

608; E.O. 12938, 59 FR 59099, 3 CFR, 1994 Comp., p. 950; E.O. 13026, 61 FR 58767, 3 CFR, 1996 Comp., p. 228; E.O. 13099, 63 FR 45167, 3 CFR, 1998 Comp., p. 208; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; E.O. 13224, 66 FR 49079, 3 CFR, 2001 Comp., p. 786; Notice of November 8, 2022, 87 FR 68015, 3 CFR, 2022 Comp., p. 563; Notice of September 18, 2024, 89 FR 77011 (September 20, 2024).

■ 2. Section 744.11 is amended by revising the first sentence of paragraph (a)(2)(i) and the first sentence of paragraph (a)(2)(iv) to read as follows:

§ 744.11 License requirements that apply to entities acting or at significant risk of acting contrary to the national security or foreign policy interests of the United States.

* * * * *

- (a) * * *
- (2) * * *

(i) *Footnote 1 entities.* You may not, without a license or license exception, reexport, export from abroad, or transfer (in-country) to or within any destination or to any end user or party any foreign-produced item subject to the EAR pursuant to § 734.9(e)(1) of the EAR.

* * * * *

(iv) *Footnote 4 entities.* You may not, without a license, reexport, export from abroad, or transfer (in-country) to or within any destination or to any end user or party any foreign-produced item subject to the EAR pursuant to § 734.9(e)(2) of the EAR.

* * * * *

PART 746—EMBARGOES AND OTHER SPECIAL CONTROLS

■ 3. The authority citation for 15 CFR part 746 continues to read as follows:

Authority: 50 U.S.C. 4801–4852; 50 U.S.C. 4601 *et seq.*; 50 U.S.C. 1701 *et seq.*; 22 U.S.C. 287c; Sec 1503, Pub. L. 108–11, 117 Stat. 559; 22 U.S.C. 2151 note; 22 U.S.C. 6004; 22 U.S.C. 7201 *et seq.*; 22 U.S.C. 7210; E.O. 12854, 58 FR 36587, 3 CFR, 1993 Comp., p. 614; E.O. 12918, 59 FR 28205, 3 CFR, 1994 Comp., p. 899; E.O. 13222, 66 FR 44025, 3 CFR, 2001 Comp., p. 783; E.O. 13338, 69 FR 26751, 3 CFR, 2004 Comp., p. 168; Presidential Determination 2003–23, 68 FR 26459, 3 CFR, 2004 Comp., p. 320; Presidential Determination 2007–7, 72 FR 1899, 3 CFR, 2006 Comp., p. 325; Notice of May 8, 2024, 89 FR 40355 (May 9, 2024).

■ 4. Section 746.8 is amended by:

- a. Revising paragraphs (a)(3), (a)(12)(ii)(D) and (E);
- b. Adding paragraph (a)(12)(ii)(F);
- c. Revising paragraphs (b)(3)(vi)(D) and (E);
- d. Adding paragraph (b)(3)(vi)(F); and
- e. Revising paragraph (c)(2)(vi).

The additions and revisions read as follows:

§ 746.8 Sanctions against Russia and Belarus.

- (a) * * *

(3) *Russia/Belarus-Military End User and Procurement FDP rule.* A license is required to reexport, export from abroad, or transfer (in-country) to or within any destination or to any end user or party any foreign-produced item subject to the EAR under § 734.9(g) of the EAR.

* * * * *

- (12) * * *
- (ii) * * *

(D) Wholly owned subsidiaries, branches, or sales offices of companies headquartered in countries from Country Group A:5 and A:6 in supplement no. 1 to part 740;

(E) Joint ventures between two or more companies headquartered in Country Group A:5 and A:6 in supplement no. 1 to part 740, including the wholly owned subsidiaries, branches, or sales offices of such joint ventures; or

(F) For official business of diplomatic or consular missions of the governments of Country Group A:5 and A:6 destinations.

* * * * *

- (b) * * *
- (3) * * *
- (vi) * * *

(D) The wholly owned subsidiaries, branches, or sales offices of companies headquartered in countries from Country Group A:5 and A:6 in supplement no. 1 to part 740;

(E) Joint ventures of companies headquartered in Country Groups A:5 and A:6 with other companies headquartered in Country Groups A:5 and A:6; or

(F) For official business of governments of Country Group A:5 and A:6 destinations.

(vii) Applications for companies headquartered in Country Groups A:5 and A:6 to support civil telecommunications infrastructure.

* * * * *

- (c) * * *
- (2) * * *

(vi) License Exception Encryption commodities, software, and technology (ENC) for civil end-users that are wholly-owned U.S. subsidiaries, branches, or sales offices; foreign subsidiaries, branches, or sales offices of U.S. companies that are joint ventures with other U.S. companies; joint ventures of U.S. companies with companies headquartered in countries from Country Group A:5 and A:6 in supplement no. 1 to part 740 of the EAR countries; the wholly-owned

subsidiaries, branches, or sales offices of companies headquartered in countries from Country Group A:5 and A:6 in supplement no. 1 to part 740; joint ventures of companies headquartered in Country Group A:5 and A:6 with other companies headquartered in Country Groups A:5 and A:6; or for official business of diplomatic or consular missions of the governments of Country Group A:5 and A:6 destinations (§§ 740.13(c) and 740.17 of the EAR).

■ 5. Supplement no. 6 to part 746 is amended by adding paragraph (i) to read as follows:

Supplement No. 6 to Part 746—Russian and Belarusian Industry Sector Sanctions Pursuant to § 746.8(a)(6)

(i) Pre-cursors for riot control agents and chloropicrin as follows:

- (1) Malononitrile (CAS 109–77–3);
- (2) 2-Chlorobenzaldehyde (CAS 89–98–5);
- (3) 2-Chlorobenzyl Alcohol (CAS 17849–38–6);
- (4) 2-Chlorobenzylamine (CAS 89–97–4);
- (5) Benzene, 1-chloro-2-(dimethoxymethyl) (CAS 70380–66–4);
- (6) Acetophenone (CAS 98–86–2);
- (7) Chloroacetyl Chloride (CAS 79–04–9);
- (8) Chloroform (CAS 67–66–3); and
- (9) o-Aminophenol (CAS 95–55–6).

Matthew S. Borman,

Principal Deputy Assistant Secretary for Strategic Trade and Technology Security.

[FR Doc. 2024–25445 Filed 10–30–24; 8:45 am]

BILLING CODE 3510–JT–P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

23 CFR Part 630

[Docket No. FHWA–2022–0017]

RIN 2125–AG05

Work Zone Safety and Mobility and Temporary Traffic Control Devices

AGENCY: Federal Highway Administration (FHWA), U.S. Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FHWA amends its regulations that govern traffic safety and mobility in highway and street work zones. The FHWA recognizes that increasing road construction activity on our highways can lead to travel disruptions which could potentially result in congestion and crashes, as well as loss in productivity and public frustration with work zones. The changes will facilitate consideration of the broader safety and mobility impacts of work zones in a more coordinated

and comprehensive manner across project development stages.

DATES: This final rule is effective December 2, 2024. The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of December 2, 2024.

FOR FURTHER INFORMATION CONTACT: Mr. Jawad Paracha, Office of Transportation Operations (HOTO-1), (202) 366-4628, or via email at Jawad.Paracha@dot.gov, or Mr. William Winne, Office of the Chief Counsel (HCC-30), (202) 366-1379, or via email at William.Winne@dot.gov. Office hours are from 8:00 a.m. to 4:30 p.m., E.T., Monday through Friday, except Federal holidays.

SUPPLEMENTARY INFORMATION:

Electronic Access and Filing

This document, the Notice of Proposed Rulemaking (NPRM), and all comments received may be viewed online through the Federal eRulemaking portal at www.regulations.gov using the docket number listed above. Electronic retrieval help and guidelines are also available at www.regulations.gov. An electronic copy of this document may also be downloaded from the Office of the Federal Register's website at www.FederalRegister.gov and the U.S. Government Publishing Office's website at www.GovInfo.gov.

Background

The principal mission of DOT is to ensure America has the safest, most efficient, and modern transportation system in the world. This system boosts our economic productivity and global competitiveness and enhances the quality of life in communities both rural and urban. We depend on transportation for access to jobs, to enable us to conduct our business, to supply us with services and goods, and to facilitate our leisure and recreational activities. The Department's mission is accomplished through strategic goals pertaining to safety, economic strength and global competitiveness, equity, climate and sustainability, transformation, and organizational excellence.

An efficient and well-maintained roadway network is a critical component of our overall transportation system. Our roadway network must be continuously monitored and repaired to keep it functioning. Periodically, roadways must also be rehabilitated, reconstructed, or otherwise improved. Work zones are a necessary part of maintaining and upgrading our aging roadway infrastructure. The FHWA strongly encourages that work zones be implemented and maintained as safely

as possible, and with the least possible amount of travel disruption. Doing so directly supports DOT's safety strategic goal, facilitates the movement of people and goods while work occurs on our highways, and is essential for maintaining economic strength and global competitiveness. Similarly, effective work zone management also ensures that work zone impacts do not unduly burden any one user group, and that appropriate efforts are taken to mitigate the differential impacts caused by work zones. Congestion generated by work zones contributes to vehicular pollution; reducing congestion undoubtedly supports DOT goals pertaining to climate and sustainability. Continuous development and support of new technologies, strategies, and uses of new sources of data for work zone management relate directly to the Department's transformation and organizational excellence goals.

