PART 630—PRECONSTRUCTION

PROCEDURES

1. The authority citation for Part 630 is revised to read as follows: Authority: 23 U.S.C. 106, 109, 112, 115, 315, 320, and 402(a); Sec. 1110, 1501, and 1503 of Pub. L. 109–59, 119 Stat. 1144; Pub.L. 105–178, 112 Stat. 193; Pub. L. 104–59, 109 Stat. 582; Pub. L. 97–424, 96 Stat. 2106; Pub. L. 90–495, 82 Stat. 828; Pub. L. 85–767, 72 Stat. 896; Pub. L. 84–627, 70 Stat. 380; 23 CFR 1.32 and 49 CFR 1.81 and 1.85, and Pub. L. 112–141, 126 Stat. 405, sections 1303 and 1405.

Subpart J—Work Zone Safety and Mobility

2. Revise subpart J of part 630 to read as follows:

Subpart J—Work Zone Safety and Mobility

Sec.

§ 630.1002 Purpose.

Work zones directly impact the safety and mobility of road users and highway workers. These safety and mobility impacts are exacerbated by an aging highway infrastructure and growing congestion in many locations. Addressing these safety and mobility issues requires considerations that start early in project development and continue through project completion. Part 6 of the Manual On Uniform Traffic Control Devices (MUTCD) (incorporated by reference, see § 630.1018) sets forth basic principles and prescribes standards for the design, application, installation, and maintenance of traffic control devices for highway and street construction, maintenance operation, and utility work. In addition to the provisions in the MUTCD, there are other actions that could be taken to further help mitigate the safety and mobility impacts of work zones. This subpart establishes requirements and provides guidance for systematically addressing the safety and mobility impacts of work zones, and developing strategies to help manage these impacts on all Federal-aid highway projects.

§ 630.1004 Definitions and explanation of terms.

As used in this subpart:

Agency means a State or local highway agency or authority that receives Federal-aid highway funding.

Highway workers include, but are not limited to, personnel of the contractor, subcontractor, ~~DOT,~~ agency, utilities, and law enforcement, performing work within the right-of-way of a transportation facility.

Mobility is the ability to move from place to place and is significantly dependent on the availability of transportation facilities and on system operating conditions. With specific reference to work zones, mobility pertains to moving road users efficiently through or around a work zone area with a minimum delay compared to baseline travel when no work zone is present, while not compromising the safety of highway workers or road users. The commonly used performance measures for the assessment of mobility include delay, speed, travel time, and queue lengths.

Safety is a representation of the level of exposure to potential hazards for users of transportation facilities and highway workers. With specific reference to work zones, safety refers to minimizing potential hazards to road users in the vicinity of a work zone and highway workers at the work zone interface with traffic. The commonly used performance measures for highway work zone safety are the number of crashes or the consequences of crashes (fatalities and injuries) at a given location or along a section of highway during a period of time. In terms of ~~H~~highway worker safety performance measures, ~~in work zones refers to the safety of workers at the work zone interface with traffic and the impacts of the work zone design on worker safety. T~~ the number of highway worker fatalities and injuries at a given location or along a section of highway~~,~~ during a period of time are commonly used measures ~~for highway worker safety~~.

State refers to a State department of transportation.

Transportation management plan (TMP) consists of strategies to manage the work zone impacts of a project. Its scope, content, and degree of detail may vary based upon the agency's work zone policy and the agency's understanding of the expected work zone impacts of the project. Refer to § 630.1010(d) and § 630.1012(b) for more information on a TMP and its components.

Work zone is an area of a highway with construction, maintenance, or utility work activities. A work zone is typically marked by signs, channelizing devices, barriers, pavement markings, ~~and/~~or work vehicles. It extends from the first warning sign or high-intensity rotating, flashing, oscillating, or strobe lights on a vehicle to the END ROAD WORK sign or the last temporary traffic control (TTC) device. See MUTCD, Part 6, ''Temporary Traffic Control'' (incorporated elsewhere in this subpart).

