



National Committee on Uniform Traffic Control Devices

17200 West Bell Road No.1135 * Surprise, Ariz. 85374
Telephone (623) 214-2403 * e-mail: ncutcd@aol.com

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.**

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

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10 **TOPIC:** Revised Design:
11 M1-9 US Bicycle Route Marker

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13 **STATUS/DATE OF ACTION:**

14 **TC Drafts:** 06/21/2009

15 **TC Approval:** 06/19/2009

16 **Transmitted to Sponsors:** 00/00/0000

17 **TC Revision:** 01/07/2010

18 **Council Approval:** **01/08/2010**

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20 **ORIGIN OF REQUEST:** AASHTO Task Force on US Bicycle Routes,
21 NCUTCD BTC

22
23 **AFFECTED SECTIONS OF MUTCD:** Bicycle Route Signs (Section 9B.21 in 2009
24 MUTCD)

25
26 **SUMMARY:**

27 The NCUTCD Bicycle Technical Committee (BTC) is proposing a new and improved
28 design for the M1-9 US Bicycle Route marker. The NCUTCD Guide and Motorist
29 Information Sign Technical Committee (GMITC) has reviewed and concurred with the
30 proposed design as well.

DISCUSSION:

The existing "upside-down acorn" design for the M1-9 was established by AASHTO and FHWA in 1978, as part of the initial development of the US Numbered Bicycle Route System. Although the sign has been in the MUTCD since the 1979 edition (in slightly varying configurations), the development of the actual US Bicycle Route System has been limited, with only two routes signed since 1979.



Existing M1-9 (2009 NPA)

In 2003, AASHTO created a task force to develop a revised national-level plan for the US Bicycle Route System, and AASHTO's Standing Committee on Highways approved this plan in October 2008. Several states have shown significant interest in establishing and extending US Bicycle Routes, so it is likely that the M1-9 will see much greater use in the near future.

However, several members of the BTC, US Bicycle Route Task Force (USBRTF), and other cycling organizations have expressed some dissatisfaction with the current design of the M1-9. There is no documentation in FHWA or AASHTO archives as to why the existing design was selected, and the current M1-9 contains no design features that in any way show that this sign denotes a national-level route system.

In 2008, the AASHTO USBRTF contacted the NCUTCD BTC to see if a new design for the M1-9 could be developed. In conjunction with in-house, FHWA, AASHTO, and outside experts, several basic designs were established, and numerous variants were developed utilizing various route symbols, colors, and design details. All these variants use a design that places a bicycle symbol within the shield, and places the route numerals in a region below the shield. This design allows the sign panel size to remain at an appropriate size for a numbered bicycle route marker, without compromising numeral size or shield shape.

These designs were submitted to the BTC, AASHTO USBRTF, and NCUTCD GMITC for review and ranking.

1 Three background colors appropriate for a route marker were evaluated - green, blue,
 2 and black.

3



Green

Blue

Black

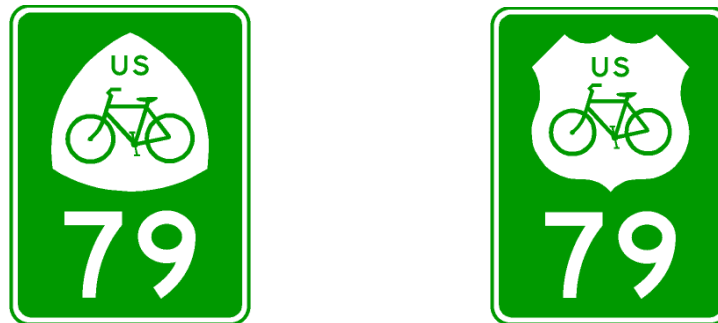
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8 While both green and black were popular with many BTC, USBRTF, and GMITC
 9 members, the decision was made to move forward with a green background. This color
 10 is consistent with other guide and informational signs.

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12 Two shield symbol designs were evaluated: a Reuleaux triangle shape, similar to the
 13 shape used for recreational and scenic trails, and the standard US shield shape.

