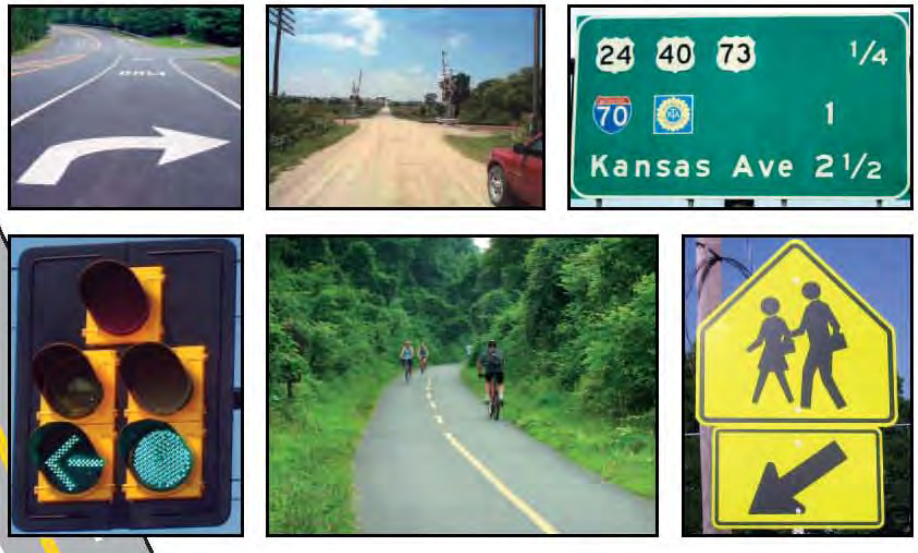
Oregon Supplement to the Manual on Uniform Traffic Control Devices

2003 EDITION

Adopted July 2005 by OAR 734-020-0005



INTRODUCTION

Traffic control devices installed on highways within the State of Oregon are required to conform to the Manual on Uniform Traffic Control Devices (MUTCD), published by the Federal Highway Administration (FHWA). The list of highways that are required to conform to the MUTCD includes all state highways and public roadways under the jurisdiction of cities and counties within the State of Oregon. This requirement is established by Oregon Revised Statute (ORS) (see ORS 810.200) and Oregon Administrative Rule (OAR) (see OAR 734-020-0005). To promote uniformity and understandability of traffic control devices, private property owners are also encouraged to conform to the MUTCD when installing devices on private property.

Devices installed or replaced after the publication date of this document shall conform to the MUTCD upon installation. Unless noted otherwise, existing devices that do not conform to the current MUTCD shall be replaced at the end of their useful life.

The intent of the MUTCD is to enhance road safety and operation by requiring uniform, understandable, and effective traffic control devices on Oregon highways.

Purpose of the Oregon Supplement to the MUTCD

Deviations to the MUTCD are published in the Oregon Supplement to the MUTCD and made for justifiable reasons such as instances where Oregon law deviates from the MUTCD. These deviations are adopted through the OAR process and by permission of the FHWA.

How to Use the Oregon Supplement to the MUTCD

This document supplements the 2003 Edition of the MUTCD with Revision No. 1 Incorporated, dated November 2004. Both the Oregon Supplement and the MUTCD need to be consulted when researching traffic control issues.

The Oregon Supplement conforms to the organization and section numbering of the MUTCD. The two documents interact as follows:

- Unless otherwise noted, language in the Oregon Supplement is added to the end of the referenced MUTCD section.
- In other cases, the MUTCD language is deleted and/or the Oregon Supplement language inserted as directed by the instructions in italics.

Obtaining the MUTCD

The MUTCD is available online in electronic format (Click here to go to MUTCD page). Printed copies of the MUTCD 2003 Edition and cost information are available from the American Association of State Highway and Transportation Officials (AASHTO), the Institute of Transportation Engineers (ITE), and the American Traffic Safety Services Association (ATSSA).

Other Related Documents

Design details for signs and traffic signals are not included in the MUTCD. They are in the Oregon Department of Transportation (ODOT) Sign Policy and Guidelines, the ODOT Traffic Signal Policy and Guidelines, and the FHWA Standard Highway Signs manual. The ODOT Traffic Manual contains additional information on traffic engineering policies and practices for state highways.

Obtaining the Oregon Supplement and Other ODOT Documents

The Oregon Supplement to the MUTCD and other ODOT traffic control device documents are available online in electronic format (Click here to go the ODOT Traffic Engineering and Operations Publications page). The Web site also provides information on the latest updates to the ODOT Sign Policy and Guidelines.

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LIST OF FIGURES

PART 1. GENERAL

There are no deviations to this part of the manual.

PART 2. SIGNS

CHAPTER 2B. REGULATORY SIGNS

Section 2B.11 Yield Here To Pedestrians Signs (R1-5, R1-5a)

Delete the Standard subsection and replace with the following:

Standard:

Yield Here to Pedestrians (R1-5 or R1-5a) signs shall not be used.