Work zone crash is a crash that occurs in or related to a construction, maintenance, or utility work zone, whether or not the workers were actually present at the time of the crash. "Work zone-related" crashes may also include crashes involving motor vehicles slowed or stopped because of the work zone, even if the first harmful event occurred before the first warning sign. ~~means a traffic crash in which the first harmful event occurs within the boundaries of a work zone or on an approach to or exit from a work zone, resulting from an activity, behavior, or control related to the movement of the traffic units through the work zone. This includes crashes occurring on approach to, exiting from or adjacent to work zones that are related to the work zone~~. See ''Model Minimum Uniform Crash Criteria Guideline'' (MMUCC), 5thEd. (Electronic), 2017, produced by NHTSA. Available at the following website: *https://www.nhtsa.gov/mmucc-1.*

Work zone impacts refer to work zone-induced deviations from the normal range of transportation system safety and mobility. The extent of the work zone impacts may vary based on factors such as, road classification and geometrics, area type (urban, suburban, and rural), traffic and travel characteristics (volumes, speeds, vehicle mix and classification etc.), type of work being performed, type of temporary traffic control; distance between workers and traffic; availability of escape paths for workers; time of day/night, and complexity of the project. These impacts may extend beyond the physical location of the work zone itself, including upstream or downstream of the work zone location, ~~and may occur on the roadway on which the work is being performed, as well as~~ other highway corridors, other modes of transportation, and/or the regional transportation network.

Work zone programmatic review is a data-driven, systematic, and holistic analysis that uses quantitative and qualitative data from different sources to assess the safety and mobility performance of work zones under a State's jurisdiction in order to identify improvements to that agency's work zone processes and procedures.

§ 630.1006 Work zone safety and mobility policy.

(a) Each State shall implement a policy for the systematic consideration and management of work zone impacts on all Federal-aid highway projects. This policy shall address work zone impacts throughout the various stages of the project development and implementation process. This policy may take the form of processes, procedures, ~~and/~~or guidance, and may vary based on the characteristics and expected work zone impacts of individual projects or classes of projects. ~~The States should institute this policy using a multi-disciplinary team and in partnership with the FHWA. The States are encouraged to implement this policy for non-Federal-aid projects as well.~~

(b) At a minimum, the policy shall identify safety and mobility performance measures that will be used to manage work zone performance. Examples of such performance measures

include number of fatal and injury crashes occurring in a work zone, percent of projects that exceed a preestablished crash rate in the work zone, number of highway worker fatalities and injuries experienced, highway worker fatality and injury rate per hours worked, percent of projects that experience queues above a predefined threshold, and percent of time when speeds in a work zone drop below a predefined threshold.

(c) The States should institute this policy using a multi-disciplinary team and in cooperation with the Federal Highway Administration (FHWA). The States are encouraged to implement this policy for non-Federal-aid projects as well.

§ 630.1008 State-level processes and procedures.

(a) This section consists of State-level processes and procedures for States to implement and sustain their respective work zone safety and mobility policies. State-level processes and procedures, data and information resources, training, and periodic evaluation enable a systematic approach for addressing and managing the safety and mobility impacts of work zones.

(b) ***Work zone assessment and management procedures.*** States ~~should~~ shall develop and implement systematic procedures to assess likely work zone impacts to all highway workers and anticipated road users in project development~~,~~ and to manage safety and mobility impacts occurring during project implementation. The scope of these procedures shall be based on the project characteristics.

(c) ***Work zone data.*** States shall use field observations, available work zone crash data, available safety surrogate data, ~~and~~ available operational information, and available exposure data to monitor and manage work zone impacts for specific projects during implementation and to perform its work zone programmatic reviews. Examples of crash data include fatalities, injuries, and crashes; examples of safety surrogate data include speed differentials, hard braking, and other data from connected and autonomous vehicles; examples of available operational information include speeds, travel times, queue length, and duration; and examples of exposure data include number of projects, number and length of lane closures, and vehicle miles traveled through work zones. ~~States shall continually pursue improvement of work zone safety and mobility by analyzing work zone crash and operational data from multiple projects to improve State processes and procedures. States should maintain elements of the data and information resources that are necessary to support these activities.~~

(d) ***Training.*** States shall require that personnel involved in the development, design, implementation, operation, inspection, and enforcement of work-zone related transportation management and traffic control be trained, appropriate to the job decisions each individual is

required to make. States shall require periodic training updates that reflect changing industry practices and State processes and procedures.

