

DEPARTMENT OF TRANSPORTATION**Federal Highway Administration****23 CFR Part 655**

[FHWA Docket No. FHWA-99-6576]

RIN 2125-AE72

Revision of the Manual on Uniform Traffic Control Devices; Temporary Traffic Control**AGENCY:** Federal Highway Administration (FHWA), DOT.**ACTION:** Notice of proposed amendments to the Manual on Uniform Traffic Control Devices (MUTCD); request for comments.

SUMMARY: The MUTCD is incorporated by reference in 23 CFR part 655, subpart F, approved by the Federal Highway Administrator, and recognized as the national standard for traffic control on all public roads. The FHWA announced its intent to rewrite and reformat the MUTCD on January 10, 1992, at 57 FR 1134.

This document proposes new text for the MUTCD in Part 6—Temporary Traffic Control. The purpose of this rewrite effort is to reformat the text for clarity of intended meanings, to include metric dimensions and values for the design and installation of traffic control devices, and to improve the overall organization and discussion of the contents in the MUTCD. The proposed changes included herein are intended to expedite traffic, promote uniformity, improve safety, and incorporate technology advances in traffic control device application.

DATES: Submit comments on or before June 30, 2000.

ADDRESSES: Signed, written comments should refer to the docket number that appears at the top of this document and must be submitted to the Docket Clerk, U.S. DOT Dockets, Room PL-401, 400 Seventh Street, SW., Washington, DC 20590-0001. All comments received will be available for examination at the above address between 9 a.m. and 5 p.m., e.t., Monday through Friday, except Federal holidays. Those desiring notification of receipt of comments must include a self-addressed, stamped postcard.

FOR FURTHER INFORMATION CONTACT: For information regarding the notice of proposed amendments contact Mr. Charlie L. Sears, Office of Transportation Operations, Room 3408, (202) 366-1555, or Mr. Raymond Cuprill, Office of the Chief Counsel, Room 4217, (202) 366-0834, Department of Transportation, Federal

Highway Administration, 400 Seventh Street, SW., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:**Electronic Access**

Internet users may access all comments received by the U.S. DOT Dockets, Room PL 401, by using the universal resource locator (URL): <http://dms.dot.gov>. It is available 24 hours each day, 365 days each year. Please follow the instructions online for more information and help. An electronic copy of this notice of proposed amendment may be downloaded using a modem and suitable communications software from the Government Printing Office's Electronic Bulletin Board Service at (202) 512-1661. Internet users may reach the Office of the Federal Register's home page at: <http://www.nara.gov/fedreg> and the Government Printing Office's database at: <http://www.access.gpo.gov/nara>.

The text for the proposed sections of the MUTCD is available from the FHWA Office of Transportation Operations (HOTO-1) or from the FHWA Home Page at the URL: <http://www.ohs.fhwa.dot.gov/operations/mutcd>. Please note that the proposed rewrite sections contained in this docket for MUTCD Part 6 will take approximately 8 weeks from the date of publication before they will be available at this web site.

Background

The 1988 MUTCD with its revisions is available for inspection and copying as prescribed in 49 CFR part 7. It may be purchased for \$57.00 (Domestic) or \$71.25 (Foreign) from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954, Stock No. 650-001-00001-0. This notice is being issued to provide an opportunity for public comment on the desirability of proposed amendments to the MUTCD. Based on the comments received and its own experience, the FHWA may issue a final rule concerning the proposed changes included in this notice.

The National Committee on Uniform Traffic Control Devices (NCUTCD) has taken the lead in this effort to rewrite and reformat the MUTCD. The NCUTCD is a national organization of individuals from the American Association of State Highway and Transportation Officials (AASHTO), the Institute of Transportation Engineers (ITE), the National Association of County Engineers (NACE), the American Public Works Association (APWA), and other organizations that have extensive

experience in the installation and maintenance of traffic control devices. The NCUTCD voluntarily assumed the arduous task of rewriting and reformatting the MUTCD. The NCUTCD proposal is available from the U.S. DOT Dockets (see address above). Pursuant to 23 CFR part 655, the FHWA is responsible for approval of changes to the MUTCD.

Although the MUTCD will be revised in its entirety, it is being completed in phases due to the enormous volume of text. The FHWA reviewed the NCUTCD's proposal for MUTCD Part 3—Markings, Part 4—Signals, and Part 8—Traffic Control for Highway-Rail Intersections. The summary of proposed changes for Parts 3, 4, and 8 was published as Phase 1 of the MUTCD rewrite effort in a previous notice of proposed amendment dated January 6, 1997, at 62 FR 691. The FHWA reviewed the NCUTCD's proposal for Part 1—General Provisions and Part 7—Traffic Control for School Areas. The summary of proposed changes for Parts 1 and 7 was published as phase 2 of the MUTCD rewrite effort in a previous notice of proposed amendment dated December 5, 1997, at 62 FR 64324. The FHWA reviewed the NCUTCD's proposal for Chapter 2A—General Provisions and Standards for Signs, Chapter 2D—Guide Signs for Conventional Roads, Chapter 2E—Guide Signs for Expressways and Freeways, Chapter 2F—Specific Service Signs, and Chapter 2I—Signing for Civil Defense. The summary of proposed changes for Chapters 2A, 2D, 2E, 2F, and 2I was published as Phase 3 of the MUTCD rewrite effort in a previous notice of proposed amendment dated June 11, 1998, at 63 FR 31950. The summary of proposed changes for Chapters 2G—Tourist Oriented Directional Signs, Chapter 2H—Recreational and Cultural Interest Signs, and Part 9—Traffic Control for Bicycles was published as Phase 4 of the MUTCD rewrite effort in a previous notice of proposed amendment dated June 24, 1999, at 64 FR 33802. The summary of proposed changes for Chapter 2C—Warning Signs and Part 10—Traffic Control for Highway-Light Rail Transit Grade Crossings was published as Phase 5 of the MUTCD rewrite effort in a previous notice of proposed amendment dated June 24, 1999, at 64 FR 33806. The summary of proposed changes for Chapter 2B—Regulatory Signs, Part 5—Traffic Control for Low-Volume Rural roads, and update information for Part 8—Traffic Control at Highway-Rail Grade Crossings was published as Phase 6 of the MUTCD rewrite effort in a

