



## National Committee on Uniform Traffic Control Devices

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1 **NOTE: This is a recommendation by NCUTCD to FHWA to add or revise the**  
2 **content of the MUTCD. This proposal by itself does not constitute official**  
3 **standards or guidance. Regardless of NCUTCD approval status, any proposed**  
4 **change or revision has no legal or official status until specifically approved by**  
5 **FHWA through either the Interim Approval process or adoption into a new edition**  
6 **of the MUTCD.**

7  
8 **TECHNICAL COMMITTEE:** Bicycle Technical Committee

9  
10 **TOPIC:** Buffered Bicycle Lanes

11  
12 **STATUS/DATE OF ACTION:**

13 **BTC Drafts:** 01/09/2014

14 **BTC Approval:** 01/09/2014

15 **MTC Concurrence:** 01/09/2014

16 **Transmitted to Sponsors:** 03/25/2014

17 **TC Revision:** 06/28/2014

18 **Council Approval:** **06/28/2014 (v1.7)**

19  
20 **ORIGIN OF REQUEST:** FHWA

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22 **AFFECTED SECTIONS OF MUTCD:** Section 1A.13, Chapter 9C

23  
24 **SUMMARY:**

25 The proposal revises Section 1A.13 – Definitions of Headings, Words, and Phrases in  
26 this Manual and Section 9C.XX to provide standards, guidance, and options for the  
27 installation of buffer areas between bicycle lanes and adjacent general-purpose lanes  
28 and/or bicycle lanes and parking lanes.

29  
30 **DISCUSSION**

31 Crashes involving bicyclists and opening vehicle doors can cause severe injury. One  
32 countermeasure that has been employed to reduce the likelihood of this type of crash is  
33 to place a buffer area between the parking lane and bicycle lane.

34  
35 Placing a buffer area between the bicycle lane and adjacent general-purpose lane  
36 provides greater separation between bicyclists and motor vehicles.

37  
38 On existing roadways that are reconfigured to provide bicycle lanes, excess remaining  
39 width can result in excessively wide bicycle lanes that appear to be general-purpose

1 lanes or parking lanes. A buffer can prevent the configuration of bicycle lanes that may  
2 be so wide that they might be mistaken for a travel lane or parking lane.

3  
4 Currently, buffered bicycle lanes can be installed as buffer-separated preferential lanes  
5 as defined in Section 1A.13 and in accordance with the Standards and Guidance in  
6 Section 3B.24 and Chapter 3D. The buffer area can be delineated by standard  
7 longitudinal pavement markings and may include chevron or diagonal markings.

8  
9 Buffered bicycle lanes have been installed at numerous locations throughout the US,  
10 however, there is a lack of uniformity in the pattern of pavement markings and  
11 geometric configuration. This proposal will include Standards, Guidance and Options  
12 for the uniform installation of buffered bicycle lanes.

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14 The NCUTCD Markings Technical Committee reviewed and concurred with this  
15 proposal in January and June, 2014.

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18

1 **RECOMMENDED MUTCD PROVISIONS/ REVISIONS**

2  
3 **Note:** Deletions from the 2009 MUTCD text are noted in ~~strikethrough—red~~, and  
4 insertions in underline blue.

5  
6  
7 **The following definition is added to Section 1A.13 of the MUTCD:**

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

10  
11 **Standard:**

12  
13 xx. Buffered Bicycle Lane—a bicycle lane that is separated from the adjacent general-purpose lane  
14 or parking lane by a pattern of standard longitudinal markings. The buffer area might include  
15 chevron or diagonal markings.

16  
17 **A new Section 9C.xx is inserted into Part 9 of the MUTCD:**

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19 **Section 9C.xx. Buffered Bicycle Lanes**

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21 Support:

22  
23 01 Pavement markings can designate a buffer area between a bicycle lane and adjacent  
24 general purpose lane and/or parking lane. A buffer area provides a greater separation between the  
25 bicycle lane and adjacent lanes than is provided by a single normal or wide lane line.

26  
27 Option:

28  
29 02 A bicycle lane buffer area may be used to separate a bicycle lane from an adjacent  
30 general-purpose lane and/or parking lane.

31  
32 **Standard**

33  
34 03 If used, a buffer between a bicycle lane and general-purpose lane or parking lane  
35 shall be delineated by standard normal width longitudinal pavement markings.

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37 Guidance:

38  
39 04 Consideration should be given to installing chevron or diagonal markings as appropriate  
40 in a bicycle lane buffer area. The use of chevron or diagonal markings in a bicycle lane buffer  
41 area should be based on engineering judgment and the Standards and Guidance in Section 3B.  
42 24 and Figure 9C-x.

