The Manual on Uniform Traffic Control Devices (MUTCD) is approved by the Federal Highway Administrator as the National Standard in accordance with Title 23 U.S. Code, Sections 109(d), 114(a), 217, 315, and 402(a), 23 CFR 655, and 49 CFR 1.48(b)(8), 1.48(b)(33), and 1.48(c)(2).

Addresses for Publications Referenced in the MUTCD

American Automobile Association (AAA)
1000 AAA Drive
Heathrow, FL 32746
www.aaa.com
800-222-4357

American Association of State Highway and Transportation Officials (AASHTO)
444 North Capitol Street, NW, Suite 249
Washington, DC 20001
www.transportation.org
202-624-5800

American National Standards Institute (ANSI)
1819 L Street, NW, 6th Floor
Washington, DC 20036
www.ansi.org
202-293-8020

American Railway Engineering and Maintenance-of-Way Association (AREMA)
10003 Derekwood Lane, Suite 210
Lanham, MD 20706
www.arema.org
301-459-3200

Federal Highway Administration Report Center
Facsimile number: 814-239-2156
report.center@fhwa.dot.gov

Illuminating Engineering Society (IES)
120 Wall Street, Floor 17
New York, NY 10005
www.iesna.org
212-248-5000

Institute of Makers of Explosives
1120 19th Street, NW, Suite 310
Washington, DC 20036-3605
www.ime.org
202-429-9280

Institute of Transportation Engineers (ITE)
1099 14th Street, NW, Suite 300 West
Washington, DC 20005-3438
www.ite.org
202-289-0222

International Organization for Standardization
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Case Postale 56
CH-1211
Acknowledgments

The Federal Highway Administration gratefully acknowledges the valuable assistance that it received from the National Committee on Uniform Traffic Control Devices and its more than 250 voluntary members in the development of this Manual.

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Section 9B.05 BEGIN RIGHT TURN LANE YIELD TO BIKES Sign (R4-4)
Section 9B.06 Bicycles May Use Full Lane Sign (R4-11)
Section 9B.07 Bicycle WRONG WAY Sign and RIDE WITH TRAFFIC Plaque (R5-1b, R9-3cP)
Section 9B.08 NO MOTOR VEHICLES Sign (R5-3)
Section 9B.09 Selective Exclusion Signs
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Section 9B.14 Other Regulatory Signs
Section 9B.15 Turn or Curve Warning Signs (W1 Series)
Section 9B.16 Intersection Warning Signs (W2 Series)
Section 9B.17 Bicycle Surface Condition Warning Sign (W8-10)
Section 9B.18 Bicycle Warning and Combined Bicycle/Pedestrian Signs (W11-1 and W11-15)
Section 9B.19 Other Bicycle Warning Signs
Section 9B.20 Bicycle Guide Signs (D1-1b, D1-1c, D1-2b, D1-2c, D1-3b, D1-3c, D11-1, D11-1c)
Section 9B.21 Bicycle Route Signs (M1-8, M1-8a, M1-9)
Section 9B.22 Bicycle Route Sign Auxiliary Plaques
Section 9B.23 Bicycle Parking Area Sign (D4-3)
Section 9B.24 Reference Location Signs (D10-1 through D10-3) and Intermediate Reference Location Signs (D10-1a through D10-3a)
Section 9B.25 Mode-Specific Guide Signs for Shared-Use Paths (D11-1a, D11-2, D11-3, D11-4)
Section 9B.26 Object Markers

CHAPTER 9C. MARKINGS
Section 9C.01 Functions of Markings
Section 9C.02 General Principles
Section 9C.03 Marking Patterns and Colors on Shared-Use Paths
Section 9C.04 Markings For Bicycle Lanes
Section 9C.05 Bicycle Detector Symbol
Section 9C.06 Pavement Markings for Obstructions
Section 9C.07 Shared Lane Marking

CHAPTER 9D. SIGNALS
Section 9D.01 Application
Section 9D.02 Signal Operations for Bicycles

APPENDIX A1. CONGRESSIONAL LEGISLATION
APPENDIX A2. METRIC CONVERSIONS
INTRODUCTION

The Department of Transportation of the State of Wisconsin, referred to hereinafter as the “Department”, has in accordance with Wisconsin Statutes designated the 2009 edition of the Manual on Uniform Traffic Control Devices for Streets and Highways (hereafter designated the Uniform Manual or MUTCD) and addendums, developed by the National Committee on Uniform Traffic Control Devices (NC) and approved by the Federal Highway Administration (FHWA), including all revisions, and errata, as the official Wisconsin Manual on Uniform Traffic Control Devices subject to the modifications set forth in this Supplement. The MUTCD as addended, expanded and modified by this Supplement is applicable to the design, use, application, installation, maintenance, and operation of all traffic control devices on all highways in the state.

