

**2007 NOTICE OF PROPOSED AMENDMENTS  
MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES  
LIST OF PARTS, CHAPTERS, AND SECTIONS**

**SECTION : 7 (Schools)**  
**APPROVAL OF NPA BY RWSTC 1-11-08**  
**RWSTC CHANGES SHOWN IN YELLOW**  
**NCUTCD COUNCIL APPROVED SECTION 7A, B & D**  
**January 12, 2008**  
**REVISED 1-27-08 BASED ON COUNCIL APPROVALS**

**CHAPTER 7A. GENERAL**

**Section 7A.01 Need for Standards**

Support:

~~It is important to stress that~~ Regardless of the school location, the best way to achieve ~~reasonably safe and~~ effective traffic control **in a manner that is intended to minimize the occurrences of crashes** is through the uniform application of realistic policies, practices, and standards developed through engineering judgment or studies.

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.

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.

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~~).~~

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 ~~activities~~ **solutions**. Engineering measures solutions alone might not result in will often not prompt the intended change in student and road user behavior.

Guidance:

A school route 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.

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.

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

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

5 Support:

6 Reduced speed limit signs for school areas and crossings are included in this Manual solely  
7 for the purpose of standardizing signing for these zones and not as an endorsement of mandatory  
8 reduced speed zones.

## 9 **Section 7A.02 School Routes and Established School Crossings**

10 Support:

11 [To establish a safer route to and from school for schoolchildren, the application of ~~The~~](#)  
12 [planning criterion for school walk routes might make it necessary for children to walk an indirect](#)  
13 [route to an established school crossing located where there is existing traffic control and to avoid](#)  
14 [the use of a direct crossing where there is no existing traffic control.](#)

15 Guidance:

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

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

- 19 A. The availability of adequate sidewalks or off-roadway sidewalk areas to and from the  
20 location with existing control,
- 21 B. The number of students using the crossing,
- 22 C. The age levels of the students using the crossing, and
- 23 D. The total extra walking distance.

## 24 **Section 7A.03 School Crossing Control Criteria**

25 Support:

26 ~~Alternate~~ [The frequency of gaps and blockades are inherent](#) in the traffic stream [that are](#)  
27 [sufficient for student crossing and are is](#) different at each crossing location. ~~For safety, students~~  
28 ~~need to wait for a gap in traffic that is of sufficient duration to permit reasonably safe crossing.~~  
29 When the delay between the occurrences of adequate gaps becomes excessive, students might  
30 become impatient and endanger themselves by attempting to cross the street during an inadequate  
31 gap. [In these instances, the creation of sufficient gaps needs to be considered to accommodate the](#)  
32 [crossing demand.](#)

33 A recommended method for determining the frequency and adequacy of gaps in the traffic  
34 stream is given in the ~~Institute of Transportation Engineers' publication, "School Trip Safety~~  
35 ~~Program Guidelines"~~ ["Traffic Control Devices Handbook"](#) (see Section 1A.11).

## 36 **Section 7A.04 Scope**

37 Standard:

38 Part 7 sets forth basic principles and prescribes standards that shall be followed in the  
39 design, application, installation, and maintenance of all traffic control devices (including  
40 signs, signals, and markings) and other controls (including adult crossing guards, student  
41 patrols, and grade-separated crossings) required for the special pedestrian conditions in  
42 school areas.

43 ~~Option:~~

44 ~~In roadway signs for school traffic control areas may be used consistent with the~~  
45 ~~requirements of Sections 2B.12, 7B.08, and 7B.09.~~ **relocated to Section 7B.03**

1 Support:

2 The introduction to this Manual contains information regarding the meaning of the headings  
3 Standard, Guidance, Option, and Support, and the use of the words “shall,” “should,” and “may.”  
4 relocated from Section 7A.10

5 Sections 1A.01 and 1A.08 contain information regarding unauthorized devices and messages.  
6 Sections 1A.02 and 1A.07 contain information regarding the application of standards. Section  
7 1A.05 contains information regarding the maintenance of traffic control devices. Section 1A.08  
8 contains information regarding placement authority for traffic control devices. Section 1A.09  
9 contains information regarding engineering studies. relocated from Sections 7A.05 through 7A.09

10 Requirements Provisions edited to improve consistency discussed in Chapter 2A and Section  
11 2B.06 are applicable in school areas.

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

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

### 15 ~~Section 7A.05 Application of Standards~~

16 ~~Support:~~

17 ~~Sections 1A.02 and 1A.07 contain information regarding the application of standards.~~

### 18 ~~Section 7A.06 Engineering Study Required~~

19 ~~Support:~~

20 ~~Section 1A.09 contains information regarding engineering studies.~~

### 21 ~~Section 7A.07 Maintenance of Traffic Control Devices~~

22 ~~Support:~~

23 ~~Section 1A.05 contains information regarding the maintenance of traffic control devices.~~

### 24 ~~Section 7A.08 Placement Authority~~

25 ~~Support:~~

26 ~~Section 1A.08 contains information regarding placement authority for traffic control devices.~~

### 27 ~~Section 7A.09 Unauthorized Devices and Messages~~

28 ~~Support:~~

29 ~~Sections 1A.01 and 1A.08 contain information regarding unauthorized devices and messages.~~

### 30 ~~Section 7A.10 Meaning of Standard, Guidance, Option, and Support~~

31 ~~Support:~~

32 ~~The introduction to this Manual contains information regarding the meaning of the headings~~  
33 ~~Standard, Guidance, Option, and Support, and the use of the words shall, should, and may.~~  
34 Sections 7A.05 through 7A.10 relocated to Section 7A.04

### 35 Section 7A.05 Grade-Separated School Crossings this Section was added to take the 36 place of Chapter 7F

37 Support:

38 Grade-separated crossings (overpasses over the highway or underpasses under the highway)  
39 are sometimes used to physically separate the crossing of school pedestrian traffic and vehicular  
40 flow. Experience has shown that overpasses are more satisfactory than underpasses for school  
41 pedestrian crossings, as overpasses are easier to maintain and supervise.

