NCUTCD Proposal for Changes to the
Manual on Uniform Traffic Control Devices

TECHNICAL COMMITTEE: Edit
ITEM NUMBER: 17A-Edit-01
TOPIC: Experimentation and Interim Approvals
ORIGIN OF REQUEST: Edit Committee Task Force: Ernie Huckaby (chair), Scott Wainwright, Bill DeSantis.
AFFECTED SECTIONS OF MUTCD: Sections 1B.05 & 1B.07 (as per previous NCUTCD action) [existing MUTCD Section 1A.10]

DEVELOPMENT HISTORY:
• Task Force: September-December 2016.
• Approved by Edit Committee: 1/4/2017
• Approved by Edit Committee following sponsor comments: 6/28/2017
• Approved by NCUTCD Council: 6/29/2017

This is a proposal for recommended changes to the MUTCD that has been approved by the NCUTCD Council. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, or options. It will be submitted to FHWA for consideration for inclusion in a future MUTCD revision. The MUTCD can be revised only through the federal rulemaking process.

SUMMARY: This proposal recommends changes and additions to MUTCD provisions in Part 1 regarding experimentations and interim approvals. Specifically, text is added regarding termination of experiments when the required semi-annual reports or final reports are not submitted, additional criteria for issuing interim approvals, and clarifying use of devices under interim approval on site roadways open to public travel.

RESEARCH: None required.

DISCUSSION: Experiments and interim approvals are currently covered in Section 1A.10. However, in 2014, the NCUTCD received from FHWA for review a first draft of a proposed reorganization and consolidation of the MUTCD Introduction and Part 1, which was based predominantly on text for such a consolidation that had been developed by the Edit Committee. Under the reorganization, existing Section 1A.10 would be divided into four separate sections numbered 1B.05 through 1B.08. Experimentations would be in Section 1B.05 and interim
approvals would be in Section 1B.07. In June 2014, the NCUTCD reviewed the FHWA’s proposed reorganized Part 1 and approved most of it, with a few relatively minor changes. The green text shown below under “Recommended MUTCD Changes” reflects the language NCUTCD approved in June 2014 and subsequently sent back to FHWA. Also, the change in terminology from “private roads open to public travel” to “site roadways open to public travel” has been incorporated, per the NCUTCD approval in June 2016.

**Experimentation**

A major concern about experimentation is the large percentage of FHWA-approved experiments for which the experimenting agency never submits any semi-annual or final reports. It is proposed that language be added in Section 1B.05 indicating that there will be automatic termination of an agency’s experiment if no semi-annual reports have been received by two years following FHWA approval of the experiment or if no final report has been received by two years after the last semi-annual report. This may provide additional incentive for experimenting agencies to comply with the terms they agreed to in order to obtain FHWA experimentation approval. New language is also proposed to describe the methods FHWA can use to terminate an experiment. It is also proposed to add text indicating that an experiment is normally considered successful only when it culminates in a research report that demonstrates that the device or application provides a safety or operational improvement or meets other objectives established by FHWA. The “other objectives” might include encouraging alternative modes of travel, livable communities, or similar goals that the FHWA could consider worthwhile even if the experimental device or application does not provide a measurable safety or operations benefit.

**Interim Approval**

To improve the interim approval process and make it more formal and research-driven, it is proposed that new language be added in Section 1B.07 stating that interim approval is ordinarily issued only after an authoritative TRB, State DOT, or International research report(s) demonstrates that the device or application provides a safety or operational improvement or meets other objectives established by FHWA. Also, individual experiments by various jurisdictions, without a research report on the overall findings of the experimental device or application, will not ordinarily qualify for issuance of an interim approval.

Additionally, to improve information about status to MUTCD users, text is proposed for addition, to state that when the FHWA does not propose to include in the next edition of the MUTCD a device or application for which an interim approval has been issued, the FHWA will include a statement in the Federal Register Notice of Proposed Amendments for the next edition of the MUTCD, indicating the status of the Interim Approval (terminated or still valid).

A new Guidance statement is also proposed, that if a State requests a statewide interim approval, the State should maintain a list of jurisdictions, toll facility authorities operators, and owners of site roadways open to public travel that are using the statewide interim approval.

**Other**
Other minor changes and additions are also proposed to provide more consistency between similar provisions of Sections 1B.05 and 1B.07. Some paragraphs have also been relocated editorially for better flow of information.

