



TECHNICAL COMMITTEE RECOMMENDATION

TECHNICAL COMMITTEE: Bicycle Technical Committee

DATE OF ACTION: June 22nd, 2005

TOPIC: Proposed R4-11 "Bicycles May Use Full Lane"
Sign - Part 9 of the MUTCD

ORIGIN OF REQUEST: NCUTCD Bicycle Technical Committee

DISCUSSION:

The Bicycle Technical Committee proposes the creation of a new standard sign to inform road users that bicyclists may occupy the travel lane when the existing travel lane is too narrow to safely allow sharing with motor vehicles.

On most roadways in the United States, bicyclists and motor vehicles share the same travel lanes. The Uniform Vehicle Code (UVC § 11-1205(a)) requires slow moving vehicles (e.g., bicycles) to travel as close as practicable to the right-hand curb or edge of the roadway, but creates a specific exception where substandard width lanes make it unsafe to continue along the right-hand curb or edge. The UVC defines a "substandard width lane" as a lane that is too narrow for a bicycle and a vehicle to travel safely side by side within the same lane.

A number of factors apply when determining if a travel lane is too narrow for side-by-side travel. The AASHTO Guide for the Development of Bicycle Facilities states that a shoulder should be paved, smooth, and at least four feet wide in order to be usable by bicyclists. The TRB Highway Capacity Manual assumes that no lane sharing occurs on lanes 12 feet or narrower.

Cyclists typically need to ride at least 11 feet from a curb on a roadway where parallel parking is present so as to maintain safe clearance of driver-side doors, which is generally considered to be at least 3 feet. In these locations, bicyclists wishing to stay out of the way of motorists often incorrectly ride too close to parked cars and risk impacting a suddenly opened car door (being "doored"). Where no parking is present, bicyclists wishing to stay out of the way of motorists often ride too close to the roadway edge and risk being run off the road or encountering drainage structures, poor pavement, debris, and other hazards.

Riding farther to the left avoids these problems, and is legally permitted under UVC § 11-1205(a) where needed for safety. However, this practice can run counter to road user expectations. In recognition of this need, several signs and variations are being used by numerous local agencies around the country.

The current signs provided in the MUTCD cannot properly instruct road users in safe overtaking. Currently, the Manual only provides the bicycle warning sign (W11-1) and the Share the Road plaque (W16-1) to advise motorists and bicyclists. This sign assembly does not convey a clear message, as different users have different understandings of what sharing of the road means. Amending the MUTCD to provide the Bicycles May Use Full Lane sign should provide improved direction to motorists and bicyclists as to their respective operational responsibilities while traveling on roadways with narrow lanes (in accordance with the UVC).

The proposed sign uses a standard symbol and word legend, and therefore is already acceptable for use under Section 2B.54 of the MUTCD. However, the Bicycle Technical Committee believes that there is sufficient demand and justification for creating a standard design and code for this sign message.

This proposal was also reviewed and approved by the NCUTCD Regulatory and Warning Sign Technical Committee (RWSTC) at their meeting in June 2005.

COMMITTEE ACTION:

The Bicycle Technical Committee recommends that the National Committee submit this proposal as developed by the NCUTCD BTC to sponsors for comment and approval.

Add the following new section to the MUTCD:

Section 9B.xx Bicycles May Use Full Lane Sign (R4-11)

Option:

The Bicycles May Use Full Lane (R4-11) sign (see Figure 9B-2) may be used on roadways with no bicycle lanes or adjacent shoulders usable by bicyclists and where travel lanes are too narrow for bicyclists and motor vehicles to operate side by side.

The Bicycles May Use Full Lane sign may be used in locations where it is important to inform road users that bicyclists may occupy the travel lane in order to prevent unsafe passing.

Support:

The Uniform Vehicle Code (UVC) defines a "substandard width lane" as a "lane that is too narrow for a bicycle and a vehicle to travel safely side by side within the same lane."



R4-11

*750 x 750 (30" x 30") panel
100 D (4" D) legend*