(e) ~~***Process review.***~~***Work zone programmatic review.*** In order to assess the effectiveness of work zone safety and mobility processes and procedures, ~~the~~ States shall perform a ~~process~~ work zone programmatic review ~~at least every two~~ every 5 years and share that review with FHWA by the end of the 5-year review period. ~~This review may include the evaluation of work zone data at the State level, and/or review of randomly selected projects throughout their jurisdictions. Appropriate personnel who represent the project development stages and the different offices within the State, and the FHWA should participate in this review. Other non-State stakeholders may also be included in this review, as appropriate. The results of the review are intended to lead to improvements in work zone processes and procedures, data and information resources, and training programs so as to enhance efforts to address safety and mobility on current and future projects.~~

(1) The work zone programmatic review shall include a data-driven assessment of the safety and mobility performance of the State's work zones. At a minimum, this review shall include a representative sample of the State's significant work zones over the 5-year period being reviewed. The approach used for selecting the representative projects shall be documented and should be based on factors such as land use (urban and rural locations), roadway type, type of work zone, and extent of the work zone impacts.

(2) Each programmatic review shall include an assessment of the work zone safety and mobility performance occurring since the last review was performed, systematic identification and assessment of the States' work zone management processes and procedures to be improved, action items to be taken to achieve improvement, State divisions or offices responsible for implementing the actions, and estimated timeline for implementation.

(3) States shall use available crash data, available safety surrogate data, available operational data, and the performance measures specified in their work zone policy to conduct the assessment. Section 630.1008(c) provides example performance measures for each data source listed in this section. To ensure assessment of the safety and mobility performance of their work zones on a continuous basis, States shall monitor performance annually.

(4) The work zone programmatic review shall include examination of efforts across State divisions or offices affecting work zone safety and mobility management, including but not limited to: project planning, project design, project implementation, maintenance activities, transportation operations and management, permitting (*e.g.,* utilities, oversize/overweight, lane closures, sidewalk closures), training, and public information and outreach.

(5) Appropriate personnel who represent the project development and implementation stages and the different offices within the State and FHWA should participate in this review. Other non-State stakeholders may also be included in this review, as appropriate.

§ 630.1010 Significant projects.

(a) A significant project is one that, alone or in combination with other concurrent projects nearby, is anticipated to cause sustained work zone impacts (as defined in § 630.1004) that are greater than what is considered tolerable based on State policy and/or engineering judgment.

(b) The applicability of the provisions in §§ 630.1012(b)(2) and 630.1012(b)(3) is dependent upon whether a project is determined to be significant. The State shall identify upcoming projects that are expected to be significant. This identification of significant projects should be done as early as possible in the project delivery and development process, and in cooperation with ~~the~~ FHWA. The State's work zone policy provisions, the project's characteristics, and the magnitude and extent of the anticipated work zone impacts should be considered when determining if a project is significant or not.

(c) All Interstate system projects within the boundaries of a designated Transportation Management Area (TMA) that ~~occupy a location for more than three days with either~~ require intermittent or continuous lane closures for 3 or more consecutive days shall be considered as significant projects.

(d) For an Interstate system project or categories of Interstate system projects that are classified as significant through the application of the provisions in paragraph (c) ~~§ 630.1010(c),~~ of this section but in the judgment of the State ~~they~~ do not cause sustained work zone impacts, the State may request from the FHWA, an exception to §§ 630.1012(b)(2) and 630.1012(b)(3). The FHWA may grant e~~E~~xceptions to these provisions ~~may be granted by the FHWA~~ based on the State's ability to show that the specific Interstate system project or categories of Interstate system projects do not have sustained work zone impacts.

(e) Non-interstate system projects with less than 3 consecutive days of intermittent or continuous lane closures do not require the transportation operations (TO) or public information and outreach (PIO) components of a TMP (as described in § 630.1012(b)).

§ 630.1012 Project-level procedures.

(a) This section provides guidance and establishes procedures for States to manage the work zone impacts of individual projects.

(b) ***Transportation Management Plan (TMP).*** ~~A TMP consists of strategies to manage the work zone impacts of a project. Its scope, content, and degree of detail may vary based upon the State's work zone policy, and the State's understanding of the expected work zone impacts of~~

~~the project.~~ For significant projects (as defined in § 630.1010), the State shall develop a TMP that consists of a ~~Temporary Traffic Control (~~TTC~~)~~ plan and addresses both ~~Transportation Operations (~~TO~~)~~ and ~~Public Information (~~PI~~)~~ O components. For individual projects or classes of projects that the State determines to have less than significant work zone impacts, the TMP may consist only of a TTC plan. States are encouraged to consider TO and PIO issues for all projects.

