

ENGINEERING DIRECTIVE

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CHIEF ENGINEER

Massachusetts Bicycle Route Signing Requirements

*This Engineering Directive supersedes
MassHighway Policy Directive P-98-003, dated 8/25/98.*

General

This directive shall apply to all bicycle route signage on State Highway and on other roads and paths that are constructed by MassDOT. Municipalities that share specific routes with MassDOT or other jurisdictions are also encouraged to adopt these requirements to increase uniformity in design, materials, and installation across the Commonwealth.

This directive follows the standards and guidance set forth in the *Manual on Uniform Traffic Control Devices* (“MUTCD”). The MUTCD and this directive may differ on some optional items; in those cases the information stated in this document shall supersede.

Establishment of Named or Numbered Bicycle Routes

The planning of a U.S. Bicycle Route in Massachusetts is the responsibility of MassDOT’s [Office of Transportation Planning](#). The final route designation of any U.S. route must be approved by the American Association of State Highway Transportation Officials (“AASHTO”) [Special Committee on U.S. Route Numbering](#). Only after this approval has been received may the U.S. Bicycle Route signs be used.

The planning of named bicycle routes, such as the East Coast Greenway, or state numbered routes should also be coordinated through the Office of Transportation Planning. This will help to improve connectivity and consistency with the statewide Bicycle Transportation Plan and other state bicycling initiatives.

For approved bicycle routes on State Highway, MassDOT, or a contractor approved and authorized by MassDOT, will install appropriate bicycle route signage. After installation, MassDOT will maintain the signage. For bicycle routes on Non-State Highway, MassDOT may install bicycle route signage; otherwise, the local jurisdiction is responsible for installation. After installation, the local jurisdiction is responsible for maintenance of any bicycle route signage on Non-State Highway roads and paths.

U.S. Bicycle Routes

The standard U.S. Bicycle Route (M1-9) sign shall be used on all established U.S. routes. The M1-9 sign face design shall conform to MUTCD standards. Sign face drawings for the M1-9 sign may be found in the MUTCD's [*Standard Highway Signs, 2004 Edition*](#).

The use and placement of all M1-9 signs shall conform to the Sign Placement and Installation Requirements sections of this document.



M1-9 Sign

State Numbered or Named Bicycle Routes

The standard Bicycle Route (M1-8) sign shall be used on all state numbered bicycle routes. The M1-8 sign face design shall conform to MUTCD standards. State numbered routes may contain 1, 2, or 3 digits. Sign face drawings for the M1-8 sign may be found in the MUTCD's *Standard Highway Signs, 2004 Edition*.

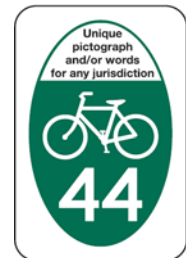
Named bicycle routes shall utilize a 1-, 2-, or 3-letter abbreviation, as established by the Office of Transportation Planning. The abbreviation shall replace the numbers on a standard M1-8 sign.

Named bicycle routes with an established logo may utilize the MUTCD standard Bicycle Route with Pictograph (M1-8a) sign. A sample drawing for the M1-8a sign face may be found at the end of this document.

In the case of a bicycle route having both a state numbered route and name continuously throughout the route, the M1-8a sign may be used with the route logo as the pictograph and the approved route number in the legend. Where the state or a U.S. numbered route and named route overlap for only a portion of either, separate signs should be used on the same post.



M1-8 Sign



M1-8a Sign

The use and placement of all M1-8 and M1-8a signs shall conform to the Sign Placement and Installation Requirements sections of this document.

Sign Placement

Bicycle route signage may be placed approximately 100 feet in advance of an intersection that requires a turn to remain on the route, has geometric features that may be confusing to a bicyclist, or to inform bicyclists of a bicycle route ahead. The signage shall be accompanied by the appropriate Advance Turn Arrow (M5 series) auxiliary plaques mounted below or Junction (M2-1) or Cardinal Direction (M3 series) mounted above.

