## DEPARTMENT OF TRANSPORTATION

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June 10, 2014

Mr. Vincent Mammano Division Administrator Federal Highway Administration 650 Capitol Mall, Suite 4-100 Sacramento, CA 95814

Dear Mr. Mammano:

The California Department of Transportation (Caltrans) requests the Federal Highway Administration's (FHWA) confirmation that the revised California Manual on Uniform Traffic Control Devices (CA MUTCD) 2012 Edition is in substantial conformance with the 2009 National MUTCD Revisions 1 and 2, dated May 2012. A finding of substantial conformance is required per title 23, Code of Federal Regulations [23 CFR 655.603(b)(1)]. The revised CA MUTCD includes the 2009 National MUTCD Revisions 1 and 2, dated May 2012. The revised document will be posted by June 13, 2014, at: <a href="https://www.dot.ca.gov/camutcd">www.dot.ca.gov/camutcd</a>

The California Traffic Control Devices Committee (CTCDC) reviewed the 2009 National MUTCD Revisions 1 and 2 on December 6, 2012, and March 21, 2013, and recommended that Caltrans adopt these revisions.

In a previous letter dated May 29, 2014, Caltrans noted that it planned to include all proposed CTCDC recommendations and Traffic Operations Policy Directives and memos issued since 2012 in the June 13, 2014, revision to the CA MUTCD. Caltrans anticipates that these revisions will be completed by August 1, 2014. The June 13, 2014, revision includes only the 2009 National MUTCD Revisions 1 and 2. Affected pages of the CA MUTCD 2012 Edition include: pages 59, 68, 76, 346, and 347, as attached. An electronic version of these pages, including comparison pages, has been emailed to Kevin Korth of your staff.

We would like to acknowledge the efforts of Kevin Korth for working closely with Johnny Bhullar of Caltrans' Division of Traffic Operations in reviewing this change to the CA MUTCD. This review process was completed to ensure the changes made would be in conformance with the FHWA's 2009 MUTCD Revisions 1 and 2.

Mr. Vincent Mammano June 10, 2014 Page 2

If you have any questions, please contact Johnny Bhullar at (916) 654-7312 or by email at johnny.bhullar@dot.ca.gov.

Sincerely,

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Division of Traffic Operations

Attachment: CA MUTCD Pages 59, 68, 76, 346 and 347.

c: Malcolm Dougherty, Director, California Department of Transportation Steve Takigawa, Deputy Director, Maintenance and Operations, California Department of Transportation Devinder Singh, Executive Secretary, CTCDC

Table I-2. Target Compliance Dates Established by the FHWA

2009 MUTCD Section Number(s)	2009 MUTCD Section Title	Specific Provision	Compliance Date
2A.08	Maintaining Minimum Retroreflectivity	Implementation and continued use of an assessment or management method that is designed to maintain regulatory and warning sign retroreflectivity at or above the established minimum levels (see Paragraph 2)	June 13, 2014
-04-10-	-Lateral Offset	-Crachwarthiness of eign supports on reads with posted speed limit of -50 mph 57 higher (see Paragraph 2)	denuary 17, 2010 (date established in the 2000 MUTGD)
28.40	ONE WAY Signs (R6-1, R6-2)	New requirements in the 2009 MUTCD for the number and locations of ONE WAY signs (see Paragraphs 4, 9, and 10)	December 31, 2019
2C.06 through 2C.14	Horizontal Alignment Warning Signs	Revised requirements in the 2009 MUTCD regarding the use of various horizontal alignment signs (see Table 2C-5)	December 31, 2019
2E.31, 2E 33, and 2E 36	Plaques for Left-Hand Exits	New requirement in the 2009 MUTCD to use E1-5aP and E1-5bP plaques for left-hand exits	December 31, 2014
4D.26	Yellow Change and Red Clearance Intervals	New requirement in the 2009 MUTCD that durations of yellow change and red clearance intervals shall be determined using engineering practices (see Paragraphs 3 and 6)	date of the revision of the 2000 MUTOR, or when timing adjustment are made to the individual intersection and/or corridor, whichever occurs first
4E.08	Pedestrian Intervals and Signal Phases	New requirement in the 2009 MUTCD that the pedestrian change interval shall not extend into the red clearance interval and shall be followed by a buffer interval of at least 3 seconds (see Paragraph 4)	date of this revision of the 2009 MUTOR, or when timing adjustment are made to the individual intersection and/or corridor, whichever occurs first
6D.03**	Worker Safety Considerations	New requirement in the 2009 MUTCD that all workers within the right-of-way shall wear high-visibility apparel (see Paragraphs 4, 6, and 7)	December 31, 2011
6E.02**	High-Visibility Safety Apparel	New requirement in the 2009 MUTCD that all flaggers within the right-of-way shall wear high-visibility apparel	December 31, 2011
7D.04**	Uniform of Adult Crossing Guards	New requirement in the 2009 MUTCD for high-visibility apparel for adult crossing guards	December 31, 2011
88.03, 88.04	Grade Crossing (Crossbuck) Signs and Supports	Retroreflective strip on Crossbuck sign and support (see Paragraph 7 in Section 88.03 and Paragraphs 15 and 18 in Section 88.04)	December 31, 2019
8B.04	Crossbuck Assemblies with YIELD or STOP Signs at Passive Grade Crossings	New requirement in the 2009 MUTCD for the use of STOP or YIELD signs with Crossbuck signs at passive grade crossings	December 31, 2019