(1) A TTC plan describes TTC measures to be used for facilitating road users through a work zone or an incident area. The TTC plan ~~plays a vital role in providing continuity of reasonably safe and efficient road user flow and highway worker safety when a work zone, incident, or other event temporarily disrupts normal road user flow. The TTC plan~~ shall be consistent with the provisions under Part 6 of the MUTCD (incorporated by reference, see § 630.1018). ~~and with the work zone hardware recommendations in Chapter 9 of the American Association of State Highway and Transportation Officials (AASHTO) Roadside Design Guide. Chapter 9 of the AASHTO Roadside Design Guide: "Traffic Barriers, Traffic Control Devices, and Other Safety Features for Work Zones" 2002, is incorporated by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51 and is on file at the National Archives and Record Administration (NARA). For information on the availability of this material at NARA call (202) 741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. The entire document is available for purchase from the American Association of State Highway and Transportation Officials (AASHTO), 444 North Capitol Street, NW., Suite 249, Washington, DC 20001 or at the URL: http://www.aashto.org/bookstore. It is available for inspection from the FHWA Washington Headquarters and all Division Offices as listed in 49 CFR part 7.~~ In developing and implementing the TTC plan, pre-existing roadside safety hardware shall be maintained at an equivalent or better level than existed prior to project implementation. The scope of the TTC plan is determined by the project characteristics, and the traffic safety and control requirements identified by the State for that project. The TTC plan shall either be a reference to specific TTC elements in the MUTCD, approved standard TTC plans, State transportation department TTC manual, or be designed specifically for the project.

(2) The TO component of the TMP shall include the identification of strategies that the State will ~~be~~ use~~d~~ to mitigate impacts of the work zone on the operation and management of the transportation system within the work zone impact area. Typical TO strategies may include, but are not limited to, demand management, corridor/network management, safety management and enforcement, and work zone traffic management. The scope of the TO component should be determined by the project characteristics, and the transportation operations and safety strategies identified by the State.

(3) The PIO component of the TMP shall include communications strategies that seek to inform affected road users, the general public, area residences and businesses, and appropriate public

entities about the project, the expected work zone impacts, and the changing conditions on the project. This may include traveler information strategies. The scope of the PIO component should be determined by the project characteristics and the public information and outreach strategies identified by the State. Public information and outreach should be provided through methods best suited for the project, and may include, but not be limited to, information on the project characteristics, expected impacts, closure details, and commuter alternatives.

(4) States should develop and implement the TMP in sustained consultation with stakeholders (e.g., other transportation agencies, railroad agencies/operators, transit providers, freight movers, utility suppliers, police, fire, emergency medical services, schools, business communities, and regional transportation management centers).

(c) *Inclusion of TMP in Plans, Specification, and Estimates.* The Plans, Specifications, and Estimates (PS&Es) shall include either a TMP or provisions for contractors to develop a TMP at the most appropriate project phase as applicable to the State's chosen contracting methodology for the project. A contractor-developed TMP shall be subject to the approval of the State, and shall not be implemented before it is approved by the State.

(d) *Inclusion of Pay Item Provisions in Plans, Specification, and Estimates.* The PS&Es shall include appropriate pay item provisions for implementing the TMP, either through method- or performance-based specifications.

~~(1) For method-based specifications individual pay items, lump sum payment, or a combination thereof may be used.~~

~~(2) For performance based specifications, applicable performance criteria and standards may be used (e.g., safety performance criteria such as number of crashes within the work zone; mobility performance criteria such as travel time through the work zone, delay, queue length, traffic volume; incident response and clearance criteria; work duration criteria).~~

(e) ***Responsible persons.*** The State and the contractor shall each designate a trained person, as specified in § 630.1008(d), at the project level who has the primary responsibility and sufficient authority for implementing the TMP and other safety and mobility aspects of the project.

§ 630.1014 Implementation.

Each State shall work in ~~partnership~~ cooperation with the FHWA in the implementation of its policies and procedures to improve work zone safety and mobility. At a minimum, this shall involve an FHWA review of conformance of the State's policies and procedures with this regulation and reassessment of the State's implementation of its procedures at appropriate intervals. Each State is encouraged to address implementation of this regulation in its stewardship agreement with the FHWA.

§ 630.1016 Compliance date.