1 If using the grade-separated crossing will be less convenient to school pedestrians than  
2 making an at-grade crossing, barriers or supervision are sometimes provided to assure a  
3 satisfactory level of use of the grade-separated crossing.

4 The published policies of the American Association of State Highway and Transportation  
5 Officials, such as “A Policy on Geometric Design of Highways and Streets” (see Section 1A.11),  
6 contain guidelines for the design of grade-separated crossings.

7

1 CHAPTER 7B. SIGNS

2 Section 7B.01 Size of School Signs

3 **TABLE 7B-1: PLAQUE SIZES MUST BE MADE CONSISTENT WITH THE**  
4 **PRIMARY SIGN SIZES.**

5 Standard:

6 Except as noted in Section 2A.11, the sizes of signs and plaques to be used on  
7 conventional roadways in school areas shall be as shown in Table 7B-1.

8 The sizes in the Conventional Road sign-size column shall be used ~~on public roads,~~  
9 ~~streets, and highways~~ unless engineering judgment determines that a minimum or oversized  
10 sign size would be more appropriate.

11 The sizes in the Minimum sign-size column, which is applicable only to the School (S1-  
12 1), SCHOOL BUS STOP AHEAD (S3-1), SCHOOL BUS TURN AHEAD (S3-2), and  
13 Reduced Speed School Zone Ahead (S4-5, S4-5a) signs, may shall only be used only on local  
14 residential streets, in urban areas, and where there are low traffic volumes and low vehicle  
15 speeds ~~speeds~~ the 85<sup>th</sup> percentile speed or posted speed limit is less than 60 km/h (35 mph),  
16 as determined by engineering judgment.

17 The sizes in the Oversized sign-size column shall be used on expressways.

18 Option:

19 The sizes in the Oversized sign-size column may be used for applications that require  
20 increased emphasis, improved recognition, or increased legibility.

21 Signs and plaques larger than those shown in Table 7B-1 may be used (see Section 2A.11).

22 Section 7B.02 Illumination and Reflectorization

23 Standard:

24 The signs used for school area traffic control shall be retroreflectorized or illuminated.

25 Section 7B.03 Position of Signs

26 Guidance:

27 Signs should be placed in positions where they will convey their messages most effectively  
28 without restricting lateral ~~clearance~~ offset or sight distances. Placement therefore should consider  
29 highway design, alignment, vehicle speed, ~~and~~ roadside development, pedestrians, and other non-  
30 motorized road users.

31 Signs should have a ~~maximum practical reasonable clearance~~ reasonable lateral offset from the edge of  
32 the traveled way for the safety of vehicles that might leave the roadway and strike the sign  
33 supports. Except as noted in the Option below, signs should not be closer than 1.8 m (6 ft) from  
34 the edge of a paved shoulder, or if none, 3.7 m (12 ft) from the edge of the traveled way.

35 Option:

36 In urban areas, a lesser ~~clearance~~ lateral offset of not less than 0.6 m (2 ft) from the face of  
37 the curb may be used. In urban areas, where sidewalk width is limited or existing poles are close  
38 to the curb, a ~~clearance~~ lateral offset of 0.3 m (1 ft) from the curb face may be used.

39 In roadway signs for school traffic control areas may be used consistent with the  
40 requirements of Sections 2B.12, 7B.08, and 7B.11, relocated from Section 7A.04

41 Section 7B.04 Height of Signs

42 Support:

43 Section 2A.18 contains information regarding the mounting height of signs.

1 **Section 7B.05 Installation of Signs**

2 Support:

3 Section 2A.16 contains information regarding the installation of signs.

4 **Section 7B.06 Lettering**

5 Support:

6 The ~~Federal Highway Administration's~~ **deleted to increase consistency** "Standard Highway  
7 Signs [and Markings](#)" book (see Section 1A.11) contains information regarding sign lettering.

8 **Section 7B.07 Sign Color for School Warning Signs**

9 **Standard:**

10 **~~Except as noted in the Option,~~ School warning signs, including the "SCHOOL" portion  
11 of the School Speed Limit (S5-1) sign, and any supplemental plaques used in association  
12 with these signs shall have a fluorescent yellow-green background with a black legend and  
13 border unless otherwise stated in this Manual for a specific sign.**

14 **Option:**

15 ~~All school warning signs in addition to the following signs may have a fluorescent yellow-  
16 green background with a black legend and border:~~

- 17 ~~A. School Advance Warning sign (S1-1);~~
- 18 ~~B. SCHOOL BUS STOP AHEAD sign (S3-1);~~
- 19 ~~C. SCHOOL plaque (S4-3);~~
- 20 ~~D. The "SCHOOL" portion of the School Speed Limit sign (S5-1);~~
- 21 ~~E. XXX FEET plaque (W16-2 series);~~
- 22 ~~F. AHEAD plaque (W16-9p);~~
- 23 ~~G. Diagonal Arrow plaque (W16-7p); and~~
- 24 ~~H. Reduced Speed School Zone Ahead sign (S4-5, S4-5a).~~

25 **Guidance:**

26 ~~When the fluorescent yellow-green background color is used, a systematic approach featuring  
27 one background color within a zone or area should be used. The mixing of standard yellow and  
28 fluorescent yellow-green backgrounds within a zone or area should be avoided.~~

29 **Section 7B.08 School ~~Advance Warning Assembly~~ Sign (S1-1 with Supplemental  
30 ~~Plaque~~)**

31 **Guidance:**

32 ~~The School Advance Warning assembly (see Figure 7B-1) should be installed in advance of  
33 locations where school buildings or grounds are adjacent to the highway, except where a physical  
34 barrier such as fencing separates schoolchildren from the highway.~~

