



National Committee on Uniform Traffic Control Devices

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National Committee on Uniform Traffic Control Devices (NCUTCD) Recommended Changes to Proposed Text for 11th Edition of the MUTCD Docket Number: FHWA-2020-0001

6 **Federal Register Item Numbers:** 582-585

7 **NPA MUTCD Section Numbers:** Chapter 9A.01-9A.08

8 **Legend:** Base text shown in proposal is the NPA “clean” proposed text.

- 9
- 10 • [NCUTCD recommendation for text to be added in final rule.](#)
 - 11 • ~~NCUTCD recommendation for text to be deleted in final rule.~~
 - 12 • [NCUTCD recommendation for text to be moved/relocated in final rule.](#)
 - 13 • NPA text that was not previously approved by NCUTCD but is now approved.
 - 14 • Explanatory note: [\[Note that explains purpose of recommended change.\]](#)

15 The following pages present NCUTCD recommendations for changes to the MUTCD NPA
16 proposed text, tables, and figures for Chapter 9A. Below is a short summary of the NCUTCD
17 position for each section of this chapter. A more detailed summary is provided at the beginning
18 of each section.

- 19
- 20 • NPA #582, Section 9A.01: Changes recommend based on Council action in Spring 2001.
 - 21 • NPA #583, Section NA: NCUTCD agrees with NPA content.
 - 22 • NPA #584, Section 9A.02: Changes recommended based on Council action in Spring 2021.
 - 23 • NPA #585, Section 9A.03: Changes recommended based on Council action in Spring 2021.
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26 **Section 9A.01 Comments:** NCUTCD generally agrees with 9A.01 as presented in the NPA, but
27 recommends deletion of one new Support statement that is covered in other Parts of the Manual.

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29 Section 9A.01 General

30 Support:

31 Part 9 covers signs and pavement markings specifically related to bicycle operation on
32 roadways, separated bikeways, and shared-use paths. Part 4 contains information on highway
33 traffic signals and bicycle signal faces. Part 6 contains information on work zones for bicycle
34 facilities and the mitigation of bicycle travel through work zones.

35 Definitions and acronyms pertaining to Part 9 are provided in Sections 1C.01 and 1C.03.

36 With only a few exceptions, such as when allowed to ride on a sidewalk or where some
37 bicycle-specific traffic control devices are installed, bicycles are either legally defined as
38 vehicles or give the operator of a bicycle the same rights and duties of an operator of a motor
39 vehicle.

40 ~~—Designing bicycle facilities and the traffic control devices on those facilities in a manner that~~
41 ~~encourages predictable behavior and compliance with traffic laws can increase public acceptable~~
42 ~~of bicyclists from other road users. The use or misuse of traffic control devices for improperly~~
43 ~~designed bicycle facilities can produce ineffective or counterproductive results.~~ NCUTCD
44 recommends deleting this provision. This applies to traffic control devices for all road users, not
45 just bicyclists. This subject is covered extensively in Part 1.

46 **Standard:**

47 **The absence of a marked bicycle lane or any of the other traffic control devices**
48 **discussed in this Chapter on a particular roadway shall not mean that bicyclists are not**
49 **permitted to travel on that roadway.**

50
51 *Guidance:*

52 *All signs, signals, and markings, including those on bicycle facilities, should be properly*
53 *maintained to command respect from both the motorist and the bicyclist. When installing signs*
54 *and markings on bicycle facilities, an agency should be designated to maintain these devices.*

56 **Section 9A.02 Comments:** NCUTCD agrees with 9A.02 with editorial revisions.

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59 **Section 9A.02 Standardization of Application for Signing**

60 Support:

61 The installation of nonstandard signing on bikeways or modifying standard signing in a
62 manner inconsistent with Chapter 2A to draw special attention, educate users or the community,
63 or brand a bicycle facility can contribute to public acceptance and enforcement problems.