<sup>\*</sup> Types of signs other than regulatory or warning are to be added to an agency's management or assessment method as resources allow.

Note: All compliance dates that were previously published in Table I-2 of the 2009 MUTCD and that do not appear in this revised table have been eliminated.

Introduction June 13, 2014

<sup>\*\*</sup> MUTCD requirement is a result of a legislative mandate.

## Section 1A.09 Engineering Study and Engineering Judgment

Support:

or Definitions of an engineering study and engineering judgment are contained in Section 1A.13.

01a Refer to CVC 627 for definition and requirements of "Engineering and Traffic Survey". It is also abbreviated in this manual as E&TS.

#### Standard:

02 This Manual describes the application of traffic control devices, but shall not be a legal requirement for their installation.

Guidance:

- 03 The decision to use a particular device at a particular location should be made on the basis of either an engineering study or the application of engineering judgment. Thus, while this Manual provides Standards, Guidance, and Options for design and applications of traffic control devices, this Manual should not be considered a substitute for engineering judgment. Engineering judgment should be exercised in the selection and application of traffic control devices, as well as in the location and design of roads and streets that the devices complement.
- o4 Early in the processes of location and design of roads and streets, engineers should coordinate such location and design with the design and placement of the traffic control devices to be used with such roads and streets.
- os Jurisdictions, or owners of private roads open to public travel, with responsibility for traffic control that do not have engineers on their staffs who are trained and/or experienced in traffic control devices should seek engineering assistance from others, such as the State transportation agency, their county, a nearby large city, or a traffic engineering consultant.

Support:

- of As part of the Federal-aid Program, each State is required to have a Local Technology Technical Assistance Program (LTAP) and to provide technical assistance to local highway agencies. Requisite technical training in the application of the principles of the MUTCD is available from the State's Local Technology Technical Assistance Program for needed engineering guidance and assistance.
- or In California, Traffic Engineers are classified under a title act and not under a practice act. Traffic engineers can conduct studies but a Civil Engineer must sign plans for traffic control devices that will be placed in the field, per the Professional Engineers Act.

# Section 1A.10 Interpretations, Experimentations, Changes, and Interim Approvals

Standard:

- of Design, application, and placement of traffic control devices other than those adopted in this Manual shall be prohibited unless the provisions of this Section are followed.

  Support:
- oz Continuing advances in technology will produce changes in the highway, vehicle, and road user proficiency; therefore, portions of the system of traffic control devices in this Manual will require updating. In addition, unique situations often arise for device applications that might require interpretation or clarification of this Manual. It is important to have a procedure for recognizing these developments and for introducing new ideas and modifications into the system.

