

National Committee on Uniform Traffic Control Devices

12615 West Keystone Drive * Sun City West, AZ, 85375 Telephone (623)680-9592 * e-mail: ncutcd@aol.com

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NCUTCD Proposal for Changes to the **Manual on Uniform Traffic Control Devices**

TECHNICAL

Bicycle, Regulatory & Warnings Signs and Signal Committees

Attachment No.: 13

Item No.: 18B-BIK-01

COMMITTEE: ITEM NUMBER:

18B-BIK-01

TOPIC:

R10-15a Traffic Signal Sign – Turning Vehicles Yield to Bicycles or Bicycles & Pedestrians Revision to 6/20/2014

proposal

ORIGIN OF REQUEST:

Bicycle/RWSTC/STC Joint Task Force

AFFECTED SECTIONS

Sections 2B.53 and 9B.14

OF MUTCD:

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DEVELOPMENT HISTORY:

- Approved by Bicycle Technical Committee: 06/26/2014
- Concurrence by Regulatory Warning Sign Technical Committee 06/26/2014
- Approved by NCUTCD Council: 06/27/2014
- Revision Approved by Bicycle Technical Committee: 01/05/2018 Task Force Mike Cynecki & Rock Miller
- Revision Concurrence by Signals Technical Committee: 01/05/2018 Task Force Lead Monica Suter
- Revision Concurrence by RW Technical Committee: 06/21/2018 Task Force Robert Weber, Tim Haagsma, Ross Oyen
- Revision Approved by NCUTCD Council: 01/11/2019

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This is a proposal for recommended changes to the MUTCD that has been approved by the NCUTCD Council. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, or options. It will be submitted to FHWA for consideration for inclusion in a future MUTCD revision. The MUTCD can be revised only through the federal rulemaking process.

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SUMMARY:

The Manual currently includes the R10-15 sign to alert motorists of the need to watch for and yield to pedestrians when turning. The Bicycle Technical Committee developed a proposal to add two additional versions of the existing R10-15 sign to provide a more complete set of signs to remind turning drivers to yield to bicyclists, or both bicyclists and pedestrians whose paths they might cross when turning. The proposal was approved by Council in June 2014 however,

since then concerns have been raised regarding the use of this sign. This proposal seeks to address those concerns with a revised proposal.

DISCUSSION

- Generally, it is expected that motorists will yield to bicyclists as appropriate when merging into bicycle lanes, bicycle lane extensions, separated bicycle lanes or turning across shared use paths. The 2009 MUTCD added the Turning Vehicles Yield to Pedestrians (R10-15) sign for pedestrians, yet there are no signs currently in the MUTCD for bicyclists or a combination of these modes. As a result, there has been some proliferation of non-standard signs. The BTC proposed to adapt the existing standard R10-15 sign with a bicycle symbol to address this issue. A proposal was approved by Council in June 2014 to include a version for Turning Vehicles
- A proposal was approved by Council in June 2014 to include a version for Turning Vehicles Yield to Bicycles (R10-15a) and Turning Vehicles Yield to Bicycle and Pedestrians (R10-15b).

 Subsequently, concerns have been raised regarding use of the R10-15a sign on approaches to signalized intersections where bicycle and vehicle movements are separated by signal phasing or where the bicycle lane transitions to a shared lane configuration as depicted in MUTCD Figure 9C-6.

Also, this sign has been installed by many jurisdictions at non-signalized intersections and driveway crossings where vehicles turn across bicycle lanes, bicycle lane extensions, separated bicycle lanes or shared-use paths. In addition, these signs have been illustrated for use at these non-signalized locations in recent FHWA sponsored design guidance documents including *Small Town and Rural Multimodal Networks December 2016*, the *Separated Bike Lane Planning and Design Guide May 2015* and the *Massachusetts Department of Transportation Separated Bike Lane Planning and Design Guide October 2015*.

To address the concerns noted above, this proposal seeks to revise the June 2014 approved proposal to provide Standards, Guidance and Options for use of these signs in a uniform manner at both signalized and unsignalized intersections.

RECOMMENDED MUTCD CHANGES

 The following present the proposed changes to the current MUTCD within the context of the current MUTCD language. Proposed additions to the MUTCD are shown in blue underline and proposed deletions from the MUTCD are shown in red strikethrough. Changes previously approved by NCUTCD Council (but not yet adopted by FHWA) are shown in green double underline for additions and green double strikethrough for deletions. In some cases, background comments may be provided with the MUTCD text. These comments are indicated by [highlighted light blue in brackets].

