



Future of the MUTCD

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Agenda

- **The NCUTCD**
- **Basics of the MUTCD**
- **Existing Resources related to MUTCD**
 - **Frequently Asked Questions**
 - **Interim Approvals**
 - **Official Interpretations / Experiments**
- **The Next Edition of the MUTCD?**

NCUTCD

The **National Committee on Uniform Traffic Control Devices (NCUTCD)** or the "National Committee" is an organization whose purpose is to assist in the development of standards, guides and warrants for traffic control devices and practices used to regulate, warn and guide traffic on streets and highways. The NCUTCD recommends to the Federal Highway Administration (FHWA) and to other appropriate agencies proposed revisions and interpretations to the Manual on Uniform Traffic Control Devices (MUTCD) and other accepted national standards. NCUTCD develops public and professional awareness of the principles of safe traffic control devices and practices and provides a forum for qualified individuals with diverse backgrounds and viewpoints to exchange professional information.



NCUTCD

Executive Board

Governing By-laws

19 Sponsoring Agencies – 35 voting members

250+ Professional Volunteer Members

NCUTCD – Sponsoring Agencies

- [American Assoc. of State Highway & Transportation Officials \(AASHTO\)](#)
- [American Automobile Association \(AAA\)](#)
- [American Public Transportation Association \(APTA\)](#)
- [American Public Works Association \(APWA\)](#)
- [American Railway Engineering & Maintenance of Way Association \(AREMA\)](#)
- [American Road & Transportation Builders Association \(ARTBA\)](#)
- [American Society of Civil Engineers \(ASCE\)](#)
- [American Traffic Safety Services Association \(ATSSA\)](#)
- [Association of American Railroads \(AAR\)](#)
- [Association of Pedestrian and Bicycle Professionals \(APBP\)](#)
- [American Highway Users Alliance \(AHUA\)](#)
- [Human Factors Resources \(HFR\)](#)
- [Institute of Transportation Engineers \(ITE\)](#)
- [International Assoc. of Chiefs of Police \(IACP\)](#)
- [International Bridge, Tunnel & Turnpike Association \(IBTTA\)](#)
- [International Municipal Signal Association \(IMSA\)](#)
- [League of American Bicyclists \(LAB\)](#)
- [National Association of County Engineers \(NACE\)](#)
- [National Safety Council \(NSC\)](#)

