

Change List for the 2003 Edition of the MUTCD

This change list was developed to acquaint readers of the 2003 Edition of the Manual on Uniform Traffic Control Devices (MUTCD) with the significant changes that have been incorporated into the MUTCD since the Errata Version of the 2000 MUTCD was placed on FHWA's MUTCD website on June 14, 2001. This change list compares the 2003 MUTCD to the Errata Version of the 2000 MUTCD, which was the version that was printed and sold by AASHTO, ATSSA, and ITE.

The changes regarding the application of accessible pedestrian signals that were incorporated into the 2000 MUTCD in July 2002 as Revision 1 are included in this change list and are clearly marked as "Revision 1 changes".

All references to Parts, Chapters, Sections, figures, tables, paragraphs, items, and pages in this change list refer to the 2003 MUTCD, unless specifically stated otherwise for a particular reference.

General Items

A new cover design was developed for the 2003 Edition of the MUTCD in order to make it easily distinguishable from the 2000 Edition. An individual cover design (with a similar theme as the overall cover) was developed for each of the ten Parts.

The format of the pages was changed in order to significantly reduce the overall number of pages in the MUTCD. Margins were decreased and the amount of space between lines and paragraphs was decreased. All text is now in 11-point font size, including Standards and Guidance, which were in 12-point font size in the 2000 MUTCD. As a result of these various format changes, there is a lot less "white space" on most of the pages.

In order to maintain accuracy, appropriate changes were made to the various Tables of Contents, footers, and cross-references throughout the MUTCD.

The date in the header at the top of each page was changed from "**December 2000**" to "**2003 Edition**". The date of "**June 2001**" was deleted from the footer at the bottom of each page.

The issue dates of the Chapters that were shown in the Tables of Contents of the 2000 MUTCD were deleted.

In figures that contain only a set of sign images, the relative sizes of the signs are shown appropriately.

The legends on the word message sign images have been converted to "highway gothic" font to more accurately represent the actual appearance of the sign legends. Symbols on sign images have also been made more pattern accurate.

Where metric units for sign legends in both the text and on the sign images were shown in upper-case letters (such as “KM” or “M”), they have been changed to lower-case letters (such as “km” or “m”).

Introductory Pages (Pages i and ii)

Internet addresses were added for all of the organizations in the list.

Acronyms were added for each organization for which an acronym was appropriate.

The following five organizations were added to the list:

- Federal Highway Administration Report Center
- International Organization for Standards
- ISEA – The Safety Equipment Association
- Occupational Safety and Health Administration
- U.S. Architectural and Transportation Barriers Compliance Board

The suite number in the AASHTO address was changed from “225” to “249”.

Introduction (Pages I-1 to I-6)

In the first sentence of Paragraph 2 [“The Manual on ...”], the phrase “**traffic control devices on all public roads**” was changed to “**all traffic control devices installed on any street, highway, or bicycle trail**”.

In the second sentence of Paragraph 3 [“Any traffic control ...”], the phrase “**, trademark,**” was added after the word “**patent**”, and the phrase “**and any other items owned by FHWA**” was added at the end of the sentence.

In the second-to-last sentence of Paragraph 4 [“The need for ...”], the word “**seven**” was changed to “**eight**”.

In the fourth sentence of Paragraph 6 [“23 CFR, Part ...”], the reference to “**Section 15-117**” was changed to “**Section 15-116**”. The last sentence of this paragraph in the 2000 MUTCD, which stated that “**Section 15-104 of the UVC adopts the MUTCD as the standard for conformance**”, was deleted.

In the second sentence of Item 1 of Paragraph 9 [“When used in ...”], the word “**large**” was deleted after “**bold**”.

In Table I-1, the revision date of the 2000 MUTCD was changed from “**6/01**” to “**7/02**”.

A new row was added at the bottom of Table I-1 to show the 2003 MUTCD.

In the second sentence of Item 2 of Paragraph 9 [“When used in ...”], the word “**large**” was changed to “**unbold**”. The third sentence of this item in the 2000 MUTCD, which stated that “**Guidance text is the same size as Standard text, but it is not bold**”, was deleted.

In the third sentence of Item 3 of Paragraph 9 [“When used in ...”], the word “**small**” was changed to “**unbold**”.

In the second sentence of Item 4 of Paragraph 9 [“When used in ...”], the word “**small**” was changed to “**unbold**”.

Paragraph 12 [“Except when a ...”] was added to clarify that numerals that appear on sign images shown in the MUTCD are intended to only be examples of the sign legends that could be used.

Paragraphs 13 [“Starting with the ...”], 14, and 15 were added to clarify the proper manner of referring to a specific portion of the text.

Paragraph 16 [“In accordance with ...”] and the several pages of compliance dates that follow were added so that readers will have a convenient place to determine if a particular aspect of the MUTCD has been given a special compliance date. Special compliance dates associated with the 2000 MUTCD and with earlier Final Rules are also included in this list.

Paragraphs 17 [“In order for ...”] and 18 were added to clarify what maintenance personnel should do when replacing a damaged non-compliant traffic control device.

Table of Contents (Pages TC-1 to TC-2)

The Table of Contents at the beginning of the MUTCD was changed to list only the names of the Parts and Chapters, but not the Sections, Figures, or Tables. Also, since each Chapter is individually numbered starting with Page 1, page numbers were eliminated in the Table of Contents at the beginning of the MUTCD. The more detailed Tables of Contents at the beginning of each Part that show page numbers for Sections, Figures, and Tables were retained (with appropriate changes) in the 2003 MUTCD.

Part 1 General

Chapter 1A General

Section 1A.01 Purpose of Traffic Control Devices

In Paragraph 2 [“Traffic control devices notify ...”], the word “**reasonably**” was added.

Section 1A.02 Principles of Traffic Control Devices

The first sentence of Paragraph 3 [“Design, placement, operation, ...”] was rearranged to increase clarity, the word “**carefully**” was added, and the word “**ensure**” was eliminated.

In Paragraph 6 [“The proper use ...”], the word “**reasonably**” was added.

In the second sentence of Paragraph 7 [“Uniformity of the ...”], the word “**documents**” was changed to “**publications**”.

Section 1A.03 Design of Traffic Control Devices

In Paragraph 2 [“All symbols shall ...”], the sentences were rearranged to increase clarity. The first and third sentences in the 2000 MUTCD were combined to form the first sentence in the 2003 MUTCD to make it clear that any symbol sign shown in the “Standard Highway Signs” book is eligible for use.

Section 1A.04 Placement and Operation of Traffic Control Devices

In the first sentence of Paragraph 1 [“Placement of a ...”], the phrase “**maximum visual acuity**” was changed to “**adequate visibility**”.

Section 1A.05 Maintenance of Traffic Control Devices

Paragraph 2 [“Physical maintenance of ...”] was rearranged to increase clarity, to eliminate the word “**ensure**”, and to eliminate the phrase “**in relation to other traffic control devices in the vicinity**”.

The third and fourth paragraphs in the 2000 MUTCD were deleted.

Section 1A.06 Uniformity of Traffic Control Devices

In the second sentence, the word “**police**” was changed to the phrase “**law enforcement**”.

Section 1A.07 Responsibility for Traffic Control Devices

In the second sentence of Paragraph 1 [“The responsibility for ...”], the word “**bikeway**” was changed to the phrase “**bicycle trail**”.

In Paragraph 4 [“Additionally, States are ...”], the reference to “**Section 15-117**” of the UVC was changed to “**Section 15-116**”.

Sections 1A.08 to 1A.09

(No changes were made to these Sections.)

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

In the title, the phrase “**Interim Approvals**” was added.

Paragraph 3 [“Requests for any ...”] was changed from Guidance to Standard by changing the word “**should**” to “**shall**”. Also, the phrase “**interim approval,**” was added.

In Item B of Paragraph 5 [“Requests for an ...”], the phrase “**a revised interpretation**” was changed to “**an interpretation**”.

In Paragraph 6 [“Requests to experiment ...”], the phrase “**field deployment for the purpose of**” was added.

In the first sentence of Item E of Paragraph 9 [“The request for permission to experiment ...”], the phrase “**concept of the**” was added. Also, all of the parenthetical text after the first sentence was added.

Paragraphs 12 [“Requests for interim ...”] to 17 [“A local jurisdiction ...”] were added to provide a process for interim approvals of new traffic control devices.

In Paragraph 18 [“A diagram indicating ...”], the phrase “**requesting changes to**” was changed to “**incorporating new traffic control devices into**”.

Section 1A.11 Relation to Other Publications

In the title, the word “**Documents**” was changed to “**Publications**”.

In Paragraph 1 [“To the extent ...”], the word “**documents**” was changed to “**publications**”, and the names of the publications that are listed in the sentence have been changed.

Paragraph 2 [“The “Standard Highway ...”] was added.

In Paragraph 3 [“For information about ...”], the phrase “**ordering information**” was changed to “**information about**”.

Paragraph 4 [“The publication entitled ...”] was added.

In Paragraph 5 [“Other publications that ...”], the phrase “**The latest version of other documents**” was changed to “**Other publications**”. Because there are now more than 26 items in the list of publications, the items are numbered rather than lettered. Also, the items in the list were rearranged such that they are now alphabetized first by source, then by title. Items 2, 3, 7, 8, 10, 13, 23, 26, 28, 30, and 31 were added. Item 29 was added in Revision 1. The publication dates for Items 1, 4, 5, 6, 11, 14, 25, 27, and 29 were added or changed.

Section 1A.12 Color Code

In the first sentence of Paragraph 1 [“The following color ...”], the numbers “**9**” and “**12**” were changed to “**10**” and “**13**”.

In Paragraph 3 [“The general meaning ...”], the number “**12**” was changed to “**13**”. The items in the list were rearranged such that they are now alphabetized. Item E was added. The phrase “**playground warning**,” was added to Item F.

Section 1A.13 Definitions of Words and Phrases in This Manual

In Paragraph 1 [“Unless otherwise defined ...”], the word “**documents**” was changed to “**publications**”.

Definitions 17, 21, 36, 56, and 68 were added.

Definition 54 in the 2000 MUTCD was deleted.

Definitions 9, 20, 51, 53, 61, 87, and 95 were changed from a plural to a singular form.

In Definition 1, the phrase “**or highway-light rail transit**” was added.

Definition 4 was rearranged to increase clarity.

In Definition 12, the phrase “**wide enough to allow**” was changed to “**available for**”.

In the “(b)” portion of Definition 18, the word “**for**” was changed to the phrase “**as a**”. The phrase “**or other markings**” was deleted. The phrase “**, which may be supplemented by contrasting pavement texture, style, or color**” was added.

In Definition 28, the phrase “**(Flashing Mode)**” was deleted from the title of the term being defined. The phrase “**a mode of**” was changed to the word “**an**”. The word “**traffic**” was deleted.

In Definition 34, the phrase “**signals at toll plazas**,” was added. The phrase “**barricade warning lights**” was changed to “**warning lights (see Section 6F.78)**”.

In Definition 39, the word “**may**” was changed to “**might**”.

In Definition 60, the phrase “**and intended**” was changed to “**that is intended to be used as a positioning guide or**”. The phrase “**or to mark the position of a fire hydrant**” was added.

In Definition 67, the phrase “**workers in temporary traffic control zones**” was changed to “**persons with disabilities**”.

In Definition 72, the phrase “**outside the traveled way and**” was added to the first sentence. The phrase “**might also be used by pedestrians, skaters, wheelchair users, joggers,**” was changed to “**are also used by pedestrians (including skaters, users of manual and motorized wheelchairs, and joggers)**” in the second sentence. The phrase “**authorized motorized and**” was added to the second sentence.

In Definition 73, the phrase “**that is paved or improved and**” was added.

In Definition 76, the phrase “**, highway, or strobe**” was changed to “**or highway**”.

In Item d of Definition 79, the word “**motorized**” was changed to “**motor**”.

In Item e of Definition 79, the word “**may**” was changed to “**might**”.

In Definition 82, the word “**may**” was changed to “**might**”.

In Definition 85, the word “**police**” was changed to the phrase “**uniformed law enforcement officers**”.

In Definition 87, the word “**bicycle**” was changed to “**shared-use**”.

Section 1A.14 Abbreviations Used on Traffic Control Devices

In Paragraph 1 [“When the word ...”], the phrase “**abbreviations are needed for**” was changed to “**the word messages shown in Table 1A-1 need to be abbreviated in connection with**”.

Paragraph 4 [“Where multiple abbreviations ...”] was added.

Figure 1A-1 Example of Process for Requesting and Conducting Experimentations for New Traffic Control Devices

In the title, the word “**Typical**” was changed to “**Example of**”.

Figure 1A-2 Example of Process for Incorporating New Traffic Control Devices into the MUTCD

In the title, the word “**Typical**” was changed to “**Example of**”.

A reference to Figure 1A-1 was added to the box in the flowchart that said “**Experiment Successful**”. The box that said “**Jurisdiction recommends that FHWA revise MUTCD**” was changed to “**Request for change from jurisdiction or interested party**” and is now shown in a different place in the flowchart. The box that said “**States adopt changes with 2 years, unless otherwise noted in Final Rule**” was changed to “**State Manuals must be in substantial conformance with the National MUTCD within 2 years as specified in 23 CFR 655.603(a)**”. All other boxes from the 2000 MUTCD were retained without changes. The boxes that were retained or modified from those shown in the 2000 MUTCD are primarily shown in the rightmost column of the new figure. Twelve new boxes were added to the flowchart. Most of the new boxes were added to show the process for interim approval.

Table 1A-1 Acceptable Abbreviations

Abbreviations were added for “**Circle**”, “**Court**”, “**Hazardous Cargo**”, “**Inherently Low Emission Vehicle**”, “**Parkway**”, “**Place**”, “**Terrace**”, and “**Trail**”.

The alternative abbreviation “**AV**” was added for “**Avenue**”.

The abbreviations for “**Eastbound**”, “**Northbound**”, “**Southbound**”, and “**Westbound**” were changed to “**E-BND**”, “**N-BND**”, “**S-BND**”, and “**W-BND**”.

The abbreviations for “**Kilometer(s)**” and “**Meter(s)**” were changed from upper-case letters to lower-case letters.

The alternative abbreviation “**M.P.H.**” was deleted for “**Miles Per Hour**”.

The word message “**Vehicles**” was changed to “**Vehicle(s)**”.

Table 1A-2 Abbreviations That Are Acceptable Only with a Prompt Word

An abbreviation and prompt word were added for “**Chemical**”.

The abbreviations and prompt words for “**Eastbound**”, “**Northbound**”, “**Southbound**”, “**Westbound**”, and “**Vehicle**” were deleted.

The asterisk was deleted from the prompt word for “**Downtown**”.

The alternative abbreviation “**RTE**” was added for “**Route**”.

Table 1A-3 Unacceptable Abbreviations

(No changes were made to this table.)

Part 2 Signs

Chapter 2A General

Sections 2A.01 to 2A.03

(No changes were made to these Sections.)

Section 2A.04 Excessive Use of Signs

In the second sentence, the word “**reasonably**” was added.

Section 2A.05 Classification of Signs

(No changes were made to this Section.)

Section 2A.06 Design of Signs

In Paragraph 2 [“In the specifications ...”], the phrase “**general appearance of the**” was added.

In Paragraph 3 [“Detailed drawings of ...”], the phrase referring to the “Standard Alphabets for Highway Signs and Pavement Markings” was deleted from the first sentence. The second sentence was changed to singular form.

In the first sentence of Paragraph 8 [“Where a standard ...”], the word “**standard**” was added.

Paragraphs 10 [“Except as stated ...”], 11, and 12 were added.

Section 2A.07 Changeable Message Signs

In Paragraph 1 [“To the extent ...”], the phrase “**to the extent practical**” was moved to the beginning of the sentence. At the end of the sentence, the reference to Section 6F.52 was deleted and references to Sections 2E.21 and 6F.02 were added.

In Paragraph 2 [“Except for safety ...”], the phrase “**Except for safety or transportation-related messages,**” was added.

In the second sentence of Paragraph 3 [“Changeable message signs, with ...”], the phrase “**additional standards may be adopted in the future**” was changed to “**experience is gained toward adoption of future standards**”.

In the first sentence of Paragraph 4 [“Information regarding the ...”], the reference at the end of the sentence was changed from “**6F.02**” to “**6F.55**”. The second sentence was added.

Paragraphs 5 [“Changeable message signs (including ...)”] through 9 were added.

Section 2A.08 Retroreflectivity and Illumination

In Paragraph 3 [“The requirements for ...”], the phrase “, **highway, or strobe**” was changed to “**or highway**”.

Paragraphs 7 [“Light Emitting Diode ...”] through 10 were added.

Sections 2A.09 to 2A.10

(No changes were made to these Sections.)

Section 2A.11 Sign Colors

In the first sentence of Paragraph 1 [“The colors to ...”], the phrase “**specific Sections of Part 2**” was changed to “**applicable Sections of this Manual**”. In the second sentence, the phrase “**the “Standard Highway Signs” book**” was changed to “**23 CFR, Part 655, Subpart F, Appendix**”.

Paragraph 5 [“Information regarding color ...”] was added.

Section 2A.12 Dimensions

In Paragraph 1 [“Sign sizes for ...”], the references to Sections 2D.04, 5A.03, 6F.02, 7B.01, 8B.02, and 9B.02 were added.

Paragraph 2 [“The “Standard Highway ...”] was added.

In Paragraph 3 [“The sign dimensions ...”], the word “**standard**” was deleted from the first sentence. In the second and third sentences, the word “**standard**” was changed to “**prescribed**”. The phrase “**and in the “Standard Highway Signs” book**” was deleted from the end of the second sentence.

In Paragraph 4 [“Increases above the ...”], the word “**standard**” was changed to “**the prescribed**”.

Section 2A.13 Symbols

(No changes were made to this Section.)

Section 2A.14 Word Messages

In Paragraph 1 [“Except as noted ...”], the phrase referring to the “Standard Alphabets for Highway Signs and Pavement Markings” was deleted.

In the second sentence of Paragraph 2 [“Word messages should ...”], the word “**minimum**” was added.

Paragraph 3 [“Some research indicates ...”] was added.

In Paragraph 5 [“All sign lettering ...”], the phrase referring to the “Standard Alphabets for Highway Signs and Pavement Markings” was changed to the “Standard Highway Signs” book.

Section 2A.15 Sign Borders

In the last sentence of Paragraph 3 [“A dark border ...”], the phrase “**Where practicable,**” was deleted, the phrase “**, except for STOP signs**” was moved to the beginning of the sentence, and the phrase “**and as otherwise provided in Section 2E.15**” was added.

Section 2A.16 Standardization of Location

The second sentence of Paragraph 1 [“Standardization of position ...”] was expanded to provide additional clarity and now only references Figures 2A-1 and 2A-2.

In the first sentence of Paragraph 2 [“Signs requiring different ...”], the word “**reasonably**” was added.

Item B of Paragraph 4 [“Signs should be individually ...”] was rearranged and expanded to provide additional clarity. Item C of Paragraph 4 was added.

In the second sentence of Paragraph 6 [“The clear zone ...”], the phrase “**The desired width**” was changed to “**The width of the clear zone**”.

Section 2A.17 Overhead Sign Installations

In Paragraph 1 [“Overhead signs should ...”], the phrase “**freeways and**” was added.

In Paragraph 3 [“The following conditions ...”], the phrase “**should be used**” was changed to “**would be beneficial**”.

The last paragraph in the 2000 MUTCD was deleted.

Section 2A.18 Mounting Height

Paragraph 1 [“The provisions of ...”] was added.

Paragraph 10 [“Overhead mounted signs ...”] was relocated (it was the first sentence in the third paragraph in the 2000 MUTCD). Also the word “**mounted**” was added and “**5.1 m**” was changed to “**5.2 m**”.

Paragraph 11 [“If the vertical ...”] was relocated (it was the second sentence in the third paragraph in the 2000 MUTCD), was changed from Standard to Option, and was reworded to provide additional clarity.

In Paragraph 13 [“Figure 2A-1 illustrates ...”], the word “**examples**” was added.

Section 2A.19 Lateral Offset

Paragraph 1 [“For overhead sign ...”] was relocated (it was the second paragraph in the 2000 MUTCD). Also the phrase “**For overhead sign supports,**” was added at the beginning of the first sentence.

Paragraph 2 [“Ground-mounted sign supports ...”] was relocated (it was the second sentence in the first paragraph in the 2000 MUTCD). Also the phrase “**Roadside-mounted**” was changed to “**Ground-mounted**”.

Paragraph 3 [“For ground-mounted signs ...”] was relocated (it was the first sentence in the first paragraph in the 2000 MUTCD). Also the phrase “**For ground-mounted signs,**” was added at the beginning of the first sentence. The lateral offset requirements specified in this paragraph are significantly different than those specified in the 2000 MUTCD.

The second sentence of the third Paragraph in the 2000 MUTCD was deleted.

In Paragraph 6 [“Where permitted, signs ...”], the word “**highway**” was added prior to “**traffic signal**”.

In Paragraph 9 [“In areas where ...”], the word “**urban**” was deleted.

In Paragraph 11 [“Figures 2A-1 and 2A-2 ...”], the phrase “**and 2A-2**” and the word “**examples**” were added.

Section 2A.20 (Position of Signs) of the 2000 MUTCD was deleted.

Section 2A.20 Orientation [Section 2A.21 in the 2000 MUTCD]

In Paragraph 1 [“Unless otherwise stated ...”], the phrase “**Unless otherwise stated in this Manual,**” was added.

Section 2A.21 Posts and Mountings [Section 2A.22 in the 2000 MUTCD]

Paragraphs 3 [“Where engineering judgment ...”] and 4 were added.

Section 2A.22 Maintenance [Section 2A.23 in the 2000 MUTCD]

In the second sentence of Paragraph 2 [“To assure adequate ...”], the phrase “**agencies, police**” was changed to “**, law enforcement**”.

Section 2A.23 Median Opening Treatments for Divided Highways with Wide Medians [Section 2A.24 in the 2000 MUTCD]

The title was changed from “**Wrong-Way Traffic Control**” to “**Median Opening Treatments for Divided Highways with Wide Medians**”.

This paragraph was changed from Standard to Guidance. The phrase “**at the median opening itself**” was added. The phrase “**the intersections with crossroads shall**” was changed to “**median openings should**”.

The second and third paragraphs in the 2000 MUTCD were deleted.

Figure 2A-1. Examples of Heights and Lateral Locations of Signs for Typical Installations

The phrase “**Examples of**” was added to the title.

The sign images were made more pattern accurate.

In the **Route Sign assembly**, the route number and the **Directional Arrow auxiliary sign** for the route shown in the lower right were changed.

The **Double Arrow sign** shown in the 2000 MUTCD was changed to a **Keep Right sign** to provide a better example of the type of sign that is placed on the nose of a median that is painted yellow. The note for this example was changed from “**WARNING SIGN ON ISLAND IN THE LINE OF TRAFFIC**” to “**SIGN ON NOSE OF MEDIAN**”.

The note in the bottom left corner that references Section 2A.19 was added.

Figure 2A-2. Examples of Locations for Some Typical Signs at Intersections

In the title, the phrase “**Typical Locations for**” was changed to “**Examples of Locations for Some Typical**”.

The sign images and pavement markings were made more pattern accurate.

The dimension “**3.7 m (12 ft)**” was changed to “**MIN. 1.8 m (6 ft) to 3.7 m (12 ft)**” in seven places.

The dimension lines for the lateral offset of the sign on the median of the “**DIVISIONAL ISLAND**” graphic at the bottom left were changed to show that the dimension is to the face of curb, not to the edge of the yellow edge line as shown in the 2000 MUTCD.

The note at the bottom was added.

Figure 2A-3 of the 2000 MUTCD was relocated to Figure 2B-14.

Figure 2A-4 of the 2000 MUTCD was relocated to Figure 2B-13.

Figure 2A-5 of the 2000 MUTCD was relocated to Figure 2B-12 (Sheet 1).

Figure 2A-6 of the 2000 MUTCD was relocated to Figure 2B-12 (Sheet 2).

Figure 2A-7 of the 2000 MUTCD was deleted.

Table 2A-1. Illumination of Sign Elements

The word “**word**” was added prior to the word “**message**” in three places in the right column.

The third row regarding LEDs was added.

In the left column of the fourth row, the phrases “**at night**”, “**(shaped to the lettering or symbol)**”, and “**Patterns of**” were deleted.

Table 2A-2. Retroreflection of Sign Elements

(No changes were made to this Table.)

Table 2A-3. Use of Sign Shapes

In the right column of the third row, the phrase “**Emergency Evacuation Route Marker**” was deleted and an asterisk was added in front of the phrase “**Highway-Rail Grade**”.

In the right column of the fifth row, the phrase “**Crossing Series**” was changed to “**Advance Warning Sign**”.

In the left column of the eighth row, the phrase “**(including square)**” was added.

In the right column of the last row, the phrases “**and Cultural Interest Area**” and “**National Forest Route Sign**” were added. Also, the asterisk in front of the word “**Recreational**” was deleted.

The note associated with the single asterisk was changed to provide additional clarity.

Emergency management signs were added to the note associated with the double asterisk.

Table 2A-4. Common Uses of Sign Colors

The column for “**Fluorescent Pink**” was added.

The rows for “**Incident Management**” and “**Changeable Message Signs**” and the note associated with the single asterisk were added.

The phrase “**Milepost Signs**” was changed to “**Reference Location**”.

The rows for “**Street Name**”, “**Destination**”, and “**Reference Location**” were relocated from Information to Guide classification.

The row for “**Evacuation Route**” was relocated from Guide to Information classification.

Chapter 2B Regulatory Signs

Section 2B.01 Application of Regulatory Signs

(No changes were made to this Section.)

Section 2B.02 Design of Regulatory Signs

Paragraph 3 [“Changeable message signs ...”] was added.

Section 2B.03 Size of Regulatory Signs

The first paragraph in the 2000 MUTCD was deleted.

In Paragraph 4 [“The Oversized size ...”], the phrase “**that require**” was changed to “**where speed, volume, or other factors result in conditions where**”, and the phrase “**would be desirable**” was added.

Paragraph 5 [“Signs larger than ...”] was added.

Section 2B.04 STOP Sign (R1-1)

(No changes were made to this Section.)

Section 2B.05 STOP Sign Applications

In Paragraph 1 [“STOP signs should be used if ...”], the phrase “**should not be used unless**” was changed to “**should be used if**”.

In Item A of Paragraph 1 ["STOP signs should be used if ..."], the phrase "**reasonably safe operation**" was changed to "**reasonable compliance with the law**".

In Paragraph 2 ["Because the potential ..."], the phrase "**except as noted in Section 4D.01**" was added.

In the last paragraph ["The use of ..."], the second sentence was added.

Section 2B.06 STOP Sign Placement

In the first sentence of Paragraph 1 ["The STOP sign shall be installed ..."], the word "**correct**" was changed to "**right**", and the phrase "**traffic lane**" was changed to the word "**approach**".

Paragraphs 4 ["Other than a ..."] and 5 were added.

In the last paragraph ["Figure 2A-2 shows ..."], the phrase "**examples of**" was added.

Section 2B.07 Multiway Stop Applications

In Item C of the last paragraph, the word "**reasonably**" was added.

Section 2B.08 YIELD Sign (R1-2)

(No changes were made to this Section.)

Section 2B.09 YIELD Sign Applications

In Paragraph 1 ["YIELD signs may ..."], the word "**installed**" was changed to the phrase "**used instead of STOP signs if engineering judgment indicates that one or more of the following conditions exist**".

In Item A of Paragraph 1 ["YIELD signs may ..."], the word "**reasonably**" was added.

Paragraph 2 ["A YIELD (R1-2) sign ..."] was added.

Section 2B.10 YIELD Sign Placement

In the first sentence of Paragraph 1 ["The YIELD sign shall be installed ..."], the word "**correct**" was changed to "**right**", and the phrase "**traffic lane**" was changed to the word "**approach**".

In Paragraph 1 ["The YIELD sign shall be installed ..."], the second sentence was added.

Paragraphs 4 ["Other than a ..."] and 5 were added.

In Paragraph 8 ["Except at roundabout ..."], the phrase "**Except at roundabout intersections,**" was added.

Paragraphs 9 ["At a roundabout ..."] and 10 were added.

Section 2B.11 Yield Here To Pedestrians Signs (R1-5, R1-5a)

This Section was added.

Section 2B.12 In-Street Pedestrian Crossing Signs (R1-6, R1-6a)

This Section was added.

Section 2B.13 Speed Limit Sign (R2-1) [Section 2B.11 in the 2000 MUTCD]

The second and third paragraphs in the 2000 MUTCD were deleted.

Paragraph 2 ["At least once ..."] was added.

In Paragraph 4 ["When a speed ..."], the phrase "**within 10 km/h or 5 mph of**" was added, and the phrase "**rounded up to the nearest 10 km/h (5 mph) increment**" was deleted.

In Paragraph 7 ["A changeable message sign that changes ..."], the phrase "**the speed limit**" was added after the word "**changes**".

Paragraphs 8 ["A changeable message sign that displays ..."] and 9 were added.

Sections 2B.14 to 2B.16 [Sections 2B.12 to 2B.14 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 2B.17 FINES HIGHER Plaque (R2-6)

This Section was added.

Section 2B.18 Location of Speed Limit Signs [Section 2B.15 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2B.16 in the 2000 MUTCD was deleted.

Section 2B.19 Turn Prohibition Signs (R3-1 through R3-4, and R3-18) [Section 2B.17 in the 2000 MUTCD]

The phrase "**, and R3-18**" was added to the title.

In Paragraph 4 [“If No Left ...”], the word “a” prior to “left corner” was changed to the phrase “the far”.

Paragraph 7 [“If combination No ...”] was added.

In Item B of Paragraph 8 [“If signals are ...”], the phrase “or combination No U-Turn/No Left Turn” was added.

The last Paragraph [If both left ...], was added.

Section 2B.20 Intersection Lane Control Signs (R3-5 through R3-8) [Section 2B.18 in the 2000 MUTCD]

In Paragraph 3 [“When Intersection Lane ...”], the phrase “When used, Intersection Lane Control signs should be mounted overhead, and” was changed to “When Intersection Lane Control signs are mounted overhead,” and after the word “over” the phrase “the lane or” was added.

Section 2B.21 Mandatory Movement Lane Control Signs (R3-5, R3-5a, and R3-7) [Section 2B.19 in the 2000 MUTCD]

In Paragraph 4 [“Mandatory Movement Lane ...”], the phrase “If used,” was deleted and the phrase “control pavement” was changed to “use arrow”.

Sections 2B.22 to 2B.24 [Sections 2B.20 to 2B.22 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 2B.25 Reversible Lane Control Signs (R3-9d, R3-9f through R3-9i) [Section 2B.23 in the 2000 MUTCD]

In the title and in the second sentence of Paragraph 1, the phrase “R3-9c” was changed to “R3-9d, R3-9f”.

In the first sentence of Item B of Paragraph 4 [“Reversing traffic flow ...”], the phrase “sign operation” was changed to “the use of Reversible Lane Control signs”.

In the sixth paragraph of the 2000 MUTCD, the phrase “R3-9c and” was deleted.

In the seventh paragraph of the 2000 MUTCD, the phrase “R3-9c or” and the second sentence were deleted.

In the eighth paragraph of the 2000 MUTCD, the phrase “or R3-9e” was deleted.

Section 2B.26 Preferential Only Lane Signs (R3-10 through R3-15) [Section 2B.48 in the 2000 MUTCD]

The title was changed from “**Preferential Lane Signs (R3-10 through R3-17)**” to “**Preferential Only Lane Signs (R3-10 through R3-15)**”.

Throughout this Section, the phrase “**preferential lane**” was changed to “**preferential only lane**”.

Paragraph 2 [“Information regarding Preferential ...”] was added.

The second sentence of Paragraph 5 [“The symbol and ...”] was added.

In Paragraph 6 [“When a preferential ...”], the phrase “**3B.22 and**” was added.

In the sixth paragraph of the 2000 MUTCD, the phrase “**or R3-16a**” was deleted.

Paragraphs 8 [“Ground-mounted Preferential Only ...”] through 13 [Figures 2E-46 through ...”] were added.

Paragraphs 14 [“The R3-10, R3-11, ...”] through 17 [“The legend format of the overhead ...”] were changed from Guidance to Standard.

In Paragraph 14 [“The R3-10, R3-11, ...”], the R3-10, R3-11c, R3-13, R3-13a, and R3-14a signs were added to the first sentence, and the word “**vehicle**” was deleted. In the second sentence, the phrase “**exclusively for bus and/or taxi use**” was changed to “**for use by other types of vehicles (such as bus and/or taxi use)**”.

In Paragraph 16 [“The legend format of the ground-mounted ...”], the phrase “**High Occupancy Vehicle Only**” was changed to “**Preferential Only Lane Operational**”. In Item A, the phrase “**CENTER LANE, CURB LANE,**” was changed to “**RIGHT LANE,**”. In Item B, the phrases “**Eligible uses, such as**” and “**BUSES ONLY**” were added. In Item C, the phrase “**(for example, 7-9 AM, 4-6 PM, MON-FRI)**” was changed to “**such as 7-9 AM or 6:30-9:30 AM, MON-FRI**”.

In Paragraph 17 [“The legend format of the overhead ...”], the phrase “**High-Occupancy Vehicle Only (R3-14) sign should**” was changed to “**Preferential Only Lane Operational (R3-14 series) signs shall**”. In Item A, the phrases “**Eligible uses, such as**” and “**BUSES ONLY**” were added. In the first sentence of Item B, the phrase “**separated by a down arrow (for example, 7-9 AM, 4-6 PM, MON-FRI)**” was changed to “**placed above the down arrow, such as 7-9 AM or 6:30-9:30 AM, MON-FRI**”. The second sentence of Item B was added.

Paragraph 19 [“**When the diamond** ...”] was changed from Guidance to Standard. The first two sentences and the last sentence were added. In the third sentence, the **R3-11** sign was deleted and the **R3-13a and R3-14a** signs were added.

In Paragraph 20 [“The Preferential Only ...”], the phrase “**Preferential Only**” was added and the R3-10, R3-13, and R3-16 signs were deleted.

Paragraph 21 [“The R3-10, R3-10b, ...”] was changed from Guidance to Standard. The R3-10b and R3-13a signs were added, and the phrase “**minimum occupancy requirement for a vehicle to use an HOV lane**” was changed to “**operational strategy (such as minimum occupancy or types of vehicles) that is being used to manage or regulate the vehicles that are permitted to use a preferential only lane**”.

In Paragraph 22 [“The legend format ...”], the phrase “**(or 3+ or 4+ if appropriate)**” was added to Item A, and the phrase “**(or 3 or 4 if appropriate)**” was added to Item B.

Paragraph 23 [“Changeable message signs ...”], was added.

Paragraph 24 [“When changeable message ...”] was changed from Guidance to Standard. The phrase “**Changeable message signs serving as HOV signs should**” was changed to “**When changeable message signs (see Section 2A.07) are used as regulatory signs for preferential only lanes, they shall**”, and the word “**roadway**” was added.

In the second-to-last paragraph of the 2000 MUTCD, the phrase “**overhead lane control signals or**” was deleted.

In Paragraph 26 [“Where additional movements ...”], the phrase “**an HOV**” was changed to “**a preferential only**”, and the paragraph was rearranged to improve clarity.

Paragraphs 27 [“The Inherently Low ...”] and 28 were added.

Section 2B.27 Preferential Only Lanes for High-Occupancy Vehicles (HOVs) [Section 2B.49 in the 2000 MUTCD]

The title was changed from “**High-Occupancy Vehicle (HOV) Lanes**” to “**Preferential Only Lanes for High-Occupancy Vehicles (HOVs)**”.

In Paragraph 1 [“The agencies that ...”], the phrase “**High-Occupancy Vehicle (HOV) lanes**” was changed to “**preferential only lanes for high-occupancy vehicles (HOV lanes)**”.

Paragraph 2 [“The requirements for ...”] was added.

In Paragraph 5 [“The Federal Highway ...”], the phrase “**to specific HOV lane segments or to the entire HOV system, when it can be reasonably expected that the proposed change could affect HOV lane segments**” was changed to “**that could reasonably be expected to affect a specific HOV lane**”. In the third sentence the word “**operational**” was added after the word “**significant**”.

Paragraph 6 ["In accordance with ..."] was added.

In the first sentence of Paragraph 7 ["FHWA Division Offices ..."], the word **"input"** was changed to **"involvement"**.

In Paragraph 8 ["Proposals to adjust ..."], the word **"typically"** was added and the word **"do"** was changed to **"might"**.

In Paragraph 9 ["Any action that ..."], the first sentence was added. In the second sentence, the word **"travel"** was added, the word **"is"** was changed to the phrase **"would be"**, the word **"operational"** was added after the word **"significant"**, and the phrase **"and does require a Federal review"** was deleted. The last sentence and Items A and B were added. (Items C and D were retained from the eighth paragraph of the 2000 MUTCD).

Paragraphs 14 ["Inherently low emission ..."] and 15 were added.

In Paragraph 16 ["Motorcycles shall be ..."], which was relocated from the fourth paragraph of the 2000 MUTCD, the word **"eligible"** was changed to **"permitted"**, and the word **"highway"** was deleted.

Section 2B.28 Preferential Only Lane Sign Applications and Placement

[Section 2B.50 in the 2000 MUTCD]

In the title, the phrase "High-Occupancy Vehicle" was changed to "Preferential Only Lane".

Throughout this Section, the phrase **"HOV lane"** was changed to **"preferential only lane"**.

Paragraphs 1 through 8 ["When Preferential Only ..."] were added.

Paragraphs 9 ["For all barrier-separated ..."] through 11 are significant revisions of the first and second paragraphs in the 2000 MUTCD.

Paragraph 12 ["For barrier-separated reversible-flow ..."] was the sixth paragraph in the 2000 MUTCD.

Paragraphs 13 ["For buffer-separated preferential ..."] and 14 are significant revisions of the third paragraph in the 2000 MUTCD.

Paragraphs 15 ["For concurrent-flow preferential ..."] and 16 are significant revisions of the fourth paragraph in the 2000 MUTCD.

Paragraphs 17 ["For direct access ..."] and 18 are significant revisions of the fifth paragraph in the 2000 MUTCD.

Paragraphs 19 ["Section 2B.26 contains ..."] and 20 were added.

Sections 2B.29 to 2B.32 [Sections 2B.24 to 2B.27 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 2B.33 Keep Right and Keep Left Signs (R4-7, R4-8) [Section 2B.28 in the 2000 MUTCD]

In Paragraph 1 [“The Keep Right (R4-7) ...”], the second sentence was added (it is a modification of the fifth paragraph of the 2000 MUTCD).

In Paragraph 2 [“If used, the ...”], the phrase **“such that traffic will have to pass to the right of the sign”** was added to the last sentence.

Paragraph 3 [“The Keep Right sign shall ...”] was added.

In Paragraph 5 [“Word message KEEP ...”], the phrase “or R4-8” was added.

The fifth paragraph of the 2000 MUTCD was deleted.

Sections 2B.34 DO NOT ENTER Sign (R5-1) [Section 2B.29 in the 2000 MUTCD]

In Paragraph 2 [“The DO NOT ENTER sign, if ...”], the phrases **“directly in view of a road user”** and **“divided highway,”** were added to the first sentence.

In Paragraph 5 [“A second DO ...”], the reference to Figure 2A-3 was deleted.

Section 2B.35 WRONG WAY Sign (R5-1a) [Section 2B.30 in the 2000 MUTCD]

In Paragraph 1 [“The WRONG WAY ...”], the reference to Figure 2A-3 was deleted.

Section 2B.36 Selective Exclusion Signs [Section 2B.31 in the 2000 MUTCD]

In Item H of Paragraph 3 [“Typical exclusion messages ...”], the word **“Cargo”** was changed to **“Material”** and the phrase **“(see Section 2B.52)”** was added.

In Paragraph 6 [“The Selective Exclusion ...”], the phrase **“or No Pedestrian Crossing”** was added to the second sentence.

In Paragraph 7 [“The NO TRUCKS ...”], the phrase **“word message”** was deleted and the phrase **“(R5-2a) sign”** was added.

In Paragraph 8 [“The PEDESTRIANS PROHIBITED ...”], the phrase **“or No Pedestrian Crossing”** was added.

Section 2B.37 ONE WAY Signs (R6-1, R6-2) [Section 2B.32 in the 2000 MUTCD]

In Paragraph 2 [“**ONE WAY** signs shall ...”], the phrase “**as shown in Figures 2B-12 through 2B-15**” was added.

In Paragraph 3 [“Where divided highways ...”], the phrase “**at the intersection itself**” was added.

In Paragraph 5 [“**ONE WAY** signs may be omitted (see ...)”], the phrases “(see **Figure 2B-14**)” and “**at the intersection itself**” were added.

The sixth paragraph of the 2000 MUTCD was deleted.

Section 2B.38 Divided Highway Crossing Signs (R6-3, R6-3a) [Section 2B.33 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2B.39 Parking, Standing, and Stopping Signs (R7 and R8 Series) [Section 2B.34 in the 2000 MUTCD]

The second sentence was added.

