January 7, 2016

Federal Highway Administration
1200 New Jersey Ave SE,
Washington, DC 20590

RE: NCUTCD Docket Response to Request for Comments, Docket FHWA Docket No. FHWA–
2015–0028, Future of the Manual on Uniform Traffic Control Devices

Dear Sir:

The National Committee on Uniform Traffic Control Devices (NCUTCD) is an organization
whose sole purpose is to develop recommendations regarding the MUTCD. Our organization
can trace its roots to the first edition of the MUTCD in 1935 and we have a long history of
providing valuable contributions regarding the MUTCD to FHWA.

The NCUTCD is pleased to see the FHWA publish this Request for Comments (RFC) regarding
the future of the MUTCD. While the RFC does not address many issues that are critical to the
future of the MUTCD, it does represent a good first step by FHWA to establish a long-range
vision for the MUTCD. As indicated in the RFC, the NCUTCD has previously addressed this
issue by approving a 20-Year Vision and Strategic Plan (VSP) for the MUTCD in January 2014.
Many of the questions in the RFC are addressed in the NCUTCD VSP. However, some of the
questions have not been addressed in the VSP. The NCUTCD responses to the RFC questions
are provided below. These responses are followed by additional comments that address issues
that have arisen since approval of the VSP or that are beyond the scope of the RFC but worth
including in the NCUTCD response.

FHWA QUESTIONS AND NCUTCD RESPONSES

The NCUTCD offers the following responses to the questions contained in the RFC. The
responses are based on the content of the NCUTCD VSP, which is referenced in the RFC.

1A. Should MUTCD content continue to be written with a traffic engineer as the intended
audience?
   NCUTCD Response: Yes. However, some aspects of the 2009 MUTCD are written in a
   manner that reduces the ability of a traffic engineer to make traffic control device decisions
   that are the most appropriate for a given situation. The NCUTCD recommends that the
   MUTCD include the language recommended in items #528 and #531 in the VSP as
   indicated below. Note that the recommended language for an engineering study specifies
   that the study must be performed by a professional, or licensed, engineer, or by someone
   working under such supervision. The NCUTCD also recommends revising the current
MUTCD to provide the practitioner with greater flexibility in selecting and implementing traffic control devices in a manner that best serves road users.

528. **Section 1A.XX MUTCD User:** Traffic control device principles in the MUTCD shall be developed for and used by individuals who are duly authorized and qualified to conduct traffic control device activities. Where MUTCD content requires a decision for implementation, such decisions shall be made by individuals who have the appropriate levels of experience and expertise to make traffic control device decisions.

531. **Section 1A.XX Definition of Engineering Study:** The analysis and evaluation of available pertinent information, and the application of appropriate principles, provisions, and practices as contained in the MUTCD and other sources, for the purpose of deciding upon the appearance, use, installation, or operation of a traffic control device. An engineering study shall be performed by a professional engineer with appropriate traffic engineering expertise, or by an individual working under the supervision of such an engineer, through the application of procedures and criteria established by the engineer. An engineering study shall be documented in writing.

**2A. In future editions, should FHWA strive to reduce the amount of explanatory language included in the MUTCD?**

*NCUTCD Response:* Yes. The NCUTCD views the MUTCD as a standards and practice document, not an educational document. The MUTCD cannot be used properly by an individual who does not have appropriate knowledge and expertise to make and/or implement traffic control device decisions without significantly expanding the MUTCD to become more of a traffic engineering education document. The NCUTCD recognizes that it may be appropriate to provide limited background information in selected support statements, but these support statements should be limited to clarifying statements and not educational statements. The VSP addresses explanatory language in items #518 and #520.

518. The MUTCD should limit the discussion of traffic engineering practices and related topics that are not traffic control device activities to those items that are most essential for traffic safety and efficiency, to meet road users’ needs and for the practitioner to understand how they are to be applied.

520. While the MUTCD is not a traffic engineering educational document, it may, at times, explain guiding rationales through Support statements. The use of Support statements should be limited to providing clarity and not for educational purposes.

**2B. If so, what types of explanatory language should be removed from the MUTCD?**

*NCUTCD Response:* The selection of explanatory language to be removed from the current MUTCD is dependent upon the ultimate direction selected for the MUTCD of the future.

**2C. If explanatory/supplementary information is removed, should it be retained in a separate document?**

*NCUTCD Response:* Yes.
2D. What organizational structure should be considered for future MUTCDs? Potential alternatives include:
   a. Current structure.
   b. Application information (e.g., urban intersections, rural highways, and collector streets).
   c. By type of information (design and applications, installation, maintenance).
   d. Other.