Evolution of the MUTCD



Working
Toward
20??
MUTCD

1935

Future

2009 MUTCD

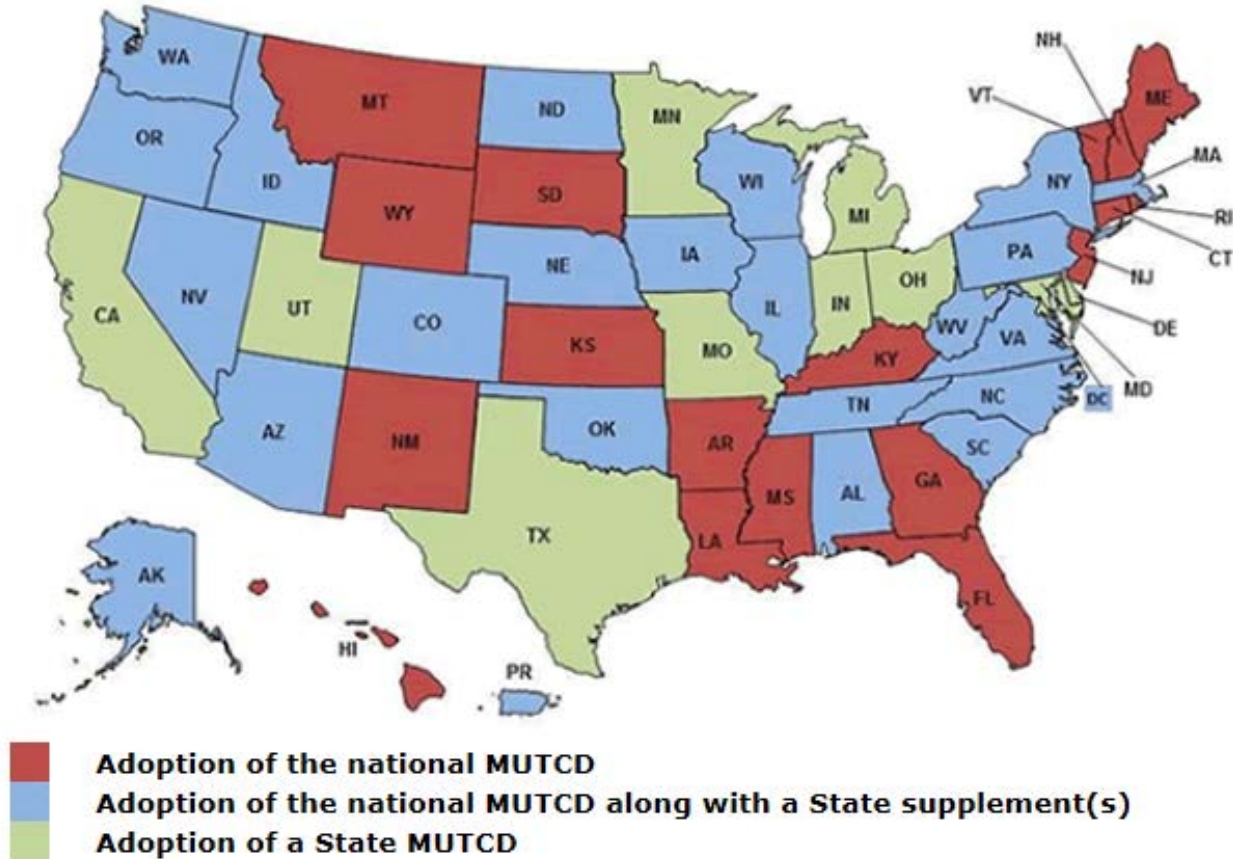
Important dates for the 2009 MUTCD:

- **1/2/2008 – Notice of Proposed Amendments to the 2003 MUTCD**
- **12/16/2009 – Final Rule and publishing of 2009 MUTCD**
- **1/15/2010 – Effective date of 2009 MUTCD**
- **1/15/2012 – Date by which all States are required by Federal law to adopt the MUTCD**

2009 MUTCD

State MUTCDs (and supplements) shall be in “substantial conformance” with the Federal MUTCD, as determined by the FHWA’s Division Administrator in each State

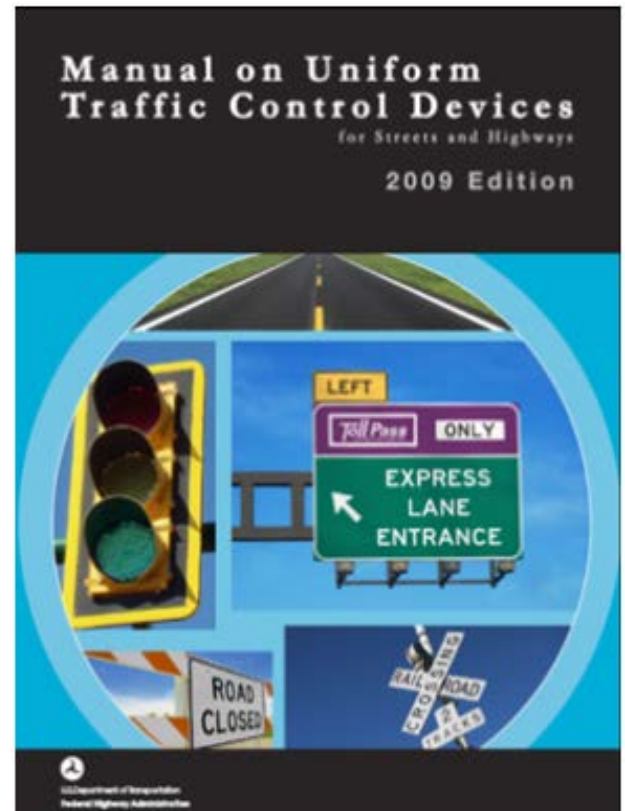
2009 MUTCD



Availability of the 2009 MUTCD

Free downloading from the
MUTCD web site
(<http://mutcd.fhwa.dot.gov>)