previous notice of proposed amendment. The summary of proposed new changes for Part 1—General Provisions, Part 3—Markings, and Part 4—Signals was published as Phase 7 of the MUTCD rewrite effort in a previous notice of proposed amendment. This notice of proposed amendment is Phase 8 of the MUTCD rewrite effort and includes the summary of proposed changes for MUTCD Part 6.

The proposed new style of the MUTCD would be a 3-ring binder with 8-1/2 x 11 inch pages. Each part of the MUTCD would be printed separately in a bound format and then included in the 3-ring binder. If someone needed to reference information on a specific part of the MUTCD, it would be easy to remove that individual part from the binder. The proposed new text would be in column format and contain four categories as follows: (1) Standards—representing “shall” conditions; (2) Guidance—representing “should” conditions; (3) Options—representing “may” conditions; and (4) Support—representing descriptive and/or general information. This new format would make it easier to distinguish standards, guidance, and optional conditions for the design, placement, and application of traffic control devices. The adopted final version of the new MUTCD will be in metric and english units. Dual units will be shown in the MUTCD particularly for speed limits, guide sign distances, and other measurements which the public must read.

The FHWA invites comments on the proposed text for MUTCD Part 6. A summary of the proposed significant changes contained in these sections are included in the following discussion:

Discussion of Proposed Amendments to Part 6—Temporary Traffic Control

The following items are the most significant proposed revisions to Part 6:

1. The FHWA proposes to change the title of Part 6 from “Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility, and Incident Management Operations” to “Temporary Traffic Control.” This title better explains the contents of this section.

2. In Section 6A, paragraph 4, the FHWA proposes to delete the word “must” from the second and third sentences. This deletion is proposed because temporary traffic control does not guarantee the safety or efficient completion of a work activity.

3. In Section 6A, in the second sentence of paragraph 5, the FHWA proposes to revise the sentence to read “A concurrent objective of the traffic

control is the efficient construction and maintenance of the roadway.” This change is proposed because it clarifies the objective of proper traffic control.

4. In Section 6B.3c, the FHWA proposes to revise the first sentence to read, “Flagging procedures when used, should provide positive guidance to drivers * * *.” This change was suggested by the National Committee on Uniform Traffic Control Devices. The FHWA agrees with this suggestion because it will provide positive guidance to drivers to safely travel through temporary traffic control area.

5. In Section 6B.4a, the FHWA proposes to revise the second sentence to read, “The most important duty of these individuals should be to ensure that all traffic control elements of the project are consistent with the traffic control plan * * *.” This change will help ensure that proper traffic control measures are being carried out.

6. In Section 6B, in the second paragraph of the STANDARD, the FHWA proposes to change the following recommended condition to a STANDARD: “All traffic control devices shall be removed when no longer needed.” This change would ensure that all traffic control devices are removed when no longer required.

7. In Section 6B.7, the FHWA proposes to revise the first sentence to read, “Good public relations should be maintained.” This sentence would be revised from a mandatory statement to GUIDANCE.

8. In Section 6C.1, the FHWA proposes to revise the third GUIDANCE paragraph concerning traffic control plans for transit from mandatory shall statements to recommended GUIDANCE.

9. In Section 6C.2, the FHWA proposes to add a new definition for a Temporary Traffic Control Zone. A Temporary Traffic Control Zone is now defined as including a Work Zone and/or an Incident Area. There currently is no uniform definition of a work zone. As a result, work zone crash data collection is not uniform.

10. In Section 6C.3, paragraph 3, the FHWA proposes to revise the discussion on advance warning area from a mandatory condition to GUIDANCE as follows:

“(A) On urban and rural two-lane roadways, effective placement of warning signs should be as follows:

(1) Urban: Warning sign spacings in meters (feet) in advance of the transition area normally should range from .75 (4) to 1.5 (8) times the speed limit, in km/h, (mph) in meters (feet), with the high end of the range being used when speeds are relatively high.

(2) Rural: Rural roadways are characterized by higher speeds. The spacing, in meters (feet), for the placement of warning signs should be substantially longer—from 1.5 (8) to 2.25 (12) times the speed limit, in km/h, (mph).”

The above proposed changes will provide clearer guidance on warning sign placement.

