**WZ-TIM for 1st Responders Post-Test**

**Answer Key**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Organization\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

E-Mail Address\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Which of the following statementsare true about traffic incidents that occur in work zones (mark all that apply):

* Lane closures, ramp closures, and temporary barrier walls often interfere with access to the incident site.
* There is usually ample space in the work zone for first responder operations, disabled vehicle storage, and staging emergency response vehicles.
* Secondary crashes are unlikely because traffic is already slowing down for construction.
* In addition to the first responders who are ordinarily on scene, it could also be necessary to coordinate the response with the contractor, field engineer, and other people involved in the construction.
* Traffic congestion can be severe due to the combined effect of construction and the incident.

Organizations directly involved in the on-site response and management of work zone incidents could include (mark all that apply):

* Construction Field Engineer/Inspector
* Coroner on Medical Examiner
* Emergency Medical Services (EMS)
* Federal Emergency Management Administration (FEMA)
* Federal Highway Administration (FHWA)
* Fire Services
* Hazardous Materials Cleanup Contractor
* Highway Construction Contractor
* Law Enforcement (police, sheriff, etc.)
* National Highway Traffic Safety Administration (NHTSA)
* National Transportation Safety Board (NTSB)
* Vehicle Towing/Recovery Service

First responders can help prevent work zone incidents by (mark all that apply):

* Participating actively in the work zone planning process.
* Inspecting all construction equipment for compliance with OSHA standards.
* Leading tabletop exercises to help agency and contractor personnel understand how to coordinate the response to a typical incident.
* Notifying the agency or contractor if they observe missing or damaged temporary traffic control devices.
* Notifying the agency or contractor if they observe work practices that present a danger to road users.

The elements of a Safe System are:

* Pedestrians, bicyclists, heavy truck operators, and workers.
* Engineering, Education, Enforcement, and Emergency Medical Services
* Vehicles, roadways, road users, and speeds.
* Temporary concrete barrier walls, portable electronic message signs, reflective pavement markings, and pedestrian curb ramps.
* All of the above.

The Model Minimum Uniform Crash Criteria:

* Stresses the importance of accurately reporting crashes that occur in a work zone but does not define them specifically.
* Defines a work zone crash as one that occurs within 500 feet of any worker or any piece of construction equipment.
* Defines a work zone crash as one that occurs between the start of the cone taper and the END CONSTRUCTION sign.
* Defines a work zone crash as any one that occurs between the first ROAD WORK AHEAD sign and the END CONSTRUCTION Sign.
* Defines a work zone crash as one that occurs that between the ROAD WORK AHEAD sign and the END CONSTRUCTION sign, plus any crashes that occur in traffic backups (queues) upstream of the first warning sign.

The Manual on Uniform Traffic Control Devices (mark all that apply):

* Contains rules and regulations but no advice or guidelines.
* Includes more than 30 diagrams that show how to set up the traffic control for work zones and traffic incidents.
* Allows the use of fluorescent pink signs for incident management.
* Is written solely for use by traffic engineers.
* Is legally binding only in national parks, military bases, tribal lands, and the District of Columbia.
* Encourages flashing lights on emergency vehicles to be reduced to the essential few after the vehicles arrive at the incident scene.
* Requires safety vests to be orange, fluorescent yellow-green, or a combination of both.

According to one reliable estimate, the percentage of highway fatalities that result from secondary crashes is:

* 7%
* 12%
* 18%
* 27%

Which of the following statements are true (mark all that apply):

* More law enforcement officers are killed in traffic crashes than by the perpetrators of crime.
* More firefighters are killed in traffic crashes than by fires and explosions.
* First responders with a rank of Captain or higher are not required to wear safety vests when standing in the roadway.
* Transportation agencies have no legal obligation to involve first responders in the planning of major construction projects.
* Worker illnesses and injuries have the potential to affect traffic in the work zone.

Examples of sites that require special attention during incident management pre-planning include:

* Major Bridges
* Tunnels
* Freeway-to-Freeway Interchanges
* Projects in remote or mountainous areas
* Urban freeways that have a rail transit line in the median
* Projects located close to a hospital, police station, fire station, ambulance station, etc.

Acceptable methods for warning vehicles as they approach a traffic backup (queue) caused by a work zone incident include (mark all that apply):

* Backhoes or bulldozers parked or moving slowly along the roadside with their amber lights flashing.
* Law enforcement vehicles parked or moving slowly along the roadside with their lights flashing.
* Portable signs.
* Trailer-mounted electronic signs.
* A person standing at the roadside waving a fluorescent yellow-green flag.
* Specially-marked vehicles provided by the construction contractor.
* Post-mounted, hinged metal or wood signs that can be opened to display an incident management message.

On freeways (or other high-speed roads) the queue warning vehicle or signs should be located:

* At the back-of-queue.
* About 500 feet upstream of the back-of-queue.
* About 1/4 mile (1320 feet) upstream of the back-of-queue.
* About 1/2 mile (2640 feet) upstream of the back-of-queue.
* At least 1 mile upstream of the back-of-queue.

Post-incident reviews for work zone incident management:

* Should be conducted 60 to 90 days after the incident.
* Should focus on things that were done improperly.
* Should not include contractor representatives.
* Should be led by a person who is good at encouraging open and honest communication.
* Should be required for all incidents, no matter how small.