73	PART 2. SIGNS		
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75	CHAPTER 2B. REGULATORY SIGNS, BARRICADES AND GATES		
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77	Section 2B.53 Traffic Signal Signs (R10-5 through R10-30)		
78	Option:		
79	To supplement traffic signal control, Traffic Signal signs R10-5 through R10-30 may be		
80	used to regulate road users.		
81	Traffic Signal signs (see Figure 2B-27) may be installed at certain locations to clarify signal		
82	control. Among the legends that may be used for this purpose are LEFT ON GREEN ARROW		
83	ONLY (R10-5), STOP HERE ON RED (R10-6 or R10-6a) for observance of stop lines, DO		
84	NOT BLOCK INTERSECTION (R10-7) for avoidance of traffic obstructions, USE LANE(S)		
85	WITH GREEN ARROW (R10-8) for obedience to lane-use control signals (see Chapter 4M),		
86	LEFT TURN YIELD ON GREEN (symbolic circular green) (R10-12), and LEFT TURN YIELD ON ELASHING RED, A PROW, A ETER STOP (R10-27)		
87 88	ON FLASHING RED ARROW AFTER STOP (R10-27). Guidance:		
89	os If used, the LEFT ON GREEN ARROW ONLY (R10-5) sign, the LEFT TURN YIELD ON		
90	GREEN (symbolic circular green) (R10-12) sign, or the LEFT TURN YIELD ON FLASHING		
91	RED ARROW AFTER STOP (R10-27) sign should be located adjacent to the left-turn signal		
92	face.		
93	Option:		
94	of If needed for additional emphasis, an additional LEFT TURN YIELD ON GREEN		
95	(symbolic circular green) (R10-12) sign with an AT SIGNAL (R10-31P) supplemental plaque		
96	(see Figure 2B-27) may be installed in advance of the intersection.		
97	In situations where traffic control signals are coordinated for progressive timing the Traffic		
98	Signal Speed (I1-1) sign may be used (see Section 2H.03).		
99	Standard:		
100	06 The CROSSWALK STOP ON RED (symbolic circular red) (R10-23) sign (see Figure		
101	2B-27) shall only be used in conjunction with pedestrian hybrid beacons (see Section		
102	4F.02).		
103	07 The EMERGENCY SIGNAL (R10-13) sign (see Figure 2B-27) shall be used in		
104	conjunction with emergency-vehicle traffic control signals (see Section 4G.02).		
105	08 The EMERGENCY SIGNAL – STOP ON FLASHING RED (R10-14 or R10-14a) sign		
106	(see Figure 2B-27) shall be used in conjunction with emergency-vehicle hybrid beacons (see		
107	Section 4G.04.		
108	Option:		
109	In order to remind drivers who are making turns at a signalized intersection to yield to or		
110	stop [approved June 2017, #16A-RW-02] for pedestrians, bieyelists, or both [approved June 2014]. Typing Vehicles Vield to (Stop Fee) Pedestrians (P.10, 15c), Pieveles		
111 112	January 2014] a Turning Vehicles Yield to (Stop For) Pedestrians (R10-15, R10-15a), Bicycles (R10-15b) sign (see Figure 2B-27) may be used.		
112	Standard:		
113	09a The Turning Vehicles Stop for Pedestrians (R10-15a) sign shall only be used in		
115	jurisdictions where laws, ordinances or resolutions specifically require that a driver must		
116	stop for a pedestrian. [approved January 2017, #16A-RW-02]		
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- 119 Option:
- 120 OPB At signalized intersections on roadways with a bicycle lane or separated bicycle lane
- positioned adjacent to a general purpose lane from which turns are permitted, a Turning
- 122 Vehicles Yield to Bicycles (R10-15b) sign (see Figure 2B-27 and Figure 9C-6) may be used on
- 123 <u>the approach to or at the intersection to remind drivers who are making turns to yield to a bicycle</u>
- in the bicycle lane when turning across or merging into the bicycle lane.
- 125 <u>ooc</u> At signalized intersections on roadways with a shared use path that crosses intersecting
- streets or driveways, or where turning vehicles would cross an adjacent bicycle lane and
- 127 crosswalk, a Turning Vehicles Yield to Bicycles and Pedestrians (R10-15c) sign (see Figure 2B-
- 128 27) may be used on the approach to the intersection to remind drivers who are making turns to
- yield to bicycles and to pedestrians lawfully in the crosswalk.
- 130 **Standard:**
- 131 09d The Turning Vehicles Yield to Bicycles (R10-15b) sign or Turning Vehicles Yield to
- Bicycles and Pedestrians (R10-15c) sign shall not be used at signalized intersections where
- 133 <u>the bicycle movement is protected by the signal phasing from all-conflicting simultaneous</u>
- motor vehicle movement at the signalized location.
- 135 *Guidance*:
- 136 09e The Turning Vehicles Yield to Bicycles (R10-15b) sign should not be used on the approach
- 137 to signalized intersections where a bicycle lane or separated bicycle lane transitions to a shared
- lane for use by turning vehicles together with through or turning bicyclists.
- 139 Support:
- 140 <u>09f</u> Use of R10-15b and R10-15c signs at unsignalized intersections and mid-block locations is
- described in Section 9B.14
- 142 Option:
- 143 10 A U-TURN YIELD TO RIGHT TURN (R10-16) sign (see Figure 2B-27) may be installed
- near the left-turn signal face if U-turn are allowed on a protected left-turn movement on an
- approach from which a right-turn GREEN ARROW signal indication is simultaneously being
- displayed to drivers making a right turn from the conflicting approach to their left.
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- 148 Add sign R10-15a to Figure 2B-27. Add * fluorescent yellow-green background color may
- be used instead of yellow for this sign [approved June 2017]