Printed copies from the
bookstores of partner
organizations including
ITE, AASHTO, ATTSA, and
IMSA



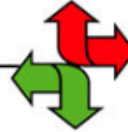
Existing Revisions to the 2009 MUTCD

The 2009 MUTCD has been officially revised two times, with both revisions being published on the same day in May 2012:

- Revision 1 – Application of engineering judgment in the selection and use of traffic control devices**
- Revision 2 – Revisions to compliance dates, including the elimination of 46 of the original 58 compliance dates**

Existing Revisions to the 2009 MUTCD

Manual on Uniform Traffic Control Devices (MUTCD)



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Overview

Evolution of the MUTCD

Who Uses the MUTCD

2009 Edition with
Revisions 1 and 2

Color Specifications

Amendment Process

Home Page

Manual on Uniform Traffic Control Devices

Your MUTCD Turns 80!

On November 7, 2015, the [80th birthday of the MUTCD](#), and throughout the year when you see a traffic sign on a foggy night, the countdown timer at a crosswalk, or a well-placed bike lane, take a moment to appreciate the MUTCD embodies. This progress has resulted in safer, more efficient travel on our Nation's roads. The MUTCD has become the traveler's best friend and silent companion, guiding us on our way along the streets and highways. Through the means of communication with the traveler, traffic control devices speak to us softly, yet effectively. From the use of glass beads to microprismatic sheeting, nighttime sign visibility has advanced significantly. From the use of positive message about train traffic. And countdown timers on pedestrian signals help us cross the street safely. So, whether you are on a path, or the pedals, you can be sure that the MUTCD, through our dedicated professionals w

Standard Highway Signs and Markings

The 2009 MUTCD sign layouts are available. The Federal Highway Administration has developed the design details of the new signs added in the 2009 Edition of the MUTCD and signs whose designs have been modified in the 2009 MUTCD. The new and modified designs are provided in the form of a [2012 Supplement to the 2004 Edition of Standard Highway Signs](#).

The *Manual on Uniform Traffic Control Devices*, or **MUTCD** defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public travel. The MUTCD is published by the Federal Highway Administration (FHWA) under 23 Code of Federal Regulations (CFR), Part 655, Subpart F.

The MUTCD, which has been administered by the FHWA since 1971, is a compilation of national standards for all traffic control devices, including road markings, highway signs, and traffic signals. It is updated periodically to accommodate the nation's changing transportation needs and address new safety technologies, traffic control tools and traffic management techniques.

On December 16, 2009 a final rule adopting the 2009 Edition of the MUTCD was published in the Federal Register with an effective date of January 15, 2010. States must adopt the 2009 National MUTCD as their legal State standard for traffic control devices within two years from the effective date. The Federal Register notice, which provides detailed discussion of the FHWA's decisions on major changes from the 2003 edition, can be viewed at <http://edocket.access.gpo.gov/2009/pdf/E9-28322.pdf> (PDF, 716KB).

FHWA does not print copies of the MUTCD. National organizations have partnered and printed hard copies of the MUTCD. These hard copies are available



Current Edition
of MUTCD

Frequently Asked Questions (FAQ's)

The FHWA's MUTCD Team receives questions daily about a wide variety of issues involving traffic control devices and the MUTCD

As a resource to practitioners, some of the most frequently-asked questions, along with the answers to those questions, are posted on the FAQs web page of the MUTCD web site

All of the FAQs are relevant to the 2009 MUTCD

Official Interpretations

Official interpretations began being issued upon request since the first MUTCD was published by the FHWA in 1971

Their purpose is to allow the FHWA to provide additional clarity to practitioners when a provision in the MUTCD is difficult to understand or when situations arise where complying with a particular provision would be challenging or impractical

Official Interpretations

An Official Interpretation is not a revision to the MUTCD and should be considered as FHWA policy guidance or FHWA's recommendation of appropriate or best practice

Agencies are encouraged to comply with the information provided in an official interpretation, but there is no legal obligation to do so

Official Interpretations

Some interpretations clarify that a particular device or application meets the intent of the MUTCD or is in compliance with the MUTCD, even though the MUTCD text does not specifically say so

An official interpretation of this type provides agencies the ability to use or continue using that particular device or application, at their option, but only in the manner specified in the interpretation

Official Interpretations

The official interpretation process is described in Paragraphs 6 and 7 of Section 1A.10 of the 2009 MUTCD

The requester should write a letter to the FHWA requesting an official interpretation. The letter should fully describe the interpretation being sought and the reasons why the MUTCD provisions are unclear or why compliance is unattainable.

