

# Bicycle/Pedestrian Facilities, Parking, ADA Ramps & Curbs

## Data Collection User's Guide

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# 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 contractors in gathering Bicycle/Pedestrian Facilities, Parking, ADA Ramps and Curb inventory information and to maintain a consistent data collection method for road inventory throughout the state. A commitment to utilize the definitions, processes, and procedures contained in this manual is an important step in 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: ODOT will benefit from an increase in reliable and accurate asset information; Asset Management practices help ensure that public agency activities are consistent with existing federal guidelines, current accounting practices such as *Governmental Accounting Standards Board (GASB) Statement 34*, and Legislative performance measures; and, Asset Management helps ODOT as an agency demonstrate to the public that they are responsible stewards of Oregon’s transportation assets.

# BASIC INVENTORY

## BEFORE INVENTORY BEGINS

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

- Identify the segment of roadway to be inventoried.
- Obtain access to the Pedestrian, Bicycle, and ADA Ramp Data Collection Sheet named “Sample\_Bike. Ped\_Ramps\_Speadsheet” located: `\\Scdata\7130shar\INVENTORY` (see Appendix B, page 33).
- Acquire fundamental working knowledge of the Digital Video Log (DVL).
  - See Appendix C
  - You can also access the DVL’s User’s Guide, at the following website: [http://intranet.odot.state.or.us/cf/dvl/DigitalVideoLog\\_Instr.htm](http://intranet.odot.state.or.us/cf/dvl/DigitalVideoLog_Instr.htm)
  - The following link provides access to a list of the available video logs:  
[http://www.oregon.gov/ODOT/TD/TDATA/rics/docs/Videolog\\_Data\\_Available.pdf](http://www.oregon.gov/ODOT/TD/TDATA/rics/docs/Videolog_Data_Available.pdf)
- Familiarize yourself with the Field Inventory Manual compiled by Road Inventory & Classification Services (RICS). To do this you will need to contact someone in the RICS unit to request a copy. The RICS website is:  
[http://www.oregon.gov/ODOT/TD/TDATA/TDATA\\_All\\_Contacts.shtml#Road\\_Inventory\\_\\_\\_Classification\\_Services](http://www.oregon.gov/ODOT/TD/TDATA/TDATA_All_Contacts.shtml#Road_Inventory___Classification_Services)
- Familiarize yourself with the terminology (e.g., milepoints, add direction, non-add direction, roadway ID, etc.). You will need to be familiar with the terms and their definitions found both in the Field Inventory Manual, and those listed on the Transportation Development Division’s website under the ITIS entity definitions:  
[http://www.oregon.gov/ODOT/TD/TDATA/otms/OTMS\\_ITIS\\_Field\\_Definitions.shtml](http://www.oregon.gov/ODOT/TD/TDATA/otms/OTMS_ITIS_Field_Definitions.shtml)
- Fill out the Asset Data Collection Registry (see Appendix A, page 31).
- Print a copy, or have access to, the Highway Inventory Summary Report for the relevant segment of highway you are inventorying before you head out into the field (see Appendix E). Visit the following website to search for reports according to ODOT highway number:  
[http://highway.intranet.odot.state.or.us/cf/highwayReports/aml\\_summary\\_parms\\_by\\_route\\_no.cfm](http://highway.intranet.odot.state.or.us/cf/highwayReports/aml_summary_parms_by_route_no.cfm)

# STEPS FOR COLLECTING INVENTORY

Note: This section merely contains a list of the steps to follow; more detailed information regarding the steps to be taken and the terms found here will be given in the following section (“Inventory Definitions and Photographs”).

1. Contact the ITIS Program Coordinator in the Road Inventory & Classification Service (RICS) Unit at 503-986-4140 & ask for the “City Urban Urbanized Bike Ped Report.”
2. Open the “Blank\_Master\_List” located at: `\\Scdata\7130shar\INVENTORY`
3. Using the information obtained from the query fill the following information into the blank Master List spreadsheet
  - a. Location
    - i. Roadway Number
    - ii. Mileage Type
    - iii. Overlapping Mileage Code
    - iv. Beginning Milepoint
    - v. Ending Milepoint
    - vi. l\_fips\_city\_id
    - vii. City Name
    - viii. l\_fips\_urb\_id
    - ix. Urban Name
    - x. l\_fips\_urbnz\_id
    - xi. Urbanized Name
4. Save the new Master List as “YEAR\_Master\_List” in a **new folder** labeled “YEAR\_bikelanes\_sidewalk” **OR** “Year\_ramps” depending on which asset you are collecting data for (where YEAR is replaced with the digits for the actual year).
5. Open Pedestrian, Bicycle and ADA Ramp Data Collection Spreadsheet “Sample\_Bike.Ped\_Ramps\_Speadsheet” located at: `\\Scdata\7130shar\INVENTORY`
6. Identify Urban Growth Boundary (UGB) sections of highway based on the Master List that has just been created. Create a new row for each UGB in the Sample Spreadsheet and then populate the cells in the row with the appropriate data from the Master List (*see step 3*), as well as the following information:
  - a. Location
    - i. Route Number
    - ii. ODOT Highway Number
    - iii. Region Number
7. Highlight the row of data that you have just entered into the sample spreadsheet.
8. Save the spreadsheet with the name of the ODOT Highway Number (e.g., “Hwy002”). Place the new spreadsheet in the same folder that you just created to place the populated Master List in (*see step # 4*).

9. Using the Digital Video Log (DVL), fill in the following information for each feature
  - a. Location
    - i. Milepoints
      1. Beginning Milepoint
      2. Ending Milepoint
    - ii. Side of Road
    - iii. Add & Non-Add Mileage
  - b. Identify type of feature (i.e., Bike Facility, Pedestrian Facility, Shared-Use Path, Mid-Block Crossing, Parking, ADA Ramp, Curb)
    - i. Determine Need
    - ii. Determine Existence
    - iii. Identify Attributes
10. Field verify the following when and where appropriate (i.e. when conditions are safe to do so) – be sure to review the “Checklist Before Leaving Office” in the Field Inventory Manual (*see Before Inventory Begins*).
  - a. Milepoints
    - i. Beginning
    - ii. Ending
    - iii. Section Miles
  - b. Condition
  - c. Width
  - d. Check for new features not previously identified with the DVL, or possibly even the removal of features.

# PEDESTRIAN, BICYCLE & ADA RAMP DATA COLLECTION SPREADSHEET

The data collection spreadsheet is used as the tool for recording and temporarily storing inventory data. You will need to enter the inventory data you collect into the appropriate column on the spreadsheet. The information contained in this manual is ordered in the same manner as the columns in the spreadsheet.

Displayed below is an example of the data collection spreadsheet (“Sample\_Bike.Ped\_Ramps\_Spreadsheet”) and is located at: `\\Scdata\7130s\har\INVENTORY`. The green lines indicate that the table was broken and the columns to the right were moved below. The top section of columns is found at the top left of the spreadsheet and the bottom section of columns is found at the lower right of the spreadsheet.

Route Number	ODOT Highway Number	Roadway Number (for divided Hwy only)	Mileage Type	overlap_mile_cd	Beginning Mile Point (to 100th)	Ending Mile Point (to 100th)	Section Miles	Region	I_fips_city_id	City Name	I_fips_urb_id	Urban Name	I_fips_urbnz_id	Urbanized Name	Right/Left	Add-Mileage

Bike Facility Needed (Y)	Sidewalk Needed (Y)	ADA Ramps Needed (Y)	Bike Facility (BL, SL, SH)	Bike Facility Width (ft)	Bike Facility Condition (G, F, P)	Bike Facility Notes	SW (Y)	SW Surface (Black/ White)	SW Buffer (Y)	SW Width (ft)	SW Condition (G, F, P)	SW Notes

Shared-Use Path (Y)	Path Surface (Black or White)	Path Width (ft)	Path Condition (G, F, P)	Mid-block (Y)	Parking (PP, DP)	Parking Width	Parking Condition (G, F, P)	Ramp Location Notes (intersection)	Ramp Location (corner number)	Ramp Type (CS, CD, D, ID, IT, I, N)	Ramp Func. Condition (G, F, P)	Ramp Phys. Condition (G, F, P)	Curb Type (SC, CG, M)	Curb Ht (G, F, P)	Curb Condition (G, F, P)	Inspection Date

# INVENTORY DEFINITIONS & PHOTOGRAPHS

**LOCATION:** This refers to the information that is needed to geographically reference the location of each feature (i.e., bike facility, pedestrian facility, parking facility, ADA ramp, curb). The goal is to use this information to map the location of features along roadways. Displayed below are the spreadsheet columns that correspond to this section of the manual.

The first section of columns corresponding to location data is shown below.

Once you have been assigned a highway to collect inventory for, you can populate the spreadsheet based on the Master List previously created from the query provided by RICS (*see Steps for Collecting Inventory, page 3, steps 1 – 8*). The spreadsheet columns you can populate at this point are: 1-5, and 9 -15.

Additional columns (6, 7, 8,16, and 17) should be filled in as you collect the inventory data.

Definitions for the location data that will help in filling in the blue columns of the spreadsheet are provided below.

1	2	3	4	5	6	7	8	9
Route Number	ODOT Highway Number	Roadway Number	Mileage Type	ovlap_mlge_cd	Beginning Mile Point (to 100th)	Ending Mile Point (to 100th)	Section Miles	Region

**Route Number** – Also known as Route ID. This is an alpha-numeric code which is commonly known to the public that identifies the highway (e.g., US 101). When multiple route numbers are located on one highway the rule for identifying the route ID is as follows: always use the interstate number when present; otherwise, use the US number; if neither are present use the lowest OR number.

**ODOT Highway Number** – A three-digit state number (not route number) used by ODOT assigned on a length of highway for specific use in the Integrated Transportation Information System (ITIS) database. Valid highway numbers range from 001 to 499. Each connection (i.e., ramp) or frontage road will have its own unique identifying highway number which will have the same highway number as the mainline, with an additional two letters to uniquely identify a specific connection or frontage road (e.g. 001AA, 001AB).

The “Routes | State Highway Cross Reference” report provides a list of Highway Names and their corresponding Route Numbers and Highways Numbers. The list can be viewed at: [http://www.oregon.gov/ODOT/TD/TDATA/otms/Route\\_Hwy\\_CrossRef.shtml](http://www.oregon.gov/ODOT/TD/TDATA/otms/Route_Hwy_CrossRef.shtml); however, some of the highways have more than one route number, for this list see *Appendices F*.

**Roadway Number** – Also known as Roadway ID. This is a one-digit code used in conjunction with the highway number and milepoint to identify the alignment on which the feature being inventoried exists. The roadway ID ranges in value from 1-5; however, when collecting road inventory data on the features in this manual the only numbers you will use are 1 and 2. The number “1” is used for all roads that are not considered divided highways, as well as, for the add direction of divided highways. The number “2” is used for the non-add direction of divided highways. **Note:** I-5 is the exception to this rule.

