

Signing for U.S. Bicycle Routes

PURPOSE: To provide for the consistent and uniform application of the U.S. Bicycle Route Sign (M1-9) along AASHTO designated routes.

BACKGROUND: Federal Highway Administration (FHWA) issued Interim Approval 15 (IA-15) for the use of a green and white version of the United States Bicycle Route (M1-9) sign in lieu of a black and white version in the current Michigan Manual on Uniform Traffic Control Devices (MMUTCD). The official ruling allows for the use of a green and white alternate version of the sign until its inclusion in the Federal Manual on Uniform Traffic Devices (MUTCD).

In the fall of 2012 additional clarification was sought from the FHWA Washington D.C. office regarding the number of sign assemblies per turn for the U.S. Bicycle Route system. The following guidance reflects this clarification.

Purchasing

The cost of signs, supports, hardware and installation for U.S. Bicycle Routes is either at the expense of the agencies requesting the signs, the agency with jurisdiction over the facility or a combination of both depending on a formal mutual arrangement prior to installation by all parties involved. Signs should be acquired from a MDOT pre-approved contractor to ensure the signs are consistent with the guidelines specified by IA-15. Signing on U.S. Bicycle Routes under the jurisdiction of MDOT will be provided by the state.

Sign Size and Design

Signs used on a roadway shall have the minimum dimensions of 18 inches wide by 24 inches in height. For signs used on shared-use paths the sign shall have minimum dimensions of 12 inches wide by 18 inches in height. Sign design shall be consistent with the all technical conditions outlined in IA-15.

Placement and Number of Assemblies

Sign assemblies should be placed on a free standing sign support, unless utility poles are in close proximity to the required sign location. To install bike route signage on a utility pole, permission must be granted from utility company in writing, per local agency request.

At least two sign assemblies are required for marking a U.S. Bicycle Route. This includes a directional assembly at the turn and a confirming or reassurance assembly following the turn. Depending on the intersection context an advanced route turn assembly may be necessary. Additional guidance on where two versus three assemblies are necessary for a turn refer to the “Advanced Route Turn Assembly.” Additional signing along the route shall be included to reassure the users. Additional guidance can be found in the “Confirming or Reassurance Assembly” section.

Advanced Route Turn Assembly

An Advance Route Turn assembly consists of a route sign (M1-9), an Advance Turn Arrow (M5 Series) or word message auxiliary sign (M4 Series), and a Cardinal Direction auxiliary sign (M3 Series). See Figure 1.

The advanced route turn assembly is recommended for left turns when the route of travel has a posted speed of 45 mph or higher.

The advanced route turn assembly should be placed approximately 200 feet in advance of the turn. The assembly shall not be placed where there is an intersection between it and the designated turn.

When the sequence of turns is rapid and in short succession the need for an advanced turn assembly for a left turn is optional when the distance between the confirming assembly and the advanced route turn or directional assembly is 500 feet or less.

The advanced route turn assembly is optional for right turns.

Directional Assembly

A Directional Assembly shall consist of a Cardinal Direction auxiliary sign (M3 Series); a route sign (M1-9); and a Directional Arrow auxiliary sign (M6 Series). See Figure 1.

Confirming or Reassurance Assembly

Confirming or Reassurance assemblies shall consist of a Cardinal Direction auxiliary sign (M3 Series); and a route sign (M1-9) and be placed following any turn of the route. See Figure 1. It should be placed 50 to 100 feet beyond the far shoulder or curb line of the intersected roadway.

Reassurance assemblies are assemblies used on route segments where turns are not present, yet there is a need to reassure the user they are still on the established route. In urban areas and within the built-up area of any incorporated city or town, reassurance assemblies should be installed between intersections as needed. Assemblies should also be installed just beyond intersections of numbered state trunkline routes.

In rural areas when turns are less frequent and roadway intersections are at the mile roads, reassurance signs should be used every 3-5 miles or as necessary based on engineering judgment.

Destination and Distance Signs

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 may be installed to provide direction, destination, and distance information as needed for bicycle travel. Refer to Section 9B.20 of the current MMUTCD for additional guidance on Destination and Distance Signs.

Sign Inventory

Jurisdictions using the green and white design for the U.S. Bicycle Route (M1-9) sign under the Interim Approval-15 shall maintain an inventory of all locations where the signs are installed.