Subpart J—Work Zone Safety and Mobility Overview

Over the last two decades, significant strides have been made in managing work zone safety and mobility, with States establishing overarching work zone safety and mobility policies and implementing processes to better understand and manage work zone impacts (e.g., implementing processes for significant projects, applying intelligent technologies for work zone operations, measuring work zone performance). However, opportunities still exist to improve the consistency and continuity of work zone management practices across States, including proactively monitoring and managing work zone impacts of projects during implementation and leveraging available data sources for data-driven work zone performance reviews. Work zones continue to have significant safety and mobility impacts on our transportation system, which are further expected to increase due to increased road construction and rehabilitation projects funded by the Bipartisan Infrastructure Law (BIL). Further, Congress, through the BIL, required FHWA to update the process review and significant projects sections.

In light of the above, FHWA published an NPRM on September 20, 2023, at 88 FR 64836, to update Subpart J to meet current and future work zone management needs while also making the subpart compliant with the BIL. The key changes proposed in the NPRM included: incorporating safety and mobility performance measures in States' work zone policies; increasing the reporting interval for work zone process reviews from 2 to 5 years (as per

the BIL) and reframing process reviews to programmatic reviews; clarifying certain unclear terms; and clarifying the significant projects and associated Transportation Management Plan (TMP) criteria for Interstate and non-Interstate projects (as per the BIL).

Several States, a few trade associations, and some private industry representatives provided responses to the NPRM. Most State department of transportation (State DOT) commenters agreed with the intent and concepts proposed in the NPRM but they recommended revisions to minimize regulatory burden, increase flexibility and scalability, and make the provisions more practical to apply in the field. States also noted that some of the terms used in the proposed rule were ambiguous and lent themselves to subjective interpretation, and asked for clarification on the compliance dates. In this final rule, FHWA has addressed the comments received in response to the NPRM that are within the scope of this rulemaking. The regulation addresses the comments related to flexibility and scalability of provisions; revises, eliminates, or clarifies ambiguous terms pointed out by the commenters; and clarifies compliance timeframes.

The final rule revises §§ 630.1004, 630.1006, 630.1008, 630.1010, 630.1012, 630.1014, and 630.1016 of the existing rule published in 2004 to clarify certain aspects of the regulation and to update and provide additional emphasis on certain elements. The regulation will enhance the current state of practice in work zone management by promoting data-driven assessment of work zone performance, motivating agencies to conduct a thorough review of work zone management processes, and encouraging comprehensive assessment and management of work zone safety and mobility impacts. This final rule incorporates new definitions and clarifies some existing definitions; includes a requirement in States' Work Zone Safety and Mobility Policies to define the safety and mobility performance measures that States will monitor and report; reframes Work Zone Process Reviews to Work Zone Programmatic Reviews (WZPR), emphasizing the importance of reviewing all aspects of a State's work zone management program; changes the WZPR reporting timeframe from every 2 years to every 5 years to comply with the BIL; strengthens the requirement for States to develop and implement work zone assessment and management procedures with an added notion of addressing impacts to all anticipated road users and highway workers; and clarifies the significant project and TMP

criteria for Interstate and Non-Interstate projects to comply with the BIL.

Subpart K—Temporary Traffic Control Devices Overview

In 2007, at 72 FR 68489, FHWA added a new Subpart K to 23 Code of Federal Regulations (CFR) part 630 to facilitate the appropriate use of, and expenditure of funds for, uniformed law enforcement officers, positive protective measures between workers and motorized traffic, and installation and maintenance of temporary traffic control devices during construction, utility, and maintenance operations. The intent of the regulation was to reduce both worker and motorist fatalities and injuries in work zones. Overall, work zone fatalities decreased significantly during the latter half of that decade, from a high of 1,068 work zone fatalities in 2004 to 590 fatalities in 2011.¹ Unfortunately, since then that trend has reversed, growing from 590 fatalities in 2011 to 891 fatalities in 2022 (the most recent year of available national work zone fatality data). Work zones continue to have significant safety and mobility impacts on our transportation system, which are further expected to increase due to increased road construction and rehabilitation projects funded by the BIL.

Vehicle collisions with highway workers as a percentage of all highway worker fatalities have also been trending upward in recent years. In 2015, 35 percent of all highway worker fatalities at road construction sites were caused by a vehicle striking a worker; by 2020, that number has increased to 53 percent.^{2 3}

It has been over 15 years since the Subpart K rule was first published. New technologies, such as work zone intelligent transportation systems (also referred to as smart work zones) and automated flagger assistance devices (AFAD), have become dependable tools that are now readily available to help mitigate the safety and mobility impacts of work zones and should be listed as options to consider within the regulation. Other advanced technologies to support connected and automated vehicle travel through and around work zones continue to be developed and deployed. Conversely, despite sufficient

time to develop appropriate procedures to do so, adoption of the requirement to base decisions regarding the need for longitudinal traffic barriers and other positive protection devices on an “engineering study” have been uneven across the States. A need exists to strengthen the rule with regard to what constitutes an engineering study. Finally, the existing regulation references guidelines and other documents that have been superseded by newer publications.

In light of the above, FHWA published an NPRM on September 20, 2023, at 88 FR 64836, to update Subpart K to meet current and future work zone safety needs. The regulations proposed in the NPRM were intended to facilitate improved agency guidelines backed by engineering research to determine the use of positive protection and other strategies. In addition, the proposed regulations mandated the use of positive protective strategies to minimize worker exposure to motorized traffic in work zones with high anticipated operating speeds that provide workers no means of escape from motorized traffic intruding into the workspace. Several States, a few trade associations, and some private industry representatives provided responses to the NPRM. While most of the commenters agreed with the intent and the concepts proposed in the NPRM, they recommended that the proposed provisions be revised and altered to make them practical for application in the field. The commenters identified the need for flexibility and scalability in the implementation of the provisions of the proposed rule; noted that some of the terms used in the proposed rule were ambiguous and lent themselves to subjective interpretation; and asked for clarification on compliance timeframes of the final rule. In this final rule, FHWA has addressed the comments received in response to the NPRM that are within the scope of this rulemaking. The regulation addressed the comments related to flexibility and scalability of provisions; revised, eliminated, or clarified ambiguous terms pointed out by the commenters; and clarified compliance timeframes.

The final rule revises §§ 630.1104, 630.1106, 630.1108, and 630.1110 of the existing rule published in 2007 to clarify certain aspects of the regulation and to update and provide additional emphasis to certain elements that have not seen the quality of implementation that was initially envisioned. The final rule also adds § 630.1112 to the existing rule to clarify the compliance timeframe. The final rule incorporates new definitions and clarifies some

existing definitions; updates the requirement in States’ Work Zone Safety Management Policies and Procedures to clarify that agency processes, procedures, or guidance regarding strategies and devices to be used for the management of work zone impacts, including the use of positive protection devices and other strategies, are to be based on an engineering study; updates the requirement in States’ Work Zone Safety Management Policies and Procedures to provide characteristics of an engineering study and examples of the types of engineering decisionmaking tools that can be used in the engineering study; and modifies § 630.1108(a) to: (i) require that positive protection devices be used in work zones with high anticipated operating speeds that provide workers no means of escape from motorized traffic intruding into the workspace unless an engineering study determines otherwise; and (ii) remove redundant language indicating that decisions regarding the use of longitudinal traffic barriers and other positive protection devices shall be based on an engineering study.

Profile of Commenters

A total of 53 parties commented on the NPRM. Of these, 35 were from State DOTs, 12 were from trade associations, 3 were from private companies, and 3 were from private citizens. Representatives from 20 State DOTs provided 35 responses. The 20 States represented a diverse range of geographies from across the country. The DOTs of Idaho, South Dakota, North Dakota, Wyoming, and Montana provided a consolidated response to the NPRM, while the remaining State DOTs submitted individual comments. The trade associations that provided comments included the Laborers’ Health and Safety Fund of North America (LHSFNA), American Traffic Safety Services Association (ATSSA), Associated General Contractors of America (AGC), American Society of Civil Engineers (ASCE), American Road and Transportation Builders Association (ARTBA), Motorcycle Industry Council (MIC), American Federation of State, County, and Municipal Employees (AFSCME), International Safety Equipment Association (ISEA), and Institute of Transportation Engineers (ITE).

The commenters represented a cross-section of job categories across DOT functions including planning, engineering, traffic, safety, design, construction and contracting.

¹ Fatality Analysis Reporting System (FARS) maintained by NHTSA and is available at the following URL: <http://www.fars.nhtsa.dot.gov/>.

² Census of Fatal Occupational Injuries. Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC. Accessible at <https://www.bls.gov/iif/overview/cfoi.htm>.

