Oregon Department of Transportation

Bike-Pedestrian Data Collection Guide

Includes: Bicycle, Sidewalk, Marked Crossing, Curb, Parking Facility & Shared Use Path

Traffic-Roadway Section | Delivery & Operations Division

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Delivery & Operations Division – Engineering & Technical Services Branch

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This guide has been prepared for use by the Traffic-Roadway Section and has evolved over time with input and expertise from a variety of resources. It will continue to evolve as new standards and requirements are established. The sources include the links provided throughout the document and the individuals listed below. Sincere gratitude is extended to these individuals for their support in the compilation of this document.

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This icon indicates important information.

Table of Contents

INTRODUCTION

In an effort to monitor inventory, condition and asset performance, Oregon Department of Transportation (ODOT) has adopted asset management principles for a proactive approach to stewardship of the transportation infrastructure. Asset Management is a systematic and strategic approach to maintain, upgrade and operate physical assets. In order to maximize the benefits of asset management, a standardized method of data collection and data processing is needed. This will not only benefit the individual asset managers, but will also create "corporate" data that can be used by all ODOT employees. Commonly understood corporate data will allow for informed decision-making, as well as better communication between asset managers and other ODOT departments (e.g., Maintenance, Construction, GIS, etc.). Data collection standards will lay the foundation for a regular cycle of communication about asset needs and conditions.

In January 2007, the draft ODOT Asset Management Region 2 Pilot Report was produced. This report documented experiences over the course of the previous year in collecting, integrating and reporting data about a variety of assets within specific highway segments. The state of available data for the assets included ranged from zero to well-established management systems. Research was done to analyze the data collection process, resources used, and condition of those assets that lacked previously existing data. Among the findings of the Pilot Report were recommendations specific to the assets included in the report, the methods and tools for data collection, and the quantity of data needed to build capacities for informed decisions.

The purpose of this guide is to assist ODOT employees and outside sources in gathering Bicycle, Sidewalk, Shared Use Path, Marked Crossing, Parking Facility, and Curbs information and to maintain a consistent data collection method throughout the state. Basic inventory supported by consistent data collection; sharing and reporting; and integration into a decision-making framework result in noticeable cost-savings as well as communication and data-sharing improvements have resulted in more cross-divisional collaborations; and additional inventory has also helped with other compliance requirements as well as improved programmatic plans.

A commitment to utilize the definitions, processes, and procedures contained in this manual is an important step in managing the programs and moving the agency forward.

The dedication to Asset Management principles by ODOT will foster the development of strategic methods to evaluate asset data and communicate asset needs. This system will prove beneficial throughout the agency in ways such as:

- provide reliable and accurate asset information;
- provide data for 1R/3R decision documentation;
- ensure that public agency activities are consistent with existing federal guidelines, current accounting practices, such as Governmental Accounting Standards Board (GASB) Statement 34; and
- Help ODOT as an agency demonstrate to the public that they are responsible stewards of Oregon's transportation assets.

Bicycle and pedestrian standards will continue to evolve, updates will be made as warranted and resources allow. Should you have any question, contact the asset owners identified in this manual.

BASIC INVENTORY

Inventory processes have changed over time and will continue to morph based on agency priority and resource availability. The business is currently testing a new data collection technology option; until implementation current business practice will not involve hand-held devices and if data collection is warranted field work will require a manual paper process, in office will be desktop inventory.
Prep work is required regardless of the process used and the steps and definitions are explained on the following pages.

Before Inventory Begins

Before collecting inventory, you will first need to do the following:

- Identify the segment of roadway to be inventoried with asset owner.
- Prepare collection method
    - Digital or physical excel spreadsheet: Use the FACS-STIP Tool Data-To-Go function to export a spreadsheet to the assets to be inspected/collected. Refer to the FACS-STIP User Guide for instructions on how to accomplish this. The FACS-STIP Tools and User Guide are available at:

      http://gisintra.odot.state.or.us/facsstip/
- Acquire fundamental working knowledge of the Digital Video Log (DVL).
    - See Appendix B
    - Access the DVL's User's Guide:
    - *https://dvlprod-ordot.msappproxy.net/cf/dvl/*
    - Link provides access to a list of the available video logs:

      https://www.oregon.gov/ODOT/Data/Documents/DVL_Available_Years.pdf
- Gain working knowledge of location and asset terminology (e.g., milepoints, add/non-add direction, etc.).

Print a copy or have access to the Highway Inventory Summary Report for the relevant segment of highway you are inventorying (see *Appendix D*). The following website contains reports by highway number:
https://www.oregon.gov/ODOT/Data/Documents/Routes-to-Highway-Cross-Reference-Table.pdf

High-level Process:

Office: Validate and update inventory from the office.

Field: Validate and update inventory with paper; tablet/ruggedized laptop; or handheld device.

INVENTORY DEFINITIONS & PHOTOGRAPHS

Bicycle Facility: Designed to separate cyclists from roadways with fast traveling motor vehicles. This is a linear asset with both a begin point and end point.

Sidewalk Facility: Designed to provide safe travel for pedestrians with and without limitations along roadways. This is a linear asset with both a begin and end point.

Marked Crossing: Designed to provide safe travel for pedestrians with and without limitations when crossing roadways. This is a point asset which belongs to a single milepoint.

Shared Use Path: Designed as a multiple use path for pedestrian travel. This is a linear asset with both a begin and end point.

Parking Facility: Designed as an acceptable location for motor vehicles to station along roadways. This is a linear asset with both a begin and end point.

Curbs: Designed to provide safety feature along sidewalk and other pedestrian facilities so that all pedestrians have protection from motor vehicles where curbs are present. This is a linear asset with both a begin and end point.

The following pages describe the features, attributes and domain values for Bike/Sidewalk Facilities. The description and images should be used to determine the appropriate details for the asset while conducting the data collection effort. Should you be unable to make a determination, or have questions, flag it for follow up with the asset owner.

Feature: A homogenous collection of common features, each having the same spatial representation and common set of attribute columns. Examples: START_MP, END_MP, BUF_IND.

Attribute: A piece of information which determines the properties of a field in a database: Highway #, Hwy Suffix, Roadway ID, Mileage Type, Overlap Type, Start MP, End MP, Position, etc.

Domains Values: The set of all possible values which will make the function 'work' and will output 'real' values. In the example of Highway # it is a three-digit state number used by ODOT assigned to a length of highway for specific use in the

corporate enterprise database. Valid highway numbers range from 001 to 499. Position has a domain of L for left and R for right. Only those values for the domain will be accepted into the enterprise system; any others will error out when trying to load the data.

LOCATION

This refers to the information that is needed to geographically reference the location of the traffic signal. The goal is to use this information to map the location of features along roadways.

Definitions for the location data that will help in filling in the location data fields are provided below:

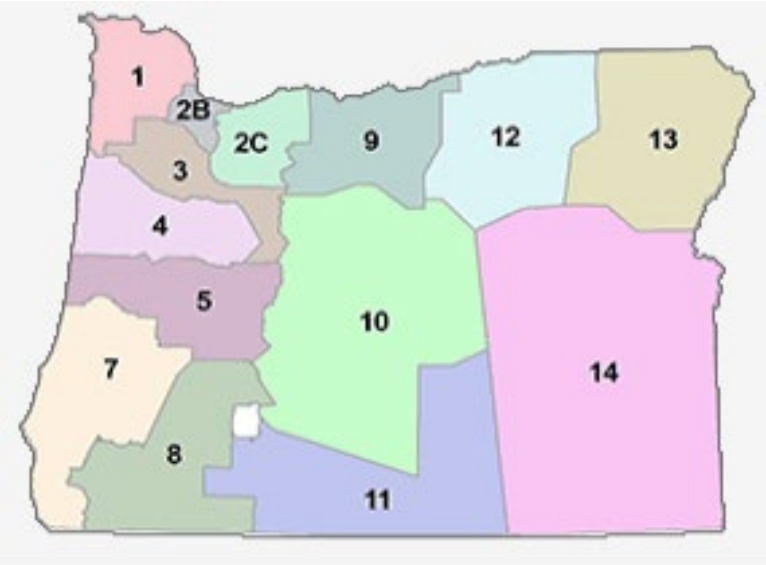
Office: When doing desktop inventory you will validate inventory based on what you see utilizing the tools available to you (DVL, straightline charts, FACS-STIP, TransGIS).

DISTRICT	LRM	START MP	END MP	POSITION	LAT	LONG
##	########	###.##	###.##	L/R	##.########	-##.########

DISTRICT

The number used to identify separate sections of the state that designate ODOT maintenance responsibilities. ODOT district number boundaries are outlined on map to right. Valid characters include: 1, 2B, 2C, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14.

Figure 1: Oregon district map



LRM

Linear referencing methods (LRM) existed long before GIS and computers. As highway systems were improved in the early 1900s, transportation departments developed referencing systems to describe locations on their infrastructure.

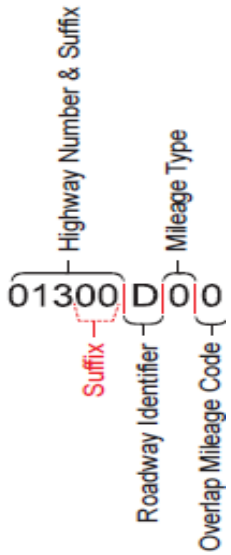
> LRM is defined as 'a method of determining the position of an entity relative to other entities to some external frame of reference.'
>
> There are an infinite number of methods used to describe locations on a transportation network.

ODOT's Highway/Milepoint LRM

ODOT has used a Linear Reference Method (LRM) for many years to establish unique locations on state managed highways, connections and frontage roads. ODOT's Highway Milepoint LRM is a combination of fields from legacy data that have been concatenated into the new LRM, which can be pulled apart to match up with legacy data.

This is what ODOT's Highway LRM looks like without its milepoint: 01300D00. **LRM is made up of the following components in this order:**

Figure 2: Hwy LRM without its milepoint: 01300D00



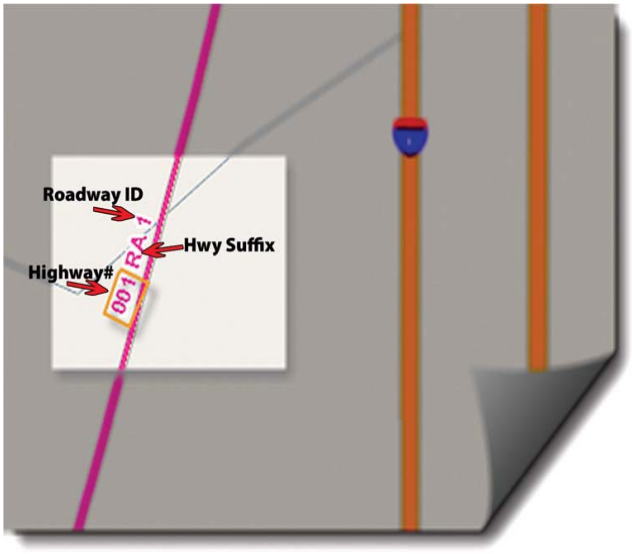
Highway Number

Three-digit state number (**not** route number) used by ODOT assigned to a length of highway for specific use in the corporate enterprise database. Valid highway numbers range from 001 to 499. See *Appendix D* for a complete list of highways.

Highway Suffix

Two-digit code; can have a numerical value of '00' (used for mainline) or any alphabetical characters ranging from 'AA – ZZ' (used for connections and frontage roads). Off-ramps, overpasses, service roads and express lanes are good examples of connections and frontage roads.

Figure 3: Displayed to show highway suffix example from TransGIS.



Roadway Identifier

The roadway identifier (RDWY_ID) is a one-digit code used in conjunction with the highway number and milepoint to identify the alignment on which the milepoint exists.

Following is a list of valid roadway identifiers:

1 - Milepoint exists on the primary roadway. This will be on the increasing-mileage alignment of the highway.

2 - Milepoint exists on the decreasing alignment.

Exception: Highway 001, Roadway 2 is the add-mileage alignment and Highway 001, Roadway 1 is the non-add mileage alignment.

5 - Preliminary Alignment (Located Line) - This milepoint indicates the mileage is on an alignment not yet built or the mileage is on a non-state owned roadway and considered located. This mileage is neither add nor non-add. For non-divided highways use Roadway 1 or the letter 'I'.

For divided highways:

- Increasing Direction = Roadway 1 = Letter 'I'
- Decreasing Direction (couplet) = Roadway 2 = Letter 'D'

Figure 4: Example increasing and decreasing roadways.

