

State's multi-year Statewide Transportation Improvement Program.

(1) *Project selection.* The program may, at the State's discretion, establish specific criteria and guidelines for selecting other highway projects for VE studies.

(2) *Studies.* Value engineering studies shall follow the widely recognized systematic problem-solving analysis process that is used throughout private industry and governmental agencies. Studies must be performed using multi-disciplined teams of individuals not personally involved in the design of the project. Study teams should consist of a team leader and individuals from different speciality areas, such as design, construction, environment, planning, maintenance, right-of-way, and other areas depending upon the type of project being reviewed. Individuals from the public and other agencies may also be included on the team when their inclusion is found to be in the public interest.

(i) Each team leader should be trained and knowledgeable in VE techniques and be able to serve as the coordinator and facilitator of the team.

(ii) Studies should be employed as early as possible in the project development or design process so that accepted VE recommendations can be implemented without delaying the progress of the project.

(iii) Studies should conclude with a formal report outlining the study team's recommendations for improving the project and reducing its overall cost.

(3) *Recommendations.* The program should include procedures to approve or reject recommendations and ensure the prompt review of VE recommendations by staff offices whose speciality areas are implicated in proposed changes and by offices responsible for implementing accepted recommendations. Reviews by these offices should be performed promptly to minimize delays to the project.

(4) *Incentives.* The program may include a VE or cost reduction incentive clause in an STD's standard specifications or project special provisions that allows construction contractors to submit change proposals and share the resulting cost savings with the STD.

(5) *Monitoring.* The program should include procedures for monitoring the implementation of VE study team recommendations and VE change proposal recommendations submitted by construction contractors.

(b) *State VE coordinators.* Individuals knowledgeable in VE shall be assigned responsibilities to coordinate and monitor the STD's program and be actively involved in all phases of the program.

(c) *Use of consultants.* Consultants or firms with experience in VE may be retained by STDs to conduct the studies of Federal-aid highway projects or elements of Federal-aid highway projects required under §627.1(a) of this part. Consultants or firms should not be retained to conduct studies of their own designs unless they maintain separate and distinct organizational separation of their VE and design sections.

(d) *Funding eligibility.* The cost of performing VE studies is project related and is, therefore, eligible for reimbursement with Federal-aid highway funds at the appropriate pro-rata share for the project studied.

(e) In the case of a Federal-aid design-build project meeting the project criteria in 23 CFR 627.1(a), the STDs shall fulfill the value engineering analysis requirement by performing a value engineering analysis prior to the release of the Request for Proposals document.

[62 FR 6868, Feb. 14, 1997, as amended at 67 FR 75924, Dec. 10, 2002]

## PART 630—PRECONSTRUCTION PROCEDURES

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AUTHORITY: 23 U.S.C. 106, 109, 115, 315, 320, and 402(a); 23 CFR 1.32; and 49 CFR 1.48(b).

**Subpart A—Project Authorization and Agreements**

SOURCE: 66 FR 23847, May 10, 2001, unless otherwise noted.

**§ 630.102 Purpose.**

The purpose of this subpart is to prescribe policies for authorizing Federal-aid projects through execution of the project agreement required by 23 U.S.C. 106(a)(2).

**§ 630.104 Applicability.**

(a) This subpart is applicable to all Federal-aid projects unless specifically exempted.

(b) Other projects which involve special procedures are to be approved, or authorized as set out in the implementing instructions or regulations for those projects.

**§ 630.106 Authorization to proceed.**

(a)(1) The State transportation department (STD) must obtain an authorization to proceed from the FHWA before beginning work on any Federal-aid project. The STD may request an authorization to proceed in writing or by electronic mail for a project or a group of projects.

(2) The FHWA will issue the authorization to proceed either through or after the execution of a formal project agreement with the State. The agreement can be executed only after applicable prerequisite requirements of Federal laws and implementing regulations and directives are satisfied. Except as provided in paragraphs (c)(1) through (c)(4) of this section, the FHWA will obligate Federal funds in the project or group of projects upon execution of the project agreement.

