



# National Committee on Uniform Traffic Control Devices

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Item No.: 25A-PED-01

## NCUTCD PROPOSAL FOR CHANGES TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

**COMMITTEE / TASK FORCE:** Pedestrian Joint Task Force  
**ITEM NUMBER:** 25A-PED-01  
**TOPIC:** TWLTL at Marked Crosswalks  
**ORIGIN OF REQUEST:** Pedestrian Joint Task Force Working Group: Eli Ferrari (BTC) - Lead, Randy McCourt (RWSTC), Lee Austin (MTC), Glenn Blackwelder (MTC), Amanda Purcell (MTC), Gabe Dowell (MTC), Rich Meredith (RWSTC), Randy Dittberner (GMI)

**AFFECTED SECTIONS OF MUTCD:** 3B.05, 3C.02

### DEVELOPMENT HISTORY:

Approved by Pedestrian JTF: 01/08/2025  
Approved by NCUTCD Council:

*This is a proposed change to the MUTCD that has been developed by a technical committee, joint committee, or joint task force of the NCUTCD. The NCUTCD is distributing this to its sponsoring organizations for review and comment. Sponsor comments will be considered in revising the proposal prior to NCUTCD Council consideration. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, options, or support. If approved by the NCUTCD Council, the recommended changes 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.*

### SUMMARY:

This proposal modifies Section 3B.05 Pavement Markings for Two-Way Left-Turn Lanes to treat marked crosswalks similar to intersections and grade crossings. Guidance recommends ending the continuous TWLTL where marked crosswalks are present, changing the lane to a left turn only lane, installing diagonal markings or providing a raised median island.

### DISCUSSION:

Pedestrian crosswalks that traverse two-way left turn lanes (TWLTL) present complexities for road users. Unlike a left turn lane, the conflict for pedestrians can come from either direction in a TWLTL.

This proposal revises Section 3B.05 Markings for Two-Way Left-Turn Lanes, 3C.02 Crosswalk Markings, and Figure 3B-7 Examples of Two-Way Left-Turn Lane Marking Applications. The new guidance language builds off the existing concept in the MUTCD which ends TWLTLs at intersections. It is also consistent with existing language in Section 8A.06 Uniform Provisions,

35 paragraph 5 which provides guidance on discontinuing two-way left-turn lanes (TWLTLs) in the  
36 immediate vicinity of grade crossings:

37  
38 “If the roadway at a grade crossing includes a two-way left-turn lane (see Section 3B.05),  
39 the two-way left turn lane should be discontinued in the immediate vicinity of the grade  
40 crossing by installing median islands, by designating the lane for left turns in one direction  
41 only, or by installing yellow diagonal markings in the lane (see Figure 3B-5). If yellow  
42 diagonal markings are used, the use of channelizing devices (see Section 3I.01), such as  
43 supplemental tubular markers, should also be considered.”

44  
45 This same application can also be useful for pedestrians crossing a roadway that is 3 or more  
46 lanes wide and looking for adequate gaps. The TWLTL creates ambiguity as vehicles may  
47 approach and enter the lane and conflict area from either direction.

48  
49 The opportunity to integrate raised medians to enhance pedestrian crossings on roadways with  
50 TWLTL has been researched. FHWA-RD-01-100 outlines the benefits of raised median as a  
51 pedestrian improvement, particularly for lower vehicle volume and speed. Research in the  
52 Transportation Research Forum notes raised medians provide a pedestrian refuge area, reduce  
53 head-on crashes, and reduce the number of conflicting maneuvers at driveways.

54  
55 To address this change, the term “marked crosswalk” is added in two places in Section 3B.05  
56 similar to that in Part 8 and one sentence is added to 3C.02 referencing the language above.  
57 Figure 3B-7 is modified to show a TWLTL being discontinued in the vicinity of a marked  
58 crosswalk using a left turn lane, yellow diagonal markings or a raised median island.

59  
60 **REFERENCES:**

61 Zegeer, C., Stewart, R., Huang, H., Lagerwey, P., Feaganes, J. and Campbell, B., [Safety](#)  
62 [Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations](#), FHWA-HRT-04-  
63 100, Federal Highway Administration, Washington, DC, September 2005, Figures 18 & 19,  
64 Table 11.

65  
66 Alluri, P., Gan, A., and Haleem, K., [Safety Impacts of Converting Two-Way Left-Turn Lanes to](#)  
67 [Raised Medians and Associated Design Concern](#), Transportation Research Forum, Volume 55,  
68 Number 2, Paris, TX, 2016.

