

Bike Route Signs and Road Improvements for Bicycling

Bike Route Signs

The *Manual for Uniform Traffic Control Devices* (MUTCD) is the required manual to use when determining what sign is needed along a road or on private property that is open to the public. Other guides also exist such as NATCO's *Urban Bikeway Design Guide*, and WisDOT's *Wisconsin Bicycle Facility Design Manual*.

Section 2A.04 Excessive Use of Signs (From MUTCD 2009)

Guidance:

01 Regulatory and warning signs should be used conservatively because these signs, if used to excess, tend to lose their effectiveness. If used, route signs and directional guide signs should be used frequently because their use promotes efficient operations by keeping road users informed of their location.

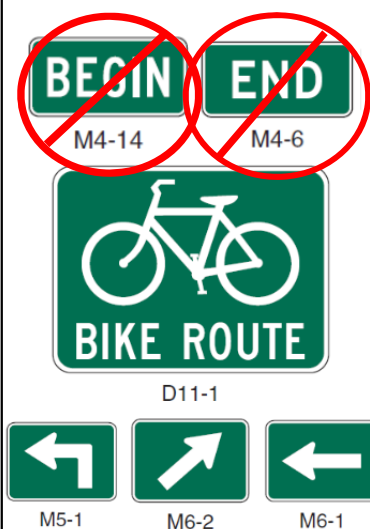
NCWRPC Note: Since the green bike route signs (D11-1, and m series) below are guide signs, then frequent use is justified per the above guidance (2A.04). Frequent use is defined below in the NACTO text.

“...every 2 to 3 blocks along bicycle facilities, unless another type of sign is used (e.g., within 150 ft of a turn or decision sign). Should be placed soon after turns to confirm destination(s). **Pavement markings can also act as confirmation that a bicyclist is on a preferred route.**”

(From NACTO Urban Bikeway Design Guide)

MUTCD Figure 9B-4. Guide Signs and Plaques for Bicycle Facilities

Note: Bicycles are allowed on most streets, so don't use “Begin” or “End” signs above a bike route sign. Motorists may interpret their use as bicycles are **only** allowed on bike routes.



This “M1-8” sign may be used instead of the “D11-1” sign if route numbers are used.



This “D1-3” sign may be used for park wayfinding. See MUTCD for guidance.



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R4-11



W11-1*



W16-1P*

In situations where there is a need to warn motorists to watch for bicyclists traveling along the highway, the **SHARE THE ROAD** (W16-1P) plaque may be used in conjunction with the W11-1 sign.

Place this sign assembly (below) on:

- Possibly roads that enter Spencer. Consult WisDOT for state highways, or the Highway Commissioner for county highways.

Place this sign assembly (below) in line with painted sharrows on:

- Roads where on-street parking is used.
- Business districts.

After the last block where a **Bike Route** sign is installed, place the **Share The Road** assembly at the start of the next block/road intersection.

If bike route ends at a 4-way intersection, then 3 **Share The Road** assemblies should be used – similar to how county highways are signed.



Traffic direction.

Mount this sign assembly first.