Section 2B.40 Design of Parking, Standing, and Stopping Signs [Section 2B.35 in the 2000 MUTCD]

Paragraphs 6 [“Where special parking ...”] and 7 were added.

In Item B of Paragraph 10 [“Where parking is prohibited during ...”], the phrase “**to form an R7-200 sign**” was added.

Sections 2B.41 to 2B.43 [Sections 2B.36 to 2B.38 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 2B.44 Pedestrian Crossing Signs (R9-2, R9-3) [Section 2B.39 in the 2000 MUTCD]

In Paragraph 5 [“The **NO PEDESTRIAN** ...”], the phrase “**PEDESTRIANS PROHIBITED**” was changed to “**NO PEDESTRIAN CROSSING**”.

Section 2B.45 Traffic Signal Signs (R10-1 through R10-21) [Section 2B.40 in the 2000 MUTCD]

In the title and in Paragraph 1, the word “**R10-13**” was changed to “**R10-21**”.

In the second and third sentences of Paragraph 6 [“The symbol sign ...”], the word “**plaque**” was changed to “**sign**”. The fourth sentence was added.

In Paragraph 7 [“Traffic Signal signs ...”], the phrase “**and LEFT TURN SIGNAL YIELD ON GREEN (symbolic green ball) (R10-21) (see Section 4D.06)**” was added at the end of the last sentence.

Paragraph 8 [“In situations where ...”] was formerly the twelfth paragraph in the 2000 MUTCD.

In Paragraph 10 [“A symbolic NO...”], which was formerly the eleventh paragraph in the 2000 MUTCD, the phrase “**(R10-11c or R10-11d)**” was changed to “**(R10-11)**”.

Paragraph 13 [“Where turns on ...”] was added.

Paragraph 14 [“In order to ...”], which was formerly the tenth paragraph in the 2000 MUTCD, was changed from Guidance to Option by changing the word “**should**” to “**may**”. Also, the word “**When**” was changed to the phrase “**In order to remind drivers who are making turns to yield to pedestrians, especially at intersections where**”.

Paragraph 15 [“The supplemental R10-20a ...”] was added.

Paragraph 17 [“A U-TURN YIELD ...”] was added.

Section 2B.46 Photo Enforced Signs (R10-18, R10-19)

This section was added.

Section 2B.47 KEEP OFF MEDIAN Sign (R11-1) [Section 2B.41 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2B.48 ROAD CLOSED Sign (R11-2) and LOCAL TRAFFIC ONLY Signs (R11-3 Series, R11-4) [Section 2B.42 in the 2000 MUTCD]

In Paragraph 3 [“The Road Closed ...”], the word “**series**” was added after “**R11-3**”.

Sections 2B.49 to 2B.51 [Sections 2B.43 to 2B.45 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 2B.52 Hazardous Material Signs (R14-2, R14-3) [Section 2B.46 in the 2000 MUTCD]

The word “**cargo**” was changed to “**material**” in six places in this Section, including in the title.

Section 2B.53 National Network Signs (R14-4, R14-5) [Section 2B.47 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2B.54 Other Regulatory Signs [Section 2B.51 in the 2000 MUTCD]

In Paragraph 3 [“When a seat ...”], the phrase “**R16-1 symbol**” was changed to “**symbol shown in Figure 2B-22**”.

Figure 2B-1. STOP, YIELD, Speed Limit, FINES HIGHER, and Photo Enforcement Signs [Page 2B-7 in the 2000 MUTCD]

A figure number and title were added.

The R1-2a; R2-6; R10-18; and R10-19 signs were added.

The Metric versions of the R2-1, R2-2, and R2-3 signs were changed.

Figure 2B-2. Unsignalized Pedestrian Crosswalk Signs

This figure was added.

Figure 2B-3. Speed Limit and Turn Prohibition Signs [Page 2B-15 in the 2000 MUTCD]

A figure number and title were added.

The R3-18 sign was added.

The Metric versions of the R2-4 and R2-4a signs were changed.

The R2-5a, R2-5b, and R2-5c signs were deleted.

Figure 2B-4. Intersection Lane Control Signs [Page 2B-19 in the 2000 MUTCD]

A figure number and title were added.

The alternative R3-6 and R3-8 signs and the R3-5e, R3-5f, and R3-5g supplemental **plaques** were added.

Figure 2B-5. Center and Reversible Lane Control Signs [Page 2B-23 in the 2000 MUTCD]

A figure number and title were added.

The R3-9c and R3-9e signs were deleted.

Figure 2B-6. Location of Reversible Two-Way Left Turn Signs [Figure 2B-1 in the 2000 MUTCD]

The R3-9d sign on the left side of the figure was changed.

Figure 2B-7. Examples of Preferential Only Lane Signs [Page 2B-53 in the 2000 MUTCD]

A figure number and title were added.

In both subheadings, the word “**ONLY**” was added.

The R3-10b, R3-11c, R3-12b, R3-13a, and R3-14a signs were added.

The R3-11 sign was relocated to the ground-mounted portion of the figure and the design was changed.

The design of the R3-14 sign was changed.

The code for the “**R3-14a**” sign in the 2000 MUTCD was changed to “**R3-14b**” in the 2003 MUTCD.

The subheading “**GROUND MOUNTED BICYCLE LANE SIGNS**” and the R3-16, R3-16a, R3-17, and R3-17a signs were deleted.

In Note 3 [“The occupancy requirement ...”], the R3-12 sign was deleted and the R3-15 sign was added.

Note 4 [“Some of the legends ...”] was added.

Figure 2B-8. Passing, Keep Right, and Truck Lane Signs [Page 2B-29 in the 2000 MUTCD]

A figure number and title were added.

The R4-9 and R4-10 signs were added.

The code “**R12-6**” was added next to the METRIC supplemental plaque.

Figure 2B-9. Traffic Prohibition Signs [Page 2B-32 in the 2000 MUTCD]

A figure number and title were added.

The asterisk next to the code for the R5-2 sign was added along with the explanation at the bottom of the figure.

Figure 2B-10. Example of Wrong-Way Signing for a Divided Highway with a Median Width of 9 m (30 ft) or Greater [Figure 2B-2 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Example of**”; and the phrase “**Divided Highways**” was changed to “**a Divided Highway with a Median Width of 9 m (30 ft) or Greater**”.

Lane lines and edge lines were added next to the left turn lanes in both directions and the median width dimensions were added.

Figure 2B-11. ONE WAY and Divided Highway Crossing Signs [Page 2B-36 in the 2000 MUTCD]

A figure number and title were added.

Figure 2B-12. Examples of Locations of ONE WAY Signs (Sheet 1 of 2)
[Figure 2A-5 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

Figure 2B-12. Examples of Locations of ONE WAY Signs (Sheet 2 of 2)
[Figure 2A-6 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The AHEAD supplemental plaques were added in two places.

Figure 2B-13. Examples of ONE WAY Signing for Divided Highways with Medians of 9 m (30 ft) or Greater [Figure 2A-4 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the phrase “**Greater Than 9 m (30 ft)**” was changed to “**of 9 m (30 ft) or Greater**”.

Edge lines were added next to the left turn lanes in both directions.

The note was added at the bottom of the figure.

Figure 2B-14. Examples of ONE WAY Signing for Divided Highways with Medians Less Than 9 m (30 ft) [Figure 2A-3 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The Wrong Way and Do Not Enter signs were deleted and the Keep Right signs were added.

Edge lines were added next to the left turn lanes in both directions and the median width dimensions were added.

Asterisks were added next to the One Way, Divided Highway, and Keep Right signs, and the meaning of the asterisk was added to the legend.

The second note [See Figure 2B-10 ..."] was added.

Figure 2B-15. Examples of ONE WAY Signing for Divided Highways with Medians Less Than 9 m (30 ft) and Separated Left-Turn Lanes

This figure was added.

Figure 2B-16. No Parking Signs (R7 Series) [Page 2B-38 in the 2000 MUTCD]

A figure number and title were added.

The R7-8a, R7-8b, R7-200, R7-202, and R7-203 signs were added.

In the R7-107a sign, “**BUS STOP**” was deleted from the legend and the No Parking symbol was enlarged.

Figure 2B-17. No Parking Signs (R8 Series) [Page 2B-39 in the 2000 MUTCD]

A figure number and title were added.

Figure 2B-18. Pedestrian Signs [Page 2B-43 in the 2000 MUTCD]

A figure number and title were added.

The R9-3, R10-3d, and R10-3e signs were added.

The R10-5 sign was relocated to Figure 2B-19.

Figure 2B-19. Traffic Signal Signs [Page 2B-46 in the 2000 MUTCD]

A figure number and title were added.

The R10-6a, R10-11, R10-15, R10-16, R10-17a, R10-20a, and R10-21 signs were added.

The R10-11c and R10-11d signs were deleted.

The R10-5 sign was relocated from Page 2B-43 in the 2000 MUTCD.

Figure 2B-20. Road Closed and Weight Limit Signs [Page 2B-48 in the 2000 MUTCD]

A figure number and title were added.

The R12-6 supplemental plaque was added and the R12-6 code was placed next to the METRIC supplemental plaque in five places.

Figure 2B-21. Truck Signs [Page 2B-51 in the 2000 MUTCD]

A figure number and title were added.

The M4-4 sign was added.

The “**HC**” on the R14-2 and R14-3 signs was changed to “**HM**”.

The R16-1 symbol was relocated to Figure 2B-22.

Figure 2B-22. Seat Belt Symbol [Page 2B-51 in the 2000 MUTCD]

A figure number and title were added.

The R16-1 code was deleted.

Table 2B-1. Regulatory Sign Sizes

The following signs were added to the table: R1-2a; R1-5; R1-5a; R1-6,6a; R2-1 (Metric); R2-2 (Metric); R2-3 (Metric); R2-4 (Metric); R2-4a (Metric); R2-6; R7-8a,8b; R7-9,9a; R8-9; R8-10; R9-11a; R10-3e; R10-6a; R10-15; R10-16; R10-17a; R10-18; R10-19; R10-20a (three lines); R10-20a (2 lines); R10-21; R10-22; R12-6; R15-1; and R15-8.

The following signs were deleted from the table: R2-5 series; R3-9e; R3-16; R3-16a; R3-17; R3-17a; and R16-1.

In the row for the R3-1,2,3,4 signs, the R3-18 sign was added.

In the row for the R3-9d sign, the R3-9c sign was deleted.

The title in the row for the R3-10 series signs was changed from “**HOV 2+**” to “**Preferential Only**” and the Freeways size was changed from “**(48 x 84)**” to “**(78 x 96)**”.

The title in the row for the R3-11 series signs was changed from “**Center Lane HOV 2+ Only**” to “**Preferential Only Lane Operation**” and the Freeways size was changed from “(54 x 84)” to “(78 x 96)”.

The title in the row for the R3-12 series signs was changed from “**HOV 2+**” to “**Preferential Only**”, the word “**series**” was added, and the size “(48 x 96)” was added in the Freeway column.

The title in the row for the R3-13 series signs was changed from “**HOV 2+**” to “**Preferential Only**”, the word “**series**” was added, and the size was changed from “(102 x 60)” to “(144 x 78) and (144 x 96)” in the Freeway column.

The title in the row for the R3-14 series signs was changed from “**HOV 2+ Only**” to “**Preferential Only Lane Operation**”, and in the Freeway column the size was changed from “(108 x 84)” to “(144 x 106), (144 x 124), and (144 x 90)”.

In the row for the R3-15 series signs, the word “**series**” was added.

The title in the row for the R4-6 sign was changed from “**500 Feet**” to “**XX Meters (XX Feet)**”.

In the row for the R5-2,2a signs, the R5-2a sign was added.

The title in the row for the R5-3 sign was changed from “**Motor Vehicle Prohibition**” to “**No Motor Vehicles**”.

In the row for the R5-5 sign, the Conventional Road size was changed from “(24 x 24)” to “(24 x 30)”.

In the row for the R6-1 sign, the size “(54 x 18)” was added in the Expressway and Freeway columns.

In the row for the R6-2 sign, the size was changed from “(18 x 24)” to “(24 x 30)” in the Conventional Road column, the size “(36 x 48)” was added in in the Expressway and Freeway columns, the size “(18 x 24)” was added in the Minimum column, and the size “(24 x 30)” was deleted in the Oversized column.

In the row for the R6-3,3a signs, the size was changed from “(24 x 18)” to “(30 x 24)” in the Conventional Road column, the size “(36 x 30)” was added in the Expressway column, and the size “(24 x 18)” was added in the Minimum column.

In the row for the R7-1 through R7-108 signs, the R7-8a,9,9a signs were deleted.

In the row for the R7-200 sign, the size was changed from “(20 x 18)” to “(24 x 18) and (12 x 30)” in the Conventional Road column.

In the row for the R7-202 sign, the size was changed from “(12 x 6.5)” to “(12 x 6)” in the Conventional Road column.

In the row for the R8-8 sign, the size “(48 x 60)” was deleted in the Freeway column.
In the row for the R9-3 sign, the title was changed from “**Pedestrians Prohibited**” to “**No Pedestrian Crossing**”.

In the row for the R9-3a sign, the title was changed from “**Pedestrian Prohibition**” to “**No Pedestrian Crossing**”.

In the row for the R9-8 sign, the size was changed from “(24 x 12)” to “(36 x 18)” in the Conventional Road column.

In the row for the R9-9 sign, the size was changed from “(24 x 12)” to “(30 x 18)” in the Conventional Road column.

In the row for the R9-10 sign, the size was changed from “(24 x 12)” to “(48 x 24)” in the Conventional Road column.

In the row for the R9-11 sign, the size was changed from “(24 x 12)” to “(48 x 36)” in the Conventional Road column.

In the row for the R10-1 sign, the title was changed from “**Pedestrian Traffic Signal Signs**” to “**Cross on Green Light Only**”.

In the row for the R10-2 to R10-4b signs, the R10-3d sign was added.

In the row for the R10-6 sign, the row R10-6a sign was deleted, and the size “(24 x 30)” was deleted in the Minimum column.

In the row for the R10-11,11a signs, the R10-11 sign was added, and the R10-11c and R10-11d signs were deleted.

In the row for the R11-3,3a,3b,4 signs, the R11-3 sign was added.

In the row for the R12-1,2 signs, the size “(36 x 48)” was added in the Expressway column.

In the row for the R12-4 sign, the size was changed from “(30 x 24)” to “(36 x 24)” in the Conventional Road column.

Table 2B-2. Meanings of Symbols and Legends on Reversible Lane Control Signs

The phrase “**or symbolic DO NOT ENTER SIGN**” was deleted in the left column of the first row [“Red X on ...”].

Chapter 2C Warning Signs

Section 2C.01 Function of Warnings Signs

(No changes were made to this Section.)

Section 2C.02 Application of Warning Signs

In Paragraph 3 [“The categories of ...”], the phrase “**The application of warning signs can be classified into the categories**” was changed to “**The categories of warning signs are**”.

In the second sentence of Paragraph 4 [“Warning signs specified ...”], the word “**Special**” was changed to “**Additional**”.

Section 2C.03 Design of Warning Signs

In Paragraph 2 [“Warning signs regarding ...”], the word “**playgrounds**” was added.

Section 2C.04 Size of Warning Signs

Paragraph 1 [“The sizes for ...”] was changed from Support to Standard.

In Paragraph 3 [“The Freeway and ...”], the phrases “**to provide larger signs**” and “**visibility and**” were added.

In Paragraph 4 [“The Minimum size ...”], the phrase “**for the warning or where physical conditions preclude the use of the other sizes**” was added.

In Paragraph 5 [“Oversized signs and ...”], the phrase “**for those special applications**” was added, and the phrase “**greater visibility or emphasis**” was changed to “**increased emphasis, improved recognition, or increased legibility**”.

Paragraph 7 [“Signs larger than ...”] was added.

Section 2C.05 Placement of Warning Signs

Paragraph 1 [“For information on ...”] was changed from Standard to Support.

In Paragraph 3 [“Table 2C-4 lists ...”], the word “**three**” was changed to “**two**”.

Section 2C.06 Horizontal Alignments Signs (W1-1 through W1-5, W1-11, W1-15)

In the title, the phrase “, **W1-11, W1-15**” was added.

In the second sentence of Paragraph 1 [“The horizontal alignment ...”], the word “**One-Direction**” was added.

Paragraphs 2 [“If the change in horizontal alignment is 135 ...”], 3, and 5 [“When the Hairpin ...”] were added.

In the third sentence of Paragraph 6 [“An Advisory Speed ...”], the phrase “**or the Curve Speed sign (see Section 2C.36)**” was added.

In Paragraph 7 [“When engineering judgment ...”], the phrase “, **W1-10, W1-11 or W1-15**” was added.

Paragraph 8 [“If the reduction ...”] was added.

Section 2C.07 Combination Horizontal Alignment/Advisory speed Signs (W1-1a, W1-2a)

In the title, “(W1-9)” was changed to “(W1-1a, W1-2a)”.

In Paragraph 1 [“The Turn (W1-1) ...”], the phrase “**Horizontal Alignment/Advisory Speed (W1-9) sign**” was changed to “**Turn/Advisory Speed (W1-1a) sign (see Figure 2C-1), or combination Curve/Advisory Speed (W1-2a) sign (see Figure 2C-1)**”.

In the second paragraph of the 2000 MUTCD, the last sentence was deleted.

Sections 2C.08 to 2C.09

(No changes were made to these Sections.)

Section 2C.10 Chevron Alignment Sign (W1-8)

In Paragraph 1 [“The Chevron Alignment (W1-8) ...”], the word “**One-Direction**” was added in the last sentence.

In Paragraph 2 [“The Chevron Alignment sign ...”], the second sentence was added.

In Paragraph 4 [“A Chevron Alignment sign may ...”], the phrase “**through the intersection**” was changed to “**for through traffic**”.

Section 2C.11 Truck Rollover Warning Sign (W1-13)

This Section was added.

Section 2C.12 Hill Signs (W7-1, W7-1a, W7-1b) [Section 2C.11 in the 2000 MUTCD]

In Item D of Paragraph 2 [“The Hill sign ...”], the number “**225**” was changed to “**230**”.

In the second sentence of Paragraph 4 [“Supplemental plaques (see ...”], the phrase “**Hill sign with a**” was added.

Section 2C.13 Truck Escape Ramp Signs (W7-4 Series) [Section 2C.12 in the 2000 MUTCD]

In Paragraph 2 [“When truck escape ...”] the phrase “**at least**” was added.

Section 2C.14 HILL BLOCKS VIEW Sign (W7-6)

This Section was added.

Section 2C.15 ROAD NARROWS sign (W5-1) [Section 2C.13 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2C.16 NARROW BRIDGE sign (W5-2) [Section 2C.14 in the 2000 MUTCD]

The last paragraph in the 2000 MUTCD was deleted.

Sections 2C.17 to 2C.18 [Sections 2C.15 and 2C.16 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 2C.19 Divided Highway (Road) Ends Sign (W6-2) [Section 2C.17 in the 2000 MUTCD]

In Paragraph 1 [“A Divided Highway ...”], the word “**at**” was changed to the phrase “**in advance of**”.

Section 2C.20 Double Arrow Sign (W12-1) [Section 2C.18 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2C.21 DEAD END/NO OUTLET Signs (W14-1, W14-1a, W14-2, W14-2a) [Section 2C.19 in the 2000 MUTCD]

In the title, the W14-1a and W14-2a signs were added.

In Paragraph 2 [“DEAD END (W14-1a) ...”], the word “**plaques**” was changed to “**signs**”; the sign code “**(D3)**” was changed to “**(D3-1)**”; and the phrase “**at intersections instead of or in addition to the W14-1 or W14-2 signs**” was changed to “**to warn turning traffic that the cross street ends in the direction indicated by the arrow**”.

In Paragraph 4 [“When the W14-1 ...”], the word “**at**” was changed to the phrase “**as near as practical to**”.

Paragraph 5 [“The DEAD END (W14-1a) ...”] was relocated from second paragraph of Section 2C.46 in the 2000 MUTCD. The phrase “**plaque, as appropriate,**” was changed to the word “**signs**”; the word “**not**” was added after the word “shall”; the phrase “**instead of the W14-1 or W14-2 signs**” was added; and the phrase “**to the dead end or no outlet street**” was changed to “**into the dead end street or no outlet area**”.

Section 2C.22 Low Clearance Signs (W12-2 and W12-2p) [Section 2C.20 in the 2000 MUTCD]

In Paragraph 1 [“The Low Clearance (W12-2) ...”], the phrase “**or minimum structure height**” was deleted.

In Paragraph 3 [“Where the clearance ...”], the phrase “**limit, a sign to that effect**” was changed to “**maximum vehicle height, the W12-2 sign with a supplemental distance plaque**”.

In Paragraph 6 [“The Low Clearance sign...”], “**(W12-2P)**” was changed to “**(W12-2p)**”.

Section 2C.23 BUMP and DIP Signs (W8-1, W8-2) [Section 2C.21 in the 2000 MUTCD]

In Paragraph 4 [“A short stretch ...”], the phrase “**when centerline striping is provided on a two-lane or three-lane road**” was added.

Section 2C.24 SPEED HUMP Sign (W17-1) [Section 2C.22 in the 2000 MUTCD]

Paragraphs 4 [“The legend SPEED...”] and 5 were added.

Section 2C.25 PAVEMENT ENDS Sign (W8-3) [Section 2C.23 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2C.26 Shoulder Signs (W8-4, W8-9, and W8-9a) [Section 2C.24 in the 2000 MUTCD]

In the title, the phrase “, **and W8-11**” was deleted.

The first two paragraphs and the sixth paragraph in the 2000 MUTCD were deleted.

In Paragraph 3 [“The SHOULDER DROP OFF...”], the phrase “**during construction and maintenance**” was deleted; the word “**a**” was changed to the phrase “**an unprotected**”; the phrase “**adjacent to the travel lane**” was added; and the word “**height**” was changed to the phrase “**depth for a significant continuous length along the roadway, based on engineering judgment**”.

Section 2C.27 Slippery When Wet Sign (W8-5) [Section 2C.25 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2C.28 BRIDGE ICES BEFORE ROAD Sign (W8-13)

This section was added.

Section 2C.29 Advance Traffic Control Signs (W3-1, W3-2, W3-3, W3-4) [Section 2C.26 in the 2000 MUTCD]

In Paragraph 1 [“The Advance Traffic ...”], “**(W3-1a)**” was changed to “**(W3-1)**” and “**(W3-2a)**” was changed to “**(W3-2)**”.

In Paragraph 5 [“Word messages (W3-1a, ...”], the phrase “**W3-1, W3-2**” was changed to “**W3-1a, W3-2a**”.

In Paragraph 7 [“A warning beacon ...”], the phrase “**a Signal Ahead (W3-3)**” was changed to “**an Advance Traffic Control**”.

In Paragraph 8 [“A BE PREPARED ...”], the word “**areas**” was changed to the phrase “**advance of a section of roadway**”.

In Paragraph 10 [“The BE PREPARED ...”], the word “**beacons**” was changed to the phrase “**a warning beacon (see Section 4K.03)**”.

In Paragraph 11 [“When the warning ...”], the word “**warning**” was added.

Section 2C.30 Speed Reduction Signs (W3-5, W3-5a)

This section was added.

Section 2C.31 Merge Signs (W4-1, W4-5) [Section 2C.28 in the 2000 MUTCD]

In the title, the W4-5 sign was added.

Paragraph 5 [“When a Merge ...”] was added.

The sign code “(W4-2)” was deleted from the last paragraph of the 2000 MUTCD.

Section 2C.32 Added Lane Signs (W4-3, W4-6) [Section 2C.29 in the 2000 MUTCD]

In the title, the W4-6 sign was added.

Paragraph 2 [“When an Added ...”] was added.

Section 2C.33 Lane Ends Signs (W4-2, W9-1, W9-2) [Section 2C.30 in the 2000 MUTCD]

In the title, the W4-2 sign was added.

In Paragraph 1 [“The LANE ENDS ...”], the word “**word**” and the phrase “, **or the Lane Ends (W4-2) symbol sign,**” were added.

In Paragraph 5 [“Where an extra ...”], the word “**word**” and the phrase “**or a Lane Ends (W4-2) symbol sign**” were added.

Section 2C.34 Two-Way Traffic Sign (W6-3) [Section 2C.31 in the 2000 MUTCD]

Paragraph 2 [“A Two-Way Traffic ...”] was added.

Section 2C.35 NO PASSING ZONE Sign (W14-3) [Section 2C.32 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2C.36 Advisory Exit, Ramp, and Curve Speed Signs (W13-2, W13-3, W13-5) [Section 2C.33 in the 2000 MUTCD]

In the second sentence of Paragraph 1 [“Advisory Exit, Ramp, ...”], the word “**advisory**” was added.

In Paragraph 2 [“When used, the ...”], the phrase “**When used,**” was added; the word “**used**” was changed to “**installed**”; and the phrase “**and the Ramp Speed sign should be used along the actual ramp since in some cases the ramp speed may be different from the deceleration exit speed**” was deleted.

In Paragraph 3 [“The Exit Speed ...”], the word “**reasonably**” was added.

In the first sentence of Paragraph 5 [“One or more ...”], the word “**Additional**” was changed to the phrase “**One or more**”; the phrases “**along the deceleration lane,**” and “(see

Figure 2C-7)” were added; and the phrase **“where the recommended speed changes because of a change in curvature or when there is a need to remind road users of the recommended speed”** was deleted.

Paragraph 6 [“A Turn (W1-1) ...”] was added.

In Paragraph 7 [“A Curve Speed ...”], the phrases **“at and”** and **“(see Section 2C.06)”** were added in the first sentence. The second sentence was added.

Paragraphs 8 [“The advisory speed ...”] and 9 were added.

Section 2C.37 Intersection Warning Signs (W2-1 through W2-6) [Section 2C.34 in the 2000 MUTCD]

In Paragraph 1 [“A Cross Road ...”], the phrase **“on a roadway, street, or shared-use path”** was deleted from the first sentence. In the second sentence, the phrase **“word message”** was changed to **“TRAFFIC CIRCLE (W16-12p)”**.

In Paragraph 3 [“An advance street ...”], the phrase **“above or”** and the word **“Warning”** were added.

In Paragraph 4 [“The Intersection Warning ...”], the word **“Warning”** was added and the phrase **“or curvilinear alignment”** was deleted.

In Paragraph 5 [“Intersection Warning signs, ...”], the word **“Warning”** and the phrase **“other than the Circular Intersection symbol (W2-6) sign and the T-intersection symbol (W2-4) sign,”** were added in the first sentence; and the phrase **“or where Junction signing (see Sections 2D.13 and 2D.28) or advance route turn assembly signs (see Section 2D.29) are present”** was deleted from the first sentence. The second sentence was added.

Section 2C.38 Two-Direction Large Arrow Sign (W1-7) [Section 2C.35 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2C.39 Traffic Signal Signs (W25-1, W25-2)

This section was added.

Section 2C.40 Vehicular Traffic Signs (W8-6, W11-1, W11-5, W11-5a, W11-8, W11-10, W11-11, W11-12p, W11-14) [Section 2C.36 in the 2000 MUTCD]

In the title, the word **“Motorized”** was changed to **“Vehicular”** and the W11-1, W11-5a, W11-11, W11-12p, W11-14 signs were added.

In Paragraph 1 [“Vehicular Traffic (W8-6, ...”], the word “**Motorized**” was changed to “**Vehicular**” and the W11-1, W11-5a, W11-11, W11-12p, W11-14 signs were added in the first sentence; and the word “**bicyclists**” and the phrase “**golf carts, horse-drawn vehicles,**” were added in the first sentence. The second sentence was added.

In Paragraphs 3 [“Vehicular Traffic signs ...”] and 4, the word “**Motorized**” was changed to “**Vehicular**”.

In Paragraph 5 [“Supplemental plaques (see ...”], the word “**KILOMETERS**” was changed to “**km**”; the phrase “**, or SHARE THE ROAD**” was added; and the word “**Motorized**” was changed to “**Vehicular**”.

In Paragraph 6 [“The Emergency Vehicle ...”], “**(W11-12P)**” was changed to “**(W11-12p)**”.

Section 2C.41 Nonvehicular Signs (W11-2, W11-3, W11-4, W11-6, W11-7, W11-9) [Section 2C.37 in the 2000 MUTCD]

In the title, the word “**Crossing**” was changed to “**Nonvehicular**”; the W11-6, W11-7, and W11-9 signs were added; and the W11-1 and W16-7P signs were deleted.

In Paragraph 1 [“Nonvehicular signs (see ...”], the word “**Crossing**” was changed to “**Nonvehicular**”; the word “**to**” was changed to the phrase “**in advance of**”; the word “**bicyclists**” was deleted; and the phrase “**or shared use of the roadway**” was added”.

In Paragraph 3 [“When used in ...”], the phrase “**When used in advance of a crossing**” was added; the word “**Crossing**” was changed to “**Nonvehicular warning**”; and the word “**KILOMETERS**” was changed to “**km**”.

In Paragraph 4 [“When used at ...”], the phrase “**If the crossing location is not delineated by crosswalk pavement markings, the Crossing**” was changed to “**When used at the crossing, Nonvehicular**” and “**(W16-7P)**” was changed to “**(W16-7p)**”. The first and last sentences were deleted.

In Paragraph 5 [“The crossing location ...”], the word “**pavement**” was changed to “**crosswalk**”.

In Paragraph 6 [“Pedestrian, Bicycle, and ...”], the phrase “**School Advance Crossing,**” was deleted; the word “**Crossing**” was deleted after the word “**School**”; and the phrase “**and their related supplemental plaques**” was added.

In Paragraph 8 [“Nonvehicular signs should ...”], the word “**Crossing**” was changed to “**Nonvehicular**”.

Section 2C.42 Playground Sign (W15-1) [Section 2C.38 in the 2000 MUTCD]

In Paragraph 2 [“If the access ...”], the word “**Crossing**” was changed to “**Nonvehicular**”.

Sections 2C.43 to 2C.44 [Sections 2C.39 to 2C.40 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 2C.45 Distance Plaques (W16-2 series, W16-3 series, W16-4, W7-3a)
[Section 2C.41 in the 2000 MUTCD]

In Paragraph 1 [“The Distance Ahead ...”], the word “**series**” was added twice.

Section 2C.46 Advisory Speed Plaque (W13-1) [Section 2C.42 in the 2000 MUTCD]

In Paragraph 1 [“The Advisory Speed (W13-1) ...”], the phrase “**supplement any warning sign to**” was added and the word “**recommended**” was changed to “**advisory**”.

Paragraph 2 [“The Advisory Speed plaque ...”] was added.

In Paragraph 3 [“If used, the ...”], the phrase “**If used,**” was added, and “**M.P.H.**” was changed to “**MPH**”.

In Paragraphs 4 [“Except in emergencies ...”] and 5, the word “**recommended**” was changed to “**advisory**”.

Paragraphs 6 [“The advisory speed may ...”] and 7 were added.

Section 2C.47 Supplemental Arrow Plaques (W16-5p, W16-6p, W16-7p)
[Section 2C.43 in the 2000 MUTCD]

In the title and in Paragraph 1, “**W16-5P, W16-6P**” was changed to “**W16-5p, W16-6p**”; and the W16-7p sign was added.

In Paragraph 2 [“Supplemental Arrow plaques ...”], the word “**Arrow**” was added after the phrase “**Advance Turn**”, and the word “**markers**” was changed to “**auxiliary signs**”.

Section 2C.48 Hill-Related Plaques (W7-2 Series, W7-3 Series) [Section 2C.44 in the 2000 MUTCD]

In the title, the word “**Series**” was added twice.

Section 2C.49 Advance Street Name Plaque (W16-8, W16-8a) [Section 2C.45 in the 2000 MUTCD]

In the title and in Paragraph 1, the W16-8a sign was added.

Section 2C.50 CROSS TRAFFIC DOES NOT STOP Plaque (W4-4p) [Section 2C.27 in the 2000 MUTCD]

In the title and in Paragraph 1, “**(W4-4P)**” was changed to “**(W4-4p)**”.

In Paragraph 1 [“The CROSS TRAFFIC ...”], the phrase “**advance of a STOP sign on approaches to two-way stop-controlled intersections to warn road users who might misinterpret the intersection as a four-way (or all-way) stop intersection**” was changed to “**combination with a STOP sign when engineering judgment indicates that conditions are present that are causing or could cause drivers to misinterpret the intersection as an all-way stop**”.

Paragraphs 2 [“Alternate messages such ...”] and 3 were added.

The second through fifth paragraphs in the 2000 MUTCD were deleted.

Section 2C.46 in the 2000 MUTCD was deleted. (The second paragraph was relocated to become Paragraph 5 of Section 2C.21.)

Section 2C.51 SHARE THE ROAD Plaque (W16-1) [Section 2C.47 in the 2000 MUTCD]

The phrase “**horse-drawn vehicles,**” was added.

Sections 2C.52 to 2C.53

These sections were added.

Figure 2C-1. Horizontal Alignment Signs [Page 2C-9 in the 2000 MUTCD]

A figure number and title were added.

The W1-11, W1-13, W1-15, W1-1a (metric), and both W1-2a signs were added.

The code for the W1-9 sign was changed to W1-1a.

Figure 2C-2. Vertical Grade Signs [Page 2C-13 in the 2000 MUTCD]

A figure number and title were added.

The design of the W7-4b sign was changed.

The W7-2, W7-2b, W7-3, W7-3a (English), and W7-3b (English) signs were relocated from Page 2C-33 in the 2000 MUTCD.

The W7-3a (metric), W7-3b (metric), W7-4d, W7-4e, W7-4f, and W7-6 signs were added.

Figure 2C-3. Miscellaneous Warning Signs [Page 2C-15 in the 2000 MUTCD]

A figure number and title were added.

The W5-2a sign was deleted.

The metric versions of the W12-2 and W12-2p signs were changed from “**M**” to “**m**”.

The W14-1a and W14-2a signs were relocated from Page 2C-33 in the 2000 MUTCD.

Figure 2C-4. Roadway Condition and Advance Traffic Control Signs [Page 2C-19 in the 2000 MUTCD]

A figure number and title were added.

The W3-4, W8-7, W8-8, W8-12, and W8-13 signs were added.

The design of the W8-9a sign was changed.

The W8-11 sign was deleted and the “a” was deleted from the code for the W3-1 and W3-2 signs.

The asterisks next to the codes for the W3-1, W3-2, and W3-3 signs were added along with the explanation at the bottom of the figure.

Figure 2C-5. Advisory Speed and Speed Reduction Signs [Page 2C-27 in the 2000 MUTCD]

A figure number and title were added.

The W3-5 and W3-5a signs were added.

The periods were deleted from the English versions of the W13-1, W13-2, W13-3 and W13-5 signs.

The metric versions of the W13-1, W13-2, W13-3 and W13-5 signs were changed.

Figure 2C-6. Merging and Passing Signs [Page 2C-24 in the 2000 MUTCD]

A figure number and title were added.

The W4-2, W4-5, W4-6, and W16-9p signs were added.

The design of the W9-2 sign was changed.

The W4-4P plaque in the 2000 MUTCD was relocated to Figure 2C-8.

Figure 2C-7. Example of Advisory Speed Signing for an Exit Ramp

This figure was added.

Figure 2C-8. Intersection Warning Signs [Page 2C-29 in the 2000 MUTCD]

A figure number and title were added.

The W2-1, W2-2, W2-3, W2-4, and W2-5 signs were redesigned with thicker lines.

The design of the W2-6 sign was changed and the W16-12p plaque was added.

The W25-1 and W25-2 signs were added.

The W4-4p plaque was relocated from Page 2C-24 of the 2000 MUTCD. The arrow was deleted from the plaque and the code was changed from W4-4P to W4-4p.

Figure 2C-9. Vehicular Traffic Signs [Page 2C-31 in the 2000 MUTCD]

A figure number and title were added.

The W11-5a, W11-11, and W11-14 signs were added.

The code for the W11-12p plaque was changed from W11-12P to W11-12p.

Figure 2C-10. Nonvehicular Traffic Signs [Page 2C-31 in the 2000 MUTCD]

A figure number and title were added.

The W11-6, W11-7, and W11-9 signs were added.

The W15-1 sign was relocated from Page 2C-33 of the 2000 MUTCD.

The W16-5P, W16-6P, and W16-7P plaques were relocated to Figure 2C-11.

Figure 2C-11. Supplemental Warning Plaques [Page 2C-33 in the 2000 MUTCD]

A figure number and title were added.

The W16-8a, W16-10, W16-11, W16-9p, and W16-13p signs were added.

The border was added to the W16-8 sign.

The W16-5p, W16-6p, and W16-7p were relocated from Page 2C-31 of the MUTCD and the codes were changed from W16-5P, W16-6P, and W16-7P to W16-5p, W16-6p, and W16-7p.

The design of the W16-2a sign was changed.

The W7-2, W7-2b, W7-3, W7-3a, and W7-3b signs were relocated to Figure 2C-2.

The W14-1P and W14-2P signs were relocated to Figure 2C-3.

The W15-1 sign was relocated to Figure 2C-10.

Table 2C-1. Categories of Warning Signs

In the title, the word “**Application**” was changed to “**Categories**”.

In the row for Section 2C.06, “**Hairpin Curve**” and “**270-Degree Curve**” were added in the Signs column and “**W1-11**” and “**W1-15**” were added in the MUTCD Codes column.

In the row for Section 2C.07, “**W1-9**” was changed to “**W1-1a, W1-2a**” in the MUTCD Codes column.

In the row for Section 2C.10, the word “**Alignment**” was added in the Signs column.

The row for Section 2C.11 was added.

In the row for Section 2C.12, “**W7-1b**” was added in the MUTCD Codes column.

The row for Section 2C.14 was added.

In the row for Sections 2C.16-17, “**W5-2a**” was deleted in the MUTCD Codes column.

In the row for Section 2C.21, “**W14-1a**” and “**W14-2a**” were added in the MUTCD Codes column.

In the row for Section 2C.26, “**W8-9a**” sign was added and “**W8-11**” was deleted in the MUTCD Codes column.

The row for Section 2C.28 was added.

In the row for Sections 2C.29-30, “**Be Prepared to Stop**” and “**Speed Reduction**” were added in the Signs column; “**W3-1**”, “**W3-2**”, “**W3-4**”, “**W3-5**”, and “**W3-5a**” were added in the MUTCD Codes column; and “**W3-1a**” and “**W3-2a**” were deleted in the MUTCD Codes column.

In the row for Sections 2C.31-35, “**Lane Reduction**” was changed to “**Lane Ends**” in the Signs column and “**W4-5**” and “**W4-6**” were added in MUTCD Codes column.

In the row for Section 2C.36, the word “**Exit**” was deleted in the Signs column.

The row for Section 2C.39 was added.

In the row for Section 2C.40, the word “**Motorized**” was changed to “**Vehicular**” in the Group column; “**Golf Cart**” and “**Horse-Drawn Vehicle**” were added in the Signs column; “**Bicycle**” in the Signs column was relocated from the row for Sections 2C.41-42; “**W11-5a**”, “**W11-11**”, “**W11-12p**”, and “**W11-14**” were added in the MUTCD Codes column.

In the row for Sections 2C.41-42, “**Nonvehicular**” was deleted from the Category column; “**Crossings**” was changed to “**Nonvehicular**” in the Group column; “**Snowmobile**” was added in the Signs column; “**Bicycle**” in the Signs column was relocated to the row for Section 2C.40; “**Diagonal Arrow**” in the Signs column was relocated to the row for Section 2C.47; and “**W11-6**” was added in the MUTCD Codes column.

In the row for Section 2C.47, “**Diagonal Arrow**” in the Signs column was relocated from the row for Sections 2C.41-42, and “**W16-5P**”, “**W16-6P**”, and “**W16-7P**” were changed to “**W16-5p**”, “**W16-6p**”, and “**W16-7p**” in the MUTCD Codes column.

The row for Section 2C.50 was relocated from the row for 2C.27 in the 2000 MUTCD, and “**W4-4P**” was changed to “**W4-4p**” in the MUTCD Codes column.

The rows for Sections 2C.52, 2C.53, and 2C.37 were added to the bottom of the table.

The row for Section 2C.46 in the 2000 MUTCD was deleted.

Table 2C-2. Warning Sign Sizes

In the row for the W1 through W17-1 signs, the Freeway size was changed from “**(36 x 36)**” to “**(48 x 48)**” and the Oversized size was deleted.

In the row for the W1 Combination through W12 signs, “**W1 Combination**” was added.

In the row for the W7-4 sign, the Expressway and Freeway sizes were added.

In the row for the W7-4b, 4c signs, “**W7-4a**” was changed to “**W7-4b, 4c**” and the Expressway and Freeway sizes were added.

The row for the W10-9, 10 signs was added.

In the row for the W12-2p sign, “**W12-2P**” was changed to “**W12-2p**” and the Expressway and Freeway sizes were added.

In the row for the W13-2 through W25 signs, “**W13**” was changed to “**W13-2, 3, 5, W25**”.

In the row for the W10-1 sign, the Conventional Road, Minimum, and Oversized sizes were doubled, and the Expressway size was added.

Table 2C-3. Minimum Size of Supplemental Warning Plaques

(No changes were made to this table.)