   **NCUTCD Response:** The preferred structure for the MUTCD is dependent upon the ultimate direction selected for the MUTCD of the future. In item #536 of its VSP, the NCUTCD recommended the MUTCD continue to exist as a single document with the current structure but that the capabilities of electronic publishing provide the ability to sort and combine content in a manner that allows grouping by application, location, and/or user. This recommendation included the justification that dividing current standard statements into two levels (Standards and Requirements) reduces the need for a document that is divided by user group, level of mandate, or traffic control device activity. This idea of restructuring the levels of mandate is discussed at the end of this letter. This recommendation was based on an additional recommendation that a new edition of the MUTCD be published no less frequently than every 8-10 years.

536. The MUTCD should continue to exist as a single document with the current structure.
   a. The ability to use MUTCD content can be simplified by labeling traffic control device provisions with “smart tags” that identify the traffic control device, characteristics(s)/activity(s) being addressed by each provision and the user group(s) that would most likely perform the activity. Additional information, such as the level of mandate, related reference materials, applications, and other information, could also be included as part of the smart tags.

538. A new edition of the MUTCD should be published every 8-10 years.
   a. New traffic control devices or practices can be implemented through the use of experimentation or interim approvals between MUTCD editions.

2E. If a different format is not appropriate, what potential alternatives/tools would help users more easily find information?

   **NCUTCD Response:** As addressed in the response to Question 2D, the use of smart tags and electronic publishing tools could provide significant improvements in the ability to sort, classify, tag, and categorize MUTCD content so that it would be most usable by various user groups.

2F. As we move toward more electronic use of the MUTCD through computers, tablets, and handheld devices, what additional electronic formats or tools would be useful?

   **NCUTCD Response:** The NCUTCD did not address the use of electronic formats beyond those already mentioned in this letter.
3A. If the minimum practical interval between editions is 6 to 8 years, should FHWA promulgate rulemakings to issue one or more revisions that are focused on individual traffic control devices between new editions of the MUTCD?

NCUTCD Response: Advances in technology are now occurring at a rapid pace. Some portions of the agencies and road user populations have desired to implement new or novel traffic control devices and/or practices that are not addressed in the current MUTCD. While the Interim Approval and experimental processes provide some ability to implement new devices/practices, there is a desire among these groups to see such devices/practices incorporated into the MUTCD on a basis that is more frequent than the 8± years that typically occurs between MUTCD editions.

In order to keep the MUTCD up to date, revisions related to specific practices should be processed through rulemaking at least every 2-3 years and possibly more frequently. This has the added benefit of reducing the amount of change associated with a new edition and would reduce the number of significant changes in a proposed rule for a new edition.

The NCUTCD believes that MUTCD users should have access to up-to-date recommendations. The most desirable method of achieving this would be for FHWA to publish focused rulemaking on the MUTCD on a regular basis every 2± years. However, the NCUTCD is exploring the value of publishing its recommended changes to the MUTCD as a stand-alone document that would be available to practitioners on the NCUTCD website for use until the MUTCD is actually revised.

3B. What about the national MUTCD or State law makes it necessary for some States to develop their own MUTCDs or supplements?

NCUTCD Response: This question is not addressed in the VSP as the VSP focuses solely on the national MUTCD. The NCUTCD believes that individual states are in a better position to comment on why their own MUTCDs/supplements are necessary.

3C. Is there anything in the national MUTCD that could be changed to reduce the burden for States to review, revise, prepare, and adopt their own State MUTCD or supplement?

NCUTCD Response: This question is not addressed in the VSP as the VSP focuses solely on the national MUTCD. The NCUTCD believes that individual states are in a better position to comment on why their own MUTCDs/supplements are necessary.

ADDITIONAL NCUTCD COMMENTS BEYOND RESPONSES TO RFC QUESTIONS

The additional comments from the NCUTCD address two topics: splitting the MUTCD into two documents and dividing current standard statements into two levels of standard statements.

Published NCUTCD Recommended Changes to the MUTCD

Since the approval of the NCUTCD’s MUTCD strategic plan, the following factors have changed and impacted the NCUTCD’s perspective on the long-range future of the MUTCD.

- For reasons beyond the control of the FHWA MUTCD team, the federal government has not advanced rulemaking on the MUTCD. It now appears that the planned publication of
a new edition of the MUTCD in 2016 will be delayed until no sooner than 2018 and possibly later.

- Continual advancements in traffic control device practices require regular revisions of the MUTCD. If the federal government is not able to issue revisions of the MUTCD on a 5-6 year or more frequent basis, the NCUTCD is exploring the potential of publishing its recommended changes to the MUTCD as a stand-alone document that would be a companion to the MUTCD and contain all of the NCUTCD recommended changes. This document would be updated twice a year and content incorporated into future MUTCDs could be deleted after publication of a final rule.

