



May 4, 2021

US Department of Transportation
West Building Ground Floor, Room W-12-140
1200 New Jersey Avenue SE
Washington, DC 20590

Reference: Docket No. FHWA-2020-0001, Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD)

The North Dakota Department of Transportation (NDDOT) respectfully submits these comments in response to the Notice of Proposed Rulemaking in this docket, published at 85 Federal Register 80898 et seq. (December 14, 2020)

In this docket, the Federal Highway Administration (FHWA) seeks comment on proposed revisions to the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), a lengthy manual incorporated by reference into the Code of Federal Regulation by reference and having the force of a rule as to its mandatory elements.

At the onset, we wish to concur with the comments submitted by state transportation departments of Idaho, Montana, North Dakota, South Dakota, and Wyoming and echo their deep commitment to safety in all aspects of our programs, including in highway safety.

Our state-specific technical concerns and recommendations are as follows:

MUTCD 11th Edition Text

Can a table of contents please be added at the beginning of each chapter? This would be especially helpful when viewing the online single chapter PDFs.

Section 1C.02, please include the definition of Business Identification Sign Panel.

Section 2A.14, paragraph 9, adding "Except as required in paragraph 10 of this Section" could add potential financial concerns as it would require many current directional signs on freeways and expressways to be replaced to taller supports.

Section 2B.21, page 77 of 781, line 11 suggest the spacing of speed limit signs can be found in the "Traffic Control Devices Handbook". Since Table 2C-3 provides spacing for warning signs why not include spacing for speed limit signs in the MUTCD.

Section 2B.52, would recommend keeping the roundabout directional (chevron) sign. Prefer this over the large arrow sign as that is a warning (yellow and black) sign where the chevron is a regulatory (white and black).

Section 2D.05 includes Table 2D-2 Minimum Letter and Numeral Sizes for Conventional Road Guide Signs by Roadway Type. Looking at Table 2D-2, the heading is completely different. It states, "Recommended Minimum Letter and Numeral Sizes for Conventional Road Guide Signs According to Speed." Also, some confusion on the wording of Table 2D-2 "recommended minimum". Recommended is guidance but minimum is more of a standard.

Section 2M.09, page 328 of 781, line 20-26. Clarify this paragraph as to what is meant by "first point". Does it mean the first point on the major highway? What if there are several turns after you leave the major highway on local roads before getting to the destination? Does this mean it cannot be signed on the major highway because the first point where the access or crossroad intersects is on a low volume county road?

Section 3A.03, first paragraph, should the color green be added as a color since green can be used in bike lanes?

Section 3A.04, increasing the normal width to 6" for freeways, expressways, ramps and other roadways with speeds > 40 mph will be a significant cost to the roadway authorities.

Section 3B.05, page 343 of 781, line 9, the 2009 MUTCD shows exclusive left turn lanes at "major cross streets" but allow the TWLTL markings through "minor cross streets". This change could impact downtown areas where there consist of short spacing between intersections.

Section 3B.09, page 348 of 781, line 9, 3A.04, page 337 of 781, line 29-31 states other roadways with speed limits > 40 mph. for consistency should this line show speed limits > 40 mph?

Section 3B.25, page 363 of 781, lines 31-32, there is some concern with worker safety as traffic will be on both sides of the work area. This work will be hand work so worker exposure will be an extended time.

Section 4C.01, page 412 of 781, line 48, the sentence has "degree of conflict". What does this mean? How do we assess the degree of conflict?

Section 4C.02, page 414 of 781, lines 24-32, can warrant 1 be broken down into separate warrants? Condition A could be separate from condition B for example. The way it is written now allows it to be concise in the MUTCD, however from a practitioner standpoint it makes it difficult to make clear how the warrant is met in engineering studies and in reviewing studies done by others.

Section 4C.05, page 416 of 781, lines 42-43, if the purpose of this warrant is based on pedestrian delay, the number of pedestrians crossing at a particular location in an hour does not reflect this. This warrant requires pedestrian counts that may not reflect the actual need for pedestrians who "desire" to cross at that location.

Section 4C.08, page 419 of 781, lines 24-28, too many criteria...A traffic volume criteria should not be included in the crash warrant.

Section 4D.02, page 423 of 781, lines 31-32, why not require ped signal heads?
Consider making this a shall statement.

Section 4E.01, page 431 of 781, lines 10-12, we flash emergency vehicle pre-emption indication lights for confirmation to emergency vehicles. This would eliminate confirmation for the emergency driver that the system has accepted his call.