Table 2C-4. Guidelines for Advance Placement of Warning Signs (Metric Units)

The title for the Condition A column was changed from “**High judgment required**” to “**Speed Reduction and Lane Changing in Heavy Traffic**”, and all of the values were increased.

The title for the Condition B column was deleted and this column was relocated to be the “0 km/h” column under the new Condition B, which was called Condition C in the 2000 MUTCD.

The values in the 0 to 80 km/h columns under Condition B were decreased.

The 90, 100, and 110 km/h columns were added.

In Note 1, the phrase “**which is the appropriate legibility distance for a 125 mm (5 in) Series D word legend**” was changed to “**for Condition A**” in the first sentence. The second sentence was added. The second and third sentences in the 2000 MUTCD were deleted.

In the third sentence of Note 2, the phrase “**6.7 to 10.0 seconds plus 4.5 seconds**” was changed to “**14.0 to 14.5 seconds**” and the phrase “**(2001 AASHTO Policy, Exhibit 3-3, Decision Sight Distance, Avoidance Maneuver E)**” was added.

In Note 3, the phrase “**and Intersection Warning signs**” was added at the end of the second sentence. In the third sentence, the phrase “**1990 AASHTO Policy for stopping sight distance (page 120)**” was changed to “**2001 AASHTO Policy, Stopping Sight Distance, Exhibit 3-1,**”; the phrase “**a deceleration rate of 3.4 m/second²,**” was added; and the phrase “**friction factor of 0.30 to 0.40,**” was deleted.

In Note 4, the phrase “**Reverse Turn, or Reverse Curve**” was added at the end of the second sentence and the phrase “**or Cross Road**” was deleted at the end of the second sentence. In the third sentence, “**1.6**” was changed to “**2.5**”; the phrase “**(1990 AASHTO, page 119)**” was deleted; and “**50**” was changed to “**75**”.

In Note 5, the word “**minimum**” was deleted.

Table 2C-4. Guidelines for Advance Placement of Warning Signs (English Units)

The title for the Condition A column was changed from “**High judgment required**” to “**Speed Reduction and Lane Changing in Heavy Traffic**”, and all of the values were increased.

The title for the Condition B column was deleted and this column was relocated to be the “0 mph” column under the new Condition B, which was called Condition C in the 2000 MUTCD.

The values in the 0 to 50 mph columns under Condition B were decreased.

The 60 and 70 mph columns were added.

The 70 and 75 mph rows were added.

In Note 1, the phrase “**which is the appropriate legibility distance for a 125 mm (5 in) Series D word legend**” was changed to “**for Condition A**” in the first sentence. The second sentence was added. The second and third sentences in the 2000 MUTCD were deleted.

In the third sentence of Note 2, the phrase “**6.7 to 10.0 seconds plus 4.5 seconds**” was changed to “**14.0 to 14.5 seconds**” and the phrase “**(2001 AASHTO Policy, Exhibit 3-3, Decision Sight Distance, Avoidance Maneuver E)**” was added.

In Note 3, the phrase “**and Intersection Warning signs**” was added at the end of the second sentence. In the third sentence, the phrase “**1990 AASHTO Policy for stopping sight distance (page 120)**” was changed to “**2001 AASHTO Policy, Stopping Sight Distance, Exhibit 3-1,**”; the phrase “**a deceleration rate of 11.2 ft/second²,**” was added; and the phrase “**friction factor of 0.30 to 0.40,**” was deleted.

In Note 4, the phrase “**Reverse Turn, or Reverse Curve**” was added at the end of the second sentence and the phrase “**or Cross Road**” was deleted at the end of the second sentence. In the third sentence, “**1.6**” was changed to “**2.5**”; the phrase “**(1990 AASHTO, page 119)**” was deleted; and “**175**” was changed to “**250**”.

In Note 5, the word “**minimum**” was deleted.

Table 2C-5. Horizontal Alignment Sign Usage

No changes were made to this Table.

Chapter 2D Guide Signs-Conventional Roads

Sections 2D.01 to 2D.02

(No changes were made to these Sections.)

Section 2D.03 Color, Retroreflection, and Illumination

Paragraphs 3 [“Color coding is ...”], 4, 5, and 6 [“Two examples of ...”] were added.

Section 2D.04 Size of Signs

In the last sentence of Paragraph 1 [“For most guide ...”], the word “**standard**” was changed to “**prescribed**”.

In Paragraph 2 [“Reduced letter height ...”], the phrase “**or lateral**” was added.

Paragraph 3 [“Reduced spacing between ...”] was added.

Section 2D.05 Lettering Style

In Paragraph 1 [“The design of ...”], the phrase “**Design standards for**” was changed to “**The design of**” and the phrase “**Standard Alphabet for Highway Signs and Pavement Markings**” was changed to “**Standard Highway Signs book**”.

In Paragraph 2 [“The lettering for ...”], the first sentence “**The standard lettering for conventional road guide signs shall be all capital letters (Section 2A.14), or a combination of lower-case letters with initial upper-case letters**” was changed to “**The lettering for names of places, streets, and highways on conventional road guide signs shall be a combination of lower-case letters with initial upper-case letters, or all capital letters (see Section 2A.14)**”.

Paragraph 3 [“All other word ...”] was added.

Section 2D.06 Size of Lettering

The fourth paragraph was deleted from the 2000 MUTCD.

Section 2D.07 Amount of Legend

(No changes were made to this Section.)

Section 2D.08 Arrows

In the second sentence of Paragraph 8 [“The width across ...”], the word “**they**” was changed to the phrase “**the width across the arrowhead**”.

Sections 2D.09 to 2D.10

(No changes were made to these Sections.)

Section 2D.11 Design of Route Signs

In Paragraph 11 [“If County road ...”], the phrase “**County road identification signs shall be designed and used as specified in the publication, “A Proposal for a Uniform County Route Marker Program on a National Scale,” available from the National Association of Counties, 440 First Street, NW, Washington, DC 20001**” was changed to “**a statewide policy for such signing shall be established that includes a uniform numbering system to uniquely identify each route**” in the first sentence. The second sentence was added.

Sections 2D.12 to 2D.16

(No changes were made to these Sections.)

Section 2D.17 ALTERNATE Auxiliary Signs (M4-1, M4-1a)

In Paragraph 3 [“The shorter (time ...”], the phrase “**(time or distance)**” was added.

Sections 2D.18 to 2D.22

(No changes were made to these Sections.)

Section 2D.23 TEMPORARY Auxiliary Signs (M4-7, M4-7a)

In the title, the M4-7a sign was added.

In Paragraph 1 [“The TEMPORARY (M4-7) ...”], the phrase “**or the TEMP (M4-7a)**” was added.

In Paragraphs 2 [“If used, the ...”] and 3, the phrase “**or TEMP**” was added.

Sections 2D.24 to 2D.30

(No changes were made to these Sections.)

Section 2D.31 Confirming or Reassurance Assemblies

In Paragraph 2 [“A Confirming assembly ...”], the first sentence was changed from Standard to Guidance and the phrase “**If used, the**” was changed to the word “**A**” at the beginning of the first sentence.

In the third paragraph of the 2000 MUTCD, the phrase “**If the Confirming assembly is used,**” was deleted and the rest of the sentence was relocated to become the second sentence of Paragraph 2.

Paragraph 5 [“Confirming and Reassurance ...”] was added.

Sections 2D.32 to 2D.33

(No changes were made to these Sections.)

Section 2D.34 Destination Signs (D1 Series)

In the title, the phrase “**(D1 Series)**” was added.

In Paragraph 1 [“Except where special ...”], the phrase “**(D1-1 through D1-3)**” was added.

In the first sentence of Paragraph 2 [“The distance (see ...)”], the phrases “**(see Section 2D.36)**” and “**on the Destination (D1-1a through D1-3a) sign (see Figure 2D-7)**” were added.

In Paragraph 5 [“Unless a sloping ...”], the phrase “**at an irregular intersection**” was deleted, and the rest of the sentence was rearranged to increase clarity.

Section 2D.35 Location of Destination Signs

(No changes were made to this Section.)

Section 2D.36 Distance Signs (D2 Series)

In the title, the phrase “**(D2 Series)**” was added.

In Paragraph 1 [“If used, the ...”], the phrase “**(D2-1 through D2-3)**” was added.

Paragraph 2 [“The distance shown ...”] was added.

Section 2D.37 Location of Distance Signs

(No changes were made to this Section.)

Section 2D.38 Street Name Sign (D3-1)

In the title and in Paragraph 1, “**(D3)**” was changed to “**(D3-1)**”.

In Paragraph 2 [“Lettering on ground-mounted ...”], the word “**ground-mounted**” was added, and “**110**” was changed to “**113**”. The last sentence was deleted from the 2000 MUTCD.

Paragraph 3 [“On multi-lane streets ...”] was added.

In Paragraph 6 [“A symbol or ...”], the phrases “**on a Street Name sign**” and “**area of jurisdiction, or other government-approved institution**” were added.

In Paragraph 7 [“If a symbol or ...”], the phrase “**height and**” was added.

In the tenth paragraph of the 2000 MUTCD, the phrase “**so that they will be on the far right side of the intersection for traffic on the major street**” was deleted from the first sentence.

In the eleventh paragraph of the 2000 MUTCD, the first sentence was deleted. The third sentence was also deleted as this topic is now discussed in the added Paragraph 15.

In Paragraph 12 [“To optimize visibility, ...”], the phrase “**or YIELD**” was added in the second sentence.

Paragraphs 14 [“In urban or ...”] and 15 were added.

The last paragraph in the 2000 MUTCD was deleted.

Section 2D.39 Advance Street Name Signs (D3-2)

This section was added.

Section 2D.40 Parking Area Sign (D4-1) [Section 2D.39 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2D.41 PARK & RIDE Sign (D4-2) [Section 2D.40 in the 2000 MUTCD]

In Paragraph 7 [“To increase the ...”], the phrase “**ensure that**” was changed to the word “**allow**”.

Section 2D.42 Rest Area Signs (D5 Series) [Section 2D.41 in the 2000 MUTCD]

In Paragraph 2 [“If used, Rest ...”], the word “**reasonably**” was added.

In Paragraph 3 [“Messages such as ...”], the phrase “**(D5-5)**” was deleted and the phrase “**PICNIC TABLE**” was changed to “**PICNIC AREA**”.

Section 2D.43 Scenic Area Signs (D6 Series) [Section 2D.42 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2D.44 Weigh Station Signing (D8 Series) [Section 2D.43 in the 2000 MUTCD]

In Paragraph 3 [“Example locations of ...”], the phrase “**The typical**” was changed to “**Example**”.

Section 2D.45 General Service Signs (D9 Series) [Section 2D.44 in the 2000 MUTCD]

In the last sentence of Paragraph 1 [“On conventional roads ...”], the word “**police**” was changed to the phrase “**law enforcement**”.

In Paragraph 7 [“General Service signs ...”], the phrase “**Electric Vehicle Charging**,” was added.

In Paragraph 10 [“If used, the ...”], the phrase “**(D9-16) sign**” was added.

In Paragraph 12 [“If the distance ...”], the phrase “**(D9-17)**” was added.

In Paragraph 13 [“The International Symbol ...”], “**(D9-5)**” was changed to “**(D9-6)**”.

In Paragraph 15 [“The Litter Container ...”], the phrase “**Trash Receptacle Symbol**” was changed to “**Litter Container**”.

Paragraph 16 [“A Carpool Information ...”] was added.

In Paragraph 18 [“A TRAVEL INFO ...”], the phrase “**Road Conditions Dial 511**” was changed to “**TRAVEL INFO CALL 511 (D12-5)**”, and the phrases “**travel information services telephone**” and “**traffic, public transportation, weather, construction, or**” were added.

Paragraphs 19 [“The logo of ...”] through 22 [“If the logo ...”] were added.

In Paragraph 25 [“The Emergency Medical Services symbol sign may ...”], the phrases “**(D9-13a) word message**”, “**(D9-13b)**”, and “**(D9-13c)**” were added to the first sentence. In the second sentence, the phrase “**CB Monitoring**” was changed to “**Channel 9 Monitored (D12-3)**”.

In the title of Item C of Paragraph 28 [“The State should ...”], the phrase “**CB 9**” was changed to “**Channel 9**”.

Section 2D.46 Reference Locations Signs (D10-1 through D10-3) and Intermediate Reference Location signs (D10-1a through D10-3a) [Section 2D.45 in the 2000 MUTCD]

In the title, the word “**Posts**” was changed to the phrase “**Location Signs**”, and the phrase “**and Intermediate Reference Location Signs (D10-1a through D10-3a)**” was added.

The phrase “**reference posts**” was changed to “**reference location signs**” throughout this Section.

Paragraph 1 [“There are two ...”] was added.

In Paragraph 2 [“Reference Location (D10-1 ...)”], the phrase “**or ramp**” was added and the word “**accidents**” was changed to “**crashes**”.

Paragraph 3 [“To augment the ...”], 4, and 5 [“When placed on freeways ...”] were added.

In Paragraph 6 [“When placed on conventional ...”], the phrase “**If used**” was changed to “**When placed on conventional roads**”; the phrase “**vertical panels having**” was deleted from the third paragraph of the 2000 MUTCD; and the phrase “**that is at least 250 mm (10 in) wide**” was added.

Paragraph 8 [“Reference location signs ...”] was added.

The seventh paragraph of the 2000 MUTCD was deleted as this topic is now discussed in the added Paragraph 8.

In Paragraph 9 [“The distance numbering ...”], the phrase “**If reference posts are used,**” was deleted and the phrase “**(see Section 2E.28)**” was added in the first sentence. The third sentence was added.

Paragraph 13 [“Except as provided ...”] was added.

In Paragraph 14 [“Where conditions limit ...”], the first and second sentences were added.

Paragraph 17 [“Enhanced reference location ...”] was added.

The last paragraph of the 2000 MUTCD was deleted as this topic is now discussed in the added Paragraph 17.

Section 2D.47 Traffic Signal Speed Sign (I1-1) [Section 2D.46 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 2D.48 General Information Signs (I Series) [Section 2D.47 in the 2000 MUTCD]

In Paragraph 1 [“Of interest to ...”], the phrase “**and safety and transportation-related messages**” was added at the end of the second sentence. The third sentence was added.

The second, tenth, and fourteenth paragraphs in the 2000 MUTCD were deleted.

In Paragraph 3 [“An information symbol ...”], the phrase “**(I-4 through I-11)**” was changed to “**(I-5 through I-8, I-11)**”.

Paragraph 7 [“When a sign ...”] was added.

In Paragraph 9 [“Except for political ...”], the phrase “**jurisdictional logos, scenic by-way logos, and Adopt-a-Highway signs**” was changed to “**boundary and scenic by-way logos and signs**”.

Section 2D.49 Signing of Named Highways [Section 2D.48 in the 2000 MUTCD]

In the second sentence of Paragraph 2 [“Such memorial names ...”], the phrase “**recreational area,**” was added.

In the third paragraph of the 2000 MUTCD, the phrase “**provided that they are independent of other guide and directional signing and they do not adversely compromise the safety of efficiency of traffic flow**” was deleted.

In Paragraph 4 [“Where such memorial ...”], the phrase “**instead of off-highway memorial plaques**” was deleted, and the phrase “**(1) memorial names shall not appear on directional guide signs, (2) memorial signs shall not interfere with the placement of any other necessary highway signing, and (3) memorial signs shall not compromise the safety or efficiency of traffic flow**” was added.

Sections 2D.50 to 2D.51 [Sections 2D.49 to 2D.50 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 2D.52 National Scenic Byways Signs (D6-4, D6-4a)

This Section was added.

Figure 2D-1. Examples of Color-Coded Destination Guide Signs

This figure was added.

Figure 2D-2. Arrows for Use on Guide Signs [Figure 2D-1 in the 2000 MUTCD]

(No changes were made to this figure.)

Figure 2D-3. Route Signs [Page 2D-7 in the 2000 MUTCD]

A figure number and title were added.

The word “**Marker**” was changed to “**Sign**” for the M1-4, M1-5, M1-6, and M1-7 signs.

Figure 2D-4. Route Sign Auxiliaries [Page 2D-11 in the 2000 MUTCD]

A figure number and title were added.

The M4-7a sign was added.

Figure 2D-5. Directional Arrow Auxiliary Signs [Page 2D-16 in the 2000 MUTCD]

A figure number and title were added.

The M6-8 and M6-9 signs were deleted.

Figure 2D-6. Illustration of Directional Assemblies and Other Route Signs (For One Direction of Travel Only) (Sheet 1 of 3) [Figure 2D-2 in the 2000 MUTCD]

A “plus or minus” symbol was added to the 300-foot distance from the intersection to the Distance sign in both drawings.

The distance from the intersection to the confirmation assembly was changed from “**100 to 200 ft**” to “**25 to 200 ft**” in both drawings.

A NORTH (M3-1) sign was added above the U.S. 37 sign in two places in the left-most drawing.

The M6-9 sign was deleted from below the JCT SR 18 assembly in the left-most drawing.

Stop lines and a STOP sign were added in the right-most drawing.

The route sign assembly in the northeast corner in the right-most drawing was expanded from six signs to fifteen signs, and the note “**(Enlarged, if necessary)**” was added.

The arrows were deleted from the Combination Junction (M2-2) sign in the right-most drawing.

The notes were added at the bottom of the figure.

Figure 2D-6. Illustration of Directional Assemblies and Other Route Signs (For One Direction of Travel Only) (Sheet 2 of 3) [Figure 2D-2 in the 2000 MUTCD]

A “plus or minus” symbol was added to the 300-foot distance from the intersection to the Distance sign in both drawings.

The distance from the intersection to the confirmation assembly was changed from “**100 to 200 ft**” to “**25 to 200 ft**” in both drawings.

The legends on all four of the guide signs were changed from all capital letters to a combination of upper-case and lower-case letters.

Stop lines and a STOP sign were added in the left-most drawing.

The route sign assembly in the northeast corner in the left-most drawing was expanded from six signs to twelve signs.

WEST (M3-4) and NORTH (M3-1) signs were added above the SR 8 and SR 15 signs in advance of the intersection in the left-most drawing.

The TO U.S. 40 assembly was deleted in the left-most drawing.

NORTH (M3-1) and EAST (M3-2) signs were added above the SR 41 and U.S. 56 signs at the intersection in the right-most drawing.

The notes were added at the bottom of the figure.

Figure 2D-6. Illustration of Directional Assemblies and Other Route Signs (For One Direction of Travel Only) (Sheet 3 of 3) [Figure 2D-2 in the 2000 MUTCD]

A “plus or minus” symbol was added to the 300-foot distance from the intersection to the Distance sign in the two left drawings.

The distance from the intersection to the confirmation assembly was changed from “**100 to 200 ft**” to “**25 to 200 ft**” in all three drawings.

The phrase “TRAFFIC SIGNAL” and the three stop lines were added in the top left drawing.

The route sign assembly at the intersection in the top left drawing was expanded from four signs to nine signs.

The EAST (M3-2) sign was added above the U.S. 86 sign in advance of the intersection in the top left drawing.

The M6-4 sign was deleted from below the JCT SR 4 assembly in the top left drawing.

The NORTH (M3-1) signs were added above the U.S. 55 and U.S. 57 signs in advance of and at the intersection in the bottom left drawing.

The dimension line for the distance from the advance route sign assembly to the intersection was changed to show that it is the distance from the intersection, not from the guide sign, that is being referenced.

The STOP signs were deleted from the right-most drawing.

The advance distance for the intersection warning sign in the right-most drawing was changed from 750 feet to an asterisk, and the note explaining the asterisk was added.

The notes were added at the bottom of the figure.

Figure 2D-7. Destination and Distance Signs [Page 2D-26 in the 2000 MUTCD]

A figure number and title were added.

The legends on all nine signs were changed from all capital letters to a combination of upper-case and lower-case letters.

The distances shown on the D2-3 sign were changed such that they are now in ascending order.

The note was added at the bottom of the figure.

Figure 2D-8. Street Name and Parking Signs [Page 2D-30 in the 2000 MUTCD]

A figure number and title were added.

The D3-2 signs were added.

The code for the D3 sign was changed to D3-1.

Figure 2D-9. Rest Area and Scenic Overlook Signs [Page 2D-34 in the 2000 MUTCD]

A figure number and title were added.

The designs of the D5-1, D5-3, and D6-2 signs were changed such that the numerals are taller than the letters in MILE(S).

The design of the D6-3 sign was changed.

The D5-5b and D5-5c signs were added.

The note was added at the bottom of the figure.

Figure 2D-10. Example of Weigh Station Signing [Figure 2D-3 in the 2000 MUTCD]

The design of the D8-1 sign was changed such that the numeral is taller than letters in MILE.

Figure 2D-11. General Service Signs [Page 2D-38 in the 2000 MUTCD]

A figure number and title were added.

The code for the D9-4 sign was changed to D9-3a, the code for the D9-5 sign was changed to D9-6, and the code for the D9-6 sign was changed to D9-8.

The D9-4, D9-11a, D9-11b, D9-13a, D9-13b, D9-13c, and D9-16 signs were added.

The D9-14 sign was relocated to Figure 2D-12.

The name of the sign was added beneath each of the sign images.

Figure 2D-12. General Information Signs [Page 2D-45 in the 2000 MUTCD]

A figure number and title were added.

The I-11, D12-1, D12-2, D12-3, D12-4, and D12-5 signs were added.

The I1-1 (English) sign was relocated from Page 2D-42 and “**M.P.H.**” was changed to “**MPH**”.

The D9-14 sign was relocated from Page 2D-38.

The names of the signs were added beneath the sign images for the I-5, I-6, I-7, and I-8 signs.

The I-4, I-9, and I-10 signs were deleted.

Figure 2D-13. Reference Location Signs [Page 2D-42 in the 2000 MUTCD]

A figure number and title were added.

The metric versions of the D10-1, D10-2, and D10-3 signs were added.

The D10-1a, D10-2a and D10-3a signs were added.

The I1-1 sign was relocated to Figure 2D-12.

Figure 2D-14. Examples of Use of the National Scenic Byways Sign

This figure was added.

Chapter 2E Guide Signs – Freeways And Expressways

Section 2E.01 Scope of Freeway and Expressway Guide Sign Standards

Paragraph 2 [“Guide signs for ...”] was added.

Sections 2E.02 to 2E.04

(No changes were made to these Sections.)

Section 2E.05 Retroreflection or Illumination

In the title, the word “**Retroreflectorization**” was changed to “**Retroreflection**”.

In Paragraph 1 [“Letters, numerals, symbols ...”], the word “**retroreflectorization**” was changed to “**retroreflection**”.

Sections 2E.06 to 2E.09

(No changes were made to these Sections.)

Section 2E.10 Number of Signs at an Overhead Installation and Sign Spreading

In the title, the phrase “**and Sign Spreading**” was added.

Paragraph 3 [“Sign spreading is ...”] and 4 were relocated from Section 2E.11 of the 2000 MUTCD.

Section 2E.11 Pull-Through Signs

The first two sentences of the first paragraph and the entire second paragraph except Item C were relocated to become Paragraphs 3 and 4 of Section 2E.10.

In Paragraph 2 [“Pull-Through signs should ...”], which was formerly Item C of the second paragraph, the phrase “**only when**” was changed to “**where**” in the first sentence. The phrase “**when the alignment and number of through lanes is not readily evident**” was changed to “**where the alignment of the through lanes is curved and the exit direction is straight ahead, where the number of through lanes is not readily evident, and at**

multi-lane exits where there is a reduction in the number of through lanes” in the second sentence.

Section 2E.12 Designation of Destinations

(No changes were made to this Section.)

Section 2E.13 Size and Style of Letters and Signs

In the second-to-last sentence of the first paragraph in the 2000 MUTCD, the word “**initial**” and the phrase “**Alphabets for**” were deleted.

In the fourth paragraph in the 2000 MUTCD, the phrase “**Alphabets for**” was deleted.

Section 2E.14 Interline and Edge Spacing

(No changes were made to this Section.)

Section 2E.15 Sign Borders

In the second sentence of Paragraph 2 [“For guide signs ...”], “**30 mm**” was changed to “**31 mm**”.

Sections 2E.16 to 2E.18

(No changes were made to these Sections.)

Section 2E.19 Diagrammatic Signs

In Item A of Paragraph 2 [“Diagrammatic signs shall ...”], the phrase “**a simplified**” was changed to the word “**the**”.

The second sentence of Item D of Paragraph 3 [“Diagrammatic signs should ...”] was added.

Section 2E.20 Signing for Interchange Lane Drops

In Paragraph 2 [“The EXIT ONLY ...”], the phrase “**(down arrow)**” was added.

In Paragraph 3 [“The Exit Direction ...”], the phrase “**Exit Direction (E11-1a) sign**” was changed to “**Exit Direction sign (see Figure 2E-20) and E11-1a panel (see Figure 2E-9)**”, and the phrase “**and 2E-10**” was added after “**2E-8**” in the first sentence. The phrase “**used with the EXIT ONLY (E11-1) panel at the Exit Direction sign location**” was changed to “**included on the Exit Direction sign**” in the second sentence.

Sections 2E.21 and 2E.22

(No changes were made to these Sections.)

Section 2E.23 Lateral Offset

In the title, the word “**Clearance**” was changed to “**Offset**”.

In Paragraph 4 [“Where overhead sign ...”], the word “**reasonably**” was added.

Section 2E.24 Guide Sign Classification

The word “**Posts**” was changed to the phrase “**Location Signs**” in Item J, and the word “**Information**” was changed to the phrase “**and Ridesharing**” in Item M.

Section 2E.25 Route Signs and Trailblazer Assemblies

(No changes were made to this Section.)

Section 2E.26 Signs for Intersection at Grade

In the first sentence of Paragraph 1 [“If there are ...”], the word “**guide**” was added.

Section 2E.27 Interchange Guide Signs

In the second sentence of Paragraph 3 [“Reference should be ...”], the “**240 m**” was changed to “**245 m**”.

Section 2E.28 Interchange Exit Numbering

In Paragraph 2 [“Interchange numbering shall ...”], the phrase “**separated from the exit number by a space**” was added and the phrase “**A and B**” was deleted in the fourth sentence. The fifth sentence was relocated from the second sentence in the fourth paragraph of Section 2E.42 in the 2000 MUTCD.

In Paragraphs 3 [“There are two ...”] and 4, the word “**post**” was changed to the phrase “**location sign**” in three places.

Paragraph 7 [“Because road users ...”] was changed from Option to Guidance. The phrase “**Because road users might not expect a left exit and might have difficulty in maneuvering to the left,**” was added in the first sentence. The second sentence was added.

Paragraph 8 [“The portion of ...”] was added.

In Paragraph 10 [“Example exit number ...”], the phrase “**Details of typical**” was changed to the word “**Example**”.

In the last paragraph [“The route chosen ...”], the word “**post**” was changed to the phrase “**location sign**”.

Section 2E.29 Interchange Classification

In Item A in the 2000 MUTCD, the phrase “**other than those named in (a)**” was deleted.

In Item B in the 2000 MUTCD, the phrase “**as defined herein**” was deleted.

Section 2E.30 Advance Guide Signs

In Paragraph 2 [“For major and ...”], the phrase “**two and preferably three Advance Guide signs should be used. Placement should be 1 km (0.5mi), 2 km (1 mi), and 4 km (2 mi) in advance of the exit.**” was changed to “**Advance Guide signs should be placed at 1 km or 0.5 miles and at 2 km or 1 mile in advance of the exit with a third Advance guide sign placed at 4 km (2 mi) in advance of the exit if spacing permits.**”.

In Paragraph 3 [“Where Advance Guide ...”], the word “**provided**” was added.

In the fourth paragraph in the 2000 MUTCD, the phrase “**the 2 km (1 mi) and 4 km (2 mi)**” was deleted.

In Paragraph 6 [“Where there is ...”], “**240 m**” was changed to “**245 m**”.

Section 2E.31 Next Exit Supplemental Signs

(No changes were made to this Section.)

Section 2E.32 Other Supplemental Guide Signs

In the second sentence of Paragraph 4 [“Where two or ...”], “**240 m**” was changed to “**245 m**”.

Section 2E.33 Exit Direction Signs

(No changes were made to this Section.)

Section 2E.34 Exit Gore Signs

In Paragraph 1 [“The Exit Gore ...”], the word “**Gore**” and phrase “**the exiting point or**” were added in the first sentence.

The third sentence of the first paragraph of the 2000 MUTCD was deleted.

In Paragraph 2 [“The gore shall ...”], the first sentence was added. In the second sentence, the word “**Gore**” was added, the phrase “**in the gore**” was deleted, and the phrase “**area between the main roadway and the ramp at all exits. The sign**” was changed to “**gore and**”.

The second sentence of Paragraph 3 [“The arrow should ...”] was relocated from the second paragraph in the 2000 MUTCD.

Paragraph 4 [“Where extra emphasis ...”] was added.

Section 2E.35 Post-Interchange Signs

(No changes were made to this Section.)

Section 2E.36 Distance Signs

Paragraphs 2 [“The minimum sizes ...”] and 3 were added.

Section 2E.37 Interchange Sequence Signs

In Paragraph 1 [“If there is ...”], “**240 m**” was changed to “**245 m**”.

Sections 2E.38 and 2E.39

(No changes were made to these Sections.)

Section 2E.40 Signing by Type of Interchange

In the second sentence of Paragraph 1 [“Road users need ...”], the word “**applications**” was changed to “**examples**”.

Section 2E.41 Freeway-to-Freeway Interchange

In the third sentence of Paragraph 1 [“Freeway-to-freeway ...”], the phrase “**typical applications**” was changed to the word “**examples**”.

Section 2E.42 Cloverleaf Interchange

In the third sentence of Paragraph 1 [“A cloverleaf interchange ...”], the phrase “**Typical application**” was changed to the word “**Examples**”.

The second sentence of the fourth paragraph in the 2000 MUTCD was relocated to Section 2E.28 to show that it applies to all types of interchanges.

Section 2E.43 Cloverleaf Interchange with Collector-Distributor Roadways

Paragraph 1 [“Examples of guide ...”] was added.

Section 2E.44 Partial Cloverleaf Interchange

In Paragraph 1 [“Examples of guide ...”], the phrase “**Typical application**” was changed to the word “**Examples**”.

In Paragraph 3 [“A ground-mounted ...”], the word “**Gore**” was added.

Section 2E.45 Diamond Interchange

In Paragraph 1 [“Examples of guide ...”], the phrase “**Typical application**” was changed to the word “**Examples**”.

In Paragraph 6 [“The Exit Speed sign should ...”], the word “**reasonably**” was added.

Section 2E.46 Diamond Interchange in Urban Area

In the title, the word “**Urban**” was deleted and the phrase “**in Urban Area**” was added.

In Paragraph 1 [“Examples of guide ...”], the phrase “**A typical application**” was changed to the word “**Examples**”.

Section 2E.47 Closely Spaced Interchanges

(No changes were made to this Section.)

Section 2E.48 Minor Interchange

In Paragraph 2 [“Examples of guide ...”], the phrase “**A typical application**” was changed to the word “**Examples**”.

Section 2E.49 Signing of Approaches and Connecting Roadways

In the title, the phrase “**Signing of**” was added.

The three paragraphs in the 2000 MUTCD were deleted and the nine paragraphs in the 2003 MUTCD were added.

Section 2E.50 Wrong-Way Traffic Control at Interchange Ramps

In Item A of Paragraph 3 [“The following traffic ...”], the word “**existing**” was changed to “**required**”.

The second sentence in Item C was relocated from Item D in the 2000 MUTCD.

Section 2E.51 General Service Signs

In Paragraph 2 [“If interchanges are ...”], the word “**RIGHT**” was changed to “**EXIT**”.

In Item B.2 of Paragraph 6 [“Only services that ...”], the word “**three**” was changed to “**two**”.

In the second sentence of Paragraph 15 [“Signing for DIESEL ...”], “**(D9-5)**” was changed to “**(D9-6)**”.

Section 2E.52 Rest and Scenic Area Signs

In Paragraph 1 [“Signing for rest ...”], the phrase “**PARKING AREA**” was changed to “**with a PARKING AREA (D5-4) sign (see Figure 2E-44)**” in the fourth sentence, and the phrase “**PICNIC AREA**” was changed to “**with a PICNIC AREA (D5-5c) sign or a Picnic Table Area (D5-5a) symbol sign**” in the fifth sentence.

In the second sentence of Paragraph 3 [“Scenic area signing ...”], sign codes “**(D6-1)**”, “**(D6-2)**”, and “**(D6-3)**” were added.

In Paragraph 5 [“If the rest ...”], “**(D9-5)**” was changed to “**(D9-6)**”.

In Paragraph 6 [“Between the REST ...”], the sign code “**(D5-1b)**” was added in the first sentence, and the sign code sign “**(E2-2)**” was added in the second sentence.

In Paragraph 7 [“To provide the ...”], the sign code “**(D5-6)**” was added.

Section 2E.53 Tourist Information and Welcome Center Signs

In Item A of Paragraph 5 [“For freeway or ...”], the phrase “**tourist information and welcome center**” was added.

Section 2E.54 Reference Location Signs and Enhanced Reference Location Signs (D10-4, D10-5)

In the title, the word “**Posts**” was changed to “**Location Signs and Enhanced Reference Location Signs (D10-4, D10-5)**”.

The five paragraphs in the 2000 MUTCD were deleted and the 14 paragraphs in the 2003 MUTCD were added.

Section 2E.55 Miscellaneous Guide Signs

(No changes were made to this Section.)

Section 2E.56 Radio Information Signing

In Paragraph 4 [“The radio station ...”], “**100 km**” was changed to “**110 km**”.

The last paragraph [“Section 2D.45 contains ...”] was added.

Section 2E.57 Carpool and Ridesharing Signing

In the title, the word “**Information**” was changed to “**and Ridesharing**”.

Paragraph 2 [“Carpool Information signs ...”] was added.

In Paragraph 4 [“If a local ...”], “**900 mm (36 in)**” was changed to “**450 mm (18 in)**”.

Section 2E.58 Weigh Station Signing

(No changes were made to this Section.)

Section 2E.59 Preferential Only Lane Signs

This Section was added.

Figure 2E-1. Example of Guide Sign Spreading

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

Figure 2E-2. Pull-Through Signs

(No changes were made to this figure.)

Figure 2E-3. Diagrammatic Sign for a Single-Lane Left Exit

An asterisk was added next to the exit number plaque, and the note explaining the meaning of the asterisk was added at the bottom of the figure.

The design of the exit number plaque was changed such that the numerals are taller than the letters in “LEFT EXIT”.

The word “**NORTH**” was added above the I-495 shield.

The word “**Optional**” and the exit number plaque without the word “LEFT” in the 2000 MUTCD were deleted.

Figure 2E-4. Diagrammatic Signs for Split with Dedicated Lanes

A ground-mounted “EXIT 17” sign was added.

The word “LEFT” was added to the exit number plaques, and the design was changed such that the numerals are taller than the letters in “LEFT EXIT”.

The cardinal direction legends on the overhead guide signs were relocated such that the tops of the letters line up with the tops of the route shields.

Figure 2E-5. Diagrammatic Signs for Split with Optional Lane

A ground-mounted “EXIT 55” sign was added.

The WEST (M3-4) sign was added above the ground-mounted I-50 sign.

The SOUTH (M3-3) sign was added above the ground-mounted I-79 sign and the sign was relocated from the left shoulder to the right shoulder.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

The cardinal direction legends on the overhead guide signs were relocated such that the tops of the letters line up with the tops of the route shields.

The cardinal direction legends on the overhead guide signs (with down arrows) at the gore area were relocated to the other sides of the route shields.

Figure 2E-6. Diagrammatic Signs for Two-Lane Exit with Optional Lane

The WEST (M3-4) sign was added above the ground-mounted U.S. 40 sign and the sign was relocated from the left shoulder to the right shoulder.

The EAST (M3-2) sign was added above the ground-mounted I-12 sign.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

The cardinal direction legends on the overhead guide signs were relocated such that the tops of the letters line up with the tops of the route shields.

Figure 2E-7. Diagrammatic Signs for Two-Lane Exit with Optional Lane

The NORTH (M3-1) sign was added above the ground-mounted I-47 sign.

The EAST (M3-2) sign was added above the ground-mounted S.R. 24 sign and the sign was relocated from the left shoulder to the right shoulder.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

The cardinal direction legends on the overhead guide signs were relocated such that the tops of the letters line up with the tops of the route shields.

Figure 2E-8. EXIT ONLY on Left with Diagrammatic Sign for Left Lane Dropped at an Interchange

The WEST (M3-4) sign was added above the ground-mounted U.S. 56 sign.

The NORTH (M3-1) sign was added above the ground-mounted I-61 sign and the sign was relocated from the left shoulder to the right shoulder.

Asterisks were added next to the exit number plaques, and the note explaining the meaning of the asterisks was added at the bottom of the figure.

The design of the exit number plaques was changed such that the numerals are taller than the letters in “LEFT EXIT”.

The cardinal direction legends on the overhead guide signs were relocated such that the tops of the letters line up with the tops of the route shields.

Figure 2E-9. EXIT ONLY Panels [Page 2E-28 in the 2000 MUTCD]

A figure number and title were added.

Figure 2E-10. EXIT ONLY Panels for Right Lane Dropped at an Interchange [Figure 2E-9 in the 2000 MUTCD]

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

Figure 2E-11. Interstate and U.S. Route Signs [Page 2E-34 in the 2000 MUTCD]

A figure number and title were added.

The two “EISENHOWER INTERSTATE SYSTEM” signs were added.

The codes “M1-1”, “M1-2”, and “M1-4” were added.

Figure 2E-12. Example of Interchange Numbering for Mainline and Circumferential Routes [Figure 2E-10 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

In the legend, the phrase “**REFERENCE POST**” was changed to “**REFERENCE LOCATION SIGN**”.

Figure 2E-13. Example of Interchange Numbering for Mainline, Loop, and Spur Routes [Figure 2E-11 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

In the legend, the phrase “**REFERENCE POST**” was changed to “**REFERENCE LOCATION SIGN**”.

Figure 2E-14. Example of Interchange Numbering If Routes Overlap [Figure 2E-12 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

In the legend, the phrase “**REFERENCE POST**” was changed to “**REFERENCE LOCATION SIGN**”.

Figure 2E-15. Example of Interchange Advance Guide Signs [Figure 2E-13 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The exit number plaque was added above the E1-1 sign.

The legend “US 56” was changed to a shield on the E1-2 sign.

The code for the “Lincoln Ave” sign was changed from E1-2 to E1-2a.

The design of the exit number (E1-5) plaque was changed such that the letters in “33 A-B” are taller than the letters in “EXITS”.

The sign designs were changed such that the borders are located at the outside edges of the signs.

Figure 2E-16. Next Exit Supplemental Advance Guide Signs [Figure 2E-14 in the 2000 MUTCD]

The sign designs were changed such that the numerals are taller than the letters.

The sign designs were changed such that the borders are located at the outside edges of the signs.

Figure 2E-17. Supplemental Guide Signs for Multi-exit Interchanges [Figure 2E-15 in the 2000 MUTCD]

A space was added between the exit number and the suffix A or B.

The sign design was changed such that the border is located at the outside edges of the sign.

Figure 2E-18. Supplemental Guide Sign for a Park and Ride Facility (Route without Exit Numbering) [Figure 2E-16 in the 2000 MUTCD]

The sign design was changed such that the border is located at the outside edges of the sign.

Figure 2E-19. Supplemental Guide Sign for a Park and Ride Facility (Route with Exit Numbering) [Figure 2E-17 in the 2000 MUTCD]

The legend was changed to all capital letters.

The sign designs were changed such that the borders are located at the outside edges of the signs.

Figure 2E-20. Interchange Exit Direction Sign [Figure 2E-18 in the 2000 MUTCD]

The design of the exit number plaque was changed such that the letters in “211 A” are taller than the letters in “EXIT”.

The sign designs were changed such that the borders are located at the outside edges of the signs.

The cardinal direction legend was relocated such that the top of the letters lines up with the top of the route shield.

Figure 2E-21. Exit Gore Signs [Figure 2E-19 in the 2000 MUTCD]

The width of the E5-2 sign was reduced.

The optional E13-1 sign was added.

The sign designs were changed such that the borders are located at the outside edges of the signs.

Figure 2E-22. Post-Interchange Distance Sign [Figure 2E-20 in the 2000 MUTCD]

The legend “US 38” was changed to a shield.

The sign design was changed such that the border is located at the outside edges of the sign.

Figure 2E-23. Signing of Closely Spaced Interchanges Using Interchange Sequence Signs [Figure 2E-21 in the 2000 MUTCD]

“RP 23”, “RP 22”, and “RP 21” were changed to “RPS 23”, “RPS 22”, and “RPS 21”.

The periods were deleted after the abbreviations St, Rd, and Ave in six places.

A space was added between the exit number and the suffix A or B in four places.

The whole number distances on the Interchange Sequence signs (the “2” for Butler Rd and the “1” for Kenston Ave) were moved to the left to line up with the “whole number column”.

The heights of the numerals in the fractions were changed to the same height as “MILE” in three places.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

Figure 2E-24. Interchange Sequence Sign [Figure 2E-22 in the 2000 MUTCD]

The numerals in the fractions were made smaller.

