

# Roadway Incident Safety for Fire & EMS



by Jack Sullivan, CSP, CFPS

Firefighters respond to a wide range of calls for service regularly. Medical assist calls, building fires, motor vehicle crashes, brush fires, hazardous material incidents, and technical rescues are our business. Every time we climb out of our rig at an incident scene, we are stepping into a hazard zone with exposure to passing vehicles. There are many incidents each year where firefighters, EMS personnel, law enforcement officers, and other emergency responders and roadway workers are struck by vehicles.

2017 has been an especially dangerous year so far for firefighters and EMTs. As of early August, there have been 12 fire and EMS personnel struck and killed by vehicles. Three of these fatalities occurred when the personnel were off-duty and working a second job or simply stopped to help someone in need along the highway. Those off-duty fatalities won't show up in the official LODD records for the year but their loss is important nevertheless.

This article provides an overview of what you need to do to protect your personnel while operating in or near moving traffic at roadway incidents. We refer to these overall strategies and tactics as traffic incident management or "TIM."

## Training

First and foremost, develop a safety training class for your personnel about the dangers of working near moving traffic and outline the strategies and tactics necessary for roadway incident scene safety. Review and implement the guidelines on traffic incident operations offered in the National Fire Protection

Association (NFPA) 1500, *Standard on Fire Department Occupational Safety and Health Program*.

Take advantage of the numerous training options available regarding TIM. The Federal Highway Administration (FHWA) has deployed a nationwide training effort – the National TIM & Responder Safety Training Program – that is available in every state in the country. This four-hour, multi-discipline program is designed to be presented to a mixed audience of law enforcement, fire, EMS, transportation, and towing/recovery personnel. Look for the National TIM Training in your area or contact your state police or state transportation officials for a list of authorized instructors in your area. Find more information here: [https://ops.fhwa.dot.gov/eto\\_tim\\_pse/about/tim.htm](https://ops.fhwa.dot.gov/eto_tim_pse/about/tim.htm)

The Emergency Responder Safety Institute has developed a robust series of online learning modules that are available to all responders for free. Register at [www.RSLN.org](http://www.RSLN.org) to access the modules that address all aspects of roadway incident response safety, strategies, and tactics. Additional modules are in development all the time. Additionally, numerous resources, training aids, and reference materials are available for free at the main web site at [www.respondersafety.com](http://www.respondersafety.com).

Utilize tabletop exercises to teach and drill personnel about how to set up scene safety measures and reduce the chance of personnel being struck by passing vehicles.

## Interagency Collaboration, Cooperation, and Communication

Collaborate with your mutual aid fire, EMS, and law enforcement agencies to

plan roadway scene safety response procedures. Work to develop a regional standard operating procedure or guideline. Communicate frequently with the other agencies on those procedures and actual incident reviews. Strive to improve strategies and tactics on a regular basis. TIM committees or task groups are an excellent way to promote and facilitate ongoing communication and collaboration.

## Scene Safety

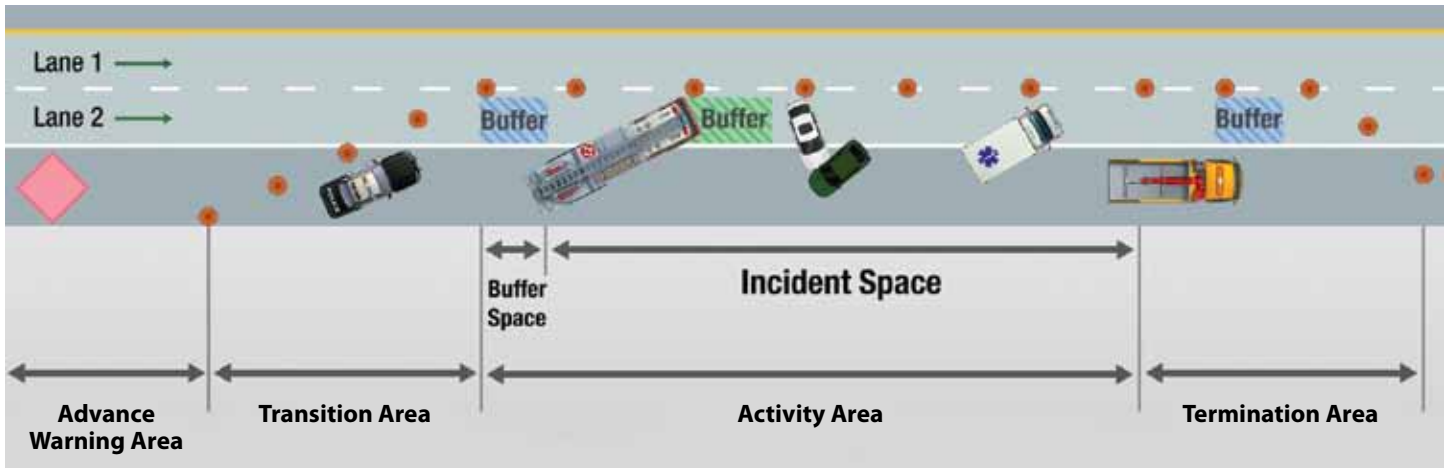
Incorporate emergency lighting equipment and high-visibility graphics into emergency apparatus and consider retrofitting existing rigs with features that will enhance scene safety.