States shall comply with all the provisions of this rule no later than ~~October 12, 2007~~ December 31, 2026. The next work zone programmatic review will be due December 31, 2030. For projects that are in the later stages of development at or about the compliance date, and if it is determined that the delivery of those projects would be significantly impacted as a result of this rule's provisions, States may request variances for those projects from the FHWA, on a project-by-project basis.

§ 630.1018 Incorporation by reference.

Certain material is incorporated by reference into this subpart with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. All approved incorporation by reference (IBR) material is available for inspection at FHWA and at the National Archives and Records Administration (NARA). Contact FHWA at: Federal Highway Administration, Office of Transportation Operations, 1200 New Jersey Avenue SE, Washington, DC 20590; phone: (202) 366–8043; website: ops.fhwa.dot.gov/ contactus.htm. For information on the availability of this material at NARA, visit www.archives.gov/federal-register/ cfr/ibr-locations or email fr.inspection@nara.gov. The material may be obtained from the following sources: (a) FHWA, Federal Highway Administration, 1200 New Jersey Avenue SE, Washington, DC 20590; phone: (202) 366–1993; website: mutcd.fhwa.dot.gov. (1) Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), 11th Edition, FHWA, December 2023; approved for §§ 630.1002; 630.1012. (2) [Reserved] (b) [Reserved]

Subpart K—Temporary Traffic Control

Devices

■ 3. Revise subpart K of part 630 to read

as follows:

Subpart K—Temporary Traffic Control

Devices

Sec.

630.1110 Maintenance of temporary traffic control devices.

630.1112 Compliance date.

§ 630.1102 Purpose.

To decrease the likelihood of highway work zone fatalities and injuries to workers and road users by establishing minimum requirements and providing guidance for the use of positive protection devices between the work space and motorized traffic, installation and maintenance of temporary traffic control devices, and use of uniformed law enforcement officers during construction, utility, and maintenance operations, and by requiring contract pay items to ensure the availability of funds for these provisions. This subpart is applicable to all Federal-aid highway projects, and its application is encouraged on other highway projects as well.

§ 630.1104 Definitions.

For the purposes of this subpart, the following definitions apply:

Agency means a State or local highway agency or authority that receives Federal-aid highway funding.

Exposure ~~C~~ ~~c~~ontrol ~~M~~ measures means traffic management strategies to avoid work zone crashes involving workers and motorized traffic by eliminating or reducing traffic through the work zone, or diverting traffic away from the work space.

Federal-aid ~~H~~ highway ~~P~~ project means highway construction, maintenance, and utility projects funded in whole or in part with Federal-aid funds.

Motorized ~~T~~ traffic means the motorized traveling public. This term does not include motorized construction or maintenance vehicles and equipment within the work space.

Other ~~T~~ traffic ~~C~~ control ~~M~~ measures means all strategies and temporary traffic controls other than Positive Protection Devices and Exposure Control Measures, but including uniformed law enforcement officers, used to reduce the risk of work zone crashes involving motorized traffic.

Engineering study means the analysis and evaluation of available pertinent information, and the application of appropriate principles, provisions, and practices for the purpose of determining the choice and application of work zone positive protection devices, exposure control measures, or other traffic control measures to safely manage work zones.

Positive Protection Devices means devices that contain ~~and/~~or redirect vehicles and meet the crashworthiness evaluation criteria. Industry crashworthiness evaluation criteria are not regulatory and use of them is voluntary and not required by law. ~~contained in National~~

~~Cooperative Highway Research Program (NCHRP) Report 350, Recommended Procedures for the Safety Performance Evaluation of Highway Features, 1993, Transportation Research Board, National Research Council. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. This document is available for inspection and copying at FHWA, 1200 New Jersey Avenue, SE., Washington, DC 20590, as provided in 49 CFR part 7. You may also inspect a copy at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741 6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.~~

~~*Work Zone Safety Management* means the entire range of traffic management and control and highway safety strategies and devices used to avoid crashes in work zones that can lead to worker and road user injuries and fatalities, including Positive Protection Devices, Exposure Control Measures, and Other Traffic Control Measures.~~

§ 630.1106 Policy and procedures for work zone safety management.

