



U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

Subject: **INFORMATION:** MUTCD – Interim
Approval for the Optional Use of an
Alternative Design for the U.S. Bicycle
Route (M1-9) Sign (IA-15)

Date: JUN 1 2012

From: Jeffrey A. Lindley
Associate Administrator for Operations

In Reply Refer To:
HOTO-1

To: Directors of Field Services
Federal Lands Highway Division Engineers
Director of Technical Services
Division Administrators

Purpose: The purpose of this memorandum is to issue an Interim Approval for the optional use of an alternative design of the U.S. Bicycle Route (M1-9) sign. Interim Approval allows interim use, pending official rulemaking, of a new traffic control device, a revision to the application or manner of use of an existing traffic control device, or a provision not specifically described in the *Manual on Uniform Traffic Control Devices for Streets and Highways* (MUTCD).

Background: The Michigan Department of Transportation requested that the Federal Highway Administration (FHWA) issue an Interim Approval to allow the use of an alternative design of the U.S. Bicycle Route (M1-9) sign that was developed and approved by the National Committee on Uniform Traffic Control Devices (NCUTCD). The NCUTCD recommended that the alternative design be included in the next edition of the MUTCD as a replacement for the existing design that is shown in Figure 9B-4 of the 2009 MUTCD. The existing design of the M1-9 sign has a black background upon which a white acorn-shaped symbol is placed with a large black bicycle symbol shown within and near the top of the acorn below which the route designation is shown in black letters or numerals within and near the bottom of the acorn with a black horizontal line separating the bicycle symbol from the route designation. The alternative design has a green background upon which a white reuleaux triangle is placed in the top portion of the sign and a white rectangle is placed in the bottom portion of the sign. The green letters “US” above a green bicycle symbol are placed within the reuleaux triangle, and the route designation is shown in green letters or numerals within the rectangle.

Research on the U.S. Bicycle Route Sign: The effectiveness of the alternative design for the M1-9 sign was successfully evaluated in March 2012 by researchers at the FHWA’s Turner-Fairbank Highway Research Center. The results of human factors testing showed that a sufficient percentage of the survey participants recognized that the sign was

associated with a bicycle route. The researchers concluded that the sign would be useful for indicating the general presence of a bicycle route.

FHWA Evaluation of Results: The Office of Transportation Operations has reviewed the available data and considers the human factors testing of the alternative design for the M1-9 sign to be satisfactorily successful. Although the testing showed that a number of the survey participants identified the sign to be a bicycle route Reference Location or milepost sign, this confusion related to seeing the sign in a static simulation in a laboratory setting would soon dissipate when a series of M1-9 signs are viewed along a bicycle route in a dynamic travel environment. In other words, when a series of M1-9 signs with the same identical route designation are viewed repeatedly along a route, road users would quickly conclude that these signs are not Reference Location signs but instead are providing bicyclists with route information about a designated bicycle route. Further context would be provided by the use of Cardinal Direction auxiliaries in Route Confirmation assemblies and/or Directional Arrow auxiliaries on Directional assemblies at locations where the designated route requires a turn at an intersection.

The alternative design of the U.S. Bicycle Route (M1-9) sign is not proprietary and can be used by any jurisdiction that requests and obtains interim approval from the FHWA to use the alternative design. The FHWA believes that the alternative sign design has a low risk of safety or operational concerns.

The alternative design of the U.S. Bicycle Route (M1-9) sign is a non-controversial sign whose design and use has been endorsed and recommended by the National Committee on Uniform Traffic Control Devices. The granting of an Interim Approval for this sign will provide practitioners with the opportunity to begin using this sign design prior to its possible inclusion in the next edition of the MUTCD.

This Interim Approval does not create a new mandate compelling the use of this alternative sign design, but will allow agencies to install this alternative sign design, pending official MUTCD rulemaking, to sign a bicycle route that has been recognized and designated by American Association of State Highway and Transportation Officials (AASHTO) as a U.S. Bicycle Route. Agencies may also continue to use the design of the M1-9 sign that is specified in the 2009 MUTCD for this application, although they should do so with the knowledge that the FHWA intends to propose that the existing design be replaced by the alternative sign design in the next edition of the MUTCD.

Conditions of Interim Approval: The FHWA will grant Interim Approval for the optional use of the alternative design for the U.S. Bicycle Route (M1-9) sign to any jurisdiction that submits a written request to the Office of Transportation Operations. A State may request Interim Approval for all jurisdictions in that State. Jurisdictions using the alternative design for the U.S. Bicycle Route (M1-9) sign under this Interim Approval must agree to comply with the technical conditions detailed below, to maintain an inventory list of all locations where the signs are installed, and to comply with Item D in Paragraph 18 of Section 1A.10 of the 2009 MUTCD, which requires:

“An agreement to restore the site(s) of the Interim Approval to a condition that complies with the provisions in this Manual within 3 months following the issuance of a Final Rule on this traffic control device; and terminate use of the device or application installed under

the interim approval at any time that it determines significant safety concerns are directly or indirectly attributable to the device or application. The FHWA's Office of Transportation Operations has the right to terminate the interim approval at any time if there is an indication of safety concerns."

1. General Conditions:

The use of the alternative design for the U.S. Bicycle Route (M1-9) sign is optional. However, if an agency opts to use the alternative sign design under this Interim Approval, the following design and installation requirements shall apply, and shall take precedence over any conflicting provisions of the MUTCD.

