Grant Course Guide
FHWA Work Zone Safety Grant

The FAST Act established a Work Zone Safety Grant program to provide highway work zone safety training to prevent and reduce work zone injuries and fatalities. This program offers training to state and local governments and transportation agencies. Course materials were developed in strict adherence to National Highway Institute standards.

If your agency is interested in hosting any of the following courses, please visit www.atssa.com/WorkZoneSafetyGrant to fill out a "Grant Course Request Form" or contact ATSSA at grant@atssa.com to schedule a course.

Cost to attend a course is $0 (free) per participant.

Designing Temporary Traffic Control Zones for Pedestrian Accessibility
One-day instructor-led course intended to make participants aware of the pedestrian accessibility requirements of the American with Disabilities Act (ADA) and their applicability to highway work zones. The course will focus on practical solutions to real-world situations.

Intended audience: This course is intended for both designers and field personnel.

Upon completion of this course, participants will be able to:

1. Identify applicable laws, regulations, guidelines, and standards pertaining to accessibility for persons with disabilities.
2. Discuss their application in temporary traffic control zones.
3. Identify some of the challenges in the Public Right-of-Way (PROW) faced by persons with disabilities.
4. Review design elements necessary for achieving accessibility in the PROW.
5. Identify contractors' best practices and provide real-world examples under various conditions.

Developing and Implementing Successful Transportation Management Plans
This one-day training course is intended to assist transportation agencies in understanding and developing an effective and complete work zone Transportation Management Plan (TMP). Topics discussed in this course include the work zone safety and mobility rule, the content of a TMP, roles and responsibilities, work zone impacts assessment, selecting TMP strategies, and TMP implementation. The course includes exercises to help you apply the concepts you learn throughout the course.

Intended audience: This course is intended for transportation agency staff, including technical staff (planners, designers, traffic engineers, highway/safety engineers, construction, etc.); management and executive-level staff responsible for setting policy and program direction; field staff responsible for building projects and managing work zones; and staff responsible for assessing performance in these areas.

Upon completion of this course, participants will be able to:

1. Identify why TMPs are important.
2. Understand and explain TMP basics.
3. Apply impact assessment findings into the TMP.
4. List TMP strategies.
5. Identify key stakeholders for TMP coordination.
6. Explain how to implement and monitor TMPs.

Maintenance and Short Duration Activities

This one-day course covers typical applications that apply to short duration activities, including utility operations, moving operations, and other short duration maintenance operations. Emphasis is placed on the use of simplified procedures and worker protection.

Intended audience: This course is intended for anyone involved in short duration activities within the roadway's right-of-way.

Upon completion of this course, participants will be able to:

1. Identify the characteristics of projects that are most suited for consideration of exposure control measures and develop guidelines for their use.
2. Determine the suitability of appropriate positive protection devices (or other worker exposure control measures) for a specific work zone situation.

Minimizing Worker Exposure in Highway Work Zones Through the Use of Positive Protection and Other Strategies

This two-day course covers issues related to the application of positive protection devices in highway work zones, including a review of standards and specific guidance on when and where to use positive protection devices.

Intended audience: This course is intended for highway agency decision makers that would take it and develop their own individual policies and practices to make design decisions for implementation in field as well as traffic control supervisors and other contractor field staff. It is also intended for use by highway agency staff to develop procedures and standards for shadow vehicle use.

Upon completion of this course, participants will be able to:

1. Identify the different types of positive protection devices and their features.
2. Recognize design principles and concepts and how they relate to potential field issues.
3. Identify the characteristics of projects that are most suited for consideration of positive protection devices.
4. Recognize the components of the Work Zone Rule (Subpart K).
5. Understand how installation and removal of positive protection devices affects constructability and safety.
6. Use an assessment tool to provide insights into whether positive protection should or should not be used.
7. Describe alternative exposure control methods.

Smarter Work Zone Intelligent Transportation Systems
Smarter Work Zones is an FHWA Every Day Counts (EDC) initiative that is assisting State DOTs in effectively managing traffic during construction. The Smarter Work Zones initiative involves both enhanced project coordination as well as the use of work zone intelligent transportation systems (ITS). By coordinating across agencies, combining projects, and effectively planning for minimal impacts from utility work and right-of-way acquisition, stakeholders can improve performance.

Intended audience: This course is intended for transportation agency staff, including technical staff (planners, designers, traffic engineers, highway/safety engineers, construction, etc.); management and executive-level staff responsible for setting policy and program direction; field staff responsible for building projects and managing work zones; and staff responsible for assessing performance for the use of intelligent transportation systems and project coordination.

Upon completion of this course, participants will be able to:

1. Define Smarter Work Zones.
2. Understand technology and the use of ITS to support effective work zone management and operations.
3. Discuss the Work Zone ITS Implementation Guide.
4. Provide a comprehensive overview of corridor and project work zone coordination.

Traffic Control Design Specialist
This one- or two-day course addresses the entire process for designing, installing, maintaining, and evaluating temporary traffic control in work zones. Topics include: applicable standards and guidelines, fundamental principles of temporary traffic control, human factors, component parts of a traffic control zone, traffic control devices, constructability, and development of a transportation management plan. Students will breakout into small groups for hands-on exercises. Certification is also available for this course.

