Disclaimer: This document shows only the changes in the 2009 MUTCD, Revision 1,2, and 3, made for the 11th Edition of the MUTCD; it not an official representation of the 11th Edition and may contain unintended errors or omissions. It was prepared to assist practitioners with identifying text changes only. Figures and tables are not included. This document does not explicitly identify where text was moved or reorganization for the 11th edition, such text will resemble other deletions and additions. The official version of the MUTCD is located on the FHWA MUTCD website (https://mutcd.fhwa.dot.gov/index.htm).

Description: This document shows the changes from 2009 MUTCD text, including Revision 1, 2, and 3, made for the 11th Edition of the MUTCD. Some parts of 11th Edition include reorganization of 2009 MUTCD material. Users of this document should refer to the Federal Register and the supplemental table of changes posted in the Federal Register docket for the MUTCD 11th Edition Final Rule to obtain information on reorganized and relocated text from the 2009 MUTCD for the 11th Edition, as well as other changes.

The Final Rule for the MUTCD 11th Edition provides general information about significant change to the MUTCD. A supplementary table of changes is included in the Final Rule docket to provide information on changes not explicitly detailed in the Final Rule by means of a comparison between the Federal Register description of changes listed in the Notice of Proposed Amendments (NPA) for the 11th Edition issued on December 14, 2020, and the disposition of comments received in response to that Notice. Practitioners will find the supplemental table of changes helpful in determining how proposed text in the NPA was either incorporated or changed to establish the MUTCD 11th Edition.

In this comparison document, new text or newly relocated text for the 11th Edition is shown in <u>blue underline</u> and 2009 MUTCD text that has been removed or moved to another Section of the MUTCD is shown in <u>red strikethrough</u>.

Additionally, Part 5 is omitted from this comparison document as this Part is completely new material in the 11th Edition. Relevant provisions from the previous version of Part 5, Low Volume Roads, have been moved to other Parts of the 11th Edition and shown in blue underline, as appropriate, or removed completely as appropriate. See supplemental tables of changes for more information on text changes.

Finally, this document is only provided by FHWA to help practitioners quickly identify changes incorporated into the 11th Edition of the MUTCD. Though every effort has been made to ensure the accuracy of this document, there may be unintentional differences between the text shown in this document and the text of the official version of the 11th Edition MUTCD. The official version is located at: https://mutcd.fhwa.dot.gov/.

1	CHAPTER 7B. SIGNS
2	Section 7B.01 Size Design of School Signs
3	Standard:
4 5	Except as provided in Section 2A.1107, the sizes of signs and plaques to be used on conventional roadways in school areas shall be as shown in Table 7B-1.
6 7	The sizes in the Conventional Road column shall be used unless engineering judgment determines that a minimum or oversized sign size would be more appropriate.
8 9	The sizes in the Minimum column shall be used only where traffic volumes are low and speeds are 30 mph or lower, as determined by engineering judgment.
10	The sizes in the Oversized column in Table 7B-1 shall be used on expressways in school areas.
11	Guidance:
12 13	The sizes in the Oversized column should be used on roadways that have four or more lanes with posted speed limits of 40 mph or higher.
14	Option:
15 16	The sizes in the Oversized column may also be used at other locations that require increased emphasis, improved recognition, or increased legibility.
17	Signs and plaques larger than those shown in Table 7B-1 may be used (see Section 2A.4407).
18	Section 7B.02 Illumination and Reflectorization
19	Standard:
20 21 22 23	School warning signs, including the "SCHOOL" portion of the School Speed Limit (S5-1) sign and including any supplemental plaques used in association with these warning signs, shall have a fluorescent yellow-green background with a black legend and border unless otherwise provided in this Manual for a specific sign.
24 25	The signs used for school area traffic control shall be retroreflectorized retroreflective or illuminated.
26	Section 7B.03 Position of Signs
27	Support:
28 29	Sections 2A. 16 13 and 2A. 17 14 contain provisions regarding the <u>installation</u> , placements, and locations of signs.
30	Section 2A.18-15_contains provisions regarding the mounting height of signs.
31	Section 2A. 19 16 contains provisions regarding the lateral offsets of signs.
32 33	The "Standard Highway Signs and Markings" book publication (see Section 1A.1105) contains information regarding sign lettering.
34	Option:
35 36	In-roadway signs for school traffic control areas may be used consistent with the requirements of Sections 2B. 12 20, and 7B. 08 03, and 7B.12.
37	Section 7B.04 Height of Signs
38	Section 7B.05 Installation of Signs
39	Section 7B.06 Lettering
40	Section 7B.07 Sign Color for School Warning Signs
41	Section 7B.08 Section 7B.02 School Area Signs (S1-1) and Plaques