Mileage Type

This is used to make milepoints unique in areas where there are multiple occurrences of a milepoint on a single highway.

Mileage types are identified as follows:

- '0' if no Z mileage (default)
- Overlaps are indicated with a 'Z'

Z-mileage refers to a section of road that has been lengthened in the middle due to realignment.

Sources: TransInfo, FACS-STIP, TransGIS, Straight line Charts, ODOT Data Reports.

Overlap Mileage Code

This is used only in conjunction with "Z" mileage. The first chronological occurrence of 'Z' mileage will have an overlapping mileage code of 1, the second occurrence will have an overlapping mileage code of 2, etc. Overlapping mileage occurs when a section of highway is lengthened in the middle due to realignment.

Example: Section of highway from milepoint 49.00 to milepoint 50.00 is washed out. The washed-out section must be replaced, but old alignment cannot be used. A new alignment is built around problem area, but new alignment is 4.62 miles longer than original alignment. New distance between milepoint 49.00 and milepoint 50.00 is now 5.62 miles. To reflect true distance along the highway without renumbering all of the milepoints along the entire road, "overlapping mileage" is created.

Milepoints

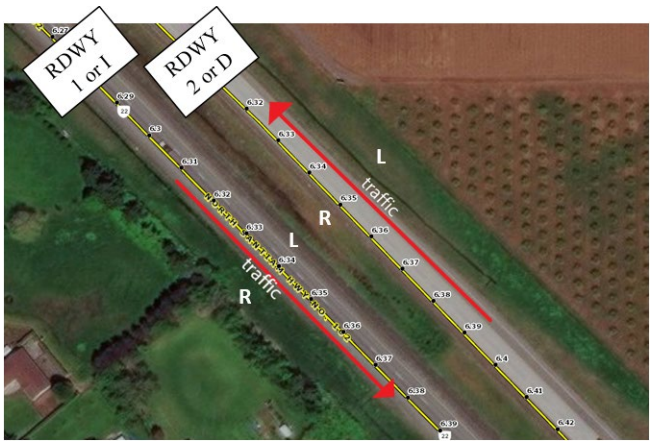
Begin and End milepoints (MP_NO).These are two separate fields that represent the distance in miles from the original beginning of the highway. This distance, measured along the contours of the traveled roadway, is derived from construction plans and verified using field inventory.

For Bike and Sidewalk Facilities measure in segments as low as 0.03 mi.

Position

Refers to the location along the highway, identified as Left (L) or Right (R) based on the increasing mile direction.

Figure 5: Example showing the Left (L) and Right (R) positions.



BICYCLE FACILITIES

Bike Need: This field answers the question, "Should there be a bike facility on this segment of highway?" This field is marked with a "Y" for Yes or "N" for No. This field is not included on the Trimble GeoXT, because "Needs" categories are not part of the 1R inventory data collection initiative.

Bike Lane (BL): These are the necessary components that define a Bike Lane: 8 inch stripe separating the bicyclist and motor vehicles and a bike lane stencil. Bike facility width is measured in feet from the face of the curb, the edge of pavement, or the center of the inside white line to the center of the 8-inch or outside stripe. Where the bike lane includes a street buffer, only measure the width where bicyclists ride.

Figure 6: Bike lane with stencils and stripes.

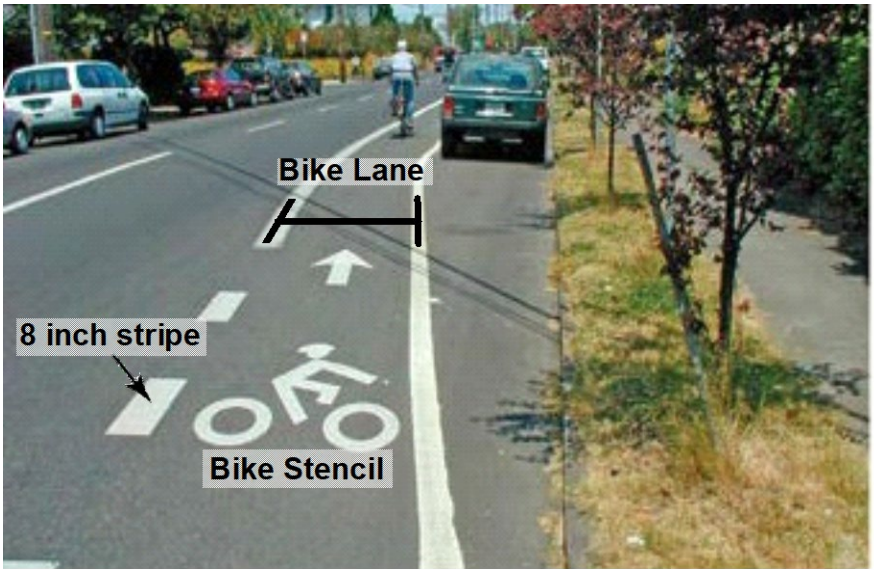


Figure 7: Shoulder Bikeway.

Shoulder (SH): These are the necessary components that define a shoulder:

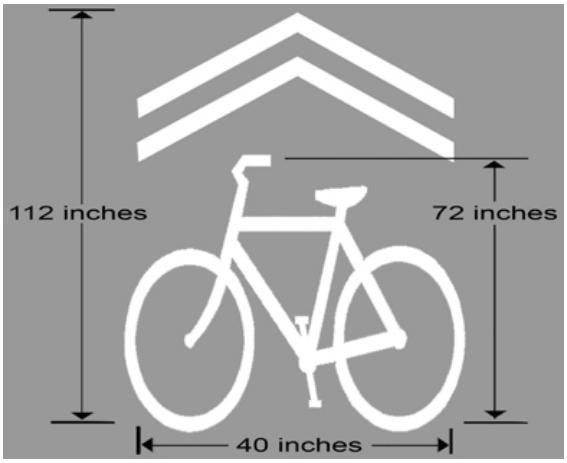
- Minimum of 5 feet wide
- Have a 4 inch stripe, and
- Be a paved surface.

For condition rating, follow the same guidelines as bike lane as it pertains to surface condition.

Shared Lane (SL): Shared lanes are commonly the condition on low speed and low traffic streets. The suitability for a street to have shared lanes is described in the Blueprint for Urban Design – Tier 3 bicycle facilities. One of the typical criteria is that the posted is 25 mph or less, as in a central business district. No bike facility is provided; bicyclists and motor vehicles simply share the same travel lane. It is an option to include shared lane markings (sharrows) to indicate bicycle positioning in some shared streets. These markings are not required, but may be present.

Figure 8: Shared lane.

Figure 9: The sharrow symbol.



Bike Lane Condition: This is a rating that refers to the physical condition of the pavement surface that makes up the bike facility, and should be determined by asking yourself, "would I feel safe riding my bike on this surface?" There are four ratings:

1) **Good (G):** Smooth pavement.

This rating is only used for new construction.

Figure 10: Good and smooth pavement.

2) **Fair (F):** Reasonably smooth pavement, safe to ride on.

Use this rating when the condition is fair or better, but the pavement is not newly constructed.

Figure 11: Fair or reasonably safe to ride on pavement.

3) **Poor (P):** Pavement that is badly cracked, heaved, potholed, rough, etc. Pavement which is dangerous to ride on or which would force a bicyclist into the motor vehicle travel lane to avoid.

Figure 12: Poor rating, cracked pavement.

4) **Blank (B):** There is no bike facility currently at this location, but is needed.

This column is used to record pertinent information about the bike, sidewalk, or pedestrian facilities in addition to the required inventory data.

See *Appendix A* for a list of standard notes. Separate each note with a semicolon (;).

SIDEWALK FACILITIES

Sidewalk: Located along roadways and are separated by a curb, a drainage swale, or a planter strip. Most sidewalks are concrete or asphalt, with asphalt being the less common surface type. In addition, sidewalks also have zones, these are the *Frontage Zone*, *Pedestrian Zone*, and *Buffer Zone*. All sidewalks have a Pedestrian Zone and a Frontage Zone. Not all sidewalks have a Buffer Zone. For example, a curbside sidewalk has no Buffer Zone because the Pedestrian Zone meets the curb. A 10 foot sidewalk in a downtown area should have all three zones.

Permeable sidewalk surface is also a buffer type.

Surface: This is denoted as either BLACK, BRICK, WHITE, PERMEABLE, or OTHER. Sidewalks are usually either all concrete or all asphalt:

Figure 13: Asphalt = BLACK.

Figure 14: Concrete = WHITE.

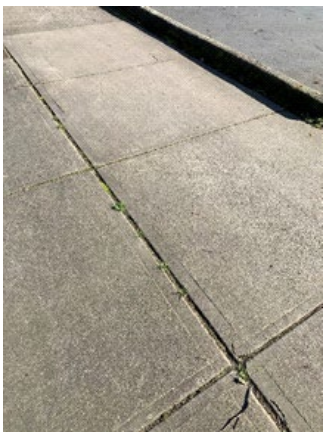


Figure 15: Brickwork = BRICK.

Figure 16: Brickwork = BRICK.

Figure 17: Permeable = PERMEABLE.

Figure 18: Wood Sidewalk = OTHER.

Unpaved sidewalks are not inventoried.

Sidewalk Need: This field answers the question: "Should there be a sidewalk on this segment of highway?" This field is marked with a "Y" for Yes or "N" for No. If a sidewalk already exists it is considered needed. This field is not collected when using the Trimble GeoXTS because "Needs" categories are not part of the 1R inventory data collection initiative.

- Sidewalks are needed in all urban areas and suburban areas with roadside development.
- Areas with roadside development are within the following boundaries. They are listed from greatest to least. While the greatest is desired it may not be present, so refer to the greatest present boundary.
  1) Federal Aid Urban Boundaries (FAUB)
  2) Urban Growth Boundaries (UGB)
  3) City Limits
- Sidewalk needs along a highway will be continuous (i.e. without gaps) within urban and suburban areas.
- Sidewalks may not be needed in the fringe areas that have no roadside development.
- On couplets a sidewalk is needed on both sides of both legs.
- On rural roads the shoulder serves as the pedestrian facility and a sidewalk is not needed.

- Typically a sidewalk is not needed on limited access expressways or on the interstate freeways.
- In some cases, sidewalks may not be needed where a shared use path or a parallel private walkway serves the purpose of pedestrian travel along the highway that a sidewalk would provide in redundancy.

Need Status: When it is determined that a sidewalk is needed, this field will indicate that there is or isn't a sidewalk present. These codes are: Constructed and In Place (IP) or Needed and Missing (MS).

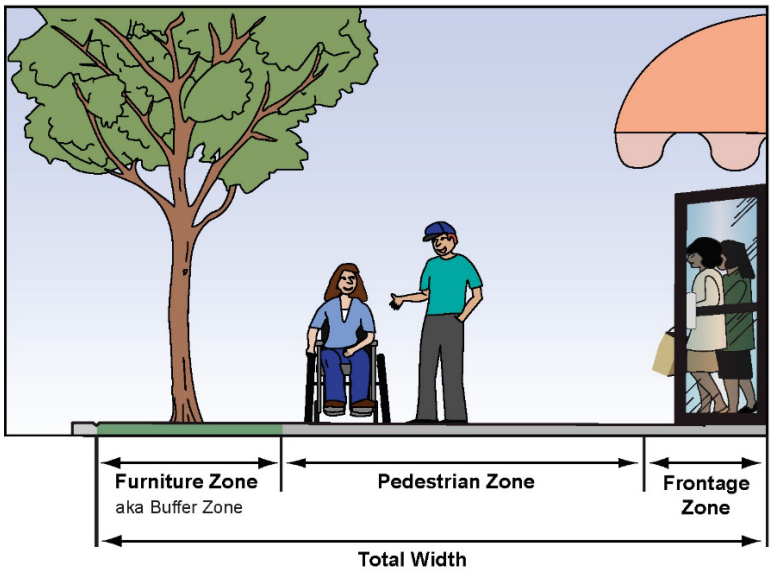
Buffer: A buffer separates the sidewalk from the roadway. The buffer, or furniture zone, may be paved, grassy or landscaped. It can sometimes be used for drainage, as in a swale. The buffer can be made of the same material as the rest of the sidewalk. When the buffer is paved, it is included in the width of the sidewalk; otherwise, it is not included in the sidewalk width. This column answers the question, "Does a buffer exist?" Depending on whether or not a buffer exists, you will enter a "Y" for Yes or "N" for No.

Any sidewalk that is wider than 6' has a de facto buffer and a "Y" is to be placed in the column. The buffer width and type should be written in the notes field.

Width: Sidewalk width is measured in feet from the back of the curb to the edge of the paved surface or to the face of a building.