**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:

- Regular mileage is left blank
- Temporary mileage is identified with a “T”
- Spurs are identified with a “Y”
- Overlaps are indicated with a “Z”. Example: Z-mileage refers to a section of road that has been lengthened due to realignment.

**Overlapping Mileage Code** (ovlap\_mlge\_cd) – 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 a 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 the problem area, but new alignment is 4.62 miles longer than the original alignment. The 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.

**Milepoint** – A number that represents the distance in miles from the original beginning of the highway. Valid values for milepoints can range from -999.9999 to 999.9999. This distance, measured along the alignment of the traveled roadway, is derived from construction plans and field inventory.

When filling in the Pedestrian, Bicycle and ADA Ramps spreadsheet, you will have a row at the top of the spreadsheet for each highway that is highlighted and contains the information mention in steps 1 – 8 of the previous section. The beginning and ending milepoint data in this row pertains to the section of that highway within an urban area.

For the purpose of collecting roadway inventory, you will then need to collect and record the beginning and ending milepoints, to the hundredth decimal place (.01), of each feature according to the milepoint log on the DVL, or the DMI when in the field.

For the “Section Miles” column of the spreadsheet, fill in the total distance in mileage from the beginning milepoint to the ending milepoint. *Note:* When entering data electronically directly into the spreadsheet enter the formula, =ABS(G#-F#) (where the # is replaced with the appropriate row number) into the cell under the “Section Miles” column that you are filling in.

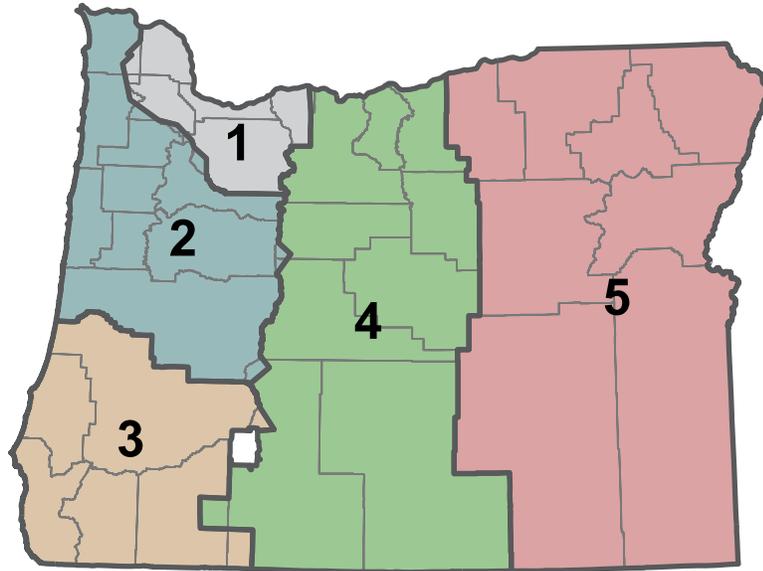
*Note:* The beginning and ending milepoints must not cross the boundary of any mileage equation. This could result in an inaccurate section mileage calculation. Therefore, an endpoint needs to be placed at the start of every mileage equation. If you have questions ask a supervisor for clarification.

**Region Number** – ODOT is organized into five regional offices, numbered 1 – 5. Each region is then further broken down into districts.

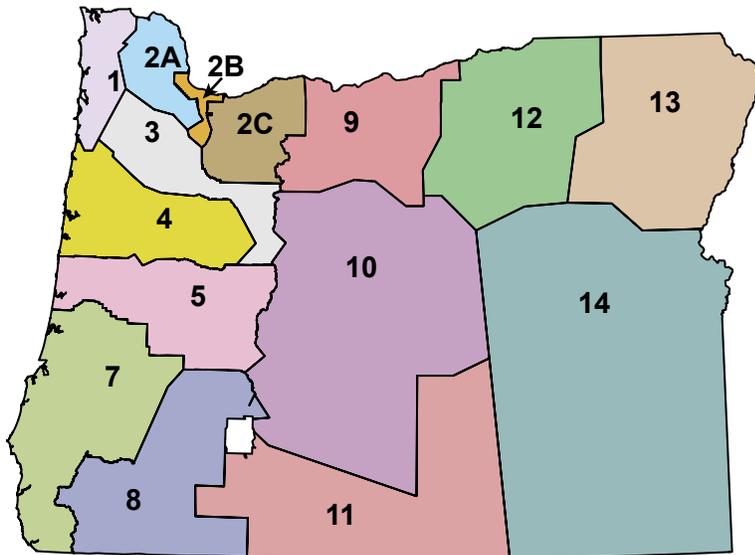
**District Number** – The number used to identify separate sections of the state that designate ODOT maintenance responsibilities. Valid values for District Identifiers include: 01, 02A, 02B, 02C, 03-05, 07-14.

Region and district boundaries are identified below. For more detailed maps see *Appendix D*.

### Region Numbers



### District Numbers



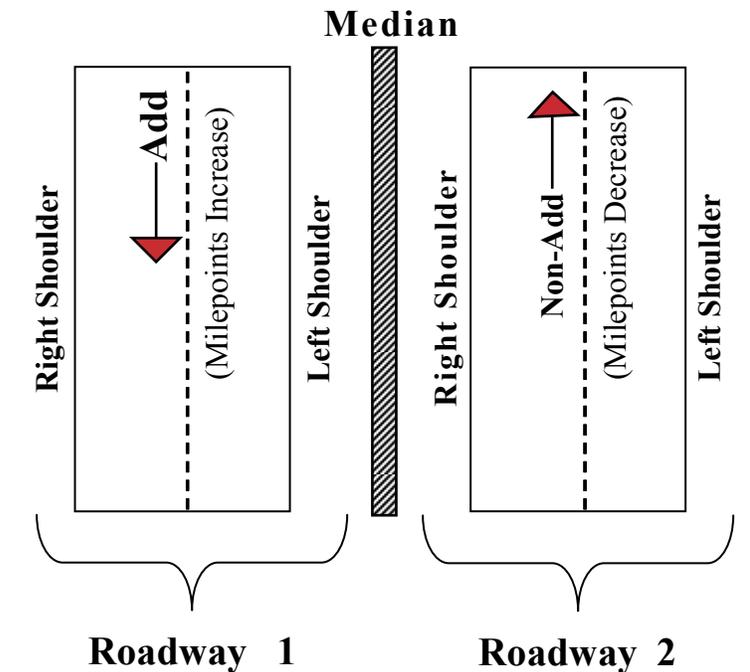
**LOCATION, CONTINUED:** The second section of columns corresponding to location data is shown below. As stated previously, the Master List created from steps 1-4 of the “Steps for Collecting Inventory” section will provide the information needed to fill in columns 10-15. For information on columns 16 and 17 see the definitions below.

10	11	12	13	14	15	16	17
I_fips_ city_id	City Name	I_fips_ urb_id	Urban Name	I_fips_ urbnz_id	Urbanized Name	Right/ Left	Add- Mileage

**Side of Road** – Refers to the location along the highway; identified as Left (L), or Right (R), based on the “Add” mile direction.

**Add Mileage & Non-Add Mileage** – Refers to the direction of travel. When traveling in the add direction you are traveling in the direction of increasing milepoints. When traveling in the non-add mileage direction you are traveling in the direction of decreasing milepoints. For most highways, the add direction is south or east, however, it is important to refer to the DVL to determine if you are traveling in the Add or Non-Add direction. This column always needs to be filled in and is done so by entering either Add or Non-Add into the appropriate cell.

The figure below depicts Roadway Number, Side of Road, and Add & Non-Add Mileage for most divided highways.



**Figure 1.** Represents most highways, where add mileage occurs in the south and east directions

**BIKE FACILITY:** When gathering road inventory data, the first feature you will need to identify is the bike facility. This feature corresponds to columns numbered 1 – 5 below. Column 1 refers to the need for a bike facility, while columns 2-5 refer to the condition of an existing bike facilities.

1 Bike Facility Needed (Y)	Sidewalk Needed (Y)	ADA Ramps Needed (Y)	2 Bike Facility (BL, SL, SH)	3 BL Width (ft)	4 BL Condition (G, F, P)	5 BL Notes
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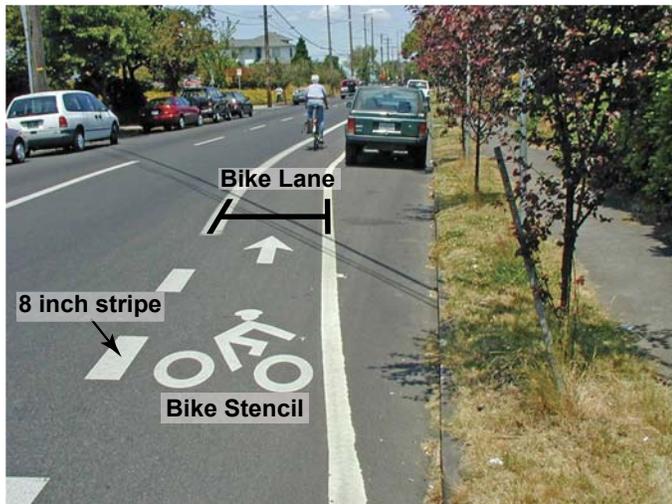
**1) Needed:** This field answers the question, “Should there be a bike facility on this segment of highway?” This field is marked with a “Y” for Yes or leave blank if the answer is No.

Bike facilities are needed in all urban areas. Bike facilities are needed on both sides of the street for two-way roads and on one side of the street for one-way roads.

**2) Existing Bike Facility:** This is the column of the data collection spreadsheet where you describe what type of bike facility exists (i.e., BL, SL, SH). If no bike facility exists this column is left blank.

**Bike Lane (BL)** – Bike lanes are denoted by an 8-inch stripe separating motor vehicle traffic from bicycles, and a bicycle stencil; other lines, dashed or dotted, are optional. Skip Striping, as in the photo above on the right, is an example of optional striping, and still constitutes a bike lane. It is used to indicate that motor vehicle traffic may be crossing the bike lane, in this instance to access the parking lane.

