

Intrusion alert

More is being done to protect workers in work zones

By Brad Sant
Contributing Author

It is just before 6 a.m. when you are awakened by the phone. Annoyed that someone would call you at such an early hour, you answer thinking, "what could be so important?"

Your world begins to spin when you learn your spouse has been killed by a motorist while working on a nearby roadway.

Perhaps this was not your experience on Friday, May 9, 2014, but it was for the families of Kenneth Duerson Jr. and Coty Demoss of Indiana. On April 28, 2014, the families of Michael Turner and Ronnie Blagg of Oklahoma received a similar call, as did loved ones of Garvin Barnes of Mississippi on March 25, 2014. Calls to the families of roadway workers killed by motorists were made in Oregon and

Virginia in February, in Maryland in January . . . and so on. Nearly every month, somewhere in the U.S., roadway workers are struck and killed by motorists. News stories often cite causes such as speed, impairment or distraction.

When these tragedies occur, employers feel despair, anger and renewed determination to ensure such accidents never happen to their workers again. Sadly, in some cases they do. Year after year, we continue to count the number of roadway-construction-worker deaths caused by work-zone intrusions.

In a recent report prepared by the U.S. Occupational Safety and Health Administration (OSHA), the agency found: "There were 129 deaths in highway, street and bridge construction from FY 2011 to FY 2012. Fifty-six (56) deaths, or 43%, were due to workers being struck by vehicles. In 39 cases, 69.6%, the victim was struck by a vehicle on the road that



was not associated with the worksite.” In other words, nearly one-third of roadway-worker deaths are not caused by construction hazards—they are caused by errant motorists.

What is more alarming is many work-zone intrusions may be intentional. In a report prepared by the Texas A&M Transportation Institute, based on a study of work-zone intrusions in New York state during the period 1993-98, researchers found that motorists deliberately entered closed lanes 44% of the time that such intrusions resulted in crashes. The study also found that many intrusions occurred because traffic was stopped or moving slowly or because drivers encountered conflicts at merging tapers.

Industry response

For the roadway-construction industry, these deaths are frustrating because they continue to occur despite significant efforts to eradicate the hazard. For example, in 1998, the Federal Highway Administration (FHWA) in partnership with the American Road & Transportation Builders Association (ARTBA) opened the National Work Zone Safety Information Clearinghouse (www.workzonesafety.org). While this facility is primarily aimed at providing research and information to the transportation industry as opposed to motorists, it does contain a significant amount of information designed to prevent motorist intrusions into work zones.

In 1999, FHWA joined with the American Association of State Highway & Transportation Officials (AASHTO) and the American Traffic Safety Services Association (ATSSA) in signing an agreement to create a National Work Zone Awareness Week. This annual event is now celebrated across the U.S. and is aimed directly at promoting driver safety when approaching roadway work zones.

In 2006, ARTBA and FHWA launched “Turning Point,” a campaign to instruct

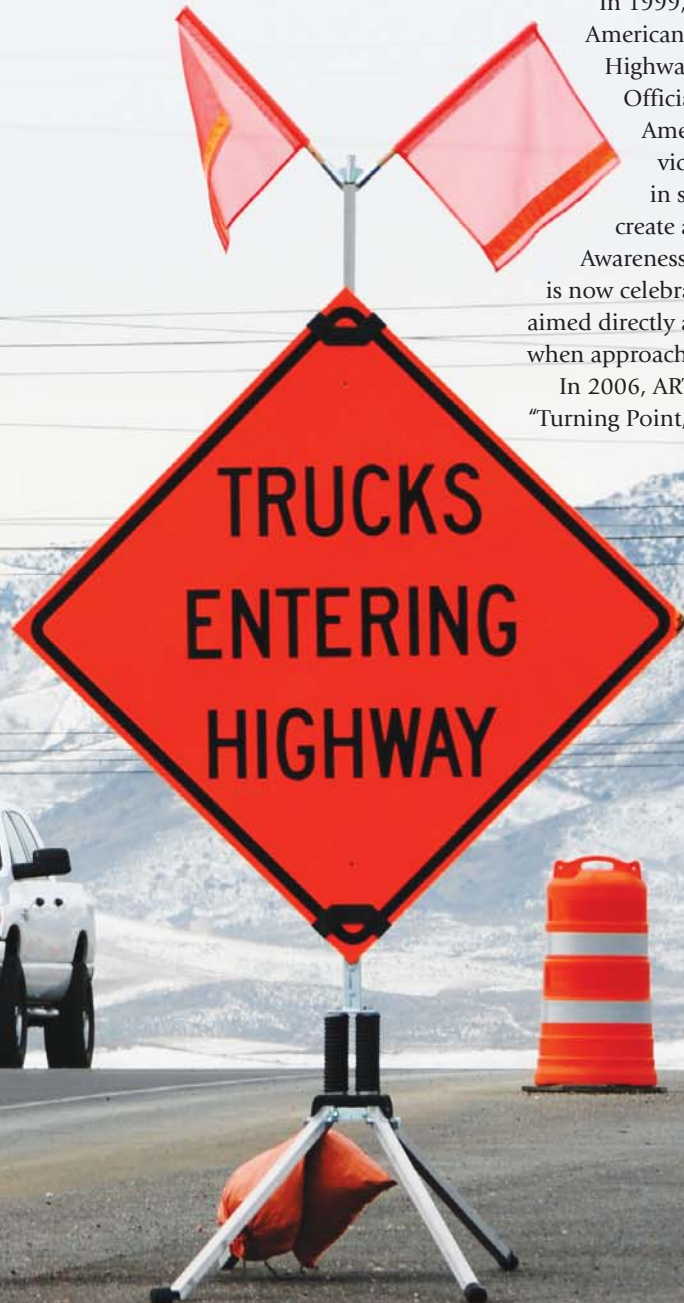
new drivers on how to safely navigate roadway work zones. This program contains materials, both video and written, intended for driver-education programs, particularly teen drivers.