2. Allowable Uses:

The use of the optional alternative design for the U.S. Bicycle Route (M1-9) sign is governed by the same provisions as those for the existing sign design in the 2009 MUTCD. Particular attention should be paid to the provisions in Paragraphs 3 through 7 in Section 9B.21.

3. Sign Design and Size:

- a. The optional alternative design of the U.S. Bicycle Route (M1-9) sign shall be as shown in the attached sign detail.
- b. The minimum size of the optional alternative design of the U.S. Bicycle Route (M1-9) sign shall be 12 inches in width by 18 inches in height when it is used on a shared-use path and shall be 18 inches in width by 24 inches in height when it is used on a roadway.

4. Other:

Except as otherwise provided above, all other provisions of the MUTCD applicable to signs shall apply to U.S. Bicycle Route (M1-9) signs.

Any questions concerning this Interim Approval should be directed to Mr. Bruce Friedman at bruce.friedman@dot.gov.

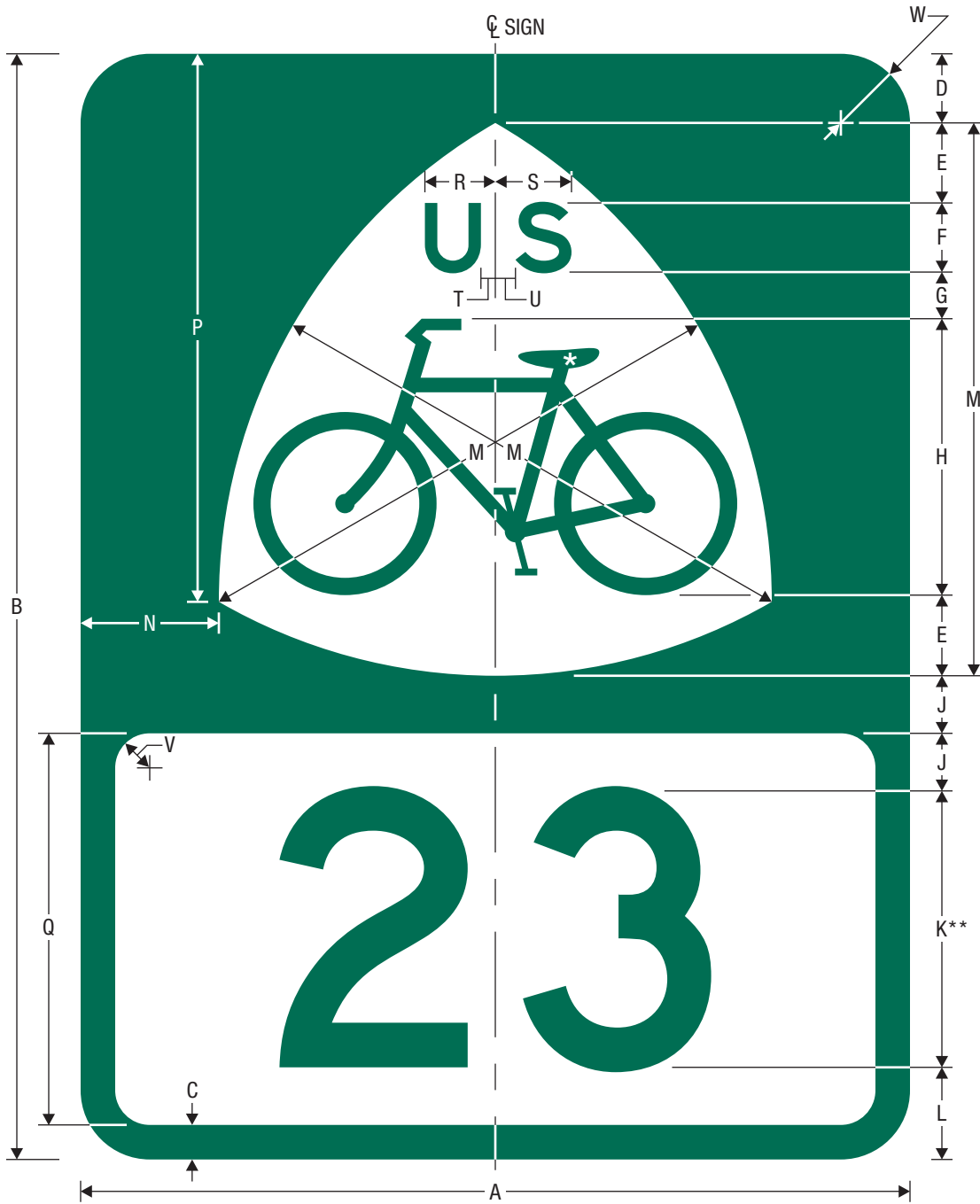
Attachment

cc:

Associate Administrators

Chief Counsel

Chief Financial Officer



M1-9 (Alternate)
 U. S. Bicycle Route (Alternate)

A	B	C	D	E	F	G	H	J	K	L	M	N
12	18	0.5	1.5	1.25	1.25 E	0.75	4.5	1	4 D	1.5	9	1.5
18	24	0.75	1.5	1.75	1.5 E	1	6	1.25	6 D	2	12	3

P	Q	R	S	T	U	V	W
9.296	6	1.263	1.388	0.25	0.375	1	1.5
11.895	8.5	1.528	1.653	0.313	0.437	0.75	1.5

* See page 6-7 for symbol design.

** Optically space numerals about vertical centerline.

COLORS: LEGEND
 — GREEN (RETROREFLECTIVE)
 INNER BACKGROUND — WHITE (RETROREFLECTIVE)
 OUTER BACKGROUND — GREEN (RETROREFLECTIVE)