69  
70 **RECOMMENDED MUTCD CHANGES:**

71 The following present the proposed changes to the current MUTCD within the context of the  
72 current MUTCD language. Proposed additions to the MUTCD are shown in [blue underline](#) and  
73 proposed deletions from the MUTCD are shown in ~~red strikethrough~~. Changes previously  
74 approved by NCUTCD Council (but not yet adopted by FHWA) are shown in [green double](#)  
75 [underline](#) for additions and ~~green double strikethrough~~ for deletions. In some cases,  
76 background comments may be provided with the MUTCD text. These comments are indicated  
77 by [bracketed white text in shaded green](#). Deletions made by a technical committee or task  
78 force after initial distribution to sponsoring organizations are shown in ~~highlighted red~~  
79 ~~strikethrough and Helvetica text~~. Additions made by a technical committee or task force after  
80 initial distribution to sponsoring organizations are shown in [underline blue and Helvetica text](#).

82  
83 **PART 3. MARKINGS**

84  
85 **CHAPTER 3B. PAVEMENT AND CURB MARKINGS**  
86

87 **Section 3B.05 Pavement Markings for Two-Way Left-Turn Lanes**

88 **Standard:**

89 01 **If a two-way left-turn lane that is never operated as a reversible lane is used, the lane line**  
90 **pavement markings on each side of the two-way left-turn lane shall consist of a normal width**  
91 **broken yellow line and a normal width solid yellow line to delineate the edges of a lane that can be**  
92 **used by traffic in either direction as part of a left-turn maneuver. These markings shall be placed**  
93 **with the broken line toward the two-way left-turn lane and the solid line toward the adjacent traffic**  
94 **lane as shown in Figure 3B-7.**

95 **Guidance:**

96 02 *White two-way left-turn lane-use arrows should be used at or just downstream from the beginning of*  
97 *a two way left-turn lane.*

98 **Option:**

99 03 *Additional two-way left-turn lane-use arrow markings may be used at other locations along a two-*  
100 *way left-turn lane where engineering judgment determines that such additional markings are needed to*  
101 *emphasize the proper use of the lane.*

102 **Standard:**

103 04 **A single-direction lane-use arrow shall not be used in a lane bordered on both sides by yellow**  
104 **two-way left-turn lane longitudinal markings.**

105 **Guidance:**

106 05 *Signs should be used in conjunction with the two-way left-turn markings (see Section 2B.32).*  
107 06 *Two-way left-turn lane markings should not extend to intersections (see definition in Section 1C.02)*  
108 *or [marked crosswalks](#).*

109 **Option:**

110 07 *Gaps in ~~two-way left-turn lanes~~ may be [created using transitioned to](#) mandatory left-turn lanes, ~~as~~  
111 ~~shown in Figure 3B-7 or painted~~ median islands ([painted or raised](#)), or [yellow diagonal markings in the](#)  
112 [lane \(with or without tubular markers\) to address intersections and marked crosswalks](#) ~~where they~~  
113 ~~approach an intersection~~ [as shown in Figure 3B-7](#).*

114 **Support:**

115 08 *Section 8A.06 contains guidance information for discontinuing a two-way left-turn lane in the*  
116 *immediate vicinity of a highway-rail or highway-LRT grade crossing.*  
117

118 **CHAPTER 3C. CROSSWALK MARKINGS**  
119

120 **Section 3C.02 Applications of Crosswalk Markings**

121 **Guidance:**

122 01 *At locations controlled by traffic control signals, crosswalk markings should be installed.*

123 **Option:**

124 02 *Crosswalk markings may be omitted if engineering judgment indicates they are not needed to direct*  
125 *pedestrians to the proper crossing path(s).*

126 *Guidance:*  
127 03 *On approaches controlled by STOP or YIELD signs, crosswalk markings should be installed where*  
128 *engineering judgment indicates they are needed to direct pedestrians to the proper crossing path(s).*  
129 04 *At uncontrolled approaches, an engineering study should be performed before a marked crosswalk is*  
130 *installed. The following criteria should be considered:*  
131 *A. Total number of approach lanes,*  
132 *B. The presence of a median,*  
133 *C. The distance from adjacent signalized intersections or other controlled crossings,*  
134 *D. Projected pedestrian and bicyclist volumes,*  
135 *E. Pedestrian and bicyclist paths of travel,*  
136 *F. Pedestrian ages and abilities,*  
137 *G. Pedestrian and bicyclist delays,*  
138 *H. Location or frequency of public transit stops,*  
139 *I. Average daily traffic (ADT),*  
140 *J. Speed limit or the 85th-percentile speed,*  
141 *K. The horizontal and vertical geometry of the crossing location,*  
142 *L. The possible consolidation of multiple crossing points,*  
143 *M. The availability of street lighting, and*  
144 *N. Other appropriate factors.*

