



## ATTACHMENT NO. 7

Approved by NCUTCD Council January 20, 2006

### TECHNICAL COMMITTEE RECOMMENDATION

**TECHNICAL COMMITTEE:** Bicycle Technical Committee

**DATE OF ACTION:** June 23rd, 2005 (*modified January 20th, 2006*)

**TOPIC:** Proposed D1 & D11 Series Bicycle Guide Signs  
Part 9 of the MUTCD

**ORIGIN OF REQUEST:** NCUTCD Bicycle Technical Committee

#### DISCUSSION:

The system of bicycle route guide signs currently in the MUTCD works reasonably well in areas where only one bicycle route exists. Urban areas, however, frequently have locations where multiple routes intersect or overlap. In these locations, the signage system currently established in the MUTCD has limited flexibility in addressing these issues, and can result in sign clutter and higher costs.

To address this concern, the following changes to the MUTCD signage for bicyclist guidance are proposed:

1. Add new Bicycle Destination Signs (D1-1b, D1-1c, D1-2b, D1-2c, D1-3b, D1-3c) for specific use as guide and wayfinding signs for bicycle travel. These revised D1 series signs include a bicycle symbol added to the principal legend. The proposal allows the use of these new Destination Signs in place of the D11-1 / D1-1 / M7-1 sign assembly currently shown in the MUTCD. Using these new bicycle-specific signs will decrease costs and reduce sign clutter because all pertinent user information can be located on one panel. This allows travelers to quickly comprehend sign information with minimal distraction.

2. Add a new optional Bicycle Route Guide Sign (D11-1c). The new optional D11-1c sign substitutes additional route name, direction, or destination information in lieu of a generic "BIKE ROUTE" message to provide improved guidance and destination information to bicyclists. By replacing the "BIKE ROUTE" text with more specific information, the D11-1c can be used to replace D11-1 / D1-1 sign assemblies, reducing sign clutter and cost. It can also increase user comprehension of the sign by reducing the amount of text and incorporating all messages into one sign panel.

The proposed signs are modeled after successful bikeway sign systems that are in place in other countries that incorporate a bike symbol, destination, direction and distance (if appropriate) into a single panel. The design has been adjusted to be consistent with US and MUTCD guidelines for guide signing.



**Example of bicycle-specific guide signing outside US (Netherlands)**

The proposed Standard, Guidance, and Option statements are modeled after similar wording in Chapter 2D for directional signing for conventional roads.

These proposed changes were also reviewed and approved by the NCUTCD Guide and Motorist Information (G/MI) Technical Committee at their meeting in June 2005.

**COMMITTEE ACTION:**

The Bicycle Technical Committee recommends that the National Committee submit this proposal as developed by the NCUTCD BTC to sponsors for comment and approval.

Note: Deleted items are shown in ~~strikethrough-red~~, and added text is shown in underline green.

Insert the following entries into existing Table 9B-1:

<u>Destination</u>	<u>D1-1, D1-1a</u>	<u>Varies x 150</u> <u>(Varies x 6)</u>	<u>Varies x 450</u> <u>(Varies x 18)</u>
<u>Bicycle Destination</u>	<u>D1-1b, D1-1c, D1-2b,</u> <u>D1-2c, D1-3b, D1-3c</u>	<u>Varies x 150, 300, 450</u> <u>(Varies x 6, 12, 18)</u>	<u>Varies x 150, 300, 450</u> <u>(Varies x 6, 12, 18)</u>
<u>Street Name</u>	<u>D3</u>	<u>Varies x 150</u> <u>(Varies x 6)</u>	<u>Varies x 450</u> <u>(Varies x 18)</u>
<u>Bicycle Route Guide</u>	<u>D11-1, D11-1c</u>	<u>600 x 450</u> <u>(24 x 18)</u>	<u>600 x 450</u> <u>(24 x 18)</u>

Revise Sections 9B.19 and 9B.21 :

**Section 9B.19 Bicycle Route Guide Signs (D11-1, D11-1c, D1-1b, D1-1c, D1-2b, D1-2c, D1-3b, D1-3c)**

~~Guidance:~~ Option:

~~If used,~~ Bicycle Route Guide (D11-1) signs (see Figure 9B-4) ~~should~~ may be provided ~~at decision points~~ along designated bicycle routes, ~~including signs~~ to inform bicyclists of bicycle route direction changes and to confirm ~~confirmation signs for~~ route direction, distance, and destination.