The sign design was changed such that the border is located at the outside edges of the sign.

Figure 2E-25. Community Interchanges Identification Sign [Figure 2E-23 in the 2000 MUTCD]

The word “Exits” was changed to “EXITS”.

The numerals in the fractions were made smaller.

The sign design was changed such that the border is located at the outside edges of the sign.

Figure 2E-26. NEXT EXITS Sign [Figure 2E-24 in the 2000 MUTCD]

The sign design was changed such that the border is located at the outside edges of the sign.

Figure 2E-27. Examples of Freeway-to-Freeway Interchange Guide Signs
[Figure 2E-25 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

“**EXIT**” was changed to “**EXITS**” on the overhead guide sign located near RLS 212.

The down arrows were relocated to below “Portland” on the overhead guide sign located near RLS 35.

The heights of the numerals in the fractions were changed to the same height as “MILE(S)” in two places.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

Figure 2E-28. Examples of Guide Signs for Full Cloverleaf Interchange

[Figure 2E-26 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

On the overhead guide sign at the top of the figure, “**US Route 40**” was changed to a shield.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

The cardinal direction legends on the overhead guide signs were relocated such that the tops of the letters line up with the tops of the route shields.

The guide signs facing U.S. 65 traffic were deleted.

The note was added at the bottom of the figure.

Figure 2E-29. Examples of Guide Signs for Full Cloverleaf Interchange With Collector-Distributor Roadways

This figure was added.

Figure 2E-30. Examples of Partial Cloverleaf Interchange Guide Signs [Figure 2E-27 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

The guide signs facing S.R. 24 traffic were deleted.

The note was added at the bottom of the figure.

Figure 2E-31. Examples of Diamond Interchange Guide Signs [Figure 2E-28 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The heights of the numerals in the fraction were changed to the same height as “MILE” on the ½ mile sign.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

The STOP and warning signs were deleted.

The guide signs facing the cross street traffic were deleted.

The note was added at the bottom of the figure.

Figure 2E-32. Examples of Diamond Interchange Guide Signs in an Urban Area [Figure 2E-29 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, the word “**Urban**” was deleted, and the phrase “**in an Urban Area**” was added.

The heights of the numerals in the fraction were changed to the same height as “MILE” on the ½ mile sign.

The word “**Exits**” was changed to “**EXITS**” on the sign located near RLS 62, and the numerals were shifted to right edge of sign.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

The guide signs facing Lincoln Avenue traffic were deleted.

The note was added at the bottom of the figure.

Figure 2E-33. Examples of Minor Interchange Guide Signs [Figure 2E-30 in the 2000 MUTCD]

The heights of the numerals in the fraction were changed to the same height as “MILE” on the ½ mile sign.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

The guide signs facing the cross street traffic were deleted.

The note was added at the bottom of the figure.

Figures 2E-34 to 2E-38

These figures were added.

Figure 2E-39. Examples of Regulatory Signing and Pavement Markings at Exit Ramp Termination to Deter Wrong-Way Entry [Figure 2E-31 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

A ground-mounted Do Not Enter sign was added on the channelization island.

The orientation of the Do Not Enter sign on the bottom right corner was changed.

Asterisks were added next to the No Left Turn and No Right Turn signs and next to the three pavement arrows on the exit ramp.

Figure 2E-40. Examples of Regulatory Signing and Pavement Markings at Entrance Ramp Terminal Where Design Does Not Clearly Indicate the Direction of Flow [Figure 2E-32 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

Figure 2E-41. Examples of General Service Signs (without Exit Numbering) [Figure 2E-33 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The D9-18e, D9-18, and E2-2 codes were added.

On the D9-18e sign, the word “**RIGHT**” was changed to “**EXIT**”.

On the E2-2 sign, the word “**NEXT**” was changed to “**SECOND**”.

The D9-18 sign was changed from six signs to one sign.

Figure 2E-42. Examples of General Service Signs (with Exit Numbering) [Figure 2E-34 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The D9-18a and D9-18 codes were added.

The E2-3 sign was added.

The D9-18 sign was changed from six signs to one sign.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

Figure 2E-43. Example of Next Services Sign [Figure 2E-35 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to “**Example of**”.

The D9-17 code was added.

The design was changed such that the numerals are taller than the letters in the word “MILES”.

Figure 2E-36 of the 2000 MUTCD was deleted.

Figures 2E-44 and 2E-45

These figures were added.

Table 2E-1. Minimum Letter and Numeral Sizes for Expressway Guide Signs According to Interchange Classification

(No changes were made to this table.)

Table 2E-2. Minimum Letter and Numeral Sizes for Expressway Guide Signs According to Sign Type

The title of Item I was changed from “**Reference Posts**” to “**Reference Location Signs**”.

Table 2E-3. Minimum Letter and Numeral Sizes for Freeway Guide Sign According to Interchange Classification (sizes shown in millimeters)

Sizes were added in every column in the row for Action Message Word.

A row was added for Numeral & Letter at the bottom of the table.

Table 2E-3. Minimum Letter and Numeral Sizes for Freeway Guide Sign According to Interchange Classification (sizes shown in inches)

Sizes were added in every column in the row for Action Message Word.

Table 2E-4. Minimum Letter and Numeral Sizes for Freeway Guide Signs According to Sign Type

In Item H, the size for Distance Fraction was changed from 300 mm to 250 mm and from 12 inches to 10 inches.

In Item H, the size for Distance Word was changed from 250 mm to 300 mm and from 10 inches to 12 inches.

The title of Item I was changed from “**Reference Posts**” to “**Reference Location Signs**”.

Chapter 2F Specific Service Signs

Section 2F.01 Eligibility

In Paragraphs 7 [“Distances to eligible ...”] and 8, “**5 km**” was changed to “**4.8 km**” in three places.

In Item B.2 of Paragraph 9 [“If State or ...”], the word “**three**” was changed to the phrase “**at least two**”.

Section 2F.02 Application

In both sentences of the last paragraph [“Examples of Specific ...”], the word “**Typical**” was changed to the phrase “**Examples of**”.

Section 2F.03 Logos and Logo Panels

(No changes were made to this Section.)

Section 2F.04 Number and Size of Logos and Signs

In the third sentence of Paragraph 4 [“Each logo panel ...”], “**600 mm (24 in)**” was changed to “**750 mm (30 in)**”.

Section 2F.05 Size of Lettering

(No changes were made to this Section.)

Section 2F.06 Signs at Interchanges

In both paragraphs, “**240 m**” was changed to “**245 m**”.

Section 2F.07 Single-Exit Interchanges

(No changes were made to this Section.)

Section 2F.08 Double-Exit Interchanges

Paragraph 3 [“At a double-exit interchange where there ...”] was added.

Sections 2F.09 and 2F.10

(No changes were made to these Sections.)

Figure 2F-1. Examples of Specific Service Signs

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The alternative single-exit (two services) sign with three rows and two columns of logos was added in the top right corner of the figure.

The alternative double-exit sign with three rows and two columns of logos was added in the bottom left corner of the figure.

The exit number plaques were deleted from the single-exit signs, and the note explaining the asterisks was changed.

The two ramp signs shown in the 2000 MUTCD were deleted and a new design for the ramp sign was added in the bottom right corner of the figure.

Figure 2F-2. Examples of Specific Service Sign Location

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The design of the GAS service sign on the ramp was changed.

The designs of the exit number plaques were changed such that the numerals are taller than the letters in “EXIT”.

The design of the first advance guide sign was changed such that the numeral 1 is taller than the letters in the words EXIT and MILE.

Chapter 2G Tourist-Oriented Directional Signs

Section 2G.01 Purpose and Application

In Paragraph 4 [“When used, tourist-oriented ...”], the phrase “**on conventional roads in urban areas nor**” was added.

Paragraph 5 [“Where both tourist-oriented ...”] was changed from Guidance to Standard.

Section 2G.02 Design

In the second sentence of Paragraph 5 [“The TOURIST ACTIVITIES ...”], the phrase “**If used,**” was added.

In the last Paragraph [Examples of tourist-oriented ...], word “**Typical**” was changed to the phrase “**Examples of**”, and the phrase “**and 2G-2**” was added.

Section 2G.03 Style and Size of Lettering

In Paragraph 2 [“Design standards for ...”], the phrase “**Standard Alphabets for Highway Signs and Pavement Markings**” was changed to “**Standard Highway Signs book (see Section 1A.11)**”.

Sections 2G.04 and 2G.05

(No changes were made to these Sections.)

Section 2G.06 Sign Locations

In the third paragraph of the 2000 MUTCD, the phrase “**and 2D**” was deleted.

Section 2G.07 State Policy

(No changes were made to this Section.)

Figure 2G-1. Examples of Tourist-Oriented Directional Signs

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

“**152 mm**” was changed to “**150 mm**” in five places.

“**304 mm**” was changed to “**300 mm**” in three places.

“**406 mm**” was changed to “**400 mm**” in two places.

The 304 mm (12 in) dimension was deleted from the bottom left of the advance sign.

On the combined sign, a vertical line was added at the bottom of the sign separating the distances and the names of the activities to the right.

Figure 2G-2. Examples of Intersection Approach Signs and Advance Signs for Tourist-Oriented Directional Signs

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The stop lines on the north/south street were deleted.

On the top right advance sign, “**1 KM**” was changed to “**1 km**”.

Chapter 2H Recreational And Cultural Interest Area Signs

Sections 2H.01 to 2H.05

(No changes were made to these Sections.)

Section 2H.06 Use of Educational Plaques

In Paragraph 3 [“Figure 2H-1 illustrates ...”], the phrase “**typical uses**” was changed to “**examples of the use**”.

Section 2H.07 Use of Prohibitive Slash

In Paragraph 3 [“Figure 2H-1 illustrates ...”], the phrase “**typical uses**” was changed to “**examples of the use**”.

Section 2H.08 Placement of Recreational and Cultural Interest Area Symbol Signs

In Paragraph 4 [“Figure 2H-3 illustrates ...”], the word “**typical**” was changed to the phrase “**some examples of the**” in the second sentence. The phrase “**and 2H-6**” was deleted in the third sentence.

Section 2H.09 Destination Guide Signs

(No changes were made to this Section.)

Figure 2H-1. Examples of Use of Educational Plaques, Prohibitory Slashes, and Arrows

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

Figure 2H-2. Examples of General Directional Guide Signs for Conventional Roads

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

The design of the Yellowstone National Park sign was changed such that the numeral 2 is taller than the letters in the word MILES.

The two trapezoidal shaped signs were added to illustrate this optional shape.

The VA National Cemetery sign was added.

Figure 2H-3. Height and Lateral Position of Signs Located Within Recreational and Cultural Interest Areas

The lower dimension lines for the vertical heights of the rural district signs were changed to clearly show that it is the edge of the pavement that is being referenced.

The note was added at the bottom of the figure.

Figure 2H-4. Examples of Symbol Signing Layout

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

Figure 2H-5 in the 2000 MUTCD was deleted and the signs were relocated to the new Figure 2H-5 in the 2003 MUTCD.

Figure 2H-5. Recreational and Cultural Interest Area Symbol Signs [Figure 2H-6 in the 2000 MUTCD]

In the title, the word “**New**” was deleted and the word “**Symbols**” was changed to the phrase “**Symbol Signs**”.

The number of signs illustrated in this figure was increased from 21 signs in the 2000 MUTCD (Figures 2H-5 and 2H-6 combined) to 104 signs in the 2003 MUTCD.

The designs of the RM-120 and RA-060 signs were changed.

The name of the RL-130 sign was changed from “**Interpretive Trail (recommended for use with educational plaque)**” to “**Trail (Interpretive, Ped.)**”.

Table 2H-1. Category Chart for Symbols

(No changes were made to this table.)

Chapter 2I Emergency Management Signing

Section 2I.01 Emergency Management

(No changes were made to this Section.)

Section 2I.02 Design of Emergency Management Signs

Paragraph 4 [“The sizes for ...”] was added.

Section 2I.03 EVACUATION ROUTE Sign (EM-1)

In Paragraph 1 [“The EVACUATION ROUTE ...”], the phrase “**be circular, having a minimum outside diameter of 450 mm (18 in), carrying**” was changed to “**a rectangular sign with a blue circular symbol with**” in the first sentence. The second sentence was added.

In Paragraph 3 [“The legend and ...”], the phrase “**arrow, symbol, and border**” was changed to “**and arrow of the EVACUATION ROUTE sign**” and the word “**circular**” was added in the first sentence. The second sentence was added. In the third sentence, the phrase “**At least the arrow and border**” was changed to “**The entire sign**”.

Paragraph 7 [“The legend on ...”] was added.

Sections 2I.04 and 2I.05

(No changes were made to these Sections.)

Section 2I.06 MAINTAIN TOP SAFE SPEED (EM-4)

In the last sentence of Paragraph 3 [“Since any speed ...”], the word “**reasonably**” was added.

Section 2I.07 ROAD (AREA) USE PERMIT REQUIRED FOR THRU TRAFFIC Sign (EM-5)

(No changes were made to this Section.)

Section 2I.08 Emergency Aid Center Signs (EM-6 Series)

Paragraph 4 [“The Emergency Aid ...”] was added.

Section 2I.09 Shelter directional Signs (EM-7 Series)

In the third paragraph of the 2000 MUTCD, the phrase “, 750 x 600 mm (30 x 24 in)” was deleted.

Figure 2I-1. Emergency Management Signs [Page 2I-3 in the 2000 MUTCD]

A figure number and title were added.

The design of the EM-1 sign was changed, and an asterisk and a note explaining the asterisk were added.

The EM-6b, EM-6c, EM-6d, EM-7a, EM-7c, and EM-7d signs were added.

The sizes were deleted from the figure. The sizes are now shown in Table 2I-1, with the only change being the size of the EM-1 sign.

Table 2I-1. Emergency Management Sign Sizes

This table was added.

Part 3 Markings

Chapter 3A General

Section 3A.01 Functions and Limitations

The four items in Paragraph 4 [“The general functions ...”] were relocated from the first paragraph of Section 3A.06 of the 2000 MUTCD. The phrase “**The general functions of longitudinal lines are:**” was added. In Item B, the phrase “**(depending on the specific application)**” was added.

Sections 3A.02 and 3A.03

(No changes were made to these Sections.)

Section 3A.04 Colors [Sections 3A.04 and 3A.05 in the 2000 MUTCD]

In Paragraph 1 [“Markings shall be ...”], the phrase “**for object markers**” was deleted from the end of the last sentence.

The phrase “**The colors of longitudinal pavement markings shall conform to the following basic concepts:**” was deleted from the first paragraph in Section 3A.05 in the 2000 MUTCD.

In Paragraph 2 [“When used, white ...”], the phrases “**When used,**” and “**markings for longitudinal**” were added.

In Paragraph 3 [“When used, yellow ...”], the phrases “**When used,**” and “**markings for longitudinal**” were added.

In Paragraph 4 [“When used, red ...”], the phrase “**When used,**” was added, and the word “**markings**” was changed to “**raised pavement markers**”.

In Paragraph 5 [“When used, blue ...”], the phrase “**When used,**” was added, and the word “**delineate**” was changed to “**supplement white markings for**” in the first sentence. The second sentence was added.

Section 3A.05 Widths and Patterns of Longitudinal Pavement Markings

[Section 3A.06 in the 2000 MUTCD]

In the first Paragraph in the 2000 MUTCD, Item A, the second sentences of Items D and E, and the third sentence of Item F were relocated to Paragraph 4 of Section 3A.01. Also, Item G was relocated to Paragraph 8 of Section 3B.11.

In Item C of Paragraph 1 [“The widths and ...”], the word “**normal**” was changed to “**parallel**”.

In Paragraph 2 [“Broken lines should ...”], the phrase “**On rural highways,**” and the word “**similar**” were deleted.

In Paragraph 3 [“A dotted line ...”], the phrase “**for line extensions**” was added, and “**1.2 m (4 ft) or longer gaps, with a maximum segment-to-gap ratio of 1-to-3**” was changed to “**0.6 m (2 ft) to 1.8 m (6 ft) gaps**”. The second sentence was added.

Chapter 3B Pavement And Curb Markings

Section 3B.01 Yellow Centerline Pavement Markings and Warrants

In the title, the phrase “**and Left Edge Line**” was deleted.

In Paragraph 5 [“The centerline markings on undivided ...”], the phrase “**traffic lanes**” was changed to “**lanes for moving motor vehicle traffic**”.

In Paragraph 6 [“On two-way roadways ...”], the phrase “**traffic lanes**” was changed to “**through lanes for moving motor vehicle traffic**”.

In the last sentence of Paragraph 7 [“Centerline markings shall ...”], the phrase “**traffic lanes**” was changed to “**lanes for moving motor vehicle traffic**”.

The last paragraph in the 2000 MUTCD was relocated to Paragraph 3 of Section 3B.06.

Section 3B.02 No-Passing Zone Pavement Markings and Warrants

In Paragraph 4 [“Where centerline markings ...”], the phrase “**Where centerline markings are used,**” was added, and the phrase “**(see Section 8B.16) and at other locations where the prohibition of passing is appropriate**” was changed to “**in conformance with Section 8B.20**”.

In Paragraph 9 [“The buffer zone ...”], the phrase “**consisting of a lane transition in each direction and a minimum of a 15 m (50 ft) buffer zone**” was changed to “**that is at least 15 m (50 ft) in length**”. The last sentence was deleted.

In the first sentence of Paragraph 12 [“On roadways with ...”], the word “**reasonably**” was added.

Section 3B.03 Other Yellow Longitudinal Pavement Markings

In Paragraph 1 [“If reversible lanes ...”], the phrase “**two normal**” was changed to “**a normal double**”, and the word “**edges**” was changed to “**edge**”.

In the first sentence of Paragraph 3 [“If a two-way ...”], the phrase “**that is never operated as a reversible lane**” was added.

Section 3B.04 White Lane Line Pavement Markings and Warrants

In the title, the phrase “**and Right Edge Line**” was deleted.

In Paragraph 2 [“Examples of lane ...”], the phrase “**Typical applications**” was changed to “**Examples**”.

The last paragraph in the 2000 MUTCD was relocated to Paragraph 4 of Section 3B.06.

Section 3B.05 Other White Longitudinal Pavement Markings

In Paragraph 4 [“Examples of channelizing ...”], the word “**Typical**” was deleted.

In Paragraph 6 [“Channelizing lines at entrance ...”], the word “**reasonably**” was added.

In the second sentence of Paragraph 12 [“Lane drop markings ...”], the phrase “**3.6 m (12 ft) gaps**” was changed to “**2.7 m (9 ft) gaps**”.

Section 3B.06 Edge Line Pavement Markings

In Paragraph 2 [“Except for dotted ...”], the word “**dotted**” and the phrase “**or major driveways**” were added.

Paragraph 3 [“If used on ...”] was relocated from the last paragraph of Section 3B.01 in the 2000 MUTCD.

Paragraph 4 [“If used, the ...”] was relocated from the last paragraph of Section 3B.04 in the 2000 MUTCD.

In Paragraph 5 [“Edge line markings should ...”], the word “**minor**” was added.

Paragraph 7 [“Wide solid edge ...”] was added.

Section 3B.07 Warrants for Use of Edge Lines

In Paragraph 3 [“Edge line markings should not ...”], the word “**would**” was changed to the phrase “**is likely to**”.

In Paragraph 4 [“Edge line markings may be placed ...”], the phrase “**that do not have**” was changed to “**with or without**”.

Section 3B.08 Extensions Through Intersections or Interchanges

Paragraph 2 [“A normal line ...”] was added.

Paragraph 4 [“Dotted edge line ...”] was added.

In the first sentence of Paragraph 5 [“Where greater restriction ...”], the phrase “**or major driveways**” was added. The second sentence was added.

Paragraphs 6 [“A single line ...”] and 7 were added.

Section 3B.09 Lane Reduction Transition Markings

In Paragraph 5 [“Lane line markings ...”], the phrase “**Pavement Width Transition**” was changed to “**Lane Ends**”.

Section 3B.10 Approach Markings for Obstructions

In the second sentence of Paragraph 1 [“Pavement markings shall ...”], the word “**raised**” was added, and the word “**diagonal**” was changed to “**tapered**”.

In the first sentence of Paragraph 2 [“For roadways having ...”], the word “**diagonal**” was changed to “**tapered**”.

In Paragraph 4 [“Examples of approach ...”], the word “**Typical**” was changed to the phrase “**Examples of**”.

In the second sentence of Paragraph 8 [“Standard: If traffic can ...”], the word “**solid**” was added in two places, and the word “**normal**” was added.

Section 3B.11 Raised Pavement Markers

Paragraph 1 [“A raised pavement ...”] was changed from Support to Standard, and the phrase “**or to mark the position of a fire hydrant**” was added.

Paragraph 3 [“Blue raised pavement ...”] was added.

Paragraph 8 [“The value of ...”] was relocated from Item G of the first paragraph of Section 3A.06 in the 2000 MUTCD, and the phrase “**for the spacing of raised pavement markers**” was added in the first sentence.

Paragraph 9 [“Figures 9-20 through ...”] was added.

Section 3B.12 Raised Pavement Markers as Vehicle Positioning Guides with Other Longitudinal Markings

Paragraph 4 [“On freeways and ...”] was added.

Section 3B.13 Raised Pavement Markers Supplementing Other Markings

In Paragraph 1 [“The use of ...”], “**2N**” was changed to “**3N**” in Item B.2, and “**N/2**” was changed to the phrase “**no greater than N**” in Item B.5.

Section 3B.14 Raised Pavement Markers Substituting for Pavement Markings

In Paragraph 5 [“If raised pavement ...”], the phrase “**four or five**” was changed to “**three to five**”, and “**N/12**” was changed to “**a distance no greater than N/8**” in the first sentence. In the second sentence, the phrase “**at the one-third points of the line segment**” was changed to “**equally spaced over the line segment length (at 1/2 points for 3 markers, at 1/3 points for 4 markers, and at 1/4 points for 5 markers)**”. The phrase “**or a retroreflective or internally illuminated marker shall be installed midway in each gap between successive groups of nonretroreflective markers**” was added to the third sentence.

In Paragraph 6 [“When raised pavement substitute for solid ...”], “**N/8**” was changed to “**N/4**”.

In Paragraph 8 [“When raised pavement markers substitute for dotted ...”], “**N/8**” was changed to the phrase “**no greater than N/4**”.

Section 3B.15 Transverse Markings

In Paragraph 1 [“Transverse markings, which ...”], the phrases “**yield lines,**” and “**speed hump markings,**” were added.

In Paragraph 3 [“Pavement marking letters ...”], the phrase “**Standard Alphabets for Highway Signs and Pavement Markings**” was changed to “**Pavement Markings chapter of the “Standard Highway Signs” book (see Section 1A.11)**”.

Section 3B.16 Stop and Yield Lines

In Paragraph 2 [“If used, yield ...”], the phrase “**solid white**” was added.

In Paragraph 4 [“Stop lines should be used ...”], the phrase “**, except YIELD signs**” was added.

In Paragraph 6 [“Yield lines may ...”], the phrase “**or a Yield Here to Pedestrians (R1-5 or R1-5a) sign**” was added.

In the first sentence of Paragraph 7 [“If used, stop and ...”], the phrases “**a minimum of**”, “**at controlled intersections**”, “**for yield lines**”, and “**and at midblock crosswalks**” were added, and the phrase “**and parallel to**” was deleted.

Paragraph 8 [“If used at ...”] was added.

Paragraph 10 [“Drivers who yield ...”] was added.

Section 3B.17 Crosswalk Markings

In Paragraph 5 [“If transverse lines ...”], the phrase “**Marked crosswalks**” was changed to “**If transverse lines are used to mark a crosswalk, the gap between the lines should not be less than 1.8 m (6 ft). If diagonal or longitudinal lines are used without transverse lines to mark a crosswalk, the crosswalk**”.

In Paragraph 6 [“Crosswalk lines, if ...”], the phrase “**or to the edge of the intersecting crosswalk**” was added.

In the first sentence of Paragraph 14 [“If used, the ...”], the phrase “**300 to 600 mm (12 to 24 in)**” was changed to “**300 to 1500 mm (12 to 60 in)**”. In the second sentence the word “**spacing**” was changed to “**marking**”, and the phrase “**and the spacing should not exceed 2.5 times the line width**” was added.

Section 3B.18 Parking Space Markings

In the last sentence of Paragraph 1 [“Marking of parking ...”], the word “**Typical**” was changed to “**Examples of**”.

Section 3B.19 Pavement Word and Symbol Markings

In Paragraph 6 [“Except for the ...”], the phrase “**Except for the two opposing arrows of a two-way left-turn lane marking (see Figure 3B-7),**” was added.

In Paragraph 9 [“The SCHOOL word ...”], the word “**approach**” was added.

In Paragraph 12 [“On narrow, low-speed ...”], the word “**bicycle**” was changed to “**shared-use**”.

In Items B.4 and B.6 of Paragraph 24 [“Word and symbol markings may ...”], the term “**X-ING**” was changed to “**XING**”.

In Paragraph 25 [“Except at the ...”], the phrase “**Except at the ends of aisles in parking lots,**” was added to the first sentence. The second sentence was added.

Section 3B.20 Speed Measurement Markings

(No changes were made to this Section.)

Section 3B.21 Curb Markings

In Paragraph 2 [“Signs shall be ...”], the phrase “**unless the no parking zone is controlled by statute or local ordinance**” was added.

In Paragraph 4 [“Except as noted ...”], the phrase “**Except as noted in the Option,**” was added.

Paragraph 5 [“Curb markings without ...”] was added.

Section 3B.22 Preferential Lane Word and Symbol Markings

In Paragraph 5 [“Preferential lanes identify ...”], the phrase “**and light rail transit only**” was added.

In Paragraph 6 [“Where a preferential ...”], the phrase “**symbol or the word message HOV**” was added to the first sentence of Item A, and Item E was added.

Paragraph 7 [“If two or ...”] was added.

Section 3B.23 Preferential Lane Longitudinal Markings for Motor Vehicles

(No changes were made to this Section.)

Section 3B.24 Markings for Roundabout Intersections

In Item C of Paragraph 1 [“Roundabout intersections are ...”], the phrase “**match the width of the circular roadway**” was changed to “**allow for proper operation as needed**”.

In Paragraph 2 [“Examples of markings ...”], the word “**Typical**” was changed to “**Examples of**”.

Paragraphs 8 [“A yield line ...”] and 9 were added.

Sections 3B.25 to 3B.27

(No changes were made to these Sections.)

Figure 3B-1. Examples of Two-Lane, Two-Way Marking Applications

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The note was added regarding edge line warrants.

Figure 3B-2. Examples of Four-or-More Lane, Two-Way Marking Applications

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The note was added regarding edge line warrants.

The curved extension of the lane line next to the left-turn lane at the top of the “b” drawing was deleted.

Figure 3B-3. Examples of Three-Lane, Two-Way Marking Applications

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

Figure 3B-4. Example of Three-Lane, Two-Way Marking for Changing Direction of the Center Lane

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

Figure 3B-5. Method of Locating and Determining the Limits of No-Passing Zones at Curves

(No changes were made to this figure.)

Figure 3B-6. Example of Reversible Lane Marking Application

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

Figure 3B-7. Example of Two-Way Left-Turn Lane Marking Applications

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

The double yellow centerline on the north leg of the major cross street intersection was extended to the point where the two-way left-turn lane begins.

Figure 3B-8. Examples of Channelizing Line Applications for Exit Ramp Markings

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, the phrase “**and Cloverleaf Ramp**” was deleted, and the phrase “**Channelizing Line Applications for**” was added.

Labels for the channelizing lines were added in all three drawings.

In the label at the bottom of the “a” drawing, the phrase “**right edge**” was changed to the word “**lane**”.

The heading for drawing “c” was changed from “c – Cloverleaf Ramps” to “c – Auxiliary lane, such as at cloverleaf interchange”.

Figure 3B-9. Examples of Channelizing Line Applications for Entrance Ramp Markings

In the title, the word “**Typical**” was changed to the phrase “**Examples of Channelizing Line Applications**”.

Labels for the channelizing lines were added in both drawings.

Figure 3B-10. Example of Lane Drop Markings at Exit Ramps

In the title, the word “**Typical**” was changed to “**Example of**”.

Figure 3B-11. Examples of Extensions through Intersections

The title was changed from “**Typical Pavement Marking Applications**” to “**Examples of Extensions through Intersections**”.

A note was added to drawing “a” and to drawing “b”.

In drawing “b”, lane line extensions beyond the crosswalks were deleted.

In drawing “d”, the dotted lines were changed from double lines to single lines.

Figure 3B-12. Examples of Lane Reduction Markings

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the word “**Transition**” was deleted.

The design of the Lane Ends sign was changed in three places.

The notes regarding delineator spacing between drawings “b” and “c” in the 2000 MUTCD were deleted, and a note stating “**See Section 3D.04 for delineator spacing**” was added in the bottom left corner.

In drawing “c”, the dimension for measuring “W” was relocated.

Figure 3B-13. Examples of Markings for Obstructions in the Roadway

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

In drawing “a”, “**2L**” was changed to “**2L MIN.**” in two places.

In the explanation for the double asterisk in the legend on Sheet 2 of 2, “**200 mm (8 in)**” was changed to “**wide**”, and “**100 mm (4 in)**” was changed to “**normal**”.

Figure 3B-14. Examples of Yield Line Layouts

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the phrase “**for Streets and Highways**” was deleted.

Figure 3B-15. Examples of Yield Lines at Unsignalized Midblock Crosswalks

This figure was added.

Figure 3B-16. Examples of Crosswalk Markings [Figure 3B-15 in the 2000 MUTCD]

In the title, the phrase “**Typical Types**” was changed to the word “**Examples**”.

Figure 3B-17. Example of Crosswalk Markings for Exclusive Pedestrian Phase That Permits Diagonal Crossing [Figure 3B-16 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

Figure 3B-18. Examples of Parking Space Markings [Figure 3B-17 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The dimensions for the “cross” parking space markings in the center drawing were changed to show that the width of the lines is 4 to 6 inches and that each leg is 12 inches long.

The leader line for the note about the extension in the center drawing was changed to point at the portion of the “cross” that is actually the extension.

Figure 3B-19. International Symbol of Accessibility Parking Space Marking with Blue Background and White Border Options [Figure 3B-18 in the 2000 MUTCD]

“**Minimum/standard**” was changed to “**Minimum**” in three places.

Figure 3B-20. Example of Elongated Letters for Word Pavement Markings [Figure 3B-19 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

Figure 3B-21. Examples of Standard Arrows for Pavement Markings [Figure 3B-20 in the 2000 MUTCD]

In the title, the phrase “**Typical Lane-Use, Lane-Reduction, and Wrong-Way**” was changed to “**Examples of Standard**”.

In drawing “a”, “**(9.0 ft)**” was changed to “**(9.5 ft)**”.

In drawing “c”, “**(13.0 ft)**” was changed to “**(12.75 ft)**”.

In drawing “d”, “**7.1 m (23.0 ft)**” was changed to “**7.2 m (23.5 ft)**”.

In drawing “e”, “**1.4 m (4.0 ft)**” was changed to “**1.45 m (4.75 ft)**”, “**690 mm**” was changed to “**675 mm**” in two places, and the phrases “**5 spaces at**” and “**4 spaces at**” were deleted.

In drawing “f”, “**5.6 m**” was changed to “**5.5 m**”, and “**(5.0 ft)**” was changed to “**(5.67 ft)**”.

In the last sentence of the note at the bottom of the figure, the phrase “**Typical Alphabets for Highway Signs and Pavement Marking**” was changed to “**Pavement Markings chapter of the “Standard Highway Signs” book**”.

Figure 3B-22. Examples of Lane Use Control Word and Symbol Markings [Figure 3B-21 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The double line was changed to a single line for the dotted centerline extension within the intersection.

Figure 3B-23. Examples of Arrow Markings at Exit Ramp Terminals [Figure 3B-22 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the phrase “**to Deter Wrong-Way Entry**” was deleted.

In the notes, “**See Chapter 2B for regulatory signing**” was added.

The orientation of the Do Not Enter sign was changed to showing it at an angle to the intersection.

A Do Not Enter sign was added on the channelizing island.

Asterisks were added next to the pavement arrows on the exit ramp in three places.

Figure 3B-24. Examples of Arrow Markings at Entrance Ramp Terminals
[Figure 3B-23 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the phrase “**Where Design Does Not Clearly Indicate the Direction of Flow**” was deleted.

A note stating “**See Chapter 2B for regulatory signing**” was added.

Figure 3B-25. Yield Ahead Triangle Symbols [Figure 3B-24 in the 2000 MUTCD]

In the title, the word “**Typical**” and the phrase “**for Streets and Highways**” were deleted.

Figure 3B-26. Examples of Markings for Preferential Lanes (Sheet 1 of 2)
[Figure 3B-25 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the phrase “**for Motorized Vehicles**” was deleted.

The note regarding double yellow was added to the bottom of both sheets.

In the title of drawing “d”, “**Full-time**” was added and the word “**ALLOWED**” was changed to “**PERMITTED**”.

In drawing “e”, “**(Crossing Permitted)**” was relocated to make it clear that it also applies to the “**SINGLE DOTTED NORMAL WHITE**” line.

Figure 3B-27. Examples of Markings for Roundabout Intersections with One-Lane Approaches [Figure 3B-26 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the phrase “**One Lane**” was changed to “**One-Lane Approaches**”.

The splitter islands were extended beyond both crosswalks.

Yield signs were added in all four splitter islands along with an asterisk. A note was added to explain the asterisk.

The yield lines were changed to be parallel to the edge of the roundabout instead of perpendicular to the approach.

The portions of the edge line of the roundabout that are adjacent to the splitter islands were changed from dotted to solid lines.

Edge lines adjacent to the splitter islands were added on the left side of all four exit lanes.

Figure 3B-28. Examples of Markings for Roundabout Intersections with Two-Lane Approaches [Figure 3B-27 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the phrase “**Two Lanes**” was changed to “**Two-Lane Approaches**”.

The splitter islands were extended beyond both crosswalks.

Yield signs were added in all four splitter islands.

This figure was changed to show two-lane approaches and two-lane departures.

The yield lines were changed to be parallel to the edge of the roundabout instead of perpendicular to the approach.

The portions of the edge line of the roundabout that are adjacent to the splitter islands were changed from dotted to solid lines.

Edge lines adjacent to the splitter islands were added on the left side of all four exit lanes.

Figure 3B-29. Examples of Pavement Markings for Speed Humps Without Crosswalks [Figure 3B-28 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the phrase “**Without Crosswalks**” was added.

The “OPTION C” design was revised. In OPTION C, “**0.4 m**” was changed to “**375 mm**”, “**2.8 m**” was changed to “**2.9 m**”, and the dimension of “**260 mm (10.4 in)**” was added at the bottom of the figure.

Figure 3B-30. Examples of Pavement Markings for Speed Tables or Speed Humps with Crosswalks [Figure 3B-29 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

OPTION C was deleted.

Figure 3B-31. Examples of Advance Warning Markings for Speed Humps [Figure 3B-30 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

Tables 3B-1 and 3B-2

(No changes were made to these tables.)

Chapter 3C Object Markers

Section 3C.01 Object Marker Design and Placement Height

In Paragraph 2 [“When used, object ...”], the sign codes “(OM1-1)”, “(OM1-2)”, and “(OM1-3)” were added in the Type 1 description. In the Type 2 description, the phrases “(OM2-1V or OM2-1H)”, “measuring at least 150 x 300 mm (6 x 12 in)” (after “white panel”), “horizontal or vertical”, and “(OM2-2V or OM2-2H)” were added. In the last sentence of the Type 3 description, the phrase “and black” was added.

Sections 3C.02 and 3C.03

(No changes were made to these Sections.)

Section 3C.04 End-of-Roadway Markers

In Paragraph 2 [“The end-of-roadway marker (see ...”], the sign codes “(OM4-1)” and “(OM4-2)” were added.

In Paragraph 5 [“The minimum mounting ...”], the phrases “to the bottom” and “above the edge of the pavement” were added.

Figure 3C-1. Object Markers and End-of-Roadway Markers [Page 3C-2 in the 2000 MUTCD]

A figure number and title were added.

The word “Typical” was deleted in four places in the sub-headings.

Chapter 3D Delineators

Sections 3D.01 to 3D.03

(No changes were made to these Sections.)

Section 3D.04 Delineator Placement and Spacing

In Paragraph 2 [Delineators should be placed ...”], the phrase “guardrail or other” was deleted in the first sentence. The last sentence was added.

In Paragraph 4 [“Examples of delineator ...”], the word “Typical” was changed to the phrase “Examples of”.

Figure 3D-1. Examples of Delineator Placement

In the title, the word “**Typical**” was changed to “**Examples of**”.

In the note at the top left corner of the figure, the word “**makes**” was changed to the phrase “**should make**”.

The no-passing zones were expanded on the approach to the curve and throughout the curve.

The word “**directly**” and the phrase “**or on the innermost edge of the guardrail**” were added to the first sentence of the note pointing to the delineators on the guardrail.

Table 3D-1. Approximate Spacing for Delineators on Horizontal Curves

In the second sentence in the notes below the table, “**6 m**” was changed to “**6.1 m**”.

Chapter 3E Colored Pavements

Section 3E.01 General

Paragraph 2 [“Colored pavement located ...”] was added.

In Paragraph 3 [“Colored pavements used as traffic control devices should ...”], the phrase “**used as traffic control devices**” was added.

Paragraph 4 [“Colors that degrade ...”] was added.

In Paragraph 6 [“Colored pavements used as traffic control devices shall ...”], the phrase “**colors and applications**” was added. In both Items A and B, the phrase “**flush or raised**” was added. In Item B, the phrase “**, and for crosswalks**” was deleted.

Item A in the fourth paragraph of the 2000 MUTCD was deleted.

The last paragraph in the 2000 MUTCD was deleted.

Chapter 3F Barricades And Channelizing Devices

Section 3F.01 Barricades

In Item A of Paragraph 2 [“An end-of-roadway marker ...”], the word “**that**” and the phrase “**in a dead end or cul-de-sac with no outlet**” were deleted.

Section 3F.02 Channelizing Devices

(No changes were made to this Section.)

Chapter 3G Islands

Sections 3G.01 to 3G.03

(No changes were made to these Sections.)

Section 3G.04 Island Marking Colors

In Paragraph 3 [“On long islands ...”], the phrase “**or edge lines**” was added.

Sections 3G.05 to 3G.06

(No changes were made to these Sections.)

Part 4 Highway Traffic Signals

Chapter 4A General

Section 4A.01 Types

(No changes were made to this Section.)

Section 4A.02 Definitions Relating to Highway Traffic Signals

Definitions 16, 20, 35, 54, and 55 were added.

In Definition 2, the phrase “**or highway-light rail transit grade crossings**” was added.

In Definition 7, the phrase “**see Signal Backplate**” was added, and the definition was relocated to Definition 56.

In Definition 12(b), the phrase “**or other markings**” was deleted, and the phrase “, **which may be supplemented by a contrasting pavement texture, style, or color**” was added.

In Definition 15, the word “**sensing**” was deleted.

In Definition 19 [Definition 18 in the 2000 MUTCD], the phrase “**(Flashing Mode)**” was deleted from the title, “**a mode of**” was changed to “**an**”, and the word “**highway**” was added.

In the second sentence of Definition 22 [Definition 20 in the 2000 MUTCD], the phrase “**signals at toll plazas**” was added, and the phrase “**barricade warning lights**” was changed to “**warning lights (see Section 6F.78)**”.

In Definition 30 [Definition 28 in the 2000 MUTCD], the phrase “**see Signal Louver**” was added, and the definition was relocated to Definition 63.

In Definition 38 [Definition 35 in the 2000 MUTCD], the phrase “**center of the farthest traveled lane**” was changed to “**far side of the traveled way**”.

In Definition 56 [Definition 7 in the 2000 MUTCD], the word “**Signal**” was added to the title.

In Definition 58 [Definition 52 in the 2000 MUTCD], the phrase “**the front part of a signal head**” was changed to “**that part of a traffic control signal provided for controlling one or more traffic movements on a single approach**”.

In Definition 59 [Definition 53 in the 2000 MUTCD], the phrase “**faces together with the associated signal housings**” was changed to the word “**sections**”.

In Definition 63 [Definition 28 in the 2000 MUTCD], the word “**Signal**” was added to the title, and the phrase “**or to a certain distance from the stop line**” was added.

In Definition 75 [Definition 68 in the 2000 MUTCD], the phrase “**(or shielded, hooded, or louvered)**” was added.

Chapter 4B Traffic Control Signals-General

Section 4B.01 General

In Paragraph 4 [“Standards for traffic ...”], the phrase “**virtually every road user**” was changed to “**a variety of road users**”, and the phrase “**who meet legal requirements**” was deleted in the first sentence. The second sentence was deleted.

Section 4B.02 Basis of Installation or Removal of Traffic Control Signals

In Paragraph 1 [“The selection and ...”], the phrase “**pedestrian, bicyclist**” was changed to “**traffic**”.

