

# FORWARD

The 2011 “Minnesota Manual on Uniform Traffic Control Devices for Streets and Highways” (2011 MN MUTCD) has been established to provide a uniform policy for all traffic control devices on all public streets, roads and highways within the State of Minnesota. This Manual was prepared pursuant to the authority vested in the State of Minnesota, Department of Transportation (MnDOT) as provided in Minnesota Statutes, Section 169.06, subd. 1 (2004). Standards described within this Manual may also be used by private agencies on facilities which they control. It is recommended that such be done so that the meaning of traffic control devices be uniform throughout the State.

This Manual is in substantial conformance with the 2009 edition of the “Manual on Uniform Uniform Traffic Control Devices for Streets and Highways” (MUTCD) as published by the U.S. Department of Transportation, Federal Highway Administration (Federal). Most of the text, figures and tables in this Manual are identical to those found in the Federal MUTCD, while others have been modified to meet State laws or to more closely reflect the conditions and policies of Minnesota.

There may be statements or sections in this Manual which are worded in a manner designed more for a National than a State document. References to the State Statutes in this Manual should be understood to refer to the “Minnesota Motor Vehicle and Traffic Laws” and other appropriate State Statutes.

Detail drawings for signs and traffic control devices along with supplemental details pertaining to standard signs and guide signs, can be found in the MnDOT “Standard Signs Manual” and the Federal “Standard Highway Signs and Markings” book.

MnDOT and State of Minnesota manuals are available from the Office of Systems and Support Services, Map & Manual Sales Unit. Federal manuals are available from the Government Printing Office (see Section 1A.11).

Improved designs and equipment, signs for special applications, and variations from standard sign drawings and sizes which may be developed after the publication date of this Manual may be used in research or on an experimental basis. However, all such research and/or experimentation with new designs **shall** be coordinated through the Minnesota Department of Transportation, Office of Traffic, Safety, and Technology.

Addresses for Publications Referenced in the MN 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, D.C. 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 (FHWA)  
Office of Transportation Operations  
400 Seventh Street SW, HOTO  
Washington, DC 20590  
http://mutcd.fhwa.dot.gov

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

Government Printing Office (GPO)  
Superintendent of Documents  
P.O. Box 371954  
Pittsburgh, PA 15250-7954  
Information: 202-512-1803  
http://mutcd.fhwa.dot.gov/ser-pubs.htm

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 St., NW, Suite 310  
Washington, D.C. 20036-3605  
www.ime.org  
202-429-9280

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

Acknowledgments

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International Organization for Standardization  
1, ch. de la Voie-Creuse  
Case Postale 56  
CH-1211  
Geneva 20, Switzerland  
www.iso.ch  
011-41-22-749-0111

International Safety Equipment Association (ISEA)  
1901 North Moore Street, Suite 808  
Arlington, VA 22209  
www.safetysystem.org  
703-525-1695

National Committee on Uniform Traffic Laws and  
Ordinances (NCUTLO)  
107 South West Street, Suite 110  
Alexandria, VA 22314  
www.ncutlo.org  
800-807-5290

National Electrical Manufacturers Association (NEMA)  
1300 North 17th Street, Suite 1752  
Rosslyn, VA 22209  
www.nema.org  
703-841-3200

Occupational Safety and Health Administration (OSHA)  
U.S. Department of Labor  
200 Constitution Avenue, NW  
Washington, DC 20210  
www.osha.gov  
800-321-6742

Office of Systems and Support Services  
Map and Manual Sales Unit  
Mail Stop 260, Room G-19  
395 John Ireland Blvd.  
St. Paul, Minnesota 55155-1899  
651-296-2216

Office of Traffic, Safety, and Technology  
Mail Stop 725  
1500 West County Road B2  
Roseville, Minnesota 55113  
www.state.mn.us/trafficeng  
651-234-7002

Transportation Research Board (TRB)  
The National Academies  
500 Fifth Street, NW  
Washington, D.C. 20001  
www.nas.edu/trb  
202-334-3072

U.S. Architectural and Transportation Barriers  
Compliance Board (The U.S. Access Board)  
1331 F Street, NW, Suite 1000  
Washington, DC 20004-1111  
www.access-board.gov  
202-272-0080

# INTRODUCTION

## **STANDARD:**

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, or 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. Minnesota Statute, Section 169.06, subd. 2 and subd. 3 (2004), empowers the Commissioner of Transportation and local road authorities to place and maintain traffic control devices on all roadways within their respective jurisdictions.