Sidewalk Width = Furniture Zone + Pedestrian Zone + Frontage Zone (see Figure 19)

Figure 19: The Zone System.



A paved buffer or frontage zone is included in the calculation of the sidewalk width rounded down to the nearest whole foot. A buffer or frontage zone that is grassy or used for drainage as in a swale is not factored into the sidewalk width. A curb is not factored into the sidewalk width.

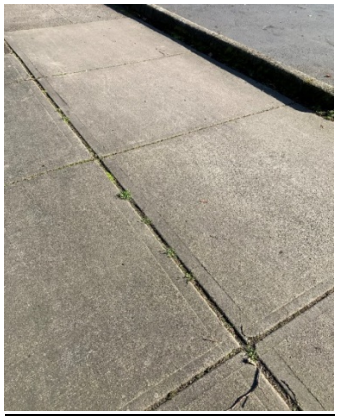
Condition**:** Sidewalk condition is a statement of the physical condition of the pavement, and should be determined by asking, "Would I feel safe walking on this surface?" There are four ratings:

Good (G): Smooth, new pavement. Only to be used for new construction.

Figure 20: Example of Good (G) sidewalk surface.

Fair (F): Reasonably smooth pavement, safe to walk on.

Figure 21: Example of Fair (F) sidewalk surface.



Poor (P): Pavement that is cracked, heaved, eroded, etc. Pavement which is dangerous to walk on or is impassable by a wheelchair or stroller.

Figure 22: Example of Poor (P) sidewalk surface.

Blank (B): There is no sidewalk currently at this location. This is a placeholder rating and should not be used when inventorying a currently existing sidewalk.

Unknown (U): Temporary place holder**.** This code is not used for field inventory purposes.

Sidewalk Buffer Types

Buffer Type attribute was added to the database at the conclusion of the 2018-2020 inventory effort; for more information contact the asset owner.

A buffer type will be determined after one of the following buffer types are identified:

Width (W): This buffer type is classified when the paved sidewalk being wider than 6 feet. This can include brick, paving stones, asphalt, or any other hard-scaped surface that makes the sidewalk wider than 6 feet even if the materials differ.

Figure 23: Width buffer type.

Example of width buffer could be: 4 foot wide concrete sidewalk and 3 foot wide brickwork, total width would be 7 feet which results in a width buffer classification.

Furniture Zone (FZ) (aka Buffer Zone): This is most common in downtown areas and is classified when there are objects in place in the sidewalk that are for pedestrian use. These objects may include: bicycle parking, benches, in-place trash cans, water fountains, etc.

Figure 24: Furniture Zone buffer type.

Permeable (P): A high porosity mix of concrete that allows water to pass through for drainage (fast draining concrete paving).

Figure 25: Permeable buffer type.

Parking Lot (PL): This buffer type is classified when there is on street parking. This is mostly present in downtown areas and the more common types of parking you will see are: diagonal, parallel, or 90 degree parking.

Posted signs that specifically address available parking are also indicators of on street parking and should also be considered. As well as shoulders along streets that are wide enough for cars to safely park.

Figure 26: Parking Lot buffer type.

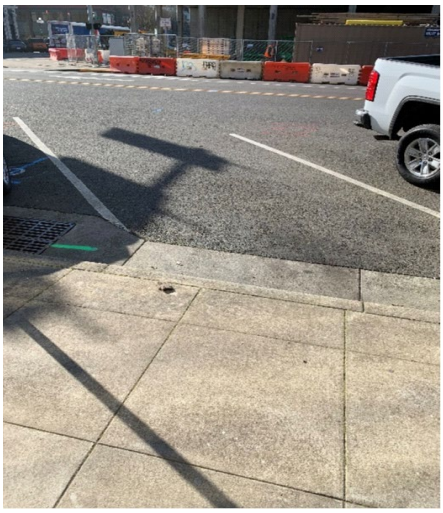
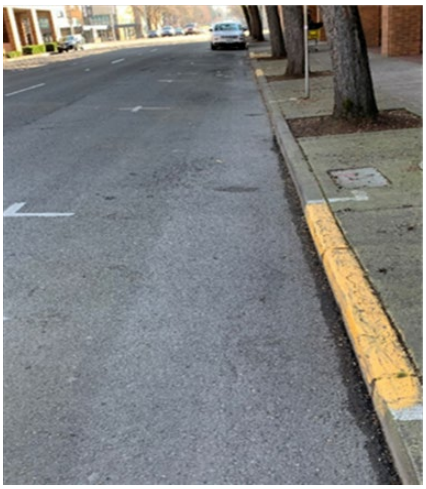


Figure 27: Parking Lot buffer type.



Landscaped (L): This buffer type is classified when there is not a paved surface that is separating the sidewalk from the roadway. This could be an area where there are materials such as: bark, gravel, plants, trees, drainage swales, etc.

Figure 28: Landscape buffer type.

Vertical (V): This buffer type is classified when there is an erect structure that works to prohibit a pedestrian from freely entering the roadway. This may be, but is not limited to the following: hand railing, guardrail, concrete traffic dividers, fences, etc.

Figure 29: Vertical buffer type.

Decorative Pavement (DP): This buffer type is often found in historic districts. It is classified when there is concrete that is stamped or dyed a color that is not white or when bricks or pavers are inset in the buffer area.

Figure 30: Decorative Pavement buffer type.

SHARED USE PATHS (SHUP)

The following asset is under revision and information is subject to change. If there are any questions please contact the asset owner, Heidi Shoblom.

This refers to a path intended for shared use by bicyclists and pedestrians; it is not a sidewalk. A shared-use path may be adjacent to a roadway, or it may have a separate alignment. This type of path is typically wider than a sidewalk; usually 8-14 feet wide. In some locations, a shared use path exists while a sidewalk or bike lane also exists. However, it is more common that the shared use path takes the place for both the pedestrian facility and the bicycle facility. In these scenarios, the corresponding bike need or sidewalk need should be adjusted to show that one of the modes is not needed.

When collecting inventory data for a Shared-Use Path you will need to gather the three attributes listed below. Note: Shared-Use Paths are not inventoried when using the mobile GPS 1R applications and are not available from FACS-STIP.

Surface: Black, White, Other

Width (ft): Numerical Value

Condition: G, F, P, B

Figure 31: Shared Use Path (SHUP).

Figure 32: Shared Use Path (SHUP).

Figure 33: Shared Use Path (SHUP).

1) Surface: This is denoted as either black or white. Shared-use paths are either concrete or asphalt:
asphalt = black, concrete = white. Unpaved paths are listed as "other".

2) Width: Shared-use path width is measured in feet from one edge of the path to the other. Adjacent soft surfacing, such as that provided for runners or horses, should not be included in the path width.

When filling in the spreadsheet do not enter the prime symbol (').

3) Condition: Path condition is a statement of the condition of the pavement, and should be determined by asking yourself, "Would I feel safe walking or bicycling on this surface?" There are four ratings: Good, Fair, Poor, and Blank.

Good (G) – Smooth, new pavement. Only to be used for new construction.

Fair (F) – Reasonably smooth pavement, safe to walk or ride on.

Poor (P) – Pavement that is badly cracked, heaved, eroded, etc. Pavement which is dangerous to walk or ride on or which is impassable by a wheelchair or stroller.

Blank (B) - This should only be used when the multi-use path is either non-existent or unpaved.

MARKED CROSSINGS

A marked crosswalk can be located at an intersection or midblock and must use white retroreflective crosswalk markings applied in one of the following patterns:

Figure 34: Standard Parallel.

Figure 35: Staggered Continental.

Figure 36: Ladder.

Useful links regarding design standards and guidelines:

Traffic Line Manual:

https://www.oregon.gov/odot/Engineering/Documents_TrafficStandards/Traffic-Line-Manual.pdf

Traffic Manual:

https://www.oregon.gov/odot/Engineering/Docs_TrafficEng/Traffic-Manual-2020.pdf

Manual on Uniform Traffic Control Devices (MUTCD):

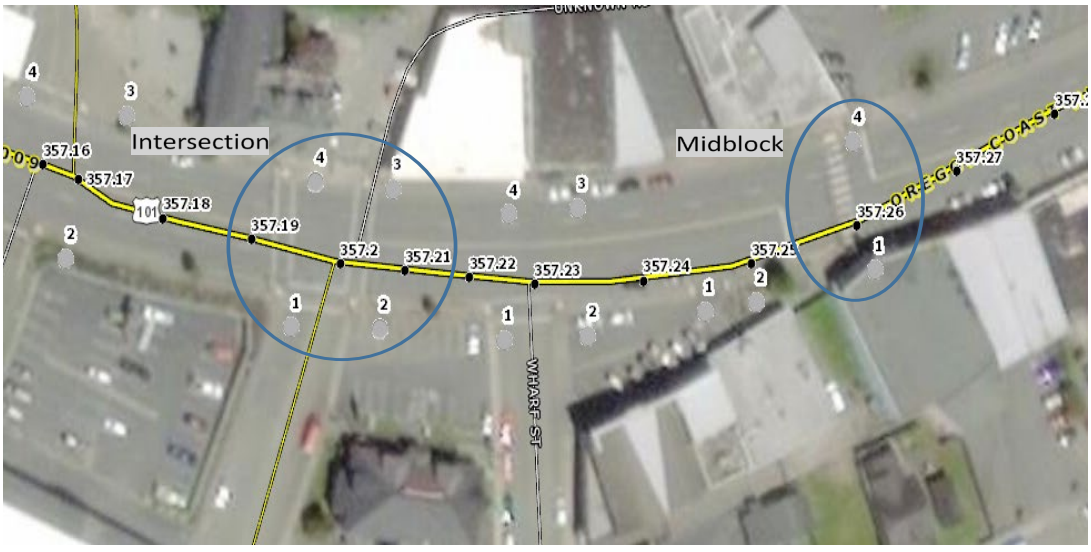
https://www.oregon.gov/odot/Engineering/Documents_TrafficStandards/MUTCD-OR-Supplement.pdf

Crosswalk attributes collected for this inventory are:

LRM and /MP (location) direction and definitions begins on page 13.

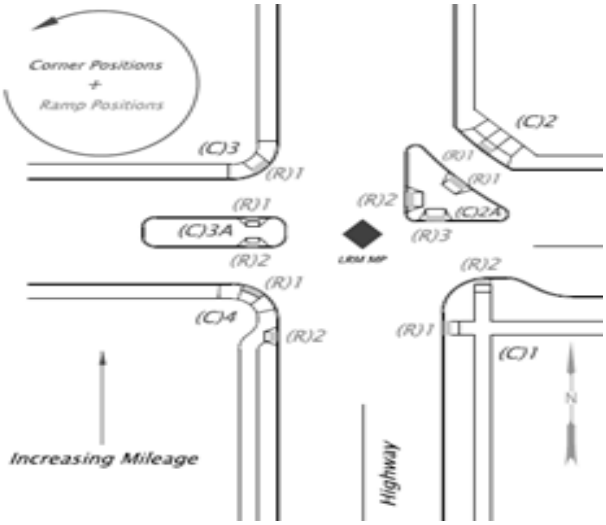
1) **Midblock (MID):** Classifying whether the marked crosswalk is located at an intersection or midblock. An intersection is a place where one road crosses paths with another. A midblock crossing is where there are markings in between two intersections, not located next to the continuing path of another road. Roundabouts are also classified as intersections.

Figure 37: Aerial view of intersection vs. midblock crossing location.



Corner position always run counterclockwise based on the increasing milepoint direction. They are assigned a number (1-7). Islands are assigned a corner number and differentiated with an 'A'. However the marked crossing connects from the ramp location not just the corner: The ramp position: is a number assigned to each ramp at a corner, Ramps are always assigned a number 1, 2, 3 like corner position they always run counterclockwise based on the increasing milepoint. For islands, the ramp 1 position is based on the ramp closest to the corner the island is associated with.

Figure 38: Corner and ramp location diagram.



2) **First Corner/ Second Corner (CORNER_1/CORNER_2):** The first corner is the lower number of the two ends of a crosswalk. The second corner is the opposite end of the crosswalk. If the crossing includes an island, inventory each segment of the crossing as a separate marked crosswalk (intersection corner to island is one marked crosswalk).

Figure 39: Aerial example depicting which corners are labeled as 1st and 2nd positions.

Sometimes the first corner number will start at 3. An example of this might be present where the intersection of two state highways occurs.

3) **Image Source (IMG_SRC):** The reference source in which a marking location can be visually confirmed. Most common examples are the Digital Video Log (DVL) and Google Earth.