Paragraph 3 [“Engineering judgment should ...”] was relocated from the last paragraph of Section 4B.03 in the 2000 MUTCD. The phrase “**Engineering studies**” was changed to “**Engineering judgment**”, the word “**made**” was changed to “**applied in the review**”, and the phrase “**all forms of**” was added.

In the second sentence of Item E of Paragraph 5 [“If the engineering ...”], the phrase “**for 1 year**” was deleted in the 2000 MUTCD.

Section 4B.03 Advantages and Disadvantages of Traffic Control Signals

In Item B.2 of Paragraph 2 [“Traffic control signals that ...”], the phrase “**timing is**” was changed to “**operational parameters are**”, “**(if needed)**” was added, the phrase “**(every 2 years)**” was changed to “**(as engineering judgment determines that significant traffic flow and/or land use changes have occurred)**”, and the phrase “**ensure that it satisfies**” was changed to “**maximize the ability of the traffic control signal to satisfy**”.

Section 4B.04 Alternatives to Traffic Control Signals

(No changes were made to this Section.)

Section 4B.05 Adequate Roadway Capacity

In the third sentence of Paragraph 1 [“The delays inherent ...”], the word “**intersection**” was changed to “**location**”.

In the second sentence of Paragraph 2 [“Adequate roadway capacity ...”], the phrase “**ensure that it will not**” was changed to “**determine if it will**”.

Chapter 4C Traffic Control Signal Needs Studies

Section 4C.01 Studies and Factors for Justifying Traffic Control Signals

In Paragraph 5 [“A traffic control should not be installed unless one ...”], the word “**section**” was changed to “**Chapter**”.

In Paragraph 11 [“At a location ...”], the second and third sentences were added.

In Paragraph 12 [“For signal warrant analysis, a ...”], the phrase “**, even if the median width is greater than 9 m (30 ft),**” was added.

Paragraphs 13 [“At an intersection ...”], 14, and 15 [“When performing a ...”] were added.

In Item A of Paragraph 17 [“The following data, ...”], the phrase “**to be consistent with the Peak Hour Warrant**” was deleted.

Section 4C.02 Warrant 1, Eight-Hour Vehicular Volume

In Paragraph 1 [“The Minimum Vehicular ...”], the phrase “**at locations**” was added.

In Paragraph 2 [“The Interruption of ...”], the phrase “**at locations where Condition A is not satisfied and**” was added.

Paragraph 3 [“It is intended ...”] was added.

Paragraph 6 [“The combination of ...”] was relocated from the last paragraph in the 2000 MUTCD, and the phrase “**is intended for application at locations where Condition A is not satisfied and Condition B is not satisfied and**” was added.

Paragraph 8 [“If the posted ...”] was added.

Sections 4C.03 and 4C.04

(No changes were made to these Sections.)

Section 4C.05 Warrant 4, Pedestrian Volume

In Paragraphs 4 [“If this warrant ...”] and 5 [“If this warrant ...”], the phrase “**If a traffic control signal is justified by both this signal warrant and a traffic engineering**”

study” was changed to **“If this warrant is met and a traffic control signal is justified by an engineering study”**.

In Item A of Paragraph 5, which was relocated from Item B in the 2000 MUTCD, the second sentence was deleted.

Section 4C.06 Warrant 5, School Crossing

In Paragraph 5 [“If this warrant ...”], the phrase **“If a traffic control signal is justified by both this signal warrant and”** was changed to **“If this warrant is met and a traffic control signal is justified by”**.

In Item A of Paragraph 5, which was relocated from Item B in the 2000 MUTCD, the second sentence was deleted.

Section 4C.07 Warrant 6, Coordinated Signal System

(No changes were made to this Section.)

Section 4C.08 Warrant 7, Crash Experience

Paragraph 3 [“If the posted ...”] was added.

Section 4C.09 Warrant 8, Roadway Network

(No changes were made to this Section.)

Figures 4C-1 to 4C-4

(No changes were made to these figures.)

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

The 56% columns were added in four places, and the explanation for footnote “d” was added at the bottom of the table.

Chapter 4D Traffic Control Signal Features

Section 4D.01 General

The third paragraph in the 2000 MUTCD was deleted.

Paragraphs 6 [“Midblock crosswalks shall ...”] and 7 were added.

Section 4D.02 Responsibility for Operation and Maintenance

In Item A of Paragraph 2 [“To this end ...”], the word “**ensure**” was changed to “**verify**”, and the phrase “**ensure that a record of all timing changes is maintained**” was changed to “**establish a policy to maintain a record of all timing changes**”.

Section 4D.03 Provisions for Pedestrians

(No changes were made to this Section.)

Section 4D.04 Meaning of Vehicular Signal Indications

At the beginning of Paragraph 2 [“The following meanings ...”], the phrase “**Unless otherwise determined by law**” was deleted.

In the first sentence of Item A.3 in Paragraph 2, the phrase “**signal indication is a turn arrow for a vehicular movement in conflict with the desired path of the pedestrian**” was changed to “**sole green signal indication is a turn arrow**”. The last sentence of Item A.3 was added.

In Item C.2 of Paragraph 2, the phrase “**(except as described in the Option below)**” was deleted, and the second paragraph [“When an R10-17a ...”] was added.

The third paragraph in the 2000 MUTCD was deleted (it was replaced by the new second paragraph of Item C.2 in Paragraph 2).

Section 4D.05 Application of Steady Signal Indications

In Item A.2 of Paragraph 3 [“Steady signal indications ...”], the phrase “**or in protected/permissive mode left-turn operation with separate left-turn signal faces (see Section 4D.06)**” was added.

Item B.4 was added to Paragraph 3.

In the last sentence of Item D of Paragraph 3, the phrase “**Except as described in Item C.2 of Section 4D.04,**” was added.

Paragraph 5 [“If U-turns are ...”] was added.

Section 4D.06 Application of Steady Signal Indications for Left Turns

In Item A of Paragraph 3 [“The required left-turn ...”], the phrase “**the same color as the signal indicator for through traffic. A separate signal indication or signal face for left turns shall not be required.**” was changed to “**provided by the signal faces controlling the through movement, or by a permissive-only left-turn signal face that is either a shared signal face or a separate signal face. A permissive-only shared**”

signal face, regardless of where the permissive-only left turn signal face is positioned and regardless of how many adjacent through signal faces are provided, shall always simultaneously display the same color of circular indication that the adjacent through signal face or faces display. A separate permissive-only left-turn signal face sometime displays a different color of circular signal indication than the adjacent through signal faces display.”.

The second paragraph of Item A of Paragraph 3 was added, including Items A.1 through A.4.

In the last sentence of Item B.2 of Paragraph 3, the phrase “**cannot be seen by**” was changed to “**is not readily visible to**”, and the word “**either**” and the phrase “**or a visibility-limited CIRCULAR RED signal indication**” were deleted.

In Item C of Paragraph 3, the phrases “**(to be shared by left-turning and through traffic)**” and “**intended to be exclusively used by left-turning traffic**” were deleted. The second, third, and fourth sentences were added.

In Item C.2(a) of Paragraph 3, the phrase “**simultaneously display a left-turn GREEN ARROW signal indication and a CIRCULAR RED signal indication**” was changed to “**display a left-turn GREEN ARROW signal indication**”.

In Item C.2(e) of Paragraph 3, the phrase “**combination of a LEFT TURN SIGNAL sign (R10-11) and a LEFT TURN YIELD ON GREEN (symbolic green ball) sign (R10-12)**” was changed to “**LEFT TURN SIGNAL—YIELD ON GREEN (symbolic green ball) (R10-21)**”.

Section 4D.07 Application of Steady Signal Indications for Right Turns

In the last sentence of Item B.2 of Paragraph 2 [“The required right-turn ...”], the phrase “**cannot be seen by**” was changed to “**is not readily visible**”, and the word “**either**” and phrase “**or a visibility-limited CIRCULAR RED signal indication**” were deleted.

Section 4D.08 Prohibited Steady Signal Indications

(No changes were made to this Section.)

Section 4D.09 Unexpected Conflicts During Green or Yellow Intervals

In the first sentence of Item A in Paragraph 1 [“A steady GREEN ...”], the phrase “**, except for the situation regarding U-turns described in Section 4D.05**” was added.

Section 4D.10 Yellow Change and Red Clearance Intervals

In Paragraph 5 [“The yellow change ...”], the phrase “**, including pedestrians,**” was added.

Section 4D.11 Application of Flashing Signal Indications

(No changes were made to this Section.)

Section 4D.12 Flashing Operation of Traffic Control Signals

In Paragraph 9 [“The steady red ...”], the word “**Any**” was changed to “**The**” and the word “**maximum**” was deleted.

Section 4D.13 Preemption and Priority Control of Traffic Control Signals

In Paragraph 2 [“Preemption control (see ...)”], the phrase “**and light rail transit**” was added.

In Item A of Paragraph 3 [“Examples of preemption ...”], the phrase “**police cars**” was changed to “**law enforcement vehicles**”.

In the last sentence of Paragraph 6 [“Some types or ...”], the phrase “**boat, train**” was changed to “**train, boat**”, and “**(police)**” was changed to “**(law enforcement)**”.

In Paragraph 10 [“When a traffic ...”], the phrase “**ensure that vehicles or pedestrian are not**” was changed to “**minimize the possibility of vehicles or pedestrians being**”.

Section 4D.14 Coordination of Traffic Control Signals

(No changes were made to this Section.)

Section 4D.15 Size, Number, and Location of Signal Faces by Approach

In Paragraph 1 [“Sections 4D.05, and ...”], the phrase “**4D.17, and**” was changed to “**and 4D.16 through**”.

In Item D.1 of Paragraph 7 [“The signal faces ...”], the word “**distance**” was deleted, the phrase “**as described in Paragraphs B and C in the first Standard of this Section**” was changed to “**for left-turn signal faces (see Section 4D.06) and right-turn signal faces (see Section 4D.07)**”, the word “**two**” was added, and the phrase “**by Paragraph A in this Standard**” was changed to “**for the major movement on the approach**”.

In Item D.1(b) of Paragraph 7, the phrase “**45 m (150 ft)**” was changed to “**55 m (180 ft)**”.

Item D.2 of Paragraph 7 was added.

In the first sentence of Item D.3 of Paragraph 7, the word “**distance**” was deleted, the phrase “**as described in Paragraphs B and C in the first Standard of this Section**” was changed to “**for left-turn signal faces (see Section 4D.06) and right-turn signal faces (see Section 4D.07)**”, the word “**two**” was added, and the phrase “**by Paragraph A in this Standard**” was changed to “**for the major movement on the approach**”.

Section 4D.16 Number and Arrangement of Signal Sections in Vehicular Traffic Control Signal Faces

In Paragraphs 7 [“In vertically arranged ...”] and 8, the phrase “**variable-indication**” was changed to the word “**dual-arrow**” in two places.

In Paragraph 8 [“In horizontally arranged ...”], the word “**variable**” was changed to “**dual**” in two places.

In Paragraph 11 [“Horizontally arranged and ...”], the word “**clearance**” was changed to “**separation spacing**”.

Section 4D.17 Visibility, Shielding, and Positioning of Signal Faces

In Paragraph 12 [“The use of a ...”], the phrase “**The use of**” was added, and the word “**used**” was changed to “**considered**”.

In Paragraph 13 [“The use of backplates ...”], the phrase “**traffic signals**” was changed to “**traffic signal indications**”.

Section 4D.18 Design, Illumination, and Color of Signal Sections

In Paragraph 5 [“Each arrow signal ...”], the phrase “**variable-indication**” was changed to the word “**dual-arrow**”.

The last paragraph in the 2000 MUTCD was deleted.

Section 4D.19 Lateral Placement of Signal Supports and Cabinets

In Item A, the phrase “**Americans with Disabilities Act (ADA) (see the Department of Justice’s ADA Standards for Accessible Design, 1991)**” was changed to “**Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG) (see Section 1A.11)**”.

Section 4D.20 Temporary Traffic Control Signals

(No changes were made to this Section.)

Section 4D.21 Traffic Signal Signs, Auxiliary

In Paragraph 2 [“The minimum vertical ...”], the phrase “**vertical and horizontal**” was added.

In Paragraph 4 [“Traffic signal signs should ...”], the phrase **“When a traffic signal sign at a highway traffic signal is applicable to a particular movement, the sign”** was changed to **“Traffic signal signs”**, and the phrase **“for that movement”** was changed to **“to which they apply”**.

Figure 4D-1. Maximum Mounting Height of Signal Faces Located Between 12 Meters (40 Feet) and 16 Meters (53 Feet) from Stop Line

(No changes were made to this figure.)

Figure 4D-2. Horizontal Location of Signal Faces

A new signal location area between 150 and 180 feet from the stop line was added to the diagram and to the legend in the top right corner of the figure. The new 180-foot dimension, including four asterisks, was added. A new footnote was added to explain the four asterisks that were placed next to the 180-foot dimension. In the footnote explaining the three asterisks in the 2000 MUTCD, the phrase **“and maximum distance from stop line for 300 mm (12 inch) signal faces, unless a near-side supplemental signal face is used”** was deleted.

Figure 4D-3. Typical Arrangements of Signal Lenses in Signal Faces

(No changes were made to this figure.)

Table 4D-1. Minimum Sight Distance

(No changes were made to this table.)

Chapter 4E PEDESTRIAN CONTROL FEATURES

Section 4E.01 Pedestrian Signal Heads

(No changes were made to this Section.)

Section 4E.02 Meaning of Pedestrian Signal Head Indications

The second sentence of Item A was added.

Section 4E.03 Application of Pedestrian Signal Heads

In Item D of Paragraph 1 [“Pedestrian signal heads shall ...”], the word **“When”** was changed to the phrase **“Where engineering judgment determines that”**, and the phrases **“or cause conflicts with”** and **“using a crosswalk”** were added.

In Item C of Paragraph 2 [“Pedestrian signal heads should ...”], the word “**reasonably**” was added.

Section 4E.04 Size, Design, and Illumination of Pedestrian Signal Head Indications

In Paragraph 1 [“All new pedestrian ...”], the phrase “**or outline style symbol**” was added in the first sentence. In the last sentence the word “**signal**” was changed to the phrase “**pedestrian signal head**”.

Paragraphs 10 [“An animated eyes ...”] and 11 were added.

Section 4E.05 Location and Height of Pedestrian Signal Heads

(No changes were made to these Sections.)

Section 4E.06 Accessible Pedestrian Signals

In the second and fourth sentences of Paragraph 1 [“The primary technique ...”], the phrase “**the vast majority of**” was changed to “**many**” in Revision 1.

In the third sentence of Paragraph 1, the word “**reasonably**” was added.

In Paragraph 2 [“If a particular ...”], the phrase “**the underlying safety and effectiveness concerns for all pedestrians should first be addressed before considering any access issues for pedestrians who have visual disabilities**” was changed to “**an engineering study should be conducted that considers the safety and effectiveness for pedestrians in general, as well as the information needs of pedestrians with visual disabilities**” in the first sentence in Revision 1. The second sentence was deleted in Revision 1.

In the first sentence of Paragraph 2, the word “**reasonably**” was added.

In the first sentence of Paragraph 3 [“The factors that ...”], the phrase “**an intersection**” was changed to “**a signalized location**”.

In Paragraph 4 [“Local organizations, providing ...”], the word “**professionals**” was changed to “**staff**” in the second sentence in Revision 1. The third sentence was added in Revision 1.

The fifth and sixth paragraphs in the 2000 MUTCD were deleted in Revision 1.

In Paragraph 16 [“Automatic volume adjustment ...”], “**dB**” was changed to “**dba**” in the first and second sentences. The last sentence was added.

Section 4E.07 Countdown Pedestrian Signals

This section was added.

Section 4E.08 Pedestrian Detectors [Section 4E.07 in the 2000 MUTCD]

In Paragraph 1 [“When pedestrian actuation ...”], the phrase “**easy to use**” was changed to “**capable of easy activation**”.

In Paragraph 8 [“If used, special ...”], the phrase “**and do not need an instructional sign**” was added. (This phrase replaces the ninth paragraph of the 2000 MUTCD, which was a Standard.)

The ninth paragraph in the 2000 MUTCD was deleted.

Paragraph 10 [“At signalized locations ...”] was added.

Section 4E.09 Accessible Pedestrian Signal Detectors [Section 4E.08 in the 2000 MUTCD]

Paragraph 1 [“An accessible pedestrian ...”] was changed from Support to Standard.

In Paragraph 5 [“At accessible pedestrian signal locations, pushbuttons ...”], the phrase “(see the Department of Justice’s Americans with Disabilities Act Standards for Accessible Design, 1991)” was changed to “as described in the “Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)” (see Section 1A.11)”.

In the third sentence of Paragraph 9 [“Pushbuttons should be ...”], “**dB**” was changed to “**dba**”.

In the first sentence of Paragraph 12 [“The audible tones(s) ...”], the term “**dB**” was changed to “**dba**”.

Section 4E.10 Pedestrian Intervals and Signal Phases [Section 4E.09 in the 2000 MUTCD]

Paragraph 3 [“If countdown pedestrian ...”] was added.

In Paragraph 6 [“If pedestrian volumes ...”], the phrase “**If it is desired to favor the length of an opposing signal phase and**” was deleted.

In Paragraph 8 [“The pedestrian clearance time should ...”], the word “**normal**” was deleted, and the phrase “**center of the farthest traveled lane**” was changed to “**far side of the traveled way**” in the first sentence. In the second sentence, the word “**normal**” was changed to “**1.2 m (4 ft) per second**”.

In Paragraph 11 [“The pedestrian clearance time may ...”], the phrase “**or may be entirely contained within the vehicular green and yellow change intervals**” was added.

Figure 4E-1. Typical Pedestrian Signal Indications

The typical indications for the one section outlined symbol signal heads were deleted, and the phrase “**(Solid Symbol)**” was deleted from the title of the remaining one section signal heads.

Figure 4E-2. Recommended Pushbutton Locations for Accessible Pedestrian Signals

The symbol for the pedestrian pushbutton was changed on the figure and in the legend.

Chapter 4F Traffic Control Signals for Emergency Vehicle Access

Section 4F.01 Applications of Emergency-Vehicle Traffic Control Signals

In Paragraph 3 [“If a traffic ...”], the word “**reasonably**” was added in two places in the first sentence. In the second sentence, the phrase “**If a traffic control signal is justified under the signal warrants of Chapter 4C**” was changed to “**If one of the signal warrants of Chapter 4C is met and a traffic control signal is justified by an engineering study**”, and the phrase “**to the Standards required for that type of signal (see Chapter 4D)**” was changed to “**based upon the provision of Chapter 4D**”.

Section 4F.02 Design of Emergency-Vehicle Traffic Control Signals

In Paragraph 2 [“An Emergency Vehicle ...”], “**(W11-12P)**” was changed to “**(W11-12p)**”.

In Paragraph 3 [“At least one ...”], the phrase “**signal face**” was changed to “**of the two required signal faces**”.

In Paragraph 6 [“An approach that ...”], the phrase “**consisting of one or more signal sections**” was added.

Section 4F.03 Operation of Emergency-Vehicle Traffic Control Signals

In Paragraph 6 [“An emergency-vehicle traffic ...”], the word “**police**” was changed to “**law enforcement**”.

Chapter 4G Traffic Control Signals for One-Lane, Two-Way Facilities

Section 4G.01 Application of Traffic Control Signals for One-Lane, Two-Way Facilities

In Paragraphs 1 [“A traffic control ...”] and 4 [“At a narrow ...”], the word “reasonably” was added.

Sections 4G.02 and 4G.03

(No changes were made to these Sections.)

Chapter 4H Traffic Control Signals for Freeway Entrance Ramps

(No changes were made to this Chapter.)

Chapter 4I. TRAFFIC CONTROL FOR MOVABLE BRIDGES

In the title of the chapter, the word “**Signals**” was deleted.

Section 4I.01 Application of Traffic Control for Movable Bridges

(No changes were made to this Section.)

Section 4I.02 Design and Location of Movable Bridge Signals and Gates

In Item A of Paragraph 2 [“Since movable bridge ...”], the phrase “**generally to be used if movable bridge operation is quite frequent**” was deleted. (The new Paragraph 4 replaced this phrase.)

Paragraph 4 [“If movable bridge operation ...”] was added.

In the third sentence of Paragraph 7 [“Movable bridge warning gates, if ...”], the phrase “**as indicated below, wherever practical**” was changed to “**where physical conditions make it impractical**”.

In the third sentence of Paragraph 8 [“Movable bridge warning gates shall ...”], “**1.25 m**” was changed to “**1.2 m**”.

In Paragraph 9 [“If two sets ...”], the phrase “**on long bridges or causeways**” was deleted.

In the first sentence of Paragraph 15 [“In cases where ...”], the phrase “**completely safe from**” was changed to “**not subject to**”.

Section 4I.03 Operation of Movable Bridge Signals and Gates

(No changes were made to this Section.)

Chapter 4J Lane-Use Control Signals

Section 4J.01 Application of Lane-Use Control Signals

(No changes were made to this Section.)

Section 4J.02 Meaning of Lane-Use Control Signal Indications

In Item B of Paragraph 1 [“The meanings of ...”], the word “**reasonably**” was added.

Section 4J.03 Design of Lane-Use Control Signals

In Paragraph 12 [“In areas with ...”], the phrase “**70 km/h (45 mph) or less**” was changed to “**less than 70 km/h or less than 40 mph**”, and the phrase “**and lane-use control signal faces with nominal height and width of 450 mm (18 in) may be used for the WHITE TWO-WAY LEFT-TURN ARROW and WHITE ONE-WAY LEFT-TURN ARROW signal faces**” was added.

The fourteenth paragraph in the 2000 MUTCD was deleted.

Section 4J.04 Operation of Lane-Use Control Signals

(No changes were made to this Section.)

Figure 4J-1. Left-Turn Lane-Use Control Signals

Both signals were changed to show a dark background.

Chapter 4K Flashing Beacons

Sections 4K.01 to 4K.03

(No changes were made to these Sections.)

Section 4K.04 Speed Limit Sign Beacon

Paragraph 1 [“A Speed Limit Sign Beacon shall be ...”] was added.

Section 4K.05 Stop Beacon

(No changes were made to this Section.)

Chapter 4L In-Roadway Lights

Section 4L.01 Application of In-Roadway Lights

In the last sentence of Paragraph 1 [“In-Roadway Lights ...”], the phrase “**marked crosswalks in advance of roundabout intersections as described in Sections 3B.24 and 3B.25**” was added.

Section 4L.02 In-Roadway Lights at Crosswalks

(No changes were made to this Section.)

Part 5 Traffic Control Devices for Low-Volume Roads

Chapter 5A General

Sections 5A.01 to 5A.02

(No changes were made to these Sections.)

Section 5A.03 Design

In Paragraph 2 [“The typical sizes ...”], the word “**minimum**” was changed to “**typical**” in the first sentence. The second sentence was added.

In Paragraph 4 [“All markings shall ...”], the phrase “**ensures that the markings are adequately visible**” was changed to “**provides adequate visibility of the markings**”.

In Paragraph 5 [“Oversized sign sizes ...”], the word “**Larger**” was changed to “**Oversized**”.

Section 5A.04 Placement

(No changes were made to this Section.)

Table 5A-1. Minimum Sign Sizes on Low-Volume Roads

The word “**Typical**” was added as the title of the first column of sizes, which corresponds to the sizes listed in the 2000 MUTCD.

The Minimum and Oversized columns and sizes were added.

Rows were added for the R2-1 (metric), R4-2, R4-7, R15-2, W1-7, W8-7, W14-1,2, and W16-9p signs.

The row for the W8-12 sign was deleted.

The size of the R2-1 (English) sign was changed from “**18 x 24**” to “**24 x 30**”.

The “**R8-3c,3d**” codes were added for the No Parking plaques.

The name of the “**Local Traffic Only**” sign was changed to “**Road Closed, Local Traffic Only**”, and the code was changed from “**R11-3**” to “**R11-3a**”.

The name of the W1-1 to W1-5 signs was changed from “**Turn/Curve, Reverse Turn/Curve, Winding Road**” to “**Horizontal Alignment**”.

“**One-Direction**” was added to the name of the W1-6 sign.

“**Alignment**” was added to the name of the W1-8 sign.

The code for the Stop Ahead sign was changed from “**W3-1a**” to “**W3-1**”.

The code for the Yield Ahead sign was changed from “**W3-2a**” to “**W3-2**”.

The code for the Be Prepared to Stop sign was changed from “**W20-7b**” to “**W3-4**”.

The code for the Narrow Bridge sign was changed from “**W5-2, 2a**” to “**W5-2**”.

The size of the W10-1 sign was changed from “**30 Dia**” to “**24 Dia.**”.

The codes for the Dead End/No Outlet signs were changed from “**W14-1p, W14-2p**” to “**W14-1a,2a**”, and the size was changed from “**24 x 24**” to “**36 x 9**”.

The name of the W16-2 sign was changed from “Supplemental Plaque” to “Supplemental Distance (plaque)”, and the code was changed from “**W16-1**” to “**W16-2**”.

The code for the No Traffic Signs sign was changed from “**W16-2**” to “**W18-1**”.

The notes were added at the bottom of the table.

Chapter 5B Regulatory Signs

Section 5B.01 Introduction

(No changes were made to this Section.)

Section 5B.02 STOP and YIELD Signs (R1-1 and R1-2)

The phrase “**consistent with the provisions of Sections 2B.04 to 2B.10**” was added.

Sections 5B.03 to 5B.06

(No changes were made to these Sections.)

Figure 5B-1. Regulatory Signs on Low-Volume Roads [Page 5B-2 in the 2000 MUTCD]

A figure number and title were added.

The design of the metric version of the R2-1 sign was changed.

The R4-2 and R11-3b signs were added.

The border was deleted from the R5-1 sign.

The code for the ROAD CLOSED 10 MILES AHEAD sign was changed from “**R11-3**” to “**R11-3a**”.

Figure 5B-2. Parking Signs on Low-Volume Roads [Page 5B-4 in the 2000 MUTCD]

(No changes were made to this figure.)

Chapter 5C Warning Signs

Sections 5C.01 to 5C.03

(No changes were made to these Sections.)

Section 5C.04 Stop Ahead and Yield Ahead Signs (W3-1, W3-2)

In Paragraph 1 [“A Stop Ahead ...”], “**(W3-1a)**” was changed to “**(W3-1)**”.

In Paragraph 2 [“A Yield Ahead ...”], “**(W3-2a)**” was changed to “**(W3-2)**”.

In Paragraph 3 [“Word message (W3-1a ...”], “**(W3-1 and W3-2)**” was changed to “**(W3-1a and W3-2a)**”.

Section 5C.05 NARROW BRIDGE Sign (W5-2)

In the title, “**(W5-2a)**” was changed to “**(W5-2)**”.

The phrase “**Narrow Bridge (W5-2a)**” was changed to “**NARROW BRIDGE (W5-2)**”.

The second paragraph in the 2000 MUTCD was deleted.

Section 5C.06 ONE LANE BRIDGE Sign (W5-3)

In Paragraph 1 [“A ONE LANE ...”], the word “**two-way**” was added, the phrase “**more than ten percent of the traffic**” was changed to “**a high proportion of the traffic**” in Item B, and the phrase “**to a bridge or culvert**” was changed to “**to the structure**” in Item C.

Section 5C.07 Hill Sign (W7-1)

In the title, “(W7-1a)” was changed to “(W7-1)”.

In Paragraph 2 [“The use of ...”], “(W7-1)” was added.

In Paragraph 3 [“Word messages (W7-1a) ...”], the sign “(W7-1)” was changed to “(W7-1a)”.

Section 5C.08 PAVEMENT ENDS Sign (W8-3)

(No changes were made to this Section.)

Section 5C.09 Vehicular Traffic and Nonvehicular Signs (W11 Series and W8-6)

In the title, the phrase “**Motorized Traffic and Crossing**” was changed to “**Vehicular Traffic and Nonvehicular**”.

In the first sentence of Paragraph 1 [“Vehicular Traffic signs ...”], the word “**Motorized**” was changed to “**Vehicular**”, and the words “**frequent**” and “**bicyclists**” were added.

In Paragraph 2 [“Nonvehicular signs (see ...)”], the word “**Crossing**” was changed to “**Nonvehicular**”, the word “**frequent**” was added, and the word “**bicyclist**” was deleted.

In Paragraph 3 [“A W7-3a, W16-2 ...”], the phrase “**Motorized Traffic or Crossing**” was changed to “**Vehicular Traffic or Nonvehicular**”.

Section 5C.10 Advisory Speed Plaque (W13-1)

(No changes were made to this Section.)

Section 5C.11 DEAD END or NO OUTLET Signs (W14-1, W14-1a, W14-2, W14-2a)

In the title, the phrase “**Plaques and**” was deleted, and the sign codes W14-1P and W14-2P were changed to W14-1a and W14-2a.

In Paragraph 1 [“The DEAD END ...”], the phrase “**The DEAD END and NO OUTLET plaques and signs**” was changed to “**The DEAD END (W14-1) and NO OUTLET (W14-2) signs (see Figure 5C-2) and the DEAD END (W14-1a) and NO OUTLET (W14-2a) signs (see Figure 2C-3)**”.

In Paragraph 2 [“If used, these ...”], the phrase “**or plaques**” was deleted.

Section 5C.12 NO TRAFFIC SIGNS Sign (W16-2)

In the title and in both paragraphs, “(W16-2)” was changed to “(W18-1)”.

Section 5C.13 Other Warning Signs

(No changes were made to this Section.)

Figure 5C-1. Horizontal Alignment and Intersection Warning Signs on Low-Volume Roads [Page 5C-2 in the 2000 MUTCD]

A figure number and title were added.

The periods were deleted from the English version of the W13-1 plaque, and the design of the metric version of the W13-1 plaque was changed.

The border was deleted from the W1-8 sign.

The symbols on the W2-1, W2-4, and W2-5 signs were changed to thicker lines.

Figure 5C-2. Other Warning Signs on Low-Volume Roads [Page 5C-3 in the 2000 MUTCD]

A figure number and title were added.

The W16-2 and W16-9p plaques were added.

The W5-2a sign was deleted.

The code for the Stop Ahead sign was changed from “W3-1a” to “W3-1”.

The code for the Yield Ahead sign was changed from “W3-2a” to “W3-2”.

The code for the No Traffic Signs sign was changed from “W16-2” to “W18-1”.

Chapters 5D and 5E

(No changes were made to these Chapters.)

Chapter 5F Traffic Control for Highway-Rail Grade Crossings

Section 5F.01 Introduction

In Paragraph 1 [“The criteria for ...”], the word “**these**” was changed to “**highway-rail grade crossing**”.

In the second sentence of Paragraph 2 [“Traffic control for ...”], the word “**reasonably**” was added.

Section 5F.02 Highway-Rail Grade Crossing (Crossbuck) Sign R15-1, R15-2)

In Paragraph 2 [“A strip of retroreflective white material not ...”], the word “**mounted**” was changed to “**used**”, and the phrase “**at all highway-rail grade crossings, except those where Crossbuck signs have been installed back-to-back**” was added.

In Paragraph 3 [“A strip of retroreflective white material, not ...”], the phrase “**Also, a similar 50 mm (2 in) strip**” was changed to “**A strip of retroreflective white material, not less than 50 mm (2 in) in width,**”, the phrase “**at passive highway-rail grade crossings**” was added, the phrase “**near ground level**” was changed to “**within 0.6 m (2 ft) above the edge of the roadway**”, and the phrase “**except on the side of those supports where a STOP (R1-1) or YIELD (R1-2) sign or flashing lights have been installed or on the back side of supports for Crossbuck signs installed on one-way streets**” was added.

Section 5F.03 Highway-Rail Grade Crossing Advance Warning Signs (W10-Series)

(No changes were made to this Section.)

Section 5F.04 STOP and YIELD Signs (R1-1, R1-2)

In Paragraph 1 [“STOP (R1-1) or ...”], the phrase “**consistent with the provisions of Sections 2B.04 to 2B.10**” was added.

In Paragraph 2 [“A Stop Ahead ...”], the word “**reasonably**” was added.

Sections 5F.05 and 5F.06

(No changes were made to these Sections.)

Figure 5F-1. Highway-Rail Grade Crossing Signs for Low-Volume Roads [Page 5F-2 in the 2000 MUTCD]

A figure number and title were added.

The symbols on the W10-2, W10-3, and W10-4 signs were changed to thicker lines.

Chapter 5G Temporary Traffic Control Zones

Sections 5G.01 to 5G.02

(No changes were made to these Sections.)

Section 5G.03 Channelization Devices

In Paragraph 2 [“To alert, guide, ...”], the phrase “**temporary traffic control zone**” was changed to “**work space**”.

Section 5G.04 Markings

(No changes were made to this Section.)

Section 5G.05 Other Traffic Control Devices

Paragraph 2 [“Some of the ...”] was added.

Figure 5G-1. Temporary Traffic Control Signs on Low-Volume Roads [Page 5G-2 in the 2000 MUTCD]

A figure number and title were added.

The code for the BE PREPARED TO STOP sign was changed from “**W20-7b**” to “**W3-4**”.

The periods were deleted from the English version of the W13-1 plaque, and the design of the metric version of the W13-1 plaque was changed.

The code for the 500 FEET plaque was changed from “**W16-1**” to “**W16-2**”.

The design of the W20-7a sign was corrected.

The W8-12 sign was deleted.

Part 6 Temporary Traffic Control

Chapter 6A General

Section 6A.01 General

Paragraphs 1 [“Whenever the acronym ...”] and 2 were added.

In Paragraph 3 [“When the normal ...”], the phrases “**(including accessible passage)**” and “**(and accessibility)**” were added.

In Paragraph 4 [“The primary function ...”], the word “**reasonably**” was added before the word “safe”, the phrase “**vehicles, bicyclists, and pedestrians**” was changed to “**road users**”, and the phrase “**, responders to traffic incidents,**” was added.

In the third sentence of Paragraph 5 [“Of equal importance ...”], the phrase “**and incident management responders**” was added.

In Paragraph 6 [“Consideration for road ...”], the phrase “**and responder**” was added in the first sentence, and the phrase “**and the efficient resolution of traffic incidents**” was added to the second sentence.

In Paragraph 7 [“No one set ...”], the phrase “**or incident**” was added in the first sentence, and the phrase “**or incident management activity**” was added in the last sentence.

In Paragraph 9 [“TTC plans and ...”], the phrase “**incident management**” was changed to “**the management of traffic incidents**”.

Paragraph 10 [“Temporary facilities, including ...”] was added.

In Paragraph 11 [“The TTC plan ...”], the last sentence was added.

Chapter 6B Fundamental Principles

Section 6B.01 Fundamental Principles of Temporary Traffic Control

Paragraph 1 [“Whenever the acronym ...”] was added.

In Paragraph 2 [“The needs and ...”], the phrase “**needs and**”, the word “**all**”, and the phrase “**(motorists, bicyclists, and pedestrians within the highway, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA), Title II, Paragraph 35.130)**” were added. The phrase “**incident management**” was changed to “**the management of traffic incidents**”.

In both the second and third sentences of Paragraph 3 [“Construction, maintenance, utility...”], the word “**extra**” was deleted.

In Paragraph 4 [“Special plans preparation ...”], the word “**police**” was changed to the phrase “**law enforcement**”.

In Paragraph 6 [“Experience has shown...”], the second sentence was deleted.

In Paragraph 7 [“Road user and ...”], the phrase “**and accessibility**” was added in both the first and second sentences. The word “**all**” was added prior to the word “motorists” in the second sentence. The phrase “**(including those with disabilities)**” was added in the second sentence.

In Paragraph 8 [“Formulating specific plans ...”], the phrase “**incident management temporary traffic control**” was changed to “**TTC at traffic incidents**”.

In Item E of Paragraph 10 [“Road user movement ...”], the phrase “**, including those with disabilities,**” was added.

In Item A of Paragraph 11 [“Motorists, bicyclists, and ...”], the last sentence was added.

In Item B of Paragraph 11 [“Motorists, bicyclists, and ...”], the last sentence was added.

In the last sentence of Item A of Paragraph 12 [“To provide acceptable ...”], the word “**reasonably**” was added prior to the word “safe”.

In the first sentence of Item B of Paragraph 12 [“To provide acceptable ...”], the word “**reasonably**” was added, and the word “**promote**” was changed to “**provide**”.

In Item B of Paragraph 13 [“Attention should be ...”], the word “**detectable**” was added.

In Paragraph 15 [“Good public relations ...”], Items A and F were added, and the word “**police**” was changed to the phrase “**law enforcement**” in Item D.

Paragraph 16 [“Before any new ...”] was added.

Chapter 6C Temporary Traffic Control Elements

Section 6C.01 Temporary Traffic Control Plans

Paragraphs 1 [“Whenever the acronym ...”] and 2 were added.

In Paragraph 3 [“A TTC plan ...”], the phrase “**or an incident area**” was added in the first sentence, and the word “**reasonably**” was added in the second sentence.

In the last sentence of Paragraph 4 [“TTC plans range ...”], the phrase “**nature and**” was added.

The last sentence of Paragraph 7 [“Traffic control planning ...”] was added.

Paragraph 8 [“Provisions for effective continuity of accessible ...”] was added.

In the second sentence of Paragraph 12 [“Provisions for effective continuity of transit ...”], the phrase “**Where applicable,**”, the word “**accessible**”, and the phrase “**including person with disabilities,**” were added.

In the third sentence of Paragraph 14 [“Reduced speed limits...”], the word “**reasonably**” was added.

Section 6C.02 Temporary Traffic Control Zones

In Paragraph 1 [“A TTC zone ...”], the word “**police**” was changed to the phrase “**uniformed law enforcement officers**”, and the word “**officials**” was changed to “**personnel**”.

In Paragraph 2 [“A work zone ...”], the phrase “**rotating/strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

In Paragraph 3 [“An incident area ...”], the phrase “**road user**” was changed to “**traffic**” in the first sentence. The last sentence was added.

Section 6C.03 Components of Temporary Traffic Control Zones

(No changes were made to this Section.)

Section 6C.04 Advance Warning Area

In Paragraph 2 [“The advance warning area may ...”], the phrase “**rotating/strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Section 6C.05 Transition Area

The second sentence of Paragraph 1 [“The transition area ...”] was relocated from the third paragraph of the 2000 MUTCD.

Section 6C.06 Activity Area

Paragraph 11 [“If a longitudinal ...”] was added.

In Paragraph 13 [“When a shadow ...”], the phrase “**formidable device, such as a**” was deleted, the phrase “**or changeable message sign**” was added, the phrase “**such an**”

island” was changed to **“a closed lane in advance of a work space”**, and the phrase **“in front of the device functions as a buffer”** was changed to **“upstream of the vehicle, arrow panel, or changeable message sign constitutes the buffer space”**.

In Paragraph 16 [“When work occurs ...”], the phrase **“an incident management vehicle storage space”** was changed to **“a vehicle storage or staging space”**, the phrase **“so that”** was changed to **“for incident response and”**, and the phrase **“and fire apparatus) so that these vehicles”** was added.

In Paragraph 17 [“If used, an ...”], the phrase **“incident response and”** was added.

Section 6C.07 Termination Area

Paragraph 3 [“A longitudinal buffer ...”] was added.

Section 6C.08 Tapers

In Paragraph 4 [“The appropriate taper ...”], the sentence **“The criteria for determining the taper length (L) is shown in Table 6C-2 and should be the minimum used”** was changed to **“The appropriate taper length (L) should be determined using the criteria shown in Tables 6C-3 and 6C-4”**.

Section 6C.09 Detours and Diversions

(No changes were made to this Section.)

Section 6C.10 One-Lane, Two-Way Traffic Control

In Paragraph 4 [“If traffic on ...”], the phrase **“with a flagger used as described in Section 6F.54”** was added.

Section 6C.11 Flagger Method of One-Lane, Two-Way Traffic Control

(No changes were made to this Section.)

Section 6C.12 Flag Transfer Method of One-Lane, Two-Way Traffic Control

In the second sentence of Paragraph 1 [“The driver of ...”], the word **“reasonably”** was added.

Sections 6C.13 to 6C.15

(No changes were made to these Sections.)

Figure 6C-1. Component Parts of a Temporary Traffic Control Zone

Sign symbols were added on the left side of the roadway.

The longitudinal buffer space near the top of the figure was labeled.

A shoulder taper and label was added.

The “30 m (100 ft)” dimension was deleted from the label for the downstream taper.

Figure 6C-2. Types of Tapers and Buffer Spaces

The long white arrows on the pavement were replaced with direction of travel symbols to make it clear that these are not intended to be pavement markings.

The “30 m (100 ft)” dimension was deleted from the label for the downstream taper.

Figure 6C-3. Example of a One-Lane, Two-Way Traffic Taper

A downstream buffer space, a downstream taper, and the corresponding cones and labels were added.

Table 6C-1. Suggested Advance Warning Sign Spacing

(No changes were made to this table.)

Table 6C-2. Stopping Sight Distance as a Function of Speed

This table was added. It is identical to Table 6E-1.

Table 6C-3. Taper Length Criteria for Temporary Traffic Control Zones [top portion of Table 6C-2 in the 2000 MUTCD]

(No changes were made to this table.)

Table 6C-4. Formulas for Determining Taper Lengths [bottom portion of Table 6C-2 in the 2000 MUTCD]

A table number and title were added.

