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

TECHNICAL COMMITTEE: Signals Technical Committee
ITEM NUMBER: 18A-STC-01
TOPIC: Regulatory Signs for Protected Only Mode Left and Right-Turn Movements in a Separate Signal Face
ORIGIN OF REQUEST: Signals Technical Committee
AFFECTED SECTIONS OF MUTCD: 4D.19 and 4D.23

DEVELOPMENT HISTORY:
- Approved by Technical Committee: 01/04/2018
- Approved by National Committee: 06/21/2018

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 existing MUTCD language contains signing requirements related to left-turn and right-turn protected only mode traffic signals that are overly restrictive and are not consistent with current engineering practices. Additionally, the language refers to “instruction” signs, which are not defined in the MUTCD and are obsolete.

DISCUSSION
The MUTCD contains provisions that, as written, only allows one sign (R10-5 for left-turns or R10-5a for right turns) to be used for protected only mode traffic signals. However, there are instances when other signs may be needed (e.g. U-TURN YIELD TO RIGHT TURN (R10-16) sign).

Additionally, the language contains references “instruction” signs. These are the only two instances in the MUTCD and this term is not defined. It is believed that this term is leftover from previous MUTCD editions and should be deleted.
The proposed language provides additional flexibility for the use of traffic signal signs, aligning the MUTCD provisions with current engineering practices as well as deletes the obsolete sign text language (“instruction”). Existing Section 4D.34 (proposed Section 4A.08) provides information about the use of signs at signalized intersections.

This proposed revision was presented to the R/W Signs Technical Committee at the January 2018 meeting and there was consensus support.

The chapter and section numbering reflects the renumbering and reformatting adopted by the Council per Item No. 14A-STC-01.

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
CHAPTER 4F: STEADY (STOP-AND-GO) OPERATION OF TRAFFIC CONTROL SIGNALS
[Currently part of Chapter 4D]

Section 4F.06 Signal Indications for Protected Only Mode Left-Turn Movements in a Separate Signal Face [These paragraphs are from existing Section 4D.19]

Standard:

03 If a separate left-turn signal face is provided for a protected only mode left turn, it shall meet the following requirements (see Figure 4D-10):

A. It shall be capable of displaying, the following signal indications: steady left-turn RED ARROW, steady left-turn YELLOW ARROW, and left-turn GREEN ARROW. Only one of the three indications shall be displayed at any given time. A signal instruction sign shall not be required with this set of signal indications. If used, it shall be a LEFT ON GREEN ARROW ONLY (R10-5) sign (see Figure 2B-27).

B. During the protected left-turn movement, a left-turn GREEN ARROW signal indication shall be displayed.

C. A steady left-turn YELLOW ARROW signal indication shall be displayed following the left-turn GREEN ARROW signal indication.

D. If the protected only mode is not the only left-turn mode used for the approach, the signal face shall be the same separate left-turn signal face that is used for the protected/permissive mode (see Section 4F.08 4D.20 and Figures 4D-8 and 4D-12) except that the flashing left-turn YELLOW ARROW or flashing left-turn RED
ARROW signal indication shall not be displayed when operating in the protected only mode.

Section 4F.13  Signal Indications for Protected Only Mode Right-Turn Movements in a Separate Signal Face  [These paragraphs are from existing Section 4D.23]

Standard:

If a separate right-turn signal face is provided for a protected only mode right turn, it shall meet the following requirements (see Figure 4D-17):

A. It shall be capable of displaying one of the following sets of signal indications:

1. Steady right-turn RED ARROW, steady right-turn YELLOW ARROW, and right-turn GREEN ARROW. Only one of the three indications shall be displayed at any given time. A signal instruction sign shall not be required with this set of signal indications. If used, it shall be a RIGHT ON GREEN ARROW ONLY (R10-5a) sign (see Figure 2B-27).

2. Steady CIRCULAR RED, steady right-turn YELLOW ARROW, and right-turn GREEN ARROW. Only one of three indications shall be displayed at any given time. If the CIRCULAR RED signal indication is sometimes displayed when the signal faces for the adjacent through lane(s) are not displaying a CIRCULAR RED signal indication, a RIGHT TURN SIGNAL (R10-10R) sign (see Figure 2B-27) shall be used unless the CIRCULAR RED signal indication is shielded, hooded, louvered, positioned, or designed such that it is not readily visible to drivers in the through lane(s).

B. During the protected right-turn movement, a right-turn GREEN ARROW signal indication shall be displayed.

C. A steady right-turn YELLOW ARROW signal indication shall be displayed following the right-turn GREEN ARROW signal indication.

D. When the separate signal face is providing a message to stop and remain stopped, a steady right-turn RED ARROW signal indication shall be displayed if it is intended that right turns on red not be permitted (except when a traffic control device is in place permitting a turn on a steady RED ARROW signal indication) or a steady CIRCULAR RED signal indication shall be displayed if it is intended that right turns on red be permitted.

E. If the protected only mode is not the only right-turn mode used for the approach, the signal face shall be the same separate right-turn signal face that is used for the protected/permisive mode (see Section 4F.15 4D.24 and Figure 4D-19) except that a flashing right-turn YELLOW ARROW or flashing right-turn RED ARROW signal indication shall not be displayed when operating in the protected only mode.