64 **Standard:**

65 **Bicycle signs shall be standard in shape, legend, and color.**

66 **All signs shall be retroreflective for use on bikeways, including shared-use paths, and**
67 **bicycle lane facilities.**

68 **Where signs serve both bicyclists and other road users, vertical mounting height and**
69 **lateral placement shall be as provided in Part 2.**

70 *Guidance:*

71 *Where used on a shared-use path, no portion of a sign or its support should be placed less*
72 *than 2 feet laterally from the near edge of the path, or less than 8 feet vertically over the entire*
73 *width of the shared-use path (see Figure 9A-1).*

74 *Mounting height for post-mounted signs on shared-use paths should be a minimum of 4 feet,*
75 *measured vertically from the bottom of the sign to the elevation of the near edge of the path*
76 *surface (see Figure 9A-1).*

77 *Signs for the exclusive use of bicyclists should be located so that other road users are not*
78 *confused by them.*

79 *The clearance for overhead signs on shared-use paths should be adjusted when appropriate*
80 *to accommodate path users requiring more clearance, such as equestrians, or typical*
81 *maintenance or emergency vehicles.*

82 **Standard:**

83 If the sign or plaque applies to motorists and bicyclists, then the size shall be as shown
84 for conventional roads in Tables 2B-1, 2C-1, or 2D-2.

85 The minimum sign and plaque sizes for signs specific to bicycle-only facilities and
86 shared-use paths shall be those shown in Tables 9BA-1, 9C-1, and 9D-1; and shall be used
87 only for signs and plaques installed specifically for bicycle-traffic applications. (editorial
88 revision to table references)

89 Option:

90 Larger size signs and plaques may be used on bicycle facilities when appropriate (see Section
91 2A.07).

92 Any diamond-shaped warning sign that is placed such that it is only applicable to bicyclists
93 and pedestrians may be 18" x 18".

94 Guidance:

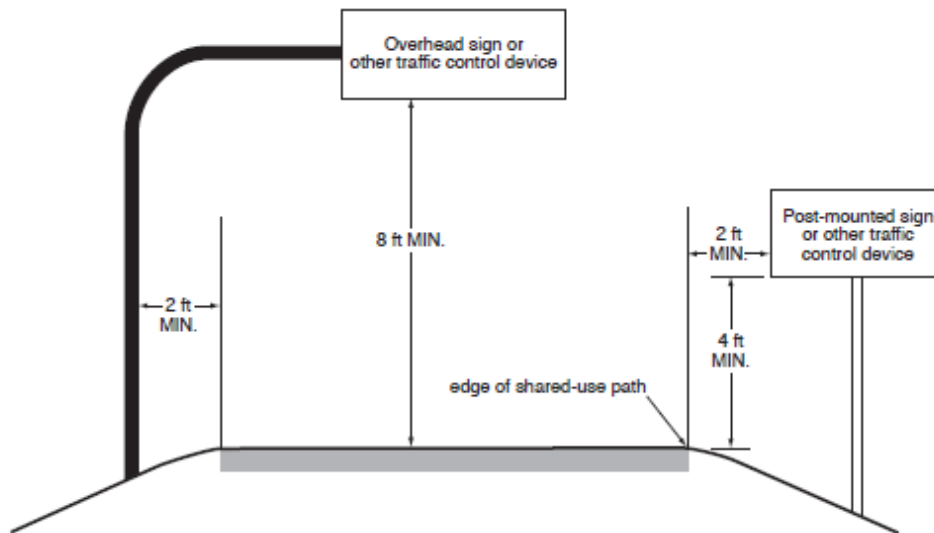
95 *Except for size, the design of signs and plaques for bicycle facilities should be identical to*
96 *that provided in this Manual for signs and plaques for streets and highways.*

97 Support:

98 Uniformity in design of bicycle signs and plaques includes shape, color, symbols, arrows,
99 wording, lettering, and illumination or retroreflectivity

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Figure 9A-1. Sign Placement on Shared-Use Paths



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NCUTCD agrees with Figure 9A-1 in the NPA.