Chapter 6D Pedestrian and Worker Safety

Section 6D.01 Pedestrian Considerations

Paragraphs 1 [“Whenever the acronym ...”] and 2 were added.

In Paragraph 3 [“A wide range ...”], the phrase “**can be expected at work sites**” was changed to “**might be affected by TTC zones**” in the first sentence, the phrase “**All of**” was deleted in the second sentence, and the third sentence was added.

Paragraphs 4 [“The most desirable ...”] and 5 were added.

In Paragraph 7 [“Advance notification of ...”], the phrase “**to the maintaining agency**” was added at the end of the first sentence. The second sentence was added.

In Paragraph 8 [“It must be ...”], the phrase “**or to add distance or out-of-the-way travel to a destination**” was added.

In Paragraph 9 [“Adequate provisions should ...”], the phrase “**or by engineering judgment**” was added to the end of the first sentence. The second sentence was added.

In Item C of Paragraph 10 [“The following three ...”], the word “**reasonably**” and phrase “**, and accessible**” were added in the first sentence. The second and third sentences were added.

Paragraph 11 [“A pedestrian route ...”] was added.

In Paragraph 12 [“Consideration should be ...”], the phrase “**Unless a reasonably safe route that does not involve crossing the roadway can be provided,**” was added in the second sentence. In the third sentence, the phrase “**(rather than midblock locations)**” was added.

In Paragraph 14 [“When pedestrian movement ...”], the second and fourth sentences were added. In the third sentence, the phrase “**that could cause a tripping hazard or could be a barrier to wheelchair use**” was added.

In Paragraph 15 [“Whenever it is ...”], the phrase “**such as cones, tubular markers, barricades and drums, or other suitable fencing**” was deleted.

Paragraph 16 [“Maintaining a detectable ...”] was added.

In Paragraph 22 [“Access to the ...”], the phrases “**by worker and equipment**” and “**where no curb ramps are available**” were added.

In Paragraph 23 [“A canopied walkway ...”], the phrase “**, and to provide a covered passage for pedestrians**” was added.

In Paragraph 26 [“If a temporary ...”], the word “**suit**” was changed to “**accommodate**”.

In Paragraph 32 [“If a significant ...”], the word “**high**” was changed to “**significant**”.

In Paragraph 33 [“TTC devices, jersey ...”], the phrase “**Standard temporary traffic control devices**” was changed to “**TTC devices, jersey barriers, and wood or chainlink fencing with a continuous detectable edging**”.

Paragraph 34 [“Tape, rope, or ...”] was changed from Support to Guidance. The words “**Although**” and “**fencing**” were deleted. The phrase “**can help discourage pedestrian movements off the designated pathway, they cannot eliminate them entirely**” was changed to “**are not detectable, do not comply with the design standards in the American with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG)**” (see Section 1A.11), and should not be used as a control for pedestrian movements”.

The second sentence of Paragraph 35 [“The extent of ...”] was added.

Section 6D.02 Accessibility Considerations

This section was added.

Section 6D.03 Worker Safety Considerations [Section 6D.02 in the 2000 MUTCD]

In the title, the word “**Safety**” was added.

In Paragraph 2 [“Maintaining TTC zones ...”], the second and third sentences were added.

In Paragraph 3 [“The following are the ...”], the phrase “**worker safety and**” was added. Item B was replaced by new text and Items E and F were added.

In Item C of Paragraph 4 [“The following are additional ...”], the word “**police**” was changed to the phrase “**law Enforcement**” in two places.

Paragraph 5 [“Judicious use of ...”] was relocated from Item E of Paragraph 4 and was changed from Option to Support.

Chapter 6E Flagger Control

Section 6E.01 Qualification for Flaggers

Paragraph 1 [“Whenever the acronym ...”] was added.

In Paragraph 3 [“Because flaggers are ...”], the phrase “**road user**” was changed to the word “**public**”, the word “**frequent**” was changed to “**the greatest number of**”, the phrase “**of all highway workers**” was added, the phrase “**have the following minimum qualifications**” was changed to “**be trained in safe traffic control practices and public contact techniques. Flaggers should be able to satisfactorily demonstrate the**

following abilities". Items A through G in the 2000 MUTCD were replaced by Items A through E.

Section 6E.02 High-Visibility Safety Apparel

In the title, the word "**Clothing**" was changed to "**Safety Apparel**".

In Paragraph 1 ["For daytime and ..."], the phrase "**work, the flagger's vest, shirt, or jacket shall be orange, yellow, yellow-green, or a fluorescent version of these colors. For nighttime work, similar outside garments shall be retroreflective**" was changed to "**and nighttime activity, flaggers shall wear safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel" (see Section 1A.11) and labeled as meeting the ANSI 107-1999 standard performance for Class 2 risk exposure. The apparel background (outer) material color shall be either fluorescent orange-red or fluorescent yellow-green as defined in the standard**".

In the last sentence of Paragraph 1 and in Paragraph 3 ["When uniformed law ..."], the word "**clothing**" was changed to the phrase "**safety apparel**".

Paragraph 2 ["For nighttime activity ..."] was added.

Section 6E.03 Hand-Signaling Devices

In Paragraph 4 ["The STOP/SLOW paddle ..."], the word "**either**", the phrase "**or red**", and the phrase "**on the STOP face, and either white or yellow flashing lights on the SLOW face**" were added in the first sentence. The last sentence was added. In Item A, the phrases "**or red**" and "**and/or two white or yellow lights, one centered vertically above and one centered vertically below the SLOW legend; or**" were added. In Item B, the phrases "**or red**" and "**and/or two white or yellow lights, one centered horizontally on each side of the SLOW legend; or**" were added. In Item C, the phrase "**or red**", and "**and/or one white or yellow light centered below the SLOW legend; or**" were added. Items D and E were added.

Paragraphs 5 ["If flashing lights are used on the STOP face ..."] through 7 were added.

Section 6E.04 Flagger Procedures

(No changes were made to this Section.)

Section 6E.05 Flagger Stations

In Paragraph 1 ["Flagger stations shall ..."], the phrase "**far enough in advance of the work space so**" was changed to the word "**such**", and the phrase "**before entering the work space**" was changed to "**at an intended stopping point**".

In the first sentence of Paragraph 2 [“The distances shown ...”] was changed from Support to Option. The phrase “**Guidelines for determining the distance of the flagger station in advance of the work space are**” was changed to “**The distances**”, and the phrase “**, which provides information regarding the stopping sight distance as a function of speed, may be used for the location of a flagger station**” was added.

Paragraph 3 [“Flagger stations should ...”] was added.

Paragraph 4 [“Except in emergency ...”] was changed from Guidance to Standard. The phrase “**Except in emergency situations,**” was added, and the phrase “**proper advance warning signs**” was changed to “**an advance warning sign or signs**” in the first sentence. In the second sentence, the phrase “**Except in emergency situations,**” was added.

In Paragraph 7 [“At spot lane ...”], the word “**reasonably**” was added.

The seventh paragraph in the 2000 MUTCD was deleted.

Figure 6E-1. Use of Hand-Signaling Devices by Flaggers

(No changes were made to this figure.)

Table 6E-1. Stopping Sight Distance as a Function of Speed

The title was changed.

All of the distances were increased.

The 70 and 75 mph rows were added.

Chapter 6F Temporary Traffic Control Zone Devices

Section 6F.01 Types of Devices

Paragraphs 1 [“Whenever the acronym ...”] and 2 were added.

Paragraph 3 [“The design and ...”], the phrase “**(motorists, bicyclists, and pedestrians), including those with disabilities**” was added.

Paragraphs 4 [“FHWA policy requires ...”] and 6 [“As stated in ...”] were added.

In Paragraph 7 [“Traffic control devices ...”], the word “**traffic**” was changed to “**road users**”.

Section 6F.02 General Characteristics of Signs

In the second sentence of Paragraph 2 [“The colors for ...”], the word “**message**” was changed to “**legend**”, the phrase “**or 7**” was added, and the phrase “**yellow or**” was deleted.

Paragraph 3 [“Where the color ...”], and 4 were relocated from the end of Section 6F.01 in the 2000 MUTCD.

Paragraph 5 [“Warning and guide ...”] was added.

Paragraph 10 [“The sizes for ...”] was added.

In Paragraph 11 [“The dimensions of ...”], the phrase “**Part 6 are for standard sizes, which**” was changed to “**Table 6F-1**”, and the phrase “**, such as on freeways and expressways**” was added.

Paragraph 15 [“The requirement for ...”] was changed from Support to Standard. The phrase “**The requirement for sign illumination shall not be considered to be satisfied by**” was added, and the phrase “does not constitute external sign illumination” was deleted.

Section 6F.03 Sign Placement

Paragraph 3 [“The Provisions of ...”] was added.

Paragraph 7 [“Where it has ...”] was added.

The second sentence of Paragraph 8 [“Neither portable nor ...”] was added.

Paragraphs 18 [“Unshielded sign posts ...”] and 19 were added.

Sections 6F.04 and 6F.05

(No changes were made to these Sections.)

Section 6F.06 Regulatory Sign Design

Paragraph 1 [“TTC regulatory signs ...”] is now properly shown as a Standard.

Sections 6F.07 to 6F.09

(No changes were made to these Sections.)

Section 6F.10 Weight Limit Signs (R12-1, R12-2, R12-5)

In Paragraph 2 [“When weight restrictions ...”], the phrase “**because of the activity in a TTC zone**” was added.

Section 6F.11 STAY IN LANE Sign (R4-9)

(No changes were made to this Section.)

Section 6F.12 PEDESTRIAN CROSSWALK Sign (R9-8)

Paragraph 2 [“If a temporary ...”] was added.

Section 6F.13 SIDEWALK CLOSED Sign (R9-9, R9-10, R9-11, R9-11a)

In Paragraph 1 [“SIDEWALK CLOSED signs ...”], the phrase “**or rerouted by work activities**” was deleted from the first sentence. The second sentence was added.

In Paragraph 6 [“These signs are ...”], the word “**detectable**” and the phrase “**and to communicate with pedestrians that the sidewalk is closed**” were added in the first sentence. The second, third, and fourth sentences were added.

Section 6F.14 Special Regulatory Signs

Paragraph 3 [“Section 2B.17 contains ...”] was added.

Section 6F.15 Warning Sign Function, Design, and Application

In the second sentence of Paragraph 2 [“TTC warning signs ...”], the phrase “**symbol or message**” was changed to the word “**legend**”, the word “**message**” was changed to “**legend**”, the phrase “**yellow or**” was deleted, and the phrase “**or 7**” was added.

Paragraph 3 [“Warning signs used ...”] was added.

In Paragraph 5 [“In emergencies, available ...”], the phrase “**or fluorescent pink**” was added.

Paragraphs 8 [“Where road users ...”] and 9 were added.

Paragraph 12 [“For freeways and ...”] was added.

Section 6F.16 Position of Advance Warning Signs

(No changes were made to this Section.)

Section 6F.17 ROAD (STREET) WORK Sign (W20-1)

In Paragraph 1 [“The ROAD (STREET) WORK (W20-1) sign (see ...”], the phrase “**and on all intersecting roadways**” was deleted.

Paragraph 2 [“Where traffic can ...”] was added.

Sections 6F.18 to 6F.20

(No changes were made to these Sections.)

Section 6F.21 Lane(s) Closed Signs (W20-5, W20-5a)

In the second sentence of Paragraph 2 [“For a single ...”], “**W20-5a**” was added.

Section 6F.22 CENTER LANE CLOSED AHEAD Signs (W9-3, W9-3a)

(No changes were made to this Section.)

Section 6F.23 THRU TRAFFIC MERGE LEFT (RIGHT) Sign (W4-7)

In the title and in Paragraph 1, “**W4-1a**” was changed to “**W4-7**”.

Section 6F.24 Lane Ends Sign (W4-2)

In the title, the word “**Reduction**” was changed to “**Ends**”.

In Paragraph 1, the word “**Reduction**” was changed to “**Ends**”, and the phrase “**motor vehicle traffic lanes**” was changed to “**lanes for moving motor vehicle traffic**”.

Sections 6F.25 to 6F.27

(No changes were made to these Sections.)

Section 6F.28 EXIT OPEN, EXIT CLOSED, EXIT ONLY Signs (E5-2, E5-2A, E5-3)

In the title, the phrase “**EXIT ONLY**” and the sign code “**E5-3**” were added.

In Paragraph 1 [“An EXIT OPEN ...”], the phrase “**or EXIT ONLY (E5-3)**” was added.

Paragraph 2 [“When an exit ...”] was added.

Section 6F.29 Flagger Sign (W20-7a, W20-7)

In the second sentence of Paragraph 2 [“A distance legend ...”], “**(W20-7b)**” was changed to “**(W3-4)**”.

Sections 6F.30 to 6F.33

(No changes were made to these Sections.)

Section 6F.34 Motorized Traffic Signs (W8-6, W11-10)

This section was added.

Section 6F.35 Shoulder Work Signs (W21-5, W21-5a, W21-5b) [Section 6F.34 in the 2000 MUTCD]

In Paragraph 2 [“The Shoulder Work ...”], the phrase “**or AHEAD**” was added.

In Paragraph 4 [“On freeways and ...”], the phrase “**or AHEAD (W21-5b)**”, and “**(W21-5a)**” were added.

Sections 6F.36 and 6F.37 [Sections 6F.35 and 6F.36 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 6F.38 Signs for Blasting Areas [Section 6F.37 in the 2000 MUTCD]

The third paragraph in the 2000 MUTCD was deleted.

Section 6F.39 BLASTING ZONE AHEAD Sign (W22-1) [Section 6F.38 in the 2000 MUTCD]

In the second sentence, the word “**CELL**” was added.

Section 6F.40 TURN OFF 2-WAY RADIO AND CELL PHONE Sign (W22-2) [Section 6F.39 in the 2000 MUTCD]

In the title and in Paragraph 1, the word “**CELL**” was added.

Section 6F.41 END BLASTING ZONE Sign (W22-3) [Section 6F.40 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 6F.42 Shoulder Signs (W8-4, W8-9, W8-9a) [Section 6F.41 in the 2000 MUTCD]

In the title, the phrase “**SHOULDER DROP-OFF Sign**” was changed to “**Shoulder Signs W8-4, W8-9**”.

Paragraphs 1 [“The SOFT SHOULDER ...”] and 2 were added.

Paragraph 3 [“The SHOULDER DROP ...”] was changed from Standard to Guidance. The word “a” was changed to the phrase “**an unprotected**”, and the phrase “**and is not protected by portable barriers**” was changed to “**for a continuous length along the roadway, based on engineering judgment**”.

Section 6F.43 UNEVEN LANES Sign (W8-11) [Section 6F.42 in the 2000 MUTCD]

The phrase “**that are open to travel**” was added.

Section 6F.44 NO CENTER STRIPE Sign (W8-12) [Section 6F.43 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 6F.45 Double Reverse Curve Signs (W24 Series)

This section was added.

Section 6F.46 Other Warning Signs [Section 6F.44 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 6F.47 Special Warning Signs

This section was added.

Sections 6F.48 and 6F.49 [Sections 6F.45 and 6F.46 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 6F.50 Guide Signs [Section 6F.47 in the 2000 MUTCD]

In Paragraph 3 [“If additional temporary ...”], the phrase “**and border**” was added.

Paragraph 4 [“Guide signs used ...”] was added.

In Paragraph 5 [“When directional signs ...”], the phrase “**and border**” was added.

Paragraph 6 [“When permanent directional ...”] was added.

Section 6F.51 ROAD WORK NEXT XX km (MILES) Sign (G20-1) [Section 6F.48 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 6F.52 END ROAD WORK Sign (G20-2) [Section 6F.49 in the 2000 MUTCD]

In the title, “(G20-2a)” was changed to “(G20-2)”.

In Paragraph 1 [“When used, the ...”], the phrase “**When used,**” was added, “(G20-2a)” was changed to “(G20-2)”, and the phrase “**about 150 m (500 ft) beyond the temporary traffic control zone**” was changed to “**near the end of the termination area, as determined by engineering judgment**”.

Section 6F.53 Detour Signs (M4-8, M4-8a, M4-8b, M4-9, M4-9a, M4-9b, M4-9c, and M4-10) [Section 6F.50 in the 2000 MUTCD]

In the title, the phrase “**and Markers**” was deleted and “**M4-9a, M4-9b, M4-9c**” was added.

In Paragraph 1 [“Each detour shall ...”], the word “**markers**” was changed to “**signs**”.

Paragraph 2 [“Detour signs in ...”] was added.

In Paragraph 4 [“The DETOUR (M4-8) ...”], the word “**marker**” was changed to “**sign**” in two places.

In Paragraph 6 [“The DETOUR (M4-9)...”], the last word “**markers**” was changed to “**signs**”.

In Paragraph 8 [“The END DETOUR ...”], the phrase “**or END**” was added.

In Paragraph 9 [“When the END...”], the word “**marker**” was changed to “**sign**”.

Paragraphs 10 [“The Pedestrian/Bicycle ...”], 11, 12, and 13 [“The Pedestrian Detour ...”] were added.

Section 6F.54 PILOT CAR FOLLOW ME Sign (G20-4) [Section 6F.51 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 6F.55 Portable Changeable Message Signs [Section 6F.52 in the 2000 MUTCD]

In Paragraph 1 [“Portable Changeable Message ...”], the word “**Typically**” was deleted in the third sentence. The fourth sentence was added.

In Paragraph 3 [“Portable Changeable Message signs have ...”], which was relocated from the thirteenth paragraph in the 2000 MUTCD, the phrases “**control or**” and “**or special events**” were added.

Paragraph 4 [“The primary purpose ...”] was relocated from the fifteenth paragraph in the 2000 MUTCD.

In Paragraph 6 [“Portable Changeable Message signs should subscribe ...”], the phrase “**Section 2A.07 and other sections of**” was added.

In Paragraph 8 [“Portable Changeable Message signs should be ...”], the second sentence was added. The second sentence of the sixth paragraph in the 2000 MUTCD was deleted.

In Paragraph 9 [“The message panel ...”], the phrase “**(minimum of 3 seconds per phase)**” was added.

Paragraph 10 [“Messages should be ...”] was relocated from the last paragraph in the 2000 MUTCD.

Paragraphs 12 [“Smaller letter sizes ...”] and 13 were added.

In Paragraph 17 [“The mounting of ...”], the phrases “**on a trailer, a large truck, or a service patrol truck**” and “**in urban areas and 1.5 m (5 ft) above the roadway in rural areas**” were added.

In Paragraph 20 [“When Portable Changeable ...”], the phrase “**perform necessary lane changes, to adjust their speed, or to**” was added.

In Paragraph 21 [“The Portable Changeable ...”], the word “**ensure**” was changed to “**provide maximum**”.

In the second sentence of Paragraph 22 [“Portable Changeable Message signs should be placed ...”], the phrase “**or when within the clear zone, shielded with a barrier or crash cushion**” was deleted.

Section 6F.56 Arrow Panels [Section 6F.53 in the 2000 MUTCD]

Paragraph 2 [“An arrow panel in ...”] was added.

In Paragraph 3 [“If used, an ...”], the phrase “**If used,**” was added.

In the second sentence of Paragraph 4 [“An arrow panel should ...”], the phrase “**or when within the clear zone, shielded with a barrier or crash cushion**” was deleted.

Paragraph 18 [“For shoulder work ...”] was rearranged to provide more clarity.

In Paragraph 19 [“For a stationary...”], the phrase “**shifting or**” was deleted.

In Paragraph 24 [“A vehicle displaying ...”], the phrase “**rotating lights**” was changed to “**high-intensity rotating, flashing, oscillating,**”.

In Paragraph 25 [“Arrow panel(s) shall ...”], the phrases “**A single**” and “**more than one lane**” were deleted.

Paragraph 26 [“A portable changeable ...”] was added.

Section 6F.57 High-Level Warning Devices (Flag Trees) [Section 6F.54 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 6F.58 Channelizing Devices [Section 6F.55 in the 2000 MUTCD]

In the second sentence of Paragraph 3 [“Channelizing devices provide ...”], the word “**bicycle**” was changed to “**shared-use**”.

Paragraphs 4 [“Devices used to ...”], 5, 6, and 7 [“If drums, cones ...”] were added.

In Paragraph 8 [“Channelizing devices should ...”], the phrase “**in the immediate area**” was deleted from the last sentence.

Section 6F.59 Cones [Section 6F.56 in the 2000 MUTCD]

In Paragraph 2 [“For nighttime use ...”], the phrase “**700 mm (28 in) or larger cones**” was changed to “**cones that are 700 to 900 mm (28 to 36 in) in height**”.

Paragraph 3 [“Retroreflectorization of cones ...”] was added.

In Paragraph 5 [“Steps should be ...”], the phrase “**ensure that**” was changed to “**minimize the possibility of**”.

Paragraph 6 [“Cones should not ...”] was added.

Section 6F.60 Tubular Markers [Section 6F.57 in the 2000 MUTCD]

Paragraph 4 [“Tubular markers should not ...”] was added.

In Paragraph 7 [“Tubular markers may ...”], the phrase “**of moving motor vehicle traffic**” was added.

In Paragraph 8 [“When a noncylindrical ...”], the phrase “**to ensure**” was changed to “**in a manner such**”.

Section 6F.61 Vertical Panels [Section 6F.58 in the 2000 MUTCD]

In Paragraph 5 [“Markings for vertical ...”], “**174,000**” was changed to “**169,000**”.

Section 6F.62 Drums [Section 6F.59 in the 2000 MUTCD]

Paragraph 4 [“Drums should not be used ...”] was added.

Section 6F.63 Type I, II, or III Barricades [Section 6F.60 in the 2000 MUTCD]

In Paragraph 5 [“The minimum length ...”], “**174,000**” was changed to “**169,000**”.

Paragraphs 10 [“The width of ...”] and 11 were added.

In Paragraph 16 [“Ballast shall not ...”], the third sentence was added.

In Paragraph 22 [“Where provision is ...”], the phrase “**to ensure**” was changed to “**who will provide**”.

Section 6F.64 Direction Indicator Barricades [Section 6F.61 in the 2000 MUTCD]

In Paragraph 1 [“The Direction Indicator Barricade (see ...”], the phrase “**retroreflective horizontal arrow top panel and striped retroreflective bottom panel, both mounted horizontally to the ground**” was changed to “**One-Direction Large Arrow (W1-6) sign mounted above a diagonal striped, horizontally aligned, retroreflective rail**”.

In Paragraph 3 [“The Direction Indicator Barricade, including ...”], the phrase “**, including any associated ballast or lights,**” was added.

Section 6F.65 Temporary Traffic Barriers as Channelizing Devices [Section 6F.62 in the 2000 MUTCD]

Paragraphs 1 [“Temporary traffic barriers are ...”] and 2 were added.

In the second sentence of Paragraph 3 [“Temporary traffic barriers shall ...”], the phrase “**For nighttime use**” was changed to “**If used to channelize vehicular traffic**”, and the phrase “**, pavement markings, or channelizing devices for improved daytime and nighttime visibility**” was added.

Sections 6F.66 to 6F.68

These sections were added.

Section 6F.69 Temporary Raised Islands [Section 6F.63 in the 2000 MUTCD]

In Paragraph 5 [“The temporary raised ...”], the word “**driver**” was changed to “**motorist**”.

Paragraph 6 [“At pedestrian crossing ...”] was added.

Section 6F.70 Opposing Traffic Lane Divider [Section 6F.64 in the 2000 MUTCD]

Paragraph 2 [“Opposing traffic lane dividers shall ...”] was added.

Section 6F.71 Pavement Markings [Section 6F.65 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 6F.72 Temporary Pavement Markings [Section 6F.66 in the 2000 MUTCD]

In Paragraph 5 [“For temporary situations ...”], the phrase “**DO NOT PASS (R4-1), PASS WITH CARE (R4-2), and**” was added in the first sentence. In the second sentence, the phrase “**DO NOT PASS, WITH CARE and**” was added, and the phrase “**low-volume roads (as defined in Section 5A.01)**” was changed to “**roads with low volumes**”.

In Paragraph 6 [“If used, the ...”], the phrase “**If used, the DO NOT PASS, PASS WITH CARE, and**” was added.

Sections 6F.73 and 6F.74 [Sections 6F.67 and 6F.68 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 6F.75 Lighting Devices [Section 6F.69 in the 2000 MUTCD]

Paragraph 2 [“When used to ...”] was added.

Paragraph 5 [“During normal daytime ...”] was changed from Support to Option. The phrase “**are adequately**” was changed to “**may be**”, and the phrase “**rotating lights or strobe lights**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe lights**”.

In Paragraph 6 [“Although vehicle hazard ...”], the phrase “**rotating or strobe lights**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe lights**” in two places.

Section 6F.76 Floodlights [Section 6F.70 in the 2000 MUTCD]

In Paragraph 2 [“When nighttime work ...”], the phrase “**flagger stations,**” was deleted.

Paragraph 3 [“Except in emergency ...”] was added.

In Paragraph 4 [“Floodlighting shall not ...”], the phrase “, **flaggers, or workers**” was added.

Paragraph 6 [“Desired illumination levels ...”] was added.

Section 6F.77 Flashing Warning Beacons [Section 6F.71 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 6F.78 Warning Lights [Section 6F.72 in the 2000 MUTCD]

In the first sentence of Paragraph 8 [“Type A Low-Intensity Flashing warning lights, Type ...”], the phrase “**and Type D 360-degree Steady-Burn warning lights**” was added.

In Paragraph 14 [“Type C Steady-Burn ...”], the phrase “**and Type D 360-degree Steady-Burn warning lights**” was added.

In Paragraph 15 [“When used to ...”], the phrase “**and Type D 360-degree**” was added.

Section 6F.79 Steady-Burn Electric Lamps [Section 6F.73 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 6F.80 Temporary Traffic Control Signals [Section 6F.74 in the 2000 MUTCD]

Paragraph 4 [“Where pedestrian traffic ...”] was added.

Paragraph 7 [“The supports for ...”] was added.

In Paragraph 9 [“Factors related to ...”], the phrase “**including bicyclists and pedestrians**” was added to Item C. Item M was added.

Section 6F.81 Temporary Traffic Barriers [Section 6F.75 in the 2000 MUTCD]

Paragraph 2 [“The four primary ...”] was relocated from the seventh paragraph of Section 6G.11 in the 2000 MUTCD.

In the second sentence of Paragraph 5 [“Temporary traffic barriers shall ...”], the phrase “**or pavement marking**” was deleted.

Section 6F.82 Crash Cushions [Section 6F.76 in the 2000 MUTCD]

In the last sentence of Paragraph 2 [“Crash cushions shall ...”], the phrase “**to maintain their crashworthiness**” was added.

In the second sentence of Paragraph 5 [“Truck-mounted attenuators shall ...”], the phrase “**If used,**” was added, and the word “**They**” was changed to the phrase “**the shadow vehicle with the attenuator**”.

In the second sentence of Paragraph 6 [“Trucks or trailers ...”], the phrase “**rotating/strobe lights**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe lights**”.

In Paragraph 9 [“If used, the ...”], the phrase “**If used,**” was added.

Section 6F.83 Vehicle-Arresting System [Section 6F.77 in the 2000 MUTCD]

In the first sentence of Paragraph 1 [“Vehicle-arresting systems ...”], the word “**reasonably**” was added.

Section 6F.84 Rumble Strips [Section 6F.78 in the 2000 MUTCD]

In the first sentence of Paragraph 1 [“Transverse rumble strips consist ...”], the word “**Transverse**” and the phrase “**extend across the travel lanes to**” were added.

Paragraphs 2 [“Longitudinal rumble strips consist ...”], 3, and 4 [“If the color ...”] were added.

In Paragraph 5 [“Intervals between transverse ...”], the word “**transverse**” was added in both sentences.

In Paragraph 6 [“Transverse rumble strips should be ...”], the word “**Transverse**” was added.

In Paragraph 7 [“In urban areas ...”], the phrase “**care should be taken not to**” was changed to “**transverse rumble strips should be designed in a manner that does not**”, and the word “**panic**” was changed to “**unnecessary**”.

In Paragraph 8 [“Transverse rumble strips should not be placed on sharp ...”], the word “**Transverse**” was added.

Paragraphs 9 [“Rumble strips should ...”], 10, and 11 [“Longitudinal rumble strips should ...”] were added.

Section 6F.85 Screens [Section 6F.79 in the 2000 MUTCD]

In Paragraph 2 [“Screens should not ...”], the word “**motorist**” was changed to the phrase “**road user**”, and the word “**reasonably**” was added.

Section 6F.86 Future and Experimental Devices [Section 6F.80 in the 2000 MUTCD]

(No changes were made to this Section.)

Figure 6F-1. Height and Lateral Location of Signs—Typical Installations

The periods were deleted from the English version of the Advisory Speed plaque, and the design of the metric version of the Advisory Speed plaque was changed.

Figure 6F-2. Methods of Mounting Signs Other Than on Posts

The phrase “**above the traveled way**” was added in two places under the “0.3 m (1 ft) MIN.” dimensions.

Figure 6F-3. Regulatory Signs in Temporary Traffic Control Zones [Pages 6F-8 to 6F-10 in the 2000 MUTCD]

A figure number and title were added.

All of the sizes were deleted. (Sizes are now shown in Table 6F-1.)

The R2-6, R3-18, and R11-3b (BRIDGE OUT) signs were added.

The R2-5a, R2-5b, and R2-5c sign were deleted.

The metric version of the R11-3a sign was deleted.

The design of the metric version of the R2-1 sign was changed.

The code for the WRONG WAY sign was changed from “**R5-1A**” to “**R5-1a**”.

The code for the No Parking sign was changed from “**R8-3**” to “**R8-3a**”.

Figure 6F-4. Warning Signs in Temporary Traffic Control Zones [Pages 6F-14 to 6F-19 in the 2000 MUTCD]

A figure number and title were added.

All of the sizes were deleted. (Sizes are now shown in Table 6F-1.)

The W3-5, W3-5a, W9-3a, W11-10, W24-1, W24-1a, and W24-1b signs were added.

The W5-2a sign was deleted.

The code for the Stop Ahead sign was changed from “**W3-1a**” to “**W3-1**”.

The code for the Yield Ahead sign was changed from “**W3-2a**” to “**W3-2**”.

The code for the BE PREPARED TO STOP sign was changed from “**W20-7b**” to “**W3-4**”.

The code for the THRU TRAFFIC MERGE LEFT sign was changed from “**W4-1a**” to “**W4-7**”.

The code for the END ROAD WORK sign was changed from “**G20-2a**” to “**G20-2**”.

The “**W16-2**” code was added for the 500 FEET plaque below the W20-7a sign, and the phrase “SUPPLEMENTAL PLAQUE” was deleted.

The periods were deleted from the English version of the W13-1 plaque, and the design of the metric version of the W13-1 plaque was changed.

The designs of the W4-2, W8-9a, W9-2, W20-5a, and W22-2 signs were changed.

An asterisk was added next to the code for the W20-3 sign along with a note at the bottom of the page explaining the asterisk.

Figure 6F-5. Exit Open and Closed and Detour Signs [Page 6F-20 in the 2000 MUTCD]

A figure number and title were added.

All of the sizes were deleted. (Sizes are now shown in Table 6F-1.)

The E5-3, M4-9a, M4-9b, and M4-9c signs were added.

Figure 6F-6. Advance Warning Arrow Display Specifications [Figure 6F-3 in the 2000 MUTCD]

(No changes were made to this figure.)

Figure 6F-7. Channelizing Devices (Sheet 1 of 2) [Sheet 1 of 2 of Figure 6F-4 in the 2000 MUTCD]

“**MIN.**” was added in five places next to the height dimensions for the drum, tubular markers, and cones.

The 12-inch maximum dimension to the bottom of the vertical panel was added.

The drawing and dimensions of the tall cone were added.

The note at the bottom of the figure was added.

The three asterisks next to “VERTICAL PANEL” were deleted, and the explanations for two asterisks and three asterisks were deleted.

Figure 6F-7. Channelizing Devices (Sheet 2 of 2) [Sheet 2 of 2 of Figure 6F-4 in the 2000 MUTCD]

The bottom dimension line for the height of the direction indicator barricade was relocated to show that the dimension is to the ground, not to the bottom of the barricade.

The 45-degree angle for the stripes on the direction indicator barricade was added.

Two asterisks were added next to “DIRECTION INDICATOR BARRICADE”.

The note at the bottom of the figure was added.

The two asterisks next to the Type I, Type II, and Type III barricades were deleted, and the explanation for two asterisks was deleted.

Table 6F-1. Sizes of Temporary Traffic Control Signs

This table was added.

The sizes for the R9-8, W1-8, W4-1, W4-3, W4-5, W4-6, W13-4, W20-1, W20-2, W20-3, W20-4, W20-5, W20-5a, W20-7a, and W21-5b signs were changed

Chapter 6G Type of Temporary Traffic Control Zone Activities

Section 6G.01 Typical Applications

Paragraphs 1 [“Whenever the acronym ...”] and 2 were added.

In Paragraph 3 [“Each TTC zone ...”], the word “**road**” was changed to “**highway**”.

Section 6G.02 Work Duration

Paragraph 1 [“Chapter 6D and ...”] was added.

In Item C of Paragraph 3 [“The five categories ...”], the phrase “, **but less than 12 hours**” was changed to “**within a single daylight period**”.

In Paragraph 11 [“Maintaining reasonably safe ...”], the word “**reasonably**” was added.

In the first sentence of Paragraph 13 [“Appropriately colored or ...”], the phrase “**rotating/strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

In Paragraph 15 [“Considering these factors ...”], the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

In Paragraph 17 [“Warning signs, high-intensity ...”], the phrase “**rotating/strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

In Paragraph 18 [“Flaggers may be ...”], the phrase “**that often involve frequent short stops**” was added.

In Paragraph 23 [“For mobile operations ...”], “**4 km/h**” was changed to “**5 km/h**”.

In Paragraph 24 [“At higher speeds ...”], the phrase “**rotating/strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

In Paragraph 26 [“Mobile operations that...”], the word “**rotating**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Section 6G.03 Location of Work

Paragraph 1 [“Chapter 6D and ...”] was added.

In Paragraph 2 [“The choice of ...”], the phrase “**(including bicyclists and pedestrians)**” was added.

In the last sentence of Paragraph 3 [“When the work ...”], the word “**and**” was changed to “**TTC devices**”.

Section 6G.04 Modifications To Fulfill Special Needs

Paragraph 1 [“Chapter 6D and ...”] was added.

In Paragraph 4 [“When conditions are ...”], the phrase “**giving particular attention to the provisions set forth in Chapter 6B and by**” was added in the first sentence. In Item A.3, the phrase “**(see Section 6F.68 for information regarding detectable edging for pedestrians)**” was added. In Item A.7, the phrase “**(including pedestrian signals and accessible pedestrian signals)**” was added.

The fourth, fifth, and sixth paragraphs in the 2000 MUTCD were deleted.

Paragraph 5 [“Where pedestrian or ...”] was added.

Section 6G.05 Work Affecting Pedestrian and Bicycle Facilities

This section was added.

Section 6G.06 Work Outside of Shoulder [Section 6G.05 in the 2000 MUTCD]

Paragraph 1 [“Chapter 6D and ...”] was added.

In the second sentence of Paragraph 2 [“When work is ...”], “**4.5 m**” was changed to “**4.6 m**”.

In Paragraph 3 [“Where the above ...”], the phrase “**rotating/strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

In Paragraph 7 [“A general warning ...”], the phrase “**closer to the traveled way**” was changed to “**onto the shoulder**”.

Section 6G.07 Work on the Shoulder with No Encroachment [Section 6G.06 in the 2000 MUTCD]

Paragraph 1 [“Chapter 6D and ...”] was added.

The third paragraph in the 2000 MUTCD was deleted.

Section 6G.08 Work on the Shoulder with Minor Encroachment [Section 6G.07 in the 2000 MUTCD]

Paragraph 1 [“Chapter 6D and ...”] was added.

In the first sentence of Paragraph 2 [“When work takes ...”], the phrase “**and bicycles**” was added.

Section 6G.09 Work Within the Median [Section 6G.08 in the 2000 MUTCD]

Paragraph 1 [“Chapter 6D and ...”] was added.

In Paragraph 2 [“If work in ...”], “**4.5 m**” was changed to “**4.6 m**”.

Section 6G.10 Work Within the Traveled Way of Two-Lane Highways [Section 6G.09 in the 2000 MUTCD]

Paragraph 1 [“Chapter 6D and ...”] was added.

In Paragraph 3 [“When a detour ...”], the word “**Marker**” was deleted.

In Paragraph 4 [“When an entire ...”], the phrase “**ROAD CLOSED TO THRU TRAFFIC**” was changed to “**ROAD CLOSED AHEAD, LOCAL TRAFFIC ONLY**”.

In Paragraph 8 [“STOP/YIELD sign control...”], the phrase “**low-volume roads**” was changed to “**roads with low traffic volumes**”.

Section 6G.11 Work Within the Traveled Way of Urban Streets [Section 6G.10 in the 2000 MUTCD]

Paragraph 1 [“Chapter 6D and ...”] was added.

In Paragraph 4 [“If the TCC affects the movement of pedestrians ...”], the second sentence was added.

In Paragraph 5 [“If the TTC zone affects the movement of bicyclists ...”], the phrase “, **bicycle paths**” was deleted.

Paragraph 6 [“Where transit stops ...”] was added.

Paragraph 8 [“Work sites within ...”] was added.

In Paragraph 11 [“As discussed under ...”], the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”, and the phrase “**or high-level warning devices**” was added.

Section 6G.12 Work Within the Traveled Way of Multi-lane, Nonaccess Controlled Highways [Section 6G.11 in the 2000 MUTCD]

Paragraph 1 [“Chapter 6D and ...”] was added.

In Paragraph 2 [“Work on multi-lane...”], the phrase “**of moving motor vehicle traffic**” was added.

In Paragraph 3 [“When a lane...”], the phrase “**for other than a mobile operation**” was added.

The seventh paragraph in the 2000 MUTCD was relocated to Paragraph 2 of Section 6F.81.

Section 6G.13 Work Within the Traveled Way at an Intersection [Section 6G.12 in the 2000 MUTCD]

Paragraph 1 [“Chapter 6D and ...”] was added.

In Paragraph 3 [“TTC zones in...”], the phrase “**and accessible pedestrian signals and detectors**” was added.

In Paragraph 5 [“When work will...”], the word “signalized” was deleted, which changed the fifth paragraph of the 2000 MUTCD (regarding nonsignalized intersections) from Guidance to Standard. The phrase “**or pedestrian accessibility**” was added.

Paragraph 7 [“Pedestrian crossing near...”] was added.

In Paragraph 15 [“If the work...”], the phrase “**or uniformed law enforcement officers**” was added, and the phrase “**assign the right-of-way**” was changed to “**direct road users**” in Item B. In Item C, the word “**small**” was changed to the phrase “**to a minimum**”.

Section 6G.14 Work Within the Traveled Way of Freeways and Expressways [Section 6G.13 in the 2000 MUTCD]

In Paragraph 1 [“Problems of TTC...”], the word “**reasonably**” was added in the second sentence. In the third sentence, the phrase “**and bicycles, if permitted**” was added.

Section 6G.15 Two-Lane, Two-Way Traffic on One Roadway of a Normally Divided Highway [Section 6G.14 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 6G.16 Crossovers [Section 6G.15 in the 2000 MUTCD]

In Item B of Paragraph 1 [“The following are...”], “**15 km/h**” was changed to “**16 km/h**”.

Sections 6G.17 and 6G.18

(No changes were made to these Sections.)

Section 6G.19 Work in the Vicinity of Highway-Rail Grade Crossings [Section 6G.18 in the 2000 MUTCD]

In Paragraph 1 [“When highway-rail grade...”], the phrase “**stopped on the railroad tracks with no means of escape**” was changed to “**queued across the railroad tracks**” in the first sentence. In the second sentence, the word “**uniformed**” was added.

Section 6G.19 Control of Traffic Through Incident Areas in the 2000 MUTCD was relocated to **Chapter 6I**.

Section 6G.20 Temporary Traffic Control During Nighttime Hours

This section was added.

Chapter 6H Typical Applications

Section 6H.01 Typical Applications

Paragraphs 1 [“Whenever the acronym...”] and 2 were added.

In Paragraph 3 [“Chapter 6G contains...”], the last sentence was added.

In Paragraph 4 [“Procedures for establishing...”], the phrase “**motorcycles, and bicycles**” was added.

In the second sentence of Paragraph 6 [“Figures and tables ...”], the phrase “**Table 6C-2 is used for the determination of taper lengths, while Table 6C-1 can be used for**” was changed to “**Also, Table 6H-3 is used for the determination of**”.

In Paragraph 7 [“Table 6H-1 is...”], the last sentence was added.

Table 6H-1. Index to Typical Applications

The descriptions for TA-11, TA-15, and TA-16 were changed to make it clear that these titles do not refer only to the low-volume roads that are discussed in Part 5.

In the header row just prior to TA-30, the word “**Undivided**” was changed to the phrase “**Nonaccess Controlled**”.

Table 6H-2. Meaning of Symbols on Typical Application Diagrams

The symbols were rearranged to be in alphabetical order.