Support:

Many state and local jurisdictions find it beneficial to advise road users that they are approaching a school that is adjacent to a highway, where additional care is needed, even though no school crossing is involved and the speed limit remains unchanged. Additionally, some jurisdictions designate school zones that have a unique legal standing in that fines for speeding or other traffic violations within designated school zones are increased or special enforcement techniques such as photo radar systems are used. It is important and sometimes legally necessary to mark the beginning and end points of these designated school zones so that the road user is given proper notice.

The School (S1-1) sign (see Figure 7B-1) has the following four applications:

- A. School Area the S1-1 sign can be used to warn road users that they are approaching a school area that might include school buildings or grounds, a school crossing, or school related activity adjacent to the highway.
- B. School Zone the S1-1 sign can be used to identify the location of the beginning of a designated school zone (see Section 7B.09).
- C. School Advance Crossing if combined with an AHEAD (W16-9P) plaque or an XX FEET (W16-2P or W16-2aP) plaque to comprise the School Advance Crossing assembly (see Figure 7B-1), the S1-1 sign can be used to warn road users that they are approaching a crossing where schoolchildren cross the roadway (see Section 7B.1103).
- D. School Crossing if combined with a diagonal downward pointing arrow (W16-7P) plaque to comprise the School Crossing assembly (see Figure 7B-1), the S1-1 sign can be used to warn approaching road users of the location of a crossing where schoolchildren cross the roadway (see Section 7B.1203).

Option:

If a school area <u>or school zone</u> is located on a cross street in close proximity to the intersection, a School (S1-1) sign with a supplemental arrow (W16-5P or W16-6P) plaque (see Figure 7B-1) may be installed on each approach of the street or highway to warn road users making a turn onto the cross street that they will encounter a school area soon after making the turn.

Section 7B.09 School Zone Sign (S1-1) and Plaques (S4-3P, S4-7P) and END SCHOOL ZONE Sign (S5-2)

30 Standard:

If a school zone has been designated under State or local statute, a School (S1-1) sign (see Figure 7B-1) shall be installed to identify the beginning point(s) of the designated school zone (see Figure 7B-2).

Option:

A School Zone (S1-1) sign may be supplemented with a SCHOOL (S4-3P) plaque (see Figure 7B-1).

A School Zone (S1-1) sign may be supplemented with an ALL YEAR (S4-7P) plaque (see Figure 7B-1) if the school operates on a 12-month schedule.

The downstream end of a designated school zone may be identified with an END SCHOOL ZONE (S5-2) sign (see Figures 7B-1 and 7B-2).

If a school zone is located on a cross street in close proximity to the intersection, a School Zone (S1-1) sign with a supplemental arrow (W16-5P or W16-6P) plaque may be installed on each approach of the street or highway to warn road users making a turn onto the cross street that they will encounter a school zone soon after making the turn.

- 44 Section 7B.10 Higher Fines Zone Signs (R2-10, R2-11) and Plaques
- 45 Section 7B.11 7B.03 School Advance Crossing Assembly Signs
- 46 Standard:

The School Advance Crossing assembly (see Figure 7B-1) shall consist of a School (S1-1) sign supplemented with an AHEAD (W16-9P) plaque or an XX FEET (W16-2P or W16-2aP) plaque.

Except as provided in Paragraph 3 of this Section, a School Advance Crossing assembly shall be used in advance (see Table 2C-4-3 for advance placement guidelines) of the first School Crossing assembly (see Section 7B.12) that is encountered in each direction as traffic approaches a school crosswalk (see Figure 7B-43).