(b) Federal funds shall not participate in costs incurred prior to the date of a project agreement except as provided by 23 CFR 1.9(b).

(c) The execution of the project agreement shall be deemed a contractual obligation of the Federal government under 23 U.S.C. 106 and shall require that appropriate funds be available at the time of authorization for the agreed Federal share, either pro rata or lump sum, of the cost of eligible work to be incurred by the State except as follows:

(1) Advance construction projects authorized under 23 U.S.C. 115.

(2) Projects for preliminary studies for the portion of the preliminary engineering and right-of-way (ROW) phase(s) through the selection of a location.

(3) Projects for ROW acquisition in hardship and protective buying situations through the selection of a particular location. This includes ROW acquisition within a potential highway corridor under consideration where necessary to preserve the corridor for future highway purposes. Authorization of work under this paragraph shall be in accord with the provisions of 23 CFR part 710.

(4) In special cases where the Federal Highway Administrator determines it to be in the best interest of the Federal-aid highway program.

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(d) For projects authorized to proceed under paragraphs (c)(1) through (c)(4) of this section, the executed project agreement shall contain the following statement: “Authorization to proceed is not a commitment or obligation to provide Federal funds for that portion of the undertaking not fully funded herein.”

(e) For projects authorized under paragraphs (c)(2) and (c)(3) of this section, subsequent authorizations beyond the location stage shall not be given until appropriate available funds have been obligated to cover eligible costs of the work covered by the previous authorization.

(f)(1) The Federal-aid share of eligible project costs shall be established at the time the project agreement is executed in one of the following manners:

(i) Pro rata, with the agreement stating the Federal share as a specified percentage; or

(ii) Lump sum, with the agreement stating that Federal funds are limited to a specified dollar amount not to exceed the legal pro rata.

(2) The pro-rata or lump sum share may be adjusted before or shortly after contract award to reflect any substantive change in the bids received as compared to the STD’s estimated cost of the project at the time of FHWA authorization, provided that Federal funds are available.

(3) Federal participation is limited to the agreed Federal share of eligible costs actually incurred by the State, not to exceed the maximum permitted by enabling legislation.

(g) The State may contribute more than the normal non-Federal share of title 23, U.S.C. projects. In general, financing proposals that result in only minimal amounts of Federal funds in projects should be avoided unless they are based on sound project management decisions.

(h)(1) Donations of cash, land, material or services may be credited to the State’s non-Federal share of the participating project work in accordance with title 23, U.S.C., and implementing regulations.

(2) Contributions may not exceed the total costs incurred by the State on the project. Cash contributions from

all sources plus the Federal funds may not exceed the total cost of the project.

**§ 630.108 Preparation of agreement.**

(a) The STD shall prepare a project agreement for each Federal-aid project.

(b) The STD may develop the project agreement in a format acceptable to both the STD and the FHWA provided the following are included:

(1) A description of each project location including State and project termini;

(2) The Federal-aid project number;

(3) The work covered by the agreement;

(4) The total project cost and amount of Federal funds under agreement;

(5) The Federal-aid share of eligible project costs expressed as either a pro rata percentage or a lump sum as set forth in § 630.106(f)(1);

(6) A statement that the State accepts and will comply with the agreement provisions set forth in § 630.112;

(7) A statement that the State stipulates that its signature on the project agreement constitutes the making of the certifications set for in § 630.112; and

(8) Signatures of officials from both the State and the FHWA, and the date executed.

(c) The project agreement should also document, by comment, instances where:

(1) The State is applying amounts of credits from special accounts (such as the 23 U.S.C. 120(j) toll credits, 23 U.S.C. 144(n) off-system bridge credits and 23 U.S.C. 323 land value credits) to cover all or a portion of the normal percent non-Federal share of the project;

(2) The project involves other arrangements affecting Federal funding or non-Federal matching provisions, including tapered match, donations, or use of other Federal agency funds, if known at the time the project agreement is executed; and

(3) The State is claiming finance related costs for bond and other debt instrument financing (such as payments to States under 23 U.S.C. 122).