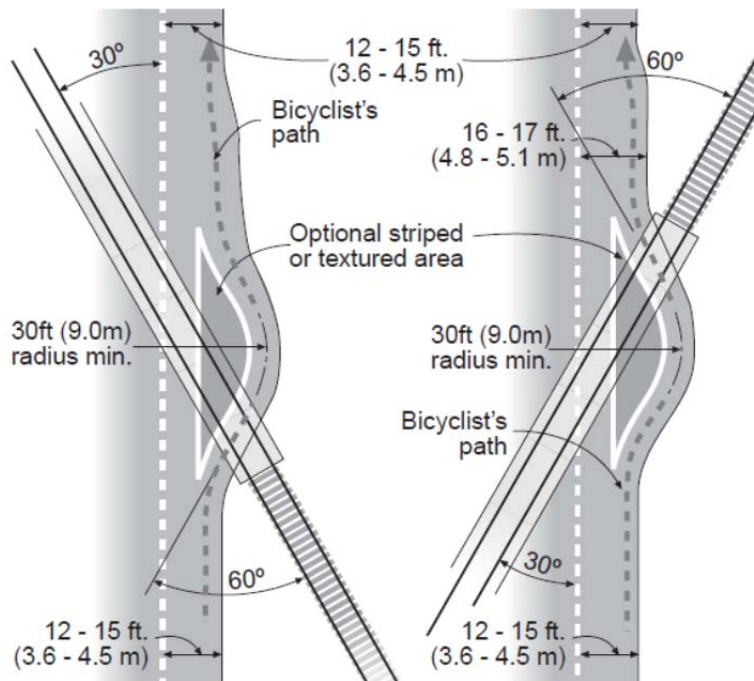
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Road Improvements for Bicycling

WisDOT's *Wisconsin Bicycle Facility Design Manual* is the required manual to use when designing on-street bicycle accommodations. Other guides also exist such as NATCO's *Urban Bikeway Design Guide*.

Railroad Crossing Improvement

Pave railroad crossings per below, so bicycles may cross tracks perpendicularly.



Source: WisDOT, Wisconsin Bicycle Facility Design Handbook



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Town Roads

No improvements beyond a bike route sign are needed on asphalt paved or sealcoated rural roads with traffic volumes less than 500 AADT (annual average daily traffic).

Dust should be controlled on gravel rural roads that are signed as bicycle routes.

On quiet country roads, little improvement is necessary to create excellent bicycling routes (fig. 2-9). Examples include town roads and many county trunk highways. State trunk highways and some county trunk highways, however, tend to have more traffic and a higher percentage of trucks. As a result, they are often improved with the addition of paved shoulders (sec. 2.6).



Figure 2-9: Many low-volume country roads need few improvements in order to serve bicyclists well.

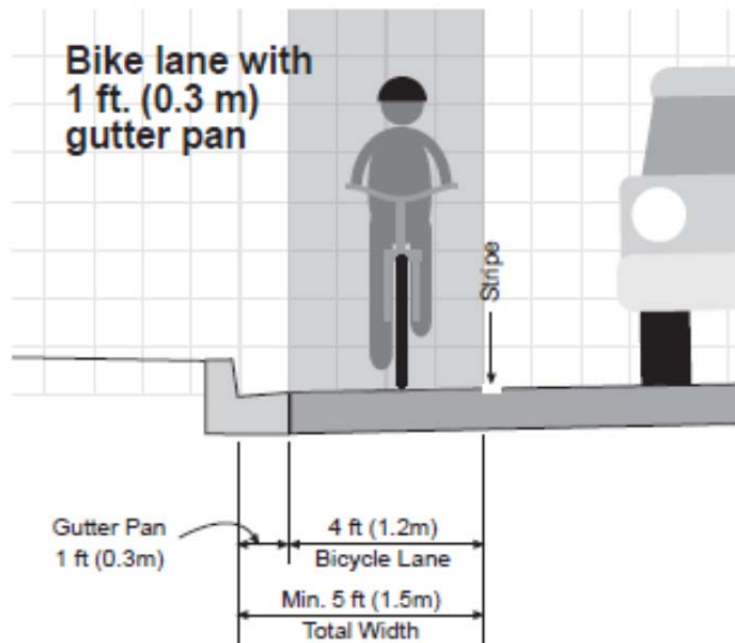
Source: WisDOT, Wisconsin Bicycle Facility Design Handbook



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Asphalt Road with curb

On a curbed asphalt street without parking, the standard clear width of a bicycle lane is 4 feet, as measured from the inside of the stripe to the joint line with the gutter pan. Depending on whether a 1 foot or 2 foot gutter pan is used, the total width from curb face to the inside of the bike lane stripe would either be 5 or 6 feet total.