Option:

The School Advance Crossing assembly may be omitted (see Figure 7B-52) where a School Zone (S1-1) sign (see Section 7B.0902) is installed to identify the beginning of a school zone in advance of the School Crossing assembly.

If a school crosswalk is located on a cross street in close proximity to an intersection, a School Advance Crossing assembly with a supplemental arrow (W16-5P or W16-6P) plaque may be installed on each approach of the street or highway to warn road users making a turn onto the cross street that they will encounter a school crosswalk soon after making the turn. (see Figure 7B-3).

A 12-inch reduced size in-street School (S1-1) sign (see Figure 7B-61), installed in compliance with the mounting height and special mounting support requirements for an In-Street Pedestrian Crossing (R1-6 or R1-6a) signs (see Section 2B.1220), may be used in advance of a school crossing to supplement the post-mounted school warning signs. A 12 x 6-inch reduced size AHEAD (W16-9P) plaque (see Figure 7B-1) may be mounted below the reduced size in-street School (S1-1) sign.

Section 7B.12 School Crossing Assembly

Standard:

If used, the School Crossing assembly (see Figure 7B-1) shall be installed at the school crossing (see Figures 7B-4-2 and 7B-53), or as close to it as possible, and shall consist of a School (S1-1) sign supplemented with a diagonal downward pointing arrow (W16-7P) plaque (see Section 2C.63) to show the location of the crossing.

The School Crossing assembly shall not be used at crossings other than those adjacent to schools and those on established school pedestrian routes.

The School Crossing assembly shall not be installed on <u>an approaches</u> controlled by a STOP or <u>a YIELD sign except as provided in Paragraphs 9 and 10 of this Section</u>.

Option:

The School Crossing assembly may be installed on an approach to a circular intersection controlled by a YIELD sign where the crosswalk is at least 20 feet in advance of the yield point at the entrance to a circulatory roadway.

At a signalized or stop-controlled intersection the School Crossing assembly may be installed on an approach to a channelized right turn lane controlled by a YIELD sign where the crosswalk is at least 20 feet in advance of the yield point.

A Yield Here To (Stop Here For) School Crossing (R1-5a or R1-5c) sign (see Figure 7B-4) may be used, in accordance with the provisions of Section 2B.19, in advance of a marked crosswalk that crosses an uncontrolled multi-lane approach within school zones.

The In-Street Pedestrian Crossing (R1-6 or R1-6a) sign (see Section 2B.12-20 and Figure 7B-61) or the In-Street Schoolchildren School Crossing (R1-6b or R1-6c) sign (see Figure 7B-61) may be used at unsignalized school crossings on approaches that are not controlled by a traffic control signal, a pedestrian hybrid beacon, or emergency vehicle hybrid beacon. If used at a school crossing, a 12 x 4-inch SCHOOL (S4-3P) plaque (see Figure 7B-61) may be mounted above the sign. The STATE LAW legend on the R1-6 series signs may be omitted.

The In-Street Pedestrian Crossing (R1-6 or R1-6a) sign or In-Street School Crossing (R1-6b or R1-6c) sign may be used at intersections or midblock crossings with flashing beacons.

The Overhead Pedestrian School Crossing (R1-9b or R1-9a9c) sign (see Section 2B.12 and Figure 1 2 2B-2) may be modified to replace the standard pedestrian symbol with the standard schoolchildren symbol and (see Figure 7B-1) may be used at unsignalized school crossings on approaches that are not 4 controlled by a traffic control signal, pedestrian hybrid beacon, or an emergency-vehicle hybrid beacon. The STATE LAW legend on the R1-9 series signs may be omitted.

Standard:

When used at an uncontrolled crossing, the In-Street or Overhead Pedestrian Crossing sign shall be used only as a supplement to a School Crossing assembly with a diagonal downward-pointing arrow (W16-7P) plaque at the crosswalk location.