11. In Section 6C.3, paragraph 4, the FHWA proposes to revise the following sentences from a permissive condition to GUIDANCE: “Typical distances for placement of advance warning signs on freeways and expressways are longer because drivers are conditioned to uninterrupted flow. Therefore, the advance warning signs should extend on these facilities as far as 800m (one-half mile) or more.”

12. In Section 6C.5, paragraph 9, the FHWA proposes to change the following discussion on an activity area from a recommended condition to an Option: “(a) Longitudinal Buffer Space: The Longitudinal buffer space may also be used to separate opposing traffic flows that utilize portions of the same traffic lane, as depicted in Figure 6-2.”

This change is proposed because buffer spaces are optional.

13. In Section 6C.7, paragraphs 6 and 7, the FHWA proposes to clarify some of the discussion on tapers and make it GUIDANCE:

(A) “Taper lengths shown in Table 6-2 should be the minimum used.” This change would require that tapers be calculated a certain way unless proper justification is given.

(B) “When using metric units, the maximum distance in meters between devices in a taper should not exceed 1/5 times the speed limit in kilometers per hour. When engineering judgment shows that there is a special need for a speed reduction, the maximum distance in kilometers between devices may be 1/10 of the speed limit in kilometers per hour. When using English units, the maximum distance in feet between devices in a taper should not exceed the speed limit in miles per hour. When engineering judgment shows there is a special need for speed reduction, the maximum distance in feet between devices may be one-half the speed limit in mph.”

This proposed clarification requires a certain spacing between channelizing devices unless proper justification is given. Also, the option for the one-half spacing is in response to recommendations contained in the

"Older Driver Highway Design Handbook".¹

14. In Section 6C.7, paragraph 12, the FHWA proposes to clarify the discussion on shifting tapers and make it GUIDANCE: "A shifting taper should have a length of about one-half 'L.'" This clarification will require a certain length for shifting tapers unless proper justification is given. This proposed change is in response to recommendations contained in the "Older Driver Highway Design Handbook".

15. In Section 6C.9 A, paragraph 2, the FHWA proposes to change the discussion of the flagger method from an Option to GUIDANCE. "When good visibility and traffic control cannot be maintained by one flagger station, traffic should be controlled by a flagger at each end of the section." This proposed change recommends two flaggers in one-lane, two-way traffic operation.

16. In Section 6D.1, paragraph 2, the FHWA proposes to add a new GUIDANCE discussion on the staging of equipment and work vehicles, barrier installation and regular inspections of work sites. These additions will provide additional guidance for and increase safety of pedestrians.

17. In Section 6D.1, paragraph 16, the FHWA proposes to clarify the following sentence and make it GUIDANCE: "At fixed work sites of significant duration, especially in urban areas with high pedestrian volumes, a canopied walkway may be used to protect pedestrians from falling debris." In the existing MUTCD the intent of the sentence was to provide safety to pedestrians by providing a canopied walkway. This proposed change would provide an increased emphasis on pedestrian safety.

18. In Section 6D.2, paragraph 3, the FHWA proposes to add the following new Option: Shadow Vehicle—in the case of mobile and constantly moving operations, such as pothole patching and striping operations, a shadow vehicle, equipped with appropriate lights, warning signs and/or a rear-mounted impact attenuator may be used to provide additional safety for the workers from impacts by errant vehicles.

19. In Section 6E.2, paragraph 1, the FHWA proposes to revise the fourth sentence to read, "The retroreflective clothing shall be designed to identify clearly the wearer as a person." This change is proposed to delete the phrase

"and be visible through the full range of body motions" because a flagger visibility is the most important issue.

20. In Section 6E.4, paragraph 2, the FHWA proposes to revise the sentence to read: "When used at nighttime, flags shall be retroreflectorized." Illuminating the flag would improve the visibility of the flag for the warning of motorists.

21. In Section 6E.4, paragraph 2, the FHWA proposes to change the following sentence from a recommended condition to a STANDARD: "The following methods of signaling with sign paddles shall be used."

22. Throughout Section 6F, the FHWA proposes to add a description of the following signs: STAY IN LANE, PEDESTRIAN CROSSWALK, SIDEWALK CLOSED (AHEAD) CROSS HERE, RIGHT TWO LANES CLOSED 0.8 KILOMETERS (½ MILE), CENTER LANE CLOSED AHEAD, THRU TRAFFIC MERGE RIGHT (LEFT), EXIT OPEN, ON RAMP, RAMP NARROWS, SLOW TRAFFIC AHEAD, SHOULDER WORK, RIGHT SHOULDER CLOSED, UTILITY WORK AHEAD, Lane Reduction Transition.

Several signs were in the Typical Application diagrams in the 1993 Edition of MUTCD, part 6 but there was no discussion as to their proper use.

23. In Section 6F.2, in the third sentence of paragraph 2, the FHWA proposes to add the following sentence as a STANDARD because mandatory "shall" is implied through the context of the sentence. "Colors for guide signs shall follow the standard in Chapter 2A, Table 2A.5, and Chapter 2D, except for special information signs as noted below in Section 6F.51." A second sentence is added to the sixth paragraph as a STANDARD to clarify that "red" flags shall not be used on warning signs.

24. In Section 6F.3, paragraphs 4, 6, 7 and 8 the FHWA proposes to modify the mounting height discussion from recommended GUIDANCE to mandatory STANDARD and added an Option condition to change the mounting height requirement for signs in work zones.