35 **Standard:**

36 ~~The School Advance Warning assembly shall be used in advance of any installation of  
37 the School Crosswalk Warning assembly (see Figure 7B-2), or in advance of the first  
38 installation of the School Speed Limit assembly (see Figure 7B-3).~~

39 ~~If used, the School Advance Warning assembly shall be installed not less than 45 m (150  
40 ft) or more than 210 m (700 ft) in advance of the school grounds or school crossings.~~

41 ~~If used, the School Advance Warning assembly shall consist of a School Advance  
42 Warning (S1-1) sign supplemented with a plaque with the legend AHEAD (W16-9p) or  
43 XXX METERS (XXX FEET) (W16-2 or W16-2a) to provide advance notice to road users of  
44 crossing activity.~~

45 **Support:**

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

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

10 A. School Area or Zone – if used alone, the S1-1 sign warns road users that they are  
11 approaching school buildings or grounds, a school crossing, or school related activity  
12 adjacent to the highway, and it marks the beginning of a designated school zone (see  
13 Figure 7B-2).

14 B. School Advance Crossing – if combined with an AHEAD (W16-9P) plaque or an XX  
15 METERS (FEET) (W16-2P or W16-2aP) plaque to comprise the School Advance  
16 Crossing assembly, the S1-1 sign warns road users that they are approaching a crossing  
17 where schoolchildren cross the roadway (see Figure 7B-3).

18 C. School Crossing – if combined with a downward diagonal pointing arrow (W16-7P)  
19 plaque to comprise the School Crossing assembly, the S1-1 sign warns approaching road  
20 users of the location of a crossing where schoolchildren cross the roadway (see Figures  
21 7B-3 and 7B-4).

## 22 Section 7B.09 School Area or School Zone Sign

### 23 Option:

24 The School (S1-1) sign may be installed in advance of locations where school buildings or  
25 grounds are adjacent to the highway to warn road users that they are approaching a school area.

### 26 Standard:

27 If a school zone has been designated under State or local statute, a School (S1-1) sign  
28 shall be installed to mark the beginning point(s) of the designated school zone (see Figure  
29 7B-2).

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

### 34 Option:

35 A School (S1-1) sign that is installed to warn road users of a school area or a school zone (see  
36 Figure 7B-2) may be supplemented with a SCHOOL (S4-3P) plaque or an appropriate  
37 enforcement sign or plaque, such as a FINES HIGHER, FINES DOUBLE, or \$XX FINE plaque  
38 (see Section 2B.17).

39 If a school area or school zone is located on a cross street **in close proximity to an**  
40 **intersection, less than 38 m (125 ft) from edge of a street or highway,** a School (S1-1) sign with a  
41 supplemental arrow (W16-5P or W16-6P) plaque (see Figure 7B-1) may be installed on each  
42 approach ~~of~~ to the cross street **intersection or highway** to warn road users making a turn onto the  
43 cross street that they will encounter a school area or school zone soon after making the turn.

44 **ADD SIGNS W16-5P (FYG), W16-6P (FYG), and R2-6P TO FIGURE 7B-1.**

45 **CHANGE TITLE OF FIGURE 7B-2 to “Example of Signing for a School Zone without a School**  
46 **Crossing”**

1 CHANGE TITLE OF FIGURE 7B-3 to “Example of Signing for a School Crossing outside  
2 of a School Zone”

3 CHANGE TITLE OF FIGURE 7B-4 to “Example of Signing for a School Zone with a  
4 School Speed Limit and a School Crossing”

5 ADD NOTE TO FIGURE 7B-4 “Use of the School Advance Crossing Assembly is  
6 optional. Refer to Section 7B.10.”. Add School Advance Crossing Assembly with note  
7 regarding optional.

## 8 Section 7B.10 School Advance Crossing Assembly

### 9 Standard:

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

13 Except as noted in the Option below, a School Advance Crossing assembly shall be used  
14 in advance (see Table 2C-4 for advance placement guidelines) of the first School Crossing  
15 assembly (see Section 7B.11) that is encountered in each direction as traffic approaches a  
16 school crosswalk (see Figure 7B-3).

17 Option:

18 The School Advance Crossing assembly may be omitted (see Figure 7B-4) where a School  
19 (S1-1) sign (see Section 7B.09) is installed in advance of the School Crossing assembly.

20 If a school crosswalk is located on a cross street in close proximity to an intersection, less  
21 than 38 m (125 ft) from edge of a street or highway, a School Advance Crossing assembly with a  
22 supplemental arrow (W16-5P or W16-6P) plaque (see Figure 7B-1) may be installed on each  
23 approach of to the cross street intersection or highway to warn road users making a turn onto the  
24 cross street that they will encounter a school area or school zone soon after making the turn.

25  
26 A 300 mm (12 in) reduced size in-street School ~~Advance Warning~~ (S1-1) sign (see Figure  
27 7B-5), installed in compliance with the mounting height and breakaway requirements for In-  
28 Street Pedestrian Crossing (R1-6 or R1-6a) signs (see Section 2B.12), may be used in advance of  
29 a school crossing to supplement the ~~ground-~~ post-mounted school warning signs. A 300 x 150  
30 mm (12 x 6 in) reduced size AHEAD (W16-9P) plaque may be mounted below the reduced size  
31 in-street School ~~Advance Warning~~ (S1-1) sign. this paragraph was in Section 7B.08 of the 2003  
32 MUTCD

## 33 Section ~~7B.09~~ 7B.11 School ~~Crosswalk Warning~~ Crossing Assembly (S1-1 with 34 Diagonal Arrow)

### 35 Standard:

36 If used, the School ~~Crosswalk Warning~~ Crossing assembly (see Figure 7B-1) shall be  
37 installed at the ~~marked-crosswalk~~ school crossing (see Figures 7B-3 and 7B-4), or as close to  
38 it as possible, and shall consist of a School ~~Advance Warning~~ (S1-1) sign supplemented with  
39 a diagonal downward pointing arrow (W16-7P) plaque to show the location of the crossing.

