

**RESCINDED
JANUARY 2024**

This Recommended Change to the MUTCD was rescinded by the NCUTCD Council on January 12, 2024.

Markings Technical Committee Recommendations

Following Sponsor Comments

978

979 RECOMMENDED MUTCD CHANGES

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981 The following present the proposed changes to the MUTCD within the context of the current
982 MUTCD language. Proposed additions to the MUTCD are shown in **blue underline** and proposed
983 deletions from the MUTCD are shown in **red strikethrough**. Changes previously approved by
984 NCUTCD Council are shown in **green double underline** for additions and **green double
985 strikethrough** for deletions. Changes to previously approved NCUTCD text are shown **blue
986 underline** and **red strikethrough** within the **green text**. **Yellow highlighted text** are changes made
987 in response to or after sponsor comments and are the recommendations of the MTC.

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PART 3: MARKINGS

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991 Chapter 3A. General

992

993 Section 3A.01 Functions and Limitations

994 Support:

995 01 Markings ~~on highways and on private roads open to public travel~~ have important functions
996 in providing guidance and information for the road user. Major marking types include pavement
997 and curb markings, delineators, colored pavements, channelizing devices, and islands. In some
998 cases, markings are used to supplement other traffic control devices such as signs, signals, and
999 other markings. In other instances, markings are used alone to effectively convey regulations,
1000 guidance, or warnings in ways not obtainable by the use of other devices.

1001

1002 Section 3A.02 Standardization of Application

1003 Guidance:

1004 02 Before any new highway, site roadway ~~private road~~ ~~open to public travel~~ (see definition in
1005 Section 1A.13), ~~paved detour~~, or temporary route is opened to public travel, all necessary
1006 markings should be in place.

1007

1008 Section 3A.06 Functions, Widths, and Patterns of Longitudinal Pavement Markings

1009 *Guidance:*

1010 04 *Broken lines should consist of 10-foot line segments and 30-foot gaps, or dimensions in a
1011 similar ratio of line segments to gaps (i.e., 3:1) as appropriate for traffic speeds and need for
1012 delineation.*

1013 **Option:**

1014 04a SROPT: Broken lines may be 5 foot line segments and 15 foot gaps on site roadways open
1015 to public travel where the operating speed is less than 25 mph.

1016

1017 Chapter 3B. Pavement and Curb Markings

1018 Section 3B.02 No-Passing Zone Pavement Markings and Warrants

1019 **Standard:**

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roadways with center line markings, no-passing zone markings shall be used at
total or vertical curves where the passing sight distance is less than the minimum
shown in Table 3B-1 for the 85th-percentile speed or the posted or statutory speed limit.
The passing sight distance on a vertical curve is the distance at which an object 3.5 feet

1024 above the pavement surface can be seen from a point 3.5 feet above the pavement (see
1025 Figure 3B-4). Similarly, the passing sight distance on a horizontal curve is the distance
1026 measured along the center line (or right-hand lane line of a three-lane roadway) between
1027 two points 3.5 feet above the pavement on a line tangent to the embankment or other
1028 obstruction that cuts off the view on the inside of the curve (see Figure 3B-4).

1029 Option

1030 ~~04a SROPT: Based upon engineering judgment, no-passing zone pavement markings may be~~
1031 ~~omitted on site roadways open to public travel where the operating speed is less than 25 mph.~~

1032 *Guidance:*

1033 ¹⁶ *The minimum lane transition taper length should be 100 feet in urban areas and 200 feet in*
1034 *rural areas.*

1035 Option:

1036 ~~17 SROPT: Based on engineering judgement, the minimum taper length should be computed~~
1037 ~~by the formula $L=WS^2/60$ may be less than 100 feet on site roadways open to public travel where~~
1038 ~~the operating speed is less than 25 mph.~~

1039 Section 3B.09 Lane-Reduction Transition Markings

1040 Option:

1041 ⁰³ On low-speed urban roadways and on site roadways open to public travel with operating
1042 speeds less than 25 mph where curbs clearly define the roadway edge in the lane-reduction
1043 transition, or where a through lane becomes a parking lane, the edge line and/or delineators
1044 shown in Figure 3B-14 may be omitted as determined by engineering judgment.