(a) Each agency's policy and processes, procedures, ~~and/~~or guidance for the systematic consideration and management of work zone impacts, to be established in accordance with ~~23 CFR 630.1006~~, §630.1006, shall include the consideration and management of road user and worker safety on Federal-aid highway projects. These processes, procedures, and/or guidance, to be developed in ~~partnership with the~~ cooperation with the Federal Highway Administration (FHWA), shall address the use of Positive Protection Devices to prevent the intrusion of motorized traffic into the work space and other potentially hazardous areas in the work zone; Exposure Control Measures to avoid or minimize worker exposure to motorized traffic and road user exposure to work activities; Other Traffic Control Measures including uniformed law enforcement officers to minimize work zone crashes; and the safe entry/exit of work vehicles onto/from the travel lanes. Each of these strategies should be used to the extent that they are possible, practical, and adequate to manage work zone exposure and reduce the risks of crashes resulting in fatalities or injuries to workers and road users.

(b) Agency processes, procedures, ~~and/~~or guidance should be based on consideration of standards ~~and/~~or guidance contained in the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), ~~and the AASHTO Roadside Design Guide,~~ as well as project characteristics and factors. The strategies and devices to be used may be determined by a project-specific engineering study, or determined from agency guidelines developed from an engineering study that indicates when positive protection devices or other ~~that define~~ strategies and approaches are to be used based on project and highway characteristics and factors. An engineer, or an individual working under the supervision of an engineer shall perform an engineering study through the application of procedures and criteria established by the

engineer. The person conducting the engineering study shall document such study. Benefit-cost analyses, decision matrices, decision tree analysis, or other appropriate engineering decision-making tools may be used in the engineering study. The types of measures and strategies to be used are not mutually exclusive, and should be considered in combination as appropriate based on characteristics and factors such as those listed below:

(1) Project scope and duration;

(2) Anticipated operating conditions including traffic volume, vehicle mix, and ~~traffic~~ speeds through the work zone;

(3) Anticipated traffic ~~volume~~ safety impacts;

~~(4) Vehicle mix;~~

(4) Type of work (as related to worker exposure and crash risks);

(5) Distance between traffic and workers, and extent of worker exposure;

(6) Escape paths available for workers to avoid a vehicle intrusion into the work space;

(7) Time of day (e.g., night work);

(8) Work area restrictions (including impact on worker exposure);

(9) Consequences from/to road users resulting from roadway departure;

(10) Potential hazard to workers and road users presented by device itself and during device placement and removal;

(11) Geometrics that may increase crash risks (e.g., poor sight distance, sharp curves);

(12) Access to/from work space;

(13) Roadway classification; and

(14) Impacts on project cost and duration.

(c) ~~Uniformed Law Enforcement Policy.~~ Each agency, in partnership with ~~the~~ FHWA, shall develop a policy addressing the use of uniformed law enforcement on Federal-aid highway projects. The policy may consist of processes, procedures, and/or guidance. The processes, procedures, ~~and/~~or guidance should address the following:

(1) Basic interagency agreements between the highway agency and appropriate law enforcement agencies to address work zone enforcement needs;

(2) Interaction between highway and law-enforcement agency during project planning and development;

(3) Conditions where law enforcement involvement in work zone traffic control may be needed or beneficial, and criteria to determine the project-specific need for law enforcement;

(4) General nature of law enforcement services to be provided, and procedures to determine project-specific services;

(5) Appropriate work zone safety and mobility training for the officers, consistent with the training requirements in ~~23 CFR 630.1008(d);~~ § 630.1008 (d);

(6) Procedures for interagency and project-level communications between highway agency and law enforcement personnel; and

(7) Reimbursement agreements for law enforcement service.

§ 630.1108 Work zone safety management measures and strategies.

(a) ***Positive Protection Devices.*** At a minimum, agencies shall use positive protection devices in work zones with high anticipated operating speeds that provide workers no means of escape from motorized traffic intruding into the workspace unless ~~The need for longitudinal traffic barrier and other positive protection devices shall be based on~~ an engineering study determines otherwise. ~~The engineering study may be used to develop positive protection guidelines for the agency, or to determine the measures to be applied on an individual project. The engineering study should be based on consideration of the factors and characteristics described in section 630.1106(b). At a minimum, p~~ Positive protection devices shall be considered in ~~work zone~~ other situations that place workers at increased risk from motorized traffic, and where positive protection devices offer the highest potential for increased safety for workers and road users, such as:

(1) Work zones that provide workers no means of escape from motorized traffic (e.g., tunnels, bridges, etc.);

(2) Long duration work zones (e.g., two weeks or more) resulting in substantial worker exposure to motorized traffic;

(3) Projects with high anticipated operating speeds (e.g., 45 mph or greater), especially when combined with high traffic volumes;

(4) Work operations that place workers close (e.g., within one lane width) to travel lanes open to traffic; and

(5) Roadside hazards, such as drop-offs or unfinished bridge decks, that will remain in place overnight or longer.