40 The School ~~Crosswalk Warning~~ Crossing assembly shall not be used at ~~marked~~  
41 ~~crosswalks~~ crossings other than those adjacent to schools and those on established school  
42 pedestrian routes.

43 The School ~~Crosswalk Warning~~ Crossing assembly shall not be installed on approaches  
44 controlled by a STOP sign.

45 Guidance:

1 ~~The School Crosswalk Warning assembly should be installed at marked crosswalk(s),~~  
2 ~~including those at signalized locations, used by students going to and from school (see Figure 7B-~~  
3 ~~2) as determined by an engineering study.~~

4 Option:

5 The In-Street Pedestrian Crossing (R1-6 or R1-6a) sign (see Section 2B.12 [and Figure 7B-5](#))  
6 [or the In-Street Schoolchildren Crossing \(R1-6b or R1-6c\) sign \(see Figure 7B-5\)](#) may be used at  
7 unsignalized school crossings. ~~When~~ [If](#) used at a school crossing, a 300 x 100 mm (12 x 4 in)  
8 SCHOOL (S4-3P) plaque (see Figure 7B-5) may be mounted above the sign.

9 [The Overhead Pedestrian Crossing \(R1-9 or R1-9a\) sign \(see Section 2B.12 and Figure 2B-2\)](#)  
10 [may be used at unsignalized school crossings.](#)

11 A 300 mm (12 in) reduced size [in-street](#) [added to increase accuracy](#) School ~~Advance Warning~~  
12 (S1-1) sign (see Figure 7B-5) may be used at an unsignalized school crossing instead of the In-  
13 Street Pedestrian Crossing (R1-6 or R1-6a) [or the In-Street Schoolchildren Crossing \(R1-6b or](#)  
14 [R1-6c\)](#) sign. A 300 x 150 mm (12 x 6 in) reduced size diagonal [downward pointing](#) [edited to](#)  
15 [increase consistency](#) arrow (W16-7P) plaque may be mounted below the reduced size in-street  
16 School ~~Advance Warning~~ (S1-1) sign.

17 Standard:

18 **If an In-Street Pedestrian Crossing sign, an In-Street Schoolchildren Crossing sign, or a**  
19 **reduced size in-street School ~~Advance Warning~~ (S1-1) sign is placed in the roadway, the**  
20 **sign support shall comply with the mounting height and breakaway requirements for In-**  
21 **Street Pedestrian Crossing (R1-6 or R1-6a) signs (see Section 2B.12).**

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

25 [ADD A NOTE TO FIGURE 7B-5: "Use of the legend "STATE LAW" is optional."](#)

### 26 Section ~~7B.10~~ [7B.12](#) ~~SCHOOL BUS STOP AHEAD~~ [School Bus Stop Ahead Sign](#) 27 [\(S3-1\)](#)

28 Guidance:

29 The ~~SCHOOL BUS STOP AHEAD~~ [School Bus Stop Ahead](#) (S3-1) sign (see Figure 7B-1)  
30 should be installed in advance of locations where a school bus, when stopped to pick up or  
31 discharge passengers, is not visible to road users for ~~an adequate distance a distance of 150 m~~  
32 ~~(500 ft) in advance~~ [as determined by the "0" column under Condition B of Table 2C-4](#), and where  
33 there is no opportunity to relocate the [school](#) bus stop to provide [adequate sight distance 150 m](#)  
34 ~~(500 ft) of visibility~~ [the distance specified in Table 2C-4](#).

### 35 [Section 7B.13 SCHOOL BUS TURN AHEAD Sign \(S3-2\)](#)

36 [Option:](#)

37 [The SCHOOL BUS TURN AHEAD \(S3-2\) sign \(see Figure 7B-1\) may be installed in](#)  
38 [advance of locations where a school bus turns around on a roadway at a location not visible to](#)  
39 [approaching road users for an adequate distance a distance as determined by the "0" column](#)  
40 [under Condition B of Table 2C-4](#), and where there is no opportunity to relocate the school bus  
41 [turn around to provide adequate sight distance the distance specified in Table 2C-4. adequate](#)  
42 [sight distance.](#)

### 43 Section ~~7B.11~~ [7B.14](#) [School Speed Limit Assembly \(S4-1P, S4-2P, S4-3P, S4-4P, S4-](#) 44 [6P, S5-1\)](#)

45 Standard:

1 A School Speed Limit assembly (see Figure 7B-1) or a School Speed Limit (S5-1) sign  
2 (see Figure 7B-1) shall be used to indicate the speed limit where a reduced speed zone for a  
3 school area has been established (~~in accordance with law~~ based upon an engineering study)  
4 or where a speed limit is specified for such areas by statute. The School Speed Limit  
5 assembly or School Speed Limit sign shall be placed at or as near as practical to the point  
6 where the reduced speed zone begins ([see Figure 7B-4](#)).

7 Guidance:

8 The reduced speed zone should begin either at a point 60 m (200 ft) from the crosswalk, or at  
9 a point 30 m (100 ft) from the school property line, based on whichever is encountered first as  
10 traffic approaches the school.

11 **Standard:**

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

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

18 Option:

19 Changeable message signs (see ~~Sections 2A.07~~ [Chapter 2M](#) and [Section 6F.57](#)) may be used  
20 to inform drivers of the ~~special~~ school speed limit. If the sign is internally illuminated, it may  
21 have a white legend on a black background. Changeable message signs with flashing beacons  
22 may be used for ~~the more critical~~ situations, where greater emphasis of the special school speed  
23 limit is needed.