**Types of Bike Facilities:**





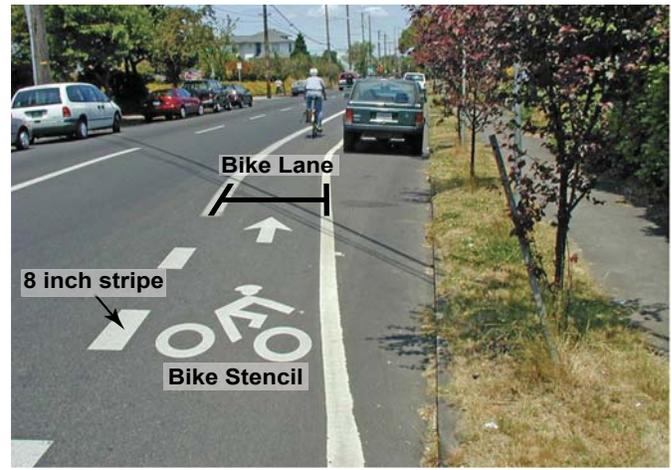
**Shared Lane (SL)** – A Shared lane is appropriate on streets posted 25 mph or less, as in central business districts. No obvious bike facility is provided; bicyclists and motor vehicles simply share the same travel lane. No markings are used.



**Shoulder (SH)** – Shoulder bikeway, or the road shoulder, vary in width from 5 – 10 feet or more. No markings are used. Typically, shoulders are the bike facility on rural roads. *Note:* Shoulders less than 5 feet wide are not considered shoulder bikeways.

**Shared-Use Path** – A Shared Use Path is separated from the roadway and serves both pedestrians and bicyclists. It is normally 8-12 feet wide (*see page 16 for more information & pictures*).

Whether the bike facility is a bike lane, a shoulder, or a shared lane depends on the posted speed, motor vehicle traffic volumes, and land uses. For example, separate bike lanes are not needed in urban business districts or downtowns where speeds are low and there is on-street parking; instead, bikes will share the road with motor vehicle drivers and a shared lane is established.



**3) Width:** Bike facility width is measured in feet from the face of curb, the edge of pavement, or the center of the inside white line to the center of the 8-inch or outside stripe. *See the four pictures above for examples of width measurements.* **Note:** When filling in the spreadsheet do not enter the prime symbol (').

**4) Condition:** This is a rating that refers to the physical condition of the pavement 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 three ratings:

- Good (G)** – Smooth pavement. **Note:** This rating is only used for new construction.
- Fair (F)** – Reasonably smooth pavement, safe to ride on. **Note:** Use this rating when the condition is fair or better.
- 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 it.

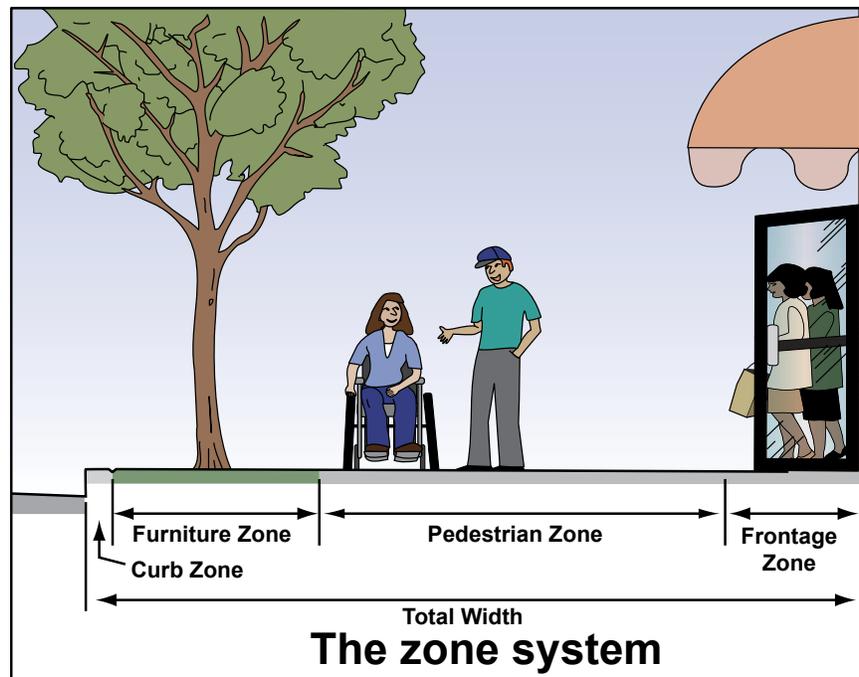
**5) Notes:** This column is used to record pertinent information about the bike facility in addition to the required inventory data. See *Appendix B* for a list of standard notes.

**PEDESTRIAN FACILITY:** The next step is to record the appropriate inventory data pertaining to pedestrian facilities, i.e., (sidewalk, shared-use path, mid-block crossing). The first group of columns to be filled in pertains to sidewalks. For this section you will need to fill in the columns numbered 1 – 7.

	1		2	3	4	5	6	7
Bike Facility Needed (Y)	Sidewalk Needed (Y)	ADA Ramps Needed (Y)	SW (Y)	SW Surface (Black/White)	SW Buffer (Y)	SW Width (ft)	SW Condition (G, F, P)	SW Notes

**Types of Pedestrian Facilities:**

**Sidewalk (SW)** – Sidewalks are located along roadways, and separated from them by a curb, a drainage swale or a planter strip. Most sidewalks are concrete; asphalt sidewalks are less common. In addition, sidewalks also have zones. All sidewalks have a Pedestrian Zone and a Frontage Zone. Not all sidewalks have a furniture zone. For example, a curbside sidewalk has no furniture zone because the pedestrian zone meets the curb. However, a 10 foot sidewalk in a downtown area should have all three zones. *For examples of sidewalks and the zones, review the “Width” section below.*



**Shared-Use Path** – A Shared Use Path is separated from the roadway and serves both pedestrians and bicyclists. It is normally 8-12 feet wide (*see page 16 for more information & pictures*).

**Mid-Block Crossing** – *See page 17.*

**1) Needed:** 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 left blank if not needed. If a sidewalk already exists it is considered needed.

Sidewalks are needed in all urban areas and suburban areas with roadside development. 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, 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. **Note:** When a shared use path exists a sidewalk is considered needed and the shared-use path serves as the sidewalk or pedestrian facility.

## Examples:



Is sidewalk needed here? **Yes.**  
Foot paths indicate a need for a sidewalk.



Is sidewalk needed here? **Yes.**  
This route clearly leads to a school.



Is sidewalk needed here? **Yes.**  
All central business districts need sidewalks.



Is sidewalk needed here? **No.**  
This road transitions from urban to rural quickly;  
on this rural portion the shoulder serves as the  
pedestrian facility.

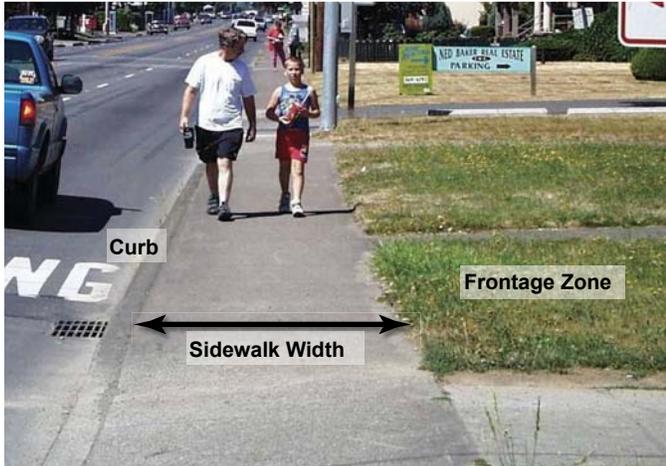
**2) Existing:** This refers to the column on the spreadsheet labeled “Sidewalk (Y).” When a sidewalk does exist place a “Y” in the corresponding spreadsheet cell, otherwise leave it blank.

**3) Surface:** This is denoted as either black or white. Sidewalks are either concrete or asphalt: asphalt = black, concrete = white. Unpaved sidewalks are not inventoried.

**4) Buffer:** The buffer = the Furniture Zone. A buffer separates the sidewalk from the roadway. The buffer, or furniture zone, may be paved, grassy or landscaped, or it can 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 leave blank if the answer is No under the column headed “SW Buffer (Y).” **Note:** Any sidewalk that is wider than 6’ has a de facto buffer and a “Y” is to be placed in column 4.

**5) 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 *The Zone System diagram on page 13*). The furniture zone, or buffer, is included in the calculation of the sidewalk width when: you would let your grandma walk on it on a rainy day. A furniture zone that is grassy or used for drainage as in a swale is not factored into the sidewalk width. **Note:** When filling in the spreadsheet do not enter the prime symbol (').

**Examples:**



**5' Curbside Sidewalk** – Notice there is no buffer (furniture zone). The grass to the right in the picture is the frontage zone.



**Sidewalk Behind a Drainage Swale** - Here, the swale is the buffer and it is not included in the measurement of the sidewalk width.



**Downtown Area Sidewalk** – Here, the brick pavers are the buffer. The sidewalk width should be measured from the back of the curb to the face of the building. In other words, the furniture zone (buffer) is included in the measurement of the width.



**5' Setback Sidewalk** – The grass between the street and the sidewalk is the buffer (furniture zone). Remember, the buffer is not included in the sidewalk width unless it is paved and intended to be utilized by foot traffic.

**6) Condition:** Sidewalk condition is a statement of the condition of the pavement, and should be determined by asking yourself, “Would I feel safe walking on this surface?” 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, safe to walk on.

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

**7) Notes:** This column is used to record pertinent information about the sidewalk in addition to the required inventory data. See *Appendix B* for a list of the standard notes.

**SHARED-USE PATH:** 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. When collecting inventory data for a Shared-Use Path you will need to fill in the columns numbered 1 – 4 below.

1	2	3	4
Shared-Use Path (Y)	Surface (Black or White)	Width (ft)	Path Condition (G, F, P)

**Examples of a shared-use path:**



Shared-Use Path adjacent to a roadway



Shared-Use Path on a separate alignment

**1) Existing:** When a shared-use path is present a “Y” will be placed in this column; otherwise, this column should be left blank.

**2) Surface:** This is denoted as either black or white. Shared-use paths are either concrete or asphalt: asphalt = black, concrete = white. Unpaved paths are not inventoried.

**3) 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. **Note:** When filling in the spreadsheet do not enter the prime symbol (').

**4) 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 three ratings: Good, Fair and Poor.

**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.

**MID-BLOCK CROSSING:** A mid-block pedestrian crossing is a marked crosswalk located anywhere other than a street intersection. The crossing must include pavement markings. Other elements, such as curb extensions, an island or median, flashing or overhead lights may also be present. The only column that pertains exclusively to this feature is the light green column below, labeled “Mid-block (Y)”. However, when a mid-block crossing is present other features such as a sidewalk and ramps will also be present and inventory is to be collected for those features separately. *A marked crosswalk at a T-intersection is NOT a mid-block crossing.*

Mid-block (Y)

**Examples of mid-block crossings:**



Mid-Block Crossing with Curb Extensions & Island



Mid-Block Crossing – Striping Only

**PARKING:** The collection of road inventory data also includes data on parking. When parking spaces are present, the three columns displayed below will need to be populated with inventory data.