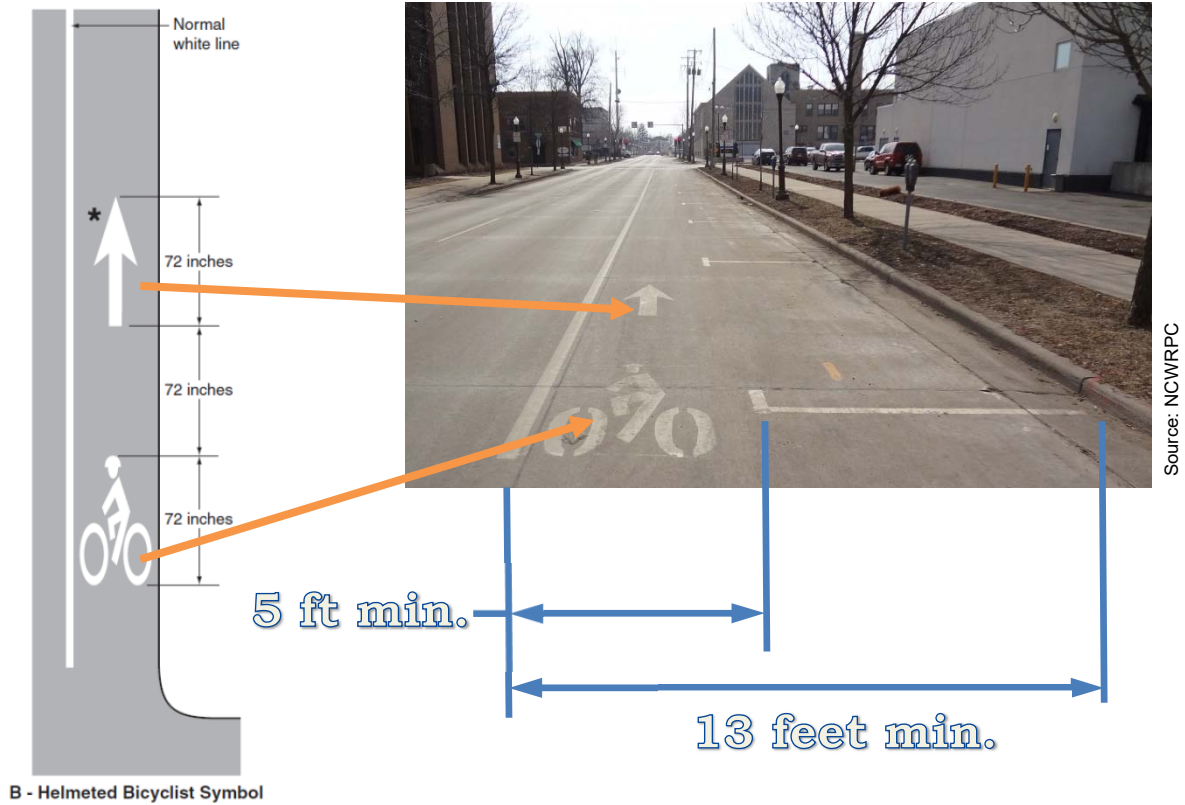
Source: WisDOT, Wisconsin Bicycle Facility Design Handbook



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Road with parking and curb – 1 of 2

Sample bike lane next to **painted** on-street parking.