(d) The STD may use an electronic version of the agreement as provided by the FHWA.

(Approved by the Office of Management and Budget under control number 2125-0529)

**§ 630.110 Modification of original agreement.**

(a) When changes are needed to the original project agreement, a modification of agreement shall be prepared. Agreements should not be modified to replace one Federal fund category with another unless specifically authorized by statute.

(b) The STD may develop the modification of project agreement in a format acceptable to both the STD and the FHWA provided the following are included:

- (1) The Federal-aid project number and State;
- (2) A sequential number identifying the modification;
- (3) A reference to the date of the original project agreement to be modified;
- (4) The original total project cost and the original amount of Federal funds under agreement;
- (5) The revised total project cost and the revised amount of Federal funds under agreement;
- (6) The reason for the modifications; and,
- (7) Signatures of officials from both the State and the FHWA and date executed.

(c) The STD may use an electronic version of the modification of project agreement as provided by the FHWA.

**§ 630.112 Agreement provisions.**

(a) The State, through its transportation department, accepts and agrees to comply with the applicable terms and conditions set forth in title 23, U.S.C., the regulations issued pursuant thereto, the policies and procedures promulgated by the FHWA relative to the designated project covered by the agreement, and all other applicable Federal laws and regulations.

(b) Federal funds obligated for the project must not exceed the amount agreed to on the project agreement, the balance of the estimated total cost being an obligation of the State. Such obligation of Federal funds extends

only to project costs incurred by the State after the execution of a formal project agreement with the FHWA.

(c) The State must stipulate that as a condition to payment of the Federal funds obligated, it accepts and will comply with the following applicable provisions:

(1) *Project for acquisition of rights-of-way.* In the event that actual construction of a road on this right-of-way is not undertaken by the close of the twentieth fiscal year following the fiscal year in which the project is authorized, the STD will repay to the FHWA the sum or sums of Federal funds paid to the transportation department under the terms of the agreement. The State may request a time extension beyond the 20-year limit with no repayment of Federal funds, and the FHWA may approve this request if it is considered reasonable.

(2) *Preliminary engineering project.* In the event that right-of-way acquisition for, or actual construction of, the road for which this preliminary engineering is undertaken is not started by the close of the tenth fiscal year following the fiscal year in which the project is authorized, the STD will repay to the FHWA the sum or sums of Federal funds paid to the transportation department under the terms of the agreement. The State may request a time extension for any preliminary engineering project beyond the 10-year limit with no repayment of Federal funds, and the FHWA may approve this request if it is considered reasonable.

(3) *Drug-free workplace certification.* By signing the project agreement, the STD agrees to provide a drug-free workplace as required by 49 CFR part 29, subpart F. In signing the project agreement, the State is providing the certification required in appendix C to 49 CFR part 29, unless the State provides an annual certification.

(4) *Suspension and debarment certification.* By signing the project agreement, the STD agrees to fulfill the responsibility imposed by 49 CFR 29.510 regarding debarment, suspension, and other responsibility matters. In signing the project agreement, the State is providing the certification for its principals required in appendix A to 49 CFR part 29.

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(5) *Lobbying certification.* By signing the project agreement, the STD agrees to abide by the lobbying restrictions set forth in 49 CFR part 20. In signing the project agreement, the State is providing the certification required in appendix A to 49 CFR part 20.

### Subpart B—Plans, Specifications, and Estimates

SOURCE: 43 FR 58564, Dec. 15, 1978, unless otherwise noted.

#### § 630.201 Purpose.

The purpose of this subpart is to prescribe Federal Highway Administration (FHWA) procedures relating to the preparation, submission, and approval of plans, specifications and estimates (PS&E), and supporting documents for Federal-aid projects.

#### § 630.203 Applicability.

The provisions of this regulation apply to all highway construction projects financed in whole or in part with Federal-aid highway funds and to be undertaken by a State or political subdivision.

[69 FR 7118, Feb. 13, 2004]

#### § 630.205 Preparation, submission, and approval.

(a) The contents and number of copies of the PS&E assembly shall be determined by the FHWA.