Section 4F.01, page 438 of 781, lines 4-7 seem to conflict with Section 4F.07, page 445 of 781, lines 18-21. Is a red clearance interval required or not? Please be consistent and clarify.

Part 5, page 510 of 781, what kind of liability will the roadway authority have if a traffic control device is out of date, incorrectly spaced or a non-standard sign that an AV encounters and a crash occurs?

MUTCD 11th Edition Figures

Similar to Figure 2D-14, can figure be included for diverging diamond interchanges, reduced crossing U-turns and median U-turns? Consider including a separate section with alternative intersections and include all the various pavement markings and signing (regulatory, warning and guide).

Figure 2M-1, consider adding a symbol for off-road biking. Similar trails for horse, hiking and ATV are signed and it appears bike trails are becoming popular in recreation areas.

Figure 2M-6, should the camping (tent) symbol be included in one of these figures as it is shown in figures 2M-3 and 2M-4.

Figure 3B-7, can a drawing be added to show what markings should be installed where there is short spacing between blocks and inadequate room to strip exclusive left turn lanes at each intersection.

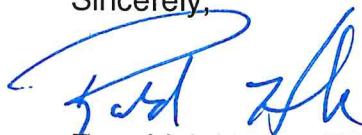
MUTCD 11th Edition Figures

Table 2M-1 (*Category Chart for Recreational and Cultural Interest Area Symbols* – specifically the *Land Recreation* portion) does not include a symbol sign for off-road bike trail. Given that horse, hiking, ATV, and other similar trail signs are available, it seems there should be one for off-road biking, as well.

Table 4C-4, shouldn't the rows for "Major Street 2 or more" be easier to satisfy than Table 4C-2?

Table 4C-5, shouldn't the rows for "Major Street 2 or more" be easier to satisfy than Table 4C-5?

Sincerely,



Ronald J. Henke, PE
Deputy Director for Engineering

56/sss
Attachment: 5-State Comments

Comments of the Transportation Departments of
Idaho, Montana, North Dakota, South Dakota, and Wyoming
to the
Federal Highway Administration
in
Docket No. FHWA-2020-0001
National Standards for Traffic Control Devices; the
Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD); Revision
April 25, 2021

The transportation departments of Idaho, Montana, North Dakota, South Dakota and Wyoming (“we” or “our”) respectfully submit these joint comments in response to the Notice of Proposed Rulemaking in this docket, published at 85 Federal Register 80898 *et seq.* (December 14, 2020).

In this docket, FHWA seeks comment on proposed revisions to the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), a lengthy manual incorporated by reference into the Code of Federal Regulations.¹

The proposed changes to the MUTCD are considerable and reflect a significant effort, as the MUTCD was last revised over a decade ago.

At the outset, the transportation departments of Idaho, Montana, North Dakota, South Dakota, and Wyoming wish to emphasize their deep commitment to safety in all aspects of our programs, including in highway safety.

Our concerns and recommendations for improving the proposal are set forth below.²

We recommend that the proposed change to the definition of “Guidance” not be adopted; that one proposed change, if adopted, could be construed as making guidance statements mandatory, greatly increasing regulatory burdens.

Currently, the MUTCD defines “Guidance” as “a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate....”

The proposed revision to the MUTCD would delete the phrase “but not mandatory.”

As a result, the definition would state that a guidance practice is recommended with deviations allowed under certain conditions. This revised language indicates that guidance would become more prescriptive, like a mandate – as deviations are allowed under specified and limited circumstances but not under other circumstances.

¹ See 23 CFR 655 subpart F.

² While making this joint submission for emphasis, each of the five departments reserves the right to file consistent comments in this docket in its own name.

Courts tend to assume that changes in a statute or rule are intended to have meaning. Why else are the changes made? The proposed change to the definition of “guidance” is very straightforward. It would delete the clear statement that a guidance item in the MUTCD is “not mandatory.”

We oppose this proposed change because of its restrictive implications and because there are scores of “guidance” statements in the current (and proposed) MUTCD. As a result, this one change could transform all non-mandatory guidance statements into requirements that can be averted only under specified, limited circumstances, by means of engineering judgment or study. The effort to exercise engineering judgment or study is not taken lightly, underscoring the restrictive nature and the significance of the proposed deletion of “but not mandatory.”

We also note that in the published preamble to the rule FHWA, in discussing definitions, does not mention the proposed change to the definition of guidance. See numbered paragraph 16, 85 Federal Register 80902. Thus, the only indication of its intent is the change itself – removing the statement that guidance is “not mandatory.”