24 Guidance:

25 Even though it might not always be practical because of special features to make changeable  
26 message signs conform in all respects to the ~~accepted~~ standards [in this Manual for fixed-message](#)  
27 [signs](#), during the periods that the school speed limit is in effect, their basic shape, message, legend  
28 layout, and colors should ~~conform to~~ [comply with](#) the standards for fixed-message signs.

29 A confirmation ~~beacon~~ [light](#) or device to indicate that the speed limit message is in operation  
30 should be considered for inclusion on the back of the changeable message sign.

31 **Option Standard:**

32 Fluorescent yellow-green pixels ~~may~~ [shall](#) be used when the ~~school-related~~ **“SCHOOL”**  
33 ~~messages are is shown displayed~~ [edited to increase consistency](#) on a changeable message  
34 sign [for a school speed limit](#).

35 **Option:**

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

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

40 A Speed Limit Sign Beacon ([see Section 4L.04](#)) also may be used, with a WHEN  
41 FLASHING legend, to identify the periods that the school speed limit is in effect. The [signal](#)  
42 ~~lenses~~ [indications](#) of the Speed Limit Sign Beacon may be positioned within the face of the  
43 School Speed Limit (S5-1) sign (see Figure 7B-1).

44 A FINES HIGHER (~~R2-6~~), [FINES DOUBLE](#), or [\\$XX FINE](#) ~~sign~~ [plaque](#) (see Section 2B.17)  
45 may be used to advise road users when increased fines are imposed for traffic violations in school  
46 zones.

1 **Section ~~7B.12~~ 7B.15 Reduced Speed School Zone Speed Limit Ahead Sign (S4-5, S4-**  
2 **5a)**

3 Option:

4 The Reduced ~~Speed~~ School ~~Zone~~ Speed Limit Ahead (S4-5, S4-5a) sign (see Figure 7B-1)  
5 may be used to inform road users of a reduced speed zone when engineering judgment indicates  
6 that advance notice would be appropriate.

7 **Standard:**

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

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

13 **Section ~~7B.13~~ 7B.16 END SCHOOL ZONE Sign (S5-2)**

14 **Standard:**

15 The downstream end of a designated school area or school zone (see Section 7B.09) shall  
16 be marked with an END SCHOOL ZONE (S5-2) sign (see Figures 7B-1 and 7B-2).

17 The downstream end of an authorized and posted school speed zone shall be marked  
18 with a ~~standard Speed Limit sign showing the speed limit for the section of highway that~~  
19 ~~follows or with~~ an END SCHOOL ZONE (S5-2) sign (see Figures 7B-1 and 7B-4). A  
20 standard Speed Limit sign showing the speed limit for the section of highway that is  
21 downstream from the authorized and posted school speed zone shall be mounted on the  
22 same post as the END SCHOOL ZONE (S5-2) sign.

23 **Section ~~7B.14~~ 7B.17 Parking and Stopping Signs (R7 and R8 Series)**

24 Option:

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

28 Support:

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

- 31 A. No Parking X:XX AM to X:XX PM School Days Only,
- 32 B. No Stopping X:XX AM to X:XX PM School Days Only,
- 33 C. XX Min Loading X:XX AM to X:XX PM School Days Only, and
- 34 D. No Standing X:XX AM to X:XX PM School Days Only.

35 Sections 2B.53, 2B.54, and 2B.55 contain information regarding the signing of parking  
36 regulations in school zone areas.

37

## CHAPTER 7C. MARKINGS

### Section 7C.01 Functions and Limitations

Support:

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.

Pavement markings have [some potential](#) limitations. They might be obliterated 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 Standardization of Application

Standard:

Each ~~standard~~ marking [described in Part 7](#) shall be used only to convey the meaning prescribed for it in this Manual.

### Section 7C.03 Crosswalk Markings

Support:

Crosswalk markings provide guidance for pedestrians who are crossing roadways by defining and delineating paths on approaches to and within signalized intersections, and on approaches to other intersections where traffic stops.

[In conjunction with signs and other measures](#), crosswalk markings ~~also serve help~~ to alert road users of a [designated](#) pedestrian crossing point across roadways [at locations that are not controlled by ~~highway~~ traffic \[control\]\(#\) signals or STOP signs.](#) [edited to be consistent with revisions to Section 3B.18](#)

At nonintersection locations, crosswalk markings legally establish the crosswalk.

[Section 3B.18 contains information regarding the detectable warning surfaces that are required by 49 CFR, Part 37 and by the Americans with Disabilities Act \(ADA\) where curb ramps are constructed at the junction of sidewalks and the roadway, for marked and unmarked crosswalks.](#)

Standard:

When ~~transverse~~ crosswalk lines are used, they shall be solid white, marking both edges of the crosswalk, except as noted in the Option. They shall be not less than 150 mm (6 in) or greater than 600 mm (24 in) in width.

Guidance:

If transverse lines are used to mark a crosswalk, the gap between the lines should not be less than 1.8 m (6 ft). If diagonal or longitudinal lines are used without transverse lines to mark a crosswalk, the crosswalk should be not less than 1.8 m (6 ft) wide.

Crosswalk lines, [if used](#) on both sides of the crosswalk, should extend across the full width of pavement or to the edge of the intersecting crosswalk to discourage diagonal walking between crosswalks [\(see Figures 3B-16 and 3B-18\).](#)

Crosswalks should be marked at all intersections on established routes to [a](#) school where there is substantial conflict between motorists, bicyclists, and ~~pedestrian~~ [student](#) movements; where students are encouraged to cross between intersections; ~~or~~ where students would not

1 otherwise recognize the proper place to cross; or where motorists or bicyclists might not expect  
2 students to cross (see Figure 7A-1).

3 Crosswalk lines should not be used indiscriminately. An engineering study considering the  
4 factors described in Section 3B.18 should be performed before ~~they are~~ a marked crosswalk is  
5 installed at a locations away from a highway traffic control signals or an approach controlled by a  
6 STOP sign~~s~~.