**RECOMMENDED MUTCD CHANGES:**

The following present the proposed changes to the current MUTCD within the context of the MUTCD language previously approved by the NCTUCD. Proposed additions to the MUTCD are shown in **blue underline** and proposed deletions from the MUTCD are shown in **red strikethrough**. Changes previously approved by NCTUCD Council (but not yet adopted by FHWA) are shown in **green double underline** for additions and **green double strikethrough** for deletions. In some cases, background comments may be provided with the MUTCD text. These comments are indicated by [highlighted light blue in brackets].

The language as shown below reflects the combination of the MUTCD Introduction and Part 1 General as suggested by FHWA and approved by the NCUTCD in June 2014, and the change in terminology from “private roads open to public travel” to “site roadways open to public travel” approved by the NCUTCD in June 2016.

**Section 1B.05  Experimentations**

**Support:**

01 Requests to experiment include consideration of field deployment for the purpose of testing or evaluating a new traffic control device, its application or manner of use, or a provision not specifically described in this Manual.

02 A request for permission to experiment will be considered only when submitted by the public agency or toll facility authority operator responsible for the operation of the road or street on which the experiment is to take place. For a private road, the request will be considered only if it is submitted by the private owner or private official having jurisdiction.

**Guidance:**

02a Before requesting permission to experiment with a new device or application, an owner of a site roadway open to public travel should first check for any State laws, regulations, and/or directives covering the application of the MUTCD that might apply [exist in their State]. [Similar to existing language re Interim Approvals]

**Support:**

03 A diagram indicating the process for experimenting with traffic control devices is shown in Figure 1A-1B-1.

**Guidance:**

04 The request for permission to experiment should contain the following:

A. A statement indicating the nature of the problem.

B. A description of the proposed change to the traffic control device or application of the traffic control device, how it was developed, the manner in which it deviates from the standard, and how it is expected to be an improvement over existing standards.

C. Any illustration that would be helpful to understand the traffic control device or use of the traffic control device.
D. Any supporting data explaining how the traffic control device was developed, if it has been tried, in what ways it was found to be adequate or inadequate, and how this choice of device or application was derived.

E. A legally binding statement from the agency conducting the experiment, the manufacturer of the device, and the supplier of the device certifying that the concept of the traffic control device or its application is not protected by a patent, trademark, or copyright and that the traffic control device and its application is in the public domain and can be used freely in traffic control device design and application without infringement. The legally binding statement should also state that the agency conducting the experiment, the manufacturer of the device, and the supplier of the device are aware that if patent, trademark, or copyright protection is established in the future for the device concept and/or application, such protection would preclude its eligibility for use in traffic control device design or application and/or result in its removal from the MUTCD or in a cancellation of its Interim Approval. (An example of a traffic control device concept would be countdown pedestrian signals in general. Ordinarily an entire general concept would not be patented or copyrighted, but if it were it would not be acceptable for experimentation unless the patent or copyright owner signs a waiver of rights acceptable to the FHWA. An example of a patented or copyrighted specific device within the general concept of countdown pedestrian signals would be a manufacturer’s design for its specific brand of countdown signal, including the design details of the housing or electronics that are unique to that manufacturer’s product. As long as the general concept is not patented or copyrighted, it is acceptable for experimentation to incorporate the use of one or more patented devices of one or several manufacturers.)

F. The time period and location(s) of the experiment.

G. A detailed research or evaluation plan that must provide for close monitoring of the experimentation, especially in the early stages of its field implementation. The evaluation plan should include before and after studies as well as quantitative data describing the performance of the experimental device.

H. An agreement to restore the site of the experiment to a condition that complies with the provisions of this Manual within 3 months following the end of the time period of the experiment. This agreement must also provide that the agency sponsoring the experimentation will terminate the experimentation at any time that it determines significant safety concerns are directly or indirectly attributable to the experimentation. The FHWA’s Office of Transportation Operations has the right to terminate approval of the experimentation at any time if there is an indication of safety concerns. If, as a result of the experimentation, a request is made that this Manual be changed to include the device or application being experimented with, the device or application will be permitted to remain in place until an official rulemaking action has occurred.

I. An agreement to provide semi-annual progress reports for the duration of the experimentation, and an agreement to provide a copy of the final results of the experimentation to the FHWA’s Office of Transportation Operations within 3 months following completion of the experimentation. [Relocated to Support below.]
The FHWA’s Office of Transportation Operations has the right to terminate approval of the agency’s experiment if reports are not provided in accordance with this schedule, and termination is automatic two years after the date of FHWA’s experimentation approval if no semiannual reports have been submitted or if the final report is not received within two years after the last semi-annual report.