High-visibility chevrons on the rear of fire and EMS apparatus are now called for in NFPA standards. The NFPA 1901 and 1917 standards offer specific guidance for the design of high visibility markings on fire apparatus and ambulances.

Advanced warning in the form of signs, cones, and flares should be placed upstream of the incident to get the attention of approaching motorists. Florescent pink signs have been designated for use at emergency scenes. Cones should be orange and 28 to 36 inches tall with reflective striping. Each emergency vehicle should carry a minimum of five cones. As these temporary traffic controls are deployed, consider reducing some of the emergency vehicle warning lights on scene. Newer emergency lights are extremely bright at nighttime and can prevent motorists in the

# Traffic Incident Management Area (TIMA)

also known as a Temporary Traffic Control Zone (TTC)



Courtesy of the Emergency Responder Learning Network

area from seeing emergency personnel working around apparatus. Utilize the high power/low power switches provided on most control heads.

Teach your personnel how to park apparatus at an incident to block the work area and protect victims and responders. Fire apparatus should be parked at an angle with the front wheels turned away from the work area. Be sure to deploy properly designed and sized chock blocks for each rig. EMS rigs should be parked in the safe area downstream of the incident scene to protect the loading zone. Company officers should remind personnel to disembark from the apparatus on the side away from traffic as you arrive at the scene.

## Personal Protective Equipment

All personnel operating at roadway incidents should be wearing appropriate personal protective equipment including helmets. The use of helmets has helped save lives on several occasions when firefighters have been struck at roadway incidents. Reflective helmet markings also enhance the visibility of firefighters on scene to drivers in the area. Make sure your personnel wear appropriate footwear that features slip-resistant soles.

Provide your personnel with high-visibility garments to be worn when they are working near moving traffic. Personnel should not wear vests while engaged

in firefighting operations, but all other personnel at roadway incidents should be wearing garments that provide reflective and florescent features. The garments should be compliant with the most recent edition of the American National Standards Institute 107 standard.

## Public Education

Every state in the country has a law that requires motorists to move over or slow down when approaching stationary emergency vehicles. Those of you who respond to emergencies on a routine basis know that it seems like very few motorists seem to be aware of those laws. We need to do our part to educate the public about "Move Over or Slow Down" laws and how to drive around emergency scenes.

We can do that by providing handouts and displays in our fire stations for visitors. We

can do community outreach presentations to tell people about the dangers we face on the roadways. We can collaborate with school systems and school resource police officers to do presentations in high school driver's education classes. Be sure to include roadway incident safety as one of the topics you cover during Fire Prevention Week public outreach activities. Write articles for your community newspapers. Put message signs up at your stations about the subject. Work with local cable service providers, television, and radio stations to develop and present public service messages about the subject. Be creative!

Proactive safety measures you take today may help save a life or prevent an injury the next time you roll out of the station. Seasoned "road warriors" always watch their back when operating at roadway incidents. ■ ■



## ABOUT THE AUTHOR

**Jack Sullivan**, CSP, CFPS is the director of training for the Emergency Responder Safety Institute. Jack retired from active firefighting as a lieutenant and safety officer with Lionville (PA) Fire Co. after 25 years active duty with three different fire departments. Jack is nationally recognized for his work on roadway incident safety for emergency responders and is a principal member of the NFPA 1091 Technical Committee. He is also a master instructor for the Federal Highway, SHRP 2 Traffic Incident Management & Responder Safety Train-the-Trainer program.