If stop lines are used in advance of a marked crosswalk at an uncontrolled location, Stop Here for Pedestrians signs (see ODOT Sign Policy) shall be placed adjacent to the stop line (see Section 3B.16 for line placement).

Support:

Oregon law (ORS 811.010) requires that drivers stop for pedestrians crossing a roadway within a marked or unmarked crosswalk where there is no traffic control device in place or in operation.

Section 2B.12 In-Street Pedestrian Crossing Signs (R1-6, R1-6a)

Delete the first Option subsection and replace with the following:

Option:

The In-Street Pedestrian Crossing (R1-6a) sign (see Figure 2B-2) may be used to remind road users of laws regarding right of way at an unsignalized pedestrian crossing. The legend STATE LAW may be shown at the top of the sign if applicable. The legend STOP FOR may be used in conjunction with the STOP sign symbol.

Delete the third paragraph of the Standard subsection and replace with the following:

Standard:

If used, the In-Street Pedestrian Crossing sign shall have a black legend (except for the red STOP sign symbol) and border on either a white and/or fluorescent yellow-green background.

Insert the following at the beginning of the Support subsection:

Support:

Oregon law (ORS 811.010) requires that drivers stop for pedestrians crossing a roadway within a marked or unmarked crosswalk where there is no traffic control device in place or in operation.

Section 2B.13 Speed Limit Sign (R2-1)

Insert the following after the Standard subsection:

Option:

Except on interstate highways, all signs posting the designated speed or speed limit per ORS 811.105 and ORS 811.111 may omit the word LIMIT. This includes truck speed restrictions, school speed zones, and other special speed restrictions allowed by law as well as the designated speed or speed limit by statute, rule or written order.

Section 2B.45 Traffic Signal Signs (R10-1 through R10-21)

Delete the third paragraph of the second Guidance subsection and insert the following at the beginning of the fourth Option subsection:

Option:

Where turns on red are permitted and the signal indication is a RED ARROW, the RIGHT (LEFT) ON RED ARROW AFTER STOP (R10-17a) sign (see Figure 2B-19) may be installed adjacent to the RED ARROW signal indication, where engineering judgment determines that additional emphasis is needed.

Insert the following after the fourth Option subsection:

Support:

ORS 811.360 permits vehicular traffic facing a Steady Red Arrow signal indication to make certain turns after stopping, making a RIGHT (LEFT) ON RED AFTER STOP (R10-17a) sign unnecessary.

Section 2B.46 Photo Enforced Signs (R10-18, R10-19)

Delete the entire section and replace with the following:

Standard:

Where photographic equipment is being used to enforce traffic regulations, a TRAFFIC LAWS PHOTO ENFORCED (R10-18) sign (see Figure 2B-1) shall be installed on all major routes entering a jurisdiction to advise road users that some of the traffic regulations within that jurisdiction are being enforced by photographic equipment.

Where photographic equipment is being used to enforce traffic regulations, a PHOTO ENFORCED (R10-19) sign (see Figure 2B-1) shall be installed near the associated traffic control device to advise road users that the regulation is being enforced by photographic equipment.

Option:

If a temporary photo radar unit is used, a SPEED PHOTO ENFORCED (OR22-21) sign (see ODOT Sign Policy) may be used instead of the PHOTO ENFORCED (R10-19) sign.

If the regulations being enforced by photographic equipment are associated with a warning sign advising road users of the condition being warned about (such as a traffic control signal or a toll plaza), a PHOTO ENFORCED (W16-1) plaque (see Section 2C.53) may be used instead of the PHOTO ENFORCED (R10-19) sign.

Standard:

If used below a regulatory sign, the PHOTO ENFORCED (R10-19) and SPEED PHOTO ENFORCED (OR22-11) signs shall be a rectangle with a black legend and border on a white background.

For speed enforcement, the PHOTO ENFORCED or SPEED PHOTO ENFORCED sign assembly shall be located between 100 and 400 yards in advance of the photo radar unit, in accordance with ORS 810.438.

Support:

Oregon law (ORS 810.434 through 810.439) allows photo enforcement of speed and red light violations in certain jurisdictions. The law requires that signs be posted on major routes entering the jurisdiction where such photo enforcement is in use, as well as in advance of the photo radar or red light unit.

CHAPTER 2C. WARNING SIGNS

Section 2C.24 SPEED HUMP Sign (W17-1)

Delete the first paragraph in the Guidance subsection and replace with the following:

Standard:

The SPEED HUMP (W17-1) sign (see Figure 2C-4) shall be used on a public roadway to give warning of a vertical deflection in the roadway that is designed to limit the speed of traffic.

Insert the following at the beginning of the Option subsection:

Option:

Speed Hump Markings (see Section 3B.26) may be used instead of the SPEED HUMP (W17-1) sign.

If a series of speed humps exists in close proximity, a single SPEED HUMP sign with a plaque indicating the series of humps ahead may be used for the series.

Insert the following at the beginning of the Support subsection:

Support:

In inclement weather, signs are important to alert drivers who might not be able to see speed humps marked solely with pavement markings. Often, to be effective, speed humps are installed in a series designed to maintain a low travel speed. However, signs posted at each speed hump can add clutter and hazard themselves, especially in the neighborhood areas where speed humps are commonly installed.

Section 2C.36 Advisory Exit, Ramp, and Curve Speed Signs (W13-2, W13-3, W13-5)

Insert the following at the end of the Guidance subsection:

Guidance:

The advisory speed should be established according to the current edition of the ODOT Sign Policy and Guidelines.

Delete the last paragraph of Option subsection and the entire Support subsection

Section 2C.37 Intersection Warning Signs (W2-1 through W2-6)

Delete the last sentence of the first paragraph of the Option subsection and replace with the following:

Option:

The Circular Intersection (W2-6) symbol sign may be installed in advance of a circular intersection.

Insert the following after the Option subsection:

Standard:

The educational TRAFFIC CIRCLE (W16-12p) plaque shall not be used.

Support:

The Circular Intersection symbol sign (W2-6) is easily understood, making the educational plaque unnecessary. In addition, using the TRAFFIC CIRCLE plaque at roundabouts perpetuates the misconception that the two types of intersections are the same.

Section 2C.46 Advisory Speed Plaque (W13-1)

Insert the following at the end of the Guidance subsection:

Guidance:

When used, the speed shown on Advisory Speed plaques should be established according to the current edition of the ODOT Sign Policy.

Delete the second Option subsection and the Support subsection

Section 2C.50 CROSS TRAFFIC DOES NOT STOP Plaque (W4-4p)

Insert the following at the end of the section:

Option:

If the W4-4p plaque is used in combination with a STOP sign, a supplemental W4-4p plaque may be installed below the Stop Ahead (W3-1) Advance Traffic Control sign (see Section 2C.29).

Support:

The Option for a supplemental W4-4p plaque allows for the expanded use of this plaque to provide advance warning to motorists.

Section 2C.53 PHOTO ENFORCED Plaque (W16-10)

Delete the entire section and replace with the following:

Standard:

Where photographic equipment is being used to enforce traffic regulations, a PHOTO ENFORCED (W16-10) plaque (see Figure 2C-11) shall be mounted below a warning sign to advise road users that the regulations associated with the condition being warned about (such as a traffic control signal or toll plaza) are being enforced by photographic equipment.

Option:

If a photo radar unit is used, a PHOTO ENFORCED (R10-19) or SPEED PHOTO ENFORCED (OR22-21) sign (see ODOT Sign Policy) may be used instead of the PHOTO ENFORCED (W16-10) plaque (see Section 2B.46).

Standard:

If used below a warning sign, the PHOTO ENFORCED (W16-10) plaque shall be a rectangle with a black legend and border on a yellow background.

For speed enforcement, the PHOTO ENFORCED sign assembly shall be located between 100 and 400 yards in advance of the photo radar unit, in accordance with ORS 810.438.

Support:

Oregon law (ORS 810.434 through 810.439) allows photo enforcement of speed and red light violations in certain jurisdictions. The law requires that signs be posted on major routes entering the jurisdiction where such photo enforcement is in use, as well as in advance of the photo radar or red light unit.

CHAPTER 2D. GUIDE SIGNS—CONVENTIONAL ROADS

Section 2D.30 Directional Assembly

Delete Standard "C" from the Standard subsection and insert the following after the Standard subsection:

Option:

The end of a route may be marked by a Directional assembly with an END auxiliary sign and a route sign displaying the number of that route.

Support:

In many cases, the end of a route is evident due to highway geometry or other signing. Where it is not evident, consideration is given to signing the end of the route.

Section 2D.45 General Service Signs (D9 Series)

Delete the third Standard subsection and replace with the following:

Standard:

Symbols and word message General Service legends shall not be intermixed on the same sign. The Pharmacy (D9-20) sign and 24 HR (D9-20a) plaque shall not be used.

Support:

Revision 1 of the 2003 MUTCD allows the use of 24-hour pharmacy signs on General Service signs. Pharmacies are prevalent in every major community in Oregon and after-hours medication emergencies can be adequately handled by 24-hour hospitals or other emergency medical treatment centers.

CHAPTER 2F. SPECIFIC SERVICE SIGNS

Section 2F.04 Number and Size of Logos and Signs

Delete the last sentence from the second Standard subsection and insert the following after the second Standard subsection:

Guidance:

The vertical and horizontal spacing between logo panels should not exceed 250 mm (10 in) and 300 mm (12 in), respectively.

Support:

Increased vertical and horizontal spacing between logo panels allows enough clearance for legends below the panels.

Section 2F.05 Size of Lettering

Insert the following at the end of the section:

Option:

The letters and numerals on Specific Service signs used to indicate distance may be a minimum height of 100 mm (4 in) on conventional roads and ramps.

Support:

On Specific Service signs installed on conventional roads and ramps, distance messages incorporating 150 mm (6 in) letters and numerals might result in a legend that is too long to fit below the standard size logo panel.

Section 2F.09 Signs at Intersections

Delete the first Standard subsection and insert the following:

Option:

Where both tourist-oriented information (see Chapter 2G) and specific service information would be needed at the same intersection, the design of the tourist-oriented directional signs may be used, and the needed specific service information may be incorporated.

Support:

The Option to use tourist-oriented direction signs provides continuity for the driver.

CHAPTER 2I. EMERGENCY MANAGEMENT SIGNING

Section 2I.03 EVACUATION ROUTE Sign (EM-1)

Insert the following at the end of the first Standard subsection:

Standard:

When used to identify a tsunami evacuation route, the Tsunami Evacuation Route (OD-463) sign (see ODOT Sign Policy) with directional arrow plaque shall be used.

Guidance:

Associated signs OD-462 through OD-466 (see ODOT Sign Policy) should be used to provide additional information about the tsunami zone.

Support:

To maintain signing consistent with neighboring coastal states, the Evacuation Route (EM-1) sign is not used when signing for tsunamis.

PART 3. MARKINGS

CHAPTER 3B. PAVEMENT AND CURB MARKINGS

Section 3B.16 Stop and Yield Lines

Delete the Option subsection and replace with the following:

Option:

Yield lines may be used to indicate the point behind which vehicles are required to yield in compliance with a YIELD (R1-2) sign.

Support:

Oregon law (ORS 811.010) requires that drivers stop for pedestrians crossing a roadway within a marked or unmarked crosswalk where there is no traffic control device in place or in operation. Therefore, the reference to Yield Here to Pedestrians (R1-5 or R1-5a) signs has been deleted. Further guidance is provided in the Guidance subsection below.

Delete the second paragraph of the second Guidance subsection and insert the following after the second Guidance subsection:

Guidance:

If used at uncontrolled crosswalks, stop lines should be placed adjacent to the Stop Here for Pedestrians (see ODOT Sign Policy) sign located 6.1 to 15 m (20 to 50 ft) in advance of the nearest crosswalk line, and parking should be prohibited in the area between the stop line and the crosswalk.

Support:

For consistency with Oregon law, stop lines are used in advance of crosswalks rather than yield lines.

Delete the Support subsection at the end of the section and replace with the following:

Support:

Drivers who stop too close to crosswalks on multi-lane approaches place pedestrians at risk by blocking other drivers' views of pedestrians.

Section 3B.26 Speed Hump Markings

Insert the following after the Standard subsection:

Guidance:

Speed humps should be marked on public roadways to give warning of a vertical deflection in the roadway that is designed to limit the speed of traffic.

Support:

Speed humps are most effective when the driver knows they are in place. Pavement markings are one way to give warning to drivers of the presence of a vertical deflection in the roadway that is designed to limit the speed of traffic.

PART 4. HIGHWAY TRAFFIC SIGNALS

CHAPTER 4D. TRAFFIC CONTROL SIGNAL FEATURES

Section 4D.04 Meaning of Vehicular Signal Indications

Insert the following at the beginning of the section:

Support:

The appropriate driver response to traffic control devices in Oregon and the conditions when a vehicle turn is permitted at a traffic signal are governed by ORS 811.260 and 811.360 respectively.

Delete the second paragraph of subsection "2" in subsection "C" of the Standard subsection and replace with the following:

Standard:

Except when a sign is in place prohibiting a turn on red, vehicular traffic facing a steady RED ARROW signal indication may enter the intersection to turn right into a two-way street, or to turn right or left into a one-way street in the direction of traffic upon the one-way street after stopping. Such vehicular traffic shall yield the right-of-way to pedestrians lawfully within an adjacent crosswalk and to other traffic lawfully using the intersection.

Section 4D.05 Application of Steady Signal Indications

Delete subsection "D" of the Standard subsection

Section 4D.07 Application of Steady Signal Indications for Right Turns

Delete the first paragraph in subsection "C" of the Standard subsection and replace with the following:

Standard:

C. Protected/Permissive Mode—A separate signal face is not required for the right turn, but if provided, it shall consist of visibility-limited signal sections, or it shall be considered an approach signal face, and shall meet the following requirements:

Insert the following at the end of the Standard subsection:

Support:

Oregon allows the use of a three section programmed signal display for exclusive right turn lanes.

Section 4D.13 Preemption and Priority Control of Traffic Control Signals

Delete subsection "B" of "During the transition into preemption control:" in the Standard subsection and replace with the following:

Standard:

B. The shortening or omission of any pedestrian change interval shall be prohibited unless the shortening or omission results from an unexpected railroad or drawbridge preemption.

Insert the following at the end of the Standard subsection:

Support:

OAR 734-020-0320(4)(e) prohibits the termination of an active pedestrian or vehicular clearance interval by emergency preemption or bus priority.

CHAPTER 4K. FLASHING BEACONS

Section 4K.03 Warning Beacon

Delete the fourth paragraph of the Standard subsection and replace with the following:

Standard:

If a Warning Beacon is suspended over the roadway, the clearance above the pavement shall be at least 4.6 m (15 ft).

Guidance:

If a Warning Beacon is suspended over the roadway, the clearance above the pavement should not be more than 7.8 m (25.6 ft). If a Warning Beacon is used as a supplement to a sign suspended over the roadway where the bottom of the sign is more than 5.8m (19 ft) above the pavement, an appropriate supplemental ground-mounted sign should be considered.

Support:

Some Warning Beacons in Oregon are used as supplements to signs suspended over the roadway where the bottom of the sign can be more than 5.8 m (19 ft) above the pavement and the Warning Beacons can be more than 6.1 m (20 ft) above the pavement. Thus, the requirement of a maximum height has been removed from the Standard subsection and inserted as a Guidance subsection.

PART 5. TRAFFIC CONTROL DEVICES FOR LOW-VOLUME ROADS

There are no deviations to this part of the manual.

PART 6. TEMPORARY TRAFFIC CONTROL

There are no deviations to this part of the manual.

PART 7. TRAFFIC CONTROLS FOR SCHOOL AREAS

CHAPTER 7B. SIGNS

Section 7B.08 School Advance Warning Assembly (S1-1 with Supplemental Plaque)

Insert the following at the beginning of the section:

Standard:

In those areas where a reduced school speed has been established, the School Advance Warning sign shall be installed not less than 45 m (150 feet) nor more than 210 m (700 feet) in advance of the School Speed Limit Assembly.

Support:

In Oregon, when a reduced school speed zone has been established the School Advance Warning sign is placed in advance of the School Speed Limit Assembly

Section 7B.09 School Crosswalk Warning Assembly (S1-1 with Diagonal Arrow)

Insert the following at the end of the first Standard subsection:

Option:

If used overhead at a marked crosswalk, the School Advance Warning (S1-1) sign may be installed without the supplemental arrow plaque. A ground mounted School Crosswalk Warning Assembly is required at overhead installations of the School Advance Warning sign (S1-1).

Support:

Oregon allows the use of the School Advance Warning (S1-1) sign without a supplemental arrow plaque overhead at marked crosswalks.

Section 7B.11 School Speed Limit Assembly (S4-1, S4-2, S4-3, S4-4, S4-6, S5-1)

Delete the first Guidance subsection and insert the following:

Guidance:

The reduced speed zone should begin either 30 to 60 m (100 to 200 ft) from the school property line or the crosswalk, whichever is determined by engineering judgment to be most appropriate.

Option:

The limits of a reduced speed zone may be determined by an engineering study.

Support:

Oregon establishes reduced school speed zone limits where they are determined to be most appropriate.

Insert the following at the end of the second Standard subsection:

Option:

In addition to the bottom plaques S4-1, S4-2, S4-4 and S4-6, plaques stating AT ALL TIMES or SCHOOL DAYS with specific periods of the day may be used where allowed by law.

Guidance:

If used, the WHEN FLASHING bottom plaque (S4-4) should be used together with flashing lights to indicate when children are scheduled to arrive at or leave school. The preferred placement of flashing lights is mounted on the same structure as the School Speed Limit assembly.

Support:

ORS 811.111 defines the different conditions for school speed limits in Oregon.

Option:

As per the Oregon Supplement for Section 2B.11, school speed limit signs may omit the word “LIMIT.”

CHAPTER 7C. MARKINGS

Section 7C.04 Stop and Yield Lines

Delete the Option subsection and insert the following:

Option:

Yield lines may be used to indicate the point behind which vehicles are required to yield in compliance with a YIELD (R1-2) sign.

Support:

Oregon law (ORS 811.010) requires that drivers stop for pedestrians crossing a roadway within a marked or unmarked crosswalk where there is no traffic control device in place or in operation. Therefore, the reference to Yield Here to Pedestrians (R1-5 or R1-5a) signs has been deleted. Further guidance is provided in the Guidance subsection below.

Delete the second paragraph of the second Guidance subsection and insert the following after the second Guidance subsection:

Guidance:

If used at uncontrolled marked crosswalks, stop lines should be placed adjacent to the Stop Here for Pedestrians (see ODOT Sign Policy) sign located 6.1 to 15 m (20 to 50 ft) in advance of the nearest crosswalk line, and parking should be prohibited in the area between the stop line and the crosswalk.

Support:

For consistency with Oregon law, stop lines are used in advance of crosswalks rather than yield lines.

Delete the Support subsection at the end of the section and replace with the following:

Support:

Drivers who stop too close to crosswalks on multi-lane approaches place pedestrians at risk by blocking other drivers' views of pedestrians.

CHAPTER 7E. CROSSING SUPERVISION

Section 7E.05 Operating Procedures for Adult Crossing Guards

Insert the following at the beginning of the section:

Standard:

The term "flagging devices" in this section shall be defined as the SCHOOL flags, vests and hats distributed by the Oregon Department of Education to all crossing guards, both youth and adult.

Support:

For driver expectancy, it is desirable to have all school crossing guards use the same flagging devices.

Delete the second paragraph of the Guidance subsection and insert the following Option and Support subsections:

Option:

Adult crossing guards may use flagging devices similar to student patrols. When the desire is to create safe gaps, adult crossing guards, with appropriate training, may use a STOP paddle.

Support:

The Oregon Department of Education provides recommendations for school flags used by adult crossing guards in Oregon.

Insert the following at the end of the section:

Standard:

Adult crossing guards shall not use STOP paddles at crosswalks controlled by traffic signals.

Support:

ORS 811.260 outlines appropriate driver response to traffic signals. The previous Standard ensures that adult crossing guards do not conflict with Oregon law.

PART 8. TRAFFIC CONTROLS FOR HIGHWAY-RAIL GRADE CROSSINGS

CHAPTER 8A. GENERAL

Section 8A.01 Introduction

Insert the following at the beginning of the section:

Standard:

Authority to control and regulate the construction, alteration, and protection of railroad-highway crossings is vested exclusively in the state, and in the Department of Transportation as provided in ORS 824.200 to 824.256. Authority to alter, construct, or eliminate a highway-rail grade crossing, including all traffic control devices at the crossing, must be obtained from the State through the issuance of a crossing Order by the Rail Division of the Department of Transportation.

Insert the following at the end of the section:

Standard:

24. Pedestrian Clear Out Interval (PCOI)—the interval prior to the start of a railroad preemption sequence at a traffic control signal, during which active pedestrian "WALK" intervals will be terminated and pedestrian clearance intervals, will be provided. The PCOI is initiated by the "advance preemption" provided by the railroad.

25. Vehicle Clear Out Interval (VCOI)—a traffic control signal interval during which motor vehicles are permitted to advance through a highway intersection and away from a railroad grade crossing. The controllers for both the highway intersection and the railroad grade crossing are electrically interconnected. Generally the VCOI follows a pedestrian clear out interval (PCOI). The VCOI is initiated by the "simultaneous preemption" provided by the railroad.

CHAPTER 8B. SIGNS AND MARKINGS

Section 8B.02 Sizes of Grade Crossing Signs

Insert the following after the Standard subsection:

Standard:

The size of STOP (R1-1) and YIELD (R1-2) signs installed at highway-rail grade crossings shall be no less than listed in Table 2B-1 for a Conventional Road.

Section 8B.03 Highway-Rail Grade Crossing (Crossbuck) Sign (R15-1) and Number of Tracks Sign (R15-2)

Delete the Option subsection and insert the following:

Standard:

The supplemental Number of Tracks sign shall be used at highway-rail grade crossings with automatic gates.

Section 8B.04 Highway-Rail Grade Crossing Advance Warning Signs (W10 Series)

Delete the first Standard subsection and replace with the following:

Standard:

A Highway-Rail Grade Crossing Advance Warning (W10-1) sign (see Figure 8B-2) shall be used on each highway in advance of every Highway-Rail grade crossing.

Option:

A Highway-Rail Grade Crossing Advance Warning (W10-1) sign may be omitted in the following circumstances:

A. On an approach to a highway-rail grade crossing from a T-intersection with a parallel highway, if the distance from the edge of the track to the edge of the parallel roadway is less than 100 ft; or

B. On low volume, low speed highways where pavement markings are installed crossing minor spur tracks that are infrequently used if an engineering study indicates such installation would be of minimal benefit, and absence of the sign is authorized in a crossing Order; or

C. In business districts where active highway-rail grade crossing traffic control devices are in use and pavement markings are installed, if an engineering study indicates such installation would be of minimal benefit, and absence of the sign is authorized in a crossing Order; or

D. Where physical conditions do not permit even a partially effective display of the sign as determined by engineering judgment, pavement markings are installed, and absence of the sign is authorized in a crossing Order.

Standard:

Placement of the Highway-Rail Grade Crossing Advance Warning sign shall be in accordance with Figure 8B-6(OR).

Section 8B.08 STOP (R1-1) or YIELD (R1-2) Signs at Highway-Rail Grade Crossings

Add the following at the end of the Standard subsection:

Standard:

Authority to install STOP or YIELD signs at highway-rail grade crossings shall be obtained from the Rail Division of the Department of Transportation through the issuance of a crossing Order.

Section 8B.17 Low Ground Clearance Highway-Rail Grade Crossing Sign (W10-5)

Delete the Standard subsection and replace with the following:

Guidance:

Because this symbol might not be readily recognizable by the public, the Low Ground Clearance Highway-Rail Grade Crossing (W10-5) warning sign should be accompanied by an educational plaque, LOW GROUND CLEARANCE. The LOW GROUND CLEARANCE educational plaque should remain in place for at least 3 years after the initial installation of the W10-5 sign (see Section 2A.13).

Option:

When the Low Ground Clearance sign is authorized for installation in conjunction with the side road Advance Warning sign (W10-2, W10-3, or W10-4), the Low Ground Clearance sign or the educational plaque may be mounted on the same post, with the Low Ground Clearance sign or educational plaque located below the Advanced Warning sign.

Section 8B.20 Pavement Markings

Delete the entire Standard subsection and replace with the following:

Standard:

All highway-rail grade crossing pavement markings shall be retroreflectorized white. All other markings shall be in accordance with Part 3.

Pavement markings in advance of a highway-rail grade crossing shall consist of an X, the letters RR, a no-passing marking (two-lane highways where centerline markings are used), and certain transverse lines as shown in Figures 8B-6(OR) and 8B-7.

Identical markings shall be placed in each approach lane on all paved approaches to highway-rail grade crossings.

Delete Figure 8B-6 and replace with Figure 8B-6(OR)

Delete the first sentence of the Guidance subsection

Insert the following at the end of the section:

Option:

Pavement markings may be omitted at highway-rail grade crossings in the following circumstances:

A. The posted or statutory highway speed is 40 km/h (25 mph) or less; and
B. An advance warning sign is installed; and
C. An engineering study indicates that other installed devices provide suitable warning and control; and
D. The absence of the markings is authorized in a crossing Order.

Section 8B.21 Stop Lines

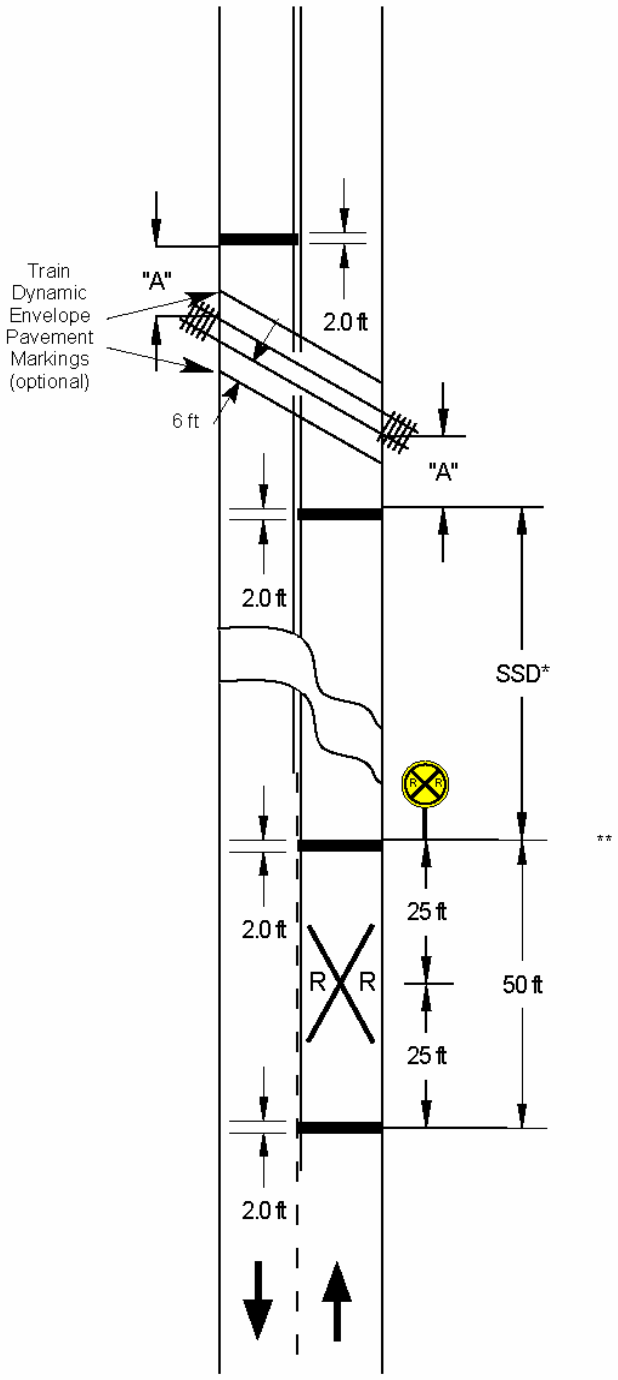
Insert the following at the beginning of the section:

Standard:

Stop lines shall be placed at all highway-rail grade crossings as shown in Figure 8B-6(OR).

Delete the second sentence of the Guidance subsection

Figure 8B-6(OR). Example of Placement of Warning Signs and Pavement Markings at Highway-Rail Grade Crossings



A three-lane roadway should be marked with a centerline for two-lane approach operation on the approach to a crossing

On multi-lane roads, the transverse bands should extend across all approach lanes, and individual RXR symbols should be used in each approach lane.

** When used the toe of the pavement marking should be directly opposite the Advanced Warning Sign (W10-1). If needed, supplemental pavement marking symbol(s) may be placed between the Advance Warning Sign and the crossing, but should be at least 50 ft. from the stop line.

"A" Stop clearance line location is 12ft minimum from the nearest rail or 1ft in advance of the location where an automatic gate arm crosses the roadway

Note:
In an effort to simplify the figure to show warning sign and pavement marking placement, not all required traffic control devices are shown.

*Safe stopping distances (SSD) based on vehicle speed approaching grade crossings:

SPEED MPH	SSD FEET
15	80
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645

Legend

Direction of travel

CHAPTER 8D. FLASHING-LIGHT SIGNALS, GATES, AND TRAFFIC CONTROL SIGNALS

Section 8D.02 Flashing-Light Signals, Post-Mounted

Delete the first Option subsection and replace with the following:

Standard:

Bells or other audible warning devices shall be included in the assembly and shall be operated in conjunction with the flashing lights to provide additional warning for pedestrians and bicyclists.

Section 8D.06 Train Detection

Delete the entire Option subsection

Section 8D.07 Traffic Control Signals at or Near Highway-Rail Grade Crossings

Insert the following at the end of the second Standard subsection:

Standard:

When a vehicle clear out interval (VCOI) is required, the indication for the clearance phases shall be green.

Advance railroad detection or other appropriate methods shall be used to provide a pedestrian clear out interval (PCOI) before the vehicle clear-out interval. This should be designed to minimize the occurrence of abbreviated pedestrian clearance intervals.

PART 9. TRAFFIC CONTROLS FOR BICYCLE FACILITIES

CHAPTER 9A. GENERAL

Section 9A.01 Requirements for Bicyclist Traffic Control Devices

Insert the following at the beginning of the section:

Support:
General guidance and design considerations relating to bikeways can be found in the "Oregon Bicycle and Pedestrian Plan" which is available from ODOT Bicycle and Pedestrian Program Unit.

CHAPTER 9B. SIGNS

Section 9B.04 Bicycle Lane Signs (R3-17, R3-17a, R3-17b)

Delete the Standard subsection and insert the following Option and Support subsections:

Option:

Bicycle Lane signs (R3-17, R3-17a and R3-17b) may be used in advance of the beginning of a marked bicycle lane or at periodic intervals and may only be used in conjunction with marked bicycle lanes.

Support:

Oregon promotes the use of bicycles as a travel mode. The Oregon Bicycle and Pedestrian Plan gives statewide practices and recommendations for providing signs and bicycle lane markings.

CHAPTER 9C. MARKINGS

Section 9C.04 Markings for Bicycle Lanes

Delete the second paragraph of the Standard subsection and insert the following Option and Support subsections after the Standard subsection:

Option:

If the word or symbol pavement markings shown in Figure 9C-6 are used, Bicycle Lane signs (see Section 9B.04) may also be used, but the signs need not be adjacent to every symbol to avoid overuse of the signs.

Support:

Oregon promotes the use of bicycles as a travel mode. The Oregon Bicycle and Pedestrian Plan gives statewide practices and recommendations for providing signs and bicycle lane markings.

PART 10. TRAFFIC CONTROLS FOR HIGHWAY-LIGHT RAIL TRANSIT GRADE CROSSINGS

CHAPTER 10D. HIGHWAY-LIGHT RAIL TRANSIT ACTIVE TRAFFIC CONTROL GRADE CROSSING SYSTEMS

Section 10D.07 Use of Traffic Control Signals for Control of Light Rail Transit Vehicles at Grade Crossings

Insert the following after the first Support subsection:

Option:

In addition to the examples of light rail transit specific control signals shown in Figure 10D-1, an amber horizontal bar may be used for a stop indication.

Support:

Amber horizontal bars are used for stop indications for light rail systems in Oregon. Oregon standards for light rail traffic control signals were developed prior to their inclusion in the MUTCD and follow national light rail transit standards.