The phrase “(shown facing down)” was added to the label for the arrow panel support.

Table 6H-3. Meaning of Letter Codes on Typical Application Diagrams

The formulas for L at the bottom of the table were relocated to a new Table 6H-4.

Table 6H-4. Formulas for Determining Taper Lengths [bottom of Table 6H-3 in the 2000 MUTCD]

A table number and title were added.

Typical Application 1

Notes:

In Note 3, “**4.5 m**” was changed to “**4.6 m**”.

In Note 4, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Notes 5 and 6 were derived by splitting up the fifth note in the 2000 MUTCD. In Note 5, the word “**can**” was changed to “**may**”. In both notes, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Figure:

(No changes were made to this figure.)

Typical Application 2

Notes:

(No changes were made to these notes.)

Figure:

The design of the TURN OFF 2-WAY RADIO sign was changed in three places.

Typical Application 3

Notes:

In Note 4, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Notes 5 and 6 were derived by splitting up the fifth note in the 2000 MUTCD. In Note 5, the word “**can**” was changed to “**may**”. In both notes, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Note 7 was added.

Figure:

Labels for the shoulder tapers were added in three places.

Typical Application 4

Notes:

In Note 4, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Notes 5 and 6 were derived by splitting up the fifth note in the 2000 MUTCD. In Note 5, the word “**can**” was changed to “**may**”. In both notes, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Figure:

(No changes were made to this figure.)

Typical Application 5

Notes:

Note 4 was changed from Guidance to Standard. The phrase “**protection should be provided for the beginning of the barrier (see Section 6F.75)**” was changed to “**the ends of the barrier shall be treated in accordance with the provisions of Section 6F.81**”.

Figure:

In the label for the crash cushion, the word “**(optional)**” was changed to the phrase “**(see Section 6F.82)**”.

Typical Application 6

Notes:

In Note 9, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Notes 10 and 11 were derived by splitting up the tenth note in the 2000 MUTCD. In Note 10, the word “**can**” was changed to “**may**”. In both notes, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Figure:

The label and dimension lines for the optional buffer space were added.

Typical Application 7

Notes:

In Note 4, the word “**Roadside**” was changed to “**Temporary**”.

In Note 5, the text was significantly changed from the text in the fourth note of the 2000 MUTCD.

In Note 6, the phrase “**When the tangent section of the diversion is more than 180 m (600 ft),**” was added.

Figure:

The Right Reverse Curve sign and the associated Advisory Speed plaques were deleted.

The Left Reverse Curve sign was changed to a Double Reverse Curve sign.

The periods were deleted from the English version of the Advisory Speed plaque, and the design of the metric version of the Advisory Speed plaque was changed.

Typical Application 8

Notes:

Note 2 was changed from Guidance to Option.

The third note in the 2000 MUTCD was deleted.

In Note 3, the word “**Marker**” was changed to “**Sign**”.

Note 5 was added.

Figure:

The barricades at the intersection were moved into the roadway.

The Detour sign was deleted from the barricade blocking the southbound lane.

The stripes were reversed on the barricade blocking the southbound lane.

Typical Application 9

Notes:

In Note 6, the word “**markers**” was changed to “**signs**”.

Figure:

The workspace was expanded such that it occupies the entire distance between the intersections, and the barricade and sign at the north end of the workspace were deleted.

The stripes were reversed on the barricade at the south end of the workspace.

The size of the TO signs was changed in two places near the top right corner of the figure.

The ROAD CLOSED XX MILES AHEAD sign was changed to a ROAD CLOSED sign above the Detour sign on the barricade at the north end of the workspace.

The ROAD CLOSED XX MILES AHEAD sign was deleted from the barricade on the side of the road near the south end of the workspace.

The legend LOCAL TRAFFIC ONLY was deleted from the ROAD CLOSED XX MILES AHEAD signs just beyond the intersection near the bottom right corner of the figure. A WEST SR 4 route sign assembly was added above this sign.

The SR 4 and SR 17 route signs were reversed for the route sign assemblies facing southbound and eastbound traffic at the intersection near the bottom right corner of the figure.

Typical Application 10

Notes:

Note 4 was added to take the place of the fifth note in the 2000 MUTCD, which was deleted.

Note 5 was changed from Guidance to Standard. The phrase “**Floodlights should be provided as needed to mark**” was changed to “**shall be illuminated, except in emergencies**”.

In Note 6, the word “Advance” was deleted.

In Note 7, the word “**backups**” was changed to “**queues**”.

In Note 11, “**4.5 m**” was changed to “**4.6 m**”.

Figure:

The position of the flagger controlling southbound traffic was relocated to be further from the workspace.

The note about the buffer space was added.

Typical Application 11

Notes:

The title was changed to make it clear that this figure does not relate only to the low-volume roads that are discussed in Part 5.

In Note 1.b, the word “**Drivers**” was changed to the phrase “**Road users**”, and the phrase “**and have sufficient visibility of approaching vehicles**” was added.

The second note in the 2000 MUTCD was deleted.

Figure:

The title was changed to make it clear that this figure does not relate only to the low-volume roads that are discussed in Part 5.

The stop line was changed to a yield line.

The phrase “(See Section 3B.16)” was added to the label for the yield line.

The periods were deleted from the English version of the Advisory Speed plaque, and the design of the metric version of the Advisory Speed plaque was changed in two places.

Typical Application 12

Notes:

In Note 2, the word “**qualified**” was changed to “**authorized**”. The second sentence was added.

In Note 4, the phrase “**for intermediate and long-term closures**” was added.

Note 5 was added.

Figure:

The dimensions were added for the length of the southbound no-passing zone.

“**MAX.**” was added to the dimension for the length of the downstream taper.

The periods were deleted from the English version of the Advisory Speed plaque, and the design of the metric version of the Advisory Speed plaque was changed in two places.

Typical Application 13

Notes:

In Note 2, the first sentence was added. In the second sentence, the phrase “**, if used for this application,**”.

Note 3 was added.

The third note in the 2000 MUTCD was deleted.

Figure:

(No changes were made to this figure.)

Typical Application 14

Notes:

In Note 4, the phrase “**Type III barricades shall be in place**” was changed to “**the haul road shall be closed with Type III barricades**”.

Note 6 was added.

Figure:

In the title for the top drawing, the word “TEMPORARY” was added.

In the top drawing, the arrangement and locations of the signal faces was changed.

In the top drawing, the optional warning light was relocated to above the Signal Ahead sign.

In the bottom drawing, “**See Note 6**” was changed to “**See Note 4**” in two places.

Typical Application 15

Notes:

The title was changed to make it clear that this figure does not relate only to the low-volume roads that are discussed in Part 5.

Note 2 was added.

In Note 6, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Notes 7 and 8 were derived by splitting up the sixth note in the 2000 MUTCD. In Note 7, the word “**can**” was changed to “**may**”. In both notes, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Figure:

The title was changed to make it clear that this figure does not relate only to the low-volume roads that are discussed in Part 5.

Labels indicating that the flag trees are optional were added in two places.

Additional cones were placed along the centerline further in advance of the workspace in both directions.

Typical Application 16

Notes:

The title was changed to make it clear that this figure does not relate only to the low-volume roads that are discussed in Part 5.

In Note 4, the word “**clothing**” was changed to the phrase “**safety apparel as described in Section 6D.03**”.

Figure:

The title was changed to make it clear that this figure does not relate only to the low-volume roads that are discussed in Part 5.

The 200-foot minimum distance was changed to the phrase “**Buffer space**” in two places.

Typical Application 17

Notes:

In Note 1, the phrase “**with the bottom of the sign at a minimum height of 1,200 mm (48 in) above the pavement**” was changed to “**in a manner such that they are not obscured by equipment or supplies**” in the first sentence. The phrase “on vehicle-mounted signs” was added in the second sentence.

In Note 2, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Notes 3 and 12 were added.

In Note 8, the phrase “**Police patrol cars**” was changed to “**Law enforcement vehicles**”.

Note 9, which is a combination of the fifth and ninth notes in the 2000 MUTCD, changes the fifth note from Guidance to Option.

Figure:

The ONE LANE ROAD sign was deleted from the work vehicle.

Labels were added for the work vehicle and shadow vehicle.

The ROAD WORK AHEAD legend was deleted from the sign on the shadow vehicle and the rectangular sign was deleted. A note was added pointing at the blank sign.

Typical Application 18

Notes:

In Note 1, the phrase “**low-volume, low-speed facilities**” was changed to “**low-speed facilities having low traffic volumes**”.

In Note 2, the word “**drivers**” was changed to the phrase “**road users**”.

Figure:

(No changes were made to this figure.)

Typical Application 19

Notes:

Notes 1 and 2 were added.

Figure:

ROAD WORK AHEAD signs were added at the top and bottom of the figure.

The A and B dimensions were added near the top of the figure.

The stripes on the two barricades with the ROAD CLOSED TO THRU TRAFFIC signs on the left side of the figure were reversed, and these barricades were relocated to block only the departure lane. Second barricades were added in both places to block the other lane.

The stripes on the two barricades with One Way and Detour signs on the right side of the figure were changed.

A 100-foot dimension to the END DETOUR sign was added at the bottom of the figure.

Typical Application 20

Notes:

(No changes were made to these notes.)

Figure:

The stripes on the barricade with the ROAD CLOSED TO THRU TRAFFIC sign were reversed.

Typical Application 21

Notes:

In Note 6, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Notes 7 and 8 were derived by splitting up the seventh note in the 2000 MUTCD. In Note 7, the word “**can**” was changed to “**may**”. In both notes, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Figure:

A label indicating that the flag tree is optional was added.

Typical Application 22

Notes:

In Note 5, the phrase “**or pavement markings**” was added, and the phrase “(see Figure 6H-24)” was deleted.

Figure:

The label indicating that the arrow panel is optional was deleted.

Typical Application 23

Notes:

In Note 3, the phrase “**converted to**” was changed to “**reopened as**”.

Figure:

A LEFT LANE CLOSED AHEAD sign and the C dimension were added near the bottom of the figure.

The design of the Lane Ends sign was changed.

Typical Application 24

Notes:

In Note 5, the phrase “, **as shown**” was deleted.

Figure:

The design of the Lane Ends sign was changed.

The optional No Left Turn sign facing eastbound traffic was relocated to the top of the barricade.

Typical Application 25

Notes:

(No changes were made to these notes.)

Figure:

The ROAD WORK AHEAD sign and the A dimension near the top of the figure were relocated to show that the A dimension is measured from the start of the road work, not from the intersection.

A label indicating that the flag tree is optional was added.

Typical Application 26

Notes:

Note 2, which was the first note in the 2000 MUTCD, was changed from Guidance to Option.

In Note 6, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Notes 7 and 8 were derived by splitting up the seventh note in the 2000 MUTCD. In Note 7, the word “**can**” was changed to “**may**”. In both notes, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Figure:

A label indicating that the flag tree is optional was added.

Typical Application 27

Notes:

Note 3 was added.

In Note 6, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Notes 10 and 11 were derived by splitting up the ninth note in the 2000 MUTCD. In Note 10, the word “**can**” was changed to “**may**”. In both notes, the phrase “**rotating lights or strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Figure:

A label indicating that the flag tree on the west leg of the intersection is optional was added.

The flag tree on the south leg was relocated to the north leg of the intersection, and a label indicating that the flag tree is optional was added.

Typical Application 28

Notes:

Note 1 replaced the first note of the 2000 MUTCD.

Note 3 was added.

In Note 7, the phrase “**or Type D 360-degree Steady-Burn**” was added.

Figure:

The cones defining the pedestrian walking area were changed to barricades.

A note indicating that the minimum width of the pedestrian walking area is 36 inches was added.

Typical Application 29

Notes:

Note 1 replaced the first note of the 2000 MUTCD.

Note 3 was added.

Figure:

Pedestrian warning signs with AHEAD plaques were added in two places.

The temporary crosswalk lines were changed to be continuous across the centerline of the roadway.

The note about long-term stationary work was added near the bottom right corner of the figure.

Typical Application 30

Notes:

(No changes were made to these notes.)

Figure:

The design of the Lane Ends sign was changed in two places.

Typical Application 31

Notes:

In Note 4, the phrase “**in km/h (mph)**” was added.

In Note 7, the phrase “**Winding Road**” was changed to “**Double Reverse Curve**”. The phrase “**Two Lane**” was added in two places.

In Note 9, the first sentence in the 2000 MUTCD was deleted.

Figure:

The design of the Lane Ends sign was changed.

The optional arrow panel facing northbound traffic was deleted.

Typical Application 32

Notes:

Notes 2 and 4 were added.

In Note 6, the phrase “**transition area**” was changed to “**merging taper**”.

In Note 7, the word “**drivers**” was changed to the phrase “**road users**” in two places.

In Notes 8 and 9, the phrase “**When a highway-rail grade crossing exists within the activity area,**” was added.

In Note 9, “**4.5 m**” was changed to “**4.6 m**”.

Figure:

The design of the Lane Ends sign was changed in two places.

The ROAD CLOSED 450 M (1500 FT) signs were changed to ROAD CLOSED XX m (XX FT) signs in both directions.

The periods were deleted from the English version of the Advisory Speed plaque, and the design of the metric version of the Advisory Speed plaque was changed.

Labels indicating that the arrow panels are optional were deleted in two places.

The label indicating that the shoulder taper is optional was changed to “(see Note 2)”.

Typical Application 33

Notes:

In Note 1, the phrase “LANE REDUCTION” was changed to “Lane Ends”.

Note 3 was added.

Note 5, which was the third note in the 2000 MUTCD, was changed from Guidance to Support, and the phrase “Where conditions permit,” was added.

Figure:

A label indicating that the downstream taper is optional was added in the drawing on the left.

The arrow panel was deleted from the vehicle in the drawing on the right.

Labels indicating that the arrow panels are optional were deleted in both drawings.

The design of the Lane Ends sign was changed in both drawings.

The advance warning signs were changed to show actual distances of 800 m (1/2 MILE) and 1.6 km (1 MILE) in both drawings.

The phrase “(see Note 3)” was added below the shoulder taper labels in both drawings.

Typical Application 34

Notes:

Notes 1 and 4 were added.

In Note 2, the word “**merging**” was added, and the phrase “**downstream point where the barrier crosses the permanent edge line**” was changed to “**far end of the downstream taper**”.

Figure:

In the label for the crash cushion, the word “**(optional)**” was changed to the phrase “**(see Section 6F.82)**”.

A label indicating that the END ROAD WORK signs facing southbound traffic are optional was added.

The label indicating that the arrow panel is optional was deleted.

The design of the Lane Ends sign was changed.

Typical Application 35

Notes:

In Note 2, the phrase “**rotating lights, strobe**” was changed to “**high-intensity rotating, flashing, oscillating, or strobe**”.

Figure:

An optional truck-mounted attenuator was added to the work vehicle.

The label indicating that the truck-mounted attenuator on Shadow Vehicle 1 is optional was deleted.

Typical Application 36

Notes:

Note 4, which was a parenthetical phrase in the twelfth note in the 2000 MUTCD, was added.

In Note 6, the phrase “**Winding Road**” was changed to “**Double Reverse Curve**”.

In Note 11, the phrase “**Triple Lane Shift**” was changed to “**Three Lane Reverse Curve**”.

Figure:

The 500-foot dimension to the END ROAD WORK signs was deleted.

The phrase “and edge line” was deleted from the note about temporary solid white lane lines near the top of the figure.

The phrase “(see Section 6F.82)” was added to the label for the crash cushion.

The periods were deleted from the English version of the Advisory Speed plaque, and the design of the metric version of the Advisory Speed plaque was changed in three places.

Typical Application 37

Notes:

In Note 4, the word “center” was changed to the phrase “adjacent interior”.

In Note 5, the phrase “**If the shoulder**” was changed to “**When a shoulder lane is used that**”, and the word “**normal**” was added.

Figure:

The 500-foot dimension to the END ROAD WORK signs was deleted.

The label indicating that the arrow panel in the roadway is optional was deleted.

The periods were deleted from the English version of the Advisory Speed plaque, and the design of the metric version of the Advisory Speed plaque was changed.

The design of the Lane Ends sign was changed.

Typical Application 38

Notes:

In Note 10, the phrase “**If the shoulder**” was changed to “**When a shoulder lane is used that**”, and the word “**normal**” was added.

Figure:

Labels indicating that the arrow panels are optional were deleted in two places.

The design of the Lane Ends sign was changed.

Typical Application 39

Notes:

(No changes were made to these notes.)

Figure:

A shoulder taper for the southbound lanes was added near the top of the figure.

Labels indicating that the arrow panels are optional were deleted in two places.

The periods were deleted from the English version of the Advisory Speed plaque, and the design of the metric version of the Advisory Speed plaque was changed.

The design of the Lane Ends sign was changed.

The actual distances shown on the advance warning signs near the bottom of the figure were changed to “**XX**” on all six sign images.

Typical Application 40

Notes:

In Note 3, the word “reasonably” was added in the first sentence. The second sentence was added.

Figure:

The note indicating that Section 6F.55 should be referenced for channelizing device spacing was changed to 7.6 m (25 ft) spacing in two places.

Typical Application 41

Notes:

In Note 3, the phrase “**When the exit is closed,**” was added.

Figure:

The note indicating that Section 6F.55 should be referenced for channelizing device spacing was changed to 7.6 m (25 ft) spacing in two places.

Typical Application 42

Notes:

In Note 2, the phrase “**When the exit ramp is closed,**” was added.

In Note 3, the word “**curved**” was deleted.

The sixth, seventh, and eighth notes in the 2000 MUTCD were deleted.

Figure:

The symbols showing lane line removal were deleted in three places.

The label indicating that the arrow panel in the drawing on the right is optional was deleted.

The design of the Lane Ends sign was changed in two places.

Typical Application 43

Notes:

In Note 1, the phrase “(see Section 6G.07)” was added.

Figure:

The periods were deleted from the English version of the Advisory Speed plaque, and the design of the metric version of the Advisory Speed plaque was changed.

Typical Application 44

Notes:

In Note 3, the word “**reasonably**” was added in the first sentence.

The fifth note in the 2000 MUTCD was deleted.

Figure:

Labels were added for the temporary yellow edge line on the left side of the entrance ramp in both drawings.

Labels indicating that the arrow panels are optional were deleted in two places.

The design of the Lane Ends sign was changed in two places.

Typical Application 45

Notes:

The second sentences were added in Notes 2.a and 2.e.

Figure:

The heading for the drawing on the right was changed from “**Transition A – B**” to “**Transition from A to B**”.

The A dimension was added just to the left of the workspace in both drawings.

On the right drawing, the Double Lane Reverse Curve sign that is located adjacent to the workspace was changed to a (single lane) Reverse Curve sign as only one lane is being shifted back to the original alignment.

The design of the Lane Ends sign was changed in seven places.

Typical Application 46

Notes:

In Note 1, “**4.5 m**” was changed to “**4.6 m**”.

In Note 2, the word “**uniformed**” was added.

Note 9 was changed from Guidance to Standard, and the phrase “**Lighting should be provided as needed to adequately illuminate**” was changed to “**shall be illuminated, except in emergencies**”.

Figure:

(No changes were made to this figure.)

Chapter 6I Control of Traffic Through Traffic Incident Management Areas [Section 6G.19 in the 2000 MUTCD]

In the title of the Chapter, the words “**TRAFFIC**” and “**MANAGEMENT**” were added.

Section 6I.01 General

Paragraphs 1 [“Whenever the acronym ...”] and 2 were added.

In Paragraph 3 [“A traffic incident is ...”], the word “**traffic**” was added, and the phrase “**a special event**” was changed to “**other unplanned event that affects or impedes the normal flow of traffic**”.

Paragraphs 4 [“A traffic incident management ...”] and 5 were added.

In Paragraph 6 [“The primary functions ...”], the word “**traffic**”, was added in two places, the words “**management**” and “**reasonably**” were added, the word “**through**” was

changed to “**past**”, and the phrase “, **and to preclude unnecessary use of the surrounding local road system**” was added in the first sentence. In the second sentence, the phrase “**road user**” was changed to “**traffic**”, the word “**chemical**” was changed to “**hazardous material**”, and the phrase “**a planned visit by a dignitary, or a major sporting event**” was deleted.

In Paragraph 7 [“In order to ...”], the phrase “**appropriate public safety agencies (law enforcement, fire and rescue, emergency communications, emergency medical, and other emergency management), and private sector responders (towing and recovery and hazardous materials contractors)**” was added, the word “**preplan**” was changed to the phrase “**mutually plan**”, and the word “**traffic**” was added. The last sentence in the 2000 MUTCD was deleted.

Paragraphs 8 [“On-scene responders should ...”], 9, and 10 [“Warning and guide ...”], were added.

In Paragraph 11 [“While some traffic ...”], the word “**traffic**” was added in the first sentence. In the second sentence, the word “**quickly**” was added, and the word “**emergency**” was changed to the phrase “**incident, such as secondary crashes or excessive traffic delays**”. In the third sentence, the phrase “**highway agency,**” the words “**traffic**” and “**management**”, and the phrase “**in order to protect responders, victims, and other personnel at the site while providing reasonably safe traffic flow**” were added. In the fourth sentence, the word “**might**” was added. In the last sentence, the words “**traffic**” and “**management**” were added.

In Paragraph 12 [“For traffic incidents ...”], the word “**unexpected**” was changed to “**traffic**”.

Section 6I.02 Major Traffic Incidents

Paragraph 1 [“Major traffic incidents ...”] was added.

Paragraph 2 [“If the traffic ...”] was changed from Standard to Guidance. The word “**traffic**” was added, and the phrase “**3 days**” was changed to “**24 hours**”.

In Paragraph 3 [“A road closure ...”], the phrase “**short-term**” was deleted, and the word “**traffic**” was added in the first sentence. In the second sentence, the phrase “**diverted through lane shifts or**” and the word “**traffic**” were added. In the third sentence, the phrases “**maintain or operate, and then to remove**”, “**traffic control**”, and “**when the detour is terminated**” were added. In the last sentence, the phrase “, **especially when detouring them from a controlled-access roadway onto local or arterial streets**” were added.

In Paragraph 4 [“During traffic incidents ...”], the word “**traffic**” was added in the first sentence. In the second sentence, the word “**cargo**” was changed to “**material**”.

In Paragraph 5 [“Some traffic incidents ...”], the words “**traffic**” and “**material**” were added the first sentence. In the second sentence, the word “**traffic**” was added. In the third sentence, the words “**traffic**” and “**management**” were added.

Paragraphs 6 [“The establishment, maintenance ...”] through 10 [“If flaggers are ...”] were added.

The eleventh paragraph in Section 6G.19 in the 2000 MUTCD was deleted.

In Paragraph 11 [“When flares are...”], the word “**traffic**” was added, and the phrase “**or for short-term temporary traffic control**” was deleted in the first sentence. The second sentence was added.

Paragraph 12 [“On-scene responders...”] was added.

Sections 6I.03 to 6I.05

These sections were added.

Figure 6I-1. Examples of Traffic Incident Management Area Signs

This figure was added.

Part 7 Traffic Controls for School Areas

Chapter 7A General

Section 7A.01 Need for Standards

In Paragraph 1 [“It is important ...”], the word “**reasonably**” was added.

In the third sentence of Paragraph 2 [“Pedestrian safety depends...”], the word “**school**” was deleted, and the phrase “**on their way to or from school**” was added.

Paragraph 8 [“The type(s) of ...”] was changed from Standard to Guidance.

Sections 7A.02 and 7A.03

(No changes were made to these Sections.)

Section 7A.04 Scope

Paragraph 2 [“In-roadway signs for ...”] was added.

The second paragraph in the 2000 MUTCD was deleted.

Sections 7A.05 to 7A.08

(No changes were made to these Sections.)

Section 7A.09 Unauthorized Devices and Messages

The title was changed from “**Removal of Confusing Advertising**” to “**Unauthorized Devices and Messages**”.

In Paragraph 1, the phrase “**the removal of confusing advertising**” was changed to “**unauthorized devices and messages**”.

Section 7A.10 Meaning of Standard, Guidance, Option, and Support

(No changes were made to this Section.)

Figure 7A-1. Example of School Route Plan Map

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

A pedestrian route was added on the south side of Gateshead Drive between Newport Drive and Emily Street.

The YIELD sign at the west end of Stacey Street was changed to a STOP sign.

The YIELD signs were deleted from Sheawood and Kathleen Courts, and from the legend.

The crossing guard at the intersection of Gateshead Drive and Meaghan Avenue was deleted.

Chapter 7B Signs

Section 7B.01 Size of School Signs

In Paragraph 2 [“The Conventional Road ...”], the word “**standard**” was changed to the phrase “**Conventional Road**”, and the word “**special**” was changed to the phrase “**Minimum or Oversized**”.

In Paragraphs 3 [“The Oversized sign size shall ...”] and 4, the word “**special**” was changed to “**Oversized**”.

Sections 7B.02 to 7B.05

(No changes were made to these Sections.)

Section 7B.06 Lettering

The phrase “**The Standard Alphabets for Highway Signs and Pavement Markings**” was changed to “**The Federal Highway Administration’s “Standard Highway Signs” book**”.

Section 7B.07 Sign Color for School Warning Signs

In Paragraph 1 [“Except as noted...”], the phrase “**specifically designed otherwise**” was changed to “**otherwise stated in this Manual for a specific sign**”.

In Paragraph 2 [“All school warning ...”], the phrase “**All school warning signs in addition to**” was added. In Item A, “the phrase “**School Crossing**” was changed to “**School Advance Warning**”. In Item D, the phrase “**The “SCHOOL” portion of the**” was added. In Item G, “**(W16-7)**” was changed to “**(W16-7p)**”. Item H was added.

Section 7B.08 School Advance Warning Assembly (S1-1 with Supplemental Plaque)

In the title, the phrase “**Sign (S1-1)**” was changed to “**Assembly (S1-1 with Supplemental Plaque)**”.

In Paragraph 1 [“The School Advance Warning assembly (see ...”], the phrase “**(S1-1) sign**” was changed to the word “**assembly**”, and the phrase “**, except where a physical barrier such as fencing separates school children from the highway**” was added.

In Paragraph 2 [“The School Advance Warning assembly shall ...”], which is a combination of the first and third paragraphs in the 2000 MUTCD, the phrase “**(S1-1) sign**” was changed to the word “**assembly**”, and the phrase “**Crossing sign**” was changed to “**Crosswalk Warning assembly**”. The word “**sign**” was deleted after the phrase “Speed Limit”.

In Paragraph 3 [“If used, the School Advance Warning assembly shall be ...”], the word “**sign**” was changed to “**assembly**”.

In Paragraph 4 [“If used, the School Advance Warning assembly shall consist ...”], the word “**sign**” was changed to “**assembly**”, the word “**be**” was changed to the phrase “**consist of a School Advance Warning (S1-1) sign**”, and the word “**supplemental**” was deleted.

Paragraph 5 [“A 300 mm (12 in) ...”] was added.

Section 7B.09 School Crosswalk Warning Assembly (S1-1 with Diagonal Arrow)

In Paragraph 1 [“If used, the ...”], “**(W16-7)**” was changed to “**(W16-7p)**”.

Paragraphs 5 [“The In-Street Pedestrian Crossing (R1-6 ...”] through 8 [“The In-Street Pedestrian Crossing ...”] were added.

Section 7B.10 SCHOOL BUS STOP AHEAD Sign (S3-1)

(No changes were made to this Section.)

Section 7B.11 School Speed Limit Assembly (S4-1, S4-2, S4-3, S4-4, S4-6, S5-1)

In the title, “**S4-6,**” was added.

In Paragraph 2 [“The reduced speed ...”], “**90 m (300 ft)**” was changed to “**30 m (100 ft)**”.

In Paragraph 4 [“The fixed-message School ...”], the phrase “**or S4-6**” was added.

Paragraphs 8 [“Fluorescent yellow-green pixels ...”], 10, and 12 [“A FINES HIGHER ...”] were added.

Section 7B.12 Reduced Speed School Zone Ahead Sign (S4-5, S4-5a)

The title was changed from “**School Reduced Speed Ahead Assembly**” to “**Reduced Speed School Zone Ahead Sign (S4-5, S4-5a)**”.

In Paragraphs 1 [“The Reduced Speed ...”] and 2, the phrase “**School Reduced Speed Ahead assembly**” was changed to “**Reduced Speed School Zone Ahead sign**”.

The second paragraph in the 2000 MUTCD was deleted.

Paragraph 3 [“The speed limit ...”] was added.

Sections 7B.13 and 7B.14

(No changes were made to these Sections.)

Figure 7B-1. School Area Signs [Page 7B-5 in the 2000 MUTCD]

A figure number and title were added.

The S4-5, S4-5a, and S4-6 signs and the metric version of the S5-1 sign were added.

The R2-6P plaque and the School Reduced Speed Ahead Assembly were deleted.

The design of the metric version of the R2-1 sign was changed.

The code for the Diagonal Arrow plaque was changed from “**W16-7**” to “**W16-7p**”.

A “**School Advance Warning Assembly**” label was added.

The W16-2 and W16-2a codes were reversed, and these codes were added next to the metric versions of the plaques.

Figure 7B-2. Examples of Signing for School Crosswalk Warning Assembly

This figure was added.

Figure 7B-3. Examples of Signing for School Area Traffic Control with School Speed Limits [Figure 7B-1 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the phrase “**with School Speed Limits**” was added.

The design of the metric version of the R2-1 sign was changed in four places, and the METRIC plaques were deleted in these same four places.

The typical 300-foot dimension was changed to an asterisk in two places, and a note explaining the asterisk was added.

The distance plaques next to the School Advance Warning Assemblies in two places were deleted

Figure 7B-4. In-Street Signs in School Areas

This figure was added.

Table 7B-1. Size of School Area Signs and Plaques

The S4-5, S4-5a, S5-1, R2-1 (metric), S4-6, and W16-7p signs and plaques were added.

The R2-6p plaque was deleted.

The title of the “**Standard**” column was changed to “**Conventional Road**”, and the “**Conventional Roads**” heading was deleted.

The title of the “**Special**” column was changed to “**Oversized**”.

The S4-5, S4-5a, S5-1, R2-1 (metric), S4-6, and W16-7p signs and plaques were added.

The R2-6p plaque was deleted.

The code for the Diagonal Arrow plaque was changed from “**W16-7**” to “**W16-7p**”.

The conventional road sizes for the S4-1, S4-2, S4-3, S4-4, W16-2, W16-2a, W16-7p, and W16-9p plaques were changed.

The minimum size of the W16-9p plaque was changed from “**24 x 10**” to “**24 x 12**”.

The oversized sizes for the S4-1, S4-2, S4-3, S4-4, and W16-7p plaques were changed.

Chapter 7C Markings

Sections 7C.01 and 7C.02

(No changes were made to these Sections.)

Section 7C.03 Crosswalk Markings

Paragraphs 1 [“Crosswalk markings provide ...”], 2, and 3 [“At nonintersection locations ...”] were added.

Paragraph 5 [“If transverse lines ...”] was added to take the place of the fifth paragraph in the 2000 MUTCD, which was deleted.

In Paragraph 6 [“Crosswalk lines on ...”], the phrase “**or to the edge of the intersecting crosswalk**” was added.

Paragraph 8 [“Crosswalk lines should ...”] was added.

In Paragraph 10 [“The diagonal or ...”], “**600 mm**” was changed to “**1500 mm**” and “**24 in**” was changed to “**60 in**”.

Section 7C.04 Stop and Yield Lines

In the title, the phrase “**and Yield**” was added.

In Paragraph 1 [“If used, stop lines ...”], the phrase “**If used,**” was added.

Paragraph 2 [“If used, yield ...”] was added.

In Paragraph 4 [“Stop lines should be used ...”], the phrase “**or some other traffic control device**” was added.

Paragraphs 5 [“The individual triangles ...”] and 6 were added.

In Paragraph 7 [“If used, stop and ...”], the phrases “**and yield**”, “**a minimum of**”, “**and parallel to**”, “**at controlled intersections**”, “**for yield lines**”, and “**and at midblock crosswalks**” were added in the first sentence. In the second sentence, the phrases “**or yield line**” and “**or yielding**” were added. In the third sentence, the word “**ensure**” was changed to “**allow**”, and the phrase “**for all**” was changed to “**to all other**”.

Paragraph 8 [“If used at ...”] was added.

Paragraph 10 [“Driver who yield ...”] was added.

Section 7C.05 Curb Markings for Parking Regulations

In Paragraph 3 [“Local highway agencies ...”], the word “**authorities**” was changed to the phrase “**highway agencies**”.

Section 7C.06 Pavement Word and Symbol Markings

In Paragraph 1 [“Word and symbol markings on ...”], the second sentence was added.

In Paragraph 3 [“Letters and numerals ...”], the word “**Large**” was deleted, and the phrase “**Standard Alphabets for Highway Signs and Pavement Markings**” was changed to “**Federal Highway Administration’s “Standard Highway Signs” book**”.

Paragraph 7 [“The number of...”] was added.

Figure 7C-1. Two-Lane Pavement Marking of “SCHOOL”

(No changes were made to this figure.)

Chapter 7D Signals

(No changes were made to this Chapter.)

Chapter 7E Crossing Supervision

Section 7E.01 Types of Crossing Supervision

In Item A of Paragraph 1 [“There are two ...”], the word “**crossing**” was added, and the word “**police**” was changed to “**uniformed law enforcement**”.

In Paragraph 2 [“Information for the organization, operation ...”], the phrase “**Traffic Institute**” was changed to “**Center for Public Safety**”.

Section 7E.02 Adult Crossing Guards

In the title, the word “**Crossing**” was added.

In Paragraph 1, the word “**crossing**” was added.

Section 7E.03 Qualifications of Adult Crossing Guards

In the title, the word “**Crossing**” was added.

In both paragraphs, the word “**crossing**” was added.

Section 7E.04 Uniform of Adult Crossing Guards and Student Patrols

In the title, the word “**Crossing**” was added.

In Paragraph 1 [“Adult crossing guards should ...”], the word “**crossing**” was added in the first sentence. In the last sentence, the word “**police**” was changed to “**law enforcement**”.

Paragraphs 2 [“Adult crossing guards shall ...”] and 3 replaced the second paragraph in the 2000 MUTCD and changed this paragraph from Guidance to Standard.

In Paragraph 4 [“Law enforcement officers ...”], the word “**police**” was changed to “**law enforcement**”.

Section 7E.05 Operating Procedures for Adult Crossing Guards

In the title, the word “**Crossing**” was added.

In Paragraph 1 [“Adult crossing guards should not ...”], the word “**crossing**” was added, and the word “**police**” was changed to “**law enforcement**” in the first sentence. In the second sentence, the word “**reasonably**” was added.

Paragraphs 4 [“The STOP paddle may ...”] and 5 were added.

Section 7E.06 Uniformed Law Enforcement Officers

In the title, the word “**Police**” was changed to “**Uniformed Law Enforcement**”.

In Paragraph 1, the word “**Police**” was changed to “**Uniformed law enforcement**”.

Section 7E.07 Student Patrols

In Paragraph 2 [“Student patrols may be used to direct and control pedestrians at signalized ...”], the word “**crossing**” was added prior to the word “guards”.

In the second sentence of Paragraph 3 [“Student patrols should...”], the word “**police**” was changed to “**uniformed law enforcement**”, and the word “**crossing**” was added.

Sections 7E.08 and 7E.09

(No changes were made to these Sections.)

Chapter 7F Grade-Separated Crossings

(No changes were made to this Chapter.)

Part 8 Traffic Controls for Highway-Rail Grade Crossings

Chapter 8A General

Section 8A.01 Introduction

In the second sentence of Paragraph 1 [“Traffic control for ...”], the word “reasonably” was added.

In Paragraph 6 [“To promote an ...”], the word “ensure” was changed to “promote”.

Definitions 1 and 2 were derived by splitting the first definition in the 2000 MUTCD into two definitions. In Definition 1, the phrase “for a period of time prior” was changed to “in advance of”, and the word “active” was deleted. In Definition 2, the phrase “in the maximum preemption time required for highway traffic signal operation and the minimum warning time needed for railroad operations” was changed to “between the required maximum highway traffic signal preemption time and the activation of the railroad warning devices”.

In Definition 4, the last two sentences were added.

In Definition 6, the word “Delineation” was deleted from the title.

Definitions 7, 8, 9, and 10 were added.

In Definition 11, the word “highway” was added.

In Definition 12, the phrase “Highway Traffic Signal” was added to the title.

In Definition 13, the last two sentences were added.

In Definition 15, the word “highway” was added.

In Definition 16, the phrase “railroad crossing and intersection” was changed to “highway-rail grade crossing in advance of the intersection”.

In Definition 17, the phrase “of maximum length” was added, the word “within” was changed to “just inside”, and the phrase “and clear the entire” was added in the first sentence. The last sentence was added.

In Definition 19, the phrase “highway traffic signal” was added.

Definitions 21, 22, and 23 were added.

The tenth definition (Monitored Interconnected Operation) in the 2000 MUTCD was deleted.

Section 8A.02 Use of Standard Devices, Systems, and Practices

In Paragraph 2 [“The appropriate traffic ...”], the phrase “**to be used at a highway-rail grade crossing**” was added.

In Paragraph 4 [“More detail on ...”], the word “**components**” was added, the phrase “**400 Seventh Street, SW**” was changed to “**1120 Vermont Ave., NW**”, and the phrase “**, or www.fra.dot.gov**” was added.

In Paragraph 6 [“Before any new ...”], the phrase “**or modified**” was deleted, and the phrase “**or before modifications are made to an existing system**” was added.

Paragraph 7 [“To stimulate effective ...”] was added.

In Paragraph 8 [“Many other details ...”], the word “**herein**” was changed to the phrase “**in Part 8**”.

Section 8A.03 Uniform Provisions

In Paragraph 2 [“No sign or ...”], the phrase “**an island with non-mountable curbs**” was changed to “**a raised island**”.

In Paragraph 3 [“Such signs or ...”], the phrase “**with a clearance of**” was added, and the phrase “**face of each curb**” was changed to “**outer edge of the raised island**”.

Section 8A.04 Highway-Rail Grade Crossing Elimination

Paragraph 1 [“Because highway-rail grade ...”] was added.

Paragraph 7 [“Based on engineering ...”] was added.

Section 8A.05 Temporary Traffic Control Zones

Paragraph 1 [“Temporary traffic control planning ...”] was added.

In Paragraph 6 [“Temporary traffic control zone ...”], the phrase “**be permitted to**” was added.

In Paragraph 7 [“The width, grade ...”], the phrase “**grade, alignment,**” was added.

Figure 8A-1. Train Dynamic Envelope

In the title, the word “**Delineation**” was deleted.

Chapter 8B Signs and Markings

Section 8B.01 Purpose

(No changes were made to this Section.)

Section 8B.02 Sizes of Grade Crossing Signs

This section was added.

Section 8B.03 Highway-Rail Grade Crossing (Crossbuck) Sign (R15-1) and Number of Tracks Sign (R15-2) [Section 8B.02 in the 2000 MUTCD]

In the title, the phrase “**and Number of Tracks**” was added.

In Paragraph 7 [“A strip of retroreflective white material, not ...”], the word “**passive**” was added, and the phrase “**near ground level**” was changed to “**within 0.6 m (2 ft) above the edge of the roadway, except on the side of those supports where a STOP (R1-1) or YIELD (R1-2) sign or flashing lights have been installed or on the back side of supports for Crossbuck signs installed on one-way streets**”.

In Paragraph 9 [“The minimum lateral ...”], the word “**minimum**” and the phrase “**(whichever is greater)**” were added.

Section 8B.04 Highway-Rail Grade Crossing Advance Warning Signs (W10-Series) [Section 8B.03 in the 2000 MUTCD]

In Item A of Paragraph 1 [“A Highway-Rail Grade ...”] was added.

Item A in the first paragraph in the 2000 MUTCD was relocated to Paragraph 4.

In Paragraph 2 [“Placement of the ...”], the phrase “**Chapter 2A and**” was added.

In Paragraph 4 [“Standard: If the distance ...”], which was relocated from Item A in the first paragraph in the 2000 MUTCD, the word “**parallel**” and the phrases “**on each approach**” and “**, and a W10-1 sign for the approach to the tracks shall not be required to be between the tracks and the parallel highway**” were added.

In Paragraph 5 [“If the W10-2 ...”], the phrase “**the turning maneuver**” was changed to “**through traffic**”.

In Paragraph 6 [“Guidance: If the distance ...”], the word “**parallel**” was added.

Section 8B.05 EXEMPT Highway-Rail Grade Crossing Signs (R15-3, W10-1a) [Section 8B.04 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 8B.06 Turn Restrictions During Preemption [Section 8B.05 in the 2000 MUTCD]

In Paragraph 2 [“A blank-out or ...”], the word “**highway**” was added in the first sentence. The last sentence was added.

Section 8B.07 DO NOT STOP ON TRACKS Sign (R8-8) [Section 8B.06 in the 2000 MUTCD]

In Paragraph 4 [“On divided highways ...”], the phrase “**of the sign**” was added.