³ Worker Fatalities and Injuries at Road Construction Sites. National Work Zone Safety Information Clearinghouse. Accessible at <https://workzonesafety.org/work-zone-data/worker-fatalities-and-injuries-at-road-construction-sites/>.

Subpart J—Work Zone Safety and Mobility

Overall Position of Commenters

Most commenters were generally supportive of the intent and stated purpose of the proposed revisions. Some commenters offered additional comments on specific areas of concern and recommended changes to improve the rule's language and interpretability.

Generally, State DOTs commented that the proposed revisions should not have a mandatory impact, but instead allow for flexibility and scalability while limiting unintended liability and cost. Five States agreed with FHWA's intent and the concepts for improving work zone safety and mobility but did not agree with many of the mandatory provisions. States also sought clarification on whether FHWA intended to mandate the performance measures listed in some of the "shall" conditions or whether the measures were provided as examples. In addition, States asked for clarification on certain ambiguous terms as well as the compliance timeframe for the final rule.

Most State DOT commenters appreciated the updated 5-year reporting timeframe for WZPRs but had concerns about the new 3-year performance reporting requirement. They commented that the 3-year requirement contradicts BIL § 11302 and would require significant commitments from its limited staff. In addition, they sought clarification on the flexibility for States to choose the number of performance measures and specific measures to meet final rule requirements.

Private sector commenters also offered comments on certain areas of concern. Details regarding these issues and FHWA's specific response are discussed in the following section, which provides a section-by-section analysis of the comments.

Section-by-Section Analysis of NPRM Comments and FHWA Response—Subpart J

Overview of the Organization of This Section

This section consists of a detailed discussion on the comments received on specific NPRM sections and the FHWA response and resolution to the comments. For each section, the following information is presented:

- Breakdown of the position of the commenters with regards to the provisions proposed in that section;
- Major issues cited by the commenters; and
- FHWA action in response to the comments and explanation of the

provisions being implemented in the final rule.

The following paragraphs present a section-by-section analysis and resolution of the comments on the NPRM.

§ 630.1004 Definitions and Explanation of Terms

Most commenters were supportive of this section. Some commenters offered specific comments on some of the definitions proposed in the NPRM. They are discussed as follows:

Definition of "Agency"

A commenter pointed out that the term "agency" only appears in the definitions of "Highway Workers," "Transportation Management Plan," and "Work Zone Programmatic Review." The commenter mentioned that all remaining sections refer to "States" and have no actionable items for agencies. The commenter sought clarification on the intent of using the term "agency" and any final rule provisions or action items applicable to local highway agencies or authorities.

The FHWA will retain the "Agency" definition as proposed in the NPRM and add clarification in § 630.1010 that provisions in §§ 630.1010, 630.1012, and 630.1014 apply to State and local agencies that receive Federal funding for their work zone projects. The FHWA updated the definition of "Agency" by adding, "that receives Federal-aid highway funding" at the end to be consistent with the Subpart K definition.

Definition of "Mobility"

Four commenters provided input on this definition, with three commenters opposed to the deletion of language associated with highway worker or road user safety and one being neutral. The three commenters suggesting that the language associated with the safety of highway workers and road users should not be deleted believe that keeping the language intact would help emphasize the fact that safety is a crucial aspect that underpins the movement of road users. Another commenter suggested adding 'level of service' as an example of commonly used performance measures.

As requested by the commenters, FHWA will retain the safety language related to highway workers and road users in the mobility definition. The FHWA did not add 'level of service' as an example measure because it is a metric that can be derived from the other example metrics included in the provision.

Definition of "Road Users"

While FHWA did not propose a definition for "Road User" in the NPRM, one commenter asked FHWA to clarify the term in relation to the use of this term in § 630.1008(b).

The FHWA declines to add a new definition here but notes that the definition for the term "Road Users" is provided in 23 United States Code (U.S.C.) 148(a)(8).

Definition of "Safety"

Ten commenters supported the removal of superfluous language on highway worker safety. Four of the commenters suggested removing "the rate of highway worker fatalities and injuries per hours of work activity" from commonly used measures. They suggested this removal due to the difficulty of obtaining accurate information for these measures.

The FHWA understands the difficulty cited by commenters in collecting accurate hours of work activity and numbers of highway worker fatalities and injuries. To this end, FHWA removed "the rate of highway worker fatalities and injuries per hours of work activity" from the commonly used measures.

Definition of "Transportation Management Plan"

Five commenters pointed out that the section-by-section discussion of § 630.1004 in the NPRM inaccurately stated that the TMP definition includes references to the temporary traffic control (TTC) plan and transportation operations (TO) and public information and outreach (PIO) components to the TMP.

The FHWA agrees with the commenters' observation that the TMP definition does not provide information about the TTC, TO, and PIO components. Sections 630.1010(d) and 630.1012(b) provide a detailed explanation of these TMP components. The FHWA added a clarifying sentence at the end of the TMP definition that readers can refer to § 630.1010(d) and § 630.1012(b) for more information on the TMP and its components.

Definition of "Work Zone Crash"

Three commenters supported the proposed changes. Two commenters asked FHWA to compare the proposed work zone crash definition with the Model Minimum Uniform Crash Criteria (MMUCC) definition of secondary crashes.⁴ The MMUCC says that

⁴ MMUCC Guideline Model Minimum Uniform Crash Criteria 6th edition. National Highway Traffic

secondary crashes are identified from the time the initial crash is detected, occurring either at the primary crash site or within the traffic queue or backup, including those in the opposite direction caused by the primary crash. A commenter recommended providing additional clarification that the crash tracking requirement is not intended to capture any crash within the area of impact, and only specifically work-zone-related crashes per the MMUCC.

The FHWA did not make any changes to the proposed NPRM language. The existing “Work Zone Crash” definition in § 630.1004 refers to the crash definition in MMUCC, which also addresses secondary crashes outside the work zone limits influenced by the primary work zone crashes. The FHWA encourages States to include secondary work zone crashes in their safety analysis to the extent data are available.

Definition of “Work Zone Impacts”

Two commenters supported the proposed changes. One commenter recommended adding “Type of Temporary Traffic Control” to the list of factors for assessing the work zone impacts and extent. Another commenter asked for clarification on whether States need to use minimum parameters or engineering judgement to assess “distance between workers and traffic and availability of escape paths for workers” factors.

The FHWA updated the rule language by adding type of temporary traffic control as a factor that States can consider for assessing the extent of work zone impacts. In addition, FHWA clarifies that States can (i) use data from work zone planning and implementation logs to identify “the distance between workers and traffic” and (ii) a combination of data (e.g., work zone type, location, closure status) and engineering judgement to assess “the availability of escape paths for workers.” Workers in this instance refers to flaggers and highway workers.

§ 630.1006 Work Zone Safety and Mobility Policy

§ 630.1006(b) Identification of Safety and Mobility Performance Measures in the Policy

Twenty-one commenters provided comments in response to this paragraph. Of these, 12 commenters expressed concerns about the inclusion of a list of safety and mobility performance measures within the “shall” condition of the work zone policy requirement.

They believe that it gives the impression that FHWA mandates the use of these performance measures. The commenters sought clarity on whether FHWA mandates the use of these measures or whether they are just examples. They also asked whether they can choose performance measures not listed in this paragraph and whether there is a minimum number of safety and mobility performance measures that each State should identify to meet this requirement. A commenter noted that the Manual on Uniform Traffic Control Devices (MUTCD) uses American National Standards Institute/ISEA (ANSI/ISEA) 107–2015 standard for compliance requirements of high-visibility safety apparel for all workers performing daytime and nighttime work activity within temporary traffic control zone. The commenter suggested adding a new paragraph to recognize the new ANSI/ISEA 107–2020, the American National Standard for High Visibility Safety Apparel.

The safety and mobility performance measures included in the NPRM are examples and are not mandatory. To avoid confusion, FHWA split the proposed sentence into two. The revised first sentence contains the requirement for States to identify performance measures in their work zone policies. The second sentence provides examples of measures to consider. States can comply with this requirement by identifying at least one safety and one mobility performance measure, but they are encouraged to use as many performance measures as needed to manage the performance of their work zones. States may choose performance measures that are best suited to their work zone conditions and impacts but they must have a documented work zone performance management approach for selecting projects, identifying performance measures, and collecting performance data. In response to the suggestion to add a new paragraph regarding ANSI/ISEA 107–2020, Subpart J incorporates the MUTCD and requires the use of Part 6 by reference. Section 6C.05 of the MUTCD requires all workers performing daytime and nighttime work activity within temporary traffic control zones to wear high-visibility safety apparel that meets the Performance Class 2 or 3 requirements of the ANSI/ISEA 107–2015 standard or equivalent revisions.

§ 630.1006(c) Multi-Disciplinary Team

Eight commenters provided input on this paragraph. Note that FHWA did not propose any changes to existing language related to the multi-disciplinary team. The only change that

FHWA made to this paragraph was to assign a paragraph number, “(c),” to this sentence. Six commenters suggested removing this paragraph to allow States flexibility for selecting members for the multidisciplinary team. Two commenters sought clarification on whether States can keep this team internal and involve external parties only if necessary. Another commenter commented that the language in § 630.1006(c) is redundant with § 630.1008(e)(5).