Official Interpretations

A total of **80** official interpretations have been issued since the 2009 MUTCD was published, with the following distribution by parts:

- Part 1. General – **2**
- Part 2. Signs – **16**
- Part 3. Markings – **5**
- Part 4. Highway Traffic Signals – **27**
- Part 5. Low-Volume Roads – **1**
- Part 6. Temporary Traffic Control – **15**
- Part 7. School Areas – **1**
- Part 8. Grade Crossings – **6**
- Part 9. Bicycle Facilities – **7**

Interim Approvals

Section 1A.10 of the MUTCD contains a provision authorizing the Federal Highway Administration to issue Interim Approvals. Such approvals allow the interim use, pending official rulemaking, of a new traffic control device, a revision to the application or manner of use of an existing traffic control device, or a provision not specifically described in the MUTCD.

Any jurisdiction that wishes to use a device or application that has received Interim Approval must submit a written request to the FHWA, Director of the Office of Transportation Operations.

Interim Approvals

The interim approval process was first introduced in the 2003 MUTCD

Its purpose is to allow the interim use, pending official rulemaking, of a proven new traffic control device, a revision to the application or manner of use of an existing traffic control device, or a provision not specifically described in this Manual

It is issued by official memorandum and includes technical conditions for use (design, placement, etc.)

Interim Approvals

Criteria for a new device to be considered for FHWA issuance of an Interim Approval:

- **Successful experimentation and/or research in diverse geographic regions or conditions (not just a single jurisdiction)**
- **Assessment of relative risks, benefits, costs, impacts, and other factors**
- **FHWA intention to propose the device for the next edition of MUTCD and a high likelihood of its adoption in the Final Rule**

Interim Approvals

Standard: A jurisdiction, toll facility operator, or owner of a private road open to public travel that desires to use a traffic control device for which FHWA has issued an interim approval shall request permission from FHWA.

Guidance: The request for permission to place a traffic control device under an interim approval should contain the following:

- A. A description of where the device will be used, such as a list of specific locations or highway segments or types of situations, or a statement of the intent to use the device jurisdiction-wide;*
- B. An agreement to abide by the specific conditions for use of the device as contained in the FHWA's interim approval document;*
- C. An agreement to maintain and continually update a list of locations where the device has been installed; and*

Interim Approvals

D. An agreement to:

- 1. Restore the site(s) of the interim approval to a condition that complies with the provisions in this Manual within 3 months following the issuance of a final rule on this traffic control device; and*
- 2. Terminate use of the device or application installed under the interim approval at any time that it determines significant safety concerns are directly or indirectly attributable to the device or application. The FHWA's Office of Transportation Operations has the right to terminate the interim approval at any time if there is an indication of safety concerns.*

Interim Approvals

A total of 18 Interim Approvals since 2003; seven have been issued since the 2009 MUTCD was published:

- **Alternative Traffic Signal Photo Enforced sign - *Nov 2010***
- **Alternative Electric Vehicle Charging sign - *April 2011***
- **Green Colored Pavement for Bike Lanes - *April 2011***
- **Alternative U.S. Bicycle Route sign - *June 2012***
- **Bicycle Signal Faces - *Dec 2013***
- **Optional Use of 3-Section FYA Signal Faces - *Aug 2014***
- **Optional use of an Intersection Bicycle Box – *Oct 2016***

Interim Approvals

Two interim approvals issued prior to the 2009 MUTCD that were in effect until recently:

- Clearview font on guide signs – **Rescinded 2016**
- Rectangular Rapid Flashing Beacon – **Suspended 2016**

Upcoming interim approvals:

- Revised Signal Warrant #7 – Crash Experience

Interim Approvals

The following are the number of agencies (as of **1/5/2017**) that have requested & received FHWA's permission to use these interim approved devices:

- Clearview font on guide signs – **30**
- Rectangular Rapid Flashing Beacons – **188**
- Alternative Traffic Signal Photo Enforced sign – **5**
- Alternative Electric Vehicle Charging sign – **12**
- Green colored pavement for bike lanes – **97**
- Alternative U.S. Bicycle Route sign – **13**
- Bicycle Signal Faces – **28**
- Three Section FYA – **17**
- Intersection Bicycle Box - **9**

Official Experiments

Purpose – to allow practitioners to test new or innovative traffic control devices or applications:

- **To see if they perform more effectively than the devices in the MUTCD; or**
- **Because there is no device in the MUTCD that addresses the situation being studied**

Official Experiments

The official experimentation process is described in Section 1A.10 of the 2009 MUTCD, Paragraphs 8 through 11

A State DOT or a local agency must write a letter to the FHWA requesting to conduct an experiment

Request must include a research plan describing what data will be collected, how it will be collected, and how it will be analyzed

Key is for experimental plan to produce data for objective (not subjective) results

Experiment may begin only after written approval from the FHWA

Official Experiments

A total of 176 official experiments have been approved since the 2008 NPA for the 2009 MUTCD was published, with the following distribution by parts:

- Part 1. General – 0
- Part 2. Signs – 28
- Part 3. Markings – 27
- Part 4. Highway Traffic Signals – 29
- Part 5. Low-Volume Roads – 0
- Part 6. Temporary Traffic Control – 13
- Part 7. School Areas – 0
- Part 8. Grade Crossings – 4
- Part 9. Bicycle Facilities – 75

Official Experiments-Why Important

A jurisdiction that installs a device or application that is not in the MUTCD, that violates MUTCD requirements, or that has not received Interim Approval status, without first obtaining FHWA experimentation approval, faces these risks:

- **Potential legal liability if a crash occurs**
- **Potential loss of Federal-Aid funding**

Official Experiments-Why Important

Data from experiments is critical to objective, scientific evaluation of new devices

Experimental results are also critical in the FHWA's consideration of a new device for possible Interim Approval or adoption into the MUTCD

Estimated Time Line for 20?? Edition

Based on Rulemaking being treated as a Significant Regulatory Action: **[Speculative to explain process]**

- June 2017 – Last NCUTCD meeting for generating recommendations for the next NPA
- December 2017 – FHWA Completes final draft of NPA to update MUTCD, including economic analysis of proposed changes
- Dec 2017 – May 2018: Internal, OMB and OST Reviews
- July 2018 – Publish NPA in Federal Register
- January 2019 – End of the 6-month docket comment period
- December 2019 – Finalize the MUTCD & Federal Register notice
- Early 2020: Internal, OMB and OST Reviews
- Fall 2020 – Publish the Final Rule for a new edition of the MUTCD

NCUTCD & Next Steps to 20?? MUTCD

- **Continue reviewing and recommending improvements to the Manual**
- **Identify and eliminate redundant or unnecessary text**
- **Reorganize content where opportunities for improving flow are identified**
- **Reassess each standard and retain, delete or downgrade**
- **Assist FHWA by reviewing and commenting on requests for interpretation and new devices**
- **Urge FHWA to continue use of Interim Rule**

Continue Exploration/Development of Additional Concepts

Ideas from 2013 RFC (smart search apps; cross indexing; fact sheets; new figures or tables; etc.)

Ideas from TRB white papers

Recommendations from NCUTCD strategic plan and vision

- Focus on ideas for enhancing future editions**
- Publish RFC to solicit broad input**

Request research and monitor results for changes to the Manual

20?? MUTCD

A new edition of the MUTCD, with many new devices and applications, is coming, but ...

Unsure when!

Meanwhile, keep an eye out for additional Interim Approvals, Official Interpretations and perhaps small revisions to the 2009 edition

20?? MUTCD

**“If it isn’t in the MUTCD, we can’t use it” ---
generally true, but...**

**Be aware of flexibilities provided in the MUTCD
processes (such as Interim Approvals,
Official Interpretations, and answers to
FAQs)**

**Use the Official Experimentation process to
test new devices and applications**

Thank You!

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content.

Questions?