Section 8B.08 STOP (R1-1) OR YIELD (R1-2) Signs at Highway-Rail Grade Crossings [Section 8B.07 in the 2000 MUTCD]

In Paragraph 6 [“For all highway-rail ...”], the phrase “**Chapter 2B**” was changed to “**Sections 2B.06 and 2B.10**” in the first sentence. In the second sentence, “**(W3-1a)**” was changed to “**(W3-1)**” and “**(W3-2a)**” was changed to “**(W3-2)**”.

Section 8B.09 TRACKS OUT OF SERVICE Sign [Section 8B.08 in the 2000 MUTCD]

(No changes were made to this Section.)

Sections 8B.10 and 8B.11

These sections were added.

Section 8B.12 Emergency Notification Sign (I-13 or I-13a) [Section 8B.09 in the 2000 MUTCD]

In Paragraph 4 [“Examples of sign ...”], the word “**Typical**” was changed to the phrase “**Examples of**”.

Section 8B.13 TRAINS MAY EXCEED 130 km/h (80MPH) Sign (W10-8) [Section 8B.10 in the 2000 MUTCD]

In the title, “**W10-8a**” was deleted.

In Paragraph 1 [“Where trains are ...”], the phrase “**or W10-8a**” was deleted.

Section 8B.14 NO TRAIN HORN Sign (W10-9) [Section 8B.11 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 8B.15 NO SIGNAL Sign (W10-10) or NO GATES OR LIGHTS Sign (W10-13) [Section 8B.12 in the 2000 MUTCD]

In the title, the phrase “**or NO GATES OR LIGHTS Sign (W10-13)**” was added.

In Paragraph 1 [“A NO SIGNAL ...”], the phrase “**or a NO GATES OR LIGHTS (W10-13) sign**” was added.

In Paragraph 2 [“The NO SIGNAL ...”], the phrase “**or the NO GATES OR LIGHTS (W10-13) sign**” was added.

Section 8B.16 LOOK Sign (R15-8) [Section 8B.13 in the 2000 MUTCD]

In Paragraph 1, the phrase “**that do not have active warning devices**” was deleted.

Section 8B.17 Low Ground Clearance Highway-Rail Grade Crossing Sign (W10-5) [Section 8B.14 in the 2000 MUTCD]

In Paragraph 2 [“Because this symbol ...”], the phrase “**New warning signs such as this that**” was changed to “**Because this symbol**” in the first sentence. In the second sentence, the phrase “**its initial installation**” was changed to “**the initial installation of the W10-5 sign**”.

In Paragraph 3 [“Auxiliary plaques such ...”], the word “**signs**” was changed to “**plaques**”, and the phrases “**or a supplemental distance plaque**” and “**below the W10-5 sign**” were added.

Section 8B.18 Storage Space Signs (W10-11, W10-11a, W10-11b) [Section 8B.15 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 8B.19 Skewed Crossing Sign (W10-12)

This section was added.

Section 8B.20 Pavement Markings [Section 8B.16 in the 2000 MUTCD]

In Paragraph 1 [“All highway-rail grade ...”], the word “**pavement**” was added.

In Paragraph 2 [“Pavement markings in ...”], the phrase “**where centerline markings are used**” was added.

Section 8B.21 Stop Lines [Section 8B.17 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 8B.22 Dynamic Envelope Markings [Section 8B.18 in the 2000 MUTCD]

In the title, the word “**Delineation**” was changed to “**Markings**”.

Paragraph 2 [“Dynamic envelope markings may be installed ...”] was added.

Figure 8B-1. Highway-Rail Grade Crossing (Crossbuck) Regulatory Signs

The internal lines in the designs of the R15-1 and R15-2 signs were deleted

The 2-foot maximum dimension to the bottom of the retroreflective strip was added.

Figure 8B-2. Advance Warning Signs [Page 8B-4 in the 2000 MUTCD]

A figure number and title were added.

The symbols on the W10-2, W10-3, and W10-4 signs were changed to thicker lines.

Figure 8B-3. Regulatory Signs [Page 8B-5 in the 2000 MUTCD]

A figure number and title were added.

The R3-1a, R3-2a, R8-10, and R10-6 signs were added.

The R15-8 sign was relocated from Page 8B-10 in the 2000 MUTCD.

The W10-1a code below the EXEMPT sign was deleted as the W10-1 sign is now shown in Figure 8B-5.

Figure 8B-4. Emergency Notification Signs [Page 8B-8 in the 2000 MUTCD]

A figure number and title were added.

Figure 8B-5. Warning Signs [Page 8B-10 in the 2000 MUTCD]

A figure number and title were added.

The W10-1a, W10-12, W10-13, W10-14, W10-14a, and W10-15 signs were added.

The R15-8 sign was relocated to Figure 8B-3.

The W10-8a code below the TRAINS MAY EXCEED 130 km/h sign was deleted as this sign is now shown as the metric alternative to the W10-8 sign.

The symbol on the W10-11 sign was changed to thicker lines.

The designs of the W10-9 and W10-10 signs were changed.

Figure 8B-6. Example of Placement of Warning Signs and Pavement Markings at Highway-Rail Grade Crossings [Figure 8B-2 in the 2000 MUTCD]

In the title, the phrase “**Typical Placement**” was changed to the word “**Example**”.

Figure 8B-7. Examples of Highway-Rail Grade Crossing Pavement Markings [Figure 8B-3 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

Figure 8B-8. Typical Train Dynamic Envelope Pavement Markings [Figure 8B-4 in the 2000 MUTCD]

In the title, the word “**Delineation**” was deleted.

Table 8B-1. Sign Sizes for Grade Crossing Signs

This table was added.

Chapter 8C Illumination

Section 8C.01 Illumination at Highway-Rail Grade Crossing

Paragraph 1 [“Illumination may be ...”] was added.

Paragraph 2 [“If an engineering ...”] was changed from Option to Guidance. The phrase “**When an**” was changed to “**If an engineering study is conducted and if the**”.

Chapter 8D Flashing-Light Signals, Gates, and Traffic Control Signals

Section 8D.01 Introduction

In Paragraph 3 [“Post-mounted and ...”], the phrase “**These systems**” was changed to “**Post-mounted and overhead-mounted flashing-light signals**” in the first sentence. The second sentence was added.

Section 8D.02 Flashing-Light Signals, Post-Mounted

In the second sentence of Paragraph 4 [“Flashing-light signals ...”], “**Figure 8D-2**” was changed to “**Figure 8D-1**”.

In Paragraph 7 [“In choosing between ...”], “**Chapter 4D**” was changed to “**Section 4D.15**”

Section 8D.03 Flashing-Light Signals, Overhead Structures

(No changes were made to this Section.)

Section 8D.04 Automatic Gates

In Paragraph 3 [“In the normal ...”], the phrase “**unless constant warning time or other advanced system requires otherwise,**” was added.

In Paragraph 7 [“The entrance gate ...”], the phrase “**approach lane**” was changed to “**entrance**”.

Section 8D.05 Four-Quadrant Gate Systems

In Paragraph 2 [“A Four-Quadrant Gate ...”], the word “**at**” was changed to the phrase “**entering and exiting**”.

In the first sentence of Paragraph 3 [“The Four-Quadrant Gate ...”], the word “**approaching**” was changed to “**entrance**”.

In the first sentence of Paragraph 4 [“In the normal ...”], the phrase “**unless constant warning time or other advanced system requires otherwise,**” was added in the first sentence. In the second sentence, the word “**approaching**” was changed to “**entrance**”. In the third sentence, the word “**lane**” was deleted.

In Paragraph 7 [“Except as noted...”], the word “**lane**” was deleted.

Paragraphs 11 [“The operating mode ...”] and 12 were added.

In Paragraph 13 [“If the Dynamic ...”], the phrase “**Where an engineering study determines the need**” was changed to “**If the Dynamic Exit Gate Operating Mode is used**”, and the phrase “**at the highway-rail grade crossing**” was changed to “**to control exit gate operation based on vehicle presence within the minimum track clearance distance**”.

Paragraphs 14 [“Regardless of which ...”], 15, and 16 were added.

In Paragraph 19 [“Exit gate arms ...”], the word “**lane**” was deleted.

Section 8D.06 Train Detection

In Paragraph 4 [“On tracks where ...”], “**32 km/h**” was changed to “**30 km/h**”.

Section 8D.07 Traffic Control Signals at or Near Highway-Rail Grade Crossings

In the first sentence of Paragraph 6 [“Coordination with the ...”], the phrase “**queue detection, or other alternatives**” was added.

Paragraphs 9 [“If a highway-rail grade ...”] 10, 11, and 12 [“The pre-signal phase ...”] were added.

Paragraph 14 [“At locations where ...”] was added.

Figure 8D-1. Composite Drawing of Active Traffic Control Devices for Highway-Rail Grade Crossings Showing Clearances

The dimension for the diameter of the flashing light lens was added below the left overhead light, and the dimension for the radius of the flashing light lens housing was deleted below the right post-mounted light.

The phrase “**ABOVE CROWN OF ROADWAY**” was added to the dimension for the minimum height of the overhead flashing lights.

The phrase “**ABOVE GROUND LEVEL**” was added to the dimension for the maximum height of the base of the post.

Symbols for the three flashing lights were added to both the horizontal and vertical gate arms.

Figure 8D-2. Example of Location Plan for Flashing-Light Signals and Four-Quadrant Gates

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

Part 9 Traffic Controls for Bicycle Facilities

Chapter 9A General

Section 9A.01 Requirements for Bicyclist Traffic Control Devices

(No changes were made to this Section.)

Section 9A.02 Scope

In Paragraph 1 [“General information and ...”], the word “**highway**” was added.

Section 9A.03 Definitions Relating to Bicycles

Definition 1 was added.

The second definition (Bicycle Path) in the 2000 MUTCD was deleted.

In the first sentence of Definition 4, the word “**markers**” was changed to “**signs**”.

In Definition 5, the phrase “**outside the traveled way and**” was added in the first sentence.

In the second sentence, the word “**might**” was changed to “**are**”, and the phrases “**of manual and motorized**” and “**authorized motorized and**” were added.

Sections 9A.04 to 9A.08

(No changes were made to these Sections.)

Chapter 9B Signs

Section 9B.01 Application and Placement of Signs

In Paragraph 4 [“On shared-use paths ...”], the phrase “(see **Figure 9B-1**)” was added.

In Paragraph 5 [“Mounting height for ...”], the phrase “(see **Figure 9B-1**)” was added.

In Paragraph 7 [“Signs for the ...”], the word “**driver**” was changed to the phrase “**other road users**”.

The ninth paragraph in the 2000 MUTCD was deleted.

Section 9B.02 Design of Bicycle Signs

In Paragraph 2 [“The minimum sign ...”], the word “**minimum**” was added in both sentences. In the second sentence, the phrase “**shared-use paths**” was changed to “**bicycle facilities**”.

In Paragraph 3 [“Larger size signs ...”], the phrase “**shared-use paths**” was changed to “**bicycle facilities**”.

Section 9B.03 STOP and YIELD Signs (R1-1, R1-2)

In Paragraph 4 [“Where conditions require ...”], the word “**bicyclists**” was changed to “**path users**”, the word “**drivers**” was changed to “**roadway users**”, and the word “**drivers**” at the end of the sentence was changed to “**road users**”.

In Paragraph 5 [“When placement of ...”], the phrase “**or YIELD**” was added.

Section 9B.04 Bicycle Lane Signs (R3-17, R3-17a, R3-17b)

In the title, the sign codes “**R3-17a**” and “**R3-17b**” were added, and the sign code “**R3-16**” was deleted.

In Paragraph 1 [“The BIKE LANE (R3-17) sign (see ...”], the phrase “**Bicycle Lane (R3-16) and R3-17 signs**” was changed to “**The BIKE LANE (R3-17) sign**”, and the phrase “**the Bicycle Lane Symbol pavement marking**” was changed to “**marked bicycle lanes as described in Section 9C.04**”. The second half of the sentence (starting with “shall be placed”), which was the third paragraph in the 2000 MUTCD, was changed from Guidance to Standard.

Paragraphs 2 [“The BIKE LANE (R3-17) sign spacing ...”], 3, and 4 were added.

The second, fourth, fifth, and sixth paragraphs in the 2000 MUTCD were deleted.

Section 9B.05 BEGIN RIGHT TURN LANE YIELD TO BIKES Sign (R4-4)

Paragraph 2 [“The R4-4 sign ...”] was added.

Section 9B.06 Bicycle WRONG WAY Sign and RIDE WITH TRAFFIC Plaque (R5-1b, R9-3c)

This section was added.

Section 9B.07 NO MOTOR VEHICLES Sign (R5-3) [Section 9B.06 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 9B.08 No Bicycles Sign (R5-6) [Section 9B.07 in the 2000 MUTCD]

In the title and in Paragraph 1 [“Where bicyclists are ...”], the phrase “**Bicycle Prohibition**” was changed to “**No Bicycles**”.

Section 9B.09 No Parking Bike Lane Signs (R7-9, R7-9a) [Section 9B.08 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 9B.10 Bicycle Regulatory Signs (R9-5, R9-6, R10-3) [Section 9B.09 in the 2000 MUTCD]

In the title, “**R10-3**” was added.

The first paragraph in the 2000 MUTCD was deleted.

In Paragraph 4 [“If used, the ...”], the phrase “, **near the crossing location,**” was changed to “**in the vicinity of**”.

Section 9B.11 Shared-Use Path Restriction Sign (R9-7) [Section 9B.10 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 9B.12 Bicycle Signal Actuation Sign (R10-22)

This section was added.

Sections 9B.13 to 9B.15 [Sections 9B.11 to 9B.13 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 9B.16 Bicycle Surface Condition Warning sign (W8-10) [Section 9B.14 in the 2000 MUTCD]

In Paragraph 2 [“Signs warning of ...”], the phrases “**Signs warning of**”, and “**PAVEMENT ENDS (W8-3)**” were added. The word “**surface**”, and the phrases “**SLIPPERY WHEN WET (W8-10p)**” and “**supplemental plaques**” were deleted.

Section 9B.17 Bicycle Warning Sign (W11-1) [Section 9B.15 in the 2000 MUTCD]

In the title and in five places in the text, the word “**Crossing**” was deleted.

In Paragraph 4 [“Bicycle Warning signs ...”], “**(W16-7)**” was changed to “**(W16-7p)**”.

Section 9B.18 Other Bicycle Warning Signs [Section 9B.16 in the 2000 MUTCD]

In Paragraph 1 [“Other bicycle warning ...”], “(W5-4)” was changed to “(W5-4a)”.

Section 9B.19 Bicycle Route Guide Signs (D11-1) [Section 9B.17 in the 2000 MUTCD]

In Paragraph 1 [“If used, Bicycle Route Guide (D11-1) ...”], the phrase “**at decision points**” was added.

In Paragraph 2 [“If used, Bicycle Route Guide signs ...”], the phrase “**to ensure**” was changed to the word “**so**”, and the phrase “**will have any opportunity to**” was added.

Paragraph 3 [“Figure 9B-5 shows ...”] replaced the third paragraph in the 2000 MUTCD, which was deleted.

Section 9B.20 Bicycle Route Signs (M1-8, M1-9) [Section 9B.18 in the 2000 MUTCD]

In the title, the word “**Markers**” was changed to “**Signs**”.

In the text, the word “**marker**” was changed to “**sign**” in three places and the word “**markers**” was changed to “**signs**” in two places.

Section 9B.21 Destination Arrow and Supplemental Plaque Signs for Bicycle Route Signs [Section 9B.19 in the 2000 MUTCD]

In Paragraph 1 [“Destination (D1-1b and...)”], the phrase “**installed with**” was changed to “**mounted below**”.

In Paragraphs 1 through 3, the word “**marker**” was changed to “**sign**” in two places and the word “**markers**” was changed to “**signs**” in four places.

Section 9B.22 Bicycle Parking Area Sign (D4-3) [Section 9B.20 in the 2000 MUTCD]

In Paragraph 1 [“The Bicycle Parking ...”], the second sentence was added.

Figure 9B-1. Sign Placement on Shared-Use Paths

(No changes were made to this figure.)

Figure 9B-2. Regulatory Signs for Bicycle Facilities [Page 9B-5 in the 2000 MUTCD]

A figure number and title were added.

The R3-17 (new design), R3-17a (new design), R3-17b, R5-1b, R9-3c, and R10-22 signs were added.

The R3-16, R3-16a, R3-17 (former design), and R3-17a (former design) signs were deleted.

The symbols on the R9-7 sign were reversed.

Figure 9B-3. Warning Signs for Bicycle Facilities [Pages 9B-9 and 9B-10 in the 2000 MUTCD]

A figure number and title were added.

The W5-2, W11-2, and W15-1 signs were added.

The W5-2a sign was deleted.

The symbols on the W2-1, W2-2, W2-3, W2-4, and W2-5 signs were changed to thicker lines.

The code for the Stop Ahead sign was changed from “**W3-1a**” to “**W3-1**”.

The code for the Yield Ahead sign was changed from “**W3-2a**” to “**W3-2**”.

The code for the BIKEWAY NARROWS sign was changed from “**W5-4**” to “**W5-4a**”.

The code for the Diagonal Arrow sign was changed from “**W16-7**” to “**W16-7p**”.

Figure 9B-4. Guide Signs for Bicycle Facilities [Page 9B-13 in the 2000 MUTCD]

A figure number and title were added.

Figure 9B-5. Example of Signing for the Beginning and End of a Designated Bicycle Route on a Shared-Use Path [Figure 9B-2 in the 2000 MUTCD]

In the title, the word “**Designated**” and the phrase “**on a Shared-Use Path**” were added.

The dimensions shown for the advance placement of the W11-1 signs were changed to “**Varies – see Section 9B.17**” in two places.

Labels indicating that the W11-1 signs are optional were added in two places.

A CITY PARK (D1-1) sign was added to both Bike Route Assemblies.

A stop line was added on the shared-use path.

Figure 9B-6. Example of Signing for an On-Roadway Bicycle Route

This figure was added.

Figure 9B-7. Examples of Signing and Markings for Shared-Use Paths [Figure 9B-3 in the 2000 MUTCD]

In the title, the phrase “**Typical Signs**” was changed to “**Examples of Signing**”.

The W11-1/W16-7p sign assembly was added at the intersection.

The optional W16-2a plaques were added under the advance W11-1 sign.

In the dimensions for the pavement markings on the roadway, “**10 m**” was changed to “**9.8 m**”.

The phrase “**on either facility**” was added to the note that points at the center of the intersection.

The note was added beneath the W2-1 sign.

The dimension from the R15-1 sign to the nearest rail was changed from “**4 m**” to “**4.6 m**”.

Table 9B-1. Minimum Sign Sizes for Bicycle Facilities

In the title, the word “**Minimum**” was added, and the phrase “**Shared-Use Paths**” was changed to “**Bicycle Facilities**”.

The single set of sizes in the 2000 MUTCD was divided into two sets of sizes, one labeled “**Shared-Use Path**” and one labeled “**Roadway**”.

The R3-17 (new design), R3-17a (new design), R3-17b, R5-1b, R9-3c, R10-3, R10-22, W5-2, W8-10p, W11-2, W15-1, W16-7p, and D1-1c signs were added.

The R3-16, R3-16a, R3-17 (former design), R3-17a (former design), and W5-2a signs were deleted.

The names of the R5-6, W11-1, D1-1b, M1-8, M1-9, M4-11 through M4-13, and M7-1 through M7-7 signs were changed.

The code for the Stop Ahead sign was changed from “**W3-1a**” to “**W3-1**”.

The code for the Yield Ahead sign was changed from “**W3-2a**” to “**W3-2**”.

The code for the Bikeway Narrows sign was changed from “**W5-4**” to “**W5-4a**”.

The code for the Bicycle Guide sign was changed from “**D1-1**” to “**D1-1b**”.

The shared-use path sizes for the R1-2 and W10-1 signs were changed.

The roadway size for the W16-1 sign was changed.

Roadway sizes for the R1-1, R1-2, R4-1 through R4-7, R15-1, W1-1 through W1-7, W2-1 through W2-5, W3-1 through W3-3, W5-4a, W7-5, W8-1, W8-2, W8-10, W10-1, W11-1, and W12-2 signs were added.

Chapter 9C Markings

Section 9C.01 Function of Markings

The first sentence of the first paragraph in the 2000 MUTCD was deleted.

Section 9C.02 General Principles

In Paragraph 3 [“Pavement marking symbols ...”], the phrase “**the bicycle lanes**” was changed to “**bikeways where appropriate**”.

Paragraph 4 [“The colors, width ...”] was relocated from the first paragraph of Section 9C.03 in the 2000 MUTCD, and the phrase “**size, and types of lines**” was changed to “**width of lines, patterns of lines**”.

In Paragraph 5 [“Figures 9B-7 and ...”], the phrase “**9B-7 and**” was added, and the phrase “**with and without parking for motor vehicles**” was deleted.

Section 9C.03 Marking Patterns and Colors on Shared-Use Paths

The first paragraph in the 2000 MUTCD was relocated to Paragraph 4 of Section 9C.02. the second paragraph in the 2000 MUTCD was deleted.

Paragraph 4 [“Markings as shown ...”] was added.

Paragraph 6 [“Smaller size letters ...”] was relocated from the second paragraph of Section 9C.05 in the 2000 MUTCD.

Paragraphs 7 [“Fixed objects adjacent ...”] through 11 [“On Type 3 ...”] were relocated from the five paragraphs of Section 9C.06 in the 2000 MUTCD.

In Paragraph 10 [“Obstructions in the ...”], the phrase “**within the bikeway**” was changed to “**in the traveled way of a shared-use path**”, the phrase “**delineation**” was changed to

“retroreflectorized material”, and the phrase “As indicated in Section 3C.02,” was deleted.

Section 9C.04 Markings For Bicycle Lanes

In Paragraph 2 [“Pavement markings designate ...”], the phrases “**supplement signs to**” and “**or exclusive**” were deleted.

In Paragraph 3 [“Examples of bicycle ...”], the word “**Typical**” was changed to the phrase “**Examples of**”, and “**9C-1**” was added in the first sentence. In the second sentence, the word “**Typical**” was changed to the phrase “**Examples of**”. The third sentence, which was relocated from the first paragraph of Section 9C.05 in the 2000 MUTCD, was changed from Option to Support, and the phrase “**Optional word and symbol markings**” was changed to “**Pavement symbols and markings for bicycle lanes are**”.

In Paragraph 4 [“If used, the ...”], the phrase “**but not closer than 20 m (65 ft) from the crossroad, or**” was changed to “**an intersection and at**”.

The fourth paragraph in the 2000 MUTCD was deleted.

Paragraphs 5 [“If the word ...”] through 12 [“Bicycle lanes shall ...”] were added.

Section 9C.05 Bicycle Detector Symbol

This section was added.

The various paragraphs of Sections 9C.05 and 9C.06 in the 2000 MUTCD were relocated to Sections 9C.03 and 9C.04.

Section 9C.06 Pavement Marking for Obstructions [Section 9C.07 in the 2000 MUTCD]

In Paragraph 1, the phrase “**cannot be eliminated**” was changed to “**it is not practical to eliminate**”.

Figure 9C-1. Example of Intersection Pavement Markings—Designated Bicycle Lane with Left-Turn Area, Heavy Turn Volumes, Parking, One-Way Traffic, or Divided Highway

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

A label indicating that the two dotted lines on the approach to the intersection are optional was added.

Figure 9C-2. Examples of Centerline Markings for Shared-Use Paths

In the title, the phrase “**Examples of**” was added.

In the title of the drawing at the top right of the figure, the word “**prohibited**” was changed to the phrase “**NOT permitted**”.

The dimension for the offset of the line around the obstacle in the bottom drawing was changed from “**0.6 m (2 ft)**” to “**0.3 m (1 ft)**”.

Figure 9C-3. Example of Bicycle Lane Treatment at a Right Turn Only Lane

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

A label indicating that the two dotted lines on the approach to the intersection are optional was added.

The design of the bicycle pavement marking symbols was changed.

Figure 9C-4. Example of Bicycle Lane Treatment at Parking Lane into a Right Turn Only Lane

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

A label indicating that the two dotted lines on the approach to the intersection are optional was added.

The design of the bicycle pavement marking symbols was changed.

Figure 9C-5. Example of Pavement Markings for Bicycle Lanes on a Two-Way Street

In the title and in the labels on the left and right sides of the figure, the word “**Typical**” was changed to the phrase “**Example of**”.

The design of the R3-17 sign was changed in four places.

The word “**Normal**” was added to the label for the solid white line on the left side of the figure.

Figure 9C-6. Example of Optional Word and Symbol Pavement Markings for Bicycle Lanes

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

The left drawing was deleted.

The LANE pavement marking and the associated dimensions were deleted.

A label was added for the normal white line.

A label indicating that the pavement marking arrow is optional was added.

The dimension for the height of the bicycle pavement marking was changed from “**1.2 m (4 ft)**” to “**1.8 m (6 ft)**”.

The design of the bicycle pavement marking symbol was changed.

The area to the right of the drawing showing the graphical layouts of the pavement markings was added.

Figure 9C-7. Example of Bicycle Detector Pavement Marking

This figure was added.

Figure 9C-8. Example of Obstruction Pavement Marking [Figure 9C-7 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

Chapter 9D Signals

Section 9D.01 Application

(No changes were made to this Section.)

Section 9D.02 Signal Operations for Bicycles

In Paragraph 2 [“On bikeways, signal ...”], the phrase “**the needs of bicyclist shall be considered when setting signal timing**” was changed to “**signal timing and actuation shall be reviewed and adjusted to consider the needs of bicyclists**”.

Part 10 Traffic Controls for Highway-Light Rail Transit Grade Crossings

Chapter 10A General

Section 10A.01 Introduction

In the first sentence of Paragraph 1 ["Part 10 provides ..."], the word "**reasonably**" was added.

In the first sentence of Paragraph 2 ["Light rail transit ..."], the word "**cars**" was changed to "**vehicles**".

Paragraph 6 ["Section 8A.01 contains ..."] was added.

Section 10A.02 Use of Standard Devices, Systems, and Practices

In Paragraph 2 ["The appropriate traffic ..."], the word "**required**" was changed to the phrase "**to be used**", and the phrase "**conducted by the transit or highway agency in cooperation with other appropriate State and local organizations**" was added.

In Paragraph 6 ["To stimulate effective ..."], the phrase "**drivers, pedestrians, and bicyclists**" was changed to "**vehicle operators and pedestrians**".

Section 10A.03 Uniform Provisions

Paragraph 2 ["No sign or ..."] was added.

In Paragraph 3 ["Such signs or ..."], the phrase "**the face of the curb**" was changed to "**outer edge of the raised island**", the word "**nearest**" was added, and the word "**head**" was deleted.

Paragraph 4 ["Where the distance ..."] was added.

Section 10A.04 Highway-Light Rail Transit Grade Crossing Elimination

In Paragraph 1 ["Because highway-light rail ..."], the phrase "**crashes and**" was added.

Paragraph 3 ["If the existing ..."] was changed from Guidance to Standard. The phrases "**If the existing traffic control devices at**" and "**become improperly placed or inaccurate**" were added, and the phrase "**, as appropriate**" was deleted.

In Paragraph 4 [“Where a roadway ...”], the phrase “**and appropriate signs should be placed at the roadway end in accordance with Section 3C.04**” was added, and the phrase “**or barricaded**” was deleted.

In Paragraph 6 [“Based on engineering ...”], the phrase “**Based on engineering judgment,**” was added in the first sentence. The second sentence was added.

Section 10A.05 Temporary Traffic Control Zones

In Paragraph 5 [“Temporary traffic control operations ...”], the phrase “**and road users**” was added.

In Paragraph 6 [“Temporary traffic control activities ...”], the word “**extensively**” was added.

Paragraph 7 [“The width, grade ...”] was added.

Chapter 10B Highway-Light Rail Transit Grade Crossing Control Systems

(No changes were made to this Chapter.)

Chapter 10C Signs, Illumination, and Markings

Section 10C.01 Purpose

The title was changed from “**Introduction**” to “**Purpose**”.

In Paragraph 1 [“Signs and markings ...”], the word “**car**” was changed to “**vehicle**”.

In Paragraph 2 [“The design and ...”], “**Chapter 2A**” was changed to “**Part 2**”.

Paragraph 3 [“Section 8B.02 contains ...”] was added.

Section 10C.02 Highway-Rail Grade Crossing (Crossbuck) Sign (R15-1) and Number of Tracks Sign (R15-2)

This Section was added.

Section 10C.03 LOOK Sign (R15-8) [Section 10C.02 in the 2000 MUTCD]

In Paragraph 1, the word “**panel**” was changed to “**plaque**”.

Section 10C.04 STOP (R1-1) or YIELD (R1-2) Signs at Highway-Light Rail Transit Grade Crossings [Section 10C.03 in the 2000 MUTCD]

In the title, the phrase “**at Highway-Light Rail Transit Grade Crossings**” was added, and the phrase “**W3-1a, W3-2a**” was deleted.

In the second sentence of Paragraph 1 [“For all highway-light ...”], “**(W3-1a)**” was changed to “**(W3-1)**”, “**(W3-2a)**” was changed to “**(W3-2)**”, and the phrase “**in accordance with Section 2C.26**” was changed to “**if the criteria for their installation given in Section 2C.29 is met**”.

In Paragraph 2 [“The use of ...”], the second sentence of Item A was added. Items B, C, and F were added.

Section 10C.05 DO NOT STOP ON TRACKS Sign (R8-8) [Section 10C.04 in the 2000 MUTCD]

In the last sentence of Paragraph 1 [“A DO NOT ...”], the phrase “**observe the sign and be able to comply with its message**” was changed to “**approaching drivers**”.

Paragraph 2 [“DO NOT STOP ...”] was added.

In Paragraph 3 [“On divided highways ...”], the phrase “**near or far**” was added.

Section 10C.06 TRACKS OUT OF SERVICE Sign (R8-9)

This Section was added.

Section 10C.07 STOP HERE ON RED Sign (R10-6) [Section 10C.05 in the 2000 MUTCD]

In Paragraph 1 [“The STOP HERE ...”], the phrase “**or traffic gates**” was deleted in 2000 MUTCD.

Section 10C.08 STOP HERE WHEN FLASHING Sign (R8-10)

This Section was added.

Section 10C.09 Light Rail Transit-Activated Blank-Out Turn Prohibition Signs (R3-1a , R3-2a) [Section 10C.06 in the 2000 MUTCD]

Paragraph 5 [“Turn prohibition signs ...”] was added.

Section 10C.10 EXEMPT Highway-Rail Grade Crossing Signs (R15-3, W10-1a)

This Section was added.

Section 10C.11 Divided Highway With Light Rail Transit Crossing Signs (R15-7 Series) [Section 10C.07 in the 2000 MUTCD]

In the first sentence of Paragraph 1 [“The Divided Highway ...”], the word “**cars**” was changed to “**vehicles**”.

Section 10C.12 No Vehicles On Tracks Signs (R15-6, R15-6a) [Section 10C.08 in the 2000 MUTCD]

In Paragraph 3 [“A No Vehicles ...”], “**1 m**” was changed to “**0.9 m**”.

Sections 10C.13 and 10C.14 [Sections 10C.09 and 10C.10 in the 2000 MUTCD]

(No changes were made to these Sections.)

Section 10C.15 Highway-Rail Grade Crossing Advance Warning Signs (W10 Series) [Section 10C.11 in the 2000 MUTCD]

In the title, the phrase “**Grade Crossing**” was added.

In Paragraph 1 [“A Highway-Rail Grade ...”], the phrases “**Grade Crossing**” and “**in semiexclusive alignments**” were added. Items A and D were added. In Item B, “**train/transit**” was changed to “**transit**”.

Paragraph 4 [“Standard: If the distance ...”] was added.

In Paragraph 5 [“If the W10-2 ...”], the phrase “**the turning maneuver**” was changed to “**through traffic**”.

The fourth and seventh paragraphs in the 2000 MUTCD were deleted.

Section 10C.16 Low Ground Clearance Highway-Rail Grade Crossing Sign (W10-5)

This Section was added.

Section 10C.17 Light Rail Transit Approaching-Activated Blank-Out Warning Sign (W10-7) [Section 10C.12 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 10C.18 Storage Space Signs (W10-11, W10-11a, W10-11b)

This Section was added.

Section 10C.19 Skewed Crossing Sign (W10-12)

This Section was added.

Section 10C.20 Light Rail Transit Station Sign (I-12) [Section 10C.13 in the 2000 MUTCD]

In the title and in Paragraph 1, the word “**Transit**” was added.

In Paragraph 1, the word “**transit**” was added.

Section 10C.21 Emergency Notification Sign (I-13 or I-13a)

This Section was added.

Section 10C.22 Illumination at Highway-Light Rail Transit Crossings [Section 10C.14 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 10C.23 Pavement Markings

This Section was added.

Section 10C.24 Stop Lines

This Section was added.

Section 10C.25 Dynamic Envelope Markings [Section 10C.15 in the 2000 MUTCD]

In the title, the word “**Delineation**” was deleted.

In Paragraph 1 [“The dynamic envelope (see ...)”], the word “**delineation**” was deleted, and the word “**car**” was changed to “**vehicle**”.

In Paragraph 3 [“If used, pavement ...”], the word “**delineation**” was deleted, and the phrase “**or contrasting pavement color and/or contrasting pavement texture**” was added.

In Paragraphs 5 [“In semiexclusive alignments ...”], 6, and 8 the word “**markings**” was added in three places, and the word “**delineated**” was deleted in three places.

Figure 10C-1. Highway-Rail Grade Crossing (Crossbuck) Regulatory Signs

This figure was added.

Figure 10C-2. Regulatory Signs [Page 10C-3 in the 2000 MUTCD]

A figure number and title were added.

The R8-9, R8-10, R10-11a, and R15-3 signs were added.

The R15-5 and R15-5a signs were relocated from Page 10C-7 in the 2000 MUTCD.

The designs of the R3-1a, R3-2a, and R15-6 signs were changed.

The diamond symbols were deleted from the R15-4a, R15-4b, and R15-4c signs.

The codes for the R15-4b and R15-4c signs were reversed.

Figure 10C-3. Warning Signs and Light Rail Station Sign [Page 10C-7 in the 2000 MUTCD]

A figure number and title were added.

The W10-1a, W10-5, W10-11, W10-12, W10-11a, and W10-11b signs were added.

The R15-5 and R15-5a signs were relocated to Figure 10C-2.

The designs of the W10-7 and I-12 signs were changed.

The symbols on the W10-2, W10-3, and W10-4 signs were changed to thicker lines.

Figure 10C-4. Emergency Notification Signs

This figure was added.

Figure 10C-5. Example of Placement of Warning Signs and Pavement Markings at Highway-Light Rail Transit Grade Crossings

This figure was added.

Figure 10C-6. Examples of Highway-Light Rail Transit Grade Crossing Pavement Markings

This figure was added.

Figure 10C-7. Light Rail Transit Vehicle Dynamic Envelope [Figure 10C-1 in the 2000 MUTCD]

The leader arrows showing the locations of the “roadway or sidewalk” were changed.

The phrase “delineation and/or” was deleted from the label for the edge pavement markings.

Figure 10C-8. Typical Light Rail Transit Vehicle Dynamic Envelope Pavement Markings [Figure 10C-2 in the 2000 MUTCD]

In the title, the word “**Delineation**” was deleted.

In the note at the top left corner, the word “**delineation**” was changed to the phrase “**dynamic envelope pavement**”.

In the note explaining the asterisk, the word “railroad” was changed to the phrase “**light rail transit authority**”.

The color of the centerline was changed from white to yellow.

Figure 10C-9. Example of Light Rail Transit Vehicle Dynamic Envelope Pavement Markings [Figure 10C-3 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Example of**”, the word “**Car**” was changed to “**Vehicle**”, and the word “**Delineation**” was deleted.

Figure 10C-10. Example of Light Rail Transit Vehicle Dynamic Envelope Contrasting Color and/or Texture [Figure 10C-4 in the 2000 MUTCD]

In the title, the word “**Typical**” was changed to the phrase “**Example of**”, the word “**Delineation**” was deleted, and the word “**Pavement**” was changed to the phrase “**Color and/or**”.

The phrase “**color and/or**” was added to the note about contrasting pavement texture.

Chapter 10D Highway-Light Rail Transit Active Traffic Control Grade Crossing Systems

Section 10D.01 Introduction

In Paragraph 1 [“Active light rail ...”], the word “**vehicles**” was added.

The second paragraph in the 2000 MUTCD was deleted.

In Paragraph 5 [“Light rail transit ...”], “**15 km/h**” was changed to “**16 km/h**”.

In Paragraph 6 [“When light rail ...”], the word “**cars**” was changed to “**vehicles**”.

Section 10D.02 Flashing-Light Signals [Section 10D.04 in the 2000 MUTCD]

(No changes were made to this Section.)

Section 10D.03 Automatic Gates

In Paragraph 4 [“Where the grade ...”], the word “**grade**” was added.

In the second sentence of Paragraph 5 [“Traffic control signals ...”], the word “**traffic**” was changed to “**automatic**”.

In Paragraph 6 [“Automatic gates may ...”], the word “**Traffic**” was changed to “**Automatic**”.

Section 10D.04 Four-Quadrant Gate Systems [Section 10D.02 in the 2000 MUTCD]

In Paragraph 2 [“A Four-Quadrant Gate ...”], the word “**at**” was changed to the phrase “**entering and exiting**”.

In Paragraph 3 [“The Four-Quadrant Gate ...”], the word “**approaching**” was changed to “**entrance**”.

In Paragraph 4 [“In the normal ...”], the phrase “**, unless constant warning time or other advanced system requires otherwise,**” was added in the first sentence. In the second sentence, the word “**approaching**” was changed to “**entrance**”. In the third sentence, the word “**lane**” was deleted in the 2000 MUTCD. In the last sentence, the word “**down**” was changed to the phrase “**in the down position**”.

In Paragraph 5 [“When the light ...”], the word “**arms**” was added.

In Paragraph 7 [“Except as noted ...”], the phrase “**Except as noted in the Option below,**” was added, and the word “**lane**” was deleted.

Paragraphs 11 [“The operating mode ...”] and 12 were added.

In Paragraph 13 [“If the Dynamic ...”], the phrase “**Where an engineering study determines the need**” was changed to “**If the Dynamic Exit Gate Operating Mode is used**”, and the phrase “**at the crossing**” was changed to “**to control exit gate operation based on vehicle presence within the minimum track clearance distance**”.

Paragraphs 14 [“Regardless of which ...”], 15, and 16 were added.

In Paragraph 17 [“At locations where ...”], the word “**safety**” was added.

In Paragraph 18 [“Four-Quadrant Gate systems should include ...”], the word “**railroad**” was changed to “**light rail transit**”.

In Paragraph 19 [“Exit gate arms ...”], the word “**lane**” was deleted in the 2000 MUTCD.

Section 10D.05 Traffic Control Signals

In Paragraph 1 [“There are two ...”], the phrase “**traffic control**” was added.

In Paragraph 2 [“The provisions of ...”], the word “**traffic**” was changed to “**automatic**”.

In Paragraph 6 [“Where light rail ...”], the word “**signals**” was changed to the phrase “**signal faces**”, and the word “**face**” was added.

Section 10D.06 Highway Traffic Signal Preemption Turning Restrictions

In the title, the word “**Highway**” was added.

In Paragraph 5 [“An activated blank-out ...”], the word “**highway**” was added.

Section 10D.07 Use of Traffic Control Signals for Control of Light Rail Transit Vehicles at Grade Crossings

In Paragraph 2 [“Examples of light ...”], the word “**Typical**” was changed to the phrase “**Example of**”.

In Paragraph 7 [“Light rail transit signal faces ...”], the word “**heads**” was changed to “**faces**”, the word “**highway**” was added, the word “**head**” was changed to “**face**”, and “**1 m**” was changed to “**0.9 m**”.

Section 10D.08 Pedestrian and Bicycle Signals and Crossings

Paragraph 4 [“If an engineering ...”] was changed from Option to Guidance.

Figure 10D-1. Examples of Light Rail Transit Signals

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”.

The phrase “**(or signal indications)**” was added to the notes at the bottom of the figure.

Figure 10D-2. Example of Light Rail Transit Flashing-Light Signal Assembly for Pedestrian Crossings

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

The maximum dimension for the height to the bottom of the flashing light housing was changed from “**2.8 m**” to “**2.9 m**”.

Figure 10D-3. Example of Pedestrian Gate Placement Behind the Sidewalk

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

Figure 10D-4. Example of Pedestrian Gate Placement with Pedestrian Gate Arm

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

The asterisk and the note explaining the asterisk were added.

Figure 10D-5. Examples of Placement of Pedestrian Gates

In the title, the word “**Typical**” was changed to the phrase “**Examples of**”, and the word “**Traffic**” was deleted.

Figure 10D-6. Example of Swing Gates

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

Figure 10D-7. Example of Pedestrian Barriers at an Offset Highway-Light Rail Transit Crossing

In the title, the word “**Typical**” was changed to the phrase “**Example of**”.

Figure 10D-8. Examples of Pedestrian Barrier Installation at an Offset Nonintersection Light Rail Transit Crossing

In the title, the word “**Typical**” was deleted.

Appendix A1 Congressional Legislation

The text regarding Section 306 - Motorist Call Boxes was added.