The FHWA disagrees with the suggestion of deleting this paragraph and retained the language as proposed in the NPRM. The intent of the “should” condition is to encourage States to include members from various work zone management divisions in their policy development and implementation in a comprehensive manner. States can determine the members of their multidisciplinary team based on their needs. The team and developed policies can remain internal to the States, but external members can be added if deemed necessary. While § 630.1006(c) addresses the members that participate in the development and implementation of the work zone safety and mobility policy, § 630.1008(e)(5) addresses the members that participate in the work zone programmatic review.

§ 630.1008 State-Level Processes and Procedures

§ 630.1008(b) Work Zone Assessment and Management Procedures

Ten commenters provided comments on this paragraph. Among these, seven commenters suggested to retain the previous “should” condition for this requirement instead of elevating to a “shall.” These commenters also believed that the term “potential” in “potential work zone impacts” could be construed as requiring analysis for outcomes that may be unlikely but are nonetheless “potential” impacts. They recommended replacing the term “potential” with “likely” or “possible” so that the implementation of this requirement can be more practical. A commenter expressed concern with the use of term “all” in “all road users and highway workers” as some road users (e.g., pedestrians and bicyclists) might not be applicable when assessing impacts on certain work zones. The commenter suggested removing the term “all” or qualifying with a caveat such as “all anticipated road users.” Another commenter recommended adding “(including motorcyclists)” next to road users.

The FHWA disagrees with the commenters’ suggestion to retain the

“should” condition instead of “shall” condition. The Work Zone Assessment and Management Procedures provision was introduced in 2007 as a new concept, hence the use of “should” was appropriate at that time. Since then, States have made significant progress in their work zone impacts assessment and management procedures. Therefore, using “shall” will reinforce this progress and facilitate continued improvement in work zone safety and mobility nationwide. The FHWA made additional changes for clarity and to address the issues cited by the commenters.

§ 630.1008(c) Work Zone Data

Thirteen commenters provided comments on this paragraph. Of these, eight commenters suggested changing the “shall” condition for this requirement to a “should.” These States noted that the term “available” is missing in front of safety surrogate data. Some commenters asked FHWA to clarify its intent in using the term “available” in front of multiple data sources. They commented that some data sources might be available in the market but not accessible for States to use due to factors such as required subscriptions and funding. In addition, five commenters sought clarity on whether FHWA mandates the use of performance measures listed in this paragraph or whether they are just examples. Two other commenters asked for clarity on the term “specific projects” and if it is the same as significant projects defined in § 630.1010.

The existing rule already requires States to use data in their work zone safety and mobility management processes. The FHWA retained the “shall” condition to facilitate improved data-driven assessments of work zone performance nationwide. To address the comment about performance measures, FHWA split the paragraph into two sentences in the final rule. The revised first sentence presents the requirement, and the second sentence identifies example measures for each data source. The FHWA’s intent in using the term “available” in this paragraph is not to require States to acquire additional data available in the market, but rather to make use of data accessible and available to them through existing sources. “Specific projects” in this paragraph refers to individual projects that State DOTs choose for monitoring and management of work zone impacts during implementation. Specific projects may include significant or non-significant projects, and are selected based on factors such as land use, type

of roadway, work zone type, and the extent of potential work zone impacts.

§ 630.1008(d) Training

Three commenters provided comments on this paragraph. Note that FHWA did not propose any changes to existing language for this paragraph. The commenters did not cite any major issues. One commenter asked about training and certification requirements pursuant to § 630.1008(d). Another commenter recommended that State and local roadway owners should require a trained and certified Work Zone Supervisor to be assigned for each significant project. The third commenter recommended to update the paragraph language by adding an established time period that informs workers when they should recertify their training to ensure workers are thoroughly trained in the best safety practices when working in work zones.

The FHWA did not make any changes to this provision. With regard to the commenter’s question on training and certification requirements, FHWA’s position is that State DOTs need to tailor training and certification for each role based on their own requirements. For example, Virginia DOT’s Work Zone Traffic Control Training Requirements document⁵ identifies various roles in design, construction, and maintenance/operations divisions and their respective training and certification requirements. The current state of the practice is that most agencies require their staff to be retrained once every 2 to 4 years. With regard to the comment on retraining, FHWA believes that the second sentence in this provision (*i.e.*, States shall require periodic training updates that reflect changing industry practices and State processes and procedures) addresses the comment by requiring periodic training updates that reflect changing industry practices, which includes state-of-the-art practices.

§ 630.1008(e) Work Zone Programmatic Review

Eleven commenters provided input on this paragraph. All commenters were supportive of this high-level provision. Note that § 630.1008(e) speaks about the high-level provision for work zone programmatic reviews and its reporting timeframe, whereas paragraphs § 630.1008(e)(1) through (e)(5) provide more specifics on the contents of the work zone programmatic reviews, project selection for conducting reviews, data-driven assessment needs, and

⁵ https://ops.fhwa.dot.gov/wz/resources/final_rule/webcast/020112wztpdi/rush_ppt/rush.htm.

examination of various work zone efforts. Commenters provided separate comments on these individual paragraphs, which are discussed following this section. Six commenters asked for clarification for the timeframe of the data to be included in the 5-year programmatic review. They noted a technical concern in the wording that calls for a State to share its 5-year review with FHWA “by the end of the 5-year review period.” They suggested that the review period for each WZPR report should include the review of work zones from 5 calendar years prior to the year of the report. Commenters also asked for clarification on the compliance dates for the reframed WZPR requirement. They mentioned that it may take at least 12 to 24 months to update their policies and data collection practices to meet the new requirements. They asked FHWA to consider these factors when identifying the compliance dates/timeframes. A commenter recommended application of data driven assessments to a representative sample of work zone projects over the 5-year review period that justify their inclusion.

The FHWA finds the approach suggested by the State DOTs for Programmatic Reviews’ review period (*i.e.*, the review period for each WZPR report includes selection and review of work zones from 5 calendar years prior to the year of the report) to be reasonable. States may use this approach for selecting the review period for their Programmatic Reviews. The FHWA addressed comments about compliance timeframes in § 630.1016 by indicating that the next Programmatic Review reports are due by December 31, 2030. The FHWA reemphasizes that States shall use a documented approach for selecting representative projects based on factors such as land use (urban and rural locations), roadway type, type of work zone, and extent of the work zone impacts.

§ 630.1008(e)(1) Work Zone Programmatic Review—Qualification

Six commenters provided comments on this paragraph. Of these, two commenters suggested changing the requirement from “shall” to “should” and indicated that this change will allow flexibility to States in selection of projects for WZPRs. These two commenters along with four other commenters noted a major concern with the use of term “all” in “all work zones” and indicated that this implies that States shall include all their work zones in their WZPRs. They indicated that the term “all” is particularly concerning in rural areas where there are very few

projects that qualify as “significant.” These commenters suggested removing the term “all” from the regulation. Another commenter asked whether States are required to negotiate and confirm the representative project selection approach with the FHWA division offices.

The FHWA retained the “shall” condition and addressed the concern raised by multiple commenters by removing the term “all” from the final rule language. To avoid confusion, FHWA split the first sentence into two sentences. The revised first sentence addresses the data-driven assessment requirement of WZPRs, and the second sentence presents the minimum Programmatic Review requirement to include a representative sample of the State’s work zones over the 5-year period being reviewed. This revision provides flexibility to State DOTs to select a representative set of projects based on a documented and well-reasoned approach. To the extent possible, FHWA encourages States to include all work zones in their programmatic review to make it a comprehensive review of systemwide performance. While States are not required to include FHWA division offices in defining the approach for representative project selection, they are encouraged to do so.

§ 630.1008(e)(2) Explanation of Work Zone Programmatic Review

Two commenters provided input on this paragraph. One commenter suggested changing the requirement from “shall” to “should” to minimize regulatory burden on States. Another commenter commented that the terms “divisions or offices” used in this paragraph are not clearly defined.

The FHWA retained the “shall” condition in the final rule to ensure uniform implementation and reporting of WZPRs across the country. To make it clear that Programmatic Reviews should identify State divisions and offices responsible for implementing action items, FHWA added the term “State” in front of “divisions or offices.”

§ 630.1008(e)(3) Work Zone Programmatic Review Data and Reporting

Nine commenters provided comments on this paragraph and opposed the provisions in it. A commenter suggested changing the requirement from “shall” to “should” to minimize regulatory burden on States. Eight commenters indicated that the requirement to report performance at the end of the third year might be contradictory to the BIL. Commenters noted inconsistent use of

the term “available” in front of data sources. A commenter asked for clarification on contents to be included in the 3-year report. Another commenter suggested consistency in use of example measures listed in § 630.1008(e)(3) and § 630.1008(c). In addition, five commenters sought clarity on whether FHWA mandates the use of performance measures listed in this paragraph or whether they are just examples.