4) **Date for Image Source (IMG_DATE):** The date of the source's image being used to confirm the attributes of the crosswalk.

5) **Marking Type (HIVIZ_MARK):** The marking is a staggered continental (longitudinal) or a combination of standard transverse and staggered continental markings (ladder) as defined in the ODOT *Traffic Line Manual* and shown in Figures 34, 35, and 36.

Figure 40: Crosswalk Marking patterns shown in the Traffic Line Manual.

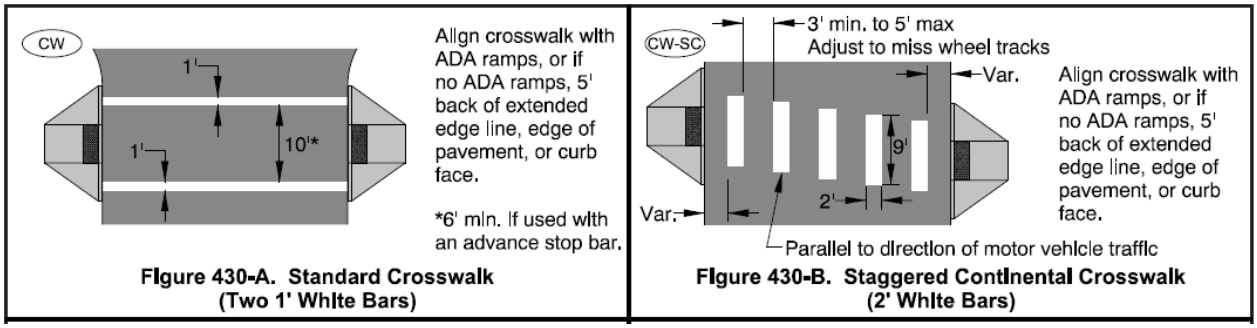


Figure 430-A. Standard Crosswalk (Two 1' White Bars)

Figure 430-B. Staggered Continental Crosswalk (2' White Bars)

6) **Installation Approval Status (INST_APRVL):** Date of State Traffic-Roadway Engineer approval to install the marked crosswalk from the latest State Traffic-Roadway Engineer approval letter.

7) **Removal Approval (RMV_APRVL):** Date of State Traffic-Roadway Engineer or Region Traffic Engineer approval to remove the marked crosswalk according to the latest edition of the Traffic Manual. The date is from the latest State Traffic-Roadway Engineer or Region Traffic Engineer approval letter. (MM/DD/YYYY)

8) Latest Status Check (YEAR_UPDATED): The date or time period in which the data was last updated. (YYYY)

Additional comments about the crosswalk and surrounding area. For example: "ending mile point is in middle of intersection;" "decorative/colored concrete also applied to crosswalk."

Figure 41: Multiple intersecting ODOT Highways.

Keep the same corner numbering as TransGIS even if listing the crosswalk under the smallest numbered highway rearranges the corner number positions.

PARKING

The following asset is under revision and information is subject to change. If there are any questions please contact the asset owner, Heidi Shoblom.

When parking spaces are present, the attribute fields below should be collected. There is no easily accessible source of current data on parking or function for uploading newly collected data. There is no mobile GPS application for collecting parking data. For information on this asset, contact the data owner.

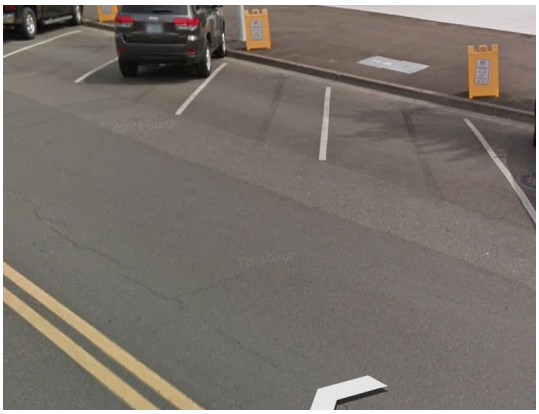
1) **Type:** There are 5 parking types:

   Parking Area (PA), Diagonal Parking (DP), Parallel Parking (PP), Orthogonal Parking (OP), and Unmarked (UM). Parking which is unmarked and unused may be deduced from the pavement width and is inventoried.

Figure 42: Parallel Parking (PP) example.

2) **Width:** Parking width is measured in feet from the edge of the pavement or face of curb to the middle of the parking lane striping, tick marks, or the edge of the motor vehicle lane or bicycle lane. The road is wide enough for parking and the curb is not painted yellow or red, but there are no markings indicating the edge of the parking lane, enter NS - not striped. *Note:* When filling in spreadsheet do not enter the prime symbol (′).

Figure 43: Diagonal Parking (DP) example.



3) Condition: Parking is a statement of the physical condition of the pavement. There are three ratings: Good, Fair and Poor.

Good (G) – Smooth, new pavement. Only to be used for new construction.

Fair (F) – Reasonably smooth pavement.

Poor (P) – Pavement that is badly cracked, heaved, eroded, etc.

CURBS

The following asset is under revision and information is subject to change. If there are any questions please contact the asset owner, Heidi Shoblom.

There is no mobile GPS application for inventorying curbs. There is no easily accessible source of current data on curbs or function for uploading newly collected data. For information on this asset, contact the data owner. Track Curbs both left and right on couplets and divided highways where the median type is 3 – Landscape.

1) **Type:** There are four types of curbs. A curb can either be classified as:
   (1) a Standard Curb (SC), no gutter;
   (2) a Curb and Gutter (CG) – one that has an integral concrete gutter;
   (3) a Low Profile Mountable Curb (M); or
   (4) RICS (RC). See Standard Drawing AD700 for curb types.

Low Profile Mountable Curb (M) – per Standard Drawing RD700 – is constructed 4" high. The typical condition would be "Fair" unless significantly or obviously less than 4" (i.e., 1-2") exposure, in which case, list as "Poor". Note: There are two other types of Mountable Curbs. One looks nearly identical to the Standard Curb and for our purposes here will be identified as a Standard Curb type (SC). The other Mountable Curb and Gutter is not used by ODOT.

Figure 44: Curb type example.

Figure 45: Curb type example.

2) **Height:** Curb height is measured in inches from the top of the pavement to the top of the curb. There are three classifications:
Good (G) - Great than 6 inches
Fair (F) - Between 4 inches and 6 inches
Poor (P) - Less than 4 inches

Figure 46: Curb type example.

3) **Condition:** The curb condition describes the physical condition of the concrete. There are four classifications:
Good (G) – Refers to a curb with no visible cracks or chipping.
Fair (F) – Refers to a curb with minor cracking or chipping.
Poor (P) – Refers to a curb that is badly cracked or chipped and/or the curb is out of alignment with the sidewalk.
Not Needed (B) – There is no need for a sidewalk at this location.
Unknown (U) – The physical condition of the pavement here is unknown.

Example of how to classify a curb and gutter with mixed conditions: If a curb and gutter has a Poor Physical Condition for the Gutter (Pan) but the curb is Good Physical Condition, indicate the Condition as "Fair."

A distance of 0.03 miles is needed to delineate a change in Type, Height or Condition. Also, don't start/stop curbs at intersections – no breaks in section.

Frequently Asked Questions

What is the difference between an "ODOT Highway Number" and the Highway "Route Number"?

An ODOT highway number is a three-digit ODOT number that is assigned to a length of highway. This number the standard referencing system used by ODOT transportation staff to identify a particular road for inventory or research purposes. It is important to use only the ODOT highway number for data collection to keep consistent with the rest of the transportation data. A route number is assigned to a particular route (e.g., interstate route, US route, OR route) and is used to follow a particular path through a road network. This route number is mainly used by drivers for traveling purposes. See *Appendix D* for the list of route numbers.

Why do we need to collect road inventory?

As ODOT moves toward an asset management approach, it is important that we have an accurate record of the existing transportation infrastructure. Not only are there performance measures and legislative requirements regarding the features in this manual, but knowing what we have will help ensure that there are bike facilities, sidewalks, and ADA ramps throughout 100% of the Urban Growth Boundary (UGB) areas. This information will also help ODOT maintain and upgrade assets in a cost-effective way. In addition, maintaining a record of current inventory data is also important for funding and mapping purposes.

What is the Highway Inventory Summary Report?

This is a report detailing the milepoint locations of roadway features. This report is run by accessing TransViewer online; which is continually updated by ODOT's Road Inventory and Classification Services (RICS) Unit.

How accurate does the milepoint data need to be?

Milepoints should be recorded to the hundredths decimal place. It is important not to record the milepoints displayed on the DVL, but instead use the milepoints that are displayed in GIS. The milepoints in GIS are the most accurate locations.

When should a change in a feature be recorded (i.e., a new line of data needed on the collection sheet)?

You do not need to record a change in a feature that occurs for less than 1 three-hundredth of a mile (0.03 miles). However, depending on the situation, you may need to place a comment in either the "Bike Facility Notes" column or the Pedestrian Facility "Notes" to record a pertinent piece of information about a feature. See Appendix A for a list of standard comments and when to use them. Sometimes there are other objects in the picture which may provide a height reference, otherwise, just use your best judgment. If you are really unsure about a particular traffic barrier – or portion of one - be sure to mark "Field verify height" in the "Comments" field so you know to check the height when out in the field. Your ability to estimate height using the DVL will improve withtime.

What is the best way to estimate the width of roadway features from the video log? How accurate does the estimate need to be?

Use your best judgment; estimates do not need to be exact for the purpose of collecting basic inventory since there will be future efforts to refine and improve the data. However, you may find objects on the screen which you can use as references to improve your estimate. For example, when estimating the width of roadway features such as bike lanes and sidewalks it is useful to know the standard size of such things as the following:

- Motor Vehicle Lane Width – 12 ft.
- Standard Bike Lane Width – 6 ft.
- Avg. Car Width (sedan) – 6 ft.
- Standard Sidewalk Width (old) – 5 ft.
- Avg. Car Width (Truck/SUV) – 7 ft.
- Standard Sidewalk Width (new) – 6 ft.
- Semi-Truck/18 Wheeler Width – 9 to 10 ft.
- Avg. height of a woman – 5 ft. 4 in.
- Avg. height of a man – 5 ft. 10 in.

Are there roadway features that we do not inventory?

No. All bike facilities, pedestrian facilities, parking, and curbs located along a highway need to be inventoried. Traffic/Roadway is responsible for a variety of assets and many of them are on a regular update cycle; up to but not limited to: traffic barrier, signs, traffic signals, sidewalk, bicycle facilities, ADA curb ramp, ADA pushbutton, design exception, closed crossings, marked crosswalks, flashing beacons, bridge ends; for more information see the layers available in the FACS-STIP Tool and the asset owner information is linked.

Why is the inspection date older than the current year of data assessment?

The inspection year reflects the vintage of the DVL or the Google Street View depending on which picture can give the most accurate and up-to-date information.

I see data where elements are missing/ source information is RICS/ I have location only, why is this?

Curb, if not noted in the database already. RICS only notes that it exists as type code 'Unknown' and Source Code 'RICS'. RICS doesn't enter any other attributes besides location.

Parking areas outside of city limits from inventory. These are type code of 'Parking Area' and Source Code 'RICS'. RICS doesn't enter any other attributes besides location.

Shared Use Path information is acquired from contracts.

BICYCLE/PEDESTRIAN FACILITIES

Do I record bicycle, sidewalk, or shoulder data on interstates?

No. These areas are discouraged for pedestrians to use except for travel by car. You only need to record the interstate's frontage roads or perpendicular connections. Do not record any connections that act as an on/off ramp as these directly connect to the interstate main roadway.

How do we know when to stop inventorying bicycle facilities?

In order to stay consistent, the Federal Aid Urban Boundary (FAUB) is the boundary which will designate the start and end location of recording bicycle facility needs along a highway.

How do we know when to stop inventorying sidewalk facilities?

The limitation for sidewalk facilities is the Federal Aid Urban Boundary (FAUB), but you want to start recording a need for sidewalk facilities where development begins; which can take place long after you have entered the FAUB. With the same regard you want to end recording of sidewalk need where development ends or where the FAUB ends. However, there are special instances where these guidelines may need to be ignored for the sake of an accurate representation of asset data and before a decision is made the asset owner needs to be contacted.

Should there be "gaps" in the sidewalk facilities data when recording within the FAUB?

No. There should be no gaps in data when within a FAUB. You want to have a continuous record of sidewalk facilities where development starts until the last point of development within a FAUB. If sidewalk is missing or there is a stretch where development is not a present, you will record these locations as 'need' until sidewalk is present again

MARKED CROSSINGS

Do we collect data for the crosswalk on the leg that the road goes through? Or on others (including the one the road would go through if it continued on)?