145 **Standard:**  
146 05 **Crosswalk markings shall be provided at legally established crosswalks at non-intersection**  
147 **locations.**

148 *Guidance:*  
149 06 *The installation of other traffic control devices and other measures designed to reduce traffic speeds,*  
150 *shorten crossing distances, enhance driver awareness of the crossing, and/or provide active warning of*  
151 *pedestrian presence, should be considered in addition to a new marked crosswalk and signs across an*  
152 *uncontrolled roadway where any of the following conditions exist:*  
153 *A. The roadway has four or more lanes of travel without a raised median or pedestrian refuge island*  
154 *and an ADT of 12,000 vehicles per day or greater; or*  
155 *B. The roadway has four or more lanes of travel with a raised median or pedestrian refuge island*  
156 *and an ADT of 15,000 vehicles per day or greater, or*  
157 *C. The posted speed limit is 40 mph or greater, or*  
158 *D. A crash study reveals that multiple-threat crashes are the predominant crash type on a multi-lane*  
159 *approach, or*  
160 *E. When adequate visibility cannot be provided by parking prohibitions.*

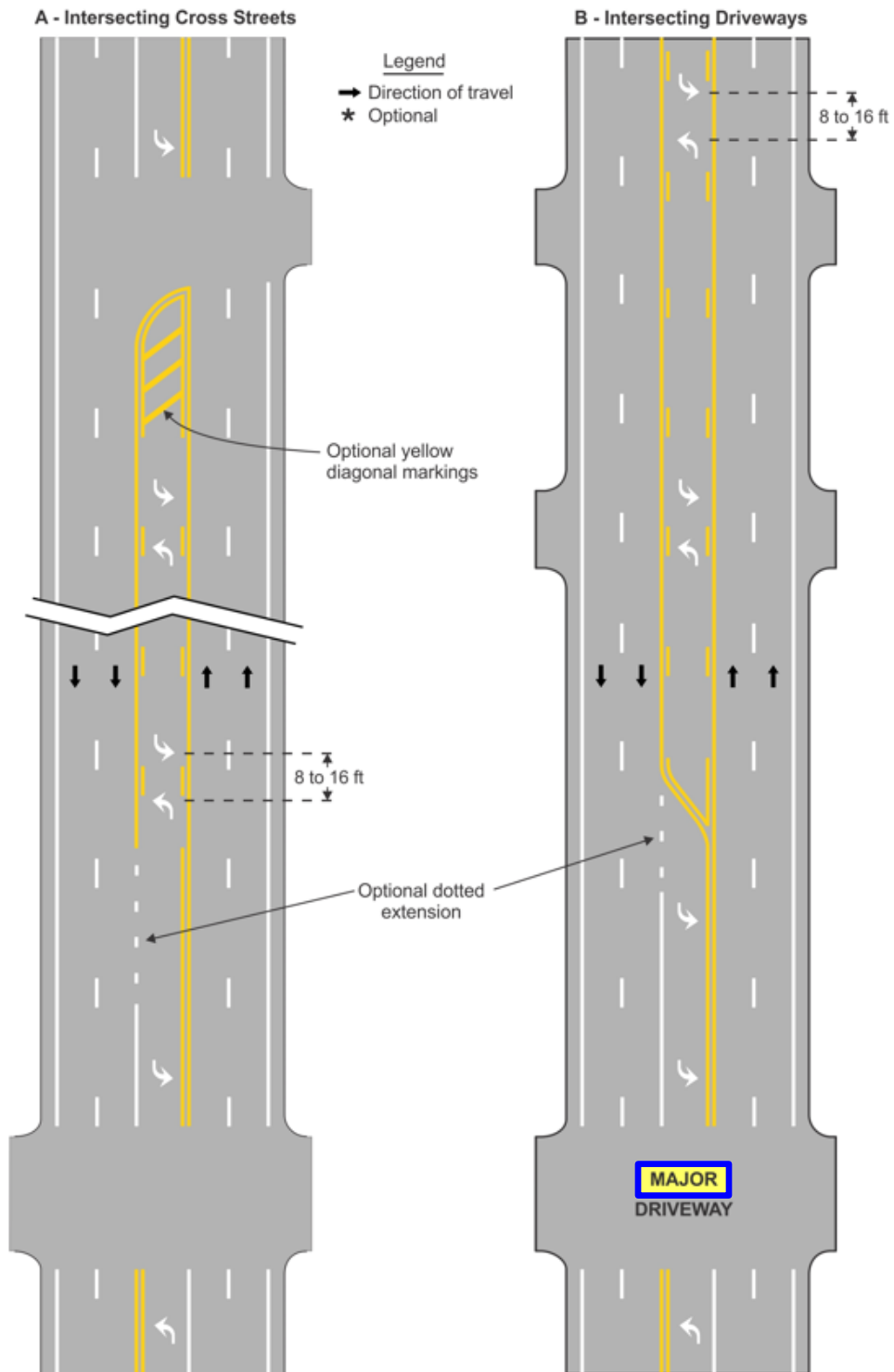
161 **Support:**

162 06A [Section 3B.05 contains guidance information for discontinuing a two-way left-turn lane in the](#)  
163 [immediate vicinity of a marked crosswalk.](#)