The FHWA removed the mid-point performance data reporting from the rule provision to address the comments received. The FHWA retained the annual performance monitoring requirement. The purpose of the annual monitoring is to facilitate continuity in assessing work zone performance. States are encouraged to use the performance measures they identify in their policies for the annual monitoring and incorporate their findings into their 5-year WZPRs. The FHWA added the term “available” in front of all data sources to make it consistent. The FHWA removed the performance measures proposed in the § 630.1008(e)(3) of NPRM and added a sentence noting that agencies can use examples of performance measures listed in § 630.1008(c) for each data source.

§ 630.1008(e)(4) Examination of Other Efforts

Seven commenters provided comments on this paragraph. Of these, two commenters suggested changing the requirement from “shall” to “should” to minimize regulatory burden on States. Four commenters opposed the use of the term “all” in “all State divisions and offices,” and noted that the selection of applicable divisions or efforts to be examined as part of WZPRs varies between States depending on factors such as staff and data availability in those divisions. They asked whether the efforts listed in the requirement are examples or requirements, and if States have flexibility in selection of these efforts based on their work zone assessment criteria.

The FHWA retained the “shall” condition in the final rule to emphasize the importance of covering all aspects of program planning and project development that affect work zone safety and mobility. The FHWA removed the term “all” in front of “State divisions or offices” to allow States flexibility to select efforts applicable to their work zone safety and mobility assessment. The FHWA further clarifies that the efforts listed in § 630.1008(e)(4) apply to work zone processes and procedures requirements between § 630.1008(e)(2) and § 630.1008(e)(4). The FHWA’s intent is for States to select

the efforts considering the assessment of the work zone safety and mobility performance. The FHWA encourages States to involve FHWA division offices in selecting efforts, but it is not mandatory.

§ 630.1010 Significant Projects

§ 630.1010(a) Significant Project Explanation

Only one commenter provided comments in response to this paragraph. Note that FHWA did not propose any changes to existing language for this paragraph. This commenter suggested adding the words “work zone” in between significant projects to distinguish work zone projects from other types of projects that may have different impacts and requirements.

The FHWA did not propose any changes to this provision in the NPRM. Therefore, FHWA did not make any change to the final rule. With regards to the one comment on this topic, the significant project definition addresses sustained work zone impacts, and it is implied that these projects are work zone projects.

§ 630.1010(c) Significant Project Qualification—Interstates

Four commenters provided comments on this paragraph. Note that FHWA did not propose any changes to existing language for this paragraph. Three of the commenters recommended deleting this paragraph, noting that States have a defined policy under § 630.1010(a) for determining significant projects. Two commenters asked FHWA to consider providing flexibility for intermittent closures associated with preservation and maintenance activities with lower/mitigated impacts on the interstate system. Another commenter mentioned that the BIL language about significant projects does not include intermittent lane closures.

In compliance with BIL § 11303(a), FHWA retained the language as proposed in the NPRM. Although States define their policy under § 630.1010(a), work zones on interstates that meet the conditions of § 630.1010(c) would still qualify as significant projects. This section identifies minimum criteria for significant projects. If a State determines a project or a class of projects as not significant, they can make use of the State DOT policy in § 630.1010(b) and exception process in § 630.1010(d) to file an exception and not prepare the PIO and TO components of a TMP. The BIL § 11303(a) mentions that “The Secretary shall amend section 630.1010(c) of title 23, Code of Federal Regulations, to ensure that only a

project described in that paragraph with a lane closure for 3 or more consecutive days shall be considered to be a significant project for purposes of that section.” The projects described in paragraph § 630.1010(c) include work zone projects with intermittent or continuous lane closures.

§ 630.1010(d) Significant Project Qualification—Non-Interstates

Three commenters provided comments on this paragraph. All of them recommend deleting this paragraph, noting that TMP requirements are covered in § 630.1012(b).

The FHWA retained this paragraph because it is required for compliance with BIL § 11303(b) and to address TO/PIO requirements for non-interstate projects. However, FHWA modified this paragraph to simplify the language and make it consistent with the interstate system projects requirement. The FHWA also changed the numbering for this section § 630.1010(d) in the NPRM to § 630.1010(e). This change allows the significant project exceptions for interstate projects (*i.e.*, previously § 630.1012(e) in the NPRM) to be next to the significant project qualification section (*i.e.*, § 630.1012(c)).

§ 630.1010(e) Significant Project Exceptions—Interstates

One commenter provided comments on this paragraph. Note that FHWA did not propose any changes to this paragraph. The commenter requested clarity on the process and time frame to request and receive an exception from FHWA.

Since there was no change proposed in the NPRM, FHWA did not make any changes to this paragraph in the final rule. With regards to the commenter's requested clarification on the process and time frame for exceptions, States are encouraged to coordinate with FHWA division offices on how to handle exceptions either on a project-by-project basis or for a particular project category, in order to streamline and simplify the process.

§ 630.1012 Project-Level Procedures

§ 630.1012(a) Section Overview and (b) Transportation Management Plan

Five commenters provided comments in response to the NPRM preamble language of this paragraph. Note that FHWA did not propose any changes to existing language for this paragraph in the NPRM. A commenter asked FHWA to clarify which agencies would be responsible for developing TMPs for projects outside the State DOT's jurisdiction. Further, the commenter

mentioned that the State should not be required to develop and implement TMPs for such projects and manage their impacts. The section-by-section discussion of the NPRM's § 630.1004 talks about updating the public information component to PIO in the TMP definition. However, the TMP definition does not cover the TO and PIO components of a TMP. All five commenters pointed out that the preamble discussion on expanding public information to PIO is more appropriate in the section-by-section discussion of § 630.1012(b) as that section explains about PIO.

The FHWA decided to remove the requirement that TTC plans are consistent with the work zone hardware recommendations in Chapter 9 of the 2011 American Association of State Highway and Transportation Officials (AASHTO) Roadway Design Guide (RDG), which had been proposed for incorporation by reference in the NPRM. The 4th edition of the RDG includes some statements that are no longer accurate (*e.g.*, reference to FHWA's approval of crashworthy products by issuing acceptance letters). Despite this change in mandatory requirement, agencies are encouraged to consider the work zone hardware recommendations in the AASHTO RDG when preparing their TTC plan. This RDG document was developed by AASHTO to present the concepts of roadside safety (including those in work zones) to designers so that the most practical, appropriate, and beneficial roadside design can be accomplished for each project.

The FHWA clarifies that the provisions in §§ 630.1010, 630.1012, and 630.1014 apply to all State and local agencies that receive Federal funding for their work zone projects. An agency (State or local) that receives Federal funds for their work zone projects is responsible for developing and implementing TMPs and managing impacts of those projects. The FHWA agrees with the commenters and clarifies that the description of a public information component in § 630.1010(d) and § 630.1012(b) has been expanded to PIO to be consistent with the intent of that aspect of the TMP.

The rulemaking to adopt the 11th edition of MUTCD was in progress when FHWA published the NPRM for this rule. In December 2023, FHWA published the new version of MUTCD. Since § 630.1012(b) refers to MUTCD Part 6, FHWA updated the MUTCD reference in § 630.1018 to reflect the new version.

§ 630.1012(c) Inclusion of TMP in Plans, Specification, and Estimates

Two commenters provided comments on this paragraph. Both suggested removing the “shall” condition from this paragraph and noted that including TMP into Plans, Specification, and Estimates will require additional policy and process development, training, and legal review.

The FHWA did not make any change to this paragraph in the final rule. The “shall” condition has been in place since the initial Work Zone Safety and Mobility Rule published in 2004 and does not introduce any new requirements.

§ 630.1012(e) Responsible Persons

Only one commenter provided comments in response to this paragraph. The FHWA did not propose any changes to this paragraph in the NPRM. The commenter inquired if the trained person referred to in this paragraph must meet any ATSSA certification requirements.

The FHWA did not make any changes to this paragraph. With regards to the commenter's question, FHWA does not establish specific training and certification requirements, as each agency determines its own.

§ 630.1016 Compliance Date

Eleven commenters provided comments in response to this paragraph. Of these, ten commenters asked questions about the compliance date for the provision and the timeframe for the mid-point performance summary and WZPR reporting. Commenters asked for the effective date to be a minimum of 12 months from the date of final rule publication.

The FHWA changed the compliance date to December 31, 2026, which allows at least 24 months for States to comply with the rule. The next WZPR reporting date will be December 31, 2030, respectively. In addition, FHWA removed the phrase “and once every 5 years thereafter” as it is already covered in § 630.1008(e).

Subpart K—Temporary Traffic Control Devices

Overall Position of Commenters

Commenters were generally supportive of the intent and purpose of the updates to Subpart K and acknowledged the importance of work zone safety, and specifically, worker safety. The commenters offered comments on specific areas of concern and recommended changes to improve the rule's language. State DOTs expressed concern that the rule should

not mandate provisions but rather it should allow for adequate flexibility and scalability while limiting unintended liability and cost. States also sought clarification of certain ambiguous terms and the compliance timeframe. Private sector commenters also offered comments on certain areas of concern. Details regarding these issues and FHWA's specific responses are discussed in the following section, which provides a section-by-section analysis of the comments.

The majority of commenters expressed overall support for the provisions proposed in the NPRM. While the commenters' overall position on the NPRM was supportive, many of these commenters suggested modifications and revised language for specific provisions as they deemed appropriate.