7 Because nonintersection school crossings are generally unexpected by the road user, warning  
8 signs (see Sections 7B.10 and 7B.11) should be installed for all marked school crosswalks at  
9 nonintersection locations. Adequate visibility of students by approaching motorists and of  
10 approaching motorists by students should be provided by parking prohibitions.

11 Option:

12 For added visibility, the area of the crosswalk may be marked with white diagonal lines at a  
13 45-degree angle to the line of the crosswalk or with white longitudinal lines parallel to traffic  
14 flow. When diagonal or longitudinal lines are used to mark a crosswalk, the transverse crosswalk  
15 lines may be omitted.

16 Guidance:

17 If used, the diagonal or longitudinal lines should be 300 to 600 mm (12 to 24 in) wide and  
18 spaced 300 to 1500 mm (12 to 60 in) apart. The spacing design should avoid the wheel paths,  
19 and the spacing should not exceed 2.5 times the line width.

20 **Section 7C.04 Stop and Yield Lines** these changes are similar to the changes being  
21 made to Section 3B.16 – some of the paragraphs in this Section have been  
22 relocated to improve continuity

23 Guidance:

24 Stop lines should be used to indicate the point behind which vehicles are required to stop in  
25 compliance with a ~~STOP (R1-1) sign (see Figure 2B-1);~~ traffic control signal, ~~or some other~~  
26 ~~traffic control device.~~ relocated to next paragraph

27 Option:

28 Stop lines may be used to indicate the point behind which vehicles are required to stop in  
29 compliance with a STOP (R1-1) sign (see Figure 2B-1), a Stop Here For Pedestrians (R1-5b or  
30 R1-5c) sign (see Figure 2B-2), or some other traffic control device that requires vehicles to stop,  
31 except YIELD signs.

32 Yield lines may be used to indicate the point behind which vehicles are required to yield in  
33 compliance with a YIELD (R1-2) sign (see Figure 2B-1) or a Yield Here To Pedestrians (R1-5 or  
34 R1-5a) sign (see Figure 2B-2).

35 **Standard:**

36 Stop lines shall not be used at locations where drivers are required to yield in  
37 compliance with a YIELD (R1-2) sign, a Yield Here To Pedestrians (R1-5 or R1-5a) sign, or  
38 at locations on uncontrolled approaches where drivers are required by State law to yield to  
39 pedestrians.

40 Yield lines shall not be used at locations where drivers are required to stop in  
41 compliance with a STOP (R1-1) sign, a Stop Here For Pedestrians (R1-5b or R1-5c) sign, a  
42 traffic control signal, or some other traffic control device.

43 ~~If used,~~ **Stop lines shall consist of solid white lines extending across approach lanes to**  
44 **indicate the point at which the stop is intended or required to be made.**

1 ~~If used,~~ Yield lines (see Figure 3B-15) shall consist of a row of solid white isosceles  
2 triangles pointing toward approaching vehicles extending across approach lanes to indicate  
3 the point at which the yield is intended or required to be made.

4 Guidance:

5 Stop lines should be 300 to 600 mm (12 to 24 in) wide.

6 The individual triangles comprising the yield line should have a base of 300 to 600 mm (12 to  
7 24 in) wide and a height equal to 1.5 times the base. The space between the triangles should be  
8 75 to 300 mm (3 to 12 in).

9 If used, stop and yield lines should be placed a minimum of 1.2 m (4 ft) in advance of and  
10 parallel to the nearest crosswalk line at controlled intersections, except for yield lines at  
11 roundabouts ~~intersections~~ as provided for in Section 3C.04 and at midblock crosswalks. In the  
12 absence of a marked crosswalk, the stop line or yield line should be placed at the desired stopping  
13 or yielding point, but should not be placed ~~no~~ edited to improve grammar more than 9 m (30 ft) or  
14 less than 1.2 m (4 ft) from the nearest edge of the intersecting traveled way. ~~Stop lines should be  
15 placed to allow sufficient sight distance to all other approaches to an intersection.~~

16 Stop lines at midblock signalized locations should be placed at least 12 m (40 ft) in advance  
17 of the nearest signal indication (see Section 4D.14).

18 Support:

19 When drivers ~~who~~ yield too close to crosswalks ~~on~~ that cross uncontrolled multi-lane  
20 approaches, they place pedestrians at risk by blocking other drivers' views of pedestrians and by  
21 blocking pedestrians' views of vehicles approaching in other lanes. relocated within this Section

22 Guidance:

23 If yield lines are used at ~~an unsignalized midblock~~ a crosswalk that crosses an uncontrolled  
24 multi-lane approach, the yield lines should be placed ~~adjacent to the Yield Here to Pedestrians~~  
25 ~~sign located~~ 6.1 to 15 m (20 to 50 ft) in advance of the nearest crosswalk line, and parking should  
26 be prohibited in the area between the yield line and the crosswalk (see Figure 3B-16).

27 Yield (stop) lines and Yield Here To (Stop Here For) Pedestrians signs should not be used in  
28 advance of crosswalks that cross an approach to or departure from a roundabout.

29 Standard:

30 Yield Here To (Stop Here For) Pedestrians (R1-5 series) signs (see Figure 2B-2) shall be  
31 used if yield (stop) lines are used at a crosswalk that crosses an uncontrolled multi-lane  
32 approach.

### 33 Section 7C.05 Curb Markings for Parking Regulations

34 Standard:

35 ~~Signs shall be used with curb markings~~ Where curbs are marked to convey parking  
36 regulations in those areas where curb markings are frequently obliterated by snow and ice  
37 accumulation, signs shall be used with the curb markings except as noted in the Option  
38 below unless the no-parking zone is controlled by statute or local ordinance.

39 Guidance:

40 Except as noted in the Option below, when curb markings are used without signs to convey  
41 parking regulations, a legible word marking regarding the regulation (such as "No Parking" or  
42 "No Standing") should be placed on the curb.

