PART 7. TRAFFIC CONTROLS FOR SCHOOL AREAS

CHAPTER 7A. GENERAL

Section 7A.01 Need for Standards
Support:

01 Regardless of the school location, the best way to achieve effective traffic control is through the uniform application of realistic policies, practices, and standards developed through engineering judgment or studies.

02 Pedestrian safety depends upon public understanding of accepted methods for efficient traffic control. This principle is especially important in the control of pedestrians, bicycles, and other vehicles in the vicinity of schools. Neither pedestrians on their way to or from school nor other road users can be expected to move safely in school areas unless they understand both the need for traffic controls and how these controls function for their benefit.

03 Procedures and devices that are not uniform might cause confusion among pedestrians and other road users, prompt wrong decisions, and contribute to crashes. To achieve uniformity of traffic control in school areas, comparable traffic situations need to be treated in a consistent manner. Each traffic control device and control method described in Part 7 fulfills a specific function related to specific traffic conditions.

04 A uniform approach to school area traffic controls assures the use of similar controls for similar situations which promotes appropriate and uniform behavior on the part of motorists, pedestrians, and bicyclists.

05 A school traffic control plan permits the orderly review of school area traffic control needs, and the coordination of school/pedestrian safety education and engineering measures. Engineering measures alone do not always result in the intended change in student and road user behavior.

Guidance:

06 A school route plan, or pedestrian plan, for each school serving elementary to high school students should be prepared in order to develop uniformity in the use of school area traffic controls and to serve as the basis for a school traffic control plan for each school.

07 The school route plan, developed in a systematic manner by the school, law enforcement, and traffic officials responsible for school pedestrian safety, should consist of a map (see Figure 7A-1) showing streets, the school, existing traffic controls, established school walk routes, and established school crossings.

08 The type(s) of school area traffic control devices used, either warning or regulatory, should be related to the volume and speed of vehicular traffic, street width, and the number and age of the students using the crossing.

09 School area traffic control devices should be included in a school traffic control plan.

Support:

10 “School” and “school zone” are defined in Section 1A.13.

11 Additional information about Safe Route to School programs and bicycle and pedestrian safety around schools is available from the ODOT website at http://www.dot.state.oh.us/SafeRoutes.

Section 7A.02 School Routes and Established School Crossings
Support:

01 To establish a safer route to and from school for schoolchildren, the application of planning criterion for school walk routes might make it necessary for children to walk an indirect route to an established school crossing located where there is existing traffic control and to avoid the use of a direct crossing where there is no existing traffic control.

Guidance:

02 School walk routes should be planned to take advantage of existing traffic controls.

03 The following factors should be considered when determining the feasibility of requiring children to walk a longer distance to a crossing with existing traffic control:

A. The availability of adequate sidewalks or other pedestrian walkways to and from the location with existing control,
Section 7A.03 School Crossing Control Criteria

Support:

01 The frequency of gaps in the traffic stream that are sufficient for student crossing is different at each crossing location. When the delay between the occurrence of adequate gaps becomes excessive, students might become impatient and endanger themselves by attempting to cross the street during an inadequate gap. In these instances, the creation of sufficient gaps needs to be considered to accommodate the crossing demand.

02 A recommended method for determining the frequency and adequacy of gaps in the traffic stream is given in the “Traffic Control Devices Handbook” (see Section 1A.11).

Section 7A.04 Scope

Standard:

01 Part 7 sets forth basic principles and prescribes standards that shall be followed in the design, application, installation, and maintenance of all traffic control devices (including signs, signals, and markings) and other controls (including adult crossing guards) required for the special pedestrian conditions in school areas.

Support:

02 Sections 1A.01 and 1A.08 contain information regarding unauthorized devices and messages. Sections 1A.02 and 1A.07 contain information regarding the application of standards. Section 1A.05 contains information regarding the maintenance of traffic control devices. Section 1A.08 contains information regarding placement authority for traffic control devices. Section 1A.09 contains information regarding engineering studies and the assistance that is available to jurisdictions that do not have engineers on their staffs who are trained and/or experienced in traffic control devices.

03 Provisions contained in Chapter 2A and Section 2B.05 are applicable in school areas.

04 Part 3 contains provisions regarding pavement markings that are applicable in school areas.

05 Part 4, contains provisions regarding highway traffic signals that are applicable in school areas. The School Crossing signal warrant is described in Section 4C.06.

