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Study of Traffic Incident Management Systems Released

As rush hour nears on a March evening, a call comes in to an emergency dispatch center: vehicle and brush fire on a four-lane highway. When a fire engine arrives, the crew finds a fully involved minivan on the side of the road, but a state trooper on the scene has not slowed or diverted traffic, and both northbound lanes remain open. The engine parks upwind of the burning vehicle, but a wind shift causes smoke to obscure visibility. An oncoming car strikes a working firefighter, killing him instantly.*

The U.S. Fire Administration (USFA) and the U.S. Department of Transportation's (DOT) Federal Highway Administration, working in partnership with the International Fire Service Training Association (IFSTA) and with funding support from the Office of Justice Programs' National Institute of Justice, recently produced a report that provides technical guidance and training programs in traffic incident management for emergency service providers. The April 2008 report, *Traffic Incident Management Systems* (TIMS), focuses on guidance for local-level fire departments on compliance with DOT's *Manual of Uniform Traffic Control Devices* and the *National Fire Service Incident Management System* (IMS) Consortium's *Model Procedures Guide for Highway Incidents,* both of which additionally emphasize the importance of cooperation between fire and law enforcement departments in preplanning for and managing traffic-related incidents.

A consistently high annual percentage of fatalities related to fire department response and roadway scene operations prompted USFA to examine ways to improve responder safety, as injuries and deaths occurring at road scenes have increased steadily in recent years. USFA has made a commitment to reduce on-duty firefighter fatalities by 25 percent within five years and by 50 percent within 10 years, and the research detailed in the report supports that goal.

"Too many firefighters and other emergency responders have been killed on duty from being struck by vehicles," says U.S. Fire Administrator Greg Cade.

"Implementing an effective traffic incident management system could reduce this number. The USFA was pleased to work with the DOT and IFSTA to enhance first responders' safety while working on the roadways."

A majority of the report focuses on secondary collisions as an area lacking in studies and data, pointing out that law enforcement personnel are keenly aware of the likelihood and potential severity of secondary collisions. Often, this translates into friction between law enforcement officers and other emergency responders at the scene of roadway incidents. Law enforcement officers, pressured to clear the scene as soon as possible to help minimize traffic delays and reduce the possibility of secondary collisions, may view bringing more apparatus and people to the scene as increasing the potential danger for secondary collisions and increasing the time needed to clear the scene. Preincident planning and interagency cooperation to balance the needs of both types of agencies are crucial, as trying to "iron these issues out while standing in the roadway at an incident is rarely successful," according to the report.

Key issues in causing secondary collisions include the following:

■ Lack of training specific to the associated hazards.

■ Lack of situational awareness (i.e., of the dangers associated with a particular situation). This often stems from insufficient training or lack of experience.

■ Failure to establish a proper temporary traffic control zone. Common causes include lack of sufficient training, equipment or standard operating procedures.

■ Failure to position apparatus so as to protect the work area, or unnecessarily positioning it in the roadway.

■ Inappropriate use of vehicle headlights, warning lights or flood lights, thus confusing or blinding approaching motorists.

- Failure to wear appropriate protective and retroreflective garments.

- Failure to use all available traffic control devices.

- Curiously distracted, careless, inattentive or impaired drivers; reduced visibility or other poor driving conditions; and driver confusion caused by traffic control measures, all of which are beyond emergency services professionals' ability to control.

The report examines such technologies and practices as effective distance for placement of roadway warning signs; efficient emergency vehicle warning lighting; and training, placement and protective equipment for flaggers. It also includes recommendations, case studies, highway scene safety survival basics, incident command, examples of effective TIMS programs and information on the American National Standards Institute/ International Safety Equipment Association (ANSI/ISEA) standard 207, *High Visibility Public Safety Vests*.

To download a copy of* Traffic Incident Management Systems, go to* http://www.usfa.dhs.gov/ downloads/pdf/publications/tims_0408.pdf.*

* Adapted from *Traffic Incident Management Systems,* chapter 2, p. 13.