43 Option:

44 Curb markings without word markings or signs may be used to convey a general prohibition  
45 by statute of parking within a specified distance of a STOP sign, driveway, fire hydrant, or  
46 crosswalk.

1 Local highway agencies may prescribe special colors for curb markings to supplement  
2 standard signs for parking regulation.

3 Support:

4 Since yellow and white curb markings are frequently used for curb delineation and visibility,  
5 it is advisable to establish parking regulations through the installation of standard signs (see  
6 Sections 2B.53 through 2B.55).

### 7 **Section 7C.06 Pavement Word and Symbol Markings**

8 Support:

9 Word, ~~and~~ symbol, and arrow markings on the pavement are used for the purpose of guiding,  
10 warning, or regulating traffic. These pavement markings can be helpful to road users in some  
11 locations by supplementing signs and providing additional emphasis for important regulatory,  
12 warning, or guidance messages, because the markings do not require diversion of the road user's  
13 attention from the roadway surface. Symbol messages are preferable to word messages.

14 **Standard:**

15 **Word, ~~and~~ symbol, and arrow markings shall be white. Word, ~~and~~ symbol, and arrow**  
16 **markings shall not be used for mandatory messages except in support of standard signs.**

17 **All letters, numerals, and symbols ~~should~~ shall be installed in accordance with the**  
18 **design details in the Pavement Markings chapter of the ~~Federal Highway Administration's~~**  
19 **deleted to increase consistency “Standard Highway Signs and Markings” book (see Section**  
20 **1A.11).**

21 Guidance:

22 Letters and numerals should be 1.8 m (6 ft) or more in height.

23 Word and symbol markings should not exceed three lines of information.

24 If a pavement marking word message consists of more than one line of information, it should  
25 read in the direction of travel. The first word of the message should be nearest to the road user.

26 The longitudinal space between word or symbol message markings, including arrow  
27 markings, should be at least four times the height of the characters for low speed roads, but not  
28 more than ten times the height of the characters under any conditions.

29 The number of different word and symbol markings used should be minimized to provide  
30 effective guidance and avoid misunderstanding.

31 Except ~~as noted in the Option below~~ for the SCHOOL word marking, pavement word and  
32 symbol markings should be no more than one lane in width.

33 Option:

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

36 Guidance:

37 If the two-lane SCHOOL word marking is used, the letters should be 3 m (10 ft) or more in  
38 height.

39

1 ~~CHAPTER 7D. SIGNALS~~ cross references to Part 4 were added in Section 7A.04

2 ~~Section 7D.01 General~~

3 ~~Support:~~

4 ~~Part 4 contains information regarding highway traffic signals in school areas. The School~~  
5 ~~Crossing signal warrant is described in Section 4C.06.~~

6

1 CHAPTER ~~7E.~~ 7D. CROSSING SUPERVISION

2 Section ~~7E.01~~ 7D.01 Types of Crossing Supervision

3 Support:

4 There are ~~two~~ three types of school crossing supervision:

- 5 A. Adult control of pedestrians and vehicles by adult crossing guards ~~or uniformed law~~
- 6 ~~enforcement officers, and~~
- 7 B. Adult control of pedestrians and vehicles by uniformed law enforcement officers, and
- 8 C. Student control of only pedestrians with student patrols.

9 ~~Information for the organization, operation, and administration of an adult crossing guard~~  
10 ~~program are given in “Civilian Guards for School Crossings” (available from the Center for~~  
11 ~~Public Safety of Northwestern University, 405 Church Street, Evanston, IL 60204) and “Adult~~  
12 ~~School Crossing Guards” (available from the American Automobile Association, 1000 AAA~~  
13 ~~Drive, Heathrow, FL 32746). deleted because neither of these publications are still available~~

14 Information ~~for regarding~~ the organization, administration, and operation of a student school  
15 safety patrol program ~~are given is contained~~ in the ~~“Policies and Practices for AAA School Safety~~  
16 ~~Patrols Operations Manual” (available from the American Automobile Association, 1000 AAA~~  
17 ~~Drive, Heathrow, FL 32746 see Section 1A.11).~~

18 Section ~~7E.02~~ 7D.02 Adult Crossing Guards

19 Option:

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

23 Section ~~7E.03~~ 7D.03 Qualifications of Adult Crossing Guards

24 Support:

25 High standards for selection of adult crossing guards are essential because they are  
26 responsible for schoolchildren within and in the immediate vicinity of school crosswalks.

27 Guidance:

28 Adult crossing guards should possess the following minimum qualifications:

- 29 A. Average intelligence;
- 30 B. Good physical condition, including sight, hearing, and ~~mobility~~ ability to move and
- 31 maneuver quickly in order to avoid danger from errant vehicles;
- 32 C. Ability to control a STOP paddle effectively to provide approaching road users with a
- 33 clear, fully direct view of the paddle’s STOP message during the entire crossing
- 34 movement;
- 35 D. Ability to communicate specific instructions clearly, firmly, and courteously;
- 36 E. Ability to recognize potentially dangerous traffic situations and warn and manage
- 37 students in sufficient time to avoid injury.
- 38 F. Mental alertness;
- 39 G. Neat appearance;
- 40 H. Good character;
- 41 I. Dependability; and
- 42 J. An overall sense of responsibility for the safety of students.

43 Section ~~7E.04~~ 7D.04 Uniform of Adult Crossing Guards~~and Student Patrols~~

44 ~~Guidance:~~

1 ~~Adult crossing guards should be uniformed so that road users and pedestrians can recognize~~  
2 ~~them and respond to their signals. The uniforms should be distinctively different from those worn~~  
3 ~~by regular law enforcement officers.~~

4 **Standard:**

5 Law enforcement officers performing school crossing supervision and adult crossing  
6 guards shall wear high-visibility retroreflective safety apparel labeled as ANSI ~~107-1999~~  
7 ~~107-2004~~ 2006 standard performance for Class 2 as described in Section 6E.02.