06 As noted in Section 7A.01, Paragraph 11, additional information on Safe Routes to School Programs and related materials is available on-line from ODOT’s website.
Figure 7A-1. Example of School Route Plan Map
CHAPTER 7B. SIGNS

Section 7B.01 Size of School Signs

Standard:
01 Except as provided in Section 2A.11, the sizes of signs and plaques to be used on conventional roadways in school areas shall be as shown in Table 7B-1.
02 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.
03 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.
04 The sizes in the Oversized column shall be used on expressways.

Guidance:
05 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.

Option:
06 The sizes in the Oversized column may also be used at other locations that require increased emphasis, improved recognition, or increased legibility.
07 Signs and plaques larger than those shown in Table 7B-1 may be used (see Section 2A.11).

Section 7B.02 Illumination and Reflectorization

Standard:
01 The signs used for school area traffic control shall be retroreflectorized or illuminated.

Section 7B.03 Position of Signs

Support:
01 Sections 2A.16 and 2A.17 contain provisions regarding the placement and locations of signs.
02 Section 2A.19 contains provisions regarding the lateral offsets of signs.

Option:
03 In-roadway signs for school traffic control areas may be used consistent with the requirements of Sections 2B.12, 7B.12, and 7B.13.

Section 7B.04 Height of Signs

Support:
01 Section 2A.18 contains provisions regarding the mounting height of signs.

Section 7B.05 Installation of Signs

Support:
01 Section 2A.16 contains provisions regarding the installation of signs.

Section 7B.06 Lettering

Support:
01 The “Sign Designs and Markings Manual” (SDMM) (see Section 1A.11) contains information regarding sign lettering.

Section 7B.07 Sign Color for School Warning Signs

Standard:
01 School warning signs, including the “SCHOOL” portion of the School Speed Limit (S5-H1) 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.
### Table 7B-1. School Area Sign and Plaque Sizes