(b) Plans and specifications shall describe the location and design features and the construction requirements in sufficient detail to facilitate the construction, the contract control and the estimation of construction costs of the project. The estimate shall reflect the anticipated cost of the project in sufficient detail to provide an initial prediction of the financial obligations to be incurred by the State and FHWA and to permit an effective review and comparison of the bids received.

(c) PS&E assemblies for Federal-aid highway projects shall be submitted to the FHWA for approval.

(d) The State highway agency (SHA) shall be advised of approval of the PS&E by the FHWA.

(e) No project or part thereof for actual construction shall be advertised

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for contract nor work commenced by force account until the PS&E has been approved by the FHWA and the SHA has been so notified.

### Subpart C [Reserved]

### Subpart D—Geodetic Markers

SOURCE: 39 FR 26414, July 19, 1974, unless otherwise noted.

#### § 630.401 Purpose.

The purpose of this subpart is to prescribe procedures for conducting geodetic control surveys when participation with Federal-aid highway funds in the cost thereof is proposed and to encourage inter-agency cooperation in setting station markers, surveying to measure their position, and preserving the control so established.

#### § 630.402 Policy.

(a) Geodetic surveys along Federal-aid highway routes may be programmed as Federal-aid highway projects.

(b) All geodetic survey work performed as a Federal-aid highway project will conform to National Ocean Survey (NOS) specifications. NOS will, as the representative of FHWA, be responsible for the inspection and verification of the work to ascertain that the specifications for the work have been met. Final project acceptance by FHWA will be predicated on a finding of acceptability by NOS.

#### § 630.403 Initiation of projects.

All projects shall be coordinated by the FHWA Division Administrator, the State highway department and the National Ocean Survey.

#### § 630.404 Standards.

(a) Highway purposes may best be served by the establishment of station markings for horizontal control along Federal-aid highway routes at spacings of three to eight kilometers (about 2 to 5 miles) and station markers for vertical control of spacings no closer than one kilometer. These requirements may be waived only with the approval of the Administrator.

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(b) Projects should be of sufficient scope to permit efficient use of field parties. Projects should extend at least 30 kilometers. Projects may be coordinated with adjoining States to attain greater efficiency.

(c) Where geodetic station markers cannot be established initially at points readily accessible from the Federal-aid route, or where unavoidable circumstances result in their being established within construction limits, supplemental projects may later be approved to set and survey markers at satisfactory permanent points, preferably within the right-of-way but at points where their use does not introduce traffic hazards.

### Subparts E–F [Reserved]

## Subpart G—Advance Construction of Federal-Aid Projects

SOURCE: 60 FR 36993, July 19, 1995, unless otherwise noted.

### § 630.701 Purpose.

The purpose of this subpart is to prescribe procedures for advancing the construction of Federal-aid highway projects without obligating Federal funds apportioned or allocated to the State.

### § 630.703 Eligibility.

(a) The State Highway Agency (SHA) may proceed with a highway substitute, congestion mitigation and air quality improvement program, surface transportation program, bridge replacement and rehabilitation, or planning and research project in accordance with this subpart, provided the SHA:

(1) Has obligated all funds apportioned or allocated to it under 23 U.S.C. 103(e)(4)(H), 104(b)(2), 104(b)(3), 104(f), 144, or 307, as the case may be for the proposed project, or

(2) Has used all obligation authority distributed to it, or

(3) Demonstrates that it will use all obligation authority distributed to it.

(b) The SHA may proceed with a National Highway System (NHS) or Interstate project in accordance with this subpart without regard to apportion-

ment or obligation authority balances. Interstate projects include Interstate construction and Interstate maintenance.

### § 630.705 Procedures.

(a) An advance construction project shall meet the same requirements and be processed in the same manner as a regular Federal-aid project, except,

(1) The FHWA authorization does not constitute any commitment of Federal funds on the project, and

(2) The FHWA shall not reimburse the State until the project is converted under § 630.709.

(b) Project numbers shall be identified by the letters “AC” preceding the regular project number prefix.