Bicycle route signs should be placed at the point of turn to show any change in route direction or to direct bicyclists onto the route. These signs shall be accompanied by the appropriate Directional Arrow (M6 series) auxiliary plaques mounted below.

Confirming or Reassurance assemblies may be placed 25 to 200 feet beyond the point of turn. These assemblies shall include the bicycle route sign and the appropriate Cardinal Direction (M3 series) plaques mounted above. These signs may be used at other intervals along the route to keep bicyclists informed that they are on the route and to remind motorists of the presence of bicyclists.

All M-series plaques shall use the same background and legend color scheme as the M1-9 (black on white), M1-8 (white on green), or M1-8a (white on green) sign they supplement.

Installation Requirements

Bicycle route signage should be installed independently on a separate sign post and shall never be combined with any warning or regulatory signage. If site constraints make it impractical to install a new sign post, bicycle route signage may share a post with a U.S. or Massachusetts route marker or a MassDOT standard D6 or D8 sign. Under those conditions the bicycle route marker shall be installed below the other signage.

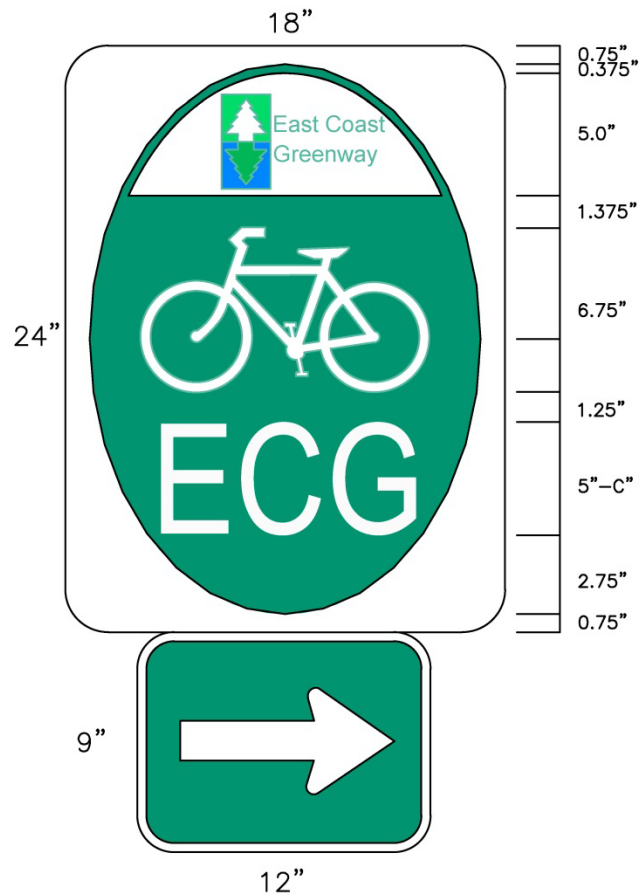
Vertical clearances should be measured from the top of the traveled facility (i.e., shoulder, bike lane, separated bikeway, etc.) to the bottom of the lowest sign in the assembly, unless otherwise noted. The following vertical clearance standards shall be met for all installations:

- The minimum vertical clearance shall be 7 feet from the sidewalk surface when installed on a sidewalk or other accessible pedestrian area.
- The minimum vertical clearance shall be 5 feet when installed adjacent to a facility used by motor vehicles.
- The minimum vertical clearance shall be 4 feet when installed adjacent to a shared-use path.

Lateral clearances shall always be measured from the edge of pavement or curb line. The following lateral clearance standards shall be met for all installations:

- The minimum lateral clearance shall be 2 feet when installed adjacent to a shared-use path.
- The minimum lateral clearance shall be 2 feet when the bicycle route is separated from pedestrians by a curb.
- Except when protected by a barrier, the minimum lateral clearance shall be 6 feet when installed adjacent to a road facility with no curb.

Example M1-8a Sign Face Drawing



Details and Drawings

FIGURE

NOT TO SCALE