If used, Bicycle Route Guide signs ~~should~~ may be repeated at regular intervals so that bicyclists entering from side streets will have an opportunity to know that they are on a bicycle route. Similar guide signing ~~should~~ may be used for shared roadways with intermediate signs placed for bicyclist guidance.

Alternative Bicycle Route Guide Signs (D11-1c) may be used to provide information on route direction, destination, and/or route name in place of the "BIKE ROUTE" wording on the D11-1 sign (see Figure 9B-4 and 9B-6).

Destination (D1-1, D1-1a) signs, Street Name (D3) signs or Bicycle Destination (D1-1b, D1-1c, D1-2b, D1-2c, D1-3b, D1-3c) signs (see Figure 9B-4) may be installed to provide direction, destination, and distance information as needed for bicycle travel. If several destinations are to be shown at a single location, they may be placed on a single panel with an arrow (and the distance, if desired) for each name. If more than one destination lies in the same direction, a single arrow may be used for the destinations.

Guidance:

Adequate separation should be made between any destination or group of destinations in one direction and those in other directions by suitable design of the arrow, spacing of lines of legend, heavy lines entirely across the panel, or separate panels.

**Standard:**

**An arrow pointing to the right, if used, shall be at the extreme right of the sign. An arrow pointing left or up, if used, shall be at the extreme left. The distance figures, if used, shall be placed to the right of the destination names.**

**On Bicycle Destination signs, a bicycle symbol shall be placed next to each destination or group of destinations. If an arrow is at the extreme left, the bicycle symbol shall be placed to the right of the respective arrow.**

**Guidance:**

Unless a sloping arrow will convey a clearer indication of the direction to be followed, the directional arrows should be horizontal or vertical.

The bicycle symbol should be to the left of the destination legend.

If several individual name panels are assembled into a group, all panels in the assembly should be of the same length.

**Support:**

Figure 9B-5 shows an example of the signing for the beginning and end of a designated bicycle route on a shared-use path. Figure 9B-6 shows an example of signing for an on-roadway bicycle route. Figure 9B-7 shows examples of signing and markings for shared-use paths.

**Section 9B.21 Destination Arrow and Supplemental Plaque Signs for Bicycle Route Signs**

**Option:**

~~Destination (D1-1b and D1-1c) signs (see Figure 9B-4) may be mounted below Bicycle Route Guide signs, Bicycle Route signs, or Interstate Bicycle Route signs to furnish additional information, such as directional changes in the route, or intermittent distance and destination information.~~

The M4-11 through M4-13 supplemental plaques (see Figure 9B-4) may be mounted above the appropriate Bicycle Route Guide signs, Bicycle Route signs, or Interstate Bicycle Route signs.

**Guidance:**

If used, the appropriate arrow (M7-1 through M7-7) sign (see Figure 9B-4) should be placed below the Bicycle Route Guide sign, Bicycle Route sign, or Interstate Bicycle Route sign.

Arrow signs and supplemental plaques should not be used in conjunction with Bicycle Destination Signs.

**Standard:**

**The arrow signs and supplemental plaques used with the D11-1 or M1-8 signs shall have a white legend and border on a green background.**

The arrow signs and supplemental plaques used with the M1-9 sign shall have a white legend and border on a black background.

Insert the following signs into existing Figure 9B-4:



D1-1



D1-1a



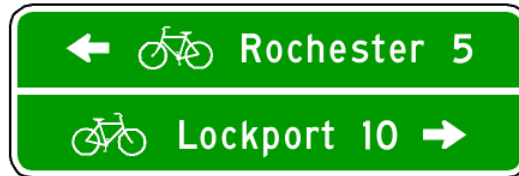
D1-1b



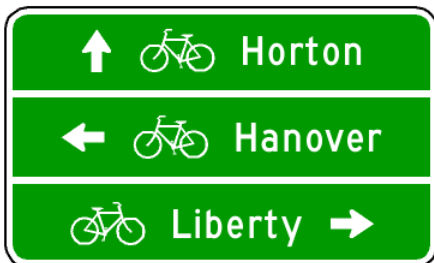
D1-1c



D1-2b



D1-2c



D1-3b



D1-3c



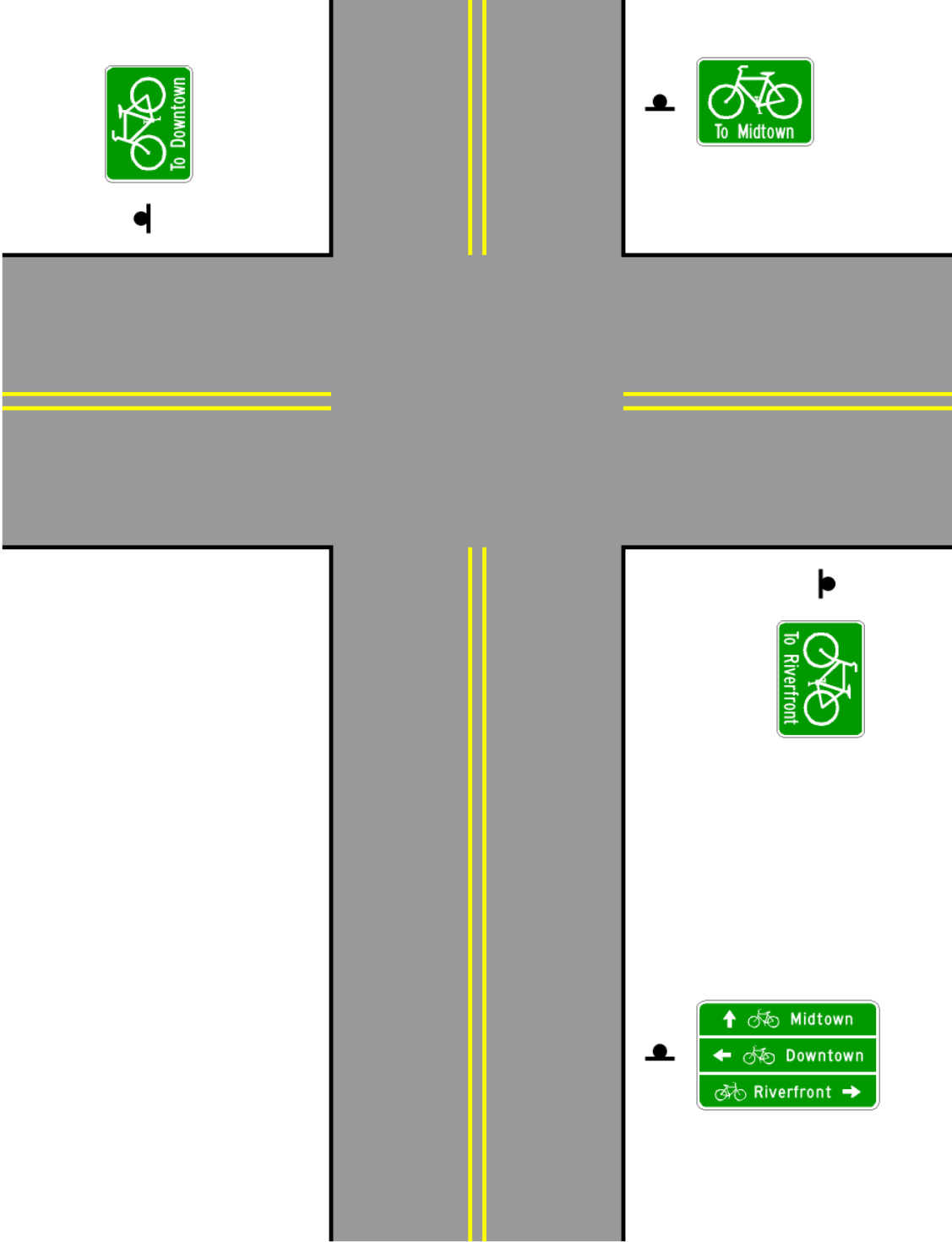
D3



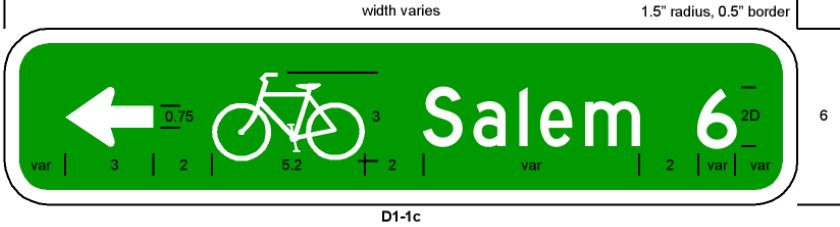
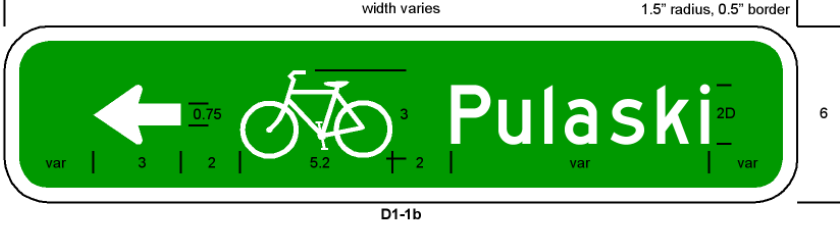