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A 12-inch reduced size in-street School (S1-1) sign (see Figure 7B-61) may be used at an unsignalized school crossing instead of the In-Street Pedestrian Crossing (R1-6 or R1-6a) or the In-Street Schoolchildren School Crossing (R1-6b or R1-6c) sign at a school crossing on approaches that are not controlled by a traffic control signal, pedestrian hybrid beacon, or an emergency vehicle hybrid beacon. A 12 x 6-inch reduced size diagonal downward pointing arrow (W16-7P) plaque (see Figure 7B-1) may be mounted below the reduced size in-street School (S1-1) sign.

Standard:

If an In-Street Pedestrian Crossing sign, an In-Street Schoolehildren Crossing sign, or a reduced size in-street School (S1-1) sign is placed in the roadway, the sign support shall comply with the mounting height and special mounting support requirements for an In-Street Pedestrian Crossing (R1-6 or R1-6a) signs (see Section 2B.1220).

The In-Street Pedestrian Crossing sign, the In-Street Schoolehildren-School Crossing sign, the Overhead Pedestrian Crossing sign, and the reduced size in-street School (S1-1) sign shall not be used at signalized locations on approaches that are controlled by a traffic control signal, pedestrian hybrid beacon, or an emergency vehicle hybrid beacon.

- 26 Section 7B.13 Section 7B.04 School Bus Stop Ahead Signs (S3-1)
- 27 Guidance:

The School Bus Stop Ahead (S3-1) sign (see Figure 7B-1) should be installed in advance of locations where a school bus, when stopped to pick up or discharge passengers, is not visible to road users for an adequate distance and where there is no opportunity to relocate the school bus stop to provide adequate sight distance.

Section 7B.14 SCHOOL BUS TURN AHEAD Sign (S3-2)

Option:

The SCHOOL BUS TURN AHEAD (S3-2) sign (see Figure 7B-1) may be installed in advance of locations where a school bus turns around on a roadway at a location not visible to approaching road users for a distance as determined by the "0" column under Condition B of Table 2C-43, and where there is no opportunity to relocate the school bus turn around to provide the distance provided in Table 2C-43.

Section 7B.15.05 School Speed Limit Assembly (S4-1P, S4-2P, S4-3P, S4-4P, S4-6P, S5-1) and END SCHOOL SPEED LIMIT Sign (S5-3)Signs and Plaques

Standard:

A School Speed Limit assembly (see Figure 7B-1) or a School Speed Limit When Flashing (S5-1) sign (see Figure 7B-1) shall be used to indicate the speed limit where a reduced school speed limit zone has been established based upon an engineering study or where a reduced school speed limit is specified for such areas by statute. The School Speed Limit assembly or School Speed Limit When Flashing sign shall be placed at or as near as practical to the point where the reduced school speed limit zone begins (see Figures 7B-3-2 and 7B-54).

If a reduced school speed limit zone has been established, a School (S1-1) sign shall be installed in advance (see Table 2C-4-3 for advance placement guidelines) of the first School Speed Limit sign assembly or S5-1 sign that is encountered in each direction as traffic approaches the reduced school speed limit zone (see Figures 7B-3-2 and 7B-54).

Where increased fines are imposed for traffic violations within a reduced school speed limit zone, a FINES HIGHER (R2-6P), FINES DOUBLE (R2-6aP), or \$XX FINE (R2-6bP) plaque (see Figure 2B-3) shall be installed as a supplement to the reduced school speed limit sign to notify road users.

Except as provided in Paragraph 54 of this Section, the downstream end of an authorized and posted reduced school speed limit zone shall be identified with an END SCHOOL SPEED LIMIT (S5-3) sign (see Figures 7B-1, 7B-2, and 7B-54).

Option:

If a reduced school speed limit zone ends at the same point as a higher fines designated school zone (see Section 7B.02), an END SCHOOL ZONE (S5-2) sign may be used instead of a combination of an END HIGHER FINES ZONE (R2-11) sign and an END SCHOOL SPEED LIMIT (S5-3) sign.

A standard Speed Limit sign showing the speed limit for the section of highway that is downstream from the authorized and posted reduced school speed limit zone may be mounted on the same post above the END SCHOOL SPEED LIMIT (S5-3) sign or the END SCHOOL ZONE (S5-2) sign.