Many states also have enacted laws to increase penalties for unsafe driving in work zones.

Industry progress

While intrusion incidents continue to frustrate roadway-safety advocates, a significant amount of progress has been made. For example, total work-zone-related fatalities—workers, motorists and passengers—reached a peak in 2002 with 1,186 deaths. In 2012, the most recent year for which data is available, the U.S. DOT reported 609 deaths—nearly half the amount one decade ago. During the same 10-year period, the value of roadway construction put in place was flat, with less than a 1% change. So, as compared with the total value of construction, the reduction in fatalities seems to be a real improvement.

While 600 deaths per year are certainly not acceptable, they show that when industry steps up its safety advocacy, real progress can be made and lives saved. Sadly, the number of annual worker deaths caused by motorists has not



declined as sharply as overall work-zone deaths, with an average of 30 worker deaths each year since 2003, according to data from the U.S. Bureau of Labor Statistics. More work needs to be done to help the traveling public understand the dangerous nature of work zones and the fragility of those working inside.

So, the question remains . . . how can the industry protect its workers from vehicles that stray into its work space and strike, kill and maim workers?

Industry cooperation

To address the continuing challenge of work-zone intrusions, ARTBA has created a partnership with the National Asphalt Pavement Association (NAPA), the Associated General Contractors of America (AGC), leading national contractors, organized labor and others with the goal to prevent worker deaths caused by motorists.

A national dialogue began with a summit held in March 2014 in Las Vegas. Representatives from construction companies, safety manufacturers and state DOTs presented research, findings, problems and solutions. The coalition decided on a focused program of work:

1. Gather best practices from across the country and around the world to document how governments, contractors and others are preventing intrusions;
2. Create regional workshops and peer-to-peer exchanges to discuss the problem, share ideas and gather information; and
3. Create a guidance document that describes the findings and best explains steps needed to carry out best practices.

An example of a model practice was shared during the March meeting by representatives from the Texas Department of Transportation (TxDOT). The agency recently launched an innovative approach to improve work-zone safety through the inclusion of a new provision in many of their roadway-construction contracts.

TxDOT realized that contractors sometimes find roadway conditions to be more hazardous than expected during



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construction operations. Typically when this occurs, the contractor might ask the DOT for a modification to the contract, requesting extra funding to provide more protection for workers, which might include concrete barrier, crash attenuators, portable changeable-message signs or the use of law enforcement. These requests are difficult for the DOT to approve because once the contract is in place there are no additional funds to pay for increased safety measures. In recognition of this dilemma, TxDOT now includes a reserve account (2-3% of total contract value) in certain contracts that can be used to provide additional safety equipment when the contractor and DOT mutually agree upon the need. This special provision ensures funds are available to protect workers and motorists even though those needs were not anticipated when the contract was let.

TxDOT reserves these extra funds exclusively for safety needs; they cannot be disbursed for other purposes. In a time of belt-tightening, this ensures that safety equipment will find its way to the jobsite and not to other projects. TxDOT has seen an increase in safety devices used and a decrease in overall work-zone-related accidents since implementing this policy.

In addition, TxDOT has conducted research on the use of automated stop/turn signals that can take the place of flaggers; equipment that can be placed in the road well forward of a work zone that will alert drivers, as well as the new contract language that will allow TxDOT and contractors to work together to keep workers and state employees safe.

Protective products

Several companies continue to manufacture devices and equipment to help prevent motorist intrusions, and an increasing number of DOTs are approving these devices for use in their work zones. They include portable rumble strips that warn and “wake up” drivers as they approach roadway-construction sites. These strips are temporary and can be used during construction and then easily removed and moved to another location once that work is done.

Another innovative product uses a heavy metal frame, mounted like a trailer to heavy-duty trucks. This crash-worthy, durable frame provides positive protection for workers during mobile and short-duration projects where concrete barrier may not be feasible.

The roadway-construction industry is working together, as never before, to gather and develop new practices, products and strategies to prevent work-zone intrusions.

The job will not be easy, and it will take coordinated efforts of contractors, roadway owners, equipment manufacturers and government agencies to make significant progress toward significantly reducing the number of deaths caused by motorist intrusions. Nevertheless, there is a groundswell of support and optimism that change can take place. If you or your organization is interested in joining this pursuit, you can contact me at ARTBA at bsant@artba.org. **ST**

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