D11-1c

Replace existing Figure 9B-6 with the following:

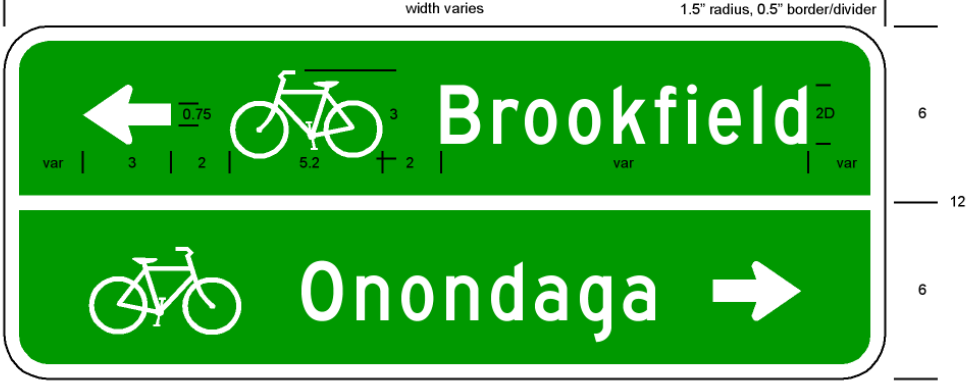
**Figure 9B-6. Example of Bicycle Guide Signing**



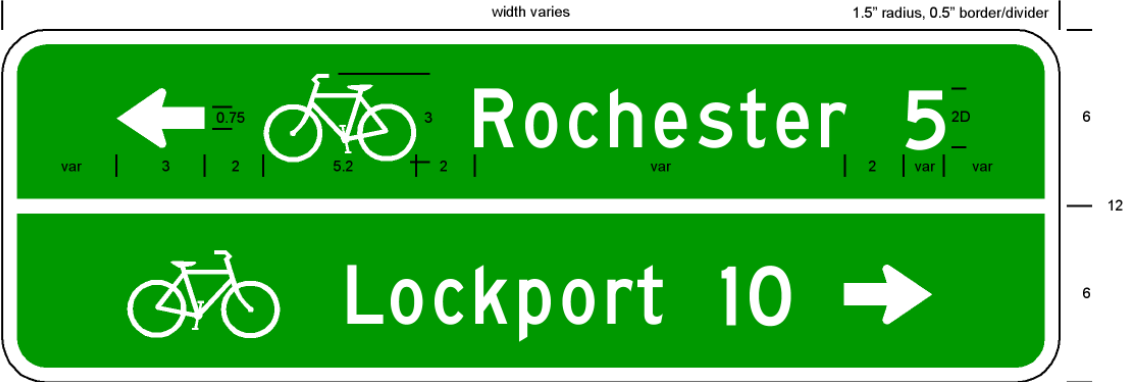
SHS figures



SHS figures



D1-2b



D1-2c



SHS figures