Statutory reference to the adoption and authority of the Uniform Manual and Supplement is contained in the following sections:

Wisconsin State Statute 84.02(4)(e) The department shall adopt a manual establishing a uniform system of traffic control devices for use upon the highways of this state. The system shall be consistent with and, so far as practicable, conform to current nationally recognized standards for traffic control devices.

Wisconsin State Statute 84.02(4)(f) The department shall adopt a manual establishing a uniform system of signs, signals, markings and devices for the purpose of regulating, warning or guiding bicycle traffic on highways, streets, and bikeways, as defined in Wisconsin State Statute 84.60(1)(a). The system shall be consistent with and shall conform to the system established under par. (e).

Wisconsin State Statute 349.065 Local authorities shall place and maintain traffic control devices upon highways under their jurisdiction to regulate, warn, guide or inform traffic. The design, installation and operation or use of new traffic control devices placed and maintained after the adoption of the uniform traffic control devices manual under Wisconsin State Statute 84.02(4)(e) shall conform to the manual. After January 1, 1977, all traffic control devices placed and maintained by local authorities shall conform to the manual.

From time to time there may be revisions to the Wisconsin MUTCD. These will be incorporated in the Wisconsin MUTCD only upon approval by the Department.

The Secretary has delegated to the State Traffic Engineer of the Department of Transportation the authority to make such specific interpretations, provided that all interpretations tending to cause a substantive change in the provisions of the Manual shall be approved by the Director of the Bureau of Traffic Operations prior to issuance.

Standard:

1. Traffic control devices shall be defined as all signs, signals, markings, and other devices used to regulate, warn, or guide traffic, placed on, over, or adjacent to a street, highway, pedestrian facility, bikeway, or private road open to public travel (see definition in Section 1A.13) by authority of a public agency or official having jurisdiction, or, in the case of a private road, by authority of the private owner or private official having jurisdiction.

2. The Manual on Uniform Traffic Control Devices (MUTCD) is incorporated by reference in 23 Code of Federal Regulations (CFR), Part 655, Subpart F and shall be recognized as the national standard for all traffic control devices installed on any street, highway, bikeway, or private road open to public travel (see definition in Section 1A.13) in accordance with 23 U.S.C. 109(d) and 402(a). The policies and procedures of the Federal Highway Administration (FHWA) to obtain basic uniformity of traffic control devices shall be as described in 23 CFR 655, Subpart F.

3. In accordance with 23 CFR 655.603(a), for the purposes of applicability of the MUTCD:

A. Toll roads under the jurisdiction of public agencies or authorities or public-private partnerships shall be considered to be public highways;

B. Private roads open to public travel shall be as defined in Section 1A.13; and

C. Parking areas, including the driving aisles within those parking areas, that are either publicly or privately owned shall not be considered to be “open to public travel” for purposes of MUTCD applicability.
Any traffic control device design or application provision contained in this Manual shall be considered to be in the public domain. Traffic control devices contained in this Manual shall not be protected by a patent, trademark, or copyright, except for the Interstate Shield and any items owned by FHWA.

Support:

Pictographs, as defined in Section 1A.13, are embedded in traffic control devices but the pictographs themselves are not considered traffic control devices for the purposes of Paragraph 4.

The need for uniform standards was recognized long ago. The American Association of State Highway Officials (AASHO), now known as the American Association of State Highway and Transportation Officials (AASHTO), published a manual for rural highways in 1927, and the National Conference on Street and Highway Safety (NCSHS) published a manual for urban streets in 1930. In the early years, the necessity for unification of the standards applicable to the different classes of road and street systems was obvious. To meet this need, a joint committee of AASHO and NCSHS developed and published the original edition of this Manual on Uniform Traffic Control Devices (MUTCD) in 1935. That committee, now called the National Committee on Uniform Traffic Control Devices (NCUTCD), though changed from time to time in name, organization, and personnel, has been in continuous existence and has contributed to periodic revisions of this Manual. The FHWA has administered the MUTCD since the 1971 edition. The FHWA and its predecessor organizations have participated in the development and publishing of the previous editions. There were nine previous editions of the MUTCD, and several of those editions were revised one or more times. Table I-1 traces the evolution of the MUTCD, including the two manuals developed by AASHO and NCSHS.

Standard:

The U.S. Secretary of Transportation, under authority granted by the Highway Safety Act of 1966, decreed that traffic control devices on all streets and highways open to public travel in accordance with 23 U.S.C. 109(d) and 402(a) in each State shall be in substantial conformance with the Standards issued or endorsed by the FHWA.

Support:

The “Uniform Vehicle Code (UVC)” is one of the publications referenced in the MUTCD. The UVC contains a model set of motor vehicle codes and traffic laws for use throughout the United States.

