

# National Committee on Uniform Traffic Control Devices

13236 North 7th Street, Suite 4-259, Phoenix, Arizona 85022  
Phone/Text: 231-4-NCUTCD (231-462-8823)  
E-mail: secretary@ncutcd.org

Item No.: 20B-SIG-01

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

**TECHNICAL COMMITTEE:** Signals Technical Committee  
**ITEM NUMBER:** 20B-SIG-01  
**TOPIC:** Accessible Pedestrian Pushbutton Locations  
**ORIGIN OF REQUEST:** Signals Technical Committee  
**AFFECTED SECTIONS OF MUTCD:** 4I-06 Pedestrian Detectors

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### DEVELOPMENT HISTORY:

- Approved by Technical Committee: 06/17/2020
- Approved by NCUTCD Council: MM/DD/YYYY

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*This is a proposal for recommended changes to the MUTCD that has been developed by a technical committee of the NCUTCD. The NCUTCD is distributing it 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, or options. 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.*

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### SUMMARY:

This proposal does the following:

1. Provides a new Figure (4I-Y) showing the preferred placement of pedestrian detection on street corners with a single pedestrian access ramp serving two crosswalks; and,
2. Revises Figure 4I-X to be consistent with existing MUTCD text and AASHTO clear zone requirements.

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### DISCUSSION

1. **Proposed Figure 4I-Y:** Very little guidance is provided for the placement of pedestrian detectors on street corners with a single pedestrian access ramp serving two crosswalks. The practice of using a single ramp to serve two crosswalks is not recommended because of the added complexities for pedestrians with disabilities. However, physical constraints frequently limit a corner to a single ramp. Positioning pedestrian detectors on corners with single access ramps is more challenging than on corners with two ramps because single ramp corners do not allow optimum placement to accommodate all types of disabilities. The needs of vision impaired pedestrians are different than those of mobility

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36 impaired pedestrians. The goal is to develop a design that, although not optimum, will  
37 work for all disabilities. A revised figure is proposed which would clarify proper  
38 placement of pedestrian detectors while allowing for defined flexibility and latitude,  
39 where necessary, to accommodate unique conditions for a given location. These  
40 revisions are shown in a new Figure 4I-Y.

41 2. **Revision Figure 4I-X:** When the revisions were approved to Figure 4I-X at the January  
42 2020 National Committee meeting, the minimum distance between the pedestrian  
43 pushbutton and curb was incorrect. The figure showed a minimum distance of 1-foot, yet  
44 the text in Section 4I-06 Guidance clearly indicates the minimum distance is 1.5 feet  
45 which is compliant with the AASHTO clear zone requirements. This proposal changes  
46 the minimum distance from 1 foot to 1.5 feet to be consistent with existing MUTCD  
47 Guidance.

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## 49 **RECOMMENDED MUTCD CHANGES**

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

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59 PART 4. HIGHWAY TRAFFIC SIGNALS

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61 CHAPTER ~~4E~~ 4I. ~~TRAFFIC CONTROL SIGNALS FOR FREEWAY ENTRANCE~~  
62 ~~RAMP~~ PEDESTRIAN CONTROL FEATURES

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64 Section ~~4E.08~~ 4I.065 **Pedestrian Detectors** [Renumbered from Section 4E.08 to 4I.06, as per  
65 14A-STC-01, approved June 2014. When 4I.02 as per 14A-STC-01, approved June 2014  
66 “Application of Pedestrian Signal Heads” was deleted per 18B-SIG-02 January 2019, 4I.06 was  
67 renumbered to 4I.05]

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69 Option:

70 01 Pedestrian detectors may be pushbuttons or passive detection devices.

71 Support:

72 02 Passive detection devices register the presence of a pedestrian in a position indicative of a  
73 desire to cross, without requiring the pedestrian to push a button. Some passive detection  
74 devices are capable of tracking the progress of a pedestrian as the pedestrian crosses the roadway  
75 for the purpose of extending or shortening the duration of certain pedestrian timing intervals.

76 03 The provisions in this Section place pedestrian pushbuttons within easy reach of pedestrians  
77 who are intending to cross each crosswalk and make it obvious which pushbutton is associated  
78 with each crosswalk. These provisions also position pushbutton poles in optimal locations for  
79 installation of accessible pedestrian signals (see Sections ~~4E.09~~ 4J-01 through ~~4E.13~~ 4J-05).