Of the six commenters who did not expressly support the updates, five of them agreed with FHWA's intent and the concepts for improving work zone safety and worker protection, but did not agree with the mandatory provisions. They opposed the change proposed in § 630.1108(a) to require positive protection devices in specific conditions unless an engineering study concludes otherwise. To this end, they mentioned the specific work zone conditions where these requirements would not be practically applicable, and the additional investments associated with implementing these strategies. They suggested additional changes to specific sections and removal of ambiguous terms. They also sought clarification on the compliance timeframe for the final rule. The remaining commenter opposed the provision for development of broader guidelines based on an engineering study that agencies can use for determining the requirement of positive protection or other strategies, and also opposed adding the "high anticipated operating speeds" qualifier in the provision (§ 630.1108(a)) that addresses the positive protection requirement.

Section-by-Section Analysis of Comments and FHWA Response—Subpart K

§ 630.1104 Definitions and Explanation of Terms

Most commenters were supportive of this section. Some commenters offered specific comments on some of the definitions proposed in the NPRM. They are discussed as follows:

Definition of "Engineering Study"

Eight commenters provided input on this definition. All eight commenters

stated that the term "comprehensive" in "comprehensive analysis and evaluation of available pertinent information . . ." is unclear. They recommended deleting this term to be consistent with the definition of Engineering Study from the recently published MUTCD 11th edition. A commenter suggested adding the term "temporary" in front of "traffic control."

Keeping consistency with the MUTCD definition, FHWA deleted the term "comprehensive" from this definition. The term "traffic control" is used in a broad sense here. As the definition of "Engineering Study" applies to the entire Subpart K, which provides guidance on how to approach strategies related to all work-zone-related temporary traffic control, FHWA did not add "temporary" before "traffic control" in this definition.

Definition of "Positive Protection Devices"

Four commenters provided input on this paragraph. Three commenters opposed removing the crashworthiness qualifier requirements from the definition of positive protection devices. They mentioned that the crashworthiness requirements ensure that the various positive protection mechanisms used are tested for their appropriateness to offer the necessary protections at relevant speeds. The remaining commenter asked for a more detailed definition of positive protection devices, including example devices that constitute a positive protection device.

The FHWA updated the definition language to include that the positive protection devices meet applicable industry crashworthiness evaluation criteria. For example, AASHTO's Manual for Assessing Safety Hardware includes current industry crashworthiness evaluation criteria. Industry crashworthiness evaluation criteria are not regulatory, and use of them is voluntary and not required by law. This updated language reemphasizes FHWA's longstanding policy that all roadside safety hardware installed on the National Highway System be crashworthy. States can refer to 23 U.S.C. 112(g)(4) for examples of positive protection devices, which include temporary traffic barriers, crash cushions, and other strategies to avoid traffic crashes in work zones, including full road closures.

§ 630.1106 Policy and Procedures for Work Zone Safety Management

§ 630.1106(b) Agency Processes, Procedures, or Guidance

Eight commenters provided input on this section. Three of the commenters opposed the requirement that agency processes, procedures, or guidance regarding strategies and devices to be used for the management of work zone impacts, including the use of positive protection devices and other strategies, are to be based on an engineering study. The remaining commenter suggested requiring that State DOTs conduct a project-specific engineering study instead of using agency guidelines based on an engineering study.

The FHWA decided to remove the reference to the AASHTO RDG. The 4th edition of the RDG includes some statements that are no longer accurate (e.g., reference to FHWA's approval of crashworthy products by issuing acceptance letters). Despite this change, agencies are encouraged to consider work zone related information in the AASHTO RDG during the development of their processes, procedures, and guidance. The FHWA reemphasizes that agencies need to use reasonable and well-documented approaches backed by engineering research to develop their processes, procedures, or guidance for managing work zone impacts, including using positive protection devices and other strategies. Such well-documented approaches can provide evidence-based justification for agencies to determine the need for positive protection and other strategies to ensure worker safety.

A commenter suggested moving the detailed discussion of engineering study from this paragraph to the "engineering study" definition in § 630.1104.

The definitions section offers a broader definition of engineering study. In contrast, this section provides more in-depth details of who conducts the study, how to document it, and applicable tools to perform it. Therefore, FHWA believes the details of the engineering study are more applicable to this section.

Another commenter asked for a clear definition of the terms "safety impacts" used in § 630.1106 (b)(3) "anticipated traffic safety impacts."

As noted in § 630.1004—definitions of "Safety" and "Work Zone Impacts," work zone safety impacts refer to work-zone-induced potential hazards to road users in the vicinity of a work zone and highway workers at the work zone interface with traffic. Anticipated traffic safety impacts in this paragraph refer to identifying the safety risks to work zone workers and road users associated with

various factors such as exposure to traffic, time of activity, type of activity, intrusion of motorized traffic into activity area, lane widths, speed limits, crash frequency and severity prior to work zone implementation, and pre-work zone inspection findings. This safety impact identification approach can be a simple checklist for short-term and limited-exposure projects and a more involved assessment for long-term and complex projects.

A commenter recommended adding a minimum safety requirement for work zone workers to this section.

The FHWA does not see a need to add specific requirements for worker safety in this paragraph as worker safety is addressed in various sections of 23 CFR 630 Subparts J and K, and MUTCD 11th edition.

The FHWA referenced four benefit-cost studies in the NPRM Subpart-K discussion section to justify that research and data did not support the thresholds stated in the Moving Ahead for Progress in the 21st Century Act (MAP-21). In response, two commenters stated that these studies overestimated the cost of positive protection devices.

Studies found it difficult to justify positive protection based on crash statistics and benefit cost analysis. Due to limited availability and challenges associated with collecting positive protection-specific data, FHWA has no new credible information to justify updating the implementation thresholds of positive protection strategies.

§ 630.1108 Work Zone Safety Management Measures and Strategies

§ 630.1108(a) Positive Protection Devices

Seven commenters provided input on this paragraph. Five commenters opposed the use of the “shall” condition for implementing positive protection devices and mentioned that these devices require a significant investment. They suggested retaining the existing rule provision language, which would allow States to determine the need for positive protection devices based on an engineering study. They also mentioned that several previous studies have demonstrated that cost-benefit analyses do not justify this policy. In addition, two commenters noted that the requirement to use positive protection devices “unless an engineering study determines otherwise” is the opposite of the current rule and contrary to the findings of prior research. These commenters also asked about the extent of conducting these engineering studies across different projects.

The FHWA made a minor update but retained the remaining language as

proposed in the NPRM. In the NPRM, FHWA added the “shall” condition for the use of positive protection in response to increasing trend of fatalities in worker struck incidents and to address the requirements in MAP-21 Section 1405. Since this is a “shall” condition, FHWA is restricting the implementation requirement to the situations where the workers are most vulnerable, which is work zones with high anticipated operating speeds that provide workers no means of escape from motorized traffic intruding into the workspace. The FHWA added the “high anticipated operating speeds” as the majority of fatal work zone crashes occur on high-speed roadways such as urban and rural interstates, urban and rural principal arterials, and freeways/expressways.⁶ These facility types generally operate at high speeds (45 mph or greater). The FHWA prioritizes the implementation of enhanced safety measures in high-risk environments, ultimately safeguarding the lives of those working in the most vulnerable conditions. The language adopted is consistent with that used in MAP-21 Section 1405 for these situations. However, agencies may choose to use positive protection devices on roadways with lower operating speeds.

State DOTs may use a tiered approach to conduct engineering studies for the type of work zones identified in this provision. Agencies may develop their engineering analysis criteria based on factors such as type of work, exposure to traffic, expected work zone level of effort, worker protection needs, vehicle mix, time of day, geometry, and location. For example, Caltrans established Guidelines on the Use of Positive Work Zone Protection and Mitigation Measures,⁷ which provide a detailed approach and weightage criteria to conduct a safety risk assessment and engineering analysis to determine positive protection and other mitigation measures for their work zones. This guidance document also allows Caltrans to determine the required level of positive protection based on the safety risk. The engineering analysis may vary from a simple assessment of checklist items summarized in a few paragraphs for smaller projects (e.g., short-term maintenance) to a more thorough assessment and risk analysis of checklist items for larger/complex projects (e.g., bridge approach slab replacement,

widening projects, and shoulder maintenance).

A commenter suggested six recognized serious hazards for consideration of positive protection. This commenter also suggested including a requirement for States to specify positive protection and provide an associated pay item when serious hazards are foreseen or encountered on a project unless an agency determines the same to be impractical under applicable agency standards.

The serious hazards recognized by the commenter did not have any changes compared to the NPRM language on example scenarios and situations for positive protection consideration, except for “Any other situation not specifically outlined above which merits the use of positive protection.” The FHWA updated § 630.1108(b)(4) to include “within one lane width” as an example for determining closeness of workers to open travel lanes as a result of work operations. Section 630.1106(a) addresses the commenter’s suggestion for agencies to specify the use of positive protection in their policy whereas § 630.1108(d)(2) addresses the suggestion for inclusion of pay items for such specified positive protection.