108 NCUTCD generally agrees with Table 9A-1 in the NPA, but recommends the following
109 revisions:

- 110 • Correct the sign designation numbers as shown. Replace the NPA text sign for R3-5hP
111 with the graphic version in accordance with NCUTCD recommendation 14A-BIK-03
- 112 • Add the graphic version of the EXCEPT BIKES R3-xP in accordance with NCUTCD
113 recommendation 09A-BIK-01
- 114 • Add R5-10dP in accordance with NCUTCD recommendation 09B-BIK-01
- 115 • Add R9-xx NO ATV and R9-xx NO DIRT BIKES in accordance with NCUTCD
116 recommendation 11A-BIK-03
- 117 • Add R10-15b and R10-15c signs in accordance with NCUTCD recommendation 18B-
118 BIK-01
- 119 • Add R10-22 sign
- 120 • Add R10-24 sign
- 121 • Add R10-40 series signs
- 122 • Add R10-41 series signs
- 123 • Add W9-5 and W9-5a signs in accordance with NCUTCD recommendation 16B-BIK-02
- 124 • Add W16-1P and W16-1aP plaques.
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Table 9A-1 - Bicycle Facility Sign and Plaque Minimum Sizes

Sign or Plaque	Sign Designation	Section	Shared-Use Path	Separated Bikeway	Roadway
Stop	R1-1	2B.05, 9B.01	18 x 18	18 x 18	30 x 30
Yield	R1-2	2B.08, 9B.01	18 x 18 x 18	18 x 18 x 18	30 x 30 x 30
Except Bicycles (plaque)	R3-7bP	9B.02	—	—	24 x 18
Advance Intersection Lane Control	R3-8 Series	2B.30, 9B.03	—	—	Varies x 30
Bike Lane	R3-17	9B.04	—	24 x 18	24 x 18
Bike Lane (plaques)	R3-17aP, R3-17bP, R3-5bP	2B, 9B.04	—	24 x 8	24 x 8
Movement Restriction	R4-1,2,3,7,16	2B.26,26.30,30; 9B.22	12 x 18	12 x 18	18 x 24
Begin Right Turn Lane Yield to Bikes	R4-4	36, 37,38,40	—	—	36 x 30
Bicycles May Use Full Lane	R4-11	9B.14	—	—	30 x 30
Bicycle Passing Distance	R4-19	9B.15	-	-	30 x 30
Bicycle Wrong Way	R5-1b	9B.06	12 x 18	12 x 18	12 x 18
No Motor Vehicles	R5-3	9B.07	24 x 24	24 x 24	24 x 24
No Bicycling	R5-6	9B.08	18 x 18	18 x 18	24 x 24
No Parking Bike Lane	R7-9,9a	9B.09	—	12 x 18	12 x 18
Back-in Parking	R7-10	9B.10	—	—	12 x 18
No Pedestrians	R9-3	9B.08	18 x 18	18 x 18	18 x 18
Ride With Traffic (plaque)	R9-3cP	9B.06	12 x 12	12 x 12	12 x 12
Bicycles Use Pedestrian Signal	R9-5	9B.11	12 x 18	12 x 18	12 x 18
Bicycle Yield to Peds	R9-6	9B.12	12 x 18	12 x 18	12 x 18
Shared-Use Path Restriction	R9-7	9B.13	12 x 18	—	—
No Skaters	R9-13	9B.08	18 x 18	18 x 18	18 x 18
No Equestrians	R9-14	9B.08	18 x 18	18 x 18	18 x 18
No Snowmobiles	R9-15	9B.08	18 x 18	18 x 18	18 x 18
Bicycles Use Shoulder Only	R9-21	9B.17	—	—	24 x 30
Bicycles Must Exit	R9-22	9B.17	—	—	24 x 30
All Turns From Bike Lane	R9-23	9B.18	18 x 24	18 x 24	18 x 24
Bicycle Turn Must Use Turn Box	R9-23a, R9-23b	9B.18	12 x 18	12 x 18	12 x 18
Bicycle All Turns	R9-24,24a	9B.19	24 x 6	24 x 6	24 x 6
Bicycle All Turns	R9-24c,24d	9B.19	12 x 18	12 x 18	12 x 18
Bicycle U and Left Turns	R9-25,25a,25b	9B.19	24 x 6	24 x 6	24 x 6
Bicycle U and Left Turns	R9-25c,25d,25e	9B.19	12 x 18	12 x 18	12 x 18
Bicycle U Turn	R9-26,26a,26b	9B.19	24 x 6	24 x 6	24 x 6
Bicycle U Turn	R9-26c,26d,26e	9B.19	12 x 18	12 x 18	12 x 18
Bicycle Left Turn	R9-27,27a,27b	9B.19	24 x 6	24 x 6	24 x 6
Bicycle Left Turn	R9-27c,27d,27e	9B.19	12 x 18	12 x 18	12 x 18
Push Button to Turn On Warning Lights	R10-25	9B.19	9 x 12	9 x 12	9 x 12