80 Information regarding reach ranges and other important accessibility needs [Approved January  
81 2020, 19B-SIG-03 Added in address sponsor comments concerning the proposed Standard  
82 language, being deleted, referencing specific details to ADAAG rather than provide specific  
83 specifications in the MUTCD] can be found in the “Americans with Disabilities Act  
84 Accessibility Guidelines for Buildings and Facilities (ADAAG)” (see Section ~~1A.11~~ 1A.04). The  
85 provisions in this Section place pedestrian pushbuttons where pedestrians using wheelchairs or  
86 other mobility aids can readily actuate the pushbutton and quickly reach the access ramp.

87 03a These provisions place the pedestrian pushbutton close to the crosswalk where a pedestrian is  
88 more likely to use the pushbutton. [Approved January 2020, 19B-SIG-03 Added to provide more  
89 clarity to the practitioner on how to best determine placement of pedestrian signals]

90 Guidance:

91 04 *If pedestrian pushbuttons are used, they should be capable of easy activation and*  
92 *conveniently located near each end of the crosswalks. Except as provided in Paragraphs 5 and*  
93 *6, pedestrian pushbuttons should be located to meet all of the following criteria (see ~~Figure 4E-3~~*  
94 *Figure 4I-X* [Approved January 2020 as per 19B-SIG-03] *and Figure 4I-Y*):

- 95 A. *Unobstructed and adjacent to a level all-weather surface to provide access from a*  
96 *wheelchair;*  
97 B. *Where there is an all-weather surface, a wheelchair accessible route from the pushbutton*  
98 *to the ramp;*  
99 ~~C. *Between the edge of the crosswalk line (extended) farthest from the center of the*~~  
100 ~~*intersection and the side of a curb ramp (if present), but not greater than 5 feet from said*~~  
101 ~~*crosswalk line;*~~ [Approved January 2020, 19B-SIG-03 Removed because it is often better  
102 for blind pedestrians to stand at the edge of the access ramp farthest from the intersection  
103 nearer the tangent section of the curb so as to provide clearer delineation of the edge of  
104 the roadway. The removed language does not allow this.]

- 105 C. On the side of the curb ramp which is farthest from the center of the intersection;  
 106 [Approved January 2020, 19B-SIG-03 Added language attempts to provide more  
 107 uniformity as well as greater separation between buttons on a corner]
- 108 D. Not greater than 10 feet from the edge of the associated curb ramp which is farthest from  
 109 the center of the intersection; [Approved January 2020, 19B-SIG-03 Added language  
 110 clarifies that the button should not be greater than 10 feet from the ramp]
- 111 E. Not greater than 5 feet from the outside edge of the marked crosswalk farthest from the  
 112 center of the intersection; [Approved January 2020, 19B-SIG-03 Added language  
 113 clarifies how close to the ramp the buttons should be placed]
- 114 F. Not farther from the crosswalk than the stop line is, if present;  
 115 ~~G.D.~~ Between 1.5 and 6 feet from the edge of the curb, shoulder, or pavement;  
 116 ~~H.E.~~ With the face of the pushbutton parallel to the crosswalk to be used; and  
 117 ~~I.F.~~ At a mounting height of approximately 3.5 feet, but no more than 4 feet, above the  
 118 sidewalk.
- 119 J. Allow a minimum 4-foot continuous clear width for a pedestrian access route. [Approved  
 120 January 2020, 19B-SIG-03 Added language ensures there is enough space for  
 121 wheelchairs to maneuver.]
- 122 K. Outside the sloped area of the curb ramp, if present. [Approved January 2020, 19B-SIG-  
 123 03 Changed to reflect ITE comment and changed again in Council]

124 05 *Where there are physical constraints that make it impractical to place the pedestrian  
 125 pushbutton adjacent to a level all-weather surface, the surface should be as level as feasible.*

126 06 *Where there are physical constraints that make it impractical to place the pedestrian  
 127 pushbutton between 1.5 and 6 feet from the edge of the curb, shoulder, or pavement, it should not  
 128 be farther than 10 feet from the edge of curb, shoulder, or pavement.*

