

# National Committee on Uniform Traffic Control Devices

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

**TECHNICAL COMMITTEE:** Bicycle Technical Committee

**TOPIC:** Review and Revision of Standards in Part 9

STATUS/DATE OF ACTION:

 17
 BTC Drafts:
 02/20/2012

 18
 BTC Approval:
 03/07/2012

 19
 Transmitted to Sponsors:
 03/08/2012

 20
 TC Revision:
 06/20/2012

 21
 Council Approval:
 06/22/2012

**ORIGIN OF REQUEST:** FHWA via 2009 MUTCD

Rulemaking

**AFFECTED SECTIONS OF MUTCD:** Part 9 (all)

**SUMMARY:** 

The NCUTCD Bicycle Technical Committee has reviewed all the Standards in Part 9 of the 2009 MUTCD, and is proposing to revise selected Standards to Part 9 to Guidance, rephrase or restate them, or delete them entirely if deemed to be unnecessary.

#### DISCUSSION:

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> In the 2009 MUTCD issued by FHWA in December 2009, FHWA revised 3 the definition of Standard to disallow exceptions based on engineering 4 5 judgment or study. Based on docket comments and other feedback. FHWA asked each NCUTCD technical committee to analyze their Parts 6 and Chapters to determine if each Standard should remain unchanged as 7 a mandatory condition or be modified to Guidance, Option, Support, or deleted. 9

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Although it is very desirable for agencies to strictly comply with the Standard provisions in Part 9, there may be situations where compliance with certain specific Standards may be impractical or impossible. Retaining these provisions, but as Guidance, should still serve to ensure uniform and appropriate placement and application of traffic control device while still allowing limited flexibility. Exceptions would still require engineering study, judgment, or documentation.

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Revision 2 of the MUTCD has returned the definition of Standard to the wording used in the 2003 MUTCD, by deleting the sentence "Standard statements shall not be modified or compromised based on engineering judgment or engineering study." However, it is still appropriate to review current Standards to see if they are still needed or are appropriate as Standards.

#### RECOMMENDED MUTCD PROVISIONS/ REVISIONS: 1 2 **Note:** Deletions from the 2009 MUTCD text are noted in strikethrough red, 3 and insertions in underline blue. 4 5 6 Section 9B.01 is revised as follows: 7 8 9 Section 9B.01 Application and Placement of Signs **Standard:** 10 01 Bicycle signs shall be standard in shape, legend, and color. 11 All signs shall be retroreflectorized for use on bikeways, including 12 02 shared-use paths and bicycle lane facilities. 13 14 Where signs serve both bicyclists and other road users, vertical mounting height and lateral placement shall be as provided in Part 2. 15 Guidance: 16 04 17 Where used on a shared-use path, no portion of a sign or its support shall should be placed less than 2 feet laterally from the near edge of the path, or less 18 than 8 feet vertically over the entire width of the shared-use path (see Figure 9B-19 20 1). 05 21 Mounting height for post-mounted signs on shared-use paths shall should be a minimum of 4 feet, measured vertically from the bottom of the sign to the 22 23 elevation of the near edge of the path surface (see Figure 9B-1). 24 -Guidance: 25 06 Signs for the exclusive use of bicyclists should be located so that other 26 road users are not confused by them. 27 The clearance for overhead signs on shared-use paths should be adjusted when appropriate to accommodate path users requiring more clearance, such as 28 29 equestrians, or typical maintenance or emergency vehicles. 30 31 The title of Figure 9B-1 is revised as follows: 32 33 Figure 9B-1. Recommended Sign Placement on Shared-Use 34 **Paths** 35 36 37 Specific justifications for 9B.01 & Figure 9B-1 changes: 38 Setting sign installation locations as a Standard may be infeasible in 39 some locations. Retaining the provisions as Guidance should 40 preserve uniformity while allowing limited flexibility as needed. 41 42 43

1	Section 9B.09 is revised as follows:	
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3	Section	n 9B.09 Selective Exclusion Signs
4	Option	I:
5	01	Selective Exclusion signs (see Figure 9B-2) may be installed at the
6	entrand	ce to a roadway or facility to notify road or facility users that designated
7	types o	of traffic are excluded from using the roadway or facility.
8	Standa	<del>ard:</del>
9	02	If used, Selective Exclusion signs shall clearly indicate the type of
10	<del>traffic</del>	that is excluded.
11	Suppor	rt:
12	<del>03</del> <u>02</u>	Typical exclusion messages include:
13	A.	No Bicycles (R5-6),
14	B.	No Pedestrians (R9-3),
15	C.	No Skaters (R9-13), and
16	D.	No Equestrians (R9-14).
17	Option:	
18	<del>04</del> <u>03</u>	Where bicyclists, pedestrians, and motor-driven cycles are all prohibited,
19	it may	be more desirable to use the R5-10a word message sign that is described in
20	Section	n 2B.39.
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23	Speci	fic justifications for 9B.09 changes:
24	Not n	ecessary to be this specific in the Standard.
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Note:

changes

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**NCUTCD** 

in June

2011

paragraphs

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#### Section 9B.21 is revised as follows:

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### Section 9B.21 Bicycle Route Signs (M1-8, M1-8a, M1-9)

4 Option:

- 5 01 To establish a unique identification (route designation) for a State or local
- 6 bicycle route, the Bicycle Route (M1-8, M1-8a) sign (see Figure 9B-4) may be

7 used.

