



# FHWA Work Zone Safety Grant

The Federal Highway Administration (FHWA) takes an active role in monitoring, improving and advancing safety for work zone workers. As a trusted partner, the FHWA has awarded ATSSA multi-year grants in 2006, 2011, 2013, and 2016 to provide roadway safety training nationwide for workers and others who make their livelihood on America's roadways. Since 2006, approximately 80,000 workers have been trained in a variety of ATSSA roadway safety training courses at an extremely low cost and have also been given access to a wide range of invaluable and informative products at no cost.

# The benefits of Work Zone Safety Grant training include:

- Employers are compliant with state or federal mandates and their employees are up-todate on standards
- Confidence knowing employees have been trained to set up work zones correctly
- Free technical guidelines allow workers to be equipped with accurate and current information which can be applied on the spot

# ATSSA offers the following Work Zone Safety Grant training:

ATSSA Work Zone Safety Grant training offers the Traffic Control Technician and Traffic Control Supervisor courses at no charge to public agencies (\$0).

Contact Eric Perry with ATSSA at <u>eric.perry@atssa.com</u> to inquire about scheduling a course.

## Traffic Control Technician (TCT) Training Course

Course Length: One day/8 hours Prerequisites: None

Everyone involved in a construction work zone project should have a basic knowledge of temporary traffic control that allows them to assist in installing traffic control devices, monitoring their performance, and recognizing deficiencies during the course of a project.

The TCT course is an introduction to temporary traffic control in work zones for individuals who work in the field installing and removing traffic control devices. The course provides concepts, techniques, and practice exercises in the installation and maintenance of traffic control devices. Previous experience in temporary traffic control is not required for this course.

Students are required to complete a written exam. A grade of 80% or greater is considered passing. A student receiving a passing grade of 80% or better will receive an attendance certificate.





A student receiving less than 80% on the final exam can take a make-up exam for an additional fee. Contact <u>customerservice@atssa.com</u> for more information.

Students who fail the final exam and the makeup exam must retake the full course.

### ATSSA Certification

Certification is available for this training course. If the student applies for and is approved for certification, the student will receive the following:

- Certification card
- Certification vest patch
- Registration on the ATSSA National Database (accessible online)

To be certified, the student must meet the following requirements:

- ✓ Score 80% or greater on the Traffic Control Technician (TCT) final exam
- ✓ Complete 2,000 hours (1 year) of work zone experience
- ✓ Complete the Certification Application
- ✓ Provide two (2) professional references to verify work zone experience
- ✓ Be approved by the ATSSA Certification Board

Certification is valid for 4 years from the date of the exam.

## Traffic Control Supervisor (TCS) Training Course

Course Length: Two days/16 hours

Prerequisites: TCT course

The TCS course is designed to train those who will be actively involved in designing or creating and maintaining temporary traffic control in a work zone. It moves from the concepts and techniques taught in the Traffic Control Technician (TCT) course to the implementation of traffic control plans and techniques for installation and removal. Students are taught how to read and interpret plans and specifications and implement them in the field.

Workshops included in the course are designed to provide real world examples in designing temporary traffic control setups and also recognizing, analyzing and correcting deficiencies. An additional, vital objective of this course is teaching students the skills necessary to become an effective supervisor, capable of leading a team in the field.

Students are required to complete a written exam. A grade of 80% or greater is considered passing. A student receiving a passing grade of 80% or better will receive an attendance certificate.



A student receiving less than 80% on the final exam can take a make-up exam for an additional fee. Contact <u>customerservice@atssa.com</u> for more information.

Students who fail the final exam and the makeup exam must retake the full course.

## ATSSA Certification

Certification is available for this training course. If the student applies for and is approved for certification, the student will receive the following:

- Certification card
- Certification vest patch
- Registration on the ATSSA National Database (accessible online)

To be certified, the student must meet the following requirements:

- ✓ Score 80% or greater on the TCT final exam
- ✓ Score 80% or greater on the TCS final exam
- ✓ Complete 4,000 hours (2 years) of temporary traffic control experience
- $\checkmark$  Complete the Certification Application and pay the certification fee
- ✓ Provide two (2) professional references to verify work zone experience
- ✓ Be approved by the ATSSA Certification Board

Certification is valid for 4 years from the date of the exam.

## Work Zone Traffic Impact Analysis

Provides useful guidance to agencies and individuals considering modeling and simulation tools for traffic impact analysis. The course provides the types of analytical tools available to support work zone analysis and the strengths, weaknesses, data requirements, and level of detail needed for each. The course describes how to select a model and perform the analysis, including data availability and quality, work zone characteristics, measures of effectiveness, and available resources.

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; and
- 3) List and discuss some available tools for work zone impact analysis.

Anticipated Duration: 1.5 Days





## **Traffic Control Design Specialist**

Addresses the entire process for designing, installing, maintaining, and evaluating temporary traffic control in work zones. This training is recommended for traffic engineers, engineering technicians, consultants, and other individuals responsible for temporary traffic control design as well as for individuals who are responsible for designing traffic control plans (TCPs).

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; and
- 5) Know the proper processes and procedures for making TCP adjustments, disposition of actions generated, and their legal implications.

Anticipated Duration: 2 Days

#### **Work Zone Strategies**

Discusses 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, intelligent transportation systems applications, variable speed limits, impact analysis, and enforcement. The FHWA Work Zone Safety and Mobility Final Rule is discussed. The intended audiences are engineers and anyone responsible for planning and designing a traffic control plan.

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; and
- 3) Discuss strategies that can be incorporated into Transportation Management Plans.

Anticipated Duration: 1.5 Days

#### **Maintenance and Short Duration Work Zones**

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. The intended audience for this course includes practitioners involved in short duration activities within the highway rights-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; and





2) Determine the suitability of appropriate positive protection devices (or other worker exposure control measures) for a specific work zone situation.

Anticipated Duration: 1 Day

# Temporary Traffic Control Considerations in Urban Work Zones

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. The course addresses instances when standards cannot be met and how to address these situations on urban streets. 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 and
- 2) Discuss issues related to the application (design) of those standards and guidelines in urban areas.

Anticipated Duration: 1.5 Days

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

Covers issues related to the application of positive protection devices in highway work zones. The course includes review of standards and specific guidance on when and where to use positive protection devices.

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 and
- 7) Describe alternative exposure control methods.

Anticipated Duration: 1.5 Days





## Work Zone Road Safety Audits

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 and is geared toward 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; and
- 6) Present Work Zone RSA findings to the road owner, contractor, and inspector.

Anticipated Duration: 1.5 Days

Other Considerations: Site visit to work zone is recommended. Other considerations limiting size of classroom to 20 for easy of transportation.

#### Designing Temporary Traffic Control Zones for Pedestrian Accessibility

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.

Anticipated Duration: 1.5 Days

Other Considerations: Site visit to work zone is recommended.





## **Developing and Implementing Successful Transportation Management Plans**

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.

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.

Anticipated Duration: 1.5 Days

#### **Smarter Work Zone Intelligent Transportation Systems**

Smarter Work Zones was 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.

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.

Anticipated Duration: 1.5 Days

#### 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 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 course and the accompanying guide help equip agencies and practitioners to meet the objectives of the FHWA Work Zone Safety and Mobility Rule.

Upon completion of the course, participants will be able:

- 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.

Anticipated Duration: 1 Day

Other information: Workshop format with data from agency to be shared with Instructor to concentrate on particular issues.