If FHWA wants to modify something in the MUTCD to be more restrictive, it should do so by proposing changes on an issue-by-issue basis. That way the public will have a clear opportunity to comment on each proposed change of an MUTCD statement from guidance to standard.

Accordingly, there are several reasons we recommend that this proposed change in the definition of guidance not be adopted. If substantive change is intended, we object to the reduction of state flexibility. Further, the merits of changing a non-binding recommendation to be more restrictive should be debated on an issue-by-issue basis, not handled for many issues all at once through a not easily noticed change of a definition. If no substantive change is intended by this proposed change in the definition, we still object, as the proposed change could be construed in courts and elsewhere as a substantive change – again, impacting many provisions.

As safety is USDOT’s highest priority, we recommend that FHWA remove from the MUTCD restrictions on the use of patented and proprietary products to encourage innovation to improve safety.

On January 21, 2021 the Senate Committee on Commerce, Science and Transportation held a hearing on the nomination of then Secretary-Designate Pete Buttigieg to be Secretary of USDOT, FHWA’s parent agency. In his statement to the Senators, the Secretary immediately stressed the importance of transportation safety:

“First and foremost, I want you to know that if confirmed, I will work every day to ensure that the Department meets its mission of ensuring safety … Safety is the foundation of the department’s mission.”

Further, safety is what is emphasized in the statutes that underly the MUTCD. The MUTCD is incorporated by reference into the Code of Federal Regulations at 23 CFR 655 (see 655.601(a)). There the rule notes that the MUTCD is in accord with 23 USC sections 109(d) and 402(a). See

23 CFR 655.603(a).³ It is important for FHWA and the MUTCD to be guided by the safety emphasis in those statutory provisions.

More specifically, in 23 USC 109(d) USDOT is authorized to approve signs, markings and traffic signals and the Secretary “is directed to concur only in such installations as will promote the safe and efficient utilization of the highways.”

In 23 USC 402(a), with regard to the traffic safety programs of USDOT administered by NHTSA, each state is directed to have a “highway safety program, approved by the Secretary, that is designed to reduce traffic accidents and the resulting deaths, injuries, and property damage.” 23 USC 402(a)(1). Unlike section 109(d), paragraph 402(a)(2) mentions “uniformity,” directing USDOT to promulgate “uniform guidelines … expressed in terms of performance criteria” to improve safety in various ways. However, design specifics such as comprise the MUTCD are not “performance criteria,” the subject of the directive. Also, uniform signage, signals and markings are not listed as a subject of the performance criteria.

This is not to say that uniformity in markings and signage and traffic control devices should not be advanced up to a point. But safety is the principle underlying the statutory basis for the MUTCD.

Accordingly, we recommend two ways the proposed changes to the MUTCD should be modified to make the MUTCD consistent with emphasis on safety – one general and one specifically concerned with products protected by a patent or copyright or otherwise proprietary.

First, the proposed support statement at the outset of the MUTCD should be revised to list safety or improved safety as the primary purpose and as the first and foremost objective of the MUTCD. “Safety and efficiency,” the words used in 23 USC 109(d), appear as the fourth objective in proposed new section 1A.01, purpose of the MUTCD.

Proposed section 1A.01 should be revised so that “safety” or “improved safety” is both the purpose and the first objective. The other objectives, including uniformity, should be renumbered and modified as objectives to be pursued “to the extent consistent with safety.”

Second, the restrictions currently in the MUTCD regarding the use of patented, copyrighted, or proprietary products arbitrarily preclude the consideration of products that could improve highway safety if they are patented, copyrighted or proprietary and the rights have not been given away. The proposed MUTCD has rearranged relevant provisions but has the same effect as the current MUTCD as to patented, copyrighted, or proprietary products.

More specifically, two provisions in the current MUTCD discourage research and the development of new and improved technologies that could improve highway safety. Those current provisions, an item in the Introduction and another in Section 1A.10, prohibit the use of

³ The NPRM similarly notes 23 USC sections 109(d) and 402(a) as authority for the proposal. The NPRM also notes 23 USC 315, but that section is a basic authorization for rulemaking, not a substantive provision. See 85 Federal Register at 80899.

patented, copyrighted, and proprietary materials as traffic control devices, unless the intellectual property rights are essentially relinquished.⁴

The same restrictions are carried over into the proposed revision in proposed section 1D.08. The proposed language says, “The MUTCD limitation on proprietary products necessarily excludes proprietary traffic control devices which claim protection on the message conveyed. The purpose of this limitation is to ensure uniformity in the message. However, any other aspects of a device may be patented so long as the appearance, audible message, or other aspects of the message conveyed remain freely reproducible by all without infringing on any proprietary rights or interests.”