- 8 **Standard** Guidance:
- 9 02 The Bicycle Route (M1-8) sign shall should contain a route designation and
- 10 shall should have a green background with a retroreflectorized white legend and
- border. The Bicycle Route (M1-8a) sign shall contain the same information as the
- 12 *MI-8 sign and in addition shall should include on the upper portion of the sign*
- 13 <u>panel</u> a pictograph or words that are associated with the route or with the agency
- 14 that has jurisdiction over the route. <u>The pictograph or legend shall should</u>
- 15 <u>incorporate a bicycle symbol or word message that clearly identifies the route as</u>
- 16 *a bicycle route or pathway.*
- 17 <u>03 If a pictograph is used on the M1-8a sign the maximum dimension (height</u>
- or width) of the pictograph should not exceed two times the height of the route
- 19 *numeral, and should be contained within a green border.*
- 20 04 If a bicycle symbol is used on the M1-8a sign, it should have a minimum
- 21 height of 20% of the M1-8a sign panel height.

22 Guidance:

- 23 05 Bicycle routes, which might be a combination of various types of
- 24 bikeways, should establish a continuous routing.
- 25 04 06 Where a designated bicycle route extends through two or more States, a
- 26 coordinated submittal by the affected States for an assignment of a U.S. Bicycle
- 27 Route number designation should be sent to the American Association of State
- 28 *Highway and Transportation Officials (see Page i for the address).*
- 29 Standard:
- 30 05 07 The U.S. Bicycle Route (M1-9) sign (see Figure 9B-4) shall contain the
- 31 route designation as assigned by AASHTO and shall have a black legend and
- 32 border with a retroreflectorized white background.
- 33 Guidance:
- 34  $\frac{66}{6}$  08 If used, the Bicycle Route or U.S. Bicycle Route signs should be placed at
- 35 intervals frequent enough to keep bicyclists informed of changes in route
- 36 *direction and to remind motorists of the presence of bicyclists.*
- 37 Option:
- 38 07 09 Bicycle Route or U.S. Bicycle Route signs may be installed on shared
- roadways or on shared-use paths to provide guidance for bicyclists.
- 40 08 10 The Bicycle Route Guide (D11-1) sign (see Figure 9B-4) may be installed
- 41 where no unique designation of routes is desired.

- 1 Specific justifications for 9B.21 changes:
- 2 The existing Standard wording on M1-9 color is not necessary, as the
- 3 Standard Highway Signs and Markings book should adequately
- 4 define the design of the sign. In addition, NCUTCD has
- 5 recommended a change to the color of the M1-9 (from black to
- 6 green), and the revised Standard will function well with either design.

1	Section 9B.23 is revised as follows:
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3	Section 9B.23 Bicycle Parking Area Sign (D4-3)
4	Option:
5	The Bicycle Parking Area (D4-3) sign (see Figure 9B-4) may be installed
6	where it is desirable to show the direction to a designated bicycle parking area.
7	The arrow may be reversed as appropriate.
8	Standard:
9	02 The legend and border of the Bicycle Parking Area sign shall be green
10	on a retroreflectorized white background.
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13	Specific justifications for 9B.23 changes:
14	The existing Standard wording on layout of bicycle guide signs is
15	unnecessarily restrictive. Retaining the provisions as Guidance
16	should preserve uniformity while allowing limited flexibility as
17	needed.
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#### Section 9B.24 is revised as follows:

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- 3 Section 9B.24 Reference Location Signs (D10-1 through D10-3) and
- 4 <u>Intermediate Reference Location Signs (D10-1a through D10-3a)</u>
- 5 Support:
- 6 01 There are two types of reference location signs:
- 7 A. Reference Location (D10-1, 2, and 3) signs show an integer distance point
- 8 along a shared-use path; and
- 9 B. Intermediate Reference Location (D10-1a, 2a, and 3a) signs also show a
- decimal between integer distance points along a shared-use path.
- 11 Option:
- Reference Location (D10-1 to D10-3) signs (see Figure 9B-4) may be
- installed along any section of a shared-use path to assist users in estimating their
- progress, to provide a means for identifying the location of emergency incidents
- and crashes, and to aid in maintenance and servicing.
- 16 03 To augment the reference location sign system, Intermediate Reference
- Location (D10-1a to D10-3a) signs (see Figure 9B-4), which show the tenth of a
- mile with a decimal point, may be installed at one tenth of a mile intervals, or at
- 19 some other regular spacing.
- 20 **Standard**: Guidance:
- 21 04 If Intermediate Reference Location (D10-1a to D10-3a) signs are used to
- 22 augment the reference location sign system, the reference location sign at the
- 23 integer mile point shall should display a decimal point and a zero numeral.
- 24 05 If placed on shared-use paths, reference location signs shall contain
- 25 4.5-inch white numerals on a green background that is at least 6 inches wide
- 26 with a white border. The signs shall contain the word MILE in 2.25-inch
- 27 white letters.
- 28 06 05 Reference location signs shall should have a minimum mounting height of
- 29 *2 feet, measured vertically from the bottom of the sign to the elevation of the near*
- 30 *edge of the shared-use path, and shall should not be governed by the mounting*
- 31 height requirements prescribed in Section 9B.01.
- 32 Option:
- 33  $\frac{07}{06}$  Reference location signs may be installed on one side of the shared-use
- path only and may be installed back-to-back.
- 35 08 07 If a reference location sign cannot be installed in the correct location, it
- may be moved in either direction as much as 50 feet.
- 37 *Guidance:*
- 38  $\frac{99}{100}$  *If a reference location sign cannot be placed within 50 feet of the correct*
- 39 *location, it should be omitted.*
- 40 10 29 Zero distance should begin at the south and west terminus points of
- 41 *shared-use paths.*
- 42 Support:
- 43 #10 Section 2H.05 contains additional information regarding reference
- 44 location signs.

- 1 Specific justifications for 9B.24 changes:
- 2 The existing Standard wording on layout and mounting of reference
- 3 location signs for bicycle facilities is unnecessarily restrictive, as the
- 4 Standard Highway Signs & Markings book and other MUTCD
- 5 sections adequately address these items. Retaining some of the
- 6 provisions as Guidance should preserve uniformity while allowing
- 7 some flexibility as needed.

2 Section 9B.26 Object Markers 3 **Standard:** 4 Obstructions in the traveled way of a shared-use path shall be marked 5 with retroreflectorized material or appropriate object markers as described 6 in Section 2C.63. 7 Option: 8 01 02 Fixed objects adjacent to shared-use paths may be marked with Type 1, 9 Type 2, or Type 3 object markers (see Figure 9B-3) such as those described in 10 Section 2C.63. If the object marker is not intended to also be seen by motorists, a 11 smaller version of the Type 3 object marker may be used (see Table 9B-1). 12 **Standard:** 13 14 02 Obstructions in the traveled way of a shared-use path shall be marked with retroreflectorized material or appropriate object markers. 15 03 All object markers shall be retroreflective. 16 04 On Type 3 object markers, the alternating black and retroreflective 17 yellow stripes shall be sloped down at an angle of 45 degrees toward the side 18 19 on which traffic is to pass the obstruction. 20 21 Specific justifications for 9B.26 changes: 22 The first Standard paragraph is moved to the front for emphasis. The 23 remaining Standards are deleted, as the design of object markers is 24 adequately described in the Standard Highway Signs and Markings 25 book and elsewhere. 26 27

Section 9B.26 is revised as follows:

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#### Section 9C.02 is revised as follows: 1 2 **Section 9C.02 General Principles** 3 Guidance: 4 5 01 Bikeway design guides (see Section 9A.05) should be used when designing markings for bicycle facilities. 6 7 **Standard:** 02 Markings used on bikeways shall be retroreflectorized. 8 Guidance: 9 02 03 Pavement marking word messages, symbols, and/or arrows should be 10 used in bikeways where appropriate. Consideration should be given to selecting 11 pavement marking materials that will minimize loss of traction for bicycles under 12 13 wet conditions. 14 **Standard:** 15 03 04 Markings used on bikeways shall be retroreflectorized. The colors, width of lines, patterns of lines, symbols, and arrows used for marking 16 bicycle facilities shall be as defined in Sections 3A.05, 3A.06, and 3B.20. 17 Support: 18 04 05 Figures 9B-7 and 9C-1 through 9C-9 show examples of the application of 19 lines, word messages, symbols, and arrows on designated bikeways. 20 21 Option: 05 06 A dotted line may be used to define a specific path for a bicyclist crossing 22 an intersection (see Figure 9C-1) as described in Sections 3A.06 and 3B.08. 23 24 Specific justifications for 9C.02 changes: 25 The Standard statements are retained, but are consolidated into one 26

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paragraph.