A commenter opposed the omission of language associated with use of temporary longitudinal barriers to protect workers. This commenter also mentioned that the “high anticipated operating speeds” qualifier used in this positive protection requirement regulation does not fully comply with MAP-21.

As longitudinal barrier is one type of positive protection device, the NPRM already covers these barriers in the engineering study requirement. In addition, agencies can refer to 23 U.S.C. 112(g)(4) for examples of positive protection devices, which include temporary traffic barriers, crash cushions, and other strategies. As indicated previously, the majority of fatal and injury work zone crashes occur on high-speed roadways such as urban and rural interstates, rural interstates, urban and rural principal arterials, and freeways/expressways. These facility types generally operate at high speeds (operating speeds of 45 mph or greater). The language adopted is consistent with that used in MAP-21 Section 1405 for these situations.

§ 630.1108(b) Exposure Control Measures

One commenter provided input on this paragraph. Note that FHWA did not propose any changes to existing language for this paragraph. The

⁶ <https://workzonesafety.org/work-zone-data/work-zone-traffic-crash-trends-and-statistics/>.

⁷ https://dot.ca.gov/-/media/dot-media/programs/design/documents/final-dib-91_06282021_a11y.pdf.

commenter suggested updating the requirement from “should” to “shall.”

The FHWA did not make any changes to this provision. The FHWA retained the “should” condition to provide agencies with the flexibility to explore exposure and other traffic control measures as an alternative suite of options to preserve safety.

§ 630.1108(c) Other Traffic Control Measures

Two commenters provided comments in response to this paragraph. One commenter supported the inclusion of AFADs as an exposure control device. Another commenter recommended defining “protection vehicles.”

The FHWA updated § 630.1108(c)(22) from “Protection vehicles” to “Protection or shadow vehicles used to protect workers and equipment from impacts by errant vehicles” to reflect the fact that there is inconsistency in how agencies define and use these terms.

§ 630.1110 Maintenance of Temporary Traffic Control Devices.—Footnotes

Six commenters provided input on this paragraph. Note that FHWA did not propose any changes to existing language for this paragraph. All six commenters recommended removing references to Illinois and Minnesota Quality Standards for Work Zone Traffic Control Devices from § 630.1110 footnotes. They opposed the suggestion of guidelines from other agencies in the footnotes and mentioned that agencies should be able to establish their own maintenance of TTC device standards or use ATSSA’s “Quality Guidelines for Temporary Traffic Control Devices and Features.”

The FHWA encourages agencies to establish their TTC device standards as applicable to their needs and policies. To this end, FHWA removed references to agency-specific quality standards (Illinois DOT and Minnesota DOT) and retained one of the commonly used industry standards (ATSSA’s Quality Guidelines for Temporary Traffic Control Devices and Features) as an example.

§ 630.1112 Compliance Date

Nine commenters asked about the compliance timeframe for the Subpart K final rule. The commenters asked for the effective date to be minimum 12 months from the date of final rule publication.

In the anticipation that the rule is published in 2024, FHWA proposed the effective date of December 31, 2025, which allows at least 12 months for States to update their policy in compliance with the rule. The

implementation date for the updated policy will be December 31, 2026.

Discussion Under 1 CFR Part 51

The FHWA is incorporating by reference the most current version of the MUTCD. At the time of NPRM publication, the rulemaking to adopt the 11th edition of the MUTCD was still underway. The FHWA published the 11th edition of MUTCD in December 2023. To this end, FHWA updated the references to incorporate the “Manual on Uniform Traffic Control Devices for Streets and Highways,” 11th edition dated December 2023. This document was developed by FHWA to define the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public travel.

The document that FHWA is incorporating by reference is reasonably available to interested parties, primarily State DOTs, local agencies, and Tribal governments carrying out Federal-aid highway projects. This document represents the most recent refinements that have been formally accepted and are currently in use by the transportation industry. The document incorporated by reference is available on the docket of this rulemaking and at the sources identified in the regulatory text below. The specific standards are discussed in greater detail elsewhere in this preamble.

Rulemaking Analyses and Notices

Executive Order 12866 (Regulatory Planning and Review), Executive Order 13563 (Improving Regulation and Regulatory Review), and DOT Regulatory Policies and Procedures

The FHWA has considered the impacts of this rule under Executive Order (E.O.) 12866 (58 FR 51735, Oct. 4, 1993), Regulatory Planning and Review, as amended by E.O. 14094 (“Modernizing Regulatory Review”), and DOT’s regulatory policies and procedures. The Office of Information and Regulatory Affairs within the Office of Management and Budget (OMB) has determined that this rulemaking is not a significant regulatory action under section 3(f) of E.O. 12866. Accordingly, OMB has not reviewed it under that E.O.

It is anticipated that the final rule would not be economically significant for purposes of E.O. 12866. The final rule would not have an annual effect on the economy of \$200 million or more. The final rule would not adversely affect in a material way the economy, any sector of the economy, productivity,

competition, or jobs. In addition, the changes would not interfere with any action taken or planned by another Agency and would not materially alter the budgetary impact of any entitlements, grants, user fees, or loan programs.

Regulatory Flexibility Act

In compliance with the Regulatory Flexibility Act (Pub. L. 96–354, 5 U.S.C. 601–612), FHWA has evaluated the effects of this final rule on small entities and has determined that it is not anticipated to have a significant economic impact on a substantial number of small entities. This rule applies to all State and local highway agencies that use Federal-aid highway funding in the execution of their highway program. However, the regulatory action only directly impacts State requirements regarding work zone programmatic reviews, and otherwise would clarify the characteristics of a significant project. State governments are not included in the definition of small entity set forth in 5 U.S.C. 601. Therefore, FHWA certifies that the final rule will not have a significant economic impact on a substantial number of small entities.

Unfunded Mandates Reform Act of 1995

This final rule would not impose unfunded mandates as defined by the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4, 109 Stat. 48). This final rule would not result in the expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector, of \$168 million or more in any one year (2 U.S.C. 1532). In addition, the definition of “Federal Mandate” in the Unfunded Mandates Reform Act excludes financial assistance of the type in which State, local, or Tribal governments have authority to adjust their participation in the program in accordance with changes made in the program by the Federal Government. The Federal-aid highway program permits this type of flexibility.

Executive Order 13132 (Federalism Assessment)

This final rule has been analyzed in accordance with the principles and criteria contained in E.O. 13132, and FHWA has determined that this final rule would not have sufficient federalism implications to warrant the preparation of a federalism assessment. The FHWA also has determined that this final rule would not preempt any State law or State regulation or affect the States’ ability to discharge traditional State governmental functions.

Paperwork Reduction Act of 1995

Under the Paperwork Reduction Act of 1995 (PRA) (44 U.S.C. 3501, *et seq.*), Federal Agencies must obtain approval from OMB for each collection of information they conduct, sponsor, or require through regulations. The FHWA has determined that the rule does not contain collection of information requirements for the purposes of the PRA.

National Environmental Policy Act

The FHWA has analyzed this final rule pursuant to the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321 *et seq.*) and has determined that it is categorically excluded under 23 CFR 771.117(c)(20), which applies to the promulgation of rules, regulations, and directives. Categorically excluded actions meet the criteria for categorical exclusions under the Council on Environmental Quality regulations and under 23 CFR 771.117(a) and normally do not require any further NEPA approvals by FHWA. The FHWA does not anticipate any adverse environmental impacts from this final rule.

Executive Order 13175 (Tribal Consultation)

The FHWA has analyzed this regulatory action in accordance with the principles and criteria contained in E.O. 13175, "Consultation and Coordination with Indian Tribal Governments." The purpose of the regulatory action is to improve motorist, worker, and other vulnerable road user safety and mobility on Federal-aid highway projects. The FHWA believes that the regulatory action would not have substantial direct effects on one or more Indian Tribes, would not impose substantial direct compliance costs on Indian Tribal governments, and would not preempt Tribal law. Therefore, the funding and consultation requirements of E.O. 13175 do not apply and a Tribal summary impact statement is not required.

Executive Order 12898 (Environmental Justice)

The E.O. 12898 requires that each Federal Agency make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minorities and low-income populations. The FHWA has determined that this final rule does not raise any environmental justice issues.

Rulemaking Summary, 5 U.S.C. 553(b)(4)

As required by 5 U.S.C. 553(b)(4), a summary of this rule can be found in the Abstract section of the Department's Unified Agenda entry for this rulemaking at [<https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=202310&RIN=2125-AG05>].

Regulation Identifier Number

A Regulation Identifier Number (RIN) is assigned to each regulatory action listed in the Unified Agenda of Federal Regulations. The Regulatory Information Service Center publishes the Unified Agenda twice each year. The RIN contained in the heading of this document can be used to cross reference this action with the Unified Agenda.

List of Subjects in 23 CFR Part 630

Government contracts, Grant programs—transportation, Highway safety, Highways and roads, Incorporation by reference, Reporting and recordkeeping requirements, Traffic regulations.

Issued under authority delegated in 49 CFR 1.81 and 1.85.

Kristin R. White,

Acting Administrator, Federal Highway Administration.