[60 FR 36993, July 19, 1995, as amended at 68 FR 60033, Oct. 21, 2003]

### § 630.707 [Reserved]

### § 630.709 Conversion to a regular Federal-aid project.

(a) The SHA may submit a written request to the FHWA that a project be converted to a regular Federal-aid project at any time provided that sufficient Federal-aid funds and obligation authority are available.

(b) Subsequent to FHWA approval the SHA may claim reimbursement for the Federal share of project costs incurred, provided the project agreement has been executed. If the SHA has previously submitted a final voucher, the FHWA will process the voucher for payment.

## Subpart H—Bridges on Federal Dams

SOURCE: 39 FR 36474, Oct. 10, 1974, unless otherwise noted.

### § 630.801 Purpose.

The purpose of this subpart is to prescribe procedures for the construction and financing, by an agency of the Federal Government, of public highway bridges over dams constructed and owned by or for the United States.

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### § 630.802 Applicability.

A proposed bridge over a dam, together with the approach roads to connect the bridge with existing public highways, must be eligible for inclusion in the Federal-aid highway system, if not already a part thereof.

### § 630.803 Procedures.

A State's application to qualify a project under this subpart will include:

(a) A certification that the bridge is economically desirable and needed as a link in the Federal-aid highway system.

(b) A statement showing the source and availability of funds to be used in construction of the roadway approaches.

(c) A statement of any obligation on the part of the agency constructing the dam to provide such bridge or approach roads to satisfy a legal liability incurred independently of this subpart.

## Subpart I [Reserved]

## Subpart J—Traffic Safety in Highway and Street Work Zones

SOURCE: 43 FR 47140, Oct. 12, 1978, unless otherwise noted.

EFFECTIVE DATE NOTE: At 69 FR 54569, Sept. 9, 2004, subpart J of part 630 was revised, effective Oct. 12, 2007. For the convenience of the user, the revised text is set forth following the subpart.

### § 630.1002 Purpose.

The purpose of this subpart is to provide guidance and establish procedures to assure that adequate consideration is given to motorists, pedestrians, and construction workers on all Federal-aid construction projects.

### § 630.1004 Background.

Part VI of the manual on uniform traffic control devices (MUTCD)<sup>1</sup> sets forth basic principles and prescribes standards for the design, application, installation, and maintenance of the

<sup>1</sup>The MUTCD is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. It is incorporated by reference at 23 CFR 655, subpart F.

various types of traffic control devices for highway and street construction, maintenance operation, and utility work. The manual cannot address in depth the variety of situations that occur in providing traffic control in work zones. Although agencies responsible for traffic control and work area protection have attempted to develop some guidelines, a coordinated and comprehensive effort to develop greater uniformity is desirable. National reviews have shown that more attention is needed to insure that the MUTCD is properly implemented on all highway projects.

[43 FR 47140, Oct. 12, 1978, as amended at 51 FR 16834, May 7, 1986]

### § 630.1006 Policy.

It is the policy of the Federal Highway Administration that each highway agency shall develop and implement procedures consonant with the requirements of this regulation that will assure the safety of motorists, pedestrians, and construction workers on Federal-aid highway construction projects. The procedures shall be consistent with the provisions of the MUTCD. Highway agencies should be encouraged to implement these procedures for non-Federal-aid projects and maintenance operations as well.

### § 630.1008 Implementation.

The FHWA Division Administrator shall review and approve the highway agency's implementation of its procedures at appropriate intervals. The FHWA shall take appropriate action to assure that the highway agency's procedures are being followed and achieve the results intended. Major revisions in established procedures shall be submitted to the FHWA Division Administrator for information.

### § 630.1010 Contents of the agency procedures.

The agency's procedures shall include, but not necessarily be limited to the following:

(a) *Traffic control plan (TCP)*. (1) A traffic control plan is a plan for handling traffic through a specific highway or street work zone or project. These plans may range in scope from a very

detailed TCP designed solely for a specific project, to a reference to standard plans, a section of the MUTCD, or a standard highway agency manual. The degree of detail in the TCP will depend on the project complexity and traffic interference with construction activity.