1	2	3
Parking (PP, DP)	Parking Width	Parking Condition (G, F, P)

**1) Existing:** Parking is either Parallel (PP) or Diagonal (DP). Parking which is unmarked and unused may be deduced from the width and is inventoried.

**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 the spreadsheet do not enter the prime symbol (').

**Examples:**



Parallel Parking (with markings)



Unmarked Parallel Parking



Diagonal Parking



Diagonal Parking

**3) Condition:** Parking condition is a statement of the 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.

**ADA RAMPS:** A ramp is a sloped section of sidewalk for the use of wheelchairs and strollers at a street intersection. The spreadsheet columns displayed below are replicas of those that need to be populated when collecting inventory data on ADA ramps.

ADA Ramps Needed (Y)	Ramp Location Notes (Intersection)	Ramp Location (corner number)	Ramp Type (CS, CD, D, ID, IT, N, I)	Ramp Func. Condition (G, F, P)	Ramp Phys. Condition (G, F, P)
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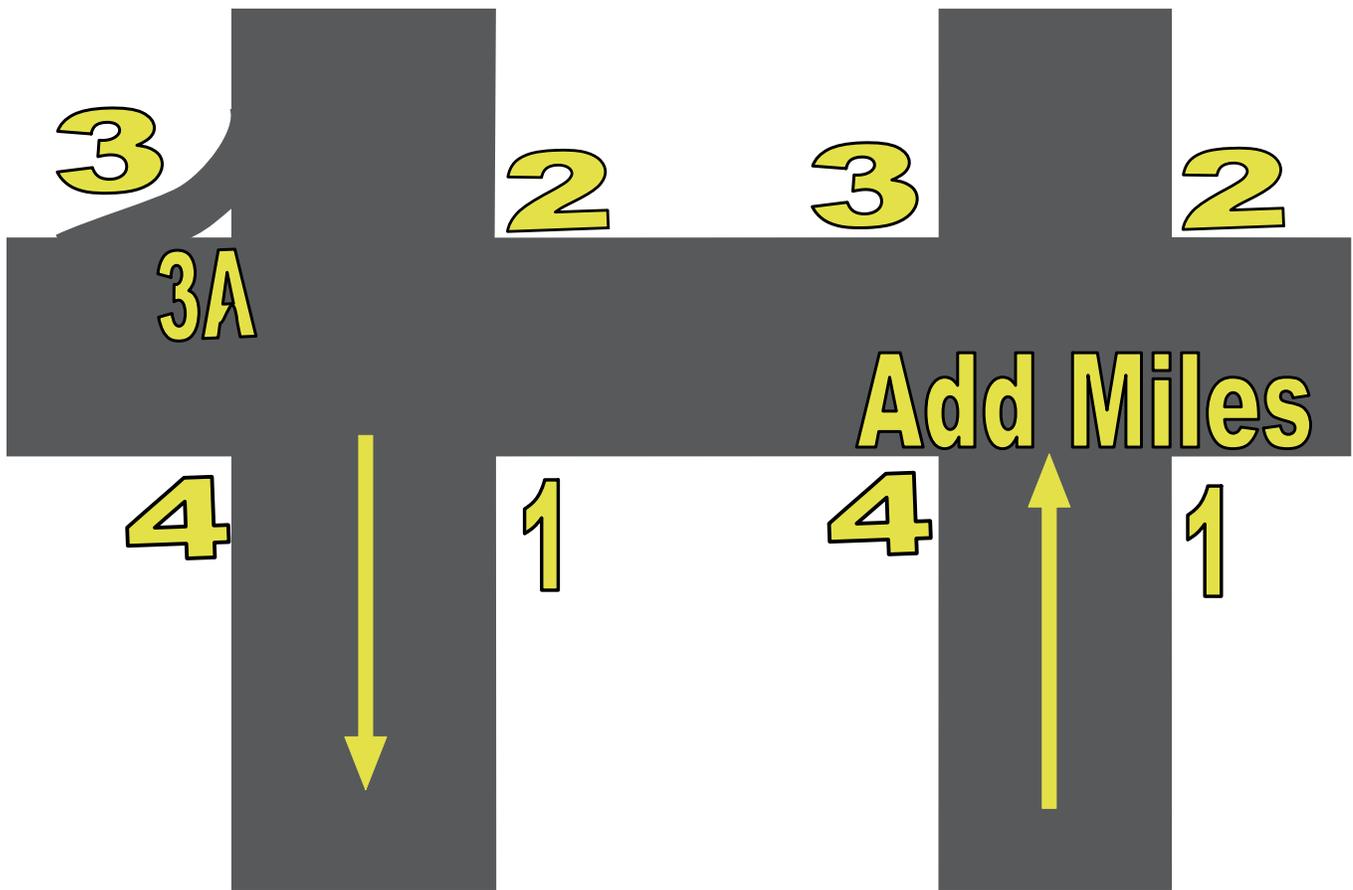
**1) Needed:** Ramps are inventoried by intersection and corner, or by mid-block crossing. When sidewalks are present ramps are needed at corners. When an island is present follow this two-step process: 1) decide if there are cut-throughs; 2) if yes, ramps are not needed (N); if no, ramps are needed (Y).

**2) Notes:** This column is used to record pertinent information about ADA ramps in addition to the required inventory data. Populate with information provided by RICS that has previously been entered into the “YEAR\_Master\_List” located in the Ramp folder at: \\Scdata\7130shar\INVENTORY (see “Steps for Collecting Inventory”). Also, place a note in this column if a ramp or cut-through is needed at a raised median.

**3) Location:** Ramps are located by the intersection milepoint, as defined in the Field Inventory Manual. Each ramp is assigned a number beginning with “1” and increasing in the counter-clockwise direction. If an island exists, it is numbered with an “A” following the closest corner number. In the example, corners 1 and 3 had right turn channelization islands; therefore, the numbering in the example includes 1A and 3A. All possible numbers that can be assigned are: 1, 1A, 2, 2A, 3, 3A, 4, 4A, 5, 5A, 6, 6A, 7, 7A.



The illustration above depicts how corners are numbered (the corner location code) for a two-way highway with a Roadway 1 only (i.e., not a couplet).

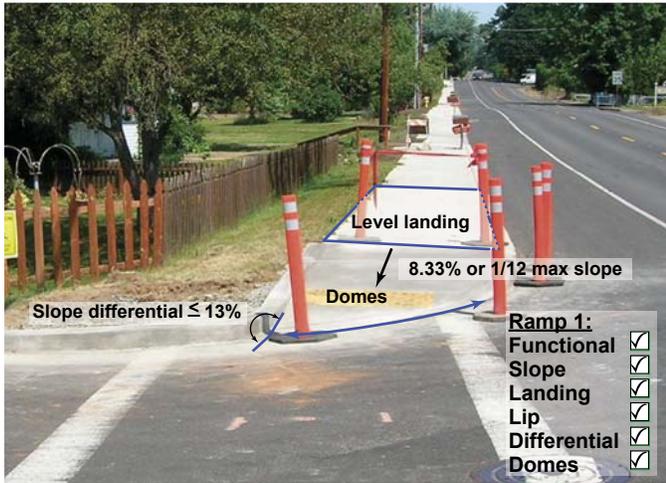


The illustration above depicts how corners are numbered (the corner location code) for a divided highway (i.e. a couplet) where both a Roadway 1 and Roadway 2 are present.

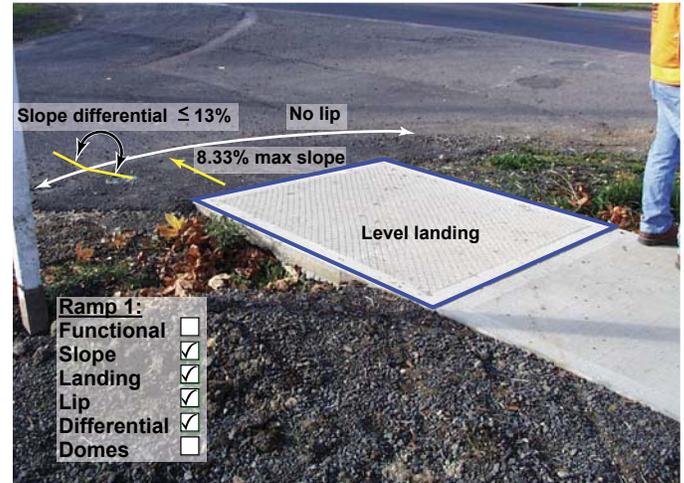
Ramps may also be inventoried by a mid-block crossing. When this is the case, there are no corner location codes. To inventory a mid-block ramp, if both ramps exist then the type of ramp should be “CS”; one ramp = “I” no ramps = “N”. **Note:** There is no entry for ramp location.

**4) Type:** The next step is to identify the type of ramp you are inventorying. It is important to mention that when determining the type of ADA ramp there are two main factors to consider: (1) the direction(s) of travel being served – which actually refers to a two-way direction such as north-south, or east-west; and (2) the number of ramps present on a corner. There are seven types of ramps, all of which are described below.

1. **Continuous Single (CS)** – A lone ramp on a corner that is in line with one direction of travel (e.g., the north-south direction) and one crosswalk only (*Note:* A ramp along the straight side of a T-intersection is always a continuous single). This ramp is only functional when a sidewalk is present on only one of the two streets feeding the corner.