B - Helmeted Bicyclist Symbol

MUTCD Figure 9C-3

Source: WisDOT, Wisconsin Bicycle Facility Design Handbook

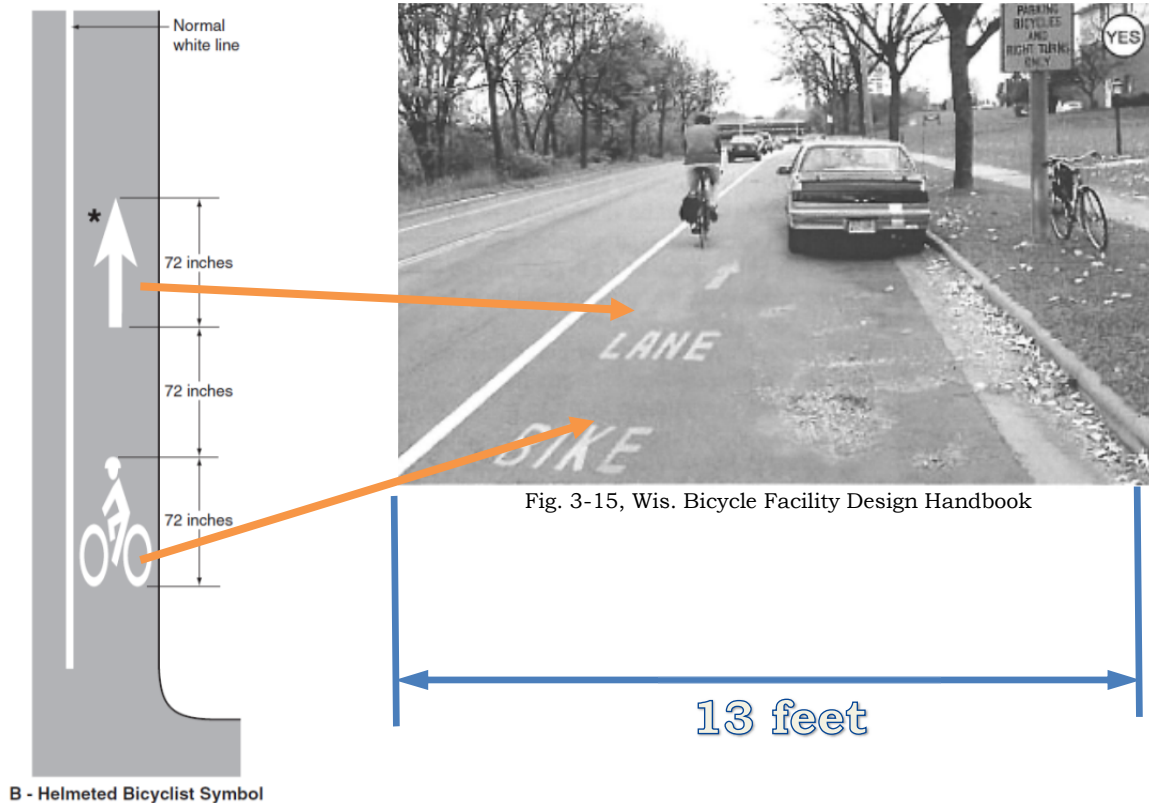
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Road with parking and curb – 2 of 2

Sample bike lane next to **non-painted** parking lane.



MUTCD Figure 9C-3



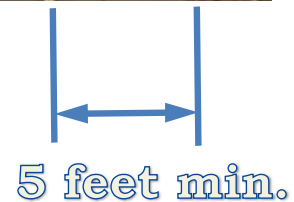
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Urban Shoulder

Sample ***paved shoulder for bicycles*** on a street:

Where on-street parking is necessary to keep, but where that parking may not be used consistently, an ***urban shoulder*** is suggested to be painted to encompass up to 7 feet of the whole parking lane. This area may be used to park cars and ride a bike in when cars are not there.

NOTE: Do not paint bike lane markings on the shoulder.



A 5-foot paved shoulder provides a safe space for bicycles on low traffic volume roads; very useful where truck traffic is higher too. Trucks and cars can pull off the road to adjust their vehicles, or bicycles can ride here.

If traffic is riding over the white line, then install bicycle safe rumble strips on the white lines.

Contact your WisDOT Bicycle Coordinator to verify what size shoulder a specific road should have based upon expected bicycle and pedestrian traffic.