(2) Traffic control plans shall be developed for all projects and be included in plans, specifications, and estimates (P.S. & E.'s) and shall be consistent with part VI of the MUTCD.

(3) The scope of the TCP should be determined during planning and design phases of a project.

(4) Provisions may be made to permit contractors to develop their own TCP's and use them if the highway agency and FHWA find that these plans are as good as or better than those provided in the P.S. & E.

(5)(i) Two-lane, two-way operation on one roadway of a normally divided highway (TLTWO) shall be used only after careful consideration of other available methods of traffic control. Where the TLTWO is used, the TCP shall include provisions for the separation of opposing traffic except:

(A) Where the TLTWO is located on an urban type street or arterial where operating speeds are low;

(B) Where drivers entering the TLTWO can see the transition back to normal one-way operation on each roadway; or

(C) Where FHWA approves nonuse of separation devices based on unusual circumstances.

(ii) Center line striping, raised pavement markers, and complementary signing, either alone or in combination, are not considered acceptable for separation purposes.

(b) *Responsible person.* The highway agency shall designate a qualified person at the project level who will have the primary responsibility and sufficient authority for assuring that the TCP and other safety aspects of the contract are effectively administered. While the project or resident engineer may have this responsibility, on large complex projects another person should be assigned at the project level to handle traffic control on a full-time basis.

(c) *Pay items.* The P.S. & E. should include unit pay items for providing, in-

stalling, moving, replacing, maintaining, and cleaning traffic control devices required by the TCP. Suitable force account procedures may be utilized for traffic control items. Lump-sum method of payment should be used only to cover very small projects, projects of short duration, contingency, and general items. Payment for traffic control items as incidental to other items of work should be discouraged.

(d) *Training.* All persons responsible for the development, design, implementation, and inspection of traffic control shall be adequately trained.

(e) *Process review and evaluation.* (1) A review team consisting of appropriate highway agency personnel shall annually review randomly selected projects throughout its jurisdiction for the purpose of assessing the effectiveness of its procedures. The agency may elect to include an FHWA representative as a member of the team. The results of this review are to be forwarded to the FHWA Division Administrator for his review and approval of the highway agency's annual traffic safety effort.

(2) Construction zone accidents and accident data shall be analyzed and used to continually correct deficiencies which are found to exist on individual projects, and to improve the content of future traffic control plans.

[43 FR 47140, Oct. 12, 1978, as amended at 47 FR 21780, May 20, 1982]

EFFECTIVE DATE NOTE: At 69 FR 54569, Sept. 9, 2004, subpart J of part 630 was revised, effective Oct. 12, 2007. For the convenience of the user, the revised text is set forth as follows:

### Subpart J—Work Zone Safety and Mobility

#### § 630.1002 Purpose.

Work zones directly impact the safety and mobility of road users and highway workers. These safety and mobility impacts are exacerbated by an aging highway infrastructure and growing congestion in many locations. Addressing these safety and mobility issues requires considerations that start early in project development and continue through project completion. Part 6 of the Manual On Uniform Traffic Control Devices (MUTCD)<sup>1</sup>

<sup>1</sup>The MUTCD is approved by the FHWA and recognized as the national standard for

*Continued*

sets forth basic principles and prescribes standards for the design, application, installation, and maintenance of traffic control devices for highway and street construction, maintenance operation, and utility work. In addition to the provisions in the MUTCD, there are other actions that could be taken to further help mitigate the safety and mobility impacts of work zones. This subpart establishes requirements and provides guidance for systematically addressing the safety and mobility impacts of work zones, and developing strategies to help manage these impacts on all Federal-aid highway projects.

**§ 630.1004 Definitions and explanation of terms.**

As used in this subpart:

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

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

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

traffic control on all public roads. It is incorporated by reference into the Code of Federal Regulations at 23 CFR part 655. It is available on the FHWA's Web site at <http://mutcd.fhwa.dot.gov> and is available for inspection and copying at the FHWA Washington, DC Headquarters and all FHWA Division Offices as prescribed at 49 CFR part 7.