Include marked crosswalk that crosses ODOT highway's leg.

Figure 47: ODOT highway ends at an intersection.

When there are crosswalks across channelized right turn lanes how do they get accounted for?

Include all marked crosswalks across channelized right turn lanes at state highway intersections. This includes channelized right turn lanes from the state highway to the side street and from the side street to the state highway. This does not include driveways or right-in-right-out channelization. Where channelized right turn lanes are present, pedestrians most often need to cross them to cross the state highway.

Figure 48: Marked crosswalk at a channelized right turn lane.

Do we catalog two separate crosswalks if it goes from 1 to 4A to 4?

The crosswalk in Figure 49 is two cataloged crosswalks, from 1 to 4A and to 4A to 4, containing a refuge island.

Figure 49: Marked crosswalk with refuge island.

If an intersection occurs at the crossroads of two different highways which one is the intersection listed under?

Use the LRM and MP in the ADA Corner layer. If an ADA Corner isn't present on TransGIS, use the same method as ADA Corners to capture the LRM and MP. This provides a standard for this event that is organized in a linear way in which we are naturally inclined to do.

Contacts and Other Useful Resources

Heidi Shoblom | State Roadway Manager

Contact for Parking, SHUP & Curbs

Heidi.E.SHOBLOM@odot.state.or.us

4040 Fairview Industrial Dr. SE, Salem, OR 97302-1142 (503) 986-3557

Scott Graham | Asset Inventory Specialist

Contact for Sidewalk & Bicycle Facilities

Scott.GRAHAM@odot.state.or.us

4040 Fairview Industrial Dr. SE, Salem, OR 97302-1142 (503) 986-6644

Eric Leaming| State Traffic Investigations Engineer

Contact for Marked Crossing

Eric.S.LEAMING@odot.state.or.us

4040 Fairview Industrial Dr. SE, Salem, OR 97302-1142 (503) 986-7212

Jessica Horning | Pedestrian & Bicycle Program Manager

Jessica.HORNING@odot.state.or.us

555 13th St NE, Salem, OR 9730 (503) 986-3555

Laura Hansen | Traffic Roadway Data & Systems Coordinator

Laura.L.HANSEN@odot.state.or.us

4040 Fairview Industrial Dr. SE, Salem, OR 97302-1142 (503) 986-3308

Rodger Gutierrez | Bicycle & Pedestrian Design Engineer

Rodger.C.GUTIERREZ@odot.state.or.us

4040 Fairview Industrial Dr. SE, Salem, OR 97302-1142 (503) 986-3554

Websites

- Acronyms:
  http://transnet.odot.state.or.us/odot/home/web%20part%20pages/acronyms.aspx
- DVL (Digital Video Log):
  https://dvlprod-ordot.msappproxy.net/cf/dvl/index.cfm?&fuseaction=entry
- FACS-STIP:
  http://gisintra.odot.state.or.us/facsstip/
- Oregon Bicycle and Pedestrian Plan (ATNI):
  https://www.oregon.gov/ODOT/Planning/Pages/Plans.aspx#OBPP

  https://www.oregon.gov/ODOT/Planning/Documents/OBPP_WorkPlan.pdf
- Highway Inventory Summary Report:
  http://highway.odot.state.or.us/cf/highwayreports/aml_summary_parms_by_route_no.cfm
- ODOT Intranet link:
  http://transnet.odot.state.or.us/odot/home/default.aspx
- State Highway Inventory Reports:
  http://highway.intranet.odot.state.or.us/cf/highwayreports/
- TransGIS:
  https://gis.odot.state.or.us/transgis/
- Bicycle Facilities Metadata:
  https://wpdotappl159/geoportal/catalog/search/resource/details.page?uuid=%7B22C6BB0B-57C6-4FBD-AE15-C3458E600A61%7D
- Sidewalk Facilities Metadata:
  https://wpdotappl159/geoportal/catalog/search/resource/details.page?uuid=%7B0A7417DA-82DF-4C9B-B8FB-6DB2F026E273%7D

- Oregon Bicycle & Pedestrian Plan: *https://www.oregon.gov/odot/Planning/Documents/OBPP.pdf*

- Active Transportation Needs (internal link): *http://transnet.odot.state.or.us/tdd/MillCreek/Pages/Active-Transportation-Section.aspx*

  http://transnet.odot.state.or.us/tdd/ActiveTransportation/default.aspx

Appendix A - Commonly Used Terms

ATNI

A barrier designed to prevent penetration and safely redirect an errant vehicle away from a traffic or median hazard.

BIKE

Code term for bicycle facilities in data collection entries such as TransInfo.

Gap

Location where there is an asset (sidewalk facility, bicycle facility, etc.), but due to a variety of potential explanations the asset is not present for a period of 0.03 miles. This is a gap and a need indicator would need to be placed.

HWY

Code term for highway, which is used as reference in various documentation of highway asset data.

MUTCD

Manual on Uniform Traffic Control Devices acronym, this is an available link within this manual.

Need

Location where an asset (sidewalk facility, bicycle facility, etc) is necessary. This may be used in areas where the asset is not present; this placeholder information will be used to indicate that the asset will be put in place in the future.

SHUP

Code term for Shared Use Path.

SWLK

Code term for sidewalk facilities in data collection entries such as TransInfo.

TI

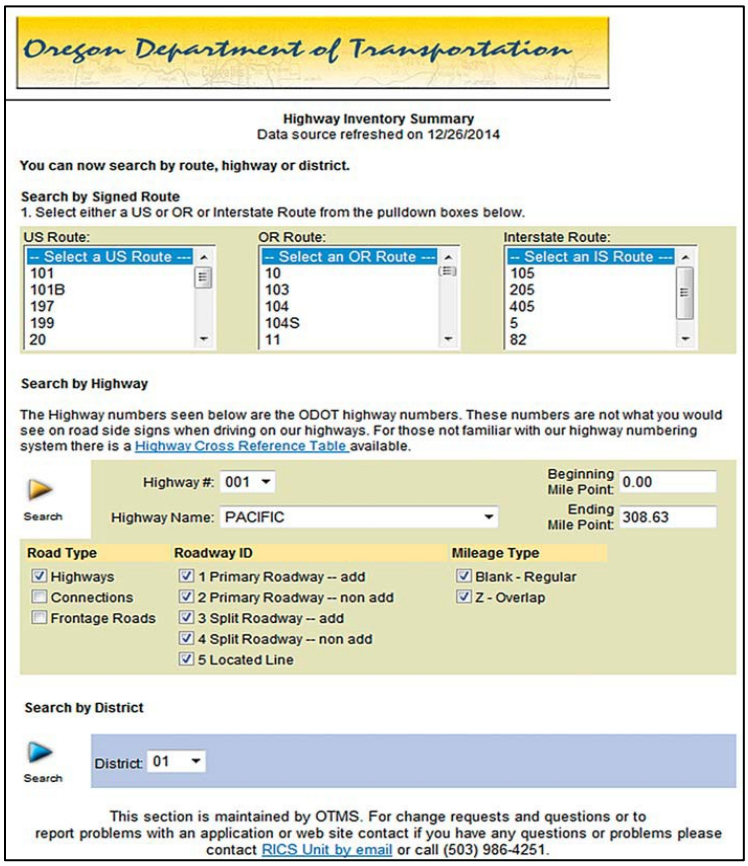
Code term for TransInfo, which is used as reference in various documentation of highway asset data.

Appendix B - Highway Inventory Summary

Below is a screen print of the web page which you will utilize to access Highway Inventory Summary Reports. As you can see there are several different ways to search for a report; by route, by highway, or by district. Only the search by highway is addressed here.

You can choose to search by either the highway name or the highway number. Once you hav**e selected the appropriate highway** all you need to do is **click on the search arrow in the upper left corner** of the 'Search by Highway' section and **a list of information** about the entire stretch of highway **will pop up in a new window.** However, you may choose to **narrow your search by entering in the milepoints** for the segment of road you are inventorying. You could also narrow, or even expand, your search by **checking or un-checking the boxes below under 'Road Type', 'Roadway ID', and 'Mileage Type'.**

Figure 50: Screenshot from Highway Inventory Summary page.



When you need a report containing ramp information, be sure to check the 'Connections' box.

The following web page can be accessed with the following web link:

https://highway.odot.state.or.us/cf/highwayreports/aml_summary_parms_by_route_no.cfm

A variety of other reports are available here:

http://highway.intranet.odot.state.or.us/cf/highwayreports/

Appendix C - State, District & Region Maps

A variety of maps are available, in both electronic and hard copy version:

- City Maps
- Pavement Condition Maps
- County Maps
- Seismic Lifeline Maps
- Statewide Maps
- SPIS Maps (2013)
- ODOT Region Maps
- Microstation Map Files
- ODOT District Maps
- GIS
- Mapping Applications

To access, go to the following website:

http://www.oregon.gov/ODOT/TD/TDATA/Pages/gis/odotmaps.aspx

Appendix D - List of Route Numbers (2018)

HWY#	HIGHWAY NAME	ROUTE NUMBER(S)	HWY#	HIGHWAY NAME	ROUTE NUMBER(S)
001	PACIFIC	I-5, US30, OR99, OR99E, OR138	30	WILLAMINA-SALEM	OR22
1E [81]	PACIFIC HIGHWAY EAST	OR99E, OR214	31	ALBANY-CORVALLIS	US20
1W [91]	PACIFIC HIGHWAY WEST	US20, OR10, OR34, OR99, OR99W, OR126, OR126B, OR219	32	THREE RIVERS	OR22
002	COLUMBIA RIVER	I-84, US30, US395, US730	33	CORVALLIS-NEWPORT	US20, OR34
2W [92]	LOWER COLUMBIA RIVER	US30	35	COOS BAY-ROSEBURG	OR42, OR99
003	OSWEGO	OR43	36	PENDLETON-COLD SPRINGS	OR37
004	THE DALLES-CALIFORNIA	US26, US30, US97, US197, OR216	37	WILSON RIVER	OR6
005	JOHN DAY	US26, US395, OR19, OR206,	38	OREGON CAVES	OR46
006	OLD OREGON TRAIL	I-84, US30, US395, OR203	39	SALMON RIVER	OR18, OR22, OR233
007	CENTRAL OREGON	US20, US26, US395, OR201	40	BEAVERTON-HILLSDALE	OR10
008	OREGON-WASHINGTON	US30, OR11	41	OCHOCO	US26, OR126
009	OREGON COAST	US101, OR255	42	SHERMAN	US97
010	WALLOWA LAKE	OR82	43	MONMOUTH-INDEPENDENCE	OR51
011	ENTERPRISE-LEWISTON	OR3	44	WAPINITIA	OR216
012	BAKER-COPPERFIELD	OR7, OR86	45	UMPQUA	OR38, OR99
014	CROOKED RIVER	OR27	46	NECANICUM	OR53
015	MCKENZIE	US20, OR126, OR126B, OR242	47	SUNSET	US26, OR47

HWY#	HIGHWAY NAME	ROUTE NUMBER(S)	HWY#	HIGHWAY NAME	ROUTE NUMBER(S)
016	SANTIAM	US20, OR126	48	JOHN DAY-BURNS	US395
017	MCKENZIE-BEND	US20, US97B	49	LAKEVIEW-BURNS	US395
018	WILLAMETTE	OR58, OR99	50	KLAMATH FALLS-MALIN	US97B, OR39 OR140
019	FREMONT	US395, OR31, OR140	51	WILSONVILLE-HUBBARD	OR551
020	KLAMATH FALLS-LAKEVIEW	US97B, OR39, OR140	52	HEPPNER	OR74, OR207
021	GREEN SPRINGS	OR66, OR140	53	WARM SPRINGS	US26
022	CRATER LAKE	OR62	54	UMATILLA-STANFIELD	US395
023	DAIRY-BONANZA	OR70	58	ALBANY-JUNCTION CITY	US20, OR99E
025	REDWOOD	US199, OR99	60	ROGUE RIVER	OR99
026	MT. HOOD	US26, OR35	61	STADIUM FREEWAY	I-405, US26, US30
027	ALSEA	OR34	62	FLORENCE-EUGENE	OR126
028	PENDLETON-JOHN DAY	US395, OR37	63	ROGUE VALLEY	OR99
029	TUALATIN VALLEY	OR8, OR47	64	EAST PORTLAND FREEWAY	I-205, OR213
66	LA GRANDE-BAKER	US30, OR7, OR203, OR237	162	NORTH SANTIAM	OR22
67	PENDLETON	US30, OR37	163	SILVER CREEK FALLS	OR214
68	CASCADE HWY NORTH	OR213	164	JEFFERSON	OR164
69	BELTLINE	OR126, OR569	171	CLACKAMAS	OR211, OR212, OR213, OR224
70	MCNARY	I-82, US395	172	EAGLE CREEK-SANDY	OR211