<table>
<thead>
<tr>
<th>Sign</th>
<th>Sign Designation</th>
<th>Section</th>
<th>Conventional Road Minimum</th>
<th>Oversized</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Single Lane</td>
<td>Multi-Lane</td>
</tr>
<tr>
<td>School</td>
<td>S1-1</td>
<td>7B.08</td>
<td>36 x 36</td>
<td>36 x 36</td>
</tr>
<tr>
<td>School Bus Stop Ahead</td>
<td>S3-1</td>
<td>7B.14</td>
<td>36 x 36</td>
<td>36 x 36</td>
</tr>
<tr>
<td>SCHOOL BUS TURN AHEAD</td>
<td>S3-2</td>
<td>7B.15</td>
<td>36 x 36</td>
<td>36 x 36</td>
</tr>
<tr>
<td>School Speed Limit Ahead</td>
<td>S4-5</td>
<td>7B.16</td>
<td>36 x 36</td>
<td>36 x 36</td>
</tr>
<tr>
<td>School Speed Limit (During Restricted Hours/Hours)</td>
<td>S5-H1</td>
<td>7B.10</td>
<td>24 x 48</td>
<td>30 x 60</td>
</tr>
<tr>
<td>END SCHOOL SPEED LIMIT</td>
<td>S5-3</td>
<td>7B.10</td>
<td>24 x 30</td>
<td>30 x 60</td>
</tr>
<tr>
<td>In-Street Pedestrian Crossing</td>
<td>R1-6, R1-6b</td>
<td>7B.12, 7B.13</td>
<td>12 x 36</td>
<td>12 X 36</td>
</tr>
<tr>
<td>Overhead Pedestrian Crossing</td>
<td>R1-9</td>
<td>7B.13</td>
<td>90 x 24</td>
<td>90 X 24</td>
</tr>
<tr>
<td>Speed Limit (School Use)</td>
<td>R2-1</td>
<td>7B.15</td>
<td>24 x 30</td>
<td>30 x 36</td>
</tr>
<tr>
<td>BEGIN HIGHER FINES ZONE</td>
<td>R2-10</td>
<td>7B.11</td>
<td>24 x 30</td>
<td>30 x 36</td>
</tr>
<tr>
<td>END HIGHER FINES ZONE</td>
<td>R2-11</td>
<td>7B.11</td>
<td>24 x 30</td>
<td>30 x 36</td>
</tr>
<tr>
<td>STOP FOR SCHOOL BUS LOADING OR UNLOADING…</td>
<td>R16-H3</td>
<td>7B.18</td>
<td>30 x 30</td>
<td>42 x 42</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plaque</th>
<th>Sign Designation</th>
<th>Section</th>
<th>Conventional Road Minimum</th>
<th>Oversized</th>
</tr>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Single Lane</td>
<td>Multi-Lane</td>
</tr>
<tr>
<td>X:XX - X:XX AM</td>
<td>S4-1P</td>
<td>7B.10</td>
<td>24 x 10</td>
<td>30 x 12</td>
</tr>
<tr>
<td>X:XX - X:XX PM</td>
<td>S4-3P</td>
<td>7B.09, 7B.10</td>
<td>24 x 8</td>
<td>30 x 10</td>
</tr>
<tr>
<td>SCHOOL</td>
<td>S4-6P</td>
<td>7B.10</td>
<td>24 x 10</td>
<td>30 x 12</td>
</tr>
<tr>
<td>MON - FRI</td>
<td>S4-7P</td>
<td>7B.10</td>
<td>24 x 12</td>
<td>30 x 15</td>
</tr>
<tr>
<td>ALL YEAR</td>
<td>S4-H8P</td>
<td>7B.10</td>
<td>24 x 10</td>
<td>30 x 12</td>
</tr>
<tr>
<td>DURING RESTRICTED HOURS</td>
<td>R2-6P</td>
<td>7B.11</td>
<td>24 x 18</td>
<td>30 x 24</td>
</tr>
<tr>
<td>FINES HIGHER</td>
<td>R2-12P</td>
<td>7B.11</td>
<td>24 x 12</td>
<td>30 x 24</td>
</tr>
<tr>
<td>XXX FEET</td>
<td>W16-2P</td>
<td>7B.08, 7B.09, 7B.12</td>
<td>24 x 18</td>
<td>24 x 18</td>
</tr>
<tr>
<td>XXX FT</td>
<td>W16-2aP</td>
<td>7B.08, 7B.09, 7B.12</td>
<td>24 x 12</td>
<td>24 x 18</td>
</tr>
<tr>
<td>Turn Arrow</td>
<td>W16-5P</td>
<td>7B.08, 7B.09, 7B.12</td>
<td>24 x 12</td>
<td>24 x 12</td>
</tr>
<tr>
<td>Advance Turn Arrow</td>
<td>W16-6P</td>
<td>7B.08, 7B.09, 7B.12</td>
<td>24 x 12</td>
<td>24 x 12</td>
</tr>
<tr>
<td>Diagonal Arrow</td>
<td>W16-7P</td>
<td>7B.13</td>
<td>24 x 12</td>
<td>24 x 12</td>
</tr>
<tr>
<td>Diagonal Arrow (Optional Size)</td>
<td>W16-9P</td>
<td>7B.13</td>
<td>24 x 12</td>
<td>24 x 12</td>
</tr>
<tr>
<td>AHEAD</td>
<td>W16-9P</td>
<td>7B.09, 7B.12</td>
<td>24 x 12</td>
<td>24 x 12</td>
</tr>
</tbody>
</table>

Notes:
1. Larger sizes may be used when appropriate.
2. Dimensions are shown in inches and are shown as width x height.

January 13, 2012
Figure 7B-1. School Area Signs

School Zone Ahead* and School Crossing Ahead Assembly

- S1-1
  - AHEAD
  - W16-9P
  - OR
  - 200 FT
  - W16-2aP
  - OR
  - 200 FEET
  - W16-2P
  - OR
  - W16-5P **
  - OR
  - W16-6P **

School Crossing Assembly

- S1-1
  - W16-7P

School Speed Limit Assembly

- S4-3P
  - SPEED LIMIT 20
  - R2-1
  - OR
  - ALL YEAR 7:30-8:30 AM and 2:30-3:30 PM
  - S4-1P
  - OR
  - NO STANDING
  - S4-2P
  - OR
  - NO STOPPING
  - S4-4P
  - OR
  - MON-FRI
  - S4-6P

* The S4-3P may also be used to supplement the School Zone Ahead assembly.