129 07 *Except as provided in Paragraph 8, where two pedestrian pushbuttons are provided on the  
 130 same corner of a signalized location, the pushbuttons should be separated by a distance of at  
 131 least 10 feet.*

132 Option:

133 08 *Where there are physical constraints on a particular corner that make it impractical to provide  
 134 the 10-foot separation between the two pedestrian pushbuttons, ~~the pushbuttons may be placed  
 135 closer together~~ or when an exclusive pedestrian phase is used at an intersection, and the  
 136 pedestrian signals controlling the crosswalks on a given corner of the intersection both operate  
 137 together such that the "WALK" indication is always simultaneous for both crosswalks the  
 138 pushbuttons may be placed closer together or on the same pole. [Revised June 2013, 14A-STC-  
 139 01]*

140 Support:

141 09 *Figure 4E-4 shows typical pedestrian pushbutton locations for a variety of situations.*

142 09a [Figure 4I-Y shows pedestrian pushbutton locations for use where a single ramp exists or is  
 143 the only available alternative.](#)

144 **Standard:**

145 10 **Signs (see Section 2B.52) shall be mounted adjacent to or integral with pedestrian  
 146 pushbuttons, explaining their purpose and use.**

147 Option:

148 11 *At certain locations, a supplemental sign in a more visible location may be used to call  
 149 attention to the pedestrian pushbutton.*

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151 **Standard:**  
152 12 The positioning of pedestrian pushbuttons and the legends on the pedestrian  
153 pushbutton signs shall clearly indicate which crosswalk signal is actuated by each  
154 pedestrian pushbutton.  
155 13 If the pedestrian clearance time is sufficient only to cross from the curb or shoulder to a  
156 median of sufficient width for pedestrians to wait and the signals are pedestrian actuated,  
157 an additional pedestrian detector shall be provided in the median.

158 *Guidance:*

159 14 *The use of additional pedestrian detectors on islands or medians where a pedestrian might*  
160 *become stranded should be considered.*

161 15 *If used, special purpose pushbuttons (to be operated only by authorized persons) should*  
162 *include a housing capable of being locked to prevent access by the general public and do not*  
163 *need an instructional sign.*

164 **Standard:**

165 16 If used, a pilot light or other means of indication installed with a pedestrian pushbutton  
166 shall not be illuminated until actuation. Once it is actuated, the pilot light shall remain  
167 illuminated until the pedestrian's green or WALKING PERSON (symbolizing WALK)  
168 signal indication is displayed.

169 ~~17 If a pilot light is used at an accessible pedestrian signal location (see Sections 4E.09~~  
170 ~~through 4E.13), each actuation shall be accompanied by the speech message "wait."~~  
171 [Revised June 2013, 14A-STC-01 Repeat of Paragraph 23 in Section 4E.11.]