HWY#	HIGHWAY NAME	ROUTE NUMBER(S)	HWY#	HIGHWAY NAME	ROUTE NUMBER(S)
71	WHITNEY	OR7	174	CLACKAMAS-BORING	OR212
72	SALEM	OR22, OR99EB	180	EDDYVILLE-BLODGETT	OR180
75	SUNRISE EXPRESSWAY	OR224	181	SILETZ	OR229
100	HISTORIC COLUMBIA RIVER	US30, OR35	189	DALLAS-RICKREALL	OR223
102	NEHALEM	US101B, OR47, OR202	191	KINGS VALLEY	OR223
103	FISHHAWK FALLS	OR103	193	INDEPENDENCE	OR51
104	FORT STEVENS	OR104	194	MONMOUTH	OR194
105	WARRENTON-ASTORIA	US101B	200	TERRITORIAL	OR200
110	MIST-CLATSKANIE	OR47	201	ALSEA-DEADWOOD	OR501
120	SWIFT	OR120	210	CORVALLIS-LEBANON	US20, OR34
123	NORTHEAST PORTLAND	US30BY	211	ALBANY-LYONS	OR226
130	LITTLE NESTUCCA	OR130	212	HALSEY-SWEET HOME	OR228
131	NETARTS	OR131	215	CLEAR LAKE-BELKNAP SPRINGS	OR126
138	NORTH UMPQUA HIGHWAY EAST	OR99, OR138	222	SPRINGFIELD-CRESWELL	OR222
140	HILLSBORO-SILVERTON	OR214, OR219	225	MCVAY	OR225
141	BEAVERTON-TUALATIN	OR141	226	GOSHEN-DIVIDE	OR99
142	FARMINGTON	OR10	227	EUGENE-SPRINGFIELD	I-105, OR126
143	SCHOLLS	OR210	228	SPRINGFIELD	OR528

HWY#	HIGHWAY NAME	ROUTE NUMBER(S)	HWY#	HIGHWAY NAME	ROUTE NUMBER(S)
144	BEAVERTON-TIGARD	OR217	229	MAPLETON-JUNCTION CITY	OR36
150	SALEM-DAYTON	OR221	231	ELKTON-SUTHERLIN	OR138
151	YAMHILL-NEWBERG	OR240	233	WEST DIAMOND LAKE	OR230
153	BELLEVUE-HOPEWELL	OR153	240	CAPE ARAGO	OR540
154	LAFAYETTE	OR154, OR233	241	COOS RIVER	OR241
155	AMITY-DAYTON	OR233	242	POWERS	OR542
157	WILLAMINA-SHERIDA	OR18B	244	COQUILLE-BANDON	OR42S
160	CASCADE HWY SOUTH	OR213	250	CAPE BLANCO	OR250
161	WOODBURN-ESTACADA	OR211	251	PORT ORFORD	OR251
255	CARPENTERVILLE	OR255	402	KIMBERLY-LONG CREEK	OR402
260	ROGUE RIVER LOOP	OR260	410	SUMPTER	OR410
270	LAKE OF THE WOODS	OR140	413	HALFWAY-CORNUCOPIA	OR413
271	SAMS VALLEY	OR99, OR234	414	PINE CREEK	OR414
272	JACKSONVILLE	OR238	415	DOOLEY MOUNTAIN	OR245
273	SISKIYOU	OR273	420	MIDLAND	
281	HOOD RIVER	OR281	422	CHILOQUIN	OR422
282	ODELL	OR282	424	SOUTH KLAMATH FALLS	OR140
290	SHERARS BRIDGE	OR216	426	HATFIELD	OR39
291	SHANIKO-FOSSIL	OR218	429	CRESCENT LAKE	OR429

HWY#	HIGHWAY NAME	ROUTE NUMBER(S)	HWY#	HIGHWAY NAME	ROUTE NUMBER(S)
292	MOSIER-THE DALLES	US30	431	WARNER	OR140
293	ANTELOPE	OR293	440	FRENCHGLEN	OR205
300	WASCO-HEPPNER	OR206, OR207	442	STEENS	OR78
301	CELILO-WASCO	OR206	449	HUNTINGTON	US30
320	LEXINGTON-ECHO	OR207	450	SUCCOR CREEK	OR201
321	HEPPNER-SPRAY	OR207	451	VALE-WEST	OR451
330	WESTON-ELGIN	OR204	453	ADRIAN-ARENA VALLEY	OR453
331	UMATILLA MISSION	OR331	454	ADRIAN-CALDWELL	OR454
332	SUNNYSIDE-UMAPINE	OR332	455	OLDS FERRY-ONTARIO	US30B, OR201
333	HERMISTON	OR207	456	I.O.N.	US95
334	ATHENA-HOLDMAN	OR334	457	SNAKE RIVER CORR INST	
335	HAVANA-HELIX	OR335	481	BAKER-COPPERFIELD	OR86S
339	FREEWATER	OR339	482	REDWOOD SPUR	US199
340	MEDICAL SPRINGS	OR203	483	MCMINNVILLE SPUR	
341	UKIAH-HILGARD	OR244	484	ESPLANADE SPUR	US97B
342	COVE	OR237	485	FORT STEVENS SPUR	OR104S
350	LITTLE SHEEP CREEK	OR350	486	GOLD HILL SPUR	OR99, OR234
351	JOSEPH-WALLOWA LAKE	OR351	487	CELILO-WASCO SPUR	
360	MADRAS-PRINEVILLE	US26	488	CHILOQUIN SPUR	OR422S

HWY#	HIGHWAY NAME	ROUTE NUMBER(S)	HWY#	HIGHWAY NAME	ROUTE NUMBER(S)
361	CULVER	OR361	489	PARMA SPUR	OR452
370	O NEIL	OR370	490	HOMEDALE SPUR	OR201
372	CENTURY DRIVE		491	WEISER SPUR	US95S
380	PAULINA	OR380	492	PAYETTE SPUR	OR52
390	SERVICE CREEK-MITCHELL	OR207	493	ONTARIO SPUR	US30, US30B

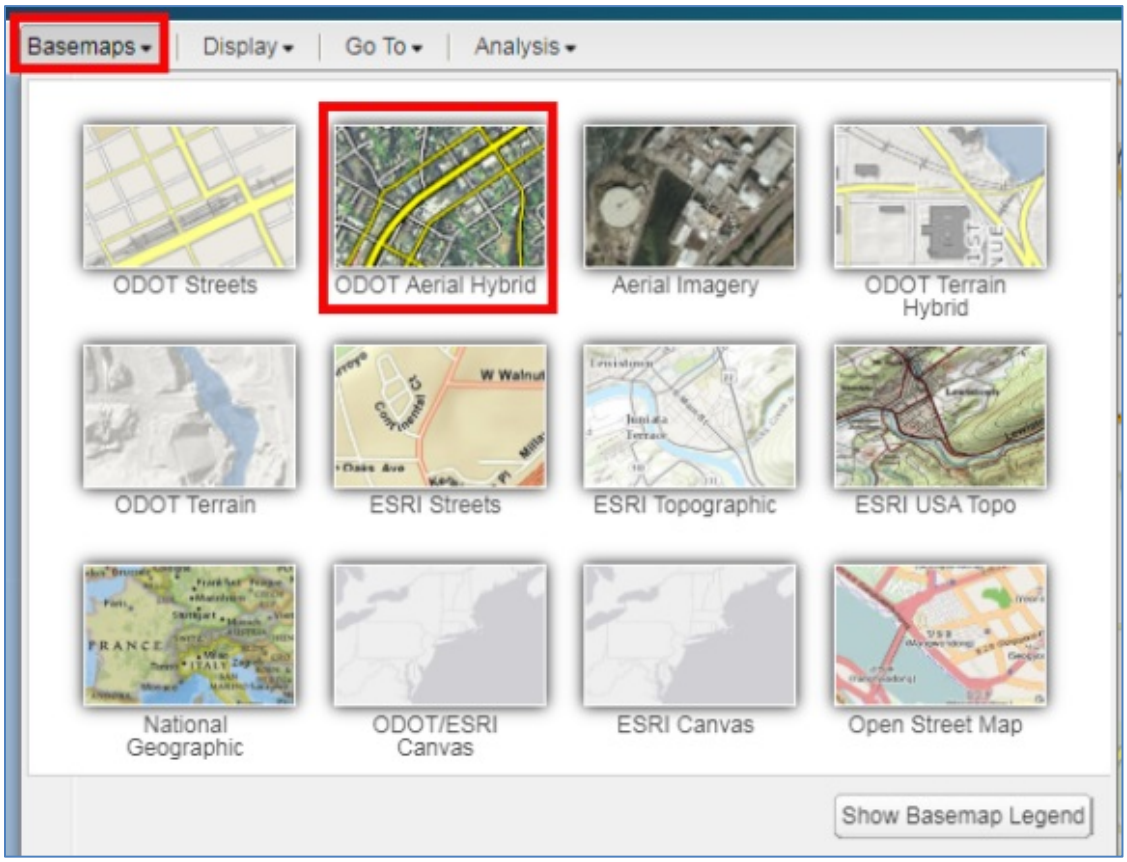
Appendix E - Inventory Collection Workflow

The following outlines the workflow for desktop asset collection and steps taken to QA & load the data into the enterprise source system at TLC. This process may not be useful, or of interest to those not involved in the data collection efforts.

TransGIS Setup

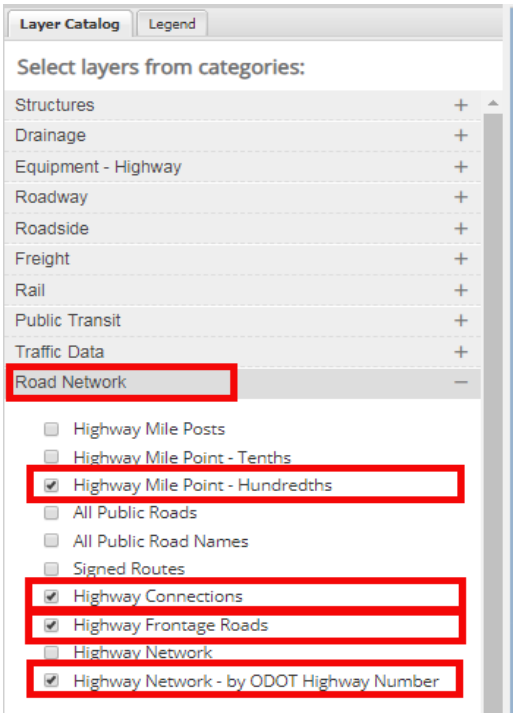
- Open a tab in Internet Explorer or Google Chrome
- Log into *TransGIS*
- Click 'Basemaps' drop down from middle tabs
    - Select any map that is most convenient, ESRI Aerial Hybrid is the map being demonstrated

Figure 17: Display of Basemaps options to pick from in TransGIS.



- In 'Layers Catalog' in the left panel - apply the following
  - Road Network drop-down:
    - Highway Mile Point Hundredths
    - Highway Connections
    - Highway Frontage Roads
    - Highway Network by ODOT HWY Number
  - Roadside drop-down:
    - Select the asset being inventoried
- Select 'Apply' at the bottom of the screen.

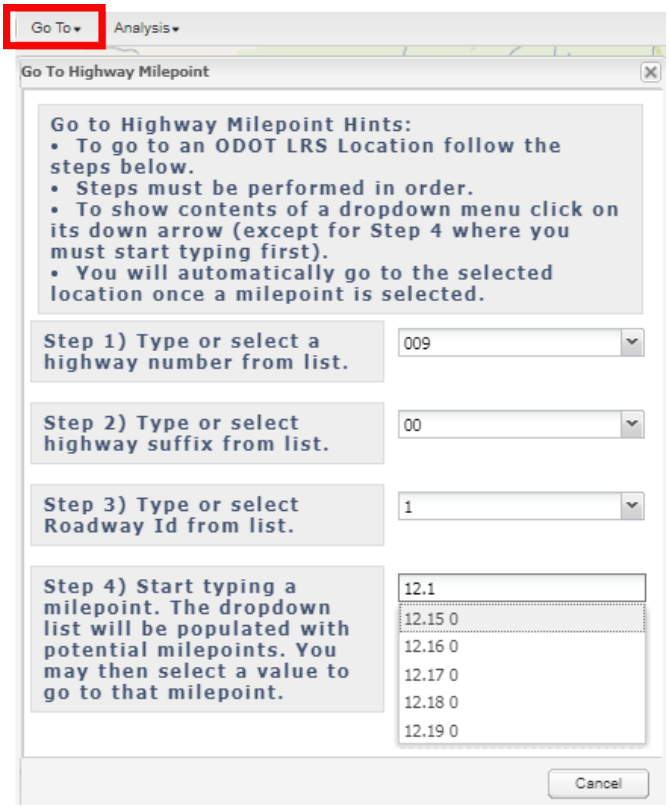
Figure 52: Commonly used layers in data collection which can be selected in the 'Layers Catalog' in TransGIS.