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Reuleaux triangle

US Route Shield

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19 Both designs were deemed appropriate, and committee members' opinions were split.
 20 The GMITC did express a preference for the Reuleaux triangle design, due to concerns
 21 that the M1-9 might be occasionally confused with the M1-4, so the triangle was brought
 22 forward for the approved design.

23

24 Another set of options considered in the design was to use either an all-white shield
 25 symbol with a dark bicycle on a dark background, or an outline shield in white and a
 26 white bicycle within the symbol with the interior of the symbol the same color as the
 27 background.



White shield symbol



Outline shield symbol

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Although votes were close, the all-white shield symbol was chosen as the preferred design.

Two ways of denoting that the marker was for a US-level route system were evaluated - placing "US" within the symbol, or including the text "US Bicycle Route" below the shield.



"US" in shield



"US Bicycle Route" below shield

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Although committee members showed favor for both designs, the committees decided to select the layout incorporating the "US" as the preferred design.

1 One more design feature evaluated by the committees was whether to show the route
2 numerals in positive contrast (white numerals on a dark background) or in negative
3 contrast (dark numerals on a white background).

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7 ***Positive contrast***



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9 ***Negative contrast***

10 The BTC and GMITC showed a strong preference for the negative-contrast design, so
11 this design was brought forward as the final version of the redesigned M1-9. The
12 selected design also greatly reduces the possibility that the sign design might be
13 confused with a D10-4 enhanced reference marker (although the mounting of this sign
14 would make such confusion highly unlikely in the first place).

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1 **RECOMMENDED MUTCD PROVISIONS/ REVISIONS**

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3 The NCUTCD Bicycle Technical Committee, in conjunction with the NCUTCD Guide &
4 Motorist Information Sign Technical Committee, proposes that the M1-9 shield shown in
5 Figure 9B-4 of the MUTCD be replaced with the following:

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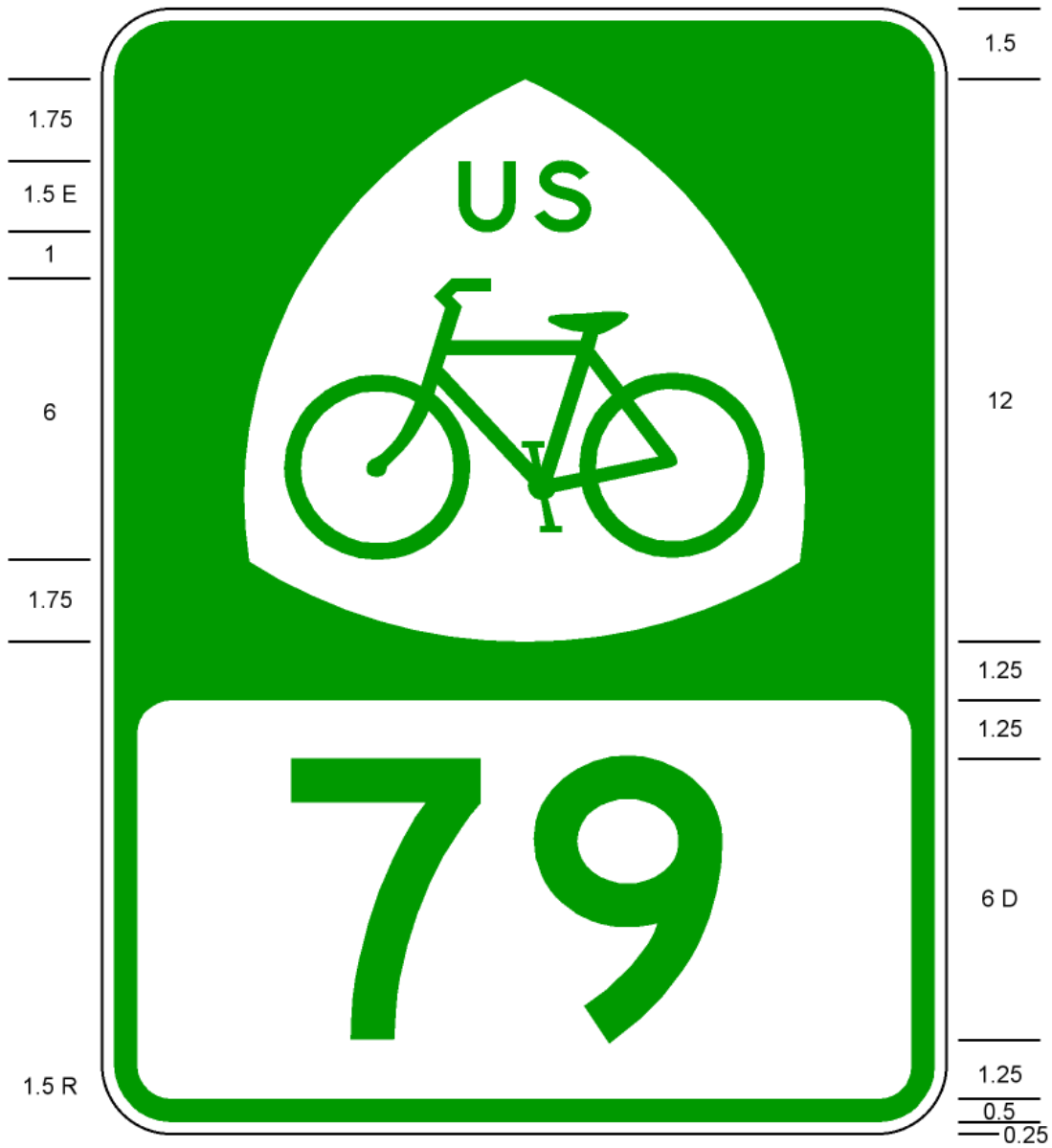
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M1-9 US Bicycle Route Marker
Size: 18" x 24" (roadway) or 12" x 18" (path)
White on green