Guidance:

The beginning point of a reduced school speed limit zone should be at least 200 feet in advance of the school grounds, or a school crossing, or other school related activities; however, this 200-foot distance should be increased if the reduced school speed limit is 30 mph or higher. The maximum beginning point of a reduced school speed limit zone should not be greater than 500 feet in advance of the school grounds or a school crossing.

Standard:

The School Speed Limit assembly shall be either a **fixed-message**static sign assembly, a blankout sign, or a changeable message sign (see Chapter 2L).

The <u>fixed-messagestatic</u> School Speed Limit assembly shall consist of a top plaque (S4-3P) with the legend SCHOOL, a Speed Limit (R2-1) sign, and a bottom plaque (S4-1P, S4-2P, S4-4P, or S4-6P) indicating the specific periods of the day and/or days of the week that the special school speed limit is in effect (see Figure 7B-1).

When a School Speed Limit When Flashing (S5-1) sign or a Speed Limit (R2-1) sign with a supplemental WHEN FLASHING (S4-4P) plaque is used, a Speed Limit Sign Beacon (see Section 4S.04) shall be used to identify the periods that the school speed limit is in effect.

Option:

Changeable message signs (see Chapter 2L and Section 6F.60) may be used to inform drivers of the school speed limit. If the sign is internally illuminated, it may have a white legend on a black background. Changeable message signs with flashing beacons may be used for situations where greater emphasis of the special school speed limit is needed.

Guidance:

Even though it might not always be practical because of special features to make changeable message signs conform in all respects to the standards in this Manual for fixed message signs, during the periods that the school speed limit is in effect, their basic shape, message, legend layout, and colors should comply with the standards for fixed message signs.

A confirmation light or device to indicate that the speed limit message is in operation should be considered for inclusion on the back of the changeable message sign.

Standard:

Fluorescent yellow-green pixels shall be used when the "SCHOOL" message is displayed on a changeable message sign for a school speed limit.

Option:

Changeable message signs may use blank-out messages or other methods in order to display the school speed limit only during the periods it applies.

<u>A Vehicle Speed Feedback (W13-20aP) plaque Changeable message signs</u> that displays the speed of approaching drivers (see Section 2B.13-21 and 2C.13), that is part of a School Speed Limit assembly or a School Speed Limit When Flashing (S5-1) sign, may be used in a school speed limit zone.

A Speed Limit Sign Beacon (see Section 4L.04) also may be used, with a WHEN FLASHING legend, to identify the periods that the school speed limit is in effect.

Section 7B.16 Reduced School Speed Limit Ahead Sign (S4-5, S4-5a)

12 Guidance:

If used, the Vehicle Speed Feedback (W13-20aP) plaque should only be used during the time period when the school speed limit is in effect

A Reduced School Speed Limit Ahead (S4-5, or S4-5a) sign (see Figure 7B-1) should be used to inform road users of a reduced speed zone where the speed limit is being reduced by more than 10 mph, or where engineering judgment indicates that advance notice would be appropriate.

Standard:

If used, the Reduced School Speed Limit Ahead sign shall be followed by a School Speed Limit sign or a School Speed Limit assembly.

The speed limit displayed on the Reduced School Speed Limit Ahead sign shall be identical to the speed limit displayed on the subsequent School Speed Limit sign or School Speed Limit assembly.

Section 7B.10 06 Higher Fines Zone Signs (R2-10, R2-11) and Plaques in School Areas

25 Support:

The signs and plaques used to inform road users of higher fines zones and their locations depend on whether the fines apply to all traffic violations or only to speeding violations. Their locations also depend on whether the higher fines zone begins and/or ends at the same point as the school zone or school speed limit zone. Figures 7B-4 and 7B-5 show examples of higher fines zones signing.

Standard:

Where increased fines are imposed for traffic violations within a designated school zone,:

- A. a-A BEGIN HIGHER FINES ZONE (R2-10) sign (see Figure 7B-1) or a FINES HIGHER (R2-6P), FINES DOUBLE (R2-6aP), or \$XX FINE (R2-6bP) plaque (see Figure 2B-37B-1) shall be installed as a supplement to the School Zone (S1-1) sign to identify the beginning point of the higher fines zone (see Figures 7B-2-4 and 7B-35); and
- B. An END HIGHER FINES ZONE (R2-11) sign (see Figure 7B-1) or an END SCHOOL ZONE (S5-2) sign (see Figure 7B-1) shall be installed at the downstream end of the zone to notify road users of the termination of the increased fines zone (see Figure 7B-5).

