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

TECHNICAL COMMITTEE: Bicycle Technical Committee
ITEM NUMBER: 18B-BIK-05
TOPIC: Buffered Bicycle Lane Markings Revised
ORIGIN OF REQUEST: Bicycle Technical Committee
AFFECTED SECTIONS OF MUTCD: Section 1A.13 and Section 9C.04

DEVELOPMENT HISTORY:
- Approved by Bicycle Technical Committee: 06/26/2014
- Concurrence by Regulatory Warning Sign Technical Committee 06/26/2014
- Approved by NCUTCD Council: 06/27/2014
- Revision Approved by Bicycle Technical Committee: 01/05/2018
- Revision Concurrence by Markings Technical Committee: 01/10/2019
- Revision Approved by NCUTCD Council: 01/11/2019

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:
This proposal provides revised text and Figures for marking buffered bicycle lanes to replace the Figure in a proposal originally approved June 2014.

DISCUSSION
FHWA has indicated that buffered bicycle lanes can be installed as buffer-separated preferential lanes as defined in Section 1A.13 and in accordance with the Standards and Guidance in Section 3B.24 and Section 3D.02. These lanes have been installed at numerous locations but the pavement marking patterns have not been uniform. The BTC developed a proposal for buffered bicycle lane markings including markings at driveways or minor commercial entrances where turns across the bicycle lane are permitted. The proposal was approved by Council on 6/28/14.
Since the approval of the proposal in 2014, experience with buffer installations has revealed
constructability problems when installing chevron cross hatching markings in buffers narrower
than 4 foot wide and diagonal markings in buffers narrower than 2 feet wide.

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 1. GENERAL

CHAPTER 1A. GENERAL

The following definition is added to Section 1A.13 of the MUTCD:

Section 1A.13 – Definitions of Headings, Words, and Phrases in this Manual

Standard:

xx. Buffered Bicycle Lane-a bicycle lane that is separated from the adjacent general-
purpose lane or parking lane by a pattern of standard longitudinal markings. The buffer
area might include chevron or diagonal markings. (Approved by NCUTCD Council 6/28/14)

PART 9. TRAFFIC CONTROL FOR BICYCLE FACILITIES

CHAPTER 9C. MARKINGS

A new Section 9C.xx is inserted into Part 9 of the MUTCD:

Section 9C.xx. Buffered Bicycle Lanes (Approved by NCUTCD Council 6/28/14)

Support:

01. Pavement markings can designate a buffer area between a bicycle lane and adjacent general
purpose lane and/or parking lane. A buffer area provides a greater separation between the bicycle
lane and adjacent lanes than is provided by a single normal or wide lane line.

Option:

02. A bicycle lane buffer area may be used to separate a bicycle lane from an adjacent general-
purpose lane and/or parking lane.

Standard

03. If used, a buffer between a bicycle lane and general-purpose lane or parking lane shall
be delineated by standard normal width longitudinal pavement markings. [Approved by
NCUTCD Council 6/28/14 Attachment No.28]
Guidance:
If used, a buffer between a bicycle lane and general purpose lane or parking lane should be delineated by normal width longitudinal pavement markings.
Consideration should be given to installing chevron or diagonal markings as appropriate in a bicycle lane buffer area. The use of chevron or diagonal markings in a bicycle lane buffer area should be based on engineering judgment and the Standards and Guidance in Section 3B.24 and Figure 9C.

Option:
Chevron markings or diagonal markings may be installed in a bicycle lane buffer area based on engineering judgment.
Where a bicycle lane buffer is marked, the chevron or diagonal markings may be omitted if the gap between the longitudinal lines of the buffer area is less than 2 feet wide.
Figure 9C - XX. Example of Pavement Markings for Buffered Bicycle Lanes on a Two-Way Street

- Bicycle lane symbol with arrow
- Normal solid white lane line
- Two normal solid single white lane lines if buffer space is less than 2 feet wide
- Chevron markings if buffer space is wider than 4 feet *
- Spacing of buffer treatment varies
- Buffer adjacent to parking lane
- Parking lane
- White diagonal markings if buffer space is 2 feet to 4 feet wide *
- Normal solid white lane line
- Bicycle lane symbol with arrow
- Spacing of buffer treatment varies

* Optional