The Federal “Manual on Uniform Traffic Control Devices” (MUTCD) is incorporated by reference in 23 Code of FHWA 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 (Federal) to obtain basic uniformity of traffic control devices shall be as described in 23 CFR 655, Subpart F.

The “Minnesota Manual on Uniform Traffic Control Devices” (MN MUTCD) has been developed to establish standards for the use of traffic control devices in the State of Minnesota and directed by Minnesota Statutes, Chapter 169.06, subd. 1 which states in part “The Commissioner (of Transportation) shall adopt a manual and specifications for a uniform system of traffic-control devices consistent with the provisions of this chapter (Chapter 169) for use upon highways within this state.”

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 the previous paragraph.

The need for uniform standards was recognized long ago. The American Association of State and 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 of 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.

Minnesota also recognized the need for statewide uniform standards and published its first recorded “Minnesota Manual on Uniform Traffic Control Devices For Streets and Highways” in 1939. It was adopted by the Commissioner of Highways in conformity with the “Highway Traffic Regulation Act” of 1937, and the standards and regulations follow closely the recommendations embodied in the “Manual on Uniform Traffic Control Devices for Streets and Highways” of the American Association of State

Year	Name	Month/Year Revised
1927	Manual and Specifications for the Manufacture ,Display, and Erection of U.S. Standard Road Markers and Signs (for rural roads)	4/29, 12/31
1930	Manual on Street Traffic Signs, Signals, and Markings (for urban streets)	No revisions
1935	Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)	2/39
1942	Manual on Uniform Traffic Control Devices for Streets and Highways - War Emergency Edition	No revisions
1948	Manual on Uniform Traffic Control Devices for Streets and Highways	9/54
1961	Manual on Uniform Traffic Control Devices for Streets and Highways	No revisions
1971	Manual on Uniform Traffic Control Devices for Streets and Highways	11/71, 4/72, 3/73, 10/73, 6/74, 6/75, 9/76, 12/77
1978	Manual on Uniform Traffic Control Devices for Streets and Highways	12/79, 12/83, 9/84, 3/86
1988	Manual on Uniform Traffic Control Devices for Streets and Highways	1/90, 3/92, 9/93, 11/94, 12/96, 6/98, 1/00
2000	Manual on Uniform Traffic Control Devices for Streets and Highways - Millennium Edition	7/02
2003	Manual on Uniform Traffic Control Devices for Streets and Highways	11/20/03
2009	Manual on Uniform Traffic Control Devices for Streets and Highways	1/15/10

**Table I-1. Evolution of the Federal MUTCD**

Highway Officials (AASHO) and the National Conference on Street and Highway Safety, which was adopted as an American standard by the American Standards Association on November 7, 1935. In October, 1993, the Minnesota Department of Transportation requested that the North Central Institute of Traffic Engineers (NCITE) form the Minnesota Manual on Uniform Traffic Control Devices (MN MUTCD) review committee. Its purpose was to review any material to be included or revised in the MN MUTCD so that it reflects current Minnesota Statutes and/or policies as they pertain to all streets or highways within the State. It serves as an advisory body to the Commissioner of Transportation. That committee changed its name to the Minnesota Committee on Uniform Traffic Control Devices (MCUTCD) since its function is similar in nature to the National Committee on Uniform Traffic Control Devices (NCUTCD). Table I-1a traces the evolution of the MN MUTCD.

**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.

In Minnesota, the requirements for conformity can be found in Minnesota Statute Section 169.06, subd. 3, which states "All such traffic-control devices hereafter erected shall conform to the state manual and specifications."