Functional Continuous Single

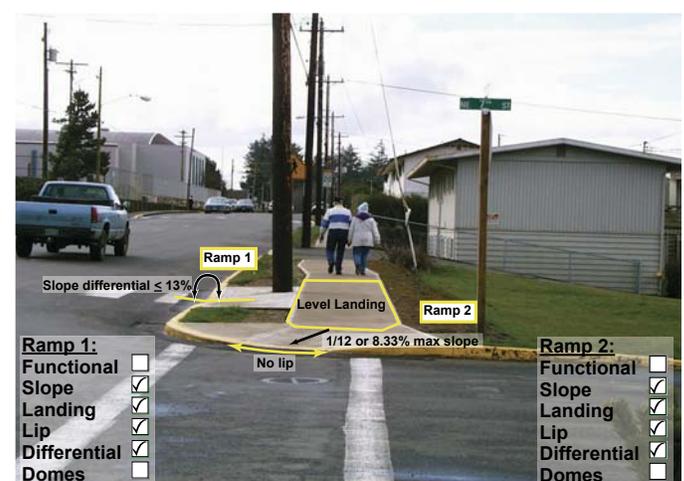
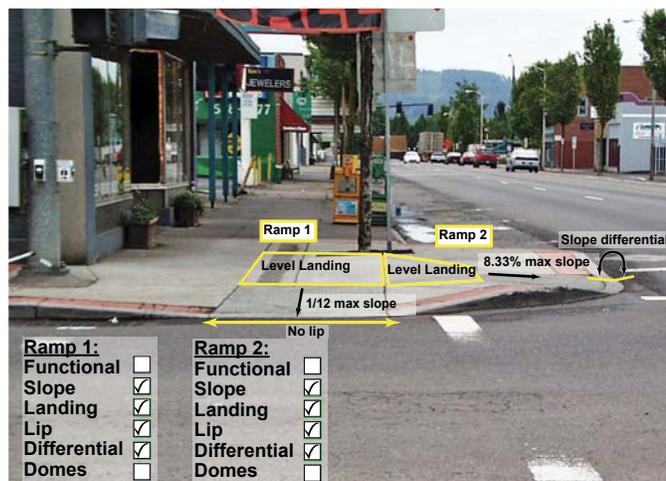


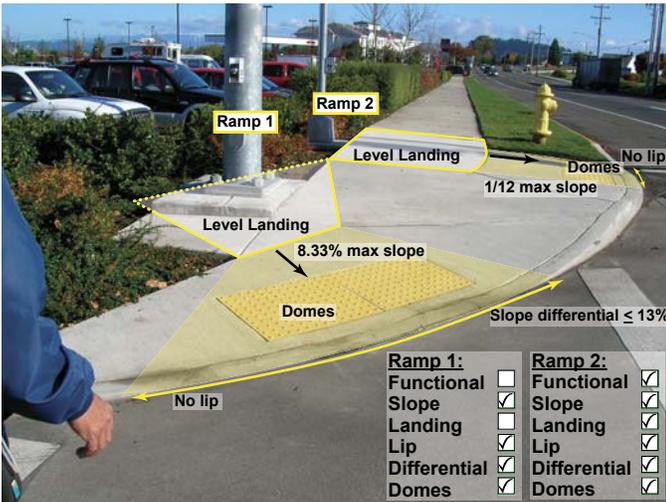
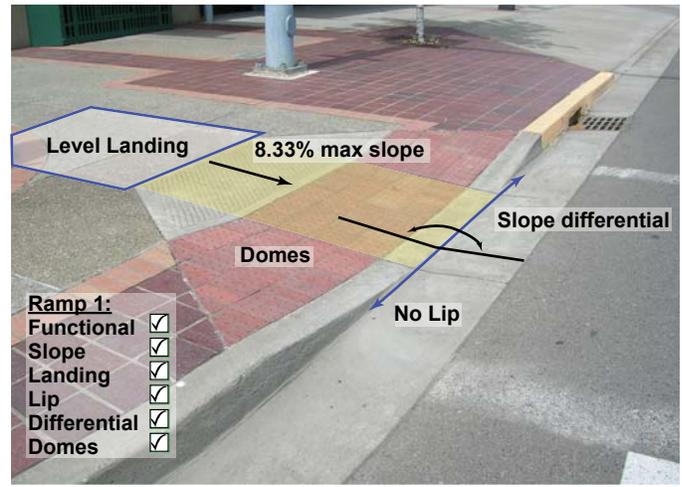
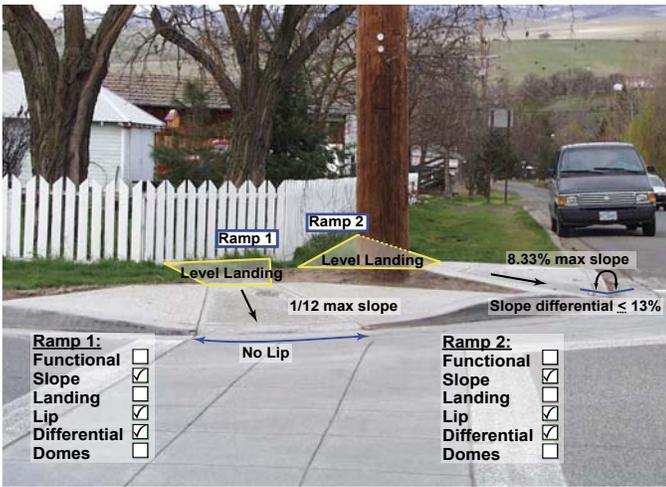
Non-functional Continuous Single



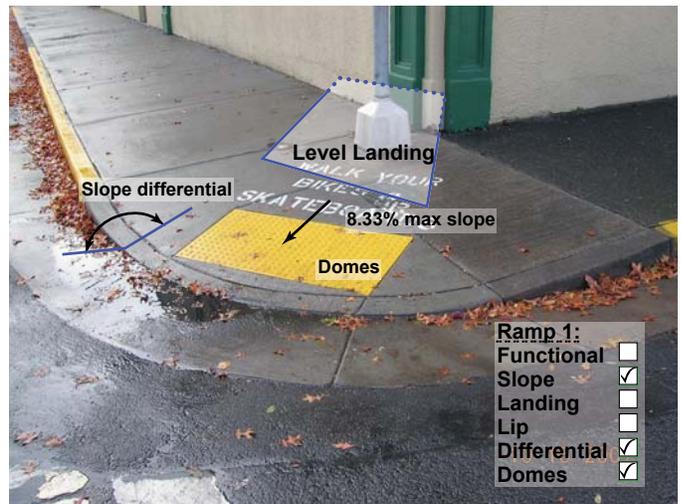
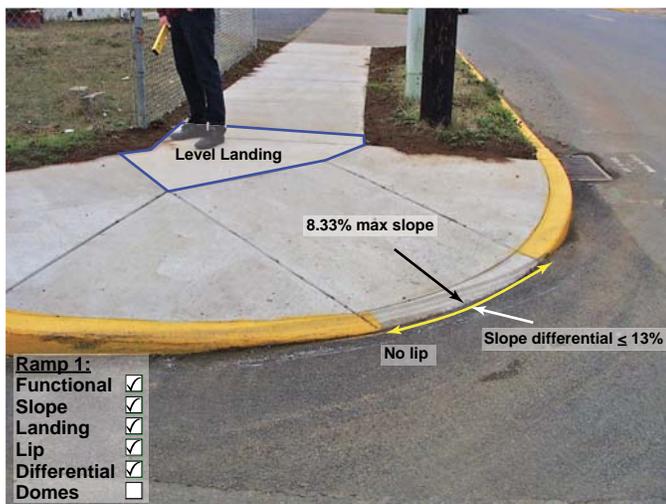
Non-functional Continuous Single

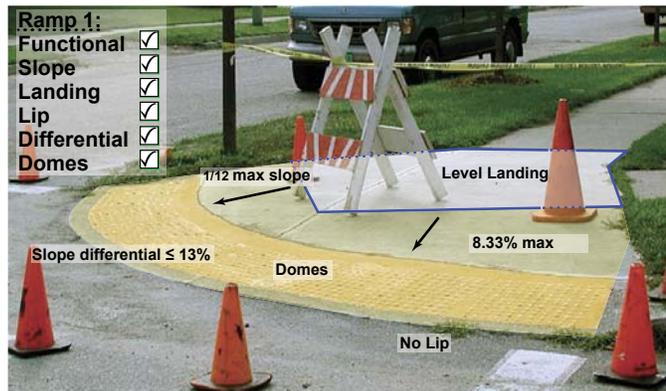
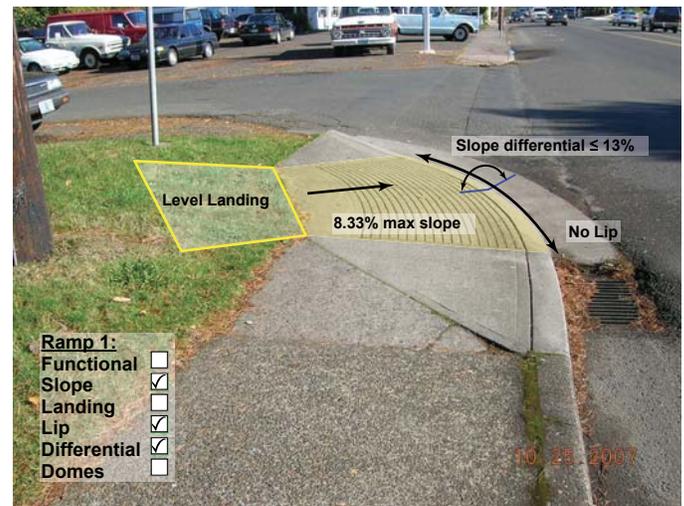
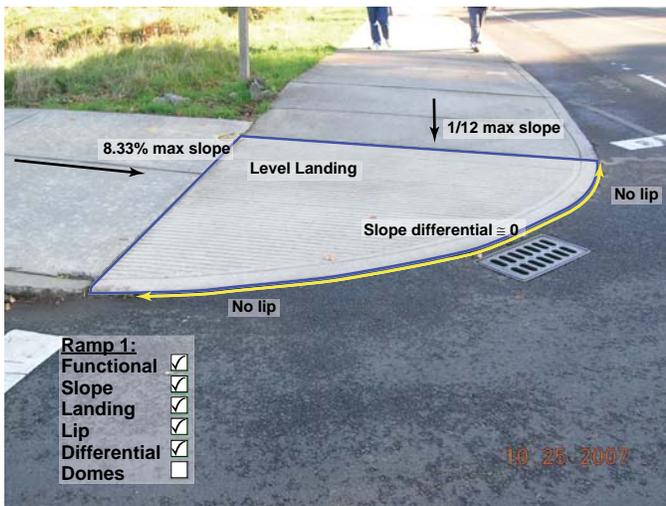
2. **Continuous Double (CD)** – Defined by a corner that has two ramps which are each in line with a separate direction of travel and each serves a different crosswalk.





3. **Diagonal (D)** – Refers to one ramp that serves two directions of travel and two crosswalks.





The next two ramp types (4 and 5) refer to those located on Island corners and are described together below.

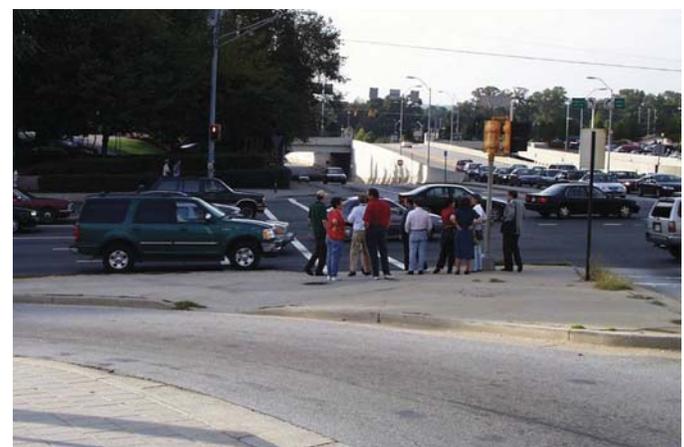
4. **Island Double (ID)** – Refers to an island with two ramps.