In consideration of the foregoing, FHWA amends Title 23, Code of Federal Regulations, Part 630, as set forth below:

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.

630.1004 Definitions and explanation of terms.

630.1006 Work zone safety and mobility policy.

630.1008 State-level processes and procedures.

630.1010 Significant projects.
630.1012 Project-level procedures.
630.1014 Implementation.
630.1016 Compliance date.
630.1018 Incorporation by reference.

§ 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 for Streets and Highways (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 for developing strategies to help manage these impacts on 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, 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 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 highway worker safety performance measures, 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.

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 one or more of the following: signs, channelizing devices, barriers, pavement markings, 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 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. See "Model Minimum Uniform Crash Criteria Guideline" (MMUCC), 5th Ed. (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 and duration 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, 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, or guidance, and may vary based on the characteristics and expected work zone impacts of individual projects or classes of projects.

(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) *General*. 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 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, 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 available exposure data include number of projects, number and length of lane closures, and vehicle-miles traveled through work zones.

(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) *Work zone programmatic review*. In order to assess the effectiveness of work zone safety and mobility processes and procedures, States shall perform a work zone programmatic review every 5 years and share that review with FHWA by the end of the 5-year review period.

(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 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 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 that 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) of this section but in the judgment of the State do not cause sustained work zone impacts, the State may request from FHWA an exception to §§ 630.1012(b)(2) and 630.1012(b)(3). The FHWA may grant exceptions to these provisions 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) *Scope.* This section provides guidance and establishes procedures for States to manage the work zone impacts of individual projects.

(b) *Transportation Management Plan.* For significant projects (as described in § 630.1010), the State shall develop a TMP that consists of a TTC plan and addresses both TO and PIO 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 shall be consistent with the provisions under Part 6 of the MUTCD (incorporated by reference, see § 630.1018). 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 use 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&E) 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.

(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 cooperation with 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 FHWA.

§ 630.1016 Compliance date.

States shall comply with all the provisions of this rule no later than 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 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.

630.1102 Purpose.

630.1104 Definitions and explanation of terms.

630.1106 Policy and procedures for work zone safety management.

630.1108 Work zone safety management measures and strategies.

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; 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 and explanation of terms.

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

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

Other traffic control 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 or redirect vehicles and meet applicable industry crashworthiness evaluation criteria. Industry crashworthiness evaluation criteria are not regulatory, and use of them is voluntary and not required by law.

§ 630.1106 Policy and procedures for work zone safety management.

(a) Each agency's policy and processes, procedures, or guidance for the systematic consideration and management of work zone impacts, to be established in accordance with § 630.1006, shall include the consideration and management of road user and worker safety on Federal-aid highway projects. These processes, procedures, or guidance, to be developed in 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, or guidance should be based on consideration of standards or guidance contained in the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), 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 indicate when positive protection devices or other 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 speeds through the work zone;
- (3) Anticipated traffic safety impacts;
- (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) Each agency, in partnership with 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, 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 agencies 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 § 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 an engineering study determines otherwise. Positive protection devices shall be considered in 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 control 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 traffic control measures.* Other traffic control 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 or variable speed limits);
- (15) Law enforcement;
- (16) 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;
- (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 law enforcement 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 programwide 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 vehicles and equipment.* In addition to addressing risks to workers and road users from motorized traffic, the agency processes, procedures, and guidance established in accordance with § 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 workspace, based on individual project characteristics and factors.

(f) *Payment for traffic control.* Consistent with the requirements of § 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.¹ A level of inspection necessary to provide ongoing compliance with the quality guidelines shall be provided.

¹ ATSSA's Quality Guidelines for Temporary Traffic Control Devices and Features uses photos and written descriptions to help judge when a traffic control device has outlived its usefulness. These guidelines are available for purchase from ATSSA through the following URL:

<https://www.atssa.com/resource/quality-guidelines/>. Similar guidelines are available from various State highway agencies.

§ 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.

[FR Doc. 2024-25065 Filed 10-31-24; 8:45 am]

BILLING CODE 4910-22-P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[USCG-2024-0996]

Safety Zone; Claytor Lake, Dublin, VA

AGENCY: Coast Guard, DHS.

ACTION: Notification of enforcement of regulation.

SUMMARY: The Coast Guard will enforce a safety zone in Virginia for portions of Claytor Lake to protect personnel, vessels, and the marine environment from potential hazards created by hazardous debris within the waterway due to a tropical storm. Any vessel in the regulated area must comply with directions from the Coast Guard Patrol Commander or his representative, including a Federal, State, and local officer designated by or assisting the Captain of the Port Virginia (COTP) in the enforcement of the safety zone.

DATES: The regulations in 33 CFR 165.520 will be enforced for Claytor Lake from October 30th, 2024 through January 31st, 2025.

FOR FURTHER INFORMATION CONTACT: If you have questions about this rule, call or email LCDR Justin Strassfield, Sector Virginia, Waterways Management Division, U.S. Coast Guard, Telephone: 757-668-5580, email: VirginiaWaterways@uscg.mil.

SUPPLEMENTARY INFORMATION: The Coast Guard will enforce a safety zone for Hurricanes, Tropical Storms, and other Storms with High Wind for portions of Claytor Lake from October 30th, 2024, through January 31st, 2025, to protect personnel, vessels, and the marine environment from potential hazards

created by hazardous debris within the waterway due to tropical storm Helene. The safety zone is now in Port Condition RECOVERY. This action is being taken to provide for the safety of life on navigable waterways while cleanup operations are conducted. The safety zone encompasses Claytor Lake.

It is bound by the following positions: Claytor Lake: 37°02'2.4" N, 80°39'40.7" W; 37°04'31.5" N 80°35'06.8" W.

During enforcement periods, the operator of a vessel in the regulated area must comply with directions from the Coast Guard Patrol Commander, including a Coast Guard coxswain, petty officer, or other officer operating a Coast Guard vessel and a Federal, State, and local officer designated by or assisting the Captain of the Port Virginia (COTP) in the enforcement of the safety zone. To seek permission to enter, contact the COTP or the COTP's representative by VHF-FM Channel 16.

In addition to this notification of enforcement in the **Federal Register**, the Coast Guard plans to provide notification of this enforcement period via the Local Notice to Mariners and marine information broadcasts.

Dated: October 28, 2024.

P.M. Britton,

Captain, U.S. Coast Guard, Captain of the Port Sector Virginia.

[FR Doc. 2024-25466 Filed 10-31-24; 8:45 am]

BILLING CODE 9110-04-P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

44 CFR Parts 61 and 62

[Docket ID FEMA-2024-0030]

RIN 1660-AB16

National Flood Insurance Program Installation Payment Plan

AGENCY: Federal Emergency Management Agency, Department of Homeland Security (DHS).

ACTION: Final rule.

SUMMARY: The National Flood Insurance Program (NFIP) is a voluntary program in which interested persons can purchase flood insurance for their property, if it is located in a community that participates in the NFIP by adopting and enforcing a set of minimum floodplain management requirements to reduce future flood damages. FEMA is revising the NFIP's regulations to offer NFIP policyholders the option of paying their annual flood

insurance premium in monthly installments.

DATES: This rule is effective December 31, 2024.

ADDRESSES: The docket for this rulemaking is available for inspection using the Federal eRulemaking Portal at <https://www.regulations.gov> and can be viewed by following that website's instructions.

FOR FURTHER INFORMATION CONTACT:

Kelly Bronowicz, Director, Policyholder Services Division, Federal Insurance Directorate, Resilience, Federal Emergency Management Agency, (202) 557-9488, Kelly.Bronowicz@fema.dhs.gov.

SUPPLEMENTARY INFORMATION:

I. Background

A. The National Flood Insurance Program

Congress created the National Flood Insurance Program (NFIP) through enactment of the National Flood Insurance Act of 1968 (NFIA) (title XIII of Pub. L. 90-448, 82 Stat. 572), 42 U.S.C. 4001 *et seq.* The NFIP is a Federal program enabling property owners in participating communities that adopt and enforce floodplain management regulations to purchase insurance as a protection against flood losses. A consumer may purchase an NFIP federally-backed flood insurance policy either: (1) directly from the Federal Government through a direct servicing agent (referred to as "NFIP Direct"); or (2) from a participating private insurance company through the Write Your Own (WYO) Program. The Standard Flood Insurance Policy (SFIP) sets out the terms and conditions of insurance. *See* 44 CFR part 61, appendix A. FEMA establishes terms and conditions of coverage and sets premiums for coverage. The terms, coverage limits, and flood insurance premiums are the same whether a policy is purchased from the NFIP Direct or a private WYO insurance company in the WYO Program. *See* 44 CFR 62.23(a). Under the regulations in place prior to this rule change, FEMA required policyholders to pay their applicable SFIP annual premium in full at the time of application.¹ 44 CFR 61.4(b). Requiring payment of the annual premium in full at the time of application reduced administrative costs to the program, and because of the seasonal nature of flooding, ensured the receipt of premium and exposure to risk

¹ Policyholders must also pay policy fees and statutory surcharges at the time of application or policy renewal. *See* 44 CFR 61.10.