**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.

Except as provided in the following Option, 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.

In addition, the section, portion of a section or graphic which shall be in compliance for future dates shall be encased in a red box or continuation of a red box together with the compliance date which is also in red. That section, portion of a section, or graphic which shall have already been in compliance for past dates shall be encased in a red dashed box or continuation of a red box together with the compliance date which is also in red.

This user of this Manual is encouraged to refer to Table I-2 for further information.

**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 MN MUTCD.

## Approved Revisions

This loose-leafed edition of the MN MUTCD incorporates all revisions which have been approved by the Federal Highway Administrator. This 2011 Edition of the MN MUTCD includes all official final rulings, interpretations, and modifications as of December 15, 2011.

A list of all official changes/revisions to this manual can be found in the Record of Revisions starting on page ix. As changes/revisions are made to each page, the revision number and date of revision will be added and so marked in the outside margin adjacent to the appropriate text or figure. The date at the bottom outside corner of each page indicates the date the official text revisions were distributed.

## Symbols and Additions

This edition of the MN MUTCD continues the national trend set in the Federal MUTCD toward a broader use of symbols as alternatives to word messages. Also, the following new parts have been added to the MN MUTCD:

- Appendix A1, Congressional Legislation
- Appendix A2, Metric Conversions
- Appendix A3, Retroreflective Sheeting Identification Guide
- Appendix C, Sign Listing