### Standard:

03 Except as provided in Paragraph 4, requests for any interpretation, permission to experiment, interim approval, or change shall be submitted electronically to the Federal Highway Administration (FHWA), Office of Transportation Operations, MUTCD team, at the following e-mail address:

oz The two colors for which general meanings have not yet been assigned are being reserved for future applications that will be determined only by FHWA after consultation with the States, the engineering community, and the general public. The meanings described in this Section are of a general nature. More specific assignments of colors are given in the individual Parts of this Manual relating to each class of devices. **Standard:** 

- 03 The general meaning of the 13 colors shall be as follows:
- A. Black-regulation
- B. Blue-road user services guidance, tourist information, and evacuation route
- C. Brown—recreational and cultural interest area guidance
- D. Coral—unassigned
- E. Fluorescent Pink-incident management
- F. Fluorescent Yellow-Green—pedestrian warning, bicycle warning, playground warning, school bus and school warning
- G. Green-indicated movements permitted, direction guidance
- H. Light Blue-unassigned
- I. Orange—temporary traffic control
- J. Purple—lanes restricted to use only by vehicles with registered electronic toll collection (ETC) accounts
- K. Red-stop or prohibition
- L. White-regulation
- M. Yellow-warning

# Section 1A.13 Definitions of Headings, Words, and Phrases in this Manual

#### Standard:

- of When used in this Manual, the text headings of Standard, Guidance, Option, and Support shall be defined as follows:
  - A. Standard—a statement of required, mandatory, or specifically prohibitive practice regarding a traffic control device. All Standard statements are labeled, and the text appears in bold type. The verb "shall" is typically used. The verbs "should" and "may" are not used in Standard statements. Standard statements are sometimes modified by Options.
  - B. Guidance—a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate. All Guidance statements are labeled, and the text appears in unbold type. The verb "should" is typically used. The verbs "shall" and "may" are not used in Guidance statements. Guidance statements are sometimes modified by Options.
  - C. Option—a statement of practice that is a permissive condition and carries no requirement or recommendation. Option statements sometime contain allowable modifications to a Standard or Guidance statement. All Option statements are labeled, and the text appears in unbold type. The verb "may" is typically used. The verbs "shall" and "should" are not used in Option statements.
  - D. Support—an informational statement that does not convey any degree of mandate, recommendation, authorization, prohibition, or enforceable condition. Support statements are labeled, and the text appears in unbold type. The verbs "shall," "should," and "may" are not used in Support statements.
- o2 Unless otherwise defined in this Section, or in other Parts of this Manual, words or phrases shall have the meaning(s) as defined in the most recent editions of the "Uniform Vehicle Code," "AASHTO Transportation Glossary (Highway Definitions)," "California Vehicle Code" and other publications mentioned in Section 1A.11.
  - 03 The following words and phrases, when used in this Manual, shall have the following meanings:
  - 1. Accessible Pedestrian Signal—a device that communicates information about pedestrian signal timing in non-visual format such as audible tones, speech messages, and/or vibrating surfaces.
  - 2. Accessible Pedestrian Signal Detector—a device designated to assist the pedestrian who has visual or physical disabilities in activating the pedestrian phase.

(FHWA's MUTCD 2009 Edition including Revisions 1 and 2, as amended for use in California)

## Option:

og Supplementary lettering to indicate the type of street (such as Street, Avenue, or Road) or the section of the city (such as NW) on the D3-1 and D3-1a signs may be in smaller lettering, composed of initial upper-case letters at least 3 inches in height and lower-case letters at least 2.25 inches in height. Conventional abbreviations (see Section 1A.15) may be used except for the street name itself.

10 A pictograph (see definition in Section 1A.13) may be used on a D3-1 sign.

#### Standard:

- 11 Pictographs shall not be displayed on D3-1a or Advance Street Name (D3-2) signs (see Section 2D.44).
- 12 If a pictograph is used on a D3-1 sign, the height and width of the pictograph shall not exceed the upper-case letter height of the principal legend of the sign.

Guidance:

13 The pictograph should be positioned to the left of the street name.

### Standard:

14 The Street Name sign shall be retroreflective or illuminated to show the same shape and similar color both day and night. The color of the legend (and border, if used) shall contrast with the background color of the sign.

## Option:

- 15 The border may be omitted from a Street Name sign.
- 16 An alternative background color other than the normal guide sign color of green may be used for Street Name (D3-1 or D3-1a) signs where the highway agency determines this is necessary to assist road users in determining jurisdictional authority for roads.

#### Standard:

- 17 Alternative background colors shall not be used for Advance Street Name (D3-2) signs (see Section 2D.44).
- 18 The only acceptable alternative background colors for Street Name (D3-1 or D3-1a) signs s hall be blue, brown, or white. Regardless of whether green, blue, or brown is used as the background color for Street Name (D3-1 or D3-1a) signs, the legend (and border, if used) shall be white. For Street Name signs that use a white background, the legend (and border, if used) shall be black.