1045 ~~05a SROPT: The minimum taper length should be computed by the formula $L=WS^2/60$ on site~~
1046 ~~roadways open to public travel with operating speeds of less than 25 mph.~~

1047 Option:

1048 ~~17 SROPT: Based on engineering judgement, the minimum taper length may be less than 100~~
1049 ~~feet on site roadways open to public travel where the operating speed is less than 25 mph.~~

1050 Section 3B.10 Approach Markings for Obstructions

1051 *Guidance:*

1052 ⁰⁵ *The minimum taper length should be 100 feet in urban areas and 200 feet in rural areas.*

1053 Option:

1054 ~~05a SROPT: Based on engineering judgement, the minimum taper length should be computed~~
1055 ~~by the formula $L=WS^2/60$ may be less than 100 feet on site roadways open to public travel where~~
1056 ~~the operating speed is less than 25 mph.~~

1057 Section 3B.16 Stop and Yield Lines

1058 *Guidance:*

1059 ⁰¹ *Stop lines should be used to indicate the point behind which vehicles are required to stop in*
1060 *compliance with a traffic control signal.*

1061 Option:

1062 ⁰² *Stop lines may be used to indicate the point behind which vehicles are required to stop in*
1063 *compliance with a STOP (R1-1) sign, a Stop Here For Pedestrians (R1-5b or R1-5c) sign, or*
1064 *some other traffic control device that requires vehicles to stop, except YIELD signs that are not*
1065 *associated with passive grade crossings.*

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Yield lines may be used to indicate the point behind which vehicles are required to yield in advance with a YIELD (R1-2) sign or a Yield Here To Pedestrians (R1-5 or R1-5a) sign.

~~1066 SROPT: On site roadways open to public travel with operating speeds less than 25 mph, a stop line or yield line may be used without an accompanying STOP or YIELD sign (see Part 2B).~~

Standard:

~~20 SROPT: Where a Stop line or Yield line is used without an accompanying sign, a STOP or YIELD pavement marking message shall be used in advance of the stop or yield line.~~

Section 3B.18 Crosswalk Markings

Guidance:

11 Because non-intersection pedestrian crossings are generally unexpected by the road user, warning signs (see Section 2C.50) should be installed for all marked crosswalks at non-intersection locations and adequate visibility should be provided by parking prohibitions.

Option:

~~49 SROPT: On site roadways open to public travel where the operating speed is less than 25 mph, crosswalk warning signs may be omitted (see Section 2C.50) for marked crosswalks at non-intersection locations where pedestrian crossings are generally expected by the road user and where adequate visibility is provided.~~

Section 3B.20 Pavement Word, Symbol, and Arrow Markings

Option:

12 On narrow, low-speed shared-use paths, the pavement words, symbols, and arrows may be smaller than suggested, but to the relative scale.

~~12a SROPT: On site roadways open to public travel where the operating speed is less than 25 mph, the pavement words, symbols, and arrows may be half-size or larger reduced in size to no less than ¼ size, but in relative proportion to the associated full-size word, symbol, or arrow.~~

13 Pavement markings simulating Interstate, U.S., State, and other official highway route shield signs (see Figure 2D-3) with appropriate route numbers, but elongated for proper proportioning when viewed as a marking, may be used to guide road users to their destinations (see Figure 3B-25).

Standard:

~~1514 The word STOP shall not be placed on the pavement in advance of a stop line, unless every vehicle is required to stop at all times.~~

~~14 Except at the ends of aisles in parking lots, the word STOP shall not be used on the pavement unless accompanied by a stop line (see Section 3B.16) and STOP sign (see Section 2B.05). At the end aisle in parking lots, the word STOP shall not be used on the pavement unless accompanied by a stop line. The word STOP shall not be used on the pavement unless accompanied by a stop line, except at the end of aisles in parking areas and for site roadways open to public travel as noted in Section 3B.16.~~

Option:

~~15a At the ends of driving aisles connecting to site roadways open to public travel, the word STOP on the pavement may be used in the place of a STOP sign when accompanied with a stop line.~~

Section 3B.24 Chevron and Diagonal Crosshatch Markings

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1112 The chevrons and diagonal lines used for crosshatch markings should be at least 12 inches
1113 for roadways having a posted or statutory speed limit of 45 mph or greater, and at least 8
1114 inches wide for roadways having posted or statutory speed limit of less than 45 mph. The
1115 longitudinal spacing of the chevrons or diagonal lines should be determined by engineering
1116 judgment considering factors such as speeds and desired visual impacts. The chevrons and
1117 diagonal lines should form an angle of approximately 30 to 45 degrees with the longitudinal
1118 lines that they intersect.
1119 06 SROPT: Chevrons and diagonal lines used for crosshatch markings should be at least 4
1120 inches wide on site roadways open to public travel where the operating speed is less than 25
1121 mph.
1122

Table 3B-1. Minimum Passing Sight Distances for No-Passing Zone Markings

85th-Percentile or Posted or Statutory Speed Limit	Minimum Passing Sight Distance
<u>20 mph</u>	<u>400 feet</u>
25 mph	4 <u>0</u> 50 feet
30 mph	500 feet
35 mph	550 feet
40 mph	600 feet
45 mph	700 feet
50 mph	800 feet
55 mph	900 feet
60 mph	1,000 feet
65 mph	1,100 feet
70 mph	1,200 feet

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