*Work zone*<sup>2</sup> is an area of a highway with construction, maintenance, or utility work activities. A work zone is typically marked by signs, channelizing devices, barriers, pavement markings, and/or work vehicles. It extends from the first warning sign or high-intensity rotating, flashing, oscillating, or strobe lights on a vehicle to the END ROAD WORK sign or the last temporary traffic control (TTC) device.

*Work zone crash*<sup>3</sup> means a traffic crash in which the first harmful event occurs within the boundaries of a work zone or on an approach to or exit from a work zone, resulting from an activity, behavior, or control related to the movement of the traffic units through the work zone. This includes crashes occurring on approach to, exiting from or adjacent to work zones that are related to the work zone.

*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, area type (urban, suburban, and rural), traffic and travel characteristics, type of work being performed, time of day/night, and complexity of the project. These impacts may extend beyond the physical location of the work zone itself, and may occur on the roadway on which the work is being performed, as well as other highway corridors, other modes of transportation, and/or the regional transportation network.

**§ 630.1006 Work zone safety and mobility policy.**

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

<sup>2</sup>MUTCD, Part 6, "Temporary Traffic Control," Section 6C.02, "Temporary Traffic Control Zones."

<sup>3</sup>"Model Minimum Uniform Crash Criteria Guideline" (MMUCC), 2d Ed. (Electronic), 2003, produced by National Center for Statistics and Analysis, National Highway Traffic Safety Administration (NHTSA). Telephone 1-(800)-934-8517. Available at the URL: <http://www.nrd.nhtsa.dot.gov>. The NHTSA, the FHWA, the Federal Motor Carrier Safety Administration (FMCSA), and the Governors Highway Safety Association (GHSA) sponsored the development of the MMUCC Guideline which recommends voluntary implementation of the 111 MMUCC data elements and serves as a reporting threshold that includes all persons (injured and uninjured) in crashes statewide involving death, personal injury, or property damage of \$1,000 or more. The Guideline is a tool to strengthen existing State crash data systems.

implementation process. This policy may take the form of processes, procedures, and/or guidance, and may vary based on the characteristics and expected work zone impacts of individual projects or classes of projects. The States should institute this policy using a multi-disciplinary team and in partnership with the FHWA. The States are encouraged to implement this policy for non-Federal-aid projects as well.

**§ 630.1008 State-level processes and procedures.**

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

(b) *Work zone assessment and management procedures.* States should develop and implement systematic procedures to assess work zone impacts in project development, and to manage safety and mobility 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, and operational information to manage work zone impacts for specific projects during implementation. States shall continually pursue improvement of work zone safety and mobility by analyzing work zone crash and operational data from multiple projects to improve State processes and procedures. States should maintain elements of the data and information resources that are necessary to support these activities.

(d) *Training.* States shall require that personnel involved in the development, design, implementation, operation, inspection, and enforcement of work zone related transportation management and traffic control be trained, appropriate to the job decisions each individual is required to make. States shall require periodic training updates that reflect changing industry practices and State processes and procedures.

(e) *Process review.* In order to assess the effectiveness of work zone safety and mobility procedures, the States shall perform a process review at least every two years. This review may include the evaluation of work zone data at the State level, and/or review of randomly selected projects throughout their jurisdictions. Appropriate personnel who represent the project development stages and the different offices within the State, and the FHWA should participate in this review. Other non-State stakeholders may also be included in this review, as appropriate. The results of the review are intended to lead to improvements in work zone processes and

procedures, data and information resources, and training programs so as to enhance efforts to address safety and mobility on current and future projects.

**§ 630.1010 Significant projects.**

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

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

(c) All Interstate system projects within the boundaries of a designated Transportation Management Area (TMA) that occupy a location for more than three days with either intermittent or continuous lane closures 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 § 630.1010(c), but in the judgment of the State they do not cause sustained work zone impacts, the State may request from the FHWA, an exception to §§ 630.1012(b)(2) and 630.1012(b)(3). Exceptions to these provisions may be granted by the FHWA based on the State's ability to show that the specific Interstate system project or categories of Interstate system projects do not have sustained work zone impacts.