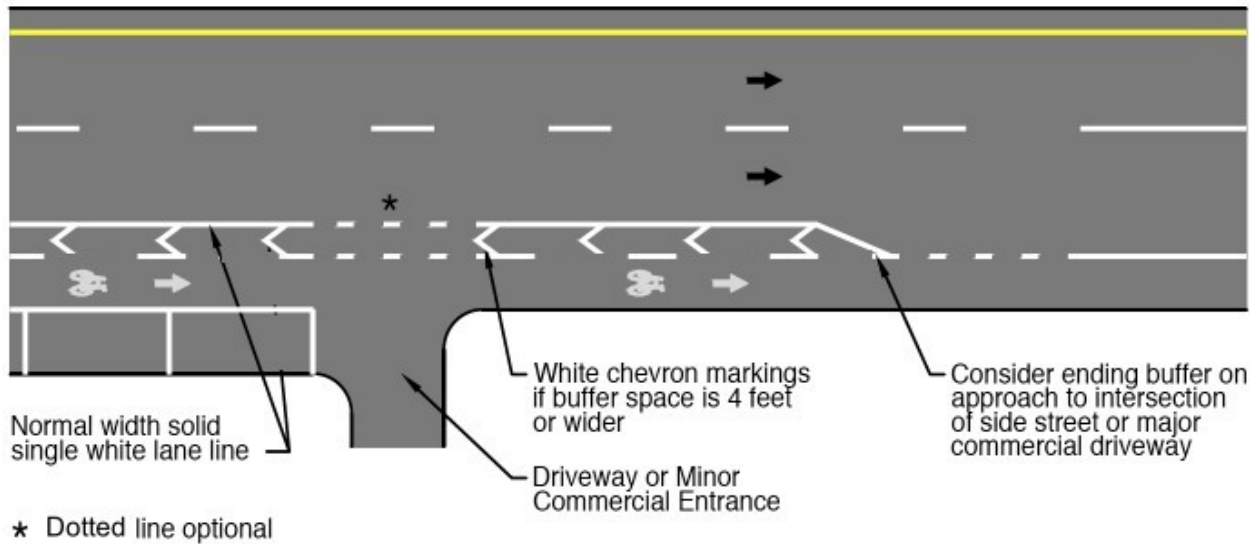
43  
44 Option:

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46 05 The chevron or diagonal markings may be omitted from narrow bicycle lane buffer areas  
47 less than 4 feet wide.

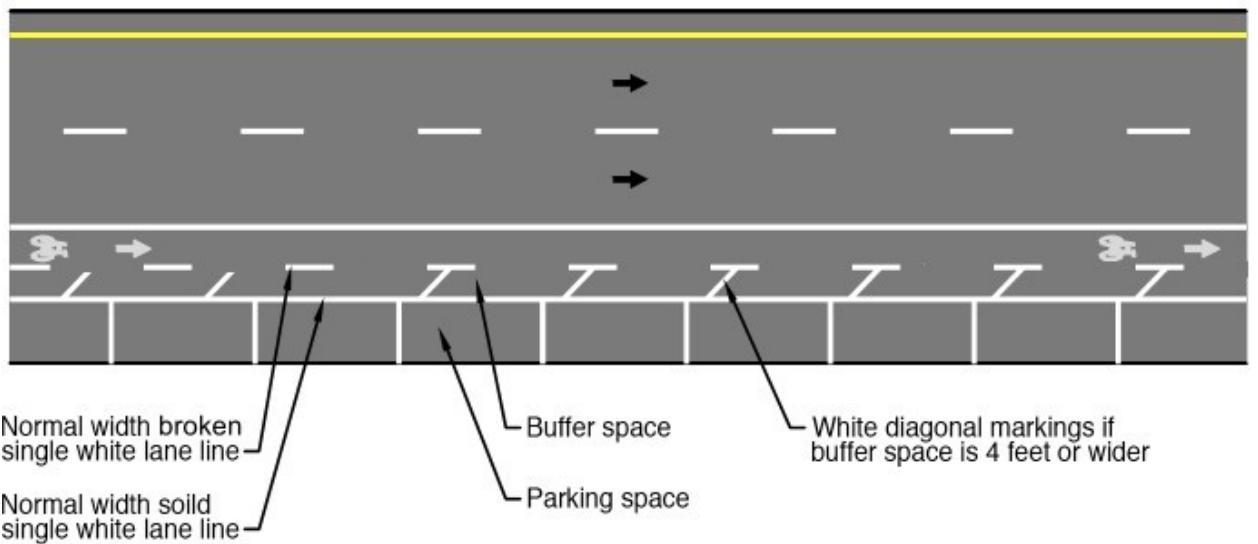
1 **Figure 9C-x. Example of Markings for Buffered Bike Lanes**

2

**A - Buffer between bicycle lane and general purpose lane.**



**B - Buffer between bicycle lane and parking lane.**



3 **Legend**  
➔ Direction of Travel