** The W16-5P or W16-6P may be used to supplement the S-1 on each approach to an intersection when a school zone or school crossing is located on a cross street in close proximity to the intersection.
**Section 7B.08 School Sign (S1-1) and Plaques**

Support:

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

A. School Zone Ahead – as part of a School Zone Ahead Assembly, the S1-1 sign can be used to provide advance notice of a designated school zone (see Section 7B.09).

B. School Crossing Ahead – as part of a School Crossing Ahead assembly, 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.12).

C. School Crossing – if combined with a diagonal downward pointing arrow (W16-7P) plaque to comprise the School Crossing assembly, 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.13).

Option:

02 If a school area 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 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 Ahead Assembly (S1-1, S4-3P, W16-2P, W16-2aP, W16-5P, W16-6P, W16-9P)**

Support:

01 Section 4511.21(B)(1)(a) of the Ohio Revised Code (ORC) establishes a 20 mile per hour speed limit for School Zones, and establishes when that speed limit is in effect (see Appendix B2).

02 Section 4511.21(B)(1)(c) of the ORC defines a traditional School Zone as “that portion of a street or highway passing a school fronting upon the street or highway that is encompassed by projecting the school property lines to the fronting street or highway, and also includes that portion of a state highway.” This ORC Section also establishes a means by which the Ohio Department of Transportation (ODOT), upon request from a local authority, may approve extensions of the traditional School Zone boundaries or designate a School Zone on a portion of a state route for certain crosswalks customarily used by children going to or leaving a school.

03 Complete instructions and a form for submitting an application for approval of a non-traditional School Zone are available from the ODOT Office of Traffic Engineering and each ODOT District Office.

Guidance:

04 Requests for changes in the traditional School Zone boundaries should be submitted to the ODOT District Deputy Director in accordance with the procedure described in Part 7 of the ODOT “Traffic Engineering Manual” (TEM) (see Section 1A.11).

Standard:

05 A School Zone Ahead assembly consisting of a School (S1-1) sign supplemented with an AHEAD (W16-9P) or XX Feet (W16-2P or W16-2aP) plaque (see Figure 7B-1) shall be installed in advance of the designated school zone (see Figures 7B-2 and 7B-4).

Option:

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

07 If a school zone 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 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.

**Section 7B.10 School Speed Limit Assembly (S4-1P, S4-3P, S4-H8P, S4-6P), School Speed Limit Sign (S5-H1), and END SCHOOL SPEED LIMIT Sign (S5-3)**

Standard:

01 A School Speed Limit assembly (see Figure 7B-1) or a School Speed Limit (S5-H1) sign (see Figure 7B-1) shall be used to indicate the speed limit where a school zone has been established. The School Speed Limit assembly or School Speed Limit sign shall be placed at or as near as practical to the point where the school zone begins (see Figures 7B-2 and 7B-4).
A School Zone Ahead assembly (Section 7B.09) shall be installed in advance (see Table 2C-4 for advance placement guidelines) of the School Speed Limit assembly or S5-H1 sign that is encountered in each direction as traffic approaches the school zone (see Figures 7B-2 and 7B-4).

Except as provided in Paragraph 10, the downstream end of a school zone shall be identified with an END SCHOOL SPEED LIMIT (S5-3) sign or a standard Speed Limit sign showing the speed limit for the section of highway that is downstream (see Figures 7B-1 and 7B-4).

Guidance:

04 There should be no Speed Limit signs erected or in place within the limits of the School Zone.

05 There should also be no Speed Limit signs within the space between either the School Zone Ahead assembly (Section 7B.09) or the School Speed Limit Ahead sign (Section 7B.16) and the beginning of the School Zone, or closer than 500 feet in advance of the School Zone Ahead or the School Speed Limit Ahead sign.

06 Where a side street intersects the highway within the School Zone, additional School Speed Limit assemblies/signs should be erected on the highway as needed to notify motorists entering the school zone from the side street of the School Zone speed limit. The School Speed Limit assembly/sign should be mounted along the right-hand side of the roadway.

Standard:

07 The School Speed Limit assembly shall be either a fixed-message sign assembly or a changeable message sign.

08 The fixed-message 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-H8P, or S4-6P) indicating when the school speed limit is in effect (see Figure 7B-1).

Option:

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

10 At the downstream end of a school zone, an END SCHOOL SPEED LIMIT sign and a Speed Limit sign may be mounted together on the same post.