(b) ***Exposure Control Measures.*** Exposure ~~C~~ control ~~M~~ measures should be considered where appropriate to avoid or minimize worker exposure to motorized traffic and exposure of road users to work activities, while also providing adequate consideration to the potential impacts on mobility. A wide range of measures may be appropriate for use on individual projects, such as:

(1) Full road closures;

(2) Ramp closures;

(3) Median crossovers;

(4) Full or partial detours or diversions;

(5) Protection of work zone setup and removal operations using rolling road blocks;

(6) Performing work at night or during off-peak periods when traffic volumes are lower; and

(7) Accelerated construction techniques.

(c) ***Other ~~T~~ traffic ~~C~~ control ~~M~~ measures.*** Other ~~T~~ traffic ~~C~~ control ~~M~~ measures should be given appropriate consideration for use in work zones to reduce work zone crashes and risks and consequences of motorized traffic intrusion into the work space. These measures, which are not mutually exclusive and should be considered in combination as appropriate, include a wide range of other traffic control measures such as:

(1) Effective, credible signing;

(2) Changeable message signs;

(3) Arrow panels;

(4) Warning flags and lights on signs;

(5) Longitudinal and lateral buffer space;

(6) Trained flaggers and spotters;

(7) Enhanced flagger station setups or use of automated flagger assistance devices (AFADs);

(8) Intrusion alarms;

(9) Rumble strips;

(10) Pace or pilot vehicle;

(11) High quality work zone pavement markings and removal of misleading markings;

(12) Channelizing device spacing reduction;

(13) Longitudinal channelizing barricades;

(14) Work zone speed management (including changes to the regulatory speed ~~and/~~or variable speed limits);

(15) Law enforcement;

(16) ~~Automated speed enforcement~~ Speed Safety Cameras (where permitted by State/local laws);

(17) Drone radar;

(18) Worker and work vehicle/equipment visibility;

(19) Worker training;

(20) Public information and traveler information;~~ and~~

(21) Temporary traffic signals.

(22) Protection or shadow vehicles used to protect workers and equipment from impacts by errant vehicles; and

(23) Intelligent Transportation Systems (ITS) and other advanced technology solutions and strategies.

(d) ***Uniformed ~~L~~ law ~~E~~ enforcement ~~O~~ officers.***

(1) A number of conditions may indicate the need for or benefit of uniformed law enforcement in work zones. The presence of a uniformed law enforcement officer and marked law enforcement vehicle in view of motorized traffic on a highway project can affect driver behavior, helping to maintain appropriate speeds and improve driver alertness through the work zone. However, such law enforcement presence is not a substitute for the temporary traffic control devices required by Part 6 of the MUTCD. In general, the need for law enforcement is greatest on projects with high traffic speeds and volumes, and where the work zone is expected to result in substantial disruption to or changes in normal traffic flow patterns. Specific project conditions should be examined to determine the need for or potential benefit of law enforcement, such as the following:

(i) Frequent worker presence adjacent to high-speed traffic without positive protection devices;

(ii) Traffic control setup or removal that presents significant risks to workers and road users;

(iii) Complex or very short term changes in traffic patterns with significant potential for road user confusion or worker risk from traffic exposure;

(iv) Night work operations that create substantial traffic safety risks for workers and road users;

(v) Existing traffic conditions and crash histories that indicate a potential for substantial safety and congestion impacts related to the work zone activity, and that may be mitigated by improved driver behavior and awareness of the work zone;

(vi) Work zone operations that require brief stoppage of all traffic in one or both directions;

(vii) High-speed roadways where unexpected or sudden traffic queuing is anticipated, especially if the queue forms a considerable distance in advance of the work zone or immediately adjacent to the work space; and

(viii) Other work site conditions where traffic presents a high risk for workers and road users, such that the risk may be reduced by improving road user behavior and awareness.