MN Rev. 1  
MN Rev. 3

RECORD OF REVISIONS OR ADDITIONS		
Revision Number	Date Issued	Pages Revised or Added
	12/15/2011	Issued as a new manual
1	6/15/2012	v, viii, ix, 1A-4, 1A-28, 1A-29, 2A-5, 2A-18, 2B-1 thru 2B-6, 2B-11, 2B-15, 2B-34, 2B-35, 2B-38, 2B-41, 2B-53, 2B-56, 2B-57, 2C-3, 2C-4, 2C-11, 2C-13, 2C-17, 2C-18, 2C-20, 2C-24 thru 2C-28, 2C-30, 2C-34, 2D-23, 2D-27 thru 2D-29, 2E-6, 2E-33, 2E-37, 2E-41, 2E-51, 2F-6, 2G-11, 2G-16, 2I-2, 2I-5, 2I-10, 2I-11, 2I-13, 2J-5, 2M-1, 2M-2, 2N-2, 3B-27, 3B-35, 4D-1, 4D-39, 4D-46, 4E-3, 4E-6, 4F-3, 5C-2, 6D-1, 6D-2, 6D-4, 6E-1, 6F-3, 6F-7, 6F-20, 6F-29, 6F-37, 6F-52, 6G-1, 7B-1, 7B-5, 7B-6, 7B-9, 7B-11, 7C-1, 7D-1, 7E-a thru 7E-21, 8B-1, 8B-3, 8B-4, 8B-7 thru 8B-10, 8B-14, 8B-18, 8C-4, 8C-8, 8C-9, 9A-i, 9A-ii, 9B-2 thru 9B-4, 9B-6, 9B-9, 9B-18, 9C-1, A2-1, C-1 thru C-8, C-15 thru C-24, C-26, C-28 thru C-31, C-33 thru C-40, C-42, C-43, C-47, C-52 thru C-60, C-62 thru C-70, C-75 thru C-77, C-79 thru C-83
2	6/29/2013	ii, vi, 2A-4, 2A-18, 2A-19, 2B-2 thru 2B-6, 2B-11, 2B-12, 2B-18, 2B-21, 2B-22, 2B-37, 2B-40, 2B-47, 2B-48, 2B-51, 2B-56, 2B-59, 2C-4, 2C-5, 2C-7, 2C-10, 2C-26, 2C-32, 2D-1, 2D-9, 2D-27, 2D-39, 2E-18, 2E-47, 2E-48, 2E-51, 2G-3, 2G-4, 2H-i, 2H-2, 2H-7 thru 2H-9, 2I-2 thru 2I-4, 2I-7, 2I-10, 2J-4, 2J-6, 2K-1, 2K-5, 2M-i, 2M-1, 2M-2, 2M-9, 2M-12 thru 2M-14, 3B-9, 4D-2, 4D-31, 4D-33, 6F-5, 6J-4, 6J-17, 7A-i, 7B-2, 7B-10, 9B-9, 9B-16, 9B-18, C-1, C-2, C-5, C-13, C-14, C-16 thru C-21, C-24, C-26 thru C-39, C-41 thru C-57, C-59 thru C-61, C-63 thru C-66, C-82 thru C-95, INDEX-9 thru INDEX-16.
3	12/11/2013	v, ix, 2B-i, 2B-17, 2B-55, 2C-ii, 2C-23, 2C-26 thru 2C-36, 2D-28, 2E-11, 3B-14, 3C-1, 4G-3, 4L-1, 6A-iii thru 6A-vi, 6F-3 thru 6F-5, 6F-14, 6F-17, 6F-19, 6F-20, 6F-40 thru 6F-53, 6G-7, 6J-iii, 6J-2, 6J-4, 6J-5, 6J-7, 6J-8, 6J-10, 6J-11, 6J-14 thru 6J-21, 6J-24a thru 6J-25b, Chapter 6K (the Field Manual) in its entirety, 7B-2, 8B-2, 9B-6, C-3, C-19, C-38, C-39, C-46, C-56 thru C-58, remove Appendix B in its entirety.
4	2/10/2015	v, ix, 2C-i, 2C-iii, 2C-5, 2C-23, 3A-i, 3A-iii, 3B-8, 3B-10, 3B-11, 3B-14, 3B-36, 6A-iii, 6A-v, 6A-vi, 6C-6, 6F-20, Chapter 6H (Speed Limits in Temporary Traffic Control Zones) in its entirety.
5	1/31/2018	Chapter 6K - Minnesota Temporary Traffic Control Field Manual (the Field Manual) in its entirety.
6	2/21/2018	1A-i, 1A-18, 2B-i, 2B-ii, 2B-iii, 2B-6, 2B-14, 2B-16, 2B-57, 2B-58, 2C-i, 2C-19, 2C-20, 2D-ii, 2D-37, 2D-38, 2M-i, 2M-13, 2M-14, 3A-i, 3A-ii, 3B-32, 3F-3, 3F-4, 4A-i, 4A-iii, 4D-1, 4I-1, 5A-ii, 5G-1, 7A-i, 7D-1, 7F-1, 8A-i, 8A-ii, 8A-iii, 8A-1, 8B-9, 8B-20, 8C-11, 8C-13, 8C-14, 8C-15, 8C-16, 8C-17, 8D-2
7	9/30/2019	v, ix, 2B-i, 2B-ii, 2B-6, 2B-15, 2B-31, 2B-56, 2H-i, 2H-1, 2H-3, 2H-4, 2H-5, 2H-6, 2H-8, 2M-i, 2M-16, 6A-i, 6A-ii, 6A-iv, 6A-v, 6A-vi, 6C-2, 6D-1, 6D-2, 6D-4, 6E-1, 6E-4, 6E-8, 6E-10, 6F-1, 6F-7, 6F-18, 6F-19, 6F-27, 6F-32, 6F-33, 6G-7, 6G-9, 6G-10, 6G-12, 6G-14, 6J-19
8	9/3/2020	1A-i, 1A-13, 1A-14, 2B-i, 2B-17, 2I-i, 2I-3, 2I-4, 2I-9, 2I-10, 2I-13, 2M-i, 2M-4, 2M-11, 2M-12, 3A-ii, 3F-3, 6A-ii, 6A-iii, 6A-iv, 6A-v, 6A-vi, 6E-1, 6F-3, 6F-4, 6F-5, 6F-7, 6F-9, 6F-12, 6F-13, 6F-14, 6F-15, 6F-26, 6F-28, 6F-30, 6F-38, 6F-50, 6G-1, 6G-4, 6G-6, 6G-7, 6G-8, 6G-14, 6H-1, 6H-8, 6J-ii, 6J-4, 6J-10