If exceeding the speed limit is the only traffic violation that is subject to higher fines, a FINES HIGHER (R2-6P), FINES DOUBLE (R2-6aP), or \$XX FINE (R2-6bP) plaque shall be posted with the School Speed Limit (S5-1) sign and shall not be posted beneath the School Zone (S1-1) sign (see Section 7B.05).

If the portion of the roadway that is subject to higher fines does not begin at the location of the School Zone (S1-1) sign, a BEGIN HIGHER FINES ZONE (R2-10) sign shall be placed at the point where the higher fines begin (see Sheet 2 of Figure 7B-5).

Option:

If a BEGIN HIGHER FINES ZONE (R2-10) sign is used downstream of the School Zone (S1-1) sign, a FINES HIGHER (R2-6P), FINES DOUBLE (R2-6aP), or \$XX FINE (R2-6bP) plaque may also be placed beneath the School Zone (S1-1) sign.

Where appropriate, one of the following plaques may be mounted below the sign that identifies the beginning point of the higher fines zone:

- A. An S4-1P plaque (see Figure 7B-1) specifying the times that the higher fines are in effect,
- B. A WHEN CHILDREN ARE PRESENT (S4-2P) plaque (see Figure 7B-1), or
- C. A WHEN FLASHING (S4-4P) plaque (see Figure 7B-1) if used in conjunction with a yellow flashing beacon.

Guidance:

If other traffic violations in addition to exceeding the speed limit are subject to higher fines, then the duplicate FINES HIGHER (R2-6P), FINES DOUBLE (R2-6aP), or \$XX FINE (R2-6bP) plaque should be omitted from the School Speed Limit When Flashing (S5-1) sign (see Section 7B.05).

Option:

If a higher fines zone ends at the same point as a reduced school speed limit zone, an END SCHOOL ZONE (S5-2) sign may be used instead of a combination of an END HIGHER FINES ZONE (R2-11) sign and an END SCHOOL SPEED LIMIT (S5-3) sign (see Figure 7B-5).

Where the higher fines zone is established by statute, the BEGIN HIGHER FINES ZONE (R2-10) sign, FINES HIGHER (R2-6P), FINES DOUBLE (R2-6aP), and \$XX FINE (R2-6bP) plaques may be omitted.

Standard:

Where a BEGIN HIGHER FINES ZONE (R2-10) sign or a FINES HIGHER (R2-6P) plaque supplementing a School Zone (S1-1) sign is posted to notify road users of increased fines for traffic violations, an END HIGHER FINES ZONE (R2-11) sign (see Figure 7B-1) or an END SCHOOL ZONE (S5-2) sign shall be installed at the downstream end of the zone to notify road users of the termination of the increased fines zone (see Figures 7B-2 and 7B-3).

Section 7B.1707 Parking and Stopping Signs (R7 and R8 Series) Signs

Option:

Parking and stopping regulatory signs may be used to prevent parked or waiting vehicles from blocking pedestrians' views, and drivers' views of pedestrians, and to control vehicles as a part of the school traffic plan.

Support:

Parking signs and other signs governing the stopping and standing of vehicles in school areas cover a wide variety of regulations. Typical examples of regulations are as follows:

- A. No Parking NO PARKING X:XX AM to X:XX PM School Days Only, SCHOOL DAYS ONLY
- B. No Stopping NO STOPPING X:XX AM to X:XX PM SCHOOL DAYS ONLY School Days Only,
- C. XX Min Loading XX MIN LOADING X:XX AM to X:XX PM SCHOOL DAYS ONLY School Days Only, and
- D. No Standing NO STANDING X:XX AM to X:XX PM SCHOOL DAYS ONLY School Days Only.

Sections 2B.4653, through 2B.4755, and 2B.48 contain information regarding the signing of parking regulations in school zone areas.