172 *Option:*

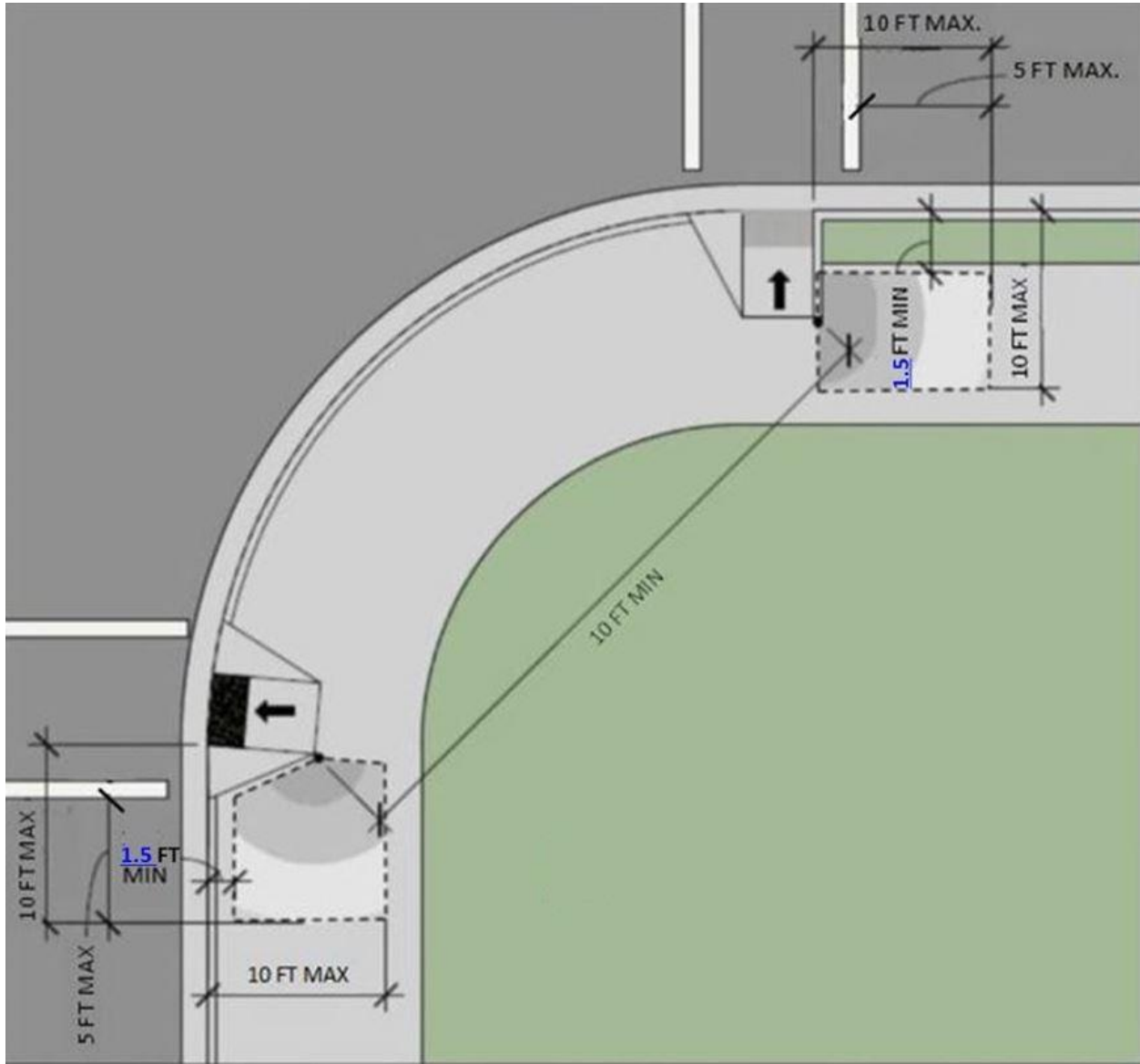
173 ~~17~~ At signalized locations with a demonstrated need and subject to equipment capabilities,  
174 pedestrians with special needs may be provided with additional crossing time by means of an  
175 extended pushbutton press.

176 **Standard:**

177 ~~18~~ ~~19~~ If additional crossing time is provided by means of an extended pushbutton press, a  
178 PUSH BUTTON FOR 2 SECONDS FOR EXTRA CROSSING TIME (R10-32P) plaque  
179 (see Figure 2B-26) shall be mounted adjacent to or integral with the pedestrian pushbutton.

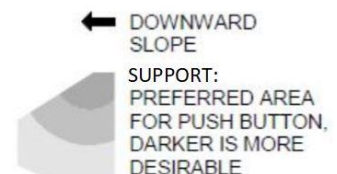
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**Figure 4I-X. Pushbutton Location Area**