- Click 'Go To' drop down from middle tabs
  - Click 'Highway Milepoint' (dialog box)
  - Window will pop up prompting the user to enter location information, enter information in following order:
    - Highway Number (0-499)

- Suffix '00', 'AA', etc…
- Roadway ID: 1 or 2 (increasing or decreasing)
- Milepoint
- TransGIS will locate the milepoint according to the information provided in the dialog box

Figure 53: Highway Milepoint selection method in the 'Go To' tab in TransGIS.



- 'Go To' drop down; enter appropriate data for specific location
  - Highway Milepoint (dialog box)
  - Window will pop up prompting the user to enter location information, enter information in following order:
    - Highway Number (0-499)
    - Suffix '00', 'AA', etc…
    - Roadway ID: 1 or 2 (increasing or decreasing)
    - Milepoint

- TransGIS will locate the milepoint according to the information provided in the dialog box

Figure 54: Milepoint hundredths layer displayed in TransGIS.

- 'Analysis' drop down
  - Street View: Google street view powered by Google maps; generally great visuals, but sometimes is outdated.
    - Won't show the increasing or decreasing direction of milepoints, reference TransGIS aerial map view, which will have the layers applied to get orientation. (This is only possible to get accurate location after adding layers listed above in 'Road Network' drop-down).
    - This can be used to examine an asset at a certain milepoint. It is valuable when obtaining location information and to determine asset attributes.

Digital Video Log Setup

- Open another tab in your preferred web browser
- Log into *DVL*
- Click 'Click to Begin'
- 'Season Range'
    - Verify that the most current box is selected
- 'Highway'
    - Click the drop-down menu and select the highway being inventoried
- 'Road Type'
    - Select the road type using the boxes. This will allow for connections and frontage roads to drop down in the 'Highway' box
- 'Mileage Type'
    - Keep all options selected to make sure all data present is inventoried
- 'Season'
    - Verify that the most recent year is selected using the drop down menu
- 'Starting Milepoint (MP)'
    - Select where data collection starts. If nothing is changed, the DVL will start at the beginning of the highway. The drop down menu can be used to select a different milepoint, or a milepoint can be manually typed in.
- 'Direction'
    - Select the direction that the DVL drives. If the roadway is split, it will be difficult to see the left side of the roadway. Cross-reference with TransGIS if this is the case.
- Click 'Play Images'
- Set 'Increment' and 'Play Speed' to preference
- It can be helpful to hold 'Ctrl' and scroll up with the mouse to zoom in to allow the DVL to utilize the entirety of the computer screen
- Reference *Appendix I* if there are more questions regarding DVL

Locate Highway Asset Files (Internal Use)

- Share files
    - Click on File tab located on desktop – if you do not have the file on your desktop, get the path (Z:\INVENTORY) and create a shortcut.
    - Locate "shar" file located in left column and open it
    - Locate 'INVENTORY' folder and open it
    - Locate desired asset folder (ramp, sidewalk, barriers, bike facility, etc…) and open the folder
    - Select desired *region* and *district* folder and open the folders
    - List of HWY with Excel Spreadsheets will show up, select desired HWY and open the file
- Editing Spreadsheet Cells
    - Spreadsheets
        - All cells are going to have no color to start out
        - Asset recording requirements are explained in asset manual, flipbook, and other training materials/sessions
        - Apply appropriate assessments to the asset
    - Using TransGIS and DVL with the settings from above, inventory the designated highway, comparing the data found to that on the spreadsheet.
    - Color Coding
        - There are 3 colors to use when updating spreadsheets: Green, Yellow, Red.
            - Green: use when cell description hasn't changed from its previous inspection data.
            - Yellow: use to show that a change has been made by you that is different from the previous inspection data.
            - Red: use to show that cell(s) need to be deleted.

Do not delete red cells in this process.

  - Notes
    - Red cells may be marked for various reasons:
      - Data row(s) from previous inspection no longer represent a segment of mile points and new data is entered so that a more accurate segment overrides the red one.
      - The 'NOTES' column may have comments that don't need to be filled in, equations (ex: MP 1.00 = MP 1.11), etc.
- Once you perform review of the segment and make the necessary changes, save the document in the folder that it was saved in initially (refer to share files bullet above for further instructions).
- Regular check-ins for QA and to answer questions with asset manager.
  - Document any necessary changes.
  - Make adjustments as needed.
  - Save and move on to next District/Hwy.

Once the entire District is completed and reviewed, you will need to prepare the loader file.

  - Loader file is what is used to get the data into our enterprise source system – TransInfo. It is IMPERATIVE that the data is in the format to match the loader file or it WILL NOT LOAD.
    - Request the loader file.
    - Load data into loader file format.

Asset Loader File Entry

Step 1

- Total up all rows for the first highway in a district.
- Total up all rows for the rest of the highways in each district omitting the title rows.
- Save the total of these two.

Step 2

- Create a rough draft loader file and upload all counted rows.
- Ensure the row count correlates with the total that you saved.
- Save this file with the appropriate name.

Step 3

- Make a copy of the file that you saved previously and name it appropriately.
- Make sure that this file correlates to the file that you copied.

Step 4

- Ensure that all of the domain values are valid within the document from step 3.
- Ensure that all notes meet standards or have a reason not to.
- Delete all red cells.
- Ensure that all MP are within current district boundaries.

Step 5

- Create a copy of the document from step 4 and name it appropriately.
- Review edits to ensure correctness.

Step 6

- After reviewing all edits and the file is completely revised, send it to the Traffic/Roadway Data Systems Coordinator for uploading to TransInfo.

Appendix F - Data Collection Tips

The following process may not be useful, or of interest to those not involved in the data collection efforts.

- TransInfo requires all values to be in UPPER CASE.
- The values **must** match the Domain values for each attribute.
- Leading/trailing spaces are **not** allowed.
- Records can only be added to currently valid highway segments. If a section of highway has been removed from the highway system by Jurisdictional Transfer, inventory, etc. or is within amilepoint equation then an asset cannot be added to that location.
- An asset cannot have the same begin and end milepoint. If the guardrail is very short the end milepoint should have 0.001 added to its value. (Example: A guardrail is only 10 feet long. If the Begin MP is 2.45 then the End MP would be 2.451).
- The 'Note' field is limited to 100 characters - separate multiple notes with a semicolon (;).
- Commas, Bar (|), or at sign (@) cannot be used in the Note field or any other free text field.
- If TransGIS is being used, and the 'Highway Report Tool' is accidentally clicked instead of 'Street View', go through the steps that are given. It is much easier to do this rather than restart TransGIS.

Appendix G - Abbreviations for Data Entry

TransInfo is the enterprise source system where our asset data is stored and maintained. Part of managing the data requires strict rules and standardization on the domain values used to describe an asset. This means that if a value is not in a standardized form, the database will not accept it. The list below can be used as a guide when entering data; changes may have taken place, please confirm prior to making any edits.

Bicycle Attributes	Meaning	Value
IIT_INV_TYPE	Inventory Type	BIKE
HWY	Highway LRM	#####I/D##
START_MP	Beginning Milepoint	(-)###.## (to the 100th)
END_MP	Ending Milepoint	(-)###.## (to the 100th)
IIT_ADMIN_UNIT		S
IIT_START_DATE	MM-DD-YYYY	(leave blank - completed when processed for TransInfo)
IIT_X_SECT	Left Right	L R
NEED_IND	Need	Y
BKPD_NEED_STAT	Constructed and In Place Needed and Missing	IP MS
BIKE_TYP_CD	Bike Lane Shoulder Shared Lane None	BL SH SL B
WD_MEAS	Width in feet	##
COND_CD	Good Fair Poor None Unknown	G F P B U

INSP_YR	Vintage of video	YYYY (Year)
Sidewalk Attributes	**Meaning**	**Value**
IIT_INV_TYPE	Inventory Type	SWLK
HWY	Highway LRM	#####I/D##
START_MP	Beginning Milepoint	(-)###.## (to the 100th)
END_MP	Ending Milepoint	(-)###.## (to the 100th)
IIT_ADMIN_UNIT		S
IIT_START_DATE	MM-DD-YYYY	(leave blank - completed when processed for TransInfo)
IIT_X_SECT	Left Right	L R
NEED_IND	Need	Y
SWLK_NEED_STAT	Constructed and In Place Needed and Missing	IP MS
SURF_CD	Concrete Asphalt Other Surfaces (Paving Stones, Wood, etc.) Brickwork Permeable	WHITE BLACK OTHER BRICK PERMEABLE
BIF_IND	Buffer Present No Buffer Present	Y N
BUF_TYPE	Landscaped Decorative pavement Width Vertical Furniture Zone Parking Lot Permeable	L DP W V FZ PL P

WD_MEAS	Width in feet	##
COND_CD	Good Fair Poor None Unknown	G F P B U
INSP_YR	Vintage of video	YYYY (Year)
Marked Crossing Attribute	**Meaning**	**Value**
IIT_INV_TYPE	Inventory Type	MXING
HWY	Highway LRM	#####I/D##
MP	Mile Point	(-)###.## (to the 100th)
LAT	Latitude	Decimal Degrees Format
LONGTD	Longitude	Decimal Degrees Format
MID	Mid-block Crossing	Y (Exists) N (Does Not Exist)
CORNER_(#)	ADA Corner Number	1-7 1A-7A (Islands ONLY)
RAMP_(#)	ADA Ramp Number	1-3
IMG_SRC	Image Source	DVL (Digital Video Log) GOOGLE (Google Earth) NC (Not Captured)
IMG_DATE	Image Date	MM/DD/YYYY
HIVIZ_MARK	Marking is a staggered continental (longitudinal) or a combination of standard transverse and staggered continental markings (ladder).	Y N
INST_APPRVL	Date of State Traffic-Roadway Engineer Approval	MM/DD/YYYY (Approval Date) S (Searching) NO_APRVL (No Approval) NN (Not Needed)

RMV_APRVL	Removal Approval	MM/DD/YYYY (Date of Approval) S (Searching) NO_APRVL (No Approval) NN (Not Needed)
YEAR_UPDATED	Year data was updated	YYYY (Year)
INSPECTOR_NAME	Person responsible for updating data	FIRST LAST
INSPECTOR_CREW	Crew number for person updating data	####
INSPECTOR_AGENCY	Agency/Company of the inspector	ODOT

Appendix H - Standard Comments

These are the standard comments that may be displayed in the **NOTE** attribute for sidewalk or bicycle facilities. This is an area in the data collection where a brief explanation of the coded data may be needed. It is standard practice to use these comments to explain why an asset is poor or to explain special differences in an asset. Though additional comments may be needed in the future it is important to be consistent with future comments. In addition, approval from asset owners will be required in order to add standard comments.

Format	Descriptions
Cracking	Large cracks in paved surface that prove difficult to utilize with wheeled transport. (ex: wheelchairs, scooters, bikes)
Erosion	Not smooth, rather rough paved surface that prove difficult to utilize with wheeled transport. (ex: wheelchairs, scooters, bikes)
Faded Stencil	Used when stencil is faded to a point where it is not significant to the bike lane and needs to be repainted. Doesn't always reflect a 'poor' Bike Lane facility.
Faded Stripe	Used when the stripe for either a Bike Lane or a Shoulder is faded to a point where it is not significant to providing a safe lane for bicyclists to travel and needs to be repainted.
Missing Stripe	Use when there is a Bike Lane stencil present, but the stripe is missing.
Missing Stencil	Used when 8 inch stripe is present for Bike Lane facility, but stencil is not present where the segments break.
Severe Cracking	Large cracks in surface that force users to utilize a non-paved surface. Typically has potholes, missing concrete panels, very difficult to use with wheeled transport.
Unusual Material	Used for material that is not concrete or asphalt type actual material (ex: wood, brick).