11 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 school speed limit is needed.

Guidance:

12 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.

13 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:

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

Option:

15 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.

16 Changeable message signs that display the speed of approaching drivers (see Section 2B.13) may be used in a school speed limit zone.

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

Option:

18 Where side mounting does not provide adequate sight distance or is otherwise impractical, the School Speed Limit assembly or the School Speed Limit (S5-H1) sign may be mounted overhead.
Section 7B.11 Higher Fines Zone Signs (R2-10, R2-11) and Plaques

Standard:

Where increased fines are imposed for traffic violations within a designated school zone, 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-3) shall be installed as a supplement to the School Speed Limit assembly or the School Speed Limit (S5-H1) sign to identify the beginning point of the higher fines zone (see Figure 7B-2).

Option:

For advance notice, a FINES HIGHER (R2-6P), FINES DOUBLE (R2-6aP), or $XX FINE (R2-6bP) plaque may be used to supplement the School Zone Ahead assembly.

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 plaque, or
C. A WHEN FLASHING plaque if used in conjunction with a yellow flashing beacon.

Standard:

Where Higher Fines Zone signs and plaques have been 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 SPEED LIMIT (S5-3) sign 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-2).

Section 7B.12 School Crossing Ahead Assembly

Standard:

The School Crossing Ahead assembly 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 (see Figure 7B-1).

Except as provided in Paragraph 3, a School Crossing Ahead assembly shall be used in advance (see Table 2C-4 for advance placement guidelines) of the first School Crossing assembly (see Section 7B.13) that is encountered in each direction as traffic approaches a school crosswalk (see Figure 7B-3).

Option:

The School Crossing Ahead assembly may be omitted (see Figure 7B-4) where a School Speed Limit assembly or the School Speed Limit (S5-H1) sign (see Section 7B.10) 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 (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 crosswalk soon after making the turn.

A 12-inch reduced size in-street School (S1-1) sign (see Figure 7B-5), installed in compliance with the mounting height and special mounting support requirements for In-Street Pedestrian Crossing (R1-6) signs (see Section 2B.12), 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 may be mounted below the reduced size in-street School (S1-1) sign.

Section 7B.13 School Crossing Assembly

Standard:

If used, the School Crossing assembly (see Figure 7B-1) shall be installed at the school crossing (see Figures 7B-3 and 7B-4), 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 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 approaches controlled by a STOP or YIELD sign.

Option:

The In-Street Pedestrian Crossing (R1-6) sign (see Section 2B.12 and Figure 7B-5) or the In-Street Schoolchildren Crossing (R1-6b) sign (see Figure 7B-5) may be used at unsignalized school crossings. If used at a school crossing, a 12 x 4-inch SCHOOL (S4-3P) plaque (see Figure 7B-5) may be mounted above the sign. The STATE LAW legend on the R1-6 series signs may be omitted.

The Overhead Pedestrian Crossing (R1-9) sign (see Section 2B.12 and Figure 2B-2) may be modified to replace the standard pedestrian symbol with the standard schoolchildren symbol and may be used at unsignalized school crossings. The STATE LAW legend on the R1-9 series signs may be omitted.

A 12-inch reduced size in-street School (S1-1) sign (see Figure 7B-5) may be used at an unsignalized school crossing instead of the In-Street Pedestrian Crossing (R1-6) sign. A 12 x 6-inch reduced size diagonal downward pointing arrow (W16-7P) plaque may be mounted below the reduced size in-street School (S1-1) sign.

Standard:

If an In-Street Pedestrian Crossing sign, an In-Street Schoolchildren 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 In-Street Pedestrian Crossing (R1-6) signs (see Section 2B.12).

The In-Street Pedestrian Crossing sign, the In-Street Schoolchildren Crossing, the Overhead Pedestrian Crossing sign, and the reduced size in-street School (S1-1) sign shall not be used at signalized locations.

Section 7B.14 School Bus Stop Ahead Sign (S3-1)

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.

Standard:

These signs shall be erected only on the basis of a traffic engineering study and after the school transportation officials have confirmed the need for the stop.

Guidance:

The need for these signs at existing locations should be reevaluated periodically.

Section 7B.15 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-4, and where there is no opportunity to relocate the school bus turn around to provide the distance provided in Table 2C-4.