However, safety should be paramount.

The above-noted restrictions on proprietary products have the effect of discouraging efforts to improve safety, as the companies and individuals who would develop new highway safety technologies would like to benefit from the intellectual property they create (*i.e.*, patent the product). Accordingly, the prohibition on the use of patented materials included in the MUTCD is a significant barrier to the development and deployment of emerging technologies that can improve highway safety.

Further, FHWA recently decided to end its regulatory ban on the use of patented and proprietary products in construction and maintenance activities. See 84 Federal Register 51023 et seq. (September 27, 2019), amending 23 CFR 635. In that notice of final rule, FHWA stated that the ban on patented and proprietary products (in construction and maintenance) was “outdated” and that the change was made “to encourage innovation in the development of highway transportation technology and methods.” *Id.*

Accordingly, the restrictions in the current MUTCD on the use of products protected by patent should be deleted. Further, the provisions in the proposed revised MUTCD that restrict the use of patented products also should be deleted before the next MUTCD is adopted. Similarly, to reflect that change, any needed conforming changes should be made to other provisions, including but not limited to provisions regarding experimentation.

In addition, even with the removal of all language restricting the use of patent-protected devices because they are patent-protected, given the past history of this issue, and to protect against the risk that a clause in the MUTCD could be misconstrued as perpetuating this restriction, the revised MUTCD should include an affirmative statement such as “Traffic control devices contained in this Manual are allowed to be protected by a patent, trademark, or copyright.”⁵

⁴ See the Introduction to the MUTCD (2009) where, on the first page, a Standard provides that: “Traffic control devices contained in this Manual shall not be protected by a patent, trademark, or copyright, except for ... items owned by FHWA.” This restriction is reinforced later in the MUTCD in that, even for purposes of experimentation, it is stated that the concept of a traffic control device cannot be protected by a patent or copyright. MUTCD Section 1A.10, Guidance paragraph E. While it is arguable that a part of a traffic control device, but not the concept of a device, can be patent protected, in practice, Section 1A.10 has not changed the overall effect of the MUTCD’s discouragement of technological innovation to advance safety by precluding patent protection for traffic control devices.

⁵ This could be a complete substitute for proposed section 1D.08, a provision that we recommend be deleted.

In recommending this position we emphasize this would not excuse a patented product from other requirements in the MUTCD, including visual appearance (uniformity in message). It does mean that a product protected by a patent would be given a chance to comply and be used rather than be precluded at the outset from attempting to comply. FHWA should not assume that this change would be problematic. If the change we recommend is made, FHWA, states, and others will see what the experience is, and change could be considered as appropriate based on real world experience. Simply, a patented device that meets applicable MUTCD requirements should be able to be deployed (as are other devices).

This would encourage innovation that would improve safety.

We disagree with the request by a commenter that FHWA should, on an expedited basis, rewrite and reframe the MUTCD; concerns with the MUTCD should be addressed issue-by-issue as the proposed revision is finalized.

At least one commenter, the National Association of City Transportation Officials (NATCO), has asked FHWA to rewrite and reframe the MUTCD on an expedited basis and has questioned the safety value of the MUTCD. We disagree with the broad request. It would reject or at least delay many proposed changes in the MUTCD that have been developed over the years and that are supported by many. We believe concerns with the MUTCD and the current proposed revisions to it should be addressed issue-by-issue. For example, above we have explained that the ban on patented and proprietary products in the current and proposed MUTCD act as a barrier to safety improvements and are not justified. But we have not asked that the entire MUTCD be reframed to make that needed change to advance safety. Change on an issue-by-issue basis is the appropriate path forward.

FHWA should carefully consider cost implications of changes to the MUTCD before adopting them in a revised MUTCD.

We ask that FHWA carefully consider the cost implications of any proposed changes to the MUTCD before adopting them. Any proposed changes that appear to be costly should have a clear safety benefit before being adopted into a revised MUTCD. This comment is not directed at any individual proposed change to the MUTCD, but is an important factor that FHWA should consider as to each issue as it works to adopt a revised version of the MUTCD.

Additional Comment.

In proposed section 6J.01 a standard would prohibit painting over markings in conjunction with temporary traffic control (TTC) work. That provision should be removed. TTC is, by its very nature, temporary. We do not see that this restriction on state flexibility as to how to cover over or remove markings in a TTC area is warranted.

Conclusion

The transportation departments of Idaho, Montana, North Dakota, South Dakota, and Wyoming thank FHWA for its consideration and urge further action by FHWA in accord with these comments.
