



SUBJECT Location of Crosswalks on State Highways	FINAL NUMBER RD21-01(B)	EFFECTIVE DATE 02/01/2021	VALIDATION DATE N/A	SUPERSEDES or RESCINDS N/A
WEB LINK(S) https://www.oregon.gov/ODOT/Engineering/Pages/Technical-Guidance.aspx				
TOPIC/PROGRAM Crosswalks	APPROVED SIGNATURE Original signed by Michael Kimlinger, P.E. State Traffic-Roadway Engineer			

PURPOSE

This technical bulletin provides direction and guidelines to ODOT staff, consultants, and local agencies on where crosswalks are located on the State Highway System. This technical bulletin does not give guidance or direction on curb ramp design.

ODOT staff, consultants, and local agency partners must understand where crosswalks are located so ODOT can work toward achieving its goals related to crosswalks in the Oregon Bicycle and Pedestrian Plan and fulfill its accessibility obligations.

DEFINITIONS

Definitions in this technical bulletin primarily refer to Oregon statutes. Definitions in the Highway Design Manual, AASHTO publications, or the MUTCD might be slightly different.

Alley – ([ORS 801.110](#)) A street or highway primarily intended to provide access to the rear or side of lots or buildings in urban areas and not intended for through vehicular traffic.

Closed Crosswalk – ([ORS 810.080](#)) A crosswalk where a road authority places and maintains signs giving notice of closure. Pedestrians are prohibited from crossing a roadway at a closed crosswalk ([ORS 810.080](#), [ORS 814.020](#)). See the Traffic Manual for more information on crosswalk closures.

Highway – ([ORS 801.305](#)) Every public way, road, street, thoroughfare and place, including bridges, viaducts and other structures within the boundaries of this state, open, used or intended for use of the general public for vehicles or vehicular traffic as a matter of right.

Intersection – ([ORS 801.320](#)) the area of a roadway created when two or more roadways join together at any angle, as described in one of the following:

1. If the roadways have curbs, the intersection is the area embraced within the prolongation or connection of the lateral curb lines.
2. If the roadways do not have curbs, the intersection is the area embraced within the prolongation or connection of the lateral boundary lines of the roadways.
3. The junction of an alley with a roadway does not constitute an intersection.
4. Where a highway includes two roadways 30 feet or more apart, then every crossing of each roadway of the divided highway by an intersection highway is a separate intersection. In the event the intersection highway also includes two roadways 30 feet or more apart, then every crossing of two roadways of such highways is a separate intersection.

Marked Crosswalk – ([ORS 801.220](#)) Any portion of a roadway at an intersection or elsewhere that is distinctly indicated for pedestrian crossing by lines or other markings on the surface of the roadway that conform in design to the standards established for crosswalks under [ORS 810.200](#). [OAR 734-020-0005](#) adopts the Manual on Uniform Traffic Control Devices (MUTCD) as those standards. Decorative pavement treatments such as brick, concrete pavers, stamped asphalt, or coloring are not crosswalk markings (see the Traffic Manual for more information on textured and colored crosswalk treatments).

Pedestrian – ([ORS 801.385](#)) Any person afoot or confined in a wheelchair.

Pedestrian Access Route –An area for the use of pedestrians to navigate along sidewalks, driveways, curb ramps, crossings, and pedestrian facilities.

Planned Roadway – A planned roadway is not yet improved, designed, or ordinarily used for vehicular travel ([ORS 801.450](#)).

Region Traffic Engineer – Defined in Section 100.1 of the ODOT Traffic Manual.

Roadway – ([ORS 801.450](#)) The portion of a highway that is improved, designed or ordinarily used for vehicular travel, exclusive of the shoulder. In the event a highway includes two or more separate roadways the term “roadway” shall refer to any such roadway separately, but not to all such roadways collectively.

Shoulder – ([ORS 801.480](#)) The portion of a highway, whether paved or unpaved, contiguous to the roadway that is primarily for use by pedestrians, for the accommodation of stopped vehicles, for emergency use and for lateral support of base and surface courses.

Sidewalk – ([ORS 801.485](#)) The area determined as follows:

1. On the side of a highway which has a shoulder, a sidewalk is that portion of the highway between the outside lateral line of the shoulder and the adjacent property line capable of being used by a pedestrian.
2. On the side of a highway which has no shoulder, a sidewalk is that portion of the highway between the outside lateral line of the roadway and the adjacent property line capable of being used by a pedestrian.

Unmarked Crosswalk – A crosswalk that does not have markings on the surface of the roadway that conform in design to the standards established for crosswalks under [ORS 810.200](#). Sometimes called a crossing in project development.

Vacated Roadway – For the purposes of this technical bulletin, a roadway is vacated when the governing body passes an ordinance, order, or resolution granting the vacation according to [ORS 271.120](#) for cities or [ORS 368.356](#) for counties.

GUIDANCE/DIRECTION

Where Crosswalks are Located

Crosswalks are located:

1. Wherever crosswalk markings conforming to the Manual on Uniform Traffic Control Devices (MUTCD, adopted in [OAR 734-020-0005](#)) are on the roadway surface (Installing marked crosswalks on state highways might require approval. See the Traffic Manual for requirements related to marked crosswalks on state highways.), or
2. If not marked, then across every leg of an intersection as follows unless a crosswalk is closed or does not exist as described in this technical bulletin:
 - a. Where curb ramps connect across the leg of an intersection (**Figure 1**), or
 - b. If not 2-a, then where a curb ramp connects with a shoulder or sidewalk across the leg of an intersection (**Figure 2**), or
 - c. If not 2-a or 2-b, then where shoulders or sidewalks connect across the leg of an intersection (**Figure 3**), or
 - d. If not 2-a, 2-b, or 2-c, then where shoulders or sidewalks would connect across the leg of the intersection, as if shoulders or sidewalks were present at an intersection (**Figure 4**).

Unmarked crosswalks are 6 to 20 feet wide ([ORS 801.220](#)). The connections described above are within the crosswalk and the crosswalk does not extend into the parallel traveled way.

An intersection exists where two or more roadways join at any angle ([ORS 801.320](#)). This includes T-intersections (where two roadways join and one of the roadways ends).

Figure 1: Unmarked Crosswalk Location where Curb Ramps Connect

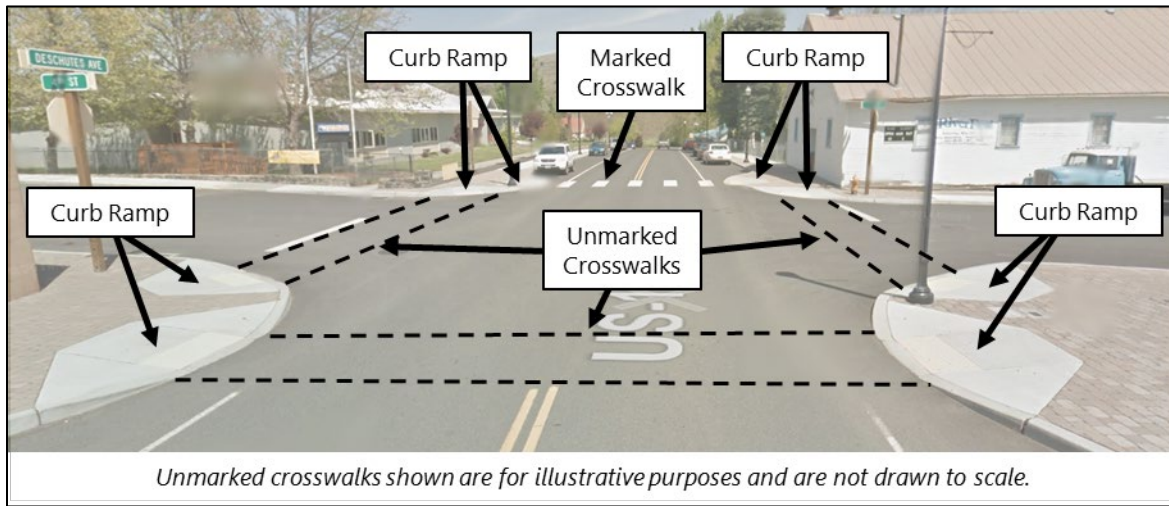


Figure 2: Unmarked Crosswalk Location where Curb Ramp and Shoulder Connect

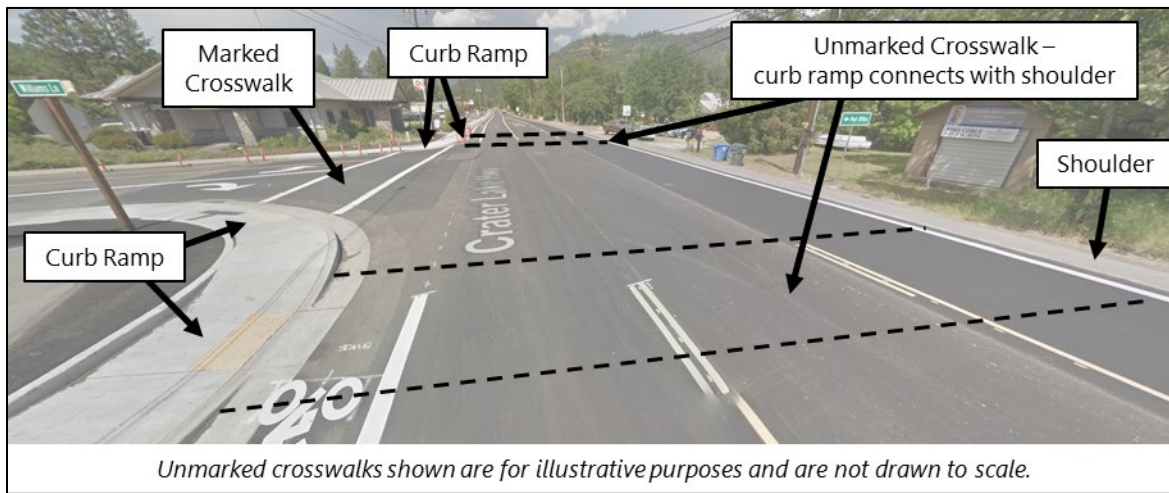


Figure 3: Unmarked Crosswalk Locations where Sidewalks/Shoulders Connect

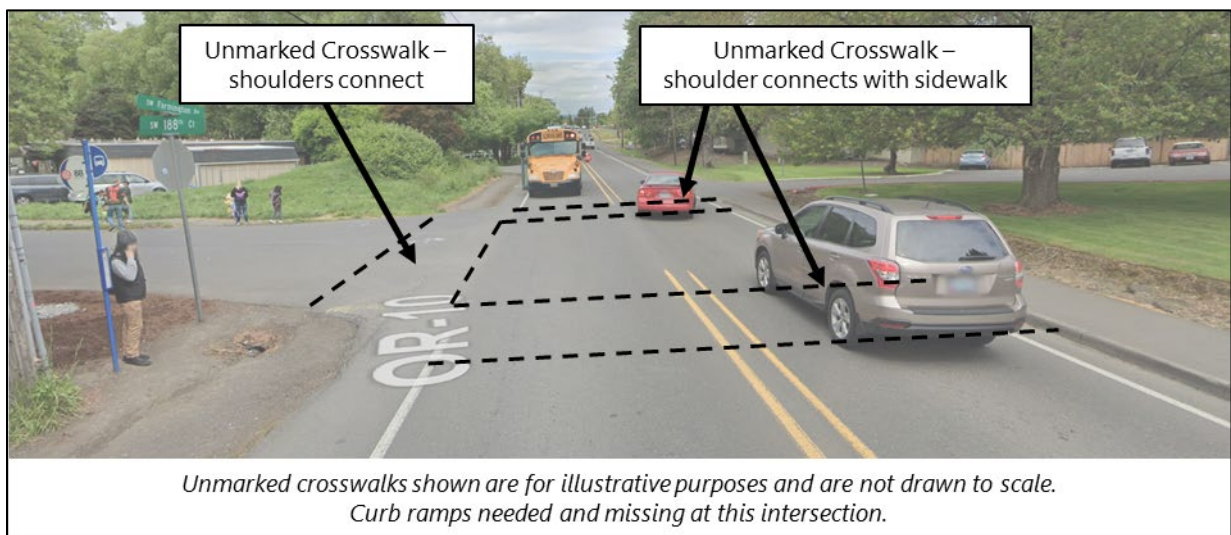
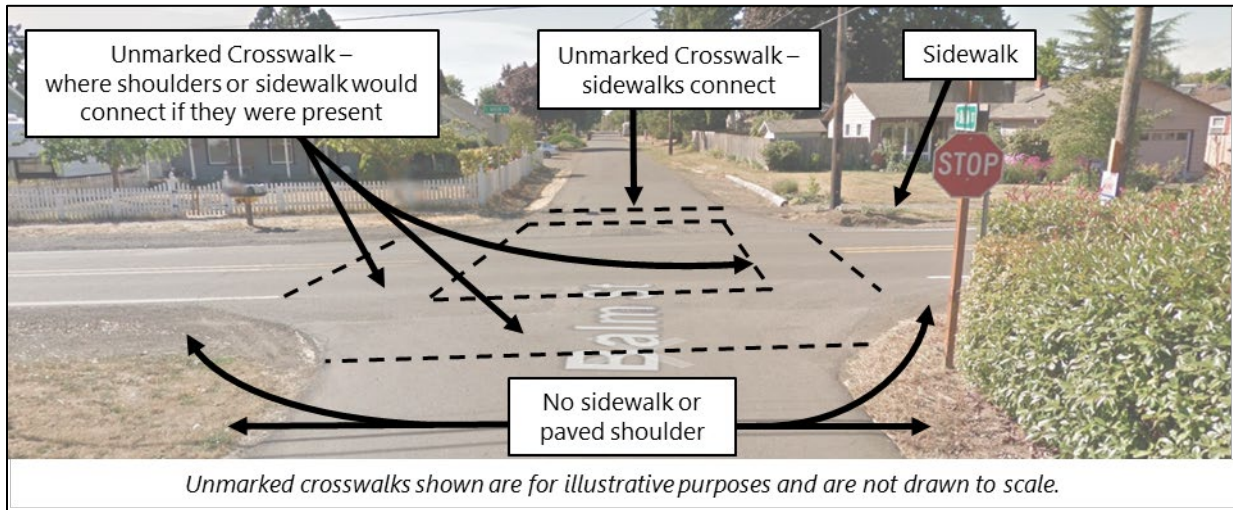


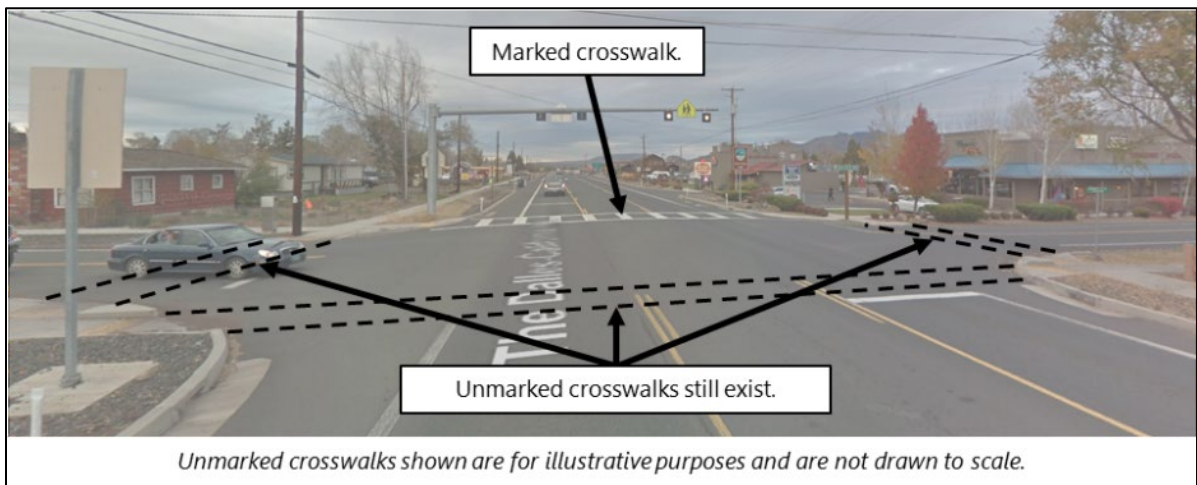
Figure 4: Unmarked Crosswalk Locations where Sidewalks/Shoulders Not Present



Intersections with Marked and Unmarked Crosswalks

A marked crosswalk at an intersection does not change the existence of any other crosswalk at that intersection.¹ For example, the unmarked crosswalks in **Figure 5** still exist even though one of the crosswalks is marked.

Figure 5: Marked and Unmarked Crosswalk at an Intersection



¹ [ORS 801.220](#) says, “Whenever marked crosswalks have been indicated, such crosswalks and no other shall be deemed lawful across such roadway at that intersection.” Some interpretations of this statute have suggested marking one crosswalk at an intersection means the crosswalk on the opposite leg of the intersection no longer exists, unless it is marked too. Other interpretations have suggested that because [ORS 801.220](#) describes both marked and unmarked crosswalks, this sentence clarifies that a marked and unmarked crosswalk cannot both exist across the same leg of an intersection – the marked crosswalk takes precedence. Road users generally expect crosswalks at intersections (marked or unmarked, unless a crosswalk is closed), so ODOT is implementing [ORS 801.220](#) this way.

Midblock Crosswalks

A midblock crosswalk is located where crosswalk pavement markings conforming to the MUTCD are present and the location is not an intersection. Unmarked crosswalks only exist at intersections ([ORS 801.220](#)).

Channelized Turn Lanes

Where a raised island separates a channelized turn lane from the rest of the intersection, the crosswalks to/from the raised island are located:

1. Where marked (**Figure 6**), or
2. If not marked, the crosswalks are located as follows unless a crosswalk is closed:
 - a. Where the curb ramp on the island connects with the curb ramp on the opposite side of the highway or channelized turn lane (**Figure 7**), or
 - b. If an opposite side does not have a curb ramp, then where the curb ramp on the island connects with the shoulder or sidewalk on the opposite side of the highway (**Figure 8**).

“Curb ramp” includes where a cut-through pedestrian access route in the island transitions to the roadway, like in **Figure 8**.

Crosswalks do not begin or end at painted channelizing islands because those types of islands are part of the roadway. Crosswalks might be located through painted channelizing islands, like in **Figure 9**. Pedestrians with limited or no vision cannot detect painted channelizing islands nor reorient themselves to complete their crossing from those types of islands.

Figure 6: Marked Crosswalk across a Channelized Turn Lane

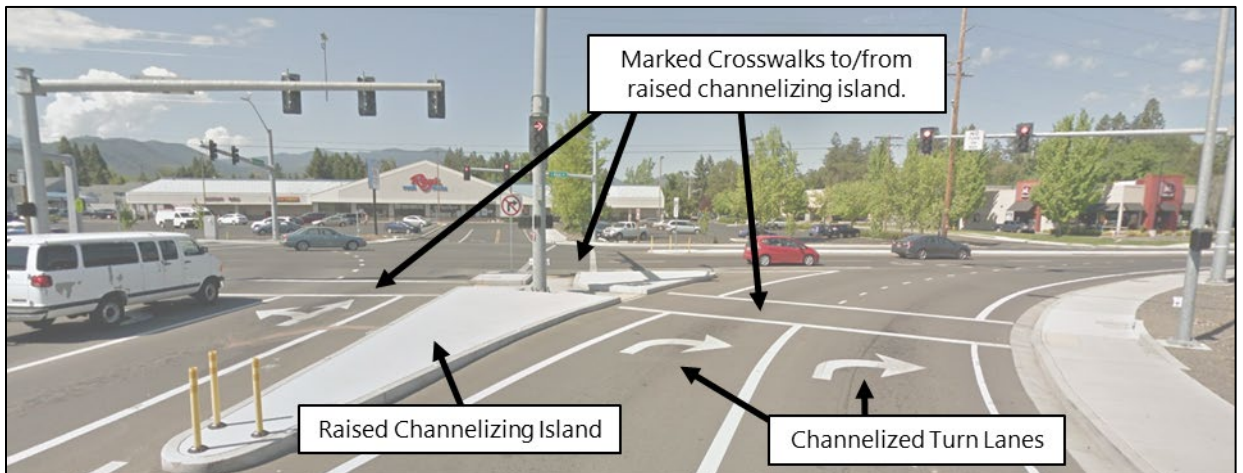


Figure 7: Unmarked Crosswalk Connecting Curb Ramps across a Channelized Turn Lane

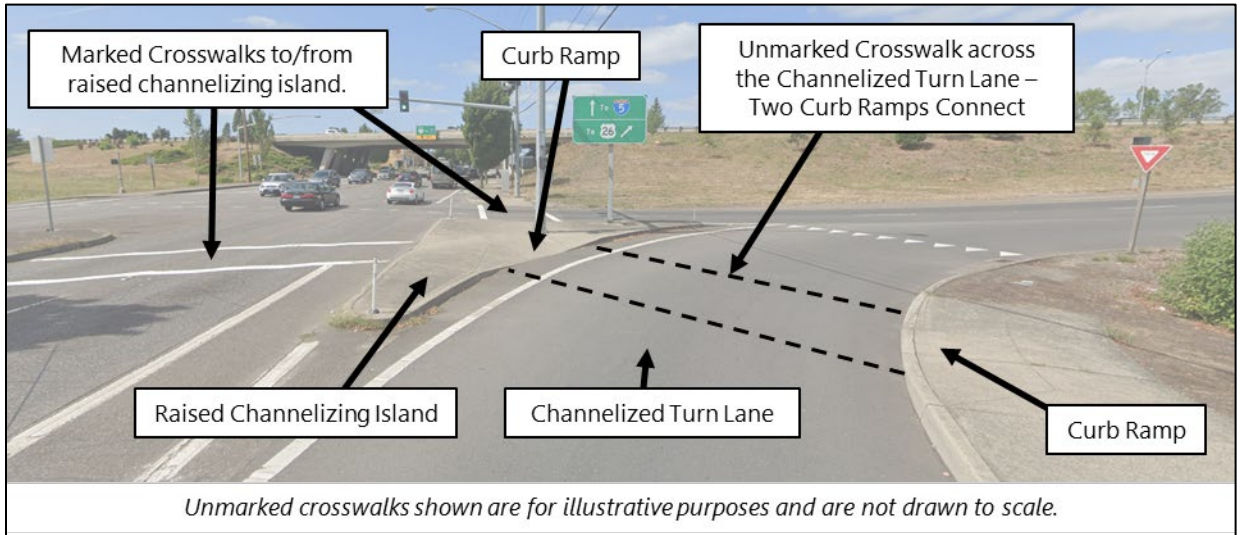


Figure 8: Unmarked Crosswalk Connecting Curb Ramp and Shoulder across a Channelized Turn Lane

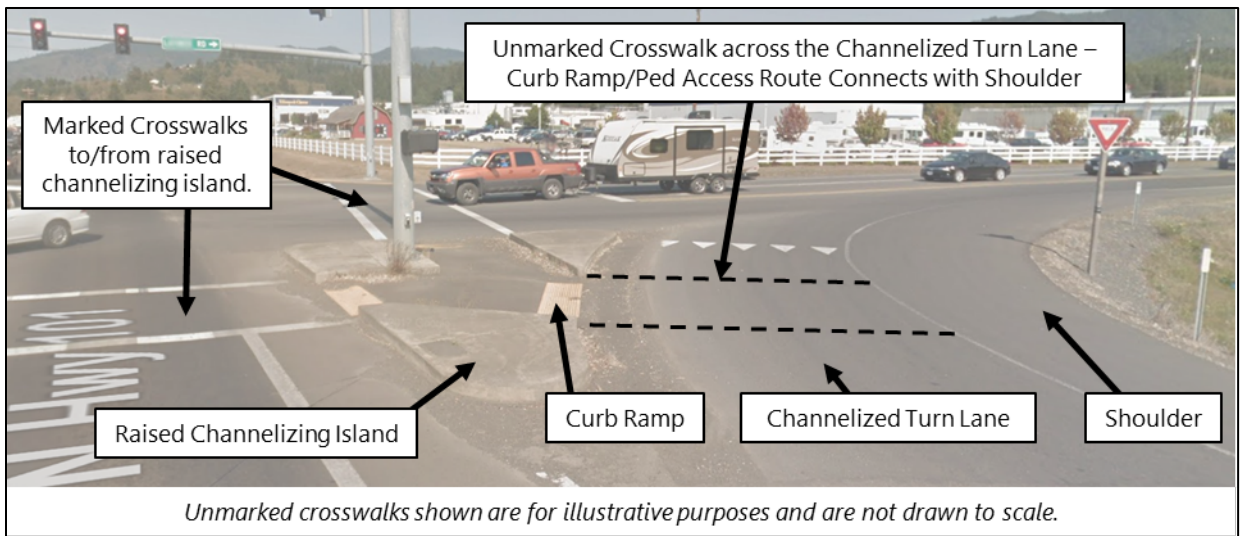
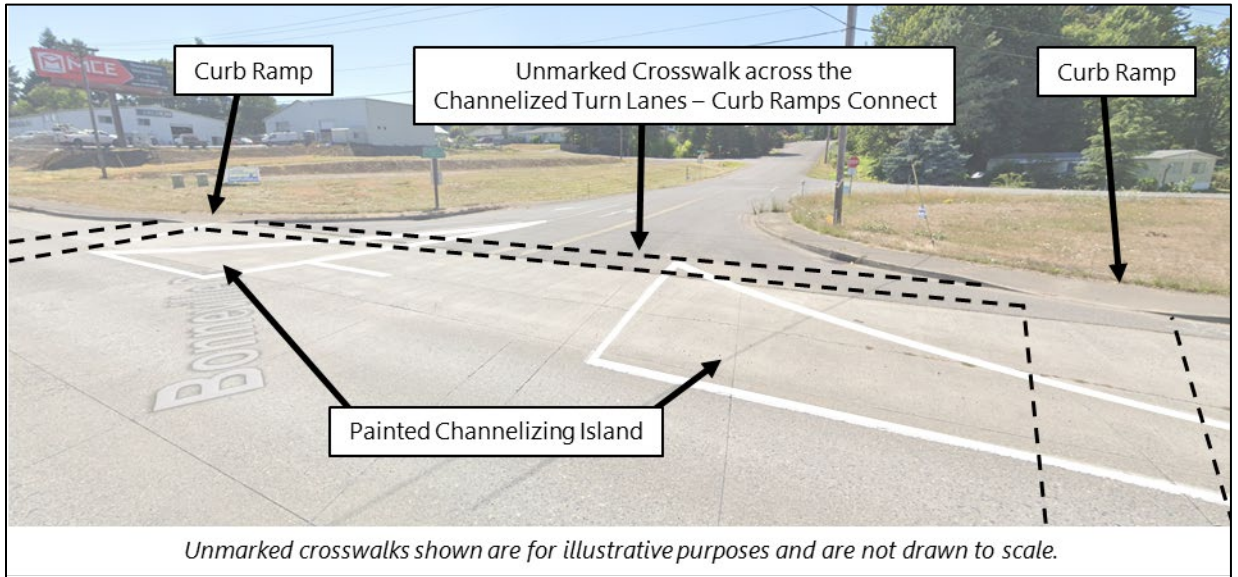


Figure 9: Unmarked Crosswalk Connecting Curb Ramps across Painted Channelizing Islands



Merging/Diverging Interchange Ramps

The location where interchange ramps merge and diverge from a main highway is an intersection because this is where two roadways join.

Crosswalks are located across merging and diverging interchange ramps so pedestrians can continue traveling along the main highway. These crosswalks are located according to the discussion under “Where Crosswalks are Located” beginning on Page 3, as shown in **Figure 10**, **Figure 11**, and **Figure 12**. Because ramps are tangent to the main highways where they merge or diverge, there are no crosswalks across the main highway.

Figure 10: Marked Crosswalks across Diverging Ramps

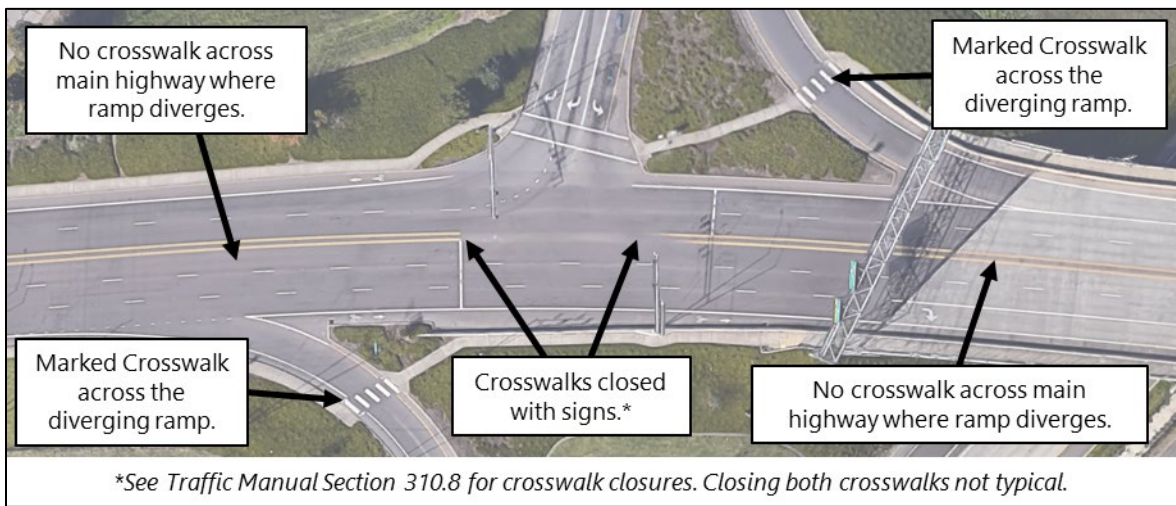


Figure 11: Unmarked Crosswalks Connecting Curb Ramps across Diverging Ramps

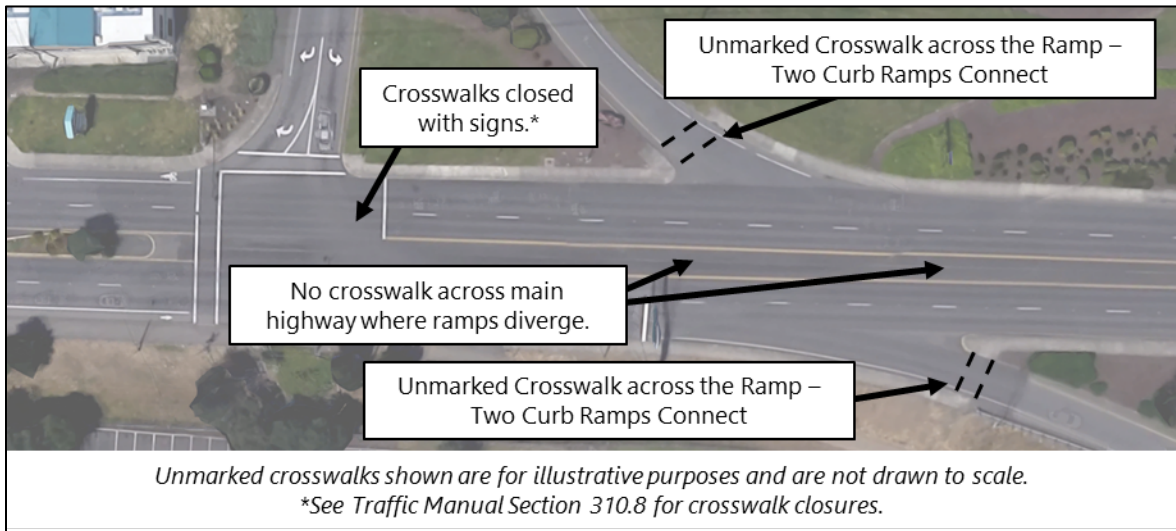
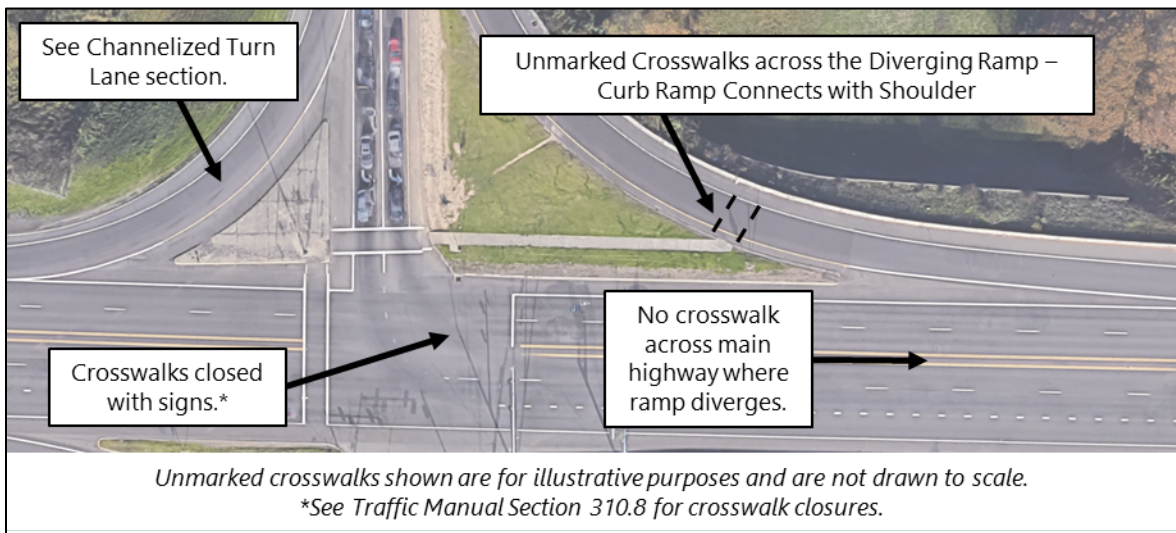


Figure 12: Unmarked Crosswalk Connecting Curb Ramp and Shoulder across a Diverging Ramp



Features that Do Not Create Intersections

There are features where drivers can enter or exit a highway that are not intersections. Unmarked crosswalks are located at intersections. A pedestrian can legally cross the roadway where a crosswalk does not exist (unless prohibited by local ordinance or at a closed crosswalk), but the pedestrian must yield to vehicles on the roadway ([ORS 814.040](#)). Drivers must yield to pedestrians on sidewalks ([ORS 811.025](#)).

Alleys, Private Driveways, and Private Streets

Private driveways, private streets, and alleys (**Figure 13**), including driveways to large developments (**Figure 14**), do not create intersections where they join a roadway, unless a traffic signal, roundabout, or STOP sign controls traffic on the highway at that junction (**Figure 15**).

Alleys do not create intersections ([ORS 801.320](#)). ODOT is treating private streets and private driveways like alleys because private streets and private driveways are primarily intended to provide access to properties and not intended for through vehicular traffic.

Figure 13: Alley

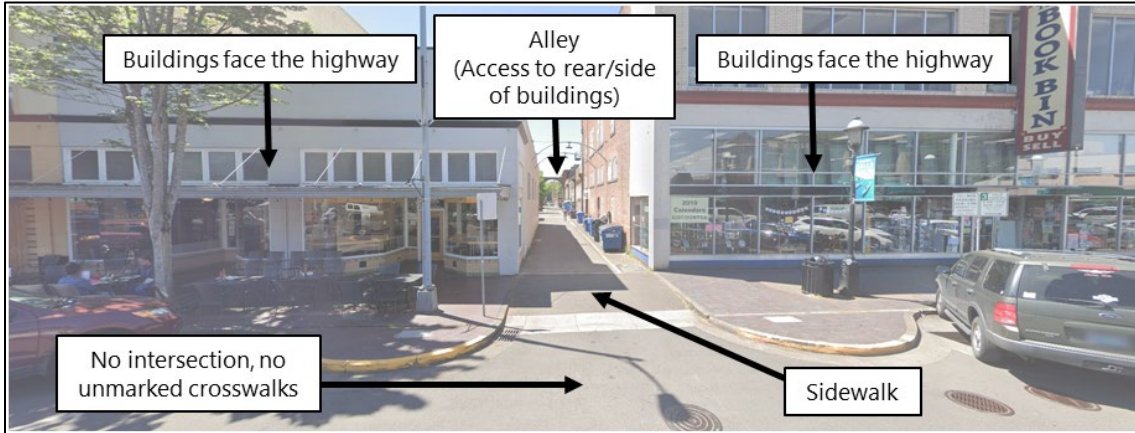


Figure 14: Private Driveway to Large Development – Highway Uncontrolled

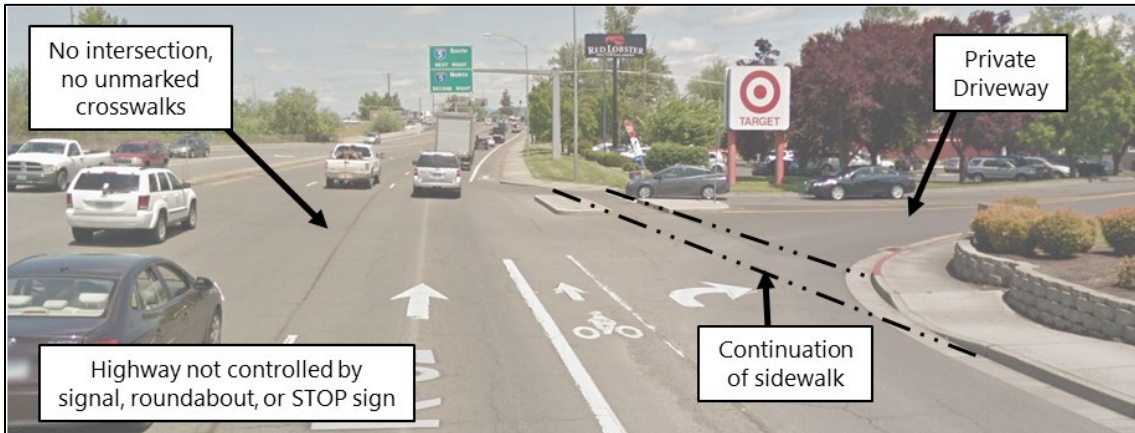
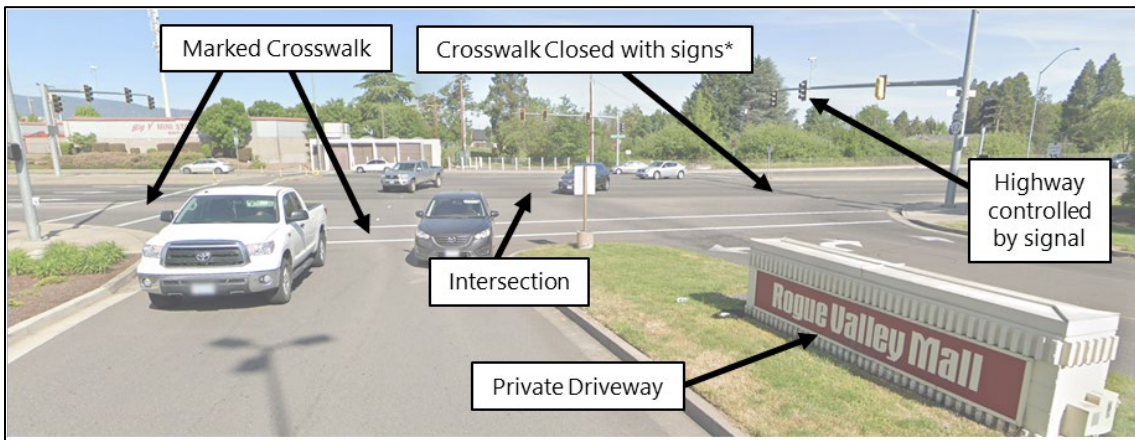


Figure 15: Private Driveway to Large Development – Highway Signal Controlled



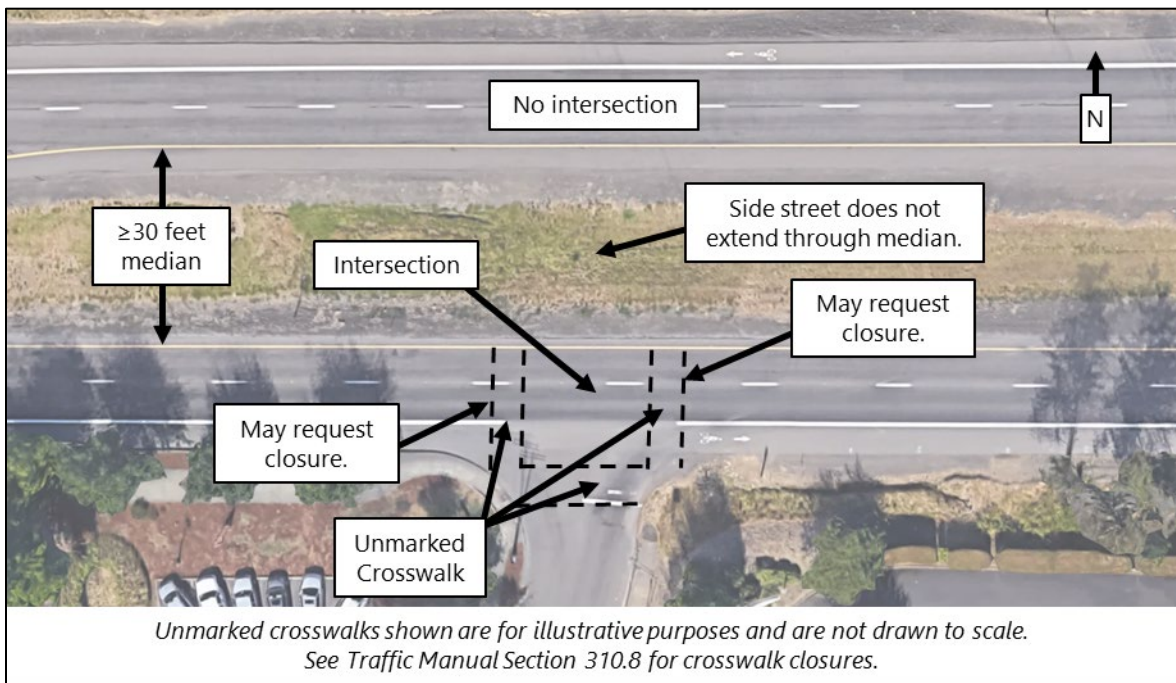
*See Traffic Manual Section 310.8 for crosswalk closures.

Wide Medians

Where a roadway intersects with one side of a divided highway that has a median 30 feet or wider, but does not extend through the median to the other side of the divided highway, an intersection exists with one side of the divided highway but not the other side ([ORS 801.320](#)). Median width in this context is measured from edge line to edge line.

For example, the highway in **Figure 16** consists of two roadways separated by a median that is 30 feet or wider, measured from edge line to edge line. A roadway intersects with the eastbound side but does not extend through the median to the westbound side. Because the median is 30 feet or wider, there is no intersection with the westbound side ([ORS 801.320](#)) and there are no unmarked crosswalks across the westbound side. Crossing would position pedestrians in the median without a route through the median nor a crosswalk to complete their crossing. The crosswalks across the eastbound side at this intersection may be considered for closure according to the Traffic Manual process.

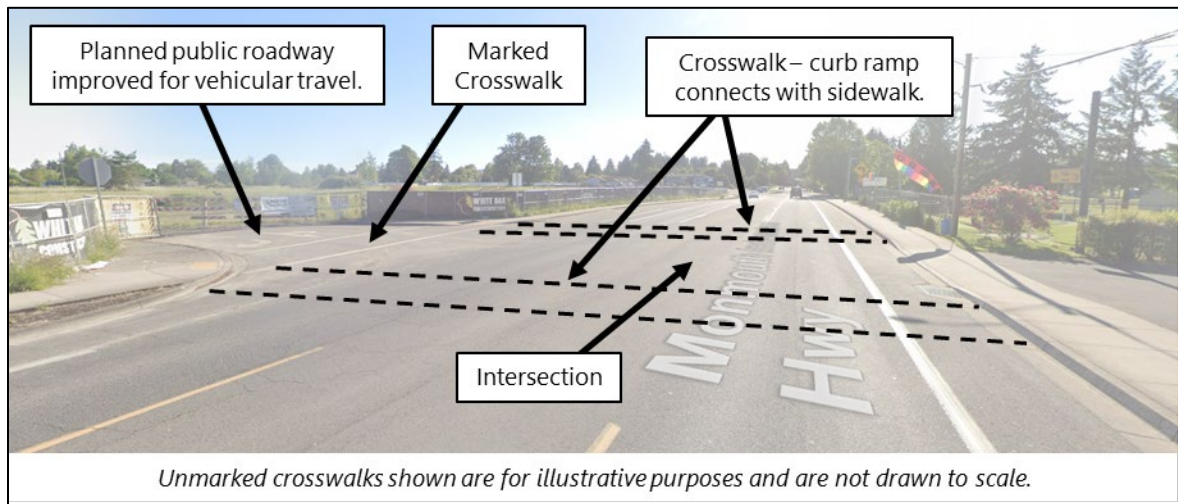
Figure 16: Highway with Wide Median



Planned Roadways

A planned or platted roadway does not create an intersection where it is planned to meet another roadway until the planned or platted roadway is improved, designed, or ordinarily used for vehicular travel, like in **Figure 17**.

Figure 17: Portion of Planned Roadway Improved for Vehicular Travel



Vacated Roadways

A vacated roadway does not create an intersection where it meets another roadway.

A roadway that a governing body vacates is no longer a public roadway. For the purposes of this technical bulletin, ODOT considers a roadway vacated when the governing body passes an ordinance, order, or resolution granting the vacation according to [ORS 271.120](#) for cities or [ORS 368.356](#) for counties.

Because vacated roadways are primarily intended to provide private access and not intended for through vehicular traffic, ODOT is treating vacated roadways like a private driveway or alley.

Closed Crosswalks

Closing a crosswalk removes a link from the surrounding pedestrian network by prohibiting pedestrians from crossing at that location. ODOT can close a crosswalk using signs according to [ORS 810.080](#) where a geometric design or operational condition significantly degrades pedestrian safety and cannot be reasonably mitigated. The State Traffic-Roadway Engineer approves installation of these traffic control devices on state highways under OAR 734-020-0410.

See the Traffic Manual for guidance, direction, and process regarding crosswalk closures. Use [Form 734-5150](#).

If it is not appropriate to close a crosswalk and a curb ramp cannot be designed to ODOT standards, seek a design exception through ODOT's Curb Ramp Design Exception process ([Form 734-5112](#)).

Features that Interrupt Crosswalks

ODOT is responsible for providing pedestrian facilities usable by everyone, including people who have disabilities. ODOT also has a policy to connect pedestrian network gaps, understanding the unique needs of urban, suburban, and rural communities. However, in some cases there are features that interrupt a crosswalk's pedestrian access route, unless access is provided through the feature. These kinds of features include but are not limited to raised medians (**Figure 18**), unpaved medians, and concrete barriers (**Figure 19**).

Choosing to provide access to some but not all pedestrians based on physical ability is discrimination. Therefore, where a feature interrupts a crosswalk's pedestrian access route, the crosswalk may be closed according to the Traffic Manual process. The request for closure shall document why a pedestrian access route should not be installed through the feature. If a crosswalk is closed because it is interrupted, the crosswalk closure should be re-evaluated when substantial changes are made to the intersection.

For example, if the median barrier in **Figure 19** were broken to provide a 6-foot-wide pedestrian access route, this would reduce the ability for the barrier to redirect an errant vehicle and increase the chance of a crossover crash because the barrier ends would need crash cushions or impact attenuators. The crosswalks across the highway at this intersection could be considered for closure according to the Traffic Manual process, which includes considering the impacts to the surrounding pedestrian network and pedestrian safety at the intersection.

Figure 18: Pedestrian Access Route through Median

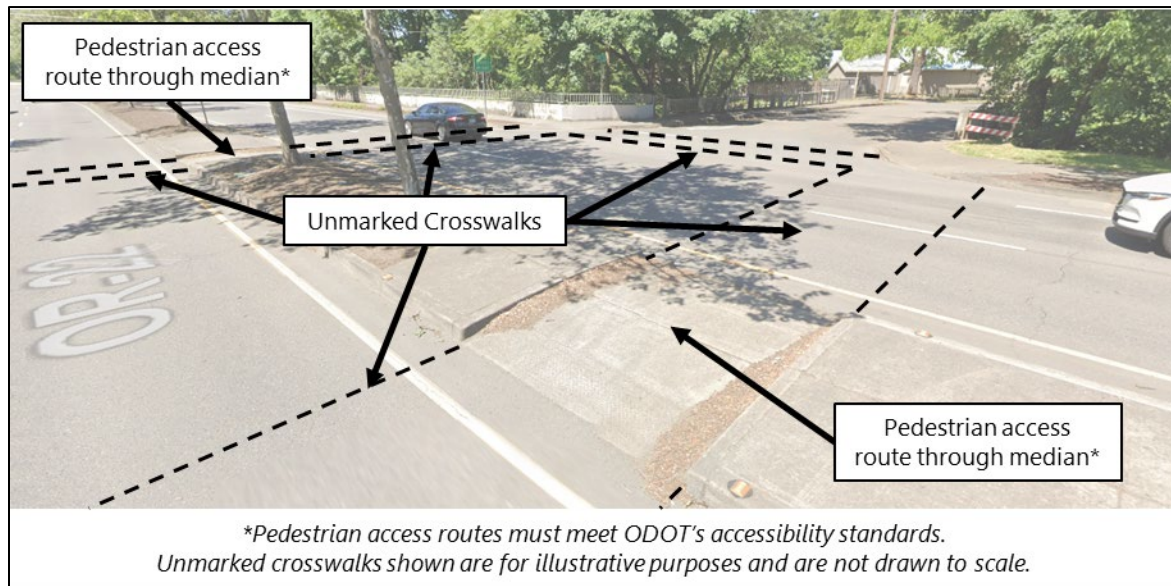
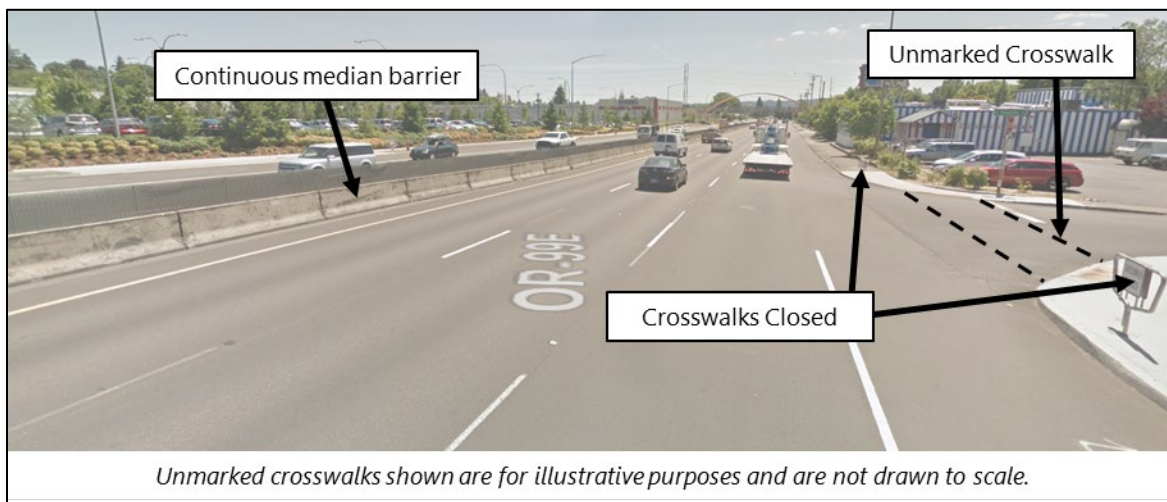


Figure 19: No Pedestrian Access Route through Median



Driveways at Intersections

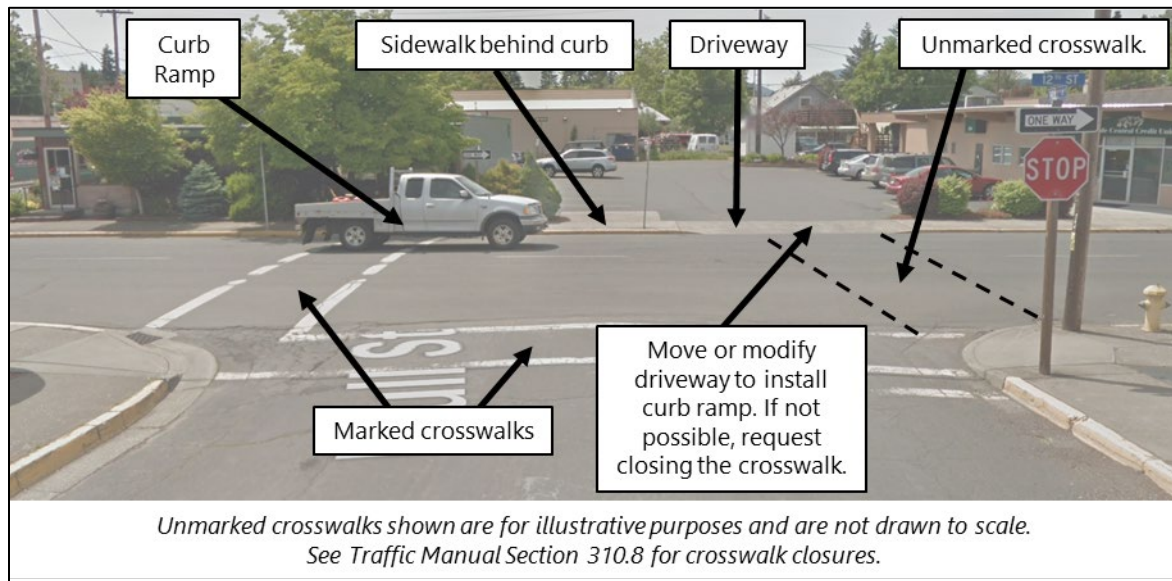
Driveways are sometimes present at intersections. Where this occurs, it is typically at a T-intersection. Where the driveway is along the top of the T, an unmarked crosswalk might align with the driveway.

In these cases, where the pedestrian facility is behind a curb (**Figure 20**), the curb ramp position on the driveway side of the crosswalk may be offset up to 15 degrees or 10 feet, whichever is less, from the opposite curb ramp. Both curb ramps shall be directional and orient pedestrians toward the receiving curb ramp.

If the curb ramp cannot be located outside the driveway, the driveway should be modified so a curb ramp can be installed to serve the crosswalk. Modifications might include but are not limited to changing the driveway width, moving the driveway, or eliminating the driveway according to access management rules.

If a curb ramp is needed, cannot be installed to serve the crosswalk, and the crosswalk still aligns with the driveway, then the crosswalk cannot serve all pedestrians. Choosing to provide access to some but not all pedestrians based on physical ability is discrimination. Therefore, request closing the crosswalk according to the Traffic Manual process. The request for closure shall document why a curb ramp cannot be installed to serve the crosswalk, including options considered to modify the driveway. The crosswalk closure should be re-evaluated when substantial changes are made to the intersection.

Figure 20: Driveway Aligned with Unmarked Crosswalk



Unique Intersections

Every intersection is unique and the guidance and direction in this technical bulletin will not cover all situations.

Where this technical bulletin does not clarify where a crosswalk is located on the State Highway System, the region traffic engineer may determine where a crosswalk is located with concurrence from the traffic active modes engineer in the Traffic-Roadway Section. In these cases:

1. The region traffic engineer shall complete Form 734-5294 and send it to the traffic active modes engineer in the Traffic-Roadway Section.
2. If the traffic active modes engineer, in coordination with the statewide asset specialist, concurs with the region traffic engineer's determination, the traffic active modes engineer sends concurrence to the region traffic engineer and the statewide asset specialist to keep the ADA curb ramp inventory up-to-date.

RESPONSIBILITIES

Use this technical bulletin for all work on the State Highway System, including but not limited to STIP projects, development projects, maintenance projects, and projects on state highways delivered by local agencies.

- **State traffic-roadway engineer** – Approve or deny requests for crosswalk closures and marked crosswalk installations as described in the Traffic Manual.
- **Region traffic engineer:**
 - Determine where a crosswalk is located if this technical bulletin does not clarify where the crosswalk is located.

- Document determination on Form 734-5294 and send it to the traffic active modes engineer in the Traffic-Roadway Section for concurrence.
- **Traffic active modes engineer (Traffic-Roadway Section):**
 - Review determinations made by region traffic engineers where this technical bulletin does not clarify the location of a crosswalk in coordination with statewide asset specialist.
 - If concurred, send concurrence to the region traffic engineer and the statewide asset specialist to keep the ADA curb ramp inventory up-to-date.
- **Statewide asset specialist (Traffic-Roadway Section)** – Update the curb ramp inventory using Form 734-5294 as part of the normal inventory update process.

SPECIAL INSTRUCTIONS

The Traffic-Roadway Section will incorporate information in this technical bulletin into the following publications as appropriate:

- Traffic Manual
- Highway Design Manual
- Bike-Ped Design Guide

CONTACT INFORMATION

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