MISSING R9-xx NO DIRT BIKES, R9-xx NO A TV, R5-10dP, R10-40 Series, R10-41 Series, R10-22,R10-24

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Table 9A-1 - Bicycle Facility Sign and Plaque Minimum Sizes

Sign or Plaque	Sign Designation	Section	Shared-Use Path	Separated Bikeway	Roadway
Bike Push Button for Green Light (arrow)	R10-2B	9B.19/ 20	9 x 15	9 x 15	9 x 15
Bicycle Signal	R10-40, R10-40a, R10-41, R10-41a, R10-41b	9B.20/ 21	12 x 21	12 x 21	12 x 21
Grade Crossing (Crossbuck)	R15-1	8B.03, 9B.23	24 x 4.5	24 x 4.5	48 x 9
Number of Tracks (plaque)	R15-2P	8B.03, 9B.23	13.5 x 9	13.5 x 9	27 x 18
Lock	R15-8	8B.17, 9B.22/ 23	18 x 9	18 x 9	—
Horizontal Alignment	W1-1,2,3,4,5	07/ 2C.04, 9C.01	18 x 18	18 x 18	24 x 24
Arrow Warning	W1-8,7	10/ 2C.12, 2C.47, 9C.01/ 43	24 x 12	24 x 12	36 x 18
Intersection Warning	W3-1,2,3,4,5	42/ 2C.24, 9C.02	18 x 18	18 x 18	24 x 24
Bicycles Merging	W9-5a	9C.07	18 x 18	18 x 18	30 x 30
Bicycle Lane Ends	W9-5	9C.07	18 x 18	18 x 18	30 x 30
Stop, Yield, Signal Ahead	W3-1,2,3	2C.36, 9B.49/ 9C.08	18 x 18	18 x 18	30 x 30
Narrow Bridge	W5-2	18/ 2C.26, 9B.19/ 9C.08	18 x 18	18 x 18	30 x 30
Path Narrow	W5-4a	9B.49/ 9C.08	18 x 18	18 x 18	—
Hill	W7-5	9B.49/ 9C.08	18 x 18	18 x 18	30 x 30
Bump or Dip	W8-1,2	2C.28/ 29/ 9C.03	18 x 18	18 x 18	24 x 24
Pavement Ends	W8-3	2C.29/ 9C.03	18 x 18	18 x 18	30 x 30
Bicycle Surface Condition	W8-10	9C.03	18 x 18	18 x 18	30 x 30
Slippery When Wet (plaque)	W8-10P	9C.03	12 x 9	12 x 9	12 x 9
Grade Crossing Advance Warning	W10-1	8B.06, 9C.08	24 Dia.	24 Dia.	36 Dia.
No Train Horn (plaque)	W10-9P	8B.21, 9C.08	18 x 12	18 x 12	30 x 24
Skewed Crossing	W10-12	8B.25, 9C.08	18 x 18	18 x 18	36 x 36
Bicycle	W11-1	55/ 9C.04	18 x 18	18 x 18	24 x 24
Pedestrian	W11-2	2C.59, 9B.49/ 9C.08	18 x 18	18 x 18	24 x 24
Bicycle / Pedestrian	W11-15	9C.04	18 x 18	18 x 18	30 x 30
Trail Crossing (plaque)	W11-15P	25/ 9C.04	18 x 12	18 x 12	24 x 18
Low Clearance	W12-2	2C.27, 9B.49/ 9C.08	18 x 18	18 x 18	30 x 30
Playground	W15-1	56/ 2C.34, 9B.49/ 9C.08	18 x 18	18 x 18	24 x 24
XX Feet (plaque)	W16-2P	81/ 2C.58, 9C.04	18 x 12	18 x 12	24 x 18
XX Ft (plaque)	W16-2aP	81/ 2C.58, 9C.04	18 x 9	18 x 9	24 x 12
Diagonal Arrow (plaque)	W16-7P	9C.04	18 x 9	18 x 9	24 x 12
Ahead (plaque)	W16-9P	9C.04	18 x 9	18 x 9	24 x 12
Except Bicycles (plaque)	W16-20P	9C.05	—	—	24 x 18
Bicycle Cross Traffic (plaque)	W16-21P, W16-21aP	69/ 9C.06/ 09	—	—	24 x 18
Type 3 Object Markers	OMS-L,C,R	2C.63, 9C.06	6 x 18	6 x 18	12 x 36
Destination (1 line)	D1-1, D1-1a	38/ 2D.37, 9D.01	Varies x 6	Varies x 6	Varies x 18
Bicycle Destination (1 line)	D1-1b, D1-1c	9D.01	Varies x 6	Varies x 6	Varies x 6
Destination (2 lines)	D1-2, D1-2a	38/ 2D.37, 9D.01	Varies x 12	Varies x 12	Varies x 30
Bicycle Destination (2 lines)	D1-2b, D1-2c	9D.01	Varies x 12	Varies x 12	Varies x 12
Destination (3 lines)	D1-3, D1-3a	38/ 2D.37, 9D.01	Varies x 18	Varies x 18	Varies x 42