Guidance:

The States should adopt Section 15-116 of the UVC, which states that, “No person shall install or maintain in any area of private property used by the public any sign, signal, marking, or other device intended to regulate, warn, or guide traffic unless it conforms with the State manual and specifications adopted under Section 15-104.”

Table I-1. Evolution of the MUTCD

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Month / Year Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td>1927</td>
<td>Manual and Specifications for the Manufacture, Display, and Erection of U.S. Standard Road Markers and Signs (for rural roads)</td>
<td>4/29, 12/31</td>
</tr>
<tr>
<td>1930</td>
<td>Manual on Street Traffic Signs, Signals, and Markings (for urban streets)</td>
<td>No revisions</td>
</tr>
<tr>
<td>1935</td>
<td>Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)</td>
<td>2/39</td>
</tr>
<tr>
<td>1948</td>
<td>Manual on Uniform Traffic Control Devices for Streets and Highways</td>
<td>9/54</td>
</tr>
<tr>
<td>1961</td>
<td>Manual on Uniform Traffic Control Devices for Streets and Highways</td>
<td>No revisions</td>
</tr>
<tr>
<td>2009</td>
<td>Manual on Uniform Traffic Control Devices for Streets and Highways</td>
<td></td>
</tr>
</tbody>
</table>
Throughout this Manual the headings Standard, Guidance, Option, and Support are used to classify the nature of the text that follows. Figures and tables, including the notes contained therein, supplement the text and might constitute a Standard, Guidance, Option, or Support. The user needs to refer to the appropriate text to classify the nature of the figure, table, or note contained therein.

**Standard:**

When used in this Manual, the text headings of Standard, Guidance, Option, and Support shall be as defined in Paragraph 1 of Section 1A.13.

**Support:**

Throughout this Manual all dimensions and distances are provided in English units. Appendix A2 contains tables for converting each of the English unit numerical values that are used in this Manual to the equivalent Metric (International System of Units) values.

**Guidance:**

If Metric units are to be used in laying out distances or determining sizes of devices, such units should be specified on plan drawings and made known to those responsible for designing, installing, or maintaining traffic control devices.

Except when a specific numeral is required or recommended by the text of a Section of this Manual, numerals displayed on the images of devices in the figures that specify quantities such as times, distances, speed limits, and weights should be regarded as examples only. When installing any of these devices, the numerals should be appropriately altered to fit the specific situation.

**Support:**

The following information will be useful when reference is being made to a specific portion of text in this Manual.

There are nine Parts in this Manual and each Part is comprised of one or more Chapters. Each Chapter is comprised of one or more Sections. Parts are given a numerical identification, such as Part 2 – Signs. Chapters are identified by the Part number and a letter, such as Chapter 2B – Regulatory Signs, Barricades, and Gates. Sections are identified by the Chapter number and letter followed by a decimal point and a number, such as Section 2B.03 – Size of Regulatory Signs.

Each Section is comprised of one or more paragraphs. The paragraphs are indented and are identified by a number. Paragraphs are counted from the beginning of each Section without regard to the intervening text headings (Standard, Guidance, Option, or Support). Some paragraphs have lettered or numbered items. As an example of how to cite this Manual, the phrase “Not less than 40 feet beyond the stop line” that appears in Section 4D.14 of this Manual would be referenced in writing as “Section 4D.14, P1, A.1,” and would be verbally referenced as “Item A.1 of Paragraph 1 of Section 4D.14.”

**Standard:**

In accordance with 23 CFR 655.603(b)(3), States or other Federal agencies that have their own MUTCDs or Supplements shall revise these MUTCDs or Supplements to be in substantial conformance with changes to the National MUTCD within 2 years of the effective date of the Final Rule for the changes. Substantial conformance of such State or other Federal agency MUTCDs or Supplements shall be as defined in 23 CFR 655.603(b)(1).

After the effective date of a new edition of the MUTCD or a revision thereto, or after the adoption thereof by the State, whichever occurs later, new or reconstructed devices installed shall be in compliance with the new edition or revision.

In cases involving Federal-aid projects for new highway or bikeway construction or reconstruction, the traffic control devices installed (temporary or permanent) shall be in conformance with the most recent edition of the National MUTCD before that highway is opened or re-opened to the public for unrestricted travel [23 CFR 655.603(d)(2) and (d)(3)].

Unless a particular device is no longer serviceable, non-compliant devices on existing highways and bikeways shall be brought into compliance with the current edition of the National MUTCD as part of the systematic upgrading of substandard traffic control devices (and installation of new required traffic control devices) required pursuant to the Highway Safety Program, 23 U.S.C. §402(a). The FHWA has the authority to
establish other target compliance dates for implementation of particular changes to the MUTCD [23 CFR 655.603(d)(1)]. These target compliance dates established by the FHWA shall be as shown in Table I-2.