FHWA uses one or more of the following methods to terminate an experiment:

- Posting a prominent notice on the MUTCD website;
- Including a statement in the Federal Register Notice of Proposed Amendments for the next edition of the MUTCD, indicating the status of the experiment (terminated or still valid). This method applies when the FHWA does not propose to include the experimental device or application in the next edition.

In regard to item E of paragraph 4 above, an example of a traffic control device concept would be countdown pedestrian signals in general. Ordinarily an entire general concept would not be patented or copyrighted, but if it were, it would not be acceptable for experimentation unless the patent or copyright owner signs a waiver of rights acceptable to the FHWA. An example of a patented or copyrighted specific device within the general concept of countdown pedestrian signals would be a manufacturer’s design for its specific brand of countdown signal, including the design details of the housing or electronics that are unique to that manufacturer’s product. As long as the general concept is not patented or copyrighted, it is acceptable for experimentation to incorporate the use of one or more patented devices of one or several manufacturers.

To be considered successful, an experiment will culminate in a research report that demonstrates that the device or application provides a safety or operational improvement or meets other objectives established by FHWA.

Section 1B.07 Interim Approvals

Interim approval allows 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 this Manual.

The FHWA may issue an interim approval as deemed appropriate, based on the results of successful experimentation, results of analytical or laboratory studies, and/or review of non-U.S. experience with a traffic control device or application. Interim approval considerations may include an assessment of relative risks, benefits, costs, impacts, and other factors.

The FHWA issues an Interim Approval by official memorandum signed by the Associate Administrator for Operations and posts this memorandum on the MUTCD website. The issuance by FHWA of an interim approval will typically result in the traffic control device or application being placed into the next scheduled rulemaking process for revisions to this Manual.

Interim approval is considered based on the results of successful experimentation (see Section 1B.05, paragraph 05a), results of analytical or laboratory studies, and/or review of non-
U.S. experience with a traffic control device or application. Interim approval considerations include an assessment of relative risks, benefits, costs, impacts, and other factors. Interim approval is ordinarily issued considered only after an authoritative TRB, State DOT, or International research report(s) demonstrates that the device or application provides a safety or operational improvement or meets other objectives established by FHWA. Individual experiments by various jurisdictions, without a research report on the overall findings of the experimental device or application, will not ordinarily qualify for issuance of an interim approval.

The issuance by FHWA of an interim approval will typically result in the traffic control device or application being placed into the next scheduled rulemaking process for revisions to this Manual. [Duplicate of 2nd sentence of para 03]

When the FHWA does not propose to include in the next edition of the MUTCD a device or application for which an Interim Approval has been issued, the FHWA will include a statement in the Federal Register Notice of Proposed Amendments for the next edition of the MUTCD, indicating the status of the Interim Approval (terminated or still valid).

Interim approval allows for optional use of a traffic control device or application and does not create a new mandate or recommendation for use. Interim approval includes conditions that jurisdictions, toll facility authorities operators, or owners of site roadways open to public travel agree to comply with in order to use the traffic control device or application until an official rulemaking action has occurred.

Standard:

A jurisdiction, toll facility authority operator, or owner of a private road site roadway 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

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.

A local jurisdiction, toll facility authority operator, or owner of a private road site roadway open to public travel that is requesting permission to use a device or application under an interim approval should first check for any State laws, regulations, and/or directives covering...
the application of the MUTCD provisions that might exist apply in their State. [Edited for consistency with changes in Section 1B.05 para 03a.]

Option:

10 A State may submit a request for the use of a device under interim approval for all jurisdictions in that State, as long as the request contains the information listed in Paragraph 08.

Guidance:

10a If a State requests and receives approval from FHWA of a statewide interim approval, the State should maintain a list of jurisdictions, toll facility authorities operators, and owners of site roadways open to public travel that are using the statewide interim approval. The jurisdictions, toll facility authorities operators, and owners of site roadways open to public travel should inform the State of their use of a device or application under the statewide interim approval.

10b The respective jurisdictions, toll facility authorities operators, and owners of site roadways open to public travel should keep a record of all locations on their roads where the device or application is in place under any interim approval, statewide or otherwise.

Guidance:

11 A local jurisdiction, toll facility operator, or owner of a private road open to public travel using a traffic control device or application under an interim approval that was granted by FHWA either directly or on a statewide basis based on the State’s request should inform the State of the locations of such use. [Incorporated into new paragraphs 10a and 10b above.]

Option:

11 A device or application installed under an interim approval may remain in place, under the conditions established in the interim approval, until an official rulemaking action has occurred.