





# SUDDENLY, EVERYTHING CHANGED

by Lee Cole

April 2013 began as a typical month for me, spent traveling across the U.S., visiting work sites, providing safety training and assistance to our affiliated companies, and promoting work zone safety in particular as we began recognizing National Work Zone Awareness Week. It was a very busy schedule with meetings to attend, worksites to visit and employees to visit with.

Suddenly, everything changed.

**L**ate on the evening of April 16, I received a call informing me that two of our more experienced people had been killed by a driver, who was suspected of driving under the influence of alcohol. Marshall Turner, 55, was our asphalt paving foreman, and James “Bubba” Rains, 34 was a contract mechanic. Both were part of our crew on a I-55 project in Crittenden County, Arkansas. As they worked in the late evening, a pick-up truck swerved into the closed-off construction work zone and struck our friends who were just doing their jobs. Both men were killed.

I knew Marshall. He had worked for our company for 26 years and had participated in a number of our safety classes over the years. He was a hard worker with a quick smile. I did not know, James (“Lil’ Bubba”), but this husband and father of two young daughters was well known to our crews; his father has worked for us for many years.

That call was a shock. Immediately everyone’s plans changed and arrangements were made for me to fly to Memphis. I knew that we needed to take care of a lot of heart-rending issues. What must be done to take care of their families? What about their co-workers? How many of them witnessed the incident? These are most important matters to address up front.

So, the process began: employee assistance programs; counseling; incident investigation; lawyers, insurance, etc.

Less than 18 hours later, I received yet another call. One of our flaggers, a man known to everyone as Renaldo, was killed in Texas by a driver who was texting/using the phone when he drove into him.

In each of these cases, the workers, their supervisors, and the company were doing everything “right.” But that did not save our workers. And each time someone from our company is killed or seriously injured in such an incident, the reaction is the same. We see and feel the devastation of those who worked with them. As one listens to the co-workers of these victims and hears the facts, to some degree, you become part of that crew. Whether we knew them personally or not, we become part of the story. And it is painful. Something we never want to repeat.

Sadly, this experience is repeated many times each year in the United States. The Occupational Safety and Health Administration (OSHA) recently reported there were 129 deaths in highway, street and bridge construction from FY2011 to FY2012. In 39 instances, the victim was struck by an errant driver who left the travel lanes and ran over a worker—just like Marshall, Renaldo or Lil’ Bubba.<sup>1</sup> In other words, nearly one-third of roadway worker deaths are not caused by construction hazards—they are caused by motorists who may be impaired, distracted, tired . . . or even belligerent.

I say “belligerent” because we learn from 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 1993-1998, that researchers found motorists deliberately<sup>2</sup> entered closed lanes 44 percent of the time that such intrusions resulted in crashes. The study also found many intrusions occurred because traffic was stopped or moving slowly, or because drivers encountered conflicts at merging tapers. While I do not believe these drivers intended to run over the workers, they did make a conscious decision that their “inconvenience” was more important than the workers’ safety.

### **We Must Change Course**

For me and my colleagues in the construction industry, these deaths are frustrating because they continue to occur despite significant efforts to eliminate this hazard. For example, in 1998, the U.S. 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](http://www.workzonesafety.org)). While this facility is primarily aimed at providing research and information to our 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 and Transportation Officials (AASHTO) and the American Traffic Safety Services Association (ATSSA), in signing an agreement to create a National Work Zone Awareness Week. This event is now held annually across the U.S. and is aimed directly at promoting driver safety when approaching

roadway work zones. It was underway in 2013 when our colleagues were killed.

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

### **Progress, But More Needed**

While intrusion incidents continue to devastate us, a significant amount of progress has been made. 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. Department of Transportation reported 609 deaths—nearly half the amount a decade ago. During the same 10-year period, the value of roadway construction put in place has stayed the same. So, as compared to the total value of construction, the reduction in fatalities seems to be a real improvement.

Even though 600 annual work zone-related deaths are far from acceptable, they show that when industry steps up its safety advocacy, 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. My personal witness of tragedy shows me more work needs to be done to help the traveling public understand the dangerous nature of work zones and the vulnerability of those working inside those areas.

Since April 2013, we continue to ask ourselves, “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, we contacted ARTBA and asked the association to help us create a partnership to prevent worker deaths caused by motorist intrusions into work zones. To date, we have been joined by the National Asphalt Pavement Association (NAPA), the Associated General Contractors of America (AGC), leading national contractors, organized labor, and others.

A national dialogue began with a summit held in March 2014 in Las Vegas, Nevada. Representatives from construction companies to safety manufacturers to 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;



3. Create a guidance document that describes the findings and best explains steps needed to carry out best practices

We were particularly impressed by a model practice 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 we contractors sometimes find roadway conditions to be more hazardous than expected as we move into construction operations. Typically when this occurs, we will ask the DOT for a modification to the contract, requesting extra funding to provide more protection for our workers, such as concrete barrier, crash attenuators, portable changeable message signs, or the use of police officers. Most DOT's are reluctant to approve such changes because once the contract is let, there are no additional funds to pay for increased safety measures. In recognition of this dilemma, TxDOT now includes a reserve account (2-3 percent of total contract value) in certain contracts that can be used to provide for 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 signed.

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 job site 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.

### Equipment Solutions

During a special ARTBA meeting also held in Las Vegas last March, several companies provided presentations on 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 crashworthy, durable frame provides positive protection for workers during mobile and short duration projects where concrete barrier may not be feasible.

I am happy to see that 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 towards significantly reducing the number of deaths caused by motorist intrusions. Nevertheless, there is a ground swell of support and optimism that change can take place. If you or your organization is interested in joining this pursuit or just learning more about the association's comprehensive safety programs and services, you can contact Bradley Sant, ARTBA senior vice president of safety and education at [bsant@artba.org](mailto:bsant@artba.org).

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<sup>1</sup>Federal OSHA Fatality Investigations for the Three Industries with the Highest Number of Fatalities FY2011-FY2012

<sup>2</sup>Deliberate action is defined as choosing to enter the closed area either with real intent or choosing to drive impaired.

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