There is an existing FHWA/NHTSA National Crash Analysis Study, Contract DTFH61-97-X00015, on 1.5 m (5 ft) versus 2.1 m (7 ft) sign mounting height. This study does not show a need to raise the sign height to 2.1 m (7 ft). For all rural post-mounted signs, a 1.5 m (5 ft) minimum mounting height is appropriate for crashworthiness. If, however, there is an operational need (visibility, etc.) to have a higher mounting height, it may be used.

25. In Section 6F.3, paragraph 8, the FHWA proposes to change the

requirement for the amount of days that signs mounted on portable supports may be used. The FHWA is also proposing to list the types of signs to be used on portable supports for more than three days. Methods of mounting signs other than on posts are illustrated in Figure 6-6. Signs mounted on portable supports may be used for a duration of three days or less (intermediate term stationary). The R11 series, W1-6 through W1-8, M4-10, E5-1 or similar type signs may be used on portable supports for more than three days.

26. In section 6F.3, paragraph 10, the FHWA proposes to change the following sentence from recommended condition to a STANDARD: "Unshielded sign supports shall be designed to breakaway or yield on impact to minimize hazards to motorists." The FHWA is proposing to change this sentence to a STANDARD because devices, according to National Cooperative Highway Research Program Report 350, are required to be crashworthy. The FHWA is proposing to add the word "breakaway" because it better explains what a sign does on impact. Also, the FHWA is proposing to add the following sentence to explain the requirements for signs mounted on multiple signs supports: "Signs erected on multiple breakaway posts shall be mounted a minimum of 2.1 m (7ft) above the ground so as to permit an errant vehicle to pass under the sign panel if all posts are not struck."

27. In Section 6F.4, the FHWA proposes to change the text from a recommended condition to a STANDARD. FHWA feels that this would increase visibility and safety.

28. In Section 6F.8, paragraph 1, the FHWA proposes to change the following sentence from a permissive condition to GUIDANCE: "The ROAD (STREET) CLOSED sign (R11-2) should be used where the roadway is closed to all traffic except contractors' equipment or officially authorized vehicles and should be accompanied by appropriate detour signing." Also, there is information on the use of these signs in both rural and urban areas.

29. In Section 6F.9, paragraph 2, the FHWA proposes to add the following new mandatory STANDARD sentence for rural areas: "In rural applications, the LOCAL TRAFFIC ONLY sign shall have the legend ROAD CLOSED (XX) KILOMETERS (MILES) AHEAD-LOCAL TRAFFIC ONLY."

30. In Section 6F.16, paragraphs 14, 15, and 16, the FHWA proposes to add the following STANDARD and GUIDANCE regarding the proper use of flexible signs: "Flexible warning signs for nighttime use shall have a black legend on a retroreflectorized orange or

¹ "Older Driver Highway Design Handbook," Report No. FHWA-RD-99-045, available from the FHWA Research and Technology report Center, 9701 Philadelphia Court, Unit Q, Lanham, Maryland 20706.

retroreflectorized fluorescent orange background. The mounting height of flexible signs shall conform to the same requirements as rigid signs. A 300 mm (1 foot) mounting height is allowable for flexible signs, but they should normally be mounted higher in order to provide improved visibility."

The FHWA proposes to add the above sentences because of the increased use of flexible signs in work zones.

31. In Section 6F.55C, paragraph 4, the FHWA proposes to add a message format for Portable Changeable Message Signs. This format indicates the following: line 1 should present the problem, line 2 should present the location or distance ahead, and line 3 should present the recommended driver action. This addition is in response to recommendations contained in the "Older Driver Highway Design Handbook" which shows that motorists may benefit by having a message in a logical sequence.

32. In Section 6F.56A, paragraphs 2 and 4, the FHWA proposes to add SUPPORT and STANDARD conditions on TYPE D arrow panels to explain how this type of arrow panel should be used.

33. In Section 6F.58E, the fourth sentence of paragraph 1, the FHWA proposes to require the top stripe on all drums to be orange to allow for better uniformity. The text will read as follows: "Each drum shall have a minimum of two orange and two white stripes with the top stripe being orange."

34. In Section 6F.58I, paragraph 4, the FHWA proposes to add under GUIDANCE four paragraphs on two-way two-lane operations concerning speed, traffic volumes, geometrics and intersections.

35. In Section 6F.59B, paragraph 1, the FHWA proposes to change the minimum length of interim pavement marking from 1.2 m (4 ft) to 0.6 m (2 ft). Texas Transportation Institute Research Record 1160, Field Studies of Temporary Pavement Markings at Overlay Project work Zones on Two-Lane, Two-Way Rural Highways, indicates that there is no significant difference between the performance of the 1.2 m (4 ft) broken line or the 0.6 m (2 ft) broken line.

36. In Section 6F.59C, paragraph 1, the FHWA proposes to add the following new STANDARD wording: "If raised pavement markers are used to substitute for a broken line segment, at least two retroreflective markers shall be placed, one at each end of a segment of 0.6 m (2 ft) to 1.5 m (5 ft). For segments over 1.5 m (5 ft), a group of at least three retroreflective markers shall be equally spaced at no greater than N/8." This

proposed change allows fewer raised pavement markings for a broken line segment.