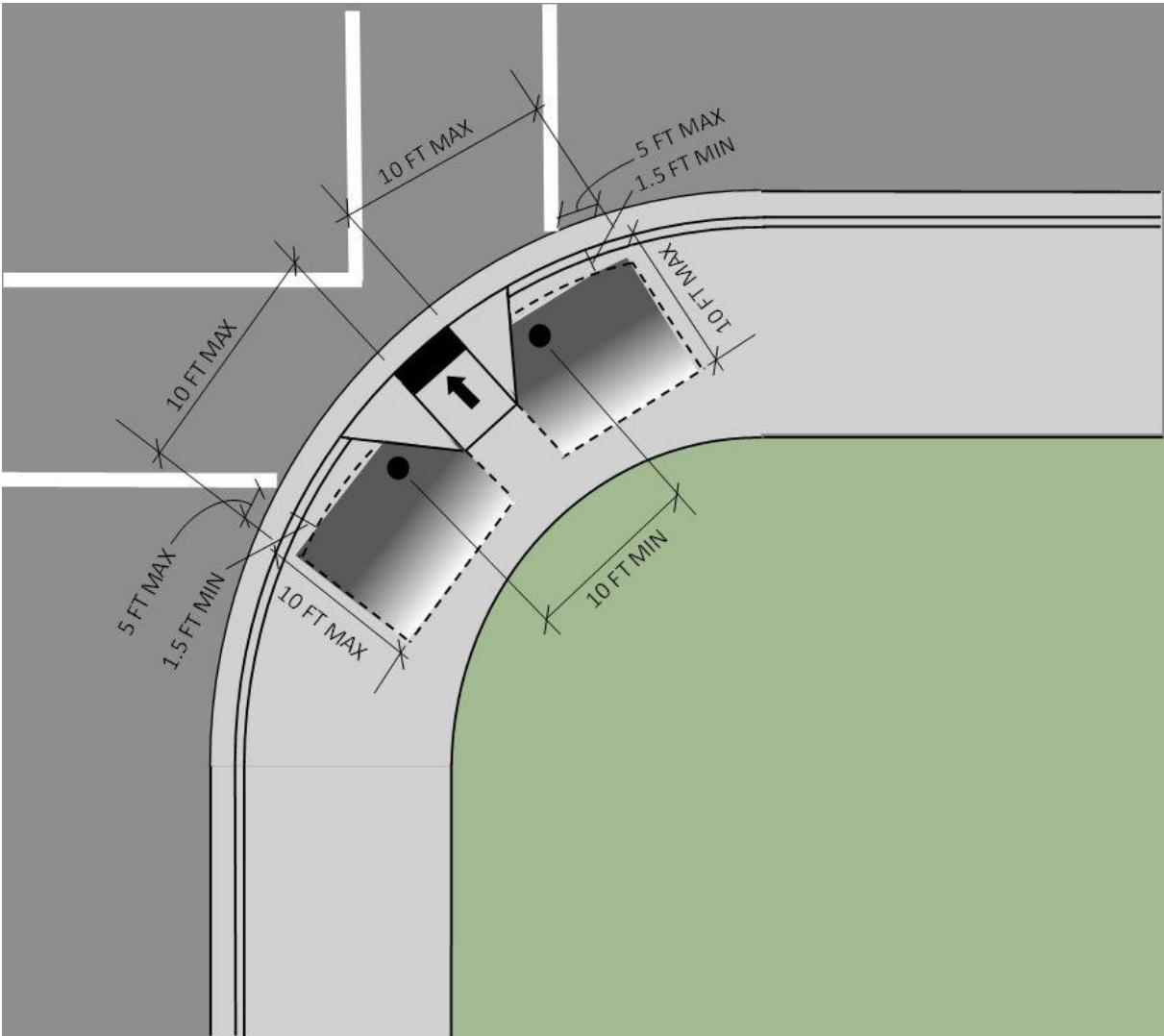
**NOTES:**

1. No greater than 5 feet from the outside edge of the marked crosswalk farthest from the intersection.
2. Not farther from the crosswalk than the stop line, if present.
3. Any maximum (MAX) or minimum (MIN) dimensions shown are based on Guidance Statements.
4. Two pedestrian pushbuttons on a corner should be separated by a minimum of 10 feet. The 10-foot dimension shown in this figure is in reference to the placement of the pushbuttons within their respective areas.
5. Figure ~~4I-4~~ ~~4E-4~~ shows typical pushbutton locations.



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**Figure 4I-X. Pushbutton Location Area For Use Where A Single Ramp Exists Or Is The Only Available Alternative**



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**NOTES:**

- 1. This figure is shown for existing ramps or when conditions preclude the installation of two ramps on a corner
- 2. The pushbutton should not be farther than 5 feet from the outside edge of a marked crosswalk farthest from the center of the intersection, and not be farther from the curb ramp than the stop line, if present (Stop line not shown if figure)
- 3. Any maximum (MAX) or minimum (MIN) dimensions shown are based of Guidance Statements.
- 4. Two pedestrian pushbuttons on a corner should be separated by a minimum of 10 feet.
- 5. All dimensions referencing the curb are measured from the face of curb.
- 6. Figure 4E-4 shows typical pushbutton locations.