(2) Costs associated with the provision of uniformed law enforcement to help protect workers and road users, and to maintain safe and efficient travel through highway work zones, are eligible for Federal-aid participation. Federal-aid eligibility excludes law enforcement activities that would normally be expected in and around highway problem areas requiring routine or ongoing law enforcement traffic control and enforcement activities. Payment for the services of uniformed law enforcement in work zones may be included in the construction contract, or be provided by direct reimbursement from the highway agency to the law enforcement agency. When payment is included through the construction contract, the contractor will be responsible for reimbursing the law enforcement agency, and in turn will recover those costs through contract pay items. Direct interagency reimbursement may be made on a project-specific basis, or on a program-wide basis that considers the overall level of services to be provided by the law enforcement agency. Contract pay items for law enforcement service may be either unit price or lump sum items. Unit price items should be utilized when the highway agency can estimate and control the quantity of law enforcement services required on the project. The use of lump sum payment should be limited to situations where the quantity of services is directly affected by the contractor's choice of project scheduling and chosen manner of staging and performing the work. Innovative payment items may also be considered when they offer an advantage to both the highway agency and the contractor. When reimbursement to the law enforcement agency is made by interagency transfer of funds, the highway agency should establish a program-level or project-level budget that is adequate to meet anticipated program or project needs, and include provisions to address unplanned needs and other contingencies.

(e) ***Work ~~V~~ vehicles and ~~E~~ equipment.*** In addition to addressing risks to workers and road users from motorized traffic, the agency processes, procedures, and~~/or~~ guidance established in

accordance with ~~23 CFR 630.1006~~ §630.1006 should also address safe means for work vehicles and equipment to enter and exit traffic lanes and for delivery of construction materials to the work space, based on individual project characteristics and factors.

(f) ***Payment for ~~T~~ traffic ~~C~~ control.*** Consistent with the requirements of ~~23 CFR 630.1012~~ §630.1012, Project-level Procedures, project plans, specifications and estimates (PS&Es) shall include appropriate pay item provisions for implementing the project Transportation Management Plan (TMP), which includes a Temporary Traffic Control (TTC) plan, either through method or performance-based specifications. Pay item provisions include, but are not limited to, the following:

(1) Payment for work zone traffic control features and operations shall not be incidental to the contract, or included in payment for other items of work not related to traffic control and safety;

(2) As a minimum, separate pay items shall be provided for major categories of traffic control devices, safety features, and work zone safety activities, including but not limited to positive protection devices, and uniformed law enforcement activities when funded through the project;

(3) For method based specifications, the specifications and other PS&E documents should provide sufficient details such that the quantity and types of devices and the overall effort required to implement and maintain the TMP can be determined;

(4) For method-based specifications, unit price pay items, lump sum pay items, or a combination thereof may be used;

(5) Lump sum payment should be limited to items for which an estimate of the actual quantity required is provided in the PS&E or for items where the actual quantity required is dependent upon the contractor's choice of work scheduling and methodology;

(6) For Lump Sum items, a contingency provision should be included such that additional payment is provided if the quantity or nature of the required work changes, either an increase or decrease, due to circumstances beyond the control of the contractor;

(7) Unit price payment should be provided for those items over which the contractor has little or no control over the quantity, and no firm estimate of quantities is provided in the PS&Es, but over which the highway agency has control of the actual quantity to be required during the project;

(8) Specifications should clearly indicate how placement, movement/relocation, and maintenance of traffic control devices and safety features will be compensated; and

(9) The specifications should include provisions to require and enforce contractor compliance with the contract provisions relative to implementation and maintenance of the project TMP and related traffic control items. Enforcement provisions may include remedies such as liquidated damages, work suspensions, or withholding payment for noncompliance.

§ 630.1110 Maintenance of temporary traffic control devices.

To provide for the continued effectiveness of temporary traffic control devices, each agency shall develop and implement quality guidelines to help maintain the quality and adequacy of the temporary traffic control devices for the duration of the project. Agencies may choose to adopt existing quality guidelines such as those developed by the American Traffic Safety Services Association (ATSSA) or other state highway agencies. A level of inspection necessary to provide ongoing compliance with the quality guidelines shall be provided.

§ 630.1102 Compliance Date.

States shall update their policy no later than December 31, 2025, and implement the policy no later than December 31, 2026. For projects that are in the later stages of development at or about the compliance date, and if it is determined that the delivery of those projects would be significantly impacted as a result of this rule's provisions, States may request variances for those projects from FHWA on a project-by-project basis.