



Script for the “Overview and Summary of the 2006 and 2011 FHWA Work Zone Safety Grants” Podcast

Welcome to the FHWA Work Zone Safety Grant podcast series. This podcast, “An Overview and Summary of the 2006 and 2011 FHWA Work Zone Safety Grants,” was developed by the American Traffic Safety Services Association (or ATSSA) under the Federal Highway Administration’s 2011 Work Zone Safety Grant. For more information on the grant, visit the National Work Zone Safety Information Clearinghouse at www.workzonesafety.org. The guidelines and many of the training products developed under the grants can be accessed or downloaded from this website by selecting “FHWA Work Zone Safety Grant Products” under the featured links listing in the panel on the left.

This podcast is intended to help practitioners familiarize themselves with the guidance and training products developed, published, and taught with funding from the 2006 and 2011 Work Zone Safety Grants.

This podcast will run for about 15 minutes.

Background and Introduction

The national trend toward increasing traffic and the growing presence of road construction and maintenance activities to address our aging infrastructure have had a significant impact on how frequently motorists must make their way through work zones. This creates a significant safety challenge. But because properly set up and maintained work zones are less likely to experience accidents or injuries among workers and the motorists that travel through them, there is a need for guidance and training for work zone designers, planners, and workers to help them create an environment that is as safe as possible for everyone who must be exposed to the work zone.

In response to this need, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, the surface transportation act signed into law in 2005, established a Work Zone Safety Grant program. The objective of this program is simple: to support the development of guidelines and to provide training to enhance highway work zone safety. Based on a competitive selection process, four grants were awarded in 2006. Recipients included the Laborers Health and Safety Fund North America and the American Road and Transportation Builders Association, the American Traffic Safety Services Association team, the Illinois Institute of Technology team, and the Wayne State University team.

Three of the original 2006 Grant awardees also received awards under the 2011 round of grant funding and are continuing their work in the three focus areas mandated by SAFETEA-LU, which include:



- Area 1 – Highway Work Zone Worker Safety Training;
- Area 2 – Highway Work Zone Safety Guidelines Development; and
- Area 3 – Highway Work Zone Safety Guidelines Training.

In July 2012, the surface transportation funding legislation titled “Moving Ahead for Progress in the 21st Century” (or MAP-21 for short) was signed into law, continuing the Work Zone Safety Grant Program as it is currently structured.

It’s important to note that the Work Zone Safety Grant training and guidance products were developed with input from actual work zone practitioners. To support the grant awardees’ efforts, FHWA authorized grantees to assemble teams of highly qualified representatives from among the construction industry, construction crafts, and transportation agencies to be invited to form practitioner working groups. These groups first began working with the grantees in 2006 to identify topics or functional areas where, based on their experience, they felt that a lack of information and education could contribute to unsafe work zone conditions.

It’s also worth noting that much of the training developed under the Work Zone Safety Grant program is consistent with the National Highway Institute’s stringent instructional design standards, so transportation agency staff and road workers alike can be assured of the highest quality instruction when they sign up for grant-sponsored training.

The practitioner working groups are still active and continue to provide technical guidance and review products.

Grant Area 1. Highway Work Zone Worker Safety Training

The objective for grant Area 1 is for grant awardees to conduct training nationally for a wide range of road workers on ways to prevent injuries and fatalities in roadway work zones. For both the 2006 and 2011 grant, awardees are charged with establishing national-level training programs that provide safety training for the following groups:

- Craft workers and other related disciplines involved in highway and road survey, construction, and maintenance activities;
- Work zone traffic control workers, including those who set up traffic control and worker protection devices, flaggers, and the designers who are responsible for maintaining traffic flow and traffic safety in a work zone;
- Utility workers who perform utility work activities that result in partial or full closure of a roadway; and
- Highway work zone law enforcement personnel and emergency response personnel who respond to work zone incidents.



The Area 1 training programs were designed to be applicable in multiple regions and States. As noted, trainees include both workers and employers within the private sector as well as workers and supervisors within public agencies. By the end of 2012, between the 2006 and 2011 grants, more than 57,000 individuals have been trained and more than 1,300 instructor-led courses have been taught throughout all 50 States.

Under Area 1, a comprehensive Roadway Safety Awareness Program, called RSA+, was developed and is available on CD or via download. This program provides an overview of common hazards in road construction as well as a series of simple prevention measures. This comprehensive instructional compendium contains 33 interactive modules, 5 trainee booklets, a 120-page instructor guide, 29 toolbox pamphlets, a 14 x 20 flip book, and 8 guidance documents. The training program is available in English, Spanish, and Portuguese.

Also under Area 1, an OSHA 10-Hour instructor-led course on Training for Roadway Construction was partially supplemented by the grant. The training, which is free, focuses on ways to recognize, avoid, remediate, and prevent safety and health hazards in workplaces and includes “hands-on” activities to reinforce the formal instruction.

A series of 8 additional instructor-led training courses was also made available under Area 1. These courses were designed to be taught in a classroom setting by certified instructors at State DOT locations or other nearby facilities on such topics as flagger instruction, law enforcement training, nighttime traffic control, and other important operational topics where safety plays a crucial role.

The RSA+ CD-based training compendium developed under the 2006 grant will continue to be offered at workzonesafety.org, with upgrades available as further training is developed.

Information and schedules for the currently available training can also be found at www.workzonesafety.org.