164 07 Chapter 4J contains information on pedestrian hybrid beacons.  
165 08 Chapter 4L contains information on rectangular rapid flashing beacons.  
166 09 Section 4S.03 contains information regarding Warning Beacons to provide active warning of a  
167 pedestrian's presence.  
168 10 Section 4U.02 contains information regarding In-Roadway Warning Lights at crosswalks.  
169 11 Chapter 7C contains information on school crosswalks.  
170 12 Chapter 7D contains information regarding school crossing supervision.  
171 13 Section 9E.13 contains information on crosswalk markings for shared-use path crossings.

172 Retain Figure 3B-7 A and B, adding a C element for marked crosswalks, add clarification on B  
173 re. 'major' driveway

Figure 3B-7. Examples of Two-Way Left-Turn Lane Marking Applications

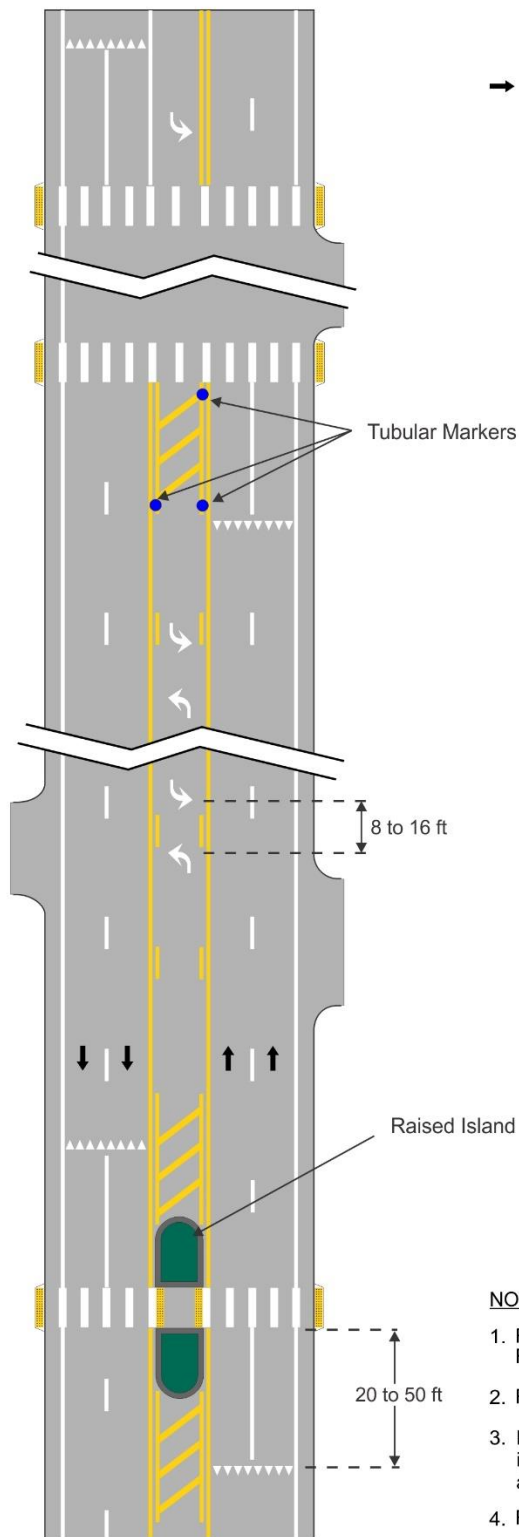


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Figure 3B-7. Examples of Two-Way Left-Turn Lane Marking Applications

**[\*\*New Figure\*\*]** (cont.)

C - Marked Crosswalk - Uncontrolled



**NOTES:**

1. Refer to Chapters 2B and 2C for Regulatory and Warning sign applications.
2. Refer to Section 3B.19 for Stop and Yield Line applications.
3. Refer to Section 3C.02 and Chapter 3J for information on crosswalk marking and raised island delineation.
4. Refer to Section 3I.02 for Tubular Marker applications.