**Dividing Standards into Two Levels of Mandate**

The RFC indicates that FHWA believes the VSP recommendation of dividing standards into two types of standard statements is not viable. The NCUTCD wishes to reemphasize the value and importance of pursuing this course of action for MUTCD language. The VSP recommendation that the MUTCD remain as a single document was predicated on the assumption that distinctions would be made between “absolute” and “required” standards. Users are often faced with dilemmas where they cannot comply with conflicting standards. We believe that rather than making the MUTCD more complex, providing two levels of standards will provide relief and simplify practitioners’ duty to provide safe and efficient traffic control. It is intended that the differences in meaning between the two levels would be clearly defined within the MUTCD itself and can be easily defended in court.

One of the challenges of using the MUTCD is that deviations from standard statements are permitted under limited circumstances. However, there are some standards in the MUTCD that should never be deviated from. In an effort to better distinguish between “absolute” standards and “required” standards, the VSP recommends that MUTCD language be divided into five levels of mandate as indicated below. The creation of additional levels of mandate will provide greater flexibility to practitioners in those areas where flexibility is appropriate, particularly as it is related to field installation issues. In addition, the issue of substantial conformance may be simplified by defining substantial conformance as compliance with the “absolute” Standards.

534. The current MUTCD is based on three levels of mandate – Standard, Guidance, and Option. For future editions, the MUTCD content should be structured to provide a range of mandates as described below:

a. **Standard practices (Standard)**
   i. A Standard represents the need to establish uniformity across the nation for critical aspects of traffic control devices.
   ii. Standards are absolute and cannot be violated at any time under any circumstances. There can be no variation and no range of performance or other criteria.
   iii. Standards use the word “shall.”
   iv. Standards are required for the meaning and appearance aspects of traffic control devices. Standards can also be established for other aspects of traffic control devices.
   v. Deviations from a Standard are not permitted.
   vi. Standards cannot be modified by an option.

b. **Required practices (Requirement)**
i. A Requirement represents the need to establish consistency across the nation for crucial aspects of traffic control devices.
ii. Requirements define an expected practice that may have a minimum, maximum, or range of criteria.
iii. Requirements use the words “is/are required.”
iv. Requirements would most often apply to selected aspects of use and installation, but can be applied to other aspects of traffic control devices.
v. Deviations from a Requirement need to be justified by an engineering study. Deviations from a Requirement may also be allowed by an Option.

c. Recommended practices (Recommendation)
i. A Recommendation represents the need to promote consistency across the nation for various aspects of traffic control devices that are deemed important but not crucial.
ii. Recommendation defines a recommended practice.
iii. Deviations from a Recommendation may be appropriate due to a wide variety of factors.
iv. Recommendation uses the word “should.”
v. Recommendation would typically apply to all traffic control device aspects except meaning and appearance.
vi. Deviations from a Recommendation need to be justified by an engineering study or the exercise of engineering judgment.

d. Optional practices (Option)
i. An Option represents alternatives that may improve the performance of traffic control devices.
ii. Options define an optional practice.
iii. Options use the word “may.”
iv. The decision to implement an option may require an engineering study or the exercise of engineering judgment depending upon the specific language of the option.
v. Implementation of an option may be appropriate due to a wide variety of factors.
vi. Options typically apply to traffic control device aspects other than meaning and appearance.
vii. There is no expectation of compliance (no requirement to use) with an option statement. If an option statement is exercised, there may be standards or guidance associated with the implementation of the option.

e. Background information (Support)
i. These represent statements that provide additional information about a traffic control device but which have no associated expectation of action.
ii. Support statements do not use any of the other distinctive words (shall, is/are required, should, or may) used in Standards, Requirements, Recommendation, or Options.

529. **Section 1A.XX Definition of Headings:** Where used, the text headings of Standard, Requirement, Recommendation, Option, and Support have the following definitions:
a. **Standard:** A statement of a required, mandatory, or specifically prohibited practice that cannot be revised or modified under any circumstances. Standard
statements are never modified by an Option statement. Standard statements use the word “shall.”

b. **Requirement:** A statement of a required, mandatory, or specifically prohibited practice, with deviations allowed when justified by an engineering study or as allowed by an Option statement. Requirement statements use the words “is/are required.”

c. **Recommendation:** A statement of a recommended practice or specifically prohibited practice, with deviations allowed when justified by an engineering study or engineering judgment or as allowed by an Option statement. Recommendation statements use the word “should.”

d. **Option:** A statement of a permissive practice that carries no requirement or recommendation. Option statements sometimes contain allowable modifications to a Requirement or Recommendation statement. An Option Statement may require an engineering study or the exercise of engineering judgment. Option statements use the word “may.”

e. **Support:** An informational statement that does not convey any degree of mandate, requirement, recommendation, authorization, prohibition, or enforceable condition. The terms “shall,” “is/are required,” “should,” and “may” are not used in Support statements.

Sincerely,

Lee E. Billingsley, P.E.
Chair, National Committee on Uniform Traffic Control Devices

cc: Anthony T. Furst. FHWA Acting Executive Director
    Kevin Sylvester, FHWA MUTCD Team Leader