Grant Area 2 – Highway Work Zone Safety Guidelines Development

The objective of Area 2 is to provide guidelines that will assist State and local government transportation agencies and other entities to prevent and reduce work zone injuries and fatalities. For this area, grantees were tasked with taking relevant regulations, national guidelines, and applicable State guidelines and converting them into a number of easy-to-use, easy-to-read, easy-to-understand products. The guidance products developed under Area 2 have had an incredible appeal, with a distribution of more than 150,000 copies downloaded or requested in print form by transportation agencies, industry groups, and organizations across the country.

As of October 2012, a total of 24 guidelines have been developed by awardees to assist work zone professionals in a variety of topic areas. For workers and supervisors, guidelines have been developed on managing speeds in work zones, promoting motorcycle and bicycle work zone safety, positive protection, and a variety of other topics relevant to improving worker safety.



For work zone designers, engineers, and other practitioners, guidelines have been developed on an array of topics including work zone impacts, shadow vehicles, temporary traffic control devices for safe maintenance and work zone operations, pedestrian access considerations, high-visibility safety apparel and many more. Efforts are also currently underway to develop a work zone safety compendium, guidelines for urban work zones, and guidelines for short-term, short-duration, and mobile work zones.

For the Utility Work Zone Traffic Control Guidelines developed under Area 2, 27 typical temporary traffic control plans for utility work were created, as was an accompanying software program to aid in the selection of the most appropriate temporary traffic control plan for the work being performed.

A set of highway work zone safety audit guidelines and related training, which were designed to be adapted to State or local agency applications, were also developed under the 2006 grant to instruct State and local transportation agencies and industry groups on how to implement the guidelines.

In addition to the guidance products themselves, the grant is funding development of a series of up to 12 podcasts (like this one) on topics identified by practitioners as areas where information is lacking, such as guidance on pedestrian accessibility needs in work zones and automated speed enforcement in work zones. A suite of smart phone and tablet applications is also being developed to help on-site users calculate taper lengths and buffer distances, quickly access useful guidance materials on short-term temporary traffic control, and determine the best type of positive protection to use based on the location and type of work zone being considered. The podcasts and apps will be available beginning in 2013.

The grantees continue working to develop additional guidelines on topics such as setting up work zones on roundabouts, requirements for making work zones accessible to disabled pedestrians under the Americans with Disabilities Act, work zone inspections, the use of automated flagger assistance devices, nighttime lighting for work zones, rolling roadblocks/slowdowns, and a variety of guidance topics related to local and rural work zone safety. Guidelines are also being developed to assist transportation agencies, utility companies, and contractors in achieving reductions in injuries and fatalities while complying with FHWA's Work Zone Safety and Mobility Rule.

Products developed under Area 2 take a variety of formats, including field guides, pocket guides, pamphlets, posters, checklists, podcasts, and soon, smart phone and tablet apps. All completed guidance products are available on the Work Zone Safety Clearinghouse web site and can be downloaded free of charge. New guideline products will be posted as soon as they are finalized and ready for distribution, so visit www.workzonesafety.org often to see what's new.



Grant Area 3 Highway Work Zone Safety Guidelines Training.

Moving on, the objectives of Area 3 are to provide training to State and local transportation agencies and other transportation groups and organizations on implementing work zone safety guidelines and to promote best practices to prevent work zone injuries and fatalities.

The training currently being offered is based on the products developed in Area 2 and includes training on topics such as traffic control design, urban work zone design, work zone strategies, work zone traffic impact analysis, maintenance and short duration activities, and positive protection, among others.

Much of the training developed and made available under the 2006 grant continues to be available due to 2011 grant funding, including courses on Work Zone Traffic Impact Analysis, Traffic Control Design Specialist, Work Zone Strategies, Maintenance and Short Duration Work Zones, and Urban Work Zone Design. The 2011 grant also makes it possible for the grant teams to continue developing new training products, including instructor-led courses on positive protection and work zone road safety audits. Many of the training modules developed under the 2006 grant are available online now, while new products will come online beginning in 2013.

Innovative training options will also be available, including, including web-based training modules, self-paced training modules, and soon instructor-led online courses and webinar-based training. In addition, a series of educational modules designed to supplement engineering curriculum at the university level will introduce the fundamentals of work zone safety to engineering students. These modules will be disseminated to instructors at institutions of higher learning nationwide.

Beyond this, a series of instructional materials designed to support the utility work zone safety guideline products developed under Area 2 are also under development, including new training programs and instructor guides for the Short-Term, Short-Duration Urban Work Zones training and the Mobile Work Zones Temporary Traffic Control Plan Selection software.

Conclusion

In conclusion, the Federal Highway Administration's 2006 and 2011 Work Zone Safety Grants have so far resulted in the development of a comprehensive collection of more than 90 guidance and training products for those involved in work zone planning, design, and construction, and more products are under development. With more than 54,000 individuals trained and nearly 150,000 copies of Area 2 guidance products disseminated to date, the FHWA Work Zone Training Grants have made a significant contribution to efforts to extend safety awareness and best practices throughout the industry, helping practitioners and agencies alike achieve our shared goal of zero fatalities and serious injuries on our Nation's roadways.



To view any or all of the guidelines and web-based training products, or to find out more about upcoming instructor-led training courses, please visit the FHWA Grant page on the work zone safety information clearinghouse at www.workzonesafety.org.

This podcast has been a presentation of the Federal Highway Administration's Work Zone Safety Grant Program. Thank you for joining us, and please visit www.workzonesafety.org often to view the latest training and guidance products.