5. **Island Triple (IT)** – Refers to an island with three ramps.

*Note:* The direction of travel is not considered when inventorying island ramps, and an island that merely has cut-throughs, and not ramps, is not inventoried.



Island Double



Island Triple

6. **Incomplete (I)** – Refers to a corner where there is a sidewalk in both the north-south and east-west directions and only one continuous ramp is present.

7. **None (N)** – Refers to a corner where no ramps are present.

**5) Functional Condition:** The functional condition for ramps is determined per corner, and is given a classification of either **Good (G)**, **Fair (F)** or **Poor (P)**. All ramps present at a corner must be functionally Good in order for the corner to be classified Good (G) in this column; and in order to do so the ramps must meet all seven of the criteria listed in this section.



Incomplete

A corner is functionally Fair (F) if one or more ramps meet only criteria 1-6; truncated domes are not needed for the corner to be classified as functionally Fair.

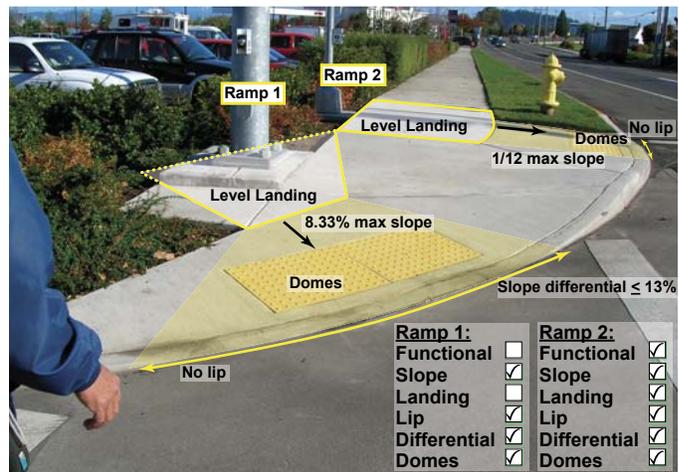
A corner is functionally Poor (P) if one or more ramps meet only 5 or less of the seven criteria. A corner is also functionally Poor if the type of ramp is Incomplete (I) or None (N).

Criteria are as follows:

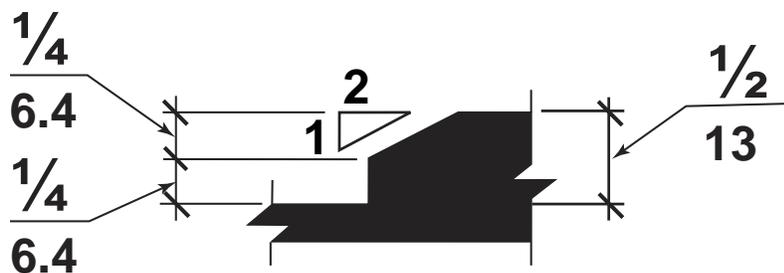
1. The ramp needs to be **free of obstacles**.

**Example:** Ramp 1 in the picture to the right depicts a ramp that would be functional except for the fact that the landing is not free of obstacles

2. **Lip** height shall not exceed .25 inches. The lip refers to any kind of a drop-off between the end of the ramp and the beginning of the roadway pavement; including, drop-offs as small as .25 inches. If the height difference is between 1/4" and 1/2", it can be beveled at 1/4 inch up to 1/2 inch as shown.



Ramp hip detail for 1/2 inch



Picture is taken from section 303.3 of the ADA Accessibility Guide (ADAAG) - "Changes in level"  
<http://www.access-board.gov/ada-aba/final.cfm#a303>

3. Travel path of a wheelchair must **slope** in only one direction at a time. The slope can be either away from or toward the level landing.

4. The **slope differential** is the algebraic difference in slopes at the ramp - street interface (ramp to street where there is no curb, or ramp to gutter pan where there is a curb) shall not exceed 13%. This refers to the measure of the slope differential, which is the change in grade of two adjacent surfaces. This is to be measured in the field in the following manner: set a smart level to display slope percentages; place smart level on ramp slope; record percentage; place smart level on gutter slope; record percentage; then you either add ramp slope to gutter slope if the grades are in opposite directions, or you subtract one percentage from the other if the grades are in the same direction.

5. Maximum ramp **slope(s)**:

Maximum ramp slopes are shown with two options:

- a. 10% with a maximum rise of 6 inches
- b. 12.5% with a maximum rise of 3 inches

The listed values are exceptions to the most common variation. Add 8.33% with a maximum rise of 15 inches. Instead of or in addition to listing the maximum ramp slopes by rise height, you can list the maximum slopes by length:

- a. 8.33% with a maximum length of 15 feet or rise of 15 inches.
- b. 10% with a maximum length of 5 feet or rise of 6 inches.
- c. 12.5% with a maximum length of 2 feet or rise of 3 inches.



6. Minimum of a 3 ft. x 3 ft. **level landing**, with a maximum 2% cross slope.

7. **Truncated domes** (the raised surface or bumps) must be present and installed per Roadway Standard Drawing RD759 Sidewalk Ramp Details found here: [http://egov.oregon.gov/ODOT/HWY/ENGSERVICES/roadway\\_drawings.shtml#Roadway\\_700\\_\\_\\_Curbs\\_\\_etc\\_](http://egov.oregon.gov/ODOT/HWY/ENGSERVICES/roadway_drawings.shtml#Roadway_700___Curbs__etc_). Truncated domes are 1/2 spheres with the tops cut off – see ODOT standard drawings. Patterned, stamped, or textured concrete is not ADA compliant and cannot take the place of the truncated domes.

**Note:** If you are unsure how to classify a ramp(s), use your best judgment to collect initial data and then ask a supervisor for assistance if need be. Keep in mind that the most important aspect of collecting inventory data for ramps is to determine the functional condition.

**6) Physical Condition:** This is an assessment of the condition of the ramp pavement. There are three classifications.

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

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

**Poor (P)** – Pavement that is badly cracked, heaved, eroded, etc. Pavement which is dangerous to walk on or which is impassable by a wheelchair or stroller. The ramp physical condition is Poor (P) if the type of ramp is Incomplete (I) or None (N).

**CURBS:** The spreadsheet columns displayed below are replicas of those that need to be populated when collecting inventory data on curbs. Track Curbs both left and right on couplets and divided highways where the median type is 3 – Landscape. ITIS already tracks raised medians with curbs.

1	2	3
Curb Type (MSC, CG)	Curb Ht (G, F, P)	Curb Condition (G, F, P)

**1) Type:** There are three 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; or (3) a **Low Profile Mountable Curb (M)**. 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.

**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)** – Greater than 6 inches

**Fair (F)** – Between 4 inches and 6 inches

**Poor (P)** – Less than 4 inches

**3) Condition:** The curb condition describes the condition of the concrete. There are three 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.

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.”

**Note:** A distance of 0.02 miles is needed to delineate a change in Type, Height or Condition. Also, don’t start/stop curbs at intersections – no breaks in section.

# PROCEDURES FOR STORING UPLOADING, & ACCESSING ROAD INVENTORY INFORMATION

## STORING INVENTORY DATA

While collecting road inventory data, the information will be stored in the same excel spreadsheets used for collection purposes (i.e., the sample spreadsheet, “Sample\_Bike.Ped\_Ramps\_Speadsheet” now titled with the HWY#) and saved at the following network location: `\\Scdata\7130shar\INVENTORY`, under the folder pertaining to the year and asset for which inventory data is being collected. Refer to the “Steps for Collecting Inventory” section at the beginning of this manual for more details about opening, saving and storing spreadsheets.

## UPLOADING DATA INTO DATABASE

Discussion is presently underway to determine how, and by whom, road inventory data is to be uploaded into the corporate database.

## ACCESSING DATA

For access to the raw data, locate the appropriate spreadsheet by searching the network folder where the data is stored (`\\Scdata\7130shar\INVENTORY`), and the sub folder listed by Year and Asset (e.g., 2007\_bikelanes\_sidewalks) for the ODOT highway number that you want information on. For access to a report based on the inventory data once it has been uploaded into the corporate database it will be necessary to request a report from Road Inventory & Classification Services Unit (RICS). Please allow 10 working days for reports to be generated.

# FREQUENTLY ASKED QUESTIONS

## 1. 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; knowing what we have will help in the effort to move toward ensuring 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.

## 2. Why is there a difference between the "ODOT Highway Number" and the highway "Route Number"?

The ODOT highway number is a three-digit ODOT number that is assigned to a length of highway. The highway number is used by ODOT transportation staff to identify a particular road for inventory or for research purposes. A route number is assigned to a particular route and is used to follow a particular path through a road network. This route number is mainly used by drivers for traveling purposes.

## 3. How accurate does the milepoint data need to be?

Just be sure to record the milepoint number shown on the DVL screen. Even though the DVL displays milepoints to the thousandth decimal place your number should be identified to the hundredth decimal place (e.g. 7.35).

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

## 5. How do I collect road inventory data on segments of roadways where more than one highway shares a common alignment (i.e., there is more than one route number)?

Common Alignment – These are locations on the State Highway System where two different highways share the same location (i.e. they are the same road). To avoid having more than one data set with the same inventory information, inventory should be collected and recorded for the highway with the lowest ODOT number only. See *Appendix G* for a list of highways that share common alignments.

**6. 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 two-hundredth of a mile (.02). However, depending on the situation, you may need to place a comment in either the “Bike Facility Notes” column or the Pedestrian Facility “SW Notes” column of the spreadsheet to record a pertinent piece of information about a feature. See *Appendix B* for a list of standard comments and when to use them.

**7. If a crosswalk corresponds to a midblock crossing on one side of the road, but to an intersection on the other side of the road how do I label the crosswalk?**

This is actually considered a T-intersection and will not be labeled as a midblock crossing. For this type of intersection you record inventory data as if it were a 4-way intersection.

**8. When should I inventory beyond the UGB?**

When a sidewalk or bike lane continues past the UGB you need to stop inventory at the UGB and then start a new line of data. Continue to record inventory data for a sidewalk until it ends, or for an additional 1 tenth of a mile (.1 mile) for a bike facility.

**9. When a bike facility or sidewalk is present along with a shared-use path, which feature should I inventory?**

You need to collect inventory data for all features that are present.

**10. When a shared-use path is present, is a sidewalk needed?**

The answer depends on the land use for the area you are inventorying. Sidewalk need should be evaluated independent of the shared-use path. To determine if a sidewalk is needed review the “Needed” definition under Pedestrian Facility on page 13.

**11. Are there roadway features that we do not inventory?**

No. All bike facilities, pedestrian facilities, parking, ADA ramps, and curbs located along a highway need to be inventoried.