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153	PART 9. TRAFFIC CONTROL FOR BICYCLE FACILITIES			
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155	CHAPTER 9B. SIGNS			
156	Section 9B.11 Bicycle Regulatory Signs (R9-5, R9-6, R10-4, R10-24, R10-25, and R10-26)			
157	Option:			
158		urns to yield to pedestrians, bicyclists, or both, a		
159		Bicycles (R10-15a) or Pedestrians and Bicycles		
160	(R10-15b) sign (see Figure 2B-27) may be used.	[approved June 2014]		
161				
162	Section 9B.14 Other Regulatory Signs			
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165	appropriate.	41 4 54 12 14		
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167	positioned adjacent to a general purpose lane from which turns are permitted, a Turning Vehicles			
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169	approach to or at the intersection, driveway or alley to remind drivers who are making turns to			
170	yield to bicycles when turning across or merging into the bicycle lane.			
171	At unsignalized intersections, driveways or alleys on roadways with a shared use path that			
172 173	crosses intersecting streets, driveways or alleys, or when turning vehicles would cross an			
174	adjacent bicycle lane and crosswalk, a Turning Vehicles Yield to Bicycles and Pedestrians			
175	(R10-15c) sign (see Figure 2B-27) may be used on the approach to or at the intersection or			
176	driveway/alley to remind drivers who are making turns to yield to bicycles and to pedestrians in the crosswalk.			
177	Support:			
178	Use of R10-15b and R10-15c signs at signalized intersections is described in Section 2B.53.			
179		to Figures 2B-27 and 9B-2]: [approved]		
180	June 2014	to rigules 20-27 and 30-2]. [approved		
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181 182	R10-15 a b	R10-15 b c		
183	30" x 30"	30" x 36"		

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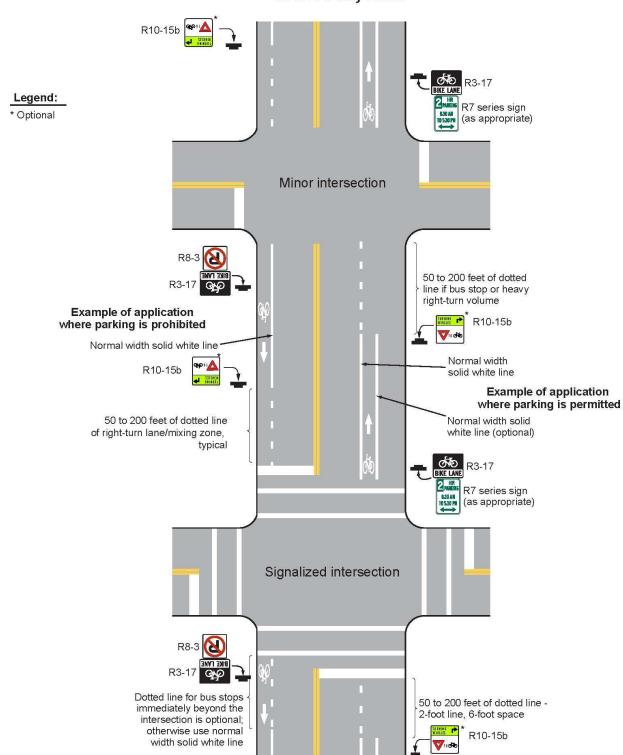


Figure 9C-6. Example of Pavement Markings for Bicycle Lanes on a Two-Way Street