Standard:

These signs shall be erected only after the school transportation officials have confirmed the need for the turn.

Guidance:

The need for these signs at existing locations should be reevaluated periodically.

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

Guidance:

A School Speed Limit Ahead (S4-5, S4-5a) sign (see Figure 7B-1) should be used to inform road users of a school zone where the speed limit is being reduced by more than 10 miles per hour, or where engineering judgment indicates that advance notice would be appropriate.
Standard:
02 If used, the School Speed Limit Ahead sign shall be followed by a School Speed Limit (S5-H1) sign or a School Speed Limit assembly (Section 7B.10).
03 The speed limit displayed on the School Speed Limit Ahead sign shall be the School Zone speed limit.

Section 7B.17 Parking and Stopping Signs (R7 and R8 Series)
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:
02 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 X:XX AM to X:XX PM School Days Only;
   B. No Stopping X:XX AM to X:XX PM School Days Only;
   C. XX Min Loading X:XX AM to X:XX PM School Days Only; and
03 Sections 2B.46, 2B.47, and 2B.48 contain information regarding the signing of parking regulations in school zone areas.

Section 7B.18 STOP FOR SCHOOL BUS LOADING OR UNLOADING Sign (R16-H3)
Option:

The STOP FOR SCHOOL BUS LOADING OR UNLOADING (R16-H3) sign (see Figure 7B-1) may be used to remind road users of the provisions of Section 4511.75 of the Ohio Revised Code (see Appendix B2) prohibiting passing of school buses in either direction on undivided highways when loading or unloading schoolchildren.
Figure 7B-2. Example of Signing for a Higher Fines School Zone
Figure 7B-3. Examples of Signing for a School Crossing Outside of a School Zone
Figure 7B-4. Examples of Signing for a School Zone with a School Crossing

Note: The use of a School Advance Crossing Assembly is optional within a signed school zone (see Section 7B.12).
Figure 7B-5. In-Street Signs in School Areas

A - In advance of the school crossing

* Reduced size signs:
  - S1-1  12 x 12 inches
  - S4-3P  12 x 4 inches
  - W16-7P  12 x 6 inches
  - W16-9P  12 x 6 inches

B - At the school crossing

Notes:
1. The use of the STATE LAW legend is optional on the R1-6 series signs (see Section 7B.13).
2. The use of the SCHOOL plaque above the R1-6 sign is optional.
Intentionally blank.
CHAPTER 7C. MARKINGS

Section 7C.01 Functions and Limitations

Support:

01 Markings have definite and important functions in a proper scheme of school area traffic control. In some cases, they are used to supplement the regulations or warnings provided by other devices, such as traffic signs or signals. In other instances, they are used alone and produce results that cannot be obtained by the use of any other device. In such cases they serve as an effective means of conveying certain regulations, guidance, and warnings that could not otherwise be made clearly understandable.

02 Pavement markings have some potential limitations. They might be obscured by snow, might not be clearly visible when wet, and might not be durable when subjected to heavy traffic. In spite of these potential limitations, they have the advantage, under favorable conditions, of conveying warnings or information to the road user without diverting attention from the road.

Section 7C.02 Crosswalk Markings

Guidance:

01 Crosswalks should be marked at all intersections on established routes to a school where there is substantial conflict between motorists, bicyclists, and student movements; where students are encouraged to cross between intersections; where students would not otherwise recognize the proper place to cross; or where motorists or bicyclists might not expect students to cross (see Figure 7A-1).

02 Crosswalk lines should not be used indiscriminately. An engineering study considering factors described in Section 3B.18 should be performed before a marked crosswalk is installed at a location away from a traffic control signal or an approach controlled by a STOP or YIELD sign.

03 Because non-intersection school crossings are generally unexpected by the road user, warning signs (see Sections 7B.12 and 7B.13) should be installed for all marked school crosswalks at non-intersection locations. Adequate visibility of students by approaching motorists and of approaching motorists by students should be provided by parking prohibitions or other appropriate measures.

Support:

04 Section 3B.18 contains provisions regarding the placement and design of crosswalks, and Section 3B.16 contains provisions regarding the placement and design of the stop lines and yield lines that are associated with them. Provisions regarding the curb markings that can be used to establish parking regulations on the approaches to crosswalks are contained in Section 3B.23.