8 ~~Student patrols shall wear high-visibility retroreflective safety apparel labeled as ANSI~~  
9 ~~107-1999 standard performance for Class 1 as described in Section 6E.02.~~

10 ~~Guidance:~~

11 ~~Law enforcement officers should wear high-visibility retroreflective material over their~~  
12 ~~uniforms when directing nighttime operations.~~

13 **Section ~~7E.05~~ 7D.05 Operating Procedures for Adult Crossing Guards**

14 ~~Guidance~~ **Standard:**

15 Adult crossing guards ~~should~~ shall not direct traffic in the usual law enforcement  
16 regulatory sense. In the control of traffic, they ~~should~~ shall pick opportune times to create a  
17 ~~reasonably safe~~ sufficient gap in the traffic flow. At these times, they ~~should~~ shall stand in  
18 the roadway to indicate that pedestrians are about to use or are using the crosswalk, and  
19 that all vehicular traffic must stop.

20 Adult crossing guards ~~should~~ shall use a STOP paddle. The STOP paddle ~~should~~ shall  
21 be the primary hand-signaling device.

22 ~~Standard:~~

23 The STOP (R1-1) paddle shall be an octagonal shape. The background of the STOP  
24 face shall be red with at least 150 mm (6 in) series ~~capital upper-case~~ white letters and  
25 border. The paddle shall be at least 450 mm (18 in) in size and have the word message  
26 STOP on both sides. The paddle shall be retroreflectorized or illuminated when used  
27 during hours of darkness.

28 Option:

29 The STOP paddle may be modified to improve conspicuity by incorporating ~~red or~~ white or  
30 red flashing lights on both sides of the paddle. The red or white flashing lights may be arranged  
31 in any of the following patterns:

- 32 A. Two ~~red or~~ white or red lights centered vertically above and below the STOP legend,  
33 B. Two ~~red or~~ white or red lights centered horizontally on each side of the STOP legend,  
34 C. One ~~red or~~ white or red light centered below the STOP legend,  
35 D. A series of eight or more small ~~red or~~ white or red lights no larger than 6 mm (0.25 in) in  
36 diameter along the outer edge of the paddle, arranged in an octagonal pattern at the eight  
37 corners of the STOP paddle (more than eight lights may be used only if the arrangement  
38 of the lights is such that it clearly conveys the octagonal shape of the STOP paddle), or  
39 E. A series of white lights forming the shapes of the letters in the legend.

40 **Standard:**

41 If flashing lights are used on the STOP paddle, the flash rate shall be at least 50, but not  
42 more than 60, flash periods per minute.

43 ~~Section 7E.06 Uniformed Law Enforcement Officers~~

44 ~~Option:~~

45 ~~Uniformed law enforcement officers may be used for school crossing supervision.~~

1 **Section 7E.07 Student Patrols**

2 **Option:**

3 ~~Student patrols may be used to direct and control pedestrians at crossings near schools where~~  
4 ~~adequate gaps in traffic occur frequently enough so that gaps do not need to be created.~~

5 ~~Student patrols may be used to direct and control pedestrians at signalized intersections where~~  
6 ~~turning movements are not a significant problem, and may be used to assist adult crossing guards~~  
7 ~~in the control of pedestrians at crossing locations used by large numbers of pedestrians.~~

8 **Guidance:**

9 ~~Student patrols should not be responsible for directing vehicular traffic. They should not~~  
10 ~~function as uniformed law enforcement officers or adult crossing guards.~~

11 **Section 7E.08 Choice of Student Patrols**

12 **Guidance:**

13 ~~Student patrols should be carefully selected. They should be students from the fifth grade or~~  
14 ~~higher. Leadership and reliability should be determining qualities for patrol membership.~~

15 ~~Parental approval should be obtained in writing before a student is used as a member of a~~  
16 ~~student patrol.~~

17 **Section 7E.09 Operating Procedures for Student Patrols**

18 **Guidance:**

19 ~~Student patrols should use a flagging device to stop pedestrians behind the curb or edge of the~~  
20 ~~roadway, and should allow them to cross only when there is an adequate gap in traffic.~~

21 **Standard:**

22 ~~Flagging devices used during periods of twilight or darkness shall be retroreflective or~~  
23 ~~illuminated.~~

24 ~~Because they are not authorized to direct vehicular traffic, student patrols shall not use~~  
25 ~~a STOP paddle.~~

26

1 ~~CHAPTER 7F. GRADE SEPARATED CROSSINGS~~ replaced by new Section

2 **7A.05**

3 ~~Section 7F.01 – Function~~

4 ~~Option:~~

5 ~~Grade separated crossings may be used to physically separate the crossing of school~~  
6 ~~pedestrian traffic and vehicular flow.~~

7 ~~Section 7F.02 – Types of Grade Separated Crossings~~

8 ~~Option:~~

9 ~~Grade separated crossings may be either overpasses over the highway or underpasses under~~  
10 ~~the highway.~~

11 ~~Guidance:~~

12 ~~The design should follow the guidelines given in the published policies of the American~~  
13 ~~Association of State Highway and Transportation Officials, such as “A Policy on Geometric~~  
14 ~~Design of Highways and Streets” (see Section 1A.11).~~

15 ~~Support:~~

16 ~~Experience has shown that overpasses are more satisfactory than underpasses for pedestrian~~  
17 ~~crossings, as overpasses are easier to maintain and supervise.~~

18 ~~Section 7F.03 – Criteria for Use of Grade Separated Crossings~~

19 ~~Guidance:~~

20 ~~If use of the grade separation will be less convenient to pedestrians than an at grade crossing,~~  
21 ~~barriers or supervision should be considered to assure a satisfactory level of use.~~

22