

Area 2 Planning Template

Use of Positive Protection for Work Zones

Guidelines in this area will cover when and how to use several forms of positive protection including portable concrete barriers, arrestor nets, and shadow vehicles.

Specific Gap/Need Identified in Analysis or Workshop	Is There an Existing Regulation or Policy Related to the Gap That Can Be Used in Generating Guidance?	Is there Existing Guidance/Guidelines Related to the Gap That Either Already Addresses the Need or That Can be Modified?	What is the Target Audience for Guidelines Related to the Gap?	Initial Thoughts on Useful Products by Target Audience
Need consensus guidelines (in the form of a decision tool) for when to use Positive Protection	FHWA is developing a Rule to cover use of Positive Protection – based on Section 1110 of SAFETEA-LU	Several states have existing documents that could be used to formulate a draft - combination of NCHRP research, current rulemaking efforts, and state practices such as those from CT, DE, FL	Highway agency decision makers that would take it and develop their own individual policies / practices to make design decisions for implementation in field.	Set of suggested guidelines or consensus guidelines / explanation material and backup information (e.g. matrix, chart, ADT’s, local conditions, cost effectiveness model, offset distance, etc.)

Specific Gap/Need Identified in Analysis or Workshop	Is There an Existing Regulation or Policy Related to the Gap That Can Be Used in Generating Guidance?	Is there Existing Guidance/Guidelines Related to the Gap That Either Already Addresses the Need or That Can be Modified?	What is the Target Audience for Guidelines Related to the Gap?	Initial Thoughts on Useful Products by Target Audience
Need guidance on the optimum position for shadow vehicles	FHWA is developing a Rule to cover use of Positive Protection – based on Section 1110 of SAFETEA-LU	Chapter 9 of the roadside design guide has some recommendations; New York has some good examples of guidance for use of shadow vehicles	Contractors, field personnel, state and local DOT construction engineers, inspectors, and maintenance personnel	Laminated field cards – based on traffic mix, lane configuration, and speed, recommend based on shadow vehicle type where it should be placed
Need guidance on when and how to use ballast filled barriers and construction attenuators and end treatments, including why field personnel should be concerned with proper installation (interest from practitioner workshop)	FHWA is developing a Rule to cover use of Positive Protection – based on Section 1110 of SAFETEA-LU	NCHRP Synthesis	Contractors, field personnel, state DOT designers, construction engineers, traffic engineers, and inspectors, consultants developing TMPs/TCPs	Set of suggested guidelines with supplemental information – highlight why field personnel should be concerned with proper installation
Toolbox for other intrusion countermeasures	Rulemaking includes other measures also	NCHRP Synthesis	Designers, policy makers, specification writers, field personnel	Fact sheet, half page countermeasure descriptions

Specific Gap/Need Identified in Analysis or Workshop	Is There an Existing Regulation or Policy Related to the Gap That Can Be Used in Generating Guidance?	Is there Existing Guidance/Guidelines Related to the Gap That Either Already Addresses the Need or That Can be Modified?	What is the Target Audience for Guidelines Related to the Gap?	Initial Thoughts on Useful Products by Target Audience
Need overall guidance on when to use different types of barriers (portable concrete, ballast filled, etc.)	FHWA is developing a Rule to cover use of Positive Protection – based on Section 1110 of SAFETEA-LU	NCHRP Synthesis	Contractors, field personnel, state DOT designers, construction engineers, traffic engineers, and inspectors, consultants developing TMPs/TCPs	Set of suggested guidelines with supplemental information on types of barriers

Processes for Selecting and Decommissioning High Visibility Apparel

Guidelines in this area will cover techniques for selecting appropriate apparel based on work zone characteristics, as well as processes for decommissioning apparel based on the procurement processes used by agencies and contractors.

Specific Gap/Need Identified in Analysis or Workshop	Is There an Existing Regulation or Policy Related to the Gap That Can Be Used in Generating Guidance?	Is there Existing Guidance/Guidelines Related to the Gap That Either Already Addresses the Need or That Can be Modified?	What is the Target Audience for Guidelines Related to the Gap?	Initial Thoughts on Useful Products by Target Audience
Need easily accessible compilation of existing guidance on selecting apparel	Worker Visibility Rule	FHWA and ATSSA have published apparel selection brochures	Contractors, field personnel, state DOT construction engineers and inspectors	A simple field guide that places all of the relevant information in one easy-to-use handbook – outline different types of apparel

Specific Gap/Need Identified in Analysis or Workshop	Is There an Existing Regulation or Policy Related to the Gap That Can Be Used in Generating Guidance?	Is there Existing Guidance/Guidelines Related to the Gap That Either Already Addresses the Need or That Can be Modified?	What is the Target Audience for Guidelines Related to the Gap?	Initial Thoughts on Useful Products by Target Audience
Need guidance on when to decommission apparel and appropriate timelines and processes	Worker Visibility Rule	ANSI standard for high visibility falls short of recommending procedures for decommissioning – ISEA committee is working on evaluation procedures	Contractors, field personnel, state DOT construction engineers and inspectors, maintenance engineers, and other decision-makers	A section in the above-mentioned field guide that provides recommendations for how to determine the useful life of a apparel – including high quality pictures showing acceptable and unacceptable apparel; highlight overall process for purchasing apparel that would include time for replacement; also develop stand alone document for decision-makers

Pedestrians and Works Zones

Guidelines in this area will cover examples that can be used to maintain adequate pedestrian facilities when construction or maintenance temporarily takes existing facilities out of service. This would include construction work access to the jobsite.