missing W9-5, W9-5a (Section 9C.07), W16-1P and W16-1aP (Section 9C.08)

Table 9A-1 - Bicycle Facility Sign and Plaque Minimum Sizes

Sign or Plaque	Sign Designation	Section	Shared-Use Path	Separated Bikeway	Roadway
Bicycle Destination (3 Lines)	D1-3b, D1-3c	9D.01	Varies x 18	Varies x 18	Varies x 18
Street Name	D9-1	2D.4 8 , 9D.01	Varies x 8	Varies x 8	Varies x 8
Bicycle Parking Area	D4-3	9D.09	12 x 18	12 x 18	12 x 18
Bicycle-Sharing Station	D4-4	9D.09	12 x 18	12 x 18	12 x 18
Reference Location (1-digit)	D10-1	2H.02 , 9D.10	6 x 12	6 x 12	10 x 18
Intermediate Reference Location (42-digits)	D10-1a	2H.02 , 9D.10	6 x 18	6 x 18	10 x 27
Reference Location (2-digits)	05	2H.02 , 9D.10	6 x 18	6 x 18	10 x 27
Intermediate Reference Location (23-digits)	D10-2a	2H.02 , 9D.10	6 x 24	6 x 24	10 x 36
Reference Location (3-digits)	D10-3	2H.02 , 9D.10	6 x 24	6 x 24	10 x 36
Intermediate Reference Location (24-digits)	D10-3a	2H.02 , 9D.10	6 x 30	6 x 30	10 x 48
Bike Route	D11-1	9D.02	24 x 18	24 x 18	24 x 18
Bicycles Permitted	D11-1a	9D.11	18 x 18	18 x 18	—
Bike Route (plaque)	D11-1bP	9D.03	18 x 8	18 x 8	—
Alternative Bike Route	D11-1c	9D.02	24 x 18	24 x 18	24 x 18
Bike Route Destination (2 Lines)	D11-1d	9D.02	24 x Varies	24 x Varies	24 x Varies
Bike Route Destination and Distance (2 Lines)	D11-1e	9D.02	24 x Varies	24 x Varies	24 x Varies
Bike Route Destination (3 Lines)	D11-1f	9D.02	24 x Varies	24 x Varies	24 x Varies
Bike Route Destination and Distance (3 Lines)	D11-1g	9D.02	24 x Varies	24 x Varies	24 x Varies
Pedestrians Permitted	D11-2	9D.11	18 x 18	—	—
Skaters Permitted	D11-3	9D.11	18 x 18	—	—
Equestrians Permitted	D11-4	9D.11	18 x 18	—	—
Destination for Shared-Use Path (1 Line)	D11-10a	9D.12	Varies x 8	—	—
Destinations for Shared-Use Path (2 Lines)	D11-10b	9D.12	Varies x 9	—	—
Destinations for Shared-Use Path (3 Lines)	D11-10c	9D.12	Varies x 12	—	—
State or Local Bicycle Route	M1-8, M1-8a	9D.05	12 x 18	12 x 18	18 x 24
Non-Numbered Bicycle Route	M1-8b, M1-8c	9D.05	12 x 18	12 x 18	18 x 24
U.S. Bicycle Route	M1-9	9D.07	12 x 18	12 x 18	18 x 24
Bicycle Route Auxiliary Signs	M3-1; M3-1,2,3,4; M4-1,1a,2,3,5,6,7,7a,8,14	9D.08	12 x 6	12 x 6	12 x 6
Bicycle Route Arrow Signs	M5-1,2; M6-1,2,3,4,5,6,7	9D.08	12 x 9	12 x 9	12 x 9
Two-Stage Bicycle Turn Box Guide Signs	D11-20	9D.13	12 x 18	12 x 18	12 x 18

Notes: 1. Larger signs may be used when appropriate