Section 7C.03 Pavement Word, Symbol, and Arrow Markings

Guidance:

01 When the SCHOOL marking is used, it should be placed at least 100 feet in advance of the School Zone.

Option:

02 If used, the SCHOOL word marking may extend to the width of two approach lanes (see Figure 7C-1).

Guidance:

03 If the two-lane SCHOOL word marking is used, the letters should be 10 feet or more in height.

Support:

04 Section 3B.20 contains provisions regarding other word, symbol, and arrow pavement markings that can be used to guide, warn, or regulate traffic.
Figure 7C-1. Two-Lane Pavement Marking of “SCHOOL”
CHAPTER 7D. CROSSING SUPERVISION

Section 7D.01 Types of Crossing Supervision

Support:
01 There are three types of school crossing supervision:
   A. Adult control of pedestrians and vehicles by adult crossing guards,
   B. Adult control of pedestrians and vehicles by uniformed law enforcement officers, and
   C. Student and/or parent control of only pedestrians with student and/or parent patrols.

02 Information regarding the organization, administration and operation of a school safety patrol program is contained in the “AAA School Safety Patrol Operations Manual” (see Section 1A.11).

Section 7D.02 Adult Crossing Guards

Option:
01 Adult crossing guards may be used to provide gaps in traffic at school crossings where an engineering study has shown that adequate gaps need to be created (see Section 7A.03), and where authorized by law.

Section 7D.03 Qualifications of Adult Crossing Guards

Support:
01 High standards for selection of adult crossing guards are essential because they are responsible for the safety of and the efficient crossing of the street by schoolchildren within and in the immediate vicinity of school crosswalks.

Guidance:
02 Adult crossing guards should possess the following minimum qualifications:
   A. Average intelligence;
   B. Good physical condition, including sight, hearing, and ability to move and maneuver quickly in order to avoid danger from errant vehicles;
   C. Ability to control a STOP paddle effectively to provide approaching road users with a clear, fully direct view of the paddle’s STOP message during the entire crossing movement;
   D. Ability to communicate specific instructions clearly, firmly, and courteously;
   E. Ability to recognize potentially dangerous traffic situations and warn and manage students in sufficient time to avoid injury;
   F. Mental alertness;
   G. Neat appearance;
   H. Good character;
   I. Dependability; and
   J. An overall sense of responsibility for the safety of students.

Section 7D.04 Uniform of Adult Crossing Guards

Standard:
01 Law enforcement officers performing school crossing supervision and adult crossing guards shall wear high-visibility retroreflective safety apparel labeled as ANSI 107-2004 standard performance for Class 2 as described in Section 6E.02.

Section 7D.05 Operating Procedures for Adult Crossing Guards

Standard:
01 Adult crossing guards shall not direct traffic in the usual law enforcement regulatory sense. In the control of traffic, they shall pick opportune times to create a sufficient gap in the traffic flow. At these times, they shall stand in the roadway to indicate that pedestrians are about to use or are using the crosswalk, and that all vehicular traffic must stop.

02 Adult crossing guards shall use a STOP paddle. The STOP paddle shall be the primary hand-signaling device.

03 The STOP (R1-1) paddle shall be an octagonal shape. The background of the STOP face shall be red with at least 6-inch series upper-case white letters and border. The paddle shall be at least 18
inches in size and have the word message STOP on both sides. The paddle shall be retroreflectORIZED or illuminated when used during hours of darkness.

Option:

The STOP paddle may be modified to improve conspicuity by incorporating white or red flashing lights on both sides of the paddle. Among the types of flashing lights that may be used are individual LEDs or groups of LEDs.

04 The white or red flashing lights or LEDs may be arranged in any of the following patterns:

A. Two white or red lights centered vertically above and below the STOP legend;
B. Two white or red lights centered horizontally on each side of the STOP legend;
C. One white or red light centered below the STOP legend; or
D. A series of eight or more small white or red lights having a diameter of ¼ inch or less along the outer edge of the paddle, arranged in an octagonal pattern at the eight corners of the STOP paddle (more than eight lights may be used only if the arrangement of the lights is such that it clearly conveys the octagonal shape of the STOP paddle), or
E. A series of white lights forming the shapes of the letters in the legend.

Standard:

05 If flashing lights are used on the STOP paddle, the flash rate shall be at least 50, but no more than 60, flash periods per minute.