

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, installing, 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)¹ sets forth basic principles and prescribes standards for the design, application, installation, and maintenance of traffic control devices for highway and street construction,

¹The MUTCD is approved by the FHWA and recognized as the national standard for 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.

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.

*Work zone*² 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

²MUTCD, Part 6, "Temporary Traffic Control," Section 6C.02, "Temporary Traffic Control Zones."

WORK sign or the last temporary traffic control (TTC) device.

*Work zone crash*³ 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 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.

³“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.

§ 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. 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 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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- 633.101 Purpose.
- 633.102 Applicability.
- 633.103 Regulatory authority.
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Subpart B—Federal-Aid Contracts (Appalachian Contracts)

- 633.201 Purpose.
- 633.202 Definitions.
- 633.203 Applicability of existing laws, regulations, and directives.
- 633.204 Fiscal allocation and obligations.
- 633.205 Prefinancing.
- 633.206 Project agreements.
- 633.207 Construction labor and materials.
- 633.208 Maintenance.
- 633.209 Notices to prospective Federal-aid construction contractors.
- 633.210 Termination of contract.
- 633.211 Implementation of the Clean Air Act and the Federal Water Pollution Control Act.

APPENDIX A TO SUBPART B OF PART 633—TYPES OF CONTRACTS TO WHICH THE CIVIL RIGHTS ACT OF 1964 IS APPLICABLE

APPENDIX B TO SUBPART B OF PART 633—REQUIRED CONTRACT PROVISIONS, APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM AND LOCAL ACCESS ROADS CONSTRUCTION CONTRACTS

APPENDIX C TO SUBPART B OF PART 633—ADDITIONAL REQUIRED CONTRACT PROVISIONS, APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM AND LOCAL ACCESS ROADS CONTRACTS OTHER THAN CONSTRUCTION CONTRACTS

APPENDIX D TO SUBPART B OF PART 633—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.