Specific Gap/Need Identified in Analysis or Workshop	Is There an Existing Regulation or Policy Related to the Gap That Can Be Used in Generating Guidance?	Is there Existing Guidance/Guidelines Related to the Gap That Either Already Addresses the Need or That Can be Modified?	What is the Target Audience for Guidelines Related to the Gap?	Initial Thoughts on Useful Products by Target Audience
Need guidelines for consideration of pedestrian access during construction, including visually impaired and disabled pedestrians	Work Zone Safety and Mobility Rule; ADA Regulations; MUTCD; OSHA Worker Safety Standards	FHWA has a high-level checklist that could be used as an example and the MUTCD has some material; Pedestrian Work Zone Safety Brochure	Designers, construction engineers, policy-makers, traffic control plan developers, inspectors, contractors	Detailed checklist and supporting materials that includes examples for consideration of pedestrians in addition to accommodating traffic; include compilation of ADA requirements
Need guidelines for maintaining sidewalks within work zones (urban and rural)	Work Zone Safety and Mobility Rule; ADA Regulations; MUTCD; OSHA Worker Safety Standards	MUTCD has some signing information and typical layouts; Pedestrian Work Zone Safety Brochure	Designers, construction engineers, policy-makers	Fact sheet on the types of projects where pedestrian access may be an issue – include examples of good practices to overcome issues (high, medium, low access needs, etc.)

Work Zone Safety Planning, Impact Assessment, and Mitigation

Guidelines in this area will highlight processes for collecting data and analyzing the worker safety and traffic safety effects of different traffic control plans and traffic management alternatives.

Specific Gap/Need Identified in Analysis or Workshop	Is There an Existing Regulation or Policy Related to the Gap That Can Be Used in Generating Guidance?	Is there Existing Guidance/Guidelines Related to the Gap That Either Already Addresses the Need or That Can be Modified?	What is the Target Audience for Guidelines Related to the Gap?	Initial Thoughts on Useful Products by Target Audience
Need guidelines on safety performance measures and appropriate data collection techniques and needs	Work Zone Safety and Mobility Rule	FHWA Work Zone Impacts Analysis Guide; Road Safety Audit Guide; Needs to coordinate with info coming from IIT WZ safety audit grant	Planners, designers, construction engineers, and inspectors	Fact sheet on the types of data to evaluate, quantity, analysis techniques, and lessons learned; Needs to coordinate with materials coming from IIT WZ safety audit grant
Need guidelines for analysis of operational strategies that can reduce back-of-queue safety hazards	Work Zone Safety and Mobility Rule	FHWA Work Zone Impacts Analysis Guide	Planners, designers, construction engineers, and inspectors	Fact sheet with examples and information on software tools that can be used to help with decision-making, including outreach techniques for supervisors

Specific Gap/Need Identified in Analysis or Workshop	Is There an Existing Regulation or Policy Related to the Gap That Can Be Used in Generating Guidance?	Is there Existing Guidance/Guidelines Related to the Gap That Either Already Addresses the Need or That Can be Modified?	What is the Target Audience for Guidelines Related to the Gap?	Initial Thoughts on Useful Products by Target Audience
Need guidelines on how to balance traffic safety, worker safety, traffic mobility, and construction convenience	Work Zone Safety and Mobility Rule	Impacts Assessment Guide Section 2.3	Planners, designers, construction engineers, and inspectors	Standalone step by step guide Brochure on why balancing these factors is important

Traffic Control and Safety for Maintenance and Short Duration Operations

Guidelines in this area will cover examples of typical applications for traffic control for maintenance activities and other short duration work zone operations to enhance work zone safety.

Specific Gap/Need Identified in Analysis or Workshop	Is There an Existing Regulation or Policy Related to the Gap That Can Be Used in Generating Guidance?	Is there Existing Guidance/Guidelines Related to the Gap That Either Already Addresses the Need or That Can be Modified?	What is the Target Audience for Guidelines Related to the Gap?	Initial Thoughts on Useful Products by Target Audience
Need guidelines for setup and takedown of temporary traffic control based on MUTCD TA's	Work Zone Safety and Mobility Rule	FHWA's Work Zone Law Enforcement Training; MUTCD; Examples such as Wisconsin DOT, Iowa DOT, and other published guidelines for maintenance and utility operations from the state-DOT-specific Google search tool	Contractors, field personnel, traffic control services firms, construction supervisors, inspectors, law enforcement personnel	Pocket guide illustrating proper setup and takedown of temporary traffic control devices; outreach product that highlights common sense procedures for a safe environment (safety first attitude)
Typical applications similar to MUTCD for use in maintenance operations	Work Zone Safety and Mobility Rule; Section 1110 Rule	Short Term Traffic Control Handbooks; MUTCD	Contractors, field personnel, traffic control services firms, supervisors, inspectors, law enforcement personnel	Brochure and pocket guide showing typical applications for maintenance operations