Except as provided in Paragraph 24, when a non-compliant traffic control device is being replaced or refurbished because it is damaged, missing, or no longer serviceable for any reason, it shall be replaced with a compliant device.

Option:

A damaged, missing, or otherwise non-serviceable device that is non-compliant may be replaced in kind if engineering judgment indicates that:

A. One compliant device in the midst of a series of adjacent non-compliant devices would be confusing to road users; and/or

B. The schedule for replacement of the whole series of non-compliant devices will result in achieving timely compliance with the MUTCD.

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

<table>
<thead>
<tr>
<th>2009 MUTCD Section Number(s)</th>
<th>2009 MUTCD Section Title</th>
<th>Specific Provision</th>
<th>Compliance Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2A.08</td>
<td>Maintaining Minimum Retroreflectivity</td>
<td>Implementation and continued use of an assessment or management method that is designed to maintain regulatory and warning sign retroreflectivity at or above the established minimum levels (see Paragraph 2)</td>
<td>2 years from the effective date of this revision of the 2009 MUTCD*</td>
</tr>
<tr>
<td>2A.19</td>
<td>Lateral Offset</td>
<td>Crashworthiness of sign supports on roads with posted speed limit of 50 mph or higher (see Paragraph 2)</td>
<td>January 17, 2013 (date established in the 2000 MUTCD)</td>
</tr>
<tr>
<td>2B.40</td>
<td>ONE WAY Signs (R6-1, R6-2)</td>
<td>New requirements in the 2009 MUTCD for the number and locations of ONE WAY signs (see Paragraphs 4, 9, and 10)</td>
<td>December 31, 2019</td>
</tr>
<tr>
<td>2C.06 through 2C.14</td>
<td>Horizontal Alignment Warning Signs</td>
<td>Revised requirements in the 2009 MUTCD regarding the use of various horizontal alignment signs (see Table 2C-5)</td>
<td>December 31, 2019</td>
</tr>
<tr>
<td>2E.31, 2E.33, and 2E.36</td>
<td>Plaques for Left-Hand Exits</td>
<td>New requirement in the 2009 MUTCD to use E1-5aP and E1-5bP plaques for left-hand exits</td>
<td>December 31, 2014</td>
</tr>
<tr>
<td>4D.26</td>
<td>Yellow Change and Red Clearance Intervals</td>
<td>New requirement in the 2009 MUTCD that durations of yellow change and red clearance intervals shall be determined using engineering practices (see Paragraphs 3 and 6)</td>
<td>5 years from the effective date of this revision of the 2009 MUTCD, or when timing adjustments are made to the individual intersection and/or corridor, whichever occurs first</td>
</tr>
<tr>
<td>4E.06</td>
<td>Pedestrian Intervals and Signal Phases</td>
<td>New requirement in the 2009 MUTCD that the pedestrian change interval shall not extend into the red clearance interval and shall be followed by a buffer interval of at least 3 seconds (see Paragraph 4)</td>
<td>5 years from the effective date of this revision of the 2009 MUTCD, or when timing adjustments are made to the individual intersection and/or corridor, whichever occurs first</td>
</tr>
<tr>
<td>6D.03**</td>
<td>Worker Safety Considerations</td>
<td>New requirement in the 2009 MUTCD that all workers within the right-of-way shall wear high-visibility apparel (see Paragraphs 4, 6, and 7)</td>
<td>December 31, 2011</td>
</tr>
<tr>
<td>6E.02**</td>
<td>High-Visibility Safety Apparel</td>
<td>New requirement in the 2009 MUTCD that all flaggers within the right-of-way shall wear high-visibility apparel</td>
<td>December 31, 2011</td>
</tr>
<tr>
<td>7D.04**</td>
<td>Uniform of Adult Crossing Guards</td>
<td>New requirement in the 2009 MUTCD for high-visibility apparel for adult crossing guards</td>
<td>December 31, 2011</td>
</tr>
<tr>
<td>8B.03, 8B.04</td>
<td>Grade Crossing (Crossbuck) Signs and Supports</td>
<td>Retroreflective strip on Crossbuck sign and support (see Paragraph 7 in Section 8B.03 and Paragraphs 15 and 18 in Section 8B.04)</td>
<td>December 31, 2019</td>
</tr>
<tr>
<td>8B.04</td>
<td>Crossbuck Assemblies with YIELD or STOP Signs at Passive Grade Crossings</td>
<td>New requirement in the 2009 MUTCD for the use of STOP or YIELD signs with Crossbuck signs at passive grade crossings</td>
<td>December 31, 2019</td>
</tr>
</tbody>
</table>

* Types of signs other than regulatory or warning are to be added to an agency's management or assessment method as resources allow.
** MUTCD requirement is a result of a legislative mandate.

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