**12. How do I determine milepoint information for a road inventory feature that starts on a mainline and ends on a ramp or side street, or vice versa (both with the DVL and in the field)?**

This milepoint location on a ramp is estimated. Allow DMI meters to run when driving on or off a ramp, record this milepoint - which may be inaccurate - but it gives some documentation. However, in the database, crew members are allowed to enter additional information by putting in the location. In this case, milepoints are not always put into the database, because of the distorted figure, so crew members rely on the location and type of feature to make adjustments.

# CONTACTS & OTHER USEFUL RESOURCES

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**Websites:**

- Bicycle & Pedestrian Program – ADA (Americans with Disabilities Act):  
[http://www.oregon.gov/ODOT/HWY/BIKEPED/ada.shtml#Sidewalk\\_Ramps\\_](http://www.oregon.gov/ODOT/HWY/BIKEPED/ada.shtml#Sidewalk_Ramps_)
- ODOT, Roadway Engineering:  
<http://www.oregon.gov/ODOT/HWY/ENGSERVICES/index.shtml>
- Highway Inventory Summary Report:  
<http://www.odot.state.or.us/Transview/highwayreports/index.cfm>
- Transportation Development Division:  
ODOT intranet link: <http://intranet.odot.state.or.us/tdb/index.htm>  
ODOT internet link: <http://www.oregon.gov/ODOT/TD/UnderConstruction.shtml>
- Road Inventory and Classification Services Unit:  
[http://www.oregon.gov/ODOT/TD/TDATA/TDATA\\_All\\_Contacts.shtml#Road\\_Inventory\\_\\_\\_Classification\\_Services](http://www.oregon.gov/ODOT/TD/TDATA/TDATA_All_Contacts.shtml#Road_Inventory___Classification_Services)
- Transviewer – Highway Inventory Summary Report:  
[http://highway.intranet.odot.state.or.us/cf/highwayReports/aml\\_summary\\_parms\\_by\\_route\\_no.cfm](http://highway.intranet.odot.state.or.us/cf/highwayReports/aml_summary_parms_by_route_no.cfm)
- ODOT Travel Guide is useful for planning trips:  
<http://www.tripcheck.com/>
- Roadway Standard Drawing RD759 Sidewalk Ramp Details:  
[http://egov.oregon.gov/ODOT/HWY/ENGSERVICES/roadway\\_drawings.shtml](http://egov.oregon.gov/ODOT/HWY/ENGSERVICES/roadway_drawings.shtml)

# APPENDIX A

## ASSET DATA COLLECTION REGISTRY

ODOT's responsibility for managing billions of dollars in linear transportation assets has taken a more strategic direction to address the state-wide issues of an aging infrastructure coupled with limited resources. Data used to manage ODOT's assets are stored in and retrieved from nearly 100 different databases and programs. To assist in coordinating the organization wide data collection efforts, this database has been developed. Its purpose is to help ODOT understand what asset information is being collected, by whom and to reduce duplicate efforts whenever possible.

### Entry Instructions:

The first step is to enter your project information into the Asset Data Collection Registry (ADCR), which can be found at: <http://highway.intranet.odot.state.or.us/cf/adcr/>.

The ADCR is divided into two sections. The first portion collects contact information and the second portion collects information pertaining to the field inventory effort.

To enter a new record in the registry simply select the **ADD** button on the main page under ADD RECORD or select Add Record from the navigation bar on the left and start filling in the form. When you are finished select the **Submit** button and your information will be saved to the database.

Drop down boxes have been provided for various fields to make entering data easier. If you do not see what you are looking for in one of these drop downs, please select **Other** at the bottom of the list and add the information to the additional information box.

There are also three text boxes you can enter data into, the Location of Project, Purpose of Collection and Additional Information. Please try to keep these descriptions as brief as possible.

### Search for Existing Inventories:

For your convenience, the search function for existing inventories has been divided into three options. However, you can only select one type at a time for your search. To begin your search, select from **Search by Organization**, **Search by Asset** or **Search by Storage Type**, then select the **View** button. This will take you to a new window that will list all of the inventories that meet search criteria. Simply select one of the Contact Names and you will see the report for that inventory. Use the back button in the upper left of the web page to go back one window.

If you wish to go back to the main page, you can select the **ODOT Asset Data Collection Registry** at the top of the page or the **Version 1.0.0.7** at the bottom of the page. This will work for any of the ADCR pages.

The database has been constructed so that you are required to enter a minimum number of mandatory fields. If you do not enter information into this minimum set of fields, you will not be able to save your information to the database. Mandatory fields are indicated with a red asterisk.

**For questions please contact:** Asset Management Analyst, (503) 986-3157.

The following is an example of a form that has been filled out online:

ASSET MANAGEMENT'S  
**ASSET DATA COLLECTION REGISTRY**

|◀ ◀ 9 - 9 of 15 ▶ ▶|

- \* Contact's Last Name: Spaulding
- \* Contact's First Name: Danny
- \* Contact's Phone Number: (503) 986-4182
- \* Contact's Email Address: [danny.g.spaulding@odot.state.or.us](mailto:danny.g.spaulding@odot.state.or.us)
- \* Organization Name: Transportation Development Division
- \* Approving Manager Last Name: King
- \* Approving Manager First Name: Heather
- \* Approving Manager's Phone Number: (503) 986-4157
- \* Approving Manager's Email Address: [heather.l.king@odot.state.or.us](mailto:heather.l.king@odot.state.or.us)
  
- \* Asset|Road Features No.1: Video Log (DVL)
- Asset|Road Features No.2:
- Asset|Road Features No.3:
- Asset|Road Features No.4:
- Who will perform the work: ODOT Personnel
- Contractor Name:
- Location of Project: All state highways
- Region:
- District:
- Highway Name:
- Beginning MilePoint:
- Ending MilePoint:
- Project Schedule: Annual
- Project Begin Date:
- Project End Date:
- Collection Method: DMI
- Storage Type: SQL Server
- Purpose of Collection: Video Log of all State Highways which can be used to collect or verify field data without having to travel to the field.
- Additional Information: Digital images collected by two cameras every 26.4 feet. Images from 1999 to present are available for viewing on the web. Video Library subscriptions of DVDs of continuous video are also available.

Data Entry Date: 24-Sep-07

|◀ ◀ 9 - 9 of 15 ▶ ▶|







Shared-Use Path (Y)	Path Surface (Black or White)	Path Condition (G, F, P)	Mid-block (Y)	Parking (PP, DP)	Parking Width	Parking Condition (G, F, P)	Ramp location Notes (intersection)	Ramp Location (corner number)	Ramp Type (CS, CD, D, ID, IT, I, N)	Ramp Func. Condition (G, F, P)	Ramp Phys. Condition (G, F, P)	Curb Type (SC, CG, M)	Curb Ht (G, F, P)	Curb Condition (G, F, P)	Inspection Date
Y	Black	F		PP	9	F									
				DP	15	P									
				DP	15	P									
			Y												

**FIGURE 3**

Figure 4: Here the relevant columns for ramp data collection are shown, with the double red lines indicating columns omitted for easier viewing because they are not specific to ramp inventory. An important thing to note about ramp inventory is that many lines will contain repeated information. Instances of this are the column “Beginning Mile Point” and “Ramp Location Notes”. This is because there are upwards of seven (7) corners and 14 ramps that may be at any mile point. Also in this figure the inspection date is filled in. The inspection date column would be completed after field work and verification of the data had been done (the year is sufficient).

Route Number	ODOT Highway Number	Roadway Number (for divided Hwy only)	Beginning Mile Point (to 100th)	Ending Mile Point (to 100th)	Section Miles	Right/Left	Add-Mileage	Bike Facility Needed (Y)	Sidewalk Needed (Y)	ADA Ramp Needed (Y)	Ramp Location Notes (intersection)	Ramp Location (corner number)	Ramp Type (CS, CD, D, ID, IT, I, N)	Ramp Func. Condition (G, F, P)	Ramp Phys. Condition (G, F, P)	Curb Type (SC, CG, M)	Curb Ht (G, F, P)	Curb Condition (G, F, P)	Inspection Date
US 20	015	1	0.77	1.34	0.77		Add												2008
US 20	015	1	0.77				Add			Y	Glenwood	1	CS	F	F				2008
US 20	015	1	0.77				Add			Y	Glenwood	2	D	F	F				2008
US 20	015	1	0.77				Add			Y	Glenwood	3	CS	P	P				2008
US 20	015	1	0.77				Add			Y	Glenwood	4							2008
US 20	015	1	0.82				Add			Y	Henderson	1	CS	F	P				2008
US 20	015	1	0.82				Add			Y	Henderson	2	D	F	F				2008
US 20	015	1	0.82				Add			Y	Henderson	3	CS	P	F				2008

**FIGURE 4**

The following is a list of standard comments to place in the “Notes” columns:

Bike Facility Comments	
1	Narrows to ## ft.
2	Widens to ##ft.
3	Width Varies
4	Poor Striping
5	No Stencil
6	Construction
7	Becomes turning lane
8	Bridge crossing
9	Rough/ gravel
10	Drainage grate
11	##mph (used when there is a shoulder or marked bike lane and speeds of 25mph or less)
12	Check speed (used when assuming a shared lane, but unsure of speed)
13	Parking included (used when measuring a shoulder for bike facility which is also used as undesignated parking)
Sidewalk Comments	
1	Narrows to ##ft
2	Widens to ##ft
3	Width Varies
4	Missing segments (used when mostly continuous, with missing segments < 0.01 miles)
5	Unusual Material (i.e. brick, tile, and etc - - type in the actual material)
6	Construction
7	Obstructions in sidewalk (used when there are light poles, mailboxes, etc. in sidewalk)
8	Bridge crossing
9	Hard to see in DVL
10	Overgrown landscaping

# TIPS AND TRICKS

## Section Miles:

For the column headed “Section Miles” it is useful to use the formula `=ABS (G2-H2)` in the excel spreadsheet. **Note:** That the number in the above formula should correspond to the number on the left side of the excel spreadsheet.

## Easy Viewing 1:

You can freeze panes in excel to make viewing the spreadsheet easier. This will allow you to see the column headings and other important columns (such as mile points) at all times.

Route Number	ODOT Highway Number	Roadway Number (for divided Hwy only)	Mileage Type	ovlap_mige_cd	Beginning Mile Point (to 100th)	Ending Mile Point (to 100th)	Section Miles	Region	l_fips_city_id

Columns you want to remain visible
Recommended box to highlight

To finish freezing panes, go to the “Window” drop down list then click “Freeze Panes”

## Easy Viewing 2:

Another way to make viewing the spreadsheet in excel easier is to hide columns. This can be used along with the “Freeze Panes” function to make working with the inventory spreadsheet as easy as possible.