Appendix I - Digital Video Log (DVL)

Background

The Digital Video Log (DVL) is a pictorial record of state highway system from a driver's perspective. The DVL consists of digital images taken every five thousandth of a mile. The DVL proceeds from mile point zero to the end of the highway. You can reverse the direction (end of highway to mile point zero) with the Increasing Mile Points and Decreasing Mile Points radio buttons. By using these two radio buttons you can view the highway in both directions of travel.

Most of the highways were driven in the right lane with a single camera mounted in the center of the vehicle. The shoulders and side conditions of the road are visible, though the perspective may be skewed a bit. Most people find they can get information about road conditions, shoulder width, etc. from the DVL.

For more detailed instructions, go to the "How to Use the Oregon Department of Transportation Digital Video Log (DVL)" instruction sheet located here:

https://dvlprod-ordot.msappproxy.net/cf/dvl/Doc/DVLinstructions2017.pdf

How to Use the Digital Video Log

1. From the DVL homepage

   https://www.oregon.gov/odot/Data/Pages/Road-Assets-Mileage.aspx#DVL

   https://dvlprod-ordot.msappproxy.net/cf/dvl/Doc/DVLinstructions2017.pdf

   Click on "Click Here to Begin" to activate the Digital Video Log.

2. Choose from the following options on the next screen. Keep in mind that the default settings are the most commonly used. Most people will only need to adjust the Highway Number, Season, and Starting Milepoint to view the images they need.
   - *Highway* – The highways are listed by the official ODOT highway number (not the route number found on maps). Choose any available highway from the drop down menu.

- To find the official ODOT Highway Number Use the State Highway Cross Reference:

https://www.oregon.gov/ODOT/Data/Documents/Routes-to-Highway-Cross-Reference-Table.pdf

The list of available highways is based on the criteria selected in the fields 2, 3 and 4. For example, if you uncheck Highways and check Frontage Roads in the Road Type Field, the highway list will only contain Frontage Roads.

- *Road Type* – Accept the default – Highways.
- *Mileage Type* – This is an internal code and is of no use or concern to the lay user. Accept the defaults.
- *Season* – The Digital Video Log will automatically default to the most current images for your chosen highway, and will list other available years in the Season pull down list. You can view images from previous seasons by choosing a different year from the Season pull down list. DVL seasons run from May 1 – April 30 each year. Approximately one half of the state highway system is taped annually.
- *Starting Milepoint* – This will default to the beginning milepoint for the chosen highway and year, but you may choose a different starting milepoint from the pull down list, or enter a milepoint in the entry field. East-West roads "begin" (mile point zero) in the West. North-South roads "begin" in the North. I-5 is an exception. It "begins" at the California border.
- *Direction* – The DVL is taped in both traffic directions, so images may be viewed in either Increasing or Decreasing Milepoint direction. The increasing milepoint is the default direction. The DVL proceeds from mile point zero to the end of the highway. You can reverse the direction (end of highway to mile point zero) with the Increasing Mile Points and Decreasing Mile Points radio buttons. By using these two radio buttons you can view the highway in both directions of travel.

3. Choose one of the following to start viewing images:

Display Image button – This will display the images on the same screen as the milepoint DVL for the highway, and will allow the user to scroll through images one at a time. (See below for further information about how to use this feature.)

Play Images button – Allows you to play the images of your selected highway consecutively. (See below for further information about how to use this feature.)
Reset – Resets all fields on the page back to the default settings.

How to Use Display Image

Once the video image is displayed, you can move through the images one at a time by clicking the

<<< (Previous Image) or >>> (Next Image) buttons below the image. The size of the image can be increased by clicking on the image.

Figure 55: Screenshot from Digital Video Log page.

Select New Highway – Goes back to highway selection screen where you can choose a different highway or change options for the same highway (such as choose a different year).

Increment (Inc Amt): The images will change by increments of 0.05 mile by default, but you can change the Increment Amount. For example, entering 10 in the increment box will change the frame by 0.10 mile and 100 will change the frame by 1.00 mile.

Increasing/Decreasing (Incr / Decr): You can choose to view the highway in either increasing (Eastbound or Southbound, except I-5) or decreasing direction Westbound or Northbound, except I-5) by clicking the appropriate direction button.

<<< – Moves to the previous image by increment amount.

>>> – Moves to the next image by increment amount.

Play Images – Goes to the Play Image tool where the images are played automatically. See "How to Use Play Images" section below for instructions on this tool.

Home – Returns to the DVL home page.

Milepoint Log – The milepoint log that corresponds to the year of the images is displayed at the bottom of the screen. You can scroll through the log to look for a particular feature, like a city's name or a side street. You can jump directly to the image of a specific milepoint by clicking the shaded milepoint button in the milepoint log below the image. See below for more detailed instructions for reading the milepoint log.

How to Use Play Images

Use this feature to play images of the selected highway consecutively. This works much like a VCR, with play, pause and rewind.

Increment: The images will change by increments of 0.015 mile by default, but you can change the Increment Amount. For example, entering 10 in the increment box will change the frame by 0.10 mile and 100 will change the frame by 1.00 mile. To change the increment amount, select a new increment from the pull down list.

Select New Highway – Goes back to highway selection screen where you can choose a different highway or change options for the same highway (such as choose a different year).

||<<< – Jumps to the beginning of the highway. You will need to select Play or Rewind after clicking on this choice.

|<<< – Jumps to the start of the currently selected images (+/- 2 miles of the requested milepoint). You will need to select Play or Rewind after clicking on this choice.

Rewind – Plays images backwards **Pause** – Pause playing of images **Play** – Plays images forward.

>>> – Jumps to the end of the currently selected images (+/- 2 miles of the requested milepoint). You will need to select Play or Rewind after clicking on this choice.

>>>| – Reposition to the end of the highway. You will need to select Play or Rewind after clicking on this choice.

Display Image – Goes to the Display Image page.

Home – Goes to the DVL home page.

Increase / Decrease MP – Click on selection – then click on Play or Rewind.

Starting MP – Click on selection – then click on Play or Rewind.

Increment – Changes increment between each image.

Play Speed – The default play speed is 1 image every 3.5 second. You can choose between .25 – 5 seconds / image.

Milepoint Log – Clicking on the Milepoint Log button will open up a new window with a corresponding milepoint log. You can scroll through the log to look for a particular feature, and jump directly to the image of a specific milepoint by clicking the shaded milepoint button in the milepoint log. After clicking on a milepoint, minimize the milepoint log window to uncover the Play Images screen.

Reading the Milepoint Log

Roadside features on the state highway system change regularly. With this in mind, the DVL displays the milepoint log that matches the year the pictures were taken.

The Milepoint log displays the following information for each milepoint:

Rdwy ID (Roadway ID) – This number identifies the alignment on which this milepoint exists. Rdwy ID 1 is the increasing mileage direction for traffic and Rdwy ID 2, the decreasing mileage traffic direction. The exception being Hwy. 001 (I-5), on which Rdwy 1 (southbound) is the decreasing mileage direction. *Don't even pay attention to this feature. It's an internal coding system of no consequence to the lay user.*

Mlge Type (Mileage Type) – Z = overlapping, Y = Spur, T = Temporary *Don't even pay attention to this feature. It's an internal coding system of no consequence to the lay user.*

Ovlap Cd (Overlap Code) – Used with 'Z' mileage only. The milepoint overlapping code indicates the sequential order in which 'Z' mileage was added to a highway. *Don't even pay attention to this feature. It's an internal coding system of no consequence to the lay user.*

Milepoint – A number that represents the distance in miles from the original beginning ofthe highway. This distance, measured along the contours of the traveled roadway, is derivedfrom construction plans and field inventory.

Roadway Codes – These codes indicate the direction (left or right) and jurisdiction of intersecting roads, culverts, structures, boundaries, etc. (The codes have been omitted from these instructions for brevity.)

Update Cycles

Approximately one half of the state highway system is taped annually, with emphasis on Interstate and US Routes. The annual Video Log seasons run from May 1 to April 30.

The highway milepoint log report is a snapshot of data from TransInfo. A yearly snapshot is taken at the beginning of the taping season in May.

Printing

- To print the whole page as seen on your computer screen including the menu, image and beginning of the milepoint log on one page – change to landscape mode under File/Print/Preferences, and click OK. Then choose "As laid out on screen" under Print/Options/Print Frames/OK

- To print just the menu, the image or the milepoint log alone – first click in the section you want, then click File/Print/"Only the selected frame" under Options/Print Frames/Print.
- To print everything, but each on a different page – click on File/Print/"All frames individually" under Options/Print Frames/OK.
- To print only a selected portion of the milepoint log – Highlight the section of the milepoint log wanted, click on File/Print/Change from "All" to "Selection" under Print Range/OK.

Saving an Image

- Right click on the image.
- Click on "Save Picture as."
- Go to the drive/folder you want the image saved in.
- Name the file.
- Choose to save it as a .jpg file.
- Click save.

To view the .jpg file, either double click on the file name, or open the file from within Microsoft Photo Editor.

DVL Frequently Asked Questions (FAQ'S)

Why is there an occasional lag while I am viewing a highway?

The DVL automatically goes out and collects images + or - two miles on either side of your selected milepoint. This is done to enable faster loading speeds for viewing. Once you reach the outside range of the requested milepoint, the DVL will go out and collect the next set of images. This will result in a short pause while the needed images are stored.

Why do I get the error "Auto Play has been exceeded"?

This message may appear while in play mode. The purpose is to stop continuous playing of a highway by accidentally leaving the DVL playing, which can slow down the server for others. If someone begins playing a highway and the DVL reloads the +/- 2 mile images 21 times then this error message will appear.

Where did my buttons go on the display image screen?

Sometimes when the display image screen is in a minimized window the buttons will be below the viewable area in order to allow room to show the image. Simply drag the lower silver dividing bar directly under the image down and your buttons will appear.

While in 2006 season can I open both images in separate windows?

Yes you can. Simply click on each image to enlarge and they will open in their own windows. The enlarged images will automatically update to reflect the selected milepoint on the main screen.

Is there a web address where customers can access the DVL via the internet?

Yes there is. Go to:

https://dvlprod-ordot.msappproxy.net/cf/dvl/index.cfm?&fuseaction=entry

Why do I sometimes see a red X?

This is due to a missing image. Due to the large amount of images collected occasionally one is not collected or is corrupted.

Why can't the images be larger on my screen while viewing the milepoint log?

Users of the DVL have various needs for display. The application was developed to be viewed in many different resolutions and screens.

Can I use the milepoints displayed on the video log for measuring?

Depending on your needs, the Video Log may be used to obtain or verify milepoints. Please keep in mind that the accuracy of the Video Log is +/- .02 miles. In addition, since not all highways are taped each year, there may have been construction work since the last Video Log that could have an effect on the milepoints. The most accurate and up to date milepoints can be obtained through the TransViewer reports located at http://highway.intranet.odot.state.or.us/cf/HIGHWAYREPORTS/

Why doesn't the milepoint log reflect a new construction project?

The milepoint log is a snapshot of data each May 1. Due to the timing of the milepoint log snapshot, the collection of the images and the entry of the construction plans, not all projects will be represented in the DVL.

Why is the route on the DVL different than I would expect?

There is not enough room on the images to list all of the routes so a hierarchy is followed: Interstates, US and then Oregon. When there is more than one kind (such as two Oregon Routes) then the lowest route number is used. There are a few exceptions to this rule where the State Highway Engineer has designated which route will be shown such as US97 in Bend instead of US20.

Why doesn't the DVL always show two images?

The addition of a second camera did not occur until the 2006 season. Images collected prior to 2006 utilized the single camera system.

I can't see the milepoints on the .jpg while in "Play Images" mode.

This situation can occur if your monitor resolution is too low. In addition to not being able to view the milepoints, the buttons on the bottom of the page may also disappear. To remedy both of these situations check to make sure your monitor resolution is set to 1024 x 762, or above.

How can I get only one image to display?

This functionality has been included for those who only want to view a single image on their screen while in "Play Images" mode. You simply uncheck "Display Image" for whichever camera you would like to disappear. Recheck the box and the camera will reappear. While in "Display Images" mode, click on the image you want to display. When the new window opens, the same options for advancing images are available as in the dual image window.

What are the update cycles of the DVL? Approximately May of each year:

Interstate and US Route (NHS) = Annually

OR Route (NHS) = Every two years.

Other OR Routes = Every three years.

Interstate Connection Frontage Road, Off-System NHS = Every five years.

ODOT provides a safe and reliable multimodal transportation system that connects people and helps Oregon's communities and economy thrive.

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