Intended audience: This course is intended for traffic engineers, engineering technicians, consultants, and other individuals responsible for traffic control plan (TCP) approval. Please note that this course does not grant authority to individuals to approve design plans.

Upon completion of this course, participants will be able to:

1. Understand the engineering concepts necessary to properly design effective traffic control plans.
2. Understand the fundamental principles of temporary traffic control needed to make discretionary decisions and adjustments.
3. Cite the sources of standards, guidelines, and specifications governing the design of TCPs.
4. Design TCPs that would facilitate the inspection and maintenance functions of the traffic control systems.
5. Know the proper processes and procedures for making TCP adjustments, disposition of actions generated, and their legal implications.

The one-day course requires successful completion of the Traffic Control Supervisor course, while the two-day course provides more comprehensive traffic control supervisor information and does not require any pre-requisites.

Temporary Traffic Control Considerations for Urban Work Zones
This two-day course addresses work zones in more populated and congested areas, particularly the considerations (substantive safety) necessary to address work zones in urban environments. These environments may involve restricted spaces, parking issues, limited sight distance, business access, pedestrian, ADA, and bicyclist considerations. This course addresses instances when standards cannot be met and how to address these situations on urban streets.

Intended audience: This course is intended for work zone designers and traffic control supervisors who may work in urban environments.

Upon completion of this course, participants will be able to:
1. Discuss temporary traffic control standards and guidelines.
2. Discuss issues related to the application (design) of those standards and guidelines in urban areas.

Work Zone Data Collection
This one-day course provides information to assist highway agencies in developing techniques and strategies to successfully collect and analyze work zone safety-related data for the purpose of making work zones safer for motorists and workers. This guidance shares work zone safety related data analysis methods that are effective in identifying safety improvement strategies and developing work zone crash reduction programs and analysis techniques. Methods that are currently being implemented in the United States are included in the guide to empower work zone safety practitioners to effectively reduce crashes, injuries, and fatalities. This course lays the foundation for improvement of the handling and analysis of safety data related to work zones. The information from this workshop and the accompanying guide help equip agencies and practitioners to meet the objectives of the FHWA Work Zone Safety and Mobility Rule.

Intended audience: This course is intended for program managers, work zone managers, traffic engineers, engineering consultants, and other individuals responsible for temporary traffic control data and safety.

Upon completion of the course, participants will be able to should be able to:
1. Directly translate learned workshop content into action plans within their agency or company.
2. Evaluate and improve procedures and policies, and determine appropriate adjustments to active and future work zones.
3. Achieve a level of knowledge towards evaluating and improving the level of data pertaining to the safety and operations of work zones administered by the agency.

Work Zone Road Safety Audits
This two-day course addresses the purpose and procedures for conducting a work zone road safety audit (RSA). This course introduces the concept of a formal safety performance examination of an upcoming or current work zone by an independent, multi-disciplinary team.

Intended audience: This course is intended for engineers, construction inspectors, and project managers.

Upon completion of this course, participants will be able to:

1. Understand the scope of the work zone safety problem in the United States.
2. Understand the differences and similarities between a work zone RSA and a traditional work zone inspection.
3. Identify the most applicable candidate projects for a work zone RSA.
4. Build a multi-disciplinary work zone RSA team.
5. Conduct a work zone RSA.
6. Present work zone RSA findings to the road owner, contractor, and inspector.

Work Zone Strategies

This two-day course discusses non-typical design strategies available to work zone designers. It focuses on strategies specifically aimed at improving work zone safety and mobility, such as work zone full closures, ITS applications, variable speed limits, impact analysis, and enforcement. The FHWA Work Zone Safety and Mobility Final Rule is also discussed.

Intended audience: This course is intended for engineers and anyone responsible for planning and designing a TCP.

Upon completion of this course, participants will be able to:

1. Discuss various strategies available to work zone designers.
2. Provide guidance to help in selecting work zone strategies.
3. Discuss strategies that can be incorporated into TMPs.

Work Zone Traffic Impact Analysis

This two-day course provides useful guidance to agencies and/or individuals considering modeling and simulation tools for traffic impact analysis. It also provides a broad, fundamental understanding of how these analytical tools available to support work zone analysis: the strengths, weaknesses, data requirements, and level of detail. This course describes how these analytical tools can be used to support work zone design by exploring the factors to consider when selecting a model, including data availability and quality, work zone characteristics, measures of effectiveness, and available resources.

Intended audience: This course is intended for engineers and others responsible for deciding which work zone strategies to implement, as well as decision-makers considering work zone analytical tools. Previous knowledge of work zone concepts is encouraged, but not required.

Upon completion of this course, participants will be able to:

1. Provide guidance to agencies and/or individuals considering work zone traffic impact analysis.
2. Understand the fundamentals of how analytical tools can be used to support work zone traffic impact analysis.
3. List and discuss some available tools for work zone impact analysis.