**§ 630.1012 Project-level procedures.**

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

(b) *Transportation Management Plan (TMP).* A TMP consists of strategies to manage the work zone impacts of a project. Its scope, content, and degree of detail may vary based upon the State's work zone policy, and the State's understanding of the expected work zone impacts of the project. For significant projects (as defined in § 630.1010), the State shall develop a TMP that consists of a Temporary Traffic Control (TTC) plan and addresses both Transportation Operations (TO) and Public Information (PI) 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 PI issues for all projects.

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

(2) The TO component of the TMP shall include the identification of strategies that will be used 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 PI 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 PI component should be determined by the project characteristics and the public information and outreach strategies identified by the State. Public information 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) The Plans, Specifications, and Estimates (PS&Es) shall include either a TMP or provisions for contractors to develop a TMP at the most appropriate project phase as applicable to the State's chosen contracting methodology for the project. A contractor developed TMP shall be subject to the approval of the State, and shall not be implemented before it is approved by the State.

(d) The PS&Es shall include appropriate pay item provisions for implementing the TMP, either through method or performance based specifications.

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

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

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

#### § 630.1014 Implementation.

Each State shall work in partnership with the FHWA in the implementation of its policies and procedures to improve work zone safety and mobility. At a minimum, this shall involve an FHWA review of conformance of the State's policies and procedures with this regulation and reassessment of the State's implementation of its procedures at

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appropriate intervals. Each State is encouraged to address implementation of this regulation in its stewardship agreement with the FHWA.

**§ 630.1016 Compliance date.**

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

**PART 633—REQUIRED CONTRACT PROVISIONS**

**Subpart A—Federal-Aid Construction Contracts (Other Than Appalachian Contracts)**

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APPENDIX A TO SUBPART B—TYPES OF CONTRACTS TO WHICH THE CIVIL RIGHTS ACT OF 1964 IS APPLICABLE

APPENDIX B TO SUBPART B—REQUIRED CONTRACT PROVISIONS, APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM AND LOCAL ACCESS ROADS CONSTRUCTION CONTRACTS

APPENDIX C TO SUBPART B—ADDITIONAL REQUIRED CONTRACT PROVISIONS, APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM AND LOCAL ACCESS ROADS CONTRACTS OTHER THAN CONSTRUCTION CONTRACTS

APPENDIX D TO SUBPART B—FEDERAL-AID PROPOSAL NOTICES

**Subpart A—Federal-Aid Construction Contracts (Other Than Appalachian Contracts)**

AUTHORITY: 23 U.S.C. 114 and 315; 49 CFR 1.48.

SOURCE: 52 FR 36920, Oct. 2, 1987, unless otherwise noted.

**§ 633.101 Purpose.**

To prescribe for Federal-aid highway proposals and construction contracts the method for inclusion of required contract provisions of existing regulations which cover employment, nonsegregated facilities, record of materials and supplies, subletting or assigning the contract, safety, false statements concerning highway projects, termination of a contract, and implementation of the Clean Air Act and the Federal Water Pollution Control Act, and other provisions as shall from time-to-time be required by law and regulation as conditions of Federal assistance.

**§ 633.102 Applicability.**

(a) The required contract provisions and the required proposal notices apply to all Federal-aid construction contracts other than Appalachian construction contracts.

(b) Form FHWA-1273, "Required Contract Provisions, Federal-aid Construction Contracts," contains required contract provisions and required proposal notices that are required by regulations promulgated by the FHWA or other Federal agencies. The required contract provisions of Form FHWA-1273 shall be physically incorporated in each Federal-aid highway construction contract other than Appalachian construction contracts (see § 633.104 for availability of form).

(c) [Reserved]

(d) The required contract provisions contained in Form FHWA-1273 shall apply to all work performed on the contract by the contractor's own organization and to all work performed on the contract by piecework, station work, or by subcontract.

(e) The contractor shall insert in each subcontract, except as excluded by law or regulation, the required contract provisions contained in Form FHWA-1273 and further require their