 2. Dimensions are shown in inches and are shown as width x height

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138 **Section 9A.03 Comments:** NCUTCD generally agrees with 9A.03 as presented in the NPA, but
139 recommends an additional Support statement referencing Section 9E.17 on channelizing devices.

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141 **Section 9A.03 Standardization of Application for Markings**

142 Support:

143 Markings indicate the separation of the lanes for road users, assist the bicyclist by indicating
144 assigned travel paths, indicate correct position for traffic control signal actuation, and provide
145 advance information for turning and crossing maneuvers.

146 *Guidance:*

147 *Pavement marking word messages, symbols, and/or arrows should be used in bikeways*
148 *where appropriate.*

149 *Consideration should be given to selecting pavement marking materials that will minimize*
150 *loss of traction for bicycles under wet conditions.*

151 **Standard:**

152 **Pavement markings on bicycle facilities that must be visible at night shall be**
153 **retroreflective unless the markings are adequately visible under provided lighting.**

154 **The colors, width of lines, patterns of lines, symbols, and arrows used for marking**
155 **bicycle facilities shall be as defined in Part 3.**

156 Support:

157 Section 3H.06 contains information on green-colored pavement for use with certain traffic
158 control devices for bicycles and bicycle facilities.

159 *Guidance:*

160 *Raised pavement markers should not be used with bicycle lanes or shared-use paths.*

161 *If used around bicycle facilities, raised pavement markers should not be placed immediately*
162 *adjacent to the travel path of bicycles in a bicycle lane or on a shared-use path.*

163 Support:

164 Using raised pavement markers creates a collision potential for bicyclists by placing fixed
165 objects immediately adjacent to the travel path of the bicyclist. Raised pavement markers can
166 cause a bicyclist to lose balance and fall, and may not be visible to a bicyclist following another
167 bicyclist.

168 Section 9E.17 contains information on the use of channelizing devices with bicycle facilities.

169 **[add reference to 9E.17]**

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