37. In Section 6F.60D(3), paragraph 2, the FHWA proposes to add the new GUIDANCE discussion to ensure lights are put on the outside of the curve to improve delineation of the curve.

38. In Section 6F.61, paragraph 3, the FHWA proposes to allow the use of temporary traffic signals other than those controlled by hard wire. This was included in the February 19, 1998, Final Rule.

39. In Section 6F.66, the FHWA proposes to add a new GUIDANCE that the spacing of screens should not be more than 0.6 m (2 ft). This addition is in response to recommendations contained in the "Older Driver Highway Design Handbook" which shows that motorists may benefit by having screens at this spacing.

40. The FHWA proposes to add a new Section 6F.68, FUTURE AND EXPERIMENTAL DEVICES to Part 6. This section provides information on the use of experimental products.

41. In Section 6G.2, the FHWA proposes to add the following words to the second bullet of the second paragraph, "or nighttime work lasting more than one hour." The FHWA believes that the above information is helpful to further explain intermediate-term stationary work at night.

42. In Section 6G.2B, paragraph 2, the FHWA proposes to add the following STANDARD statement: "Since intermediate-term operations extend into nighttime, retroreflective and/or illuminated devices shall be used." This STANDARD is proposed because a good safety design feature for any/all nighttime work is one that is properly delineated with retroreflective signs and/or illuminated devices.

43. In Section 6G.10, the second sentence of paragraph 5, the FHWA proposes to add a new STANDARD statement to read as follows: "For lane closures, the merging taper shall utilize channelizing devices and the barrier shall be placed beyond the transition area." This proposed change would provide proper delineation of a lane closure to the road user. Also, this proposed change would delete the last sentence of the second paragraph of Section 6G-7 of the Part VI of the 1993 Edition of the MUTCD and Section 6G-7 would be transferred and renumbered as Section 6G.10.

44. In Section 6G.10 B, paragraph 2, the FHWA proposes to change the second sentence from a recommended condition to a STANDARD. This proposed change would provide the

road user with better delineation of the left lane closure.

45. In Section 6G.10 D, the FHWA proposes to transfer to this Section old Section 6G-7c of Part VI of 1993 Edition of the MUTCD. The FHWA also proposes to change the sixth sentence of the existing Section 6G-7c from a recommended condition to a STANDARD. The proposed sentence would read as follows: "When a directional roadway is closed, inapplicable WRONG WAY signs and markings, and other existing traffic control devices at intersections within the temporary two-lane two-way operations section, shall be covered, removed or obliterated." The proposed sentence change would provide the road user with accurate information on whether the road is open or closed.

46. In Section 6H.2, Notes for Figure TA-7, the FHWA proposes to add the following sentence to note 1: "Devices similar to those depicted shall be placed for the opposite direction of travel." This proposed change is very important to motorists traveling in the opposite direction to inform them of the temporary traffic control condition ahead.

47. In Section 6H.2, Notes for Figure TA-7 (Note 3) and Notes for Figure TA-31 (Note 7), the FHWA proposes to change Note 3 for Figure TA-7 and Note 7 for Figure TA-31 to read as follows: "If the tangential distance along the temporary diversion is less than 180 m (600 feet), the winding road sign should be used at the location of the first Reverse Curve sign. The second Reverse Curve sign should be omitted." This proposed GUIDANCE statement would be in compliance with Section 2C-8, Winding Road Sign, page 2C-4 of the 1988 Edition of the MUTCD which describes the circumstances when the Winding Road sign should be used.

48. In Section 6H.2, the FHWA proposes to add new Notes 7 and 8 to Figure TA-10 on the use of the BE PREPARED TO STOP sign.

49. In Section 6H.2, the FHWA proposes to add new notes for Figure TA-10 (Notes 9, 10, 11, and 12), a new note for Figure TA-30 (Note 4), new notes for TA-32 (Notes 4, 5, and 6), new notes for TA-39 (Notes 11 and 12), and a new Figure TA-45 to provide additional information concerning work zone treatments near highway-rail grade crossings.

On March 17, 1993, a tractor-semitrailer hauling gasoline was struck by a National Railroad Passenger Corporation (Amtrak) train resulting in the truck driver and five occupants of three stopped vehicles being killed. The truck driver was attempting to cross a

highway-rail grade crossing on Cypress Creek in Fort Lauderdale, Florida and traffic in the area of the crossing was congested because the left and center lanes were closed just beyond the crossing. As a result of the investigation of the crash, the National Transportation Safety Board (NTSB) recommended that the FHWA provide information on channelization of traffic at work zones to minimize traffic congestion over highway-rail grade crossings. The above mentioned notes and figure are in compliance with the NTSB's recommendation. The above proposed changes would be added to provide information for safe and efficient operation of both highway and rail traffic at highway-rail grade crossings within construction and maintenance work zone limits.

50. In Section 6H.2, the FHWA proposes to modify the first sentence of Note 4 of Figure TA-12 to read as "Stop lines shall be installed with temporary traffic signals." The FHWA proposes to add the same sentence to a new Note 9 for Figure TA-14. The proposed changes will be in compliance with Part 4, Chapter 4D, of the Notice of Proposed Amendments to the Manual on Traffic Control Devices dated January 7, 1997, which discuss the location of stop lines with respect to traffic signals.

51. In Section 6H.2, for Figure TA-12, the FHWA proposes to move Note 7 from a permissive condition to Note 11 as GUIDANCE. The FHWA believes that changing the condition from a permissive condition to GUIDANCE would provide the State and local agencies, and contractors with additional guidance for making safe traffic operations' decisions.

52. In Section 6H.2, the FHWA proposes to add a new Note 8 for Figure TA-14 which states "Traffic control signal timing shall be established by authorized personnel." This proposed change is in compliance with Part 4, Chapter 4D, of the Notice of Proposed Amendments to the Manual on Uniform Traffic Control Devices dated January 7, 1997, which states the responsibility for operation and maintenance of traffic control signals and all of its appurtenances.

53. In Section 6H.2, Figure TA-14, under the signalized method, the FHWA proposes to delete the requirement to remove any double yellow pavement marking and add skip line pavement markings along the northbound lanes because there is no reason to prohibit passing for traffic leaving the intersection.

54. In Section 6H.2, the FHWA proposes to modify existing Note 4 for Figure TA-16 and to add a new Note 11

which would states, "For a survey along the edge of the road or along the shoulder, cones should be placed along the edge line." The FHWA also proposes to add a new Note 10 to read, "If the work is along the shoulder, the flagger may be omitted."

55. In Section 6H.2, for Figure TA-17, the FHWA proposes to move the second sentence of Note 5 from a recommended condition to Note 2 as a STANDARD. It would read, "Shadow and work vehicles shall display flashing or rotating beacons visible in all directions." The FHWA believes that flashing or rotating beacon visibility will help improve the safety and visibility of the shadow and work vehicles resulting in a reduction in work zone crashes. Also, the FHWA proposes to change the wording "protection vehicle" to "shadow vehicle" to be in compliance with the AASHTO Roadside Design Guide Book, Chapter 9.1.2.2, Truck-Mounted Attenuators.

56. In Section 6H.2, Figure TA-17, the FHWA proposes to add a CAUTION arrow board to be in compliance with Section 6F-55 B.

57. In Section 6H.2, Notes for Figure TA-17, the FHWA proposes to delete the note on "Optional Signs for Short Duration Operation" because TA-17 is not for Short Duration work.

58. In Section 6H.2, the FHWA proposes to modify the first sentence of Note 1 for Figure TA-18 to read as follows: "The traffic control procedures shall be used only for low-volume, low-speed facilities." This proposed change simplifies the STANDARD condition statement.

59. In Section 6H.2, the FHWA proposes to add a new Note 4 for Figure TA-18 to read, "Where traffic cannot effectively self-regulate, one or two flaggers shall be used as illustrated in Figure TA-10." The purpose is to improve the movement of traffic around the lane closure.

60. In Section 6H.2, the FHWA proposes to change Note 2 for Figure TA-21 from a permissive condition to a STANDARD. This proposed change is to provide for the direction of traffic around lane closures.

61. In Section 6H.2, the FHWA proposes to add a new Note 4 (GUIDANCE) and a new Note 5 (Option) to Figure TA-21 concerning flashing or rotating lights on work vehicles. These proposed new notes will assist in providing warning to road users and workers.

62. In Section 6H.2, the FHWA proposes to add a new Note 7 for Figure TA-21 for the optional use of a truck-mounted attenuator on shadow vehicles. This Option statement is

proposed to provide safety to road users and workers.

63. In Section 6H.2, the FHWA proposes to add a new Note 2 (GUIDANCE) for Figure TA-24 to provide for turn prohibition signs. This GUIDANCE statement is being proposed to give road users addition warning that turns are prohibited.

64. In Section 6H-2, the FHWA proposes to delete Note 2 (mandatory condition) of Figure TA-26 concerning channelizing devices on tapers. This proposal will make this in compliance with Section 6F.59, CHANNELIZING DEVICES. That section recommends using a formula based on speed, rather than a set number of channelizing devices.

65. In Section 6H.2, the FHWA proposes to change Note 2 for Figure TA-27 on the use of uniformed law enforcement officers from a permissive condition to GUIDANCE. The proposed GUIDANCE is to provide for a person with recognized authority which should improve the safe movement of traffic through the intersection.

66. In Section 6H.2, the FHWA proposes to add a new Note 6 for Figure TA-27 which reduces the need for channelization for short-duration work operations. We propose to add Note 6 to be in compliance with Section 6G.2(1) which states that a reduction in the number of devices may be offset by the use of other more dominant devices such as flashing or rotating beacons on work vehicles.

67. In Section 6H.2, the FHWA proposes to add a new Note 1 (STANDARD) for Figure TA-28 to read as follows: "Where sidewalks exist, provisions shall be made for disabled pedestrians." The FHWA also proposes to add this note as Note 1 (STANDARD) for Figure TA-29. We propose to add this Note 1 to provide additional safety for disabled pedestrians and to be in compliance with the Americans with Disabilities Act Standards for Accessible Design.²

68. In Section 6H.2, the FHWA proposes to add a new Note 2 (STANDARD) for Figure TA-29 on curb parking restrictions in advance of mid-block crosswalks to provide additional safety for pedestrians. The proposed STANDARD statement provides additional safety for pedestrians.

69. In Section 6H.2, the FHWA proposes to add a second sentence to Note 3 (GUIDANCE) for Figure TA-30 providing for additional signing for

² *Americans with Disabilities Act Handbook*, U.S. Equal Employment Opportunity Commission and the U.S. Department of Justice, EEOC-BK-19, Appendix B, "ADA Accessibility Guidelines," December 1991.

higher speed and higher volume roads. The proposed GUIDANCE is added to provide safety instruction for the road users traveling at higher speeds.

70. In Section 6H.2, the FHWA proposes to add new Notes 6, 7, 8, 9, and 10 for Figure TA-34 concerning the use of traffic control devices with movable barriers.

71. In Section 6H.2, the FHWA proposes to add a new Note 7 for Figure TA-35 and a new Note 3 for Figure TA-37 to provide optional use of truck-mounted attenuators on shadow vehicles. This is proposed because truck-mounted attenuators attached to the rear of shadow vehicles can reduce the severity of rear-end crashes.

72. In Section 6H.2, the FHWA proposes a new Note 6 for Figure TA-35 to allow optional use of a shadow vehicle. Existing Note 6 would be renumbered as Note 8.

73. In Section 6H.2, the FHWA proposes a new Note 5 for Figure TA-35 to provide for the optional use of a shadow vehicle on the shoulder. Note 5 will be renumbered as Note 9.

74. In Section 6H.2, the FHWA proposes to add a new Note 10 for Figure TA-35 (GUIDANCE) on work vehicles and shadow vehicle locations. This note is proposed to provide information and guidance to road users of work ahead.

75. In Section 6H.2, the FHWA proposes to add a new Note 4 for Figure TA-37 and a new Note 10 for Figure TA-38 to indicate where that traffic may be redirected around the work area. These notes provide additional information for the movement of traffic along the right shoulder because the shoulder width is wide enough to safely accommodate traffic.

76. In Section 6H.2, the FHWA proposes to add a new Note 6 for Figure TA-39 which will address a problem of poor guidance for traffic traveling through a two-lane, two-way operation at the end of the construction zone. Consequently, truck drivers with driver eye heights substantially above the road cannot see well enough through adverse weather conditions (fog, heavy rain, snow squalls, etc.) to find anything except the barrels leading back across the median. They too often follow the backside of those barrels into the median, resulting in crossover embankment collision, median side slope rollover, and bridge rail impact. If we are going to use delineators to separate two-lane, two-way traffic in construction zones, provisions should be made to extend the line of delineation well beyond the end of two-lane, two-way traffic in order to achieve "continuity" and to fulfill "driver

expectancy" under low visibility conditions.

77. In Section 6H.2, the FHWA proposes to add a new Note 7 for Figure TA-39 concerning channelizing devices and signing for two-way traffic. This new note is GUIDANCE to warn motorists that the roadway is two-way traffic within a single lane, with flaggers.

78. In Section 6H.2, the FHWA proposes to change the third sentence of Note 1 for Figure TA-40 from a permissive condition to GUIDANCE. "A temporary acceleration lane should be used to facilitate merging." The proposed changed note will be renumbered Note 3 of the new Part VI.

79. In Section 6H.2, the FHWA proposes to add a STANDARD for Figure TA-41 (Note 5) and for Figure TA-42 (Note 3) concerning the mounting height for temporary EXIT signs in the temporary gore. The mounting height noted in the above notes will be in compliance with Section 6F-1, page 31, paragraph 6 of the Part 6 of 1993 Edition of MUTCD, Revision 3.

80. In Section 6H.2, the FHWA proposes to add a new Figure TA-46, Temporary Reversible Lane Using Moveable Barriers. Many jurisdictions are using movable barriers. However, guidance for these devices is not currently included in the MUTCD.

81. The FHWA proposes to add a new Figure TA-47, Variable Message Sign Abbreviations. This proposed change is in response to recommendations contained in the "Older Driver Highway Design Handbook" as it will provide for uniformity in messages.

Rulemaking Analysis and Notices

All comments received before the close of business on the comment closing date indicated above will be considered and will be available for examination in the docket at the above address. Comments received after the comment closing date will be filed in the docket and will be considered to the extent practicable, but the FHWA may issue a final rule at any time after the close of the comment period. In addition to late comments, the FHWA will also continue to file in the docket relevant information that becomes available after the comment closing date, and interested persons should continue to examine the docket for new material.

Executive Order 12866 (Regulatory Planning and Review) and DOT Regulatory Policies and Procedures.

The FHWA has determined preliminarily that this action will not be

a significant regulatory action within the meaning of Executive Order 12866 or significant within the meaning of Department of Transportation regulatory policies and procedures. It is anticipated that the economic impact of this rulemaking would be minimal. The new standards and other changes proposed in this notice are intended to improve traffic operations and safety, and provide additional guidance, clarification, and optional applications for traffic control devices. The FHWA expects that these proposed changes will create uniformity and enhance safety and mobility at little additional expense to public agencies or the motoring public. Therefore, a full regulatory evaluation is not required.

Regulatory Flexibility Act

In compliance with the Regulatory Flexibility Act (5 U.S.C. 601-612), the FHWA has evaluated the effects of this proposed action on small entities. This notice of proposed rulemaking adds some new and alternative traffic control devices and traffic control device applications. The proposed new standards and other changes are intended to improve traffic operations and safety, expand guidance, and clarify application of traffic control devices. The FHWA hereby certifies that these proposed revisions would not have a significant economic impact on a substantial number of small entities.