Sign inventories should including the number and makeup of the sign assemblies, the intersection or estimated distance of the nearest intersections for confirming or reassurance signs, date of installation, as well as agency installing. The inventory should be provided to the MDOT Bicycle and Pedestrian Coordinator.

Detours

When a roadway used for a U.S. Bicycle Route is proposed for construction, accommodation for bicyclists in temporary traffic control (TTC) is required. All efforts should be made to limit the distance of a detour route for bicyclist in the event of a total road closure or where the motor vehicle detour route utilizes roadways that prohibit bicyclists. Notification should be given to the MDOT Bicycle and Pedestrian Coordinator of plans or efforts to detour the route.

¹ http://mutcd.fhwa.dot.gov/res-interim_approvals.htm

Figure 1. Guide Signs and Plaques for Bicycle Routes

Refer to Part 2D of the current MMUTCD for guidance on directional assembly placement.



M1-9



M3 Series



M3-1



M3-2



M3-3



M3-4

M4 Series



M4-1



M4-1a



M4-2



M4-3



M4-5



M4-6



M4-7



M4-7a



M4-8



M4-14

M5 Series



M5-1



M5-2

M6 Series



M6-1



M6-2



M6-3



M6-4



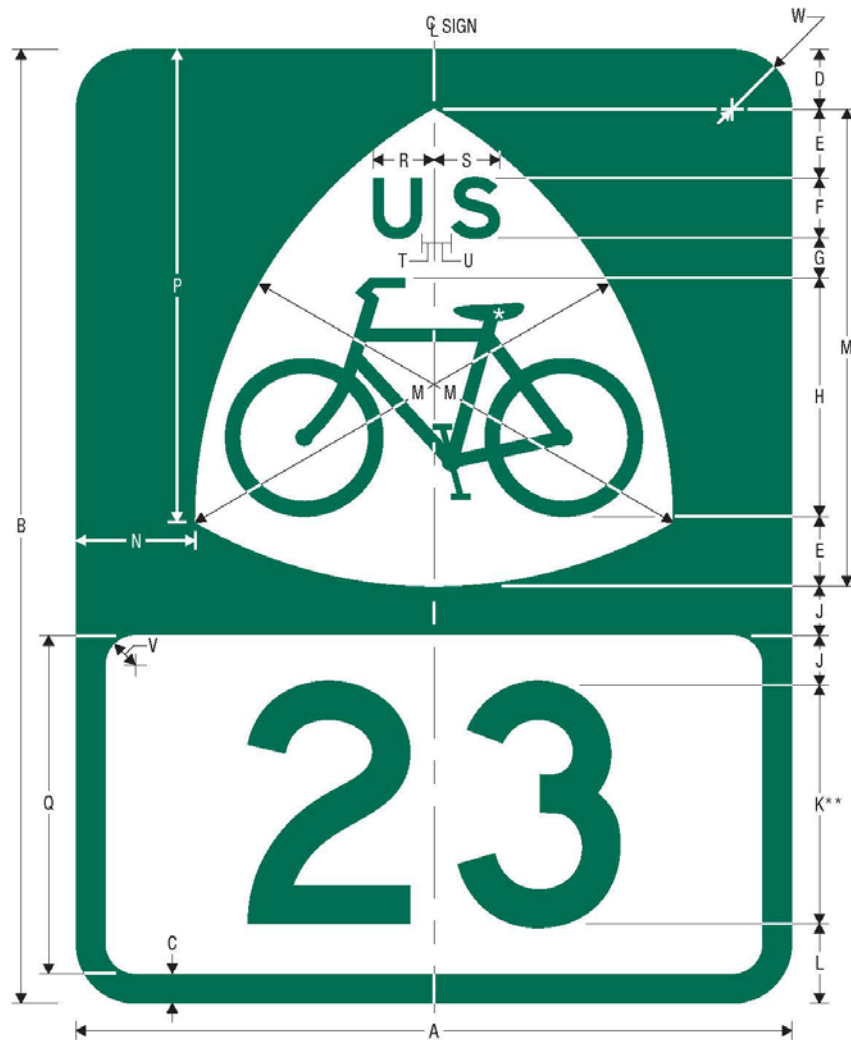
M6-5



M6-6



M6-7



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)

IA-15-1