Guidance:

- 19 An alternative background color for Street Name signs, if used, should be applied to the Street Name (D3-1 or D3-1a) signs on all roadways under the jurisdiction of a particular highway agency.
- 20 In business or commercial areas and on principal arterials, Street Name signs should be placed at least on diagonally opposite corners. In residential areas, at least one Street Name sign should be mounted at each intersection. Signs naming both streets should be installed at each intersection.

## Standard:

They should shall be mounted with their faces parallel to the streets they name.

- 21 To optimize visibility, Street Name signs may be mounted overhead. Street Name signs may also be placed above a regulatory or STOP or YIELD sign with no required vertical separation.
- 22 In urban or suburban areas, especially where Advance Street Name signs for signalized and other major intersections are not used, the use of overhead Street Name signs should be strongly considered.

  Option:
- 23 At intersection crossroads where the same road has two different street names for each direction of travel, both street names may be displayed on the same sign along with directional arrows.
- <sup>24</sup> On lower speed roadways, historic street name signs within locally identified historic districts that are consistent with the criteria contained in 36 CFR 60.4 for such structures and districts may be used without complying with the provisions of Paragraphs 3, 4, 6, 9, 12 through 14, and 18 through 20 of this section. Support:
- 25 Information regarding the use of street names on supplemental plaques for use with intersection-related warning signs is contained in Section 2C.58.

(FHWA's MUTCD 2009 Edition including Revisions 1 and 2, as amended for use in California)

#### Standard:

26 Street Name signs shall be placed, clearly visible to traffic approaching from all directions, at all signalized intersections. Refer to CVC 21366.

## Option:

27 If structurally adequate luminaire poles are available, the street name signs may be mounted on them at a height of approximately 15 feet. Refer to Department of Transportation's Standard Plans publication. See Section 1A.11 for information regarding this publication.

# Section 2D.44 Advance Street Name Signs (D3-2)

## Support:

of Advance Street Name (D3-2) signs (see Figure 2D-10) identify an upcoming intersection. Although this is often the next intersection, it could also be several intersections away in cases where the next signalized intersection is referenced.

## Standard:

02 Advance Street Name (D3-2) signs, if used, shall supplement rather than be used instead of the Street Name (D3-1) signs at the intersection.

## Option:

of Advance Street Name (D3-2) signs may be installed in advance of signalized or unsignalized intersections to provide road users with advance information to identify the name(s) of the next intersecting street to prepare for crossing traffic and to facilitate timely deceleration and/or lane changing in preparation for a turn.

Guidance:

#### Standard:

o4 On arterial highways in rural areas, Advance Street Name signs should shall be used in advance of all signalized intersections and in advance of all intersections with exclusive turn lanes.

Guidance:

05 In urban areas, Advance Street Name signs should be used in advance of all signalized intersections on major arterial streets, except where signalized intersections are so closely spaced that advance placement of the signs is impractical.

06 The heights of the letters on Advance Street Name signs should be the same as those used for Street Name signs (see Section 2D.43).

#### Standard:

- o7 If used, Advance Street Name signs shall have a white legend and border on a green background.
- 08 If used, Advance Street Name signs shall provide the name(s) of the intersecting street(s) on the top line(s) of the legend and the distance to the intersecting streets or messages such as NEXT SIGNAL, NEXT INTERSECTION, NEXT ROUNDABOUT, or directional arrow(s) on the bottom line of the legend.
- 09 Pictographs shall not be displayed on Advance Street Name signs.

## Option:

- 10 Directional arrow(s) may be placed to the right or left of the street name or message such as NEXT SIGNAL, as appropriate, rather than on the bottom line of the legend. Curved-stem arrows may be used on Advance Street Name signs on approaches to circular intersections.
- 11 For intersecting crossroads where the same road has a different street name for each direction of travel, the different street names may be displayed on the same Advance Street Name sign along with directional arrows.
- 12 In advance of two closely-spaced intersections where it is not practical to install separate Advance Street Name signs, the Advance Street Name sign may include the street names for both intersections along with appropriate supplemental legends for both street names, such as NEXT INTERSECTION, 2ND INTERSECTION, or NEXT LEFT and NEXT RIGHT, or directional arrows.

  Guidance:
- 13 If two street names are used on the Advance Street Name sign, the street names should be displayed in the following order:
- A. For a single intersection where the same road has a different street name for each direction of travel, the name of the street to the left should be displayed above the name of the street to the right; or