Right/Left	Add-Mileage	Bike Facility Needed (Y)	Sidewalk Needed (Y)	ADA Ramps Needed (Y)	Bike Facility (BL, SL, SH)	BL Width (ft)	BL Condition (G, F, P)	BL Notes	Sidewalk (Y)	SW Surface (Black/White)	SW Buffer (Y)	SW Width (ft)	SW Condition (G, F, P)

First highlight the columns that you want to hide. Go to the drop down menu “Format”, then “Column” and in the column menu click “Hide”.

Right/Left	Add-Mileage	Bike Facility Needed (Y)	Sidewalk Needed (Y)	ADA Ramps Needed (Y)	Sidewalk (Y)	SW Surface (Black/White)	SW Buffer (Y)	SW Width (ft)	SW Condition (G, F, P)	Shared-Use Path (Y)	Surface (Black or White)	Width (ft)	Path Condition (G, F, P)

The hidden columns are indicated by a bold line. Don’t forget that you have hidden columns because there won’t be any indication when using excel.



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# APPENDIX C

## HOW TO USE THE DIGITAL VIDEO LOG

*Background*

*How to Use the Log*

*How to Use Display Images Feature*

*How to Use the Play Images Feature*

*Reading the Milepoint Log*

*Update Schedule*

*Printing*

*Saving an Image*

**Note:** Press “ctrl” and click on titles above to instantly scroll to desired section.

### **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.

### **How to Use the Digital Video Log**

1) From the DVL home page: (<https://keiko.odot.state.or.us/whalecome324431c3ee61b8fa2602f107a5be6eff7c305ad0fffb1654e/whalecom0/cf/dvl/>)

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.

1. *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: ([http://www.oregon.gov/ODOT/TD/TDATA/otms/Route\\_Hwy\\_CrossRef.shtml](http://www.oregon.gov/ODOT/TD/TDATA/otms/Route_Hwy_CrossRef.shtml))

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.

2. *Road Type* – Accept the default – Highways.
3. *Mileage Type* – This is an internal code and is of no use or concern to the lay user. Accept the defaults.
4. *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.
5. *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.

6. *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.

**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:** 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:** 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.

**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.

**Single 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.

**Highway Log** - Clicking on the Highway 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. *See comment under Mlge Type above.*

**Milepoint** – A number that represents 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 field inventory.

**Dup (Duplicate)** – A number of 10, 20, etc. in this column indicates multiple features at the same milepoint and engineering station.

**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 the Integrated Transportation Information System (ITIS) database. 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. Then choose "As laid out on screen" under 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)

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

The DVL automatically goes out and collects images + or - 2 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.

### 2. 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.

### 3. 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.

### 4. 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.

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

Yes there is. Direct them to <https://keiko36.odot.state.or.us/>

### 6. 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.

### 7. 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.

### 8. 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://intranet.odot.state.or.us/TransView/highwayreports/index.cfm>

### 9. 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.

**10. 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.

**11. 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.

**12. I can't see the milepoints on the JPEGs 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.

**13. 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.

## APPENDIX D

### 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/SIP Maps*

*ODOT Region Maps*

*Microstation Map Files*

*ODOT District Maps*

*Hardcopy Printed Map*

To access, go to the following website:

[http://www.oregon.gov/ODOT/TD/TDATA/gis/odotmaps.shtml#ODOT\\_Region\\_Maps](http://www.oregon.gov/ODOT/TD/TDATA/gis/odotmaps.shtml#ODOT_Region_Maps)

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# APPENDIX E

## 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 have 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.” **Note:** 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: [http://highway.intranet.odot.state.or.us/cf/highwayReports/aml\\_summary\\_parms\\_by\\_route\\_no.cfm](http://highway.intranet.odot.state.or.us/cf/highwayReports/aml_summary_parms_by_route_no.cfm)

**Oregon Department of Transportation**

**Highway Inventory Summary**

You can now search by route, highway or district.

**Search by Signed Route**  
1. Select either a US or OR or Interstate Route from the pulldown boxes below.

US Route: -- Select a US Route --  
101  
101B  
197  
199  
20

OR Route: -- Select an OR Route --  
10  
103  
104  
104S  
11

Interstate Route: -- Select an IS Route --  
105  
205  
405  
5  
82

**Search by Highway**

The Highway numbers seen below are the ODOT highway numbers. These numbers are not what you would see on road side signs when driving on our highways. For those not familiar with our highway numbering system there is a [Highway Cross Reference Table](#) available.

1. Select a highway.

Search  Highway #: 001 Highway Name: PACIFIC Beginning Mile Point: 0.00 Ending Mile Point: 308.38

Road Type	Roadway ID	Mileage Type
<input checked="" type="checkbox"/> Highways	<input checked="" type="checkbox"/> 1 Primary Roadway -- add	<input checked="" type="checkbox"/> Blank - Regular
<input type="checkbox"/> Connections	<input checked="" type="checkbox"/> 2 Primary Roadway -- non add	<input checked="" type="checkbox"/> T - Temporary
<input type="checkbox"/> Frontage Roads	<input checked="" type="checkbox"/> 3 Split Roadway -- add	<input checked="" type="checkbox"/> Y - Spur
	<input checked="" type="checkbox"/> 4 Split Roadway -- non add	<input checked="" type="checkbox"/> Z - Overlap
	<input checked="" type="checkbox"/> 5 Located Line	

**Search by District**

1. Select a district.



Search

District: 01 ▼

This section is maintained by the [ODOT RICS Unit](#).  
For change requests and questions or to report problems with this application, contact  
the [ODOT RICS Unit](#).

## APPENDIX F

### LIST OF ROUTES CROSS-REFERENCED WITH HIGHWAY NUMBERS & HIGHWAY NAMES

ODOT Hwy No. (rd_id)	Hwy Name (rd_name)	Routes
001	PACIFIC	I-5 OR138 OR99 OR99E US30
002	COLUMBIA RIVER	I-84 US30 US395 US730
003	OSWEGO	OR43
004	THE DALLES-CALIFORNIA	OR216 US197 US26 US30 US97
005	JOHN DAY	OR19 OR206 OR207 US26 US395
006	OLD OREGON TRAIL	I-84 OR203 US30 US395
007	CENTRAL OREGON	OR201 US20 US26 US395
008	OREGON-WASHINGTON	OR11 US30
009	OREGON COAST	OR255 US101
010	WALLOWA LAKE	OR82
011	ENTERPRISE-LEWISTON	OR3
012	BAKER-COPPERFIELD	I-84 OR7 OR86 OR86S
014	CROOKED RIVER	OR27
015	MCKENZIE	OR126 OR126B OR242 US20
016	SANTIAM	OR126 US20
017	MCKENZIE-BEND	US20 US97B
018	WILLAMETTE	OR58 OR99
019	FREMONT	OR140 OR31 US395
020	KLAMATH FALLS-LAKEVIEW	OR140 OR39 US97B
021	GREEN SPRINGS	OR140 OR66
022	CRATER LAKE	OR62
023	DAIRY-BONANZA	OR70
025	REDWOOD	OR99 US199
026	MT. HOOD	OR35 US26
027	ALSEA	OR34
028	PENDLETON-JOHN DAY	OR37 US395
029	TUALATIN VALLEY	OR47 OR8
030	WILLAMINA-SALEM	OR22
031	ALBANY-CORVALLIS	US20
032	THREE RIVERS	OR22
033	CORVALLIS-NEWPORT	OR34 US20
035	COOS BAY-ROSEBURG	OR42 OR99
036	PENDLETON-COLD SPRINGS	OR37

037	WILSON RIVER	OR6
038	OREGON CAVES	OR46
039	SALMON RIVER	OR18 OR22 OR233
040	BEAVERTON-HILLSDALE	OR10
041	OCHOCO	OR126 US26
042	SHERMAN	US97
043	MONMOUTH-INDEPENDENCE	OR51
044	WAPINITIA	OR216
045	UMPQUA	OR38 OR99
046	NECANICUM	OR53
047	SUNSET	OR47 US26
048	JOHN DAY-BURNS	US395
049	LAKEVIEW-BURNS	US395
050	KLAMATH FALLS-MALIN	OR140 OR39 US97B
051	WILSONVILLE-HUBBARD	OR551
052	HEPPNER	OR207 OR74
053	WARM SPRINGS	US26
054	UMATILLA-STANFIELD	US395
058	ALBANY-JUNCTION CITY	OR99E US20
060	ROGUE RIVER	OR99
061	STADIUM FREEWAY	I-405 US26 US30
062	FLORENCE-EUGENE	OR126
063	ROGUE VALLEY	OR99
064	EAST PORTLAND FREEWAY	I-205 OR213 OR224
066	LA GRANDE-BAKER	OR203 OR237 OR7 US30
067	PENDLETON	OR11 OR37 US30
068	CASCADE HWY NORTH	OR213
069	BELTLINE	OR126 OR569
070	MCNARY	I-82 US395
071	WHITNEY	OR7
072	SALEM	OR22 OR99EB
081	PACIFIC HIGHWAY EAST	OR214 OR99E
091	PACIFIC HIGHWAY WEST	OR10 OR126 OR126B OR219 OR34 OR99 OR99W US20
092	LOWER COLUMBIA RIVER	US30
100	HISTORIC COLUMBIA RIVER	I-84 OR35 US30
102	NEHALEM	OR202 OR47 US101B US26
103	FISHHAWK FALLS	OR103
104	FORT STEVENS	OR104 OR104S
105	WARRENTON-ASTORIA	US101B
110	MIST-CLATSKANIE	OR47

120	SWIFT	OR120
123	NORTHEAST PORTLAND	US30BY
130	LITTLE NESTUCCA	OR130
131	NETARTS	OR131
138	NORTH UMPQUA	OR138 OR99
140	HILLSBORO-SILVERTON	OR214 OR219 OR99E OR99W
141	BEAVERTON-TUALATIN	OR141
142	FARMINGTON	OR10
143	SCHOLLS	OR210
144	BEAVERTON-TIGARD	OR217
150	SALEM-DAYTON	OR221
151	YAMHILL-NEWBERG	OR240
153	BELLEVUE-HOPEWELL	OR153 OR99W
154	LAFAYETTE	OR154 OR233
155	AMITY-DAYTON	OR233
157	WILLAMINA-SHERIDAN	OR18B
160	CASCADE HWY SOUTH	OR213
161	WOODBURN-ESTACADA	OR211
162	NORTH SANTIAM	OR22
163	SILVER CREEK FALLS	OR214
164	JEFFERSON	OR164
171	CLACKAMAS	I-205 OR211 OR212 OR213 OR224
172	EAGLE CREEK-SANDY	OR211
173	TIMBERLINE	OR173
174	CLACKAMAS-BORING	OR212
180	EDDYVILLE-BLODGETT	OR180
181	SILETZ	OR229
189	DALLAS-RICKREALL	OR223
191	KINGS VALLEY	OR223
193	INDEPENDENCE	OR51
194	MONMOUