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

TECHNICAL COMMITTEE: Signals Committee
ITEM NUMBER: 18B-SIG-02
TOPIC: Use of Bicycle Signal Faces
ORIGIN OF REQUEST: Signals and Bicycle Technical Committees
AFFECTED SECTIONS OF MUTCD: 4H.02

DEVELOPMENT HISTORY:
- Approved by Technical Committee: 06/21/2018
- Approved by NCUTCD Council: 01/10/2019

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:
The Signals and Bicycles Technical Committees unanimously agreed on additional NCUTCD Council-approved support language that signs, markings or separate signal phases with bicycle signal faces can minimize potential conflicts. New language to also address bicycle lanes to the left of an exclusive left-turn lane is also recommended.

DISCUSSION
A conference call was held on 5/22/18 with the Joint Bicycle and Signal Task Force and both committees’ members to review sample bicycle signal face videos showing various applications in the United States and Europe. The Task Force also met on 6/20/18 to discuss this item and reached consensus that since the industry is currently experimenting with a variety of applications, it would be inappropriate to propose strict limitations on the specific operations and use of bicycle signal faces. The type of bicycle signal face applications appear to vary substantially along with the conditions. Accordingly, additional language and a new support statement are recommended.
RECOMMENDED MUTCD CHANGES

The following present the proposed changes to the current MUTCD within the context of the current MUTCD language. 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 NCUTCD 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].

PART 4. HIGHWAY TRAFFIC SIGNALS

[Adopted as per 14A-STC-02 in June 2014]

CHAPTER 4H. BICYCLE SIGNALS

Section 4H.01 General

Support:

01. See Section 1A.13 (1) for the definitions of bicycle signal face and bicycle symbol signal indication.

Section 4H.02 Use of Bicycle Signal Faces

Option:

02. The use of a bicycle signal face is optional.

03. A bicycle signal face can be used to provide separate control of the bicycle movement for various situations such as the following:

   A. Bicyclist non-compliance with the previous traffic control.
   B. Provide a leading or lagging bicycle interval.
   C. Continue the bicycle lane on the right-hand side of an exclusive right turn lane or on the left-hand side of an exclusive left-turn lane that would otherwise be in non-compliance with Paragraph 6 of Section 9C.04(1).
   D. Augment the design of a contra-flow bicycle facility.
   E. Provide for unusual or unexpected arrangements of the bicycle movement through complex intersections, conflict areas, or signal control.

Guidance:

04. Agencies should exercise consistency with the decision to introduce bicycle signal faces to a roadway or bikeway network and use caution with any non-systematic policy to use bicycle signal faces.

Support:

05. The use of bicycle traffic signal faces containing bicycle symbol indications and bicycle signal faces containing circular indications in the same corridor or jurisdiction could create comprehension issues by the roadway user or violate bicyclist expectation.

Guidance:

06. A bicycle signal face should only be used to control bicycle movements from a designated bicycle lane or from a separate facility such as a shared use path, and, other than as provided in the Option below, only where the bicycle movement controlled by the bicycle signal face is sometimes allowed to proceed or sometimes required to stop at times when other traffic, making the same movement, and controlled by other vehicular signal faces, is required to stop or allowed to proceed respectively.
Support:
07 If a bicycle facility is located to the right of a right-turn only lane or to the left of a left-turn only lane at a signalized location, signs, markings or phase separation can be helpful to minimize potential conflicts.

Option:
08 A bicycle signal face may be used at a mid-block traffic control signal where there are no motor vehicle movements parallel to the bicycle crossing.