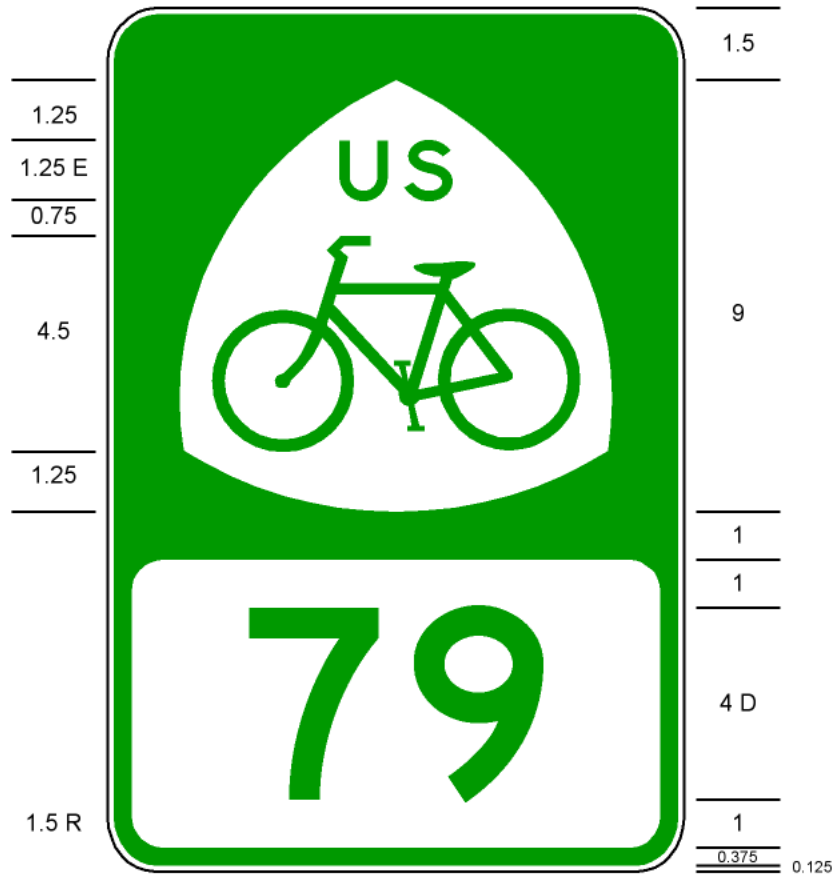
All text / symbols centered



SHS layout (18" x 24" size)

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All text / symbols centered



SHS layout (12" x 18" size)

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