trucks, landscape trucks, flatbed and stake trucks, refrigerated and box trucks, small and medium school and transit busses.

**CLASS 7 • HEAVY-DUTY • (26,001 - 33,000 lbs. GVW - 6 tires or more)\***



**CLASS 8 • HEAVY-DUTY • (33,001 lbs. and over GVW - 10 tires or more)\***



Classes 7 and 8 include a wide range of heavy vehicles, large delivery trucks, motor coaches, refuse trucks, cement mixers, all tractor trailer combinations including double trailers.

### Information Needed To Correctly Dispatch Towing and Recovery Units:

- Year, Make and Model of Vehicle to be Towed or Recovered
- DOT Classification (Class 1 – 8 based on GVW)
- Location of Vehicle
- Type of Tow (impound, accident, recovery motorist assist, etc.)
- Additional Vehicle Information
  - 2 wheel drive, 4 wheel drive, all wheel drive
  - damage to vehicle, tire condition
  - vehicle loaded or empty
  - cargo contents
  - does the vehicle have a trailer
  - are the keys with the vehicle

**Note:** Any vehicle may carry hazardous materials. Advise if placarded.

**\* Note:** The Gross Vehicle Weight Rating (GVWR) of the vehicle to be towed or recovered can be found on the identification label on the vehicle's driver's side doorframe. The number of pounds listed on the label can then be compared with the DOT Classification Vehicle Type Chart for the correct DOT class.

## Policies that Support Better Incident Management

While individual agencies can make changes to improve the efficiency of incident clearance, there is a web of underlying policies—generally at the local level—which impact the operations of local law enforcement. Adopting best practices at the local level can reduce the risk of traffic incidents, reduce incident duration and restore traffic flow as quickly as possible. Particular issues and associated best practices are presented below.

1. Vehicles broken down/abandoned on the freeway shoulder create a risk to passing traffic.<sup>4</sup> Some jurisdictions allow vehicles to remain on the freeway shoulder for 72 hours or more before being towed to an impound lot. Best practices are to:

Adopt law or policy to limit the time that vehicles can remain on freeway shoulder (e.g., Columbus, Ohio limits to three hours);

Allow DOT personnel to assist law enforcement with tagging abandoned vehicles, so that their duration on the freeway shoulder is tracked as accurately as possible.

2. Most of the driving public is indoctrinated to remain with their vehicles after a traffic incident until law enforcement officers arrive to perform a proper investigation. In prac-

tice, this can be very dangerous, especially on urban freeways. When there is a property damage traffic crash with no injuries, and the vehicles are mobile, it is far safer for drivers to exchange information (driver's and owner's name/address, driver's license number, vehicle license plate number, insurance information) and move their vehicle to the shoulder or exit ramp if a police officer must report. Best practice is for:

Municipalities to adopt “steer-clear” statutes or policies, with signs directing motorists to move fender-benders to the roadside (see sample sign and photo in Figure 3).

3. As stated above, local governments establish contracts with towing companies for call-out to traffic incident scenes. Such contracts sometimes lack specificity as to qualification for handling different types of wrecked vehicles. Best practices are to:

Pre-qualify towing companies, so the towing company called to an incident scene has the capability to handle the vehicles involved;

Train law enforcement in the Towing & Recovery Association of America's vehicle identification guide, to ensure the correct equipment can be requested and dispatched to the incident.

Figure 3 - “Steer Clear” Sign



## Pre-Incident Planning, Incident Command and Major Incident Review

Repeatedly in the course of developing these best practices, it was revealed that communication is the key to improving incident management practices. Often, agencies are unaware of the impacts their operations have on traffic or the value of communicating incident information, which can be relayed to the public. Thus, this section reviews pre-planning, on-scene command, and post-hoc incident reviews to outline the best practices in communication.

- *Pre-Incident Planning* brings agencies together to review policies and best practices, so that all incident management operations can be carried out efficiently and safely when the need arises. The best practices for pre-incident planning are:

Transportation agencies should pre-plan diversion routes, so that traffic control and detours are arranged as efficiently as possible when the need arises. Such pre-planning should include a review of practices for incident command (outlined below), communication with local media, etc.;

Transportation agencies should have equipment on-hand to handle traffic control, such as arrow boards, portable message signs, etc.;

All agencies involved in incident management should meet regularly to review a transportation agency's pre-planned diversionary routes and review best practices and policy.

- *Incident Command.* The incident command system (ICS) is a universally-recognized management approach for the command, control and coordination of incident response, including traffic crashes. The ICS establishes the on-scene organizational structure to coordinate the efforts of individual agencies as they work to stabilize the incident scene and protect life, property and the environment.

The ICS can be as large or as small as necessary to manage an incident, and incident command can change depending on the type and size of an incident. For traffic incidents, law enforcement agencies will generally be first on the scene and establish command. If the accident scene requires fire, rescue or emergency medical agencies, however, incident command might shift to those agencies while rescue is taking

place. At some point, scene command almost always reverts back to law enforcement to supervise the towing, recovery and clearance of vehicles and debris. Best practices are to: Communicate with transportation agencies in the incident command structure, so that proper decisions can be made regarding traffic management;

Assess and request the proper towing equipment in parallel with other activities, so that towing and salvage can begin as soon as possible;

Provide regular updates to the media, who can help inform the public about road closures, detours and expected duration of the incident.

- *Major Incident Review.* It is unfortunate, but certain, that major traffic incidents will plague Ohio for the foreseeable future. Just as certainly, some incidents will not be handled as efficiently as possible, leading to increased exposure of incident responders, more traffic congestion delay and secondary crashes. Best practices are:

In an environment of mutual professional respect, hold meetings after major traffic incidents to review performance, decisions, policies or procedures that conflicted with the goal of efficient incident management;

Communicate the meeting results so as to resolve conflicts in future traffic incidents.

---

### (Footnotes)

- 1 I-35 Incident Management and the Impact of Incidents on Freeway Operation. Minnesota Department of Transportation, January 1982.
- 2 Intelligent Transportation Systems Impact Assessment Framework: Final Report. Volpe National Transportation Systems Center, September 1995.
- 3 "National Police Week Observed May 10 - 16," The Police Chief. International Association of Chiefs of Police, May 1998.
- 4 A study of Washington State roadways revealed an average of 450 shoulder collisions annually over a seven year period. (Source: Traffic Incident Management Handbook. Federal Highway Administration, 2000.)

*Published by the Ohio Department of Transportation.*

*for more information visit: [www.dot.state.oh.us/quickclear/](http://www.dot.state.oh.us/quickclear/)*

*for additional copies contact the ODOT Office of Communications at (614) 466-7170*