Unfunded Mandates Reform Act of 1995

This proposed rule would not impose a Federal mandate resulting in the expenditure by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one year (2 U.S.C. 1532).

Executive Order 13132 (Federalism)

This action has been analyzed in accordance with the principles and criteria contained in Executive Order 13132 dated August 4, 1999, and it has been determined this action does not have a substantial direct effect or sufficient federalism implications on States that would limit the policymaking discretion of the States. Nothing in this document directly preempts any State law or regulation.

Executive Order 12372 (Intergovernmental Review)

Catalog of Federal Domestic Assistance Program Number 20.205, Highway Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on

Federal programs and activities apply to this program.

Paperwork Reduction Act

This action does not contain a collection of information requirement for purposes of the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 *et seq.*

Executive Order 12988 (Civil Justice Reform)

This action meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

Executive Order 13045 (Protection of Children)

We have analyzed this action under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and does not concern an environmental risk to health or safety that may disproportionately affect children.

Executive Order 12630 (Taking of Private Property)

This rule will not effect a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and Interference with Constitutionally Protected Property Rights.

National Environmental Policy Act

The agency has analyzed this action for the purpose of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*) and has determined that this action would not have any effect on the quality of the environment.

Regulation Identification Number

A regulation identification 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 in April and October of 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 655

Design standards, Grant programs—transportation, Highways and roads, Incorporation by reference, Signs, Traffic regulations.

(23 U.S.C. 109(d), 114(a), 315, and 402(a); 23 CFR 1.32; 49 CFR 1.48)

Issued on: December 17, 1999.

Kenneth R. Wykle,

Administrator.

[FR Doc. 99-33404 Filed 12-29-99; 8:45 am]

BILLING CODE 4910-22-P

DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

23 CFR Part 655

[FHWA Docket No. FHWA-99-6575]

RIN 2125-AE71

Revision of the Manual on Uniform Traffic Control Devices; General Provisions, Markings, and Signals

AGENCY: Federal Highway Administration (FHWA), DOT.

ACTION: Notice of proposed amendments to the Manual on Uniform Traffic Control Devices (MUTCD); request for comments.

SUMMARY: The MUTCD is incorporated by reference in 23 CFR part 655, subpart F, approved by the Federal Highway Administrator, and recognized as the national standard for traffic control on all public roads. The FHWA announced its intent to rewrite and reformat the MUTCD on January 10, 1992, at 57 FR 1134. The purpose of this rewrite effort is to reformat the text for clarity of intended meanings, to include metric dimensions and values for the design and installation of traffic control devices, and to improve the overall organization and discussion of the contents in the MUTCD.

This document proposes new text for the MUTCD in Part 1—General Provisions, Part 3—Markings, and Part 4—Signals. The proposed changes included herein are intended to expedite traffic, promote uniformity, improve safety, and incorporate technology advances in traffic control device application.

DATES: Submit comments on or before June 30, 2000.

ADDRESSES: Signed, written comments should refer to the docket number that appears at the top of this document and must be submitted to the Docket Clerk, U.S. DOT Dockets, Room PL-401, 400 Seventh Street, SW., Washington, DC 20590-0001. All comments received will be available for examination at the above address between 9 a.m. and 5 p.m., e.t., Monday through Friday, except Federal holidays. Those desiring notification of receipt of comments must include a self-addressed, stamped postcard.

FOR FURTHER INFORMATION CONTACT: For information regarding the notice of proposed amendments contact Ms. Linda Brown, Office of Transportation Operations, Room 3408, (202) 366-2192, or Mr. Raymond Cuprill, Office of Chief Counsel, Room 4217, (202) 366-0834, Department of Transportation, Federal Highway Administration, 400 Seventh Street, SW., Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

Electronic Access

Internet users may access all comments received by the U.S. DOT Dockets, Room PL-401, by using the universal resource locator (URL): see "Addresses" <http://dms.dot.gov>. It is available 24 hours each day, 365 days each year. Please follow the instructions online for more information and help. An electronic copy of this notice of proposed amendment may be downloaded using a modem and suitable communications software from the Government Printing Office's Electronic Bulletin Board Service at (202) 512-1661. Internet users may reach the Office of the Federal Register's home page at: <http://www.nara.gov/fedreg> and the Government Printing Office's database at: <http://www.access.gpo.gov/nara>.

The text for the proposed sections of the MUTCD is available from the FHWA Office of Transportation Operations (HOTO-1) or from the FHWA Home Page at the URL: <http://www.ohs.fhwa.dot.gov/operations/mutcd>. Please note that the proposed rewrite sections contained in this docket for the MUTCD Part 1, Part 3, and Part 4 will take approximately 8 weeks from the date of publication before they will be available at this web site.

Background

The 1988 MUTCD with its revisions are available for inspection and copying as prescribed in 49 CFR part 7. It may be purchased for \$57.00 (Domestic) or \$71.25 (Foreign) from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954, Stock No. 650-001-00001-0. This notice is being issued to provide an opportunity for public comment on the desirability of proposed amendments to the MUTCD. Based on the comments received and its own experience, the FHWA may issue a final rule concerning the proposed changes included in this notice.

The National Committee on Uniform Traffic Control Devices (NCUTCD) has taken the lead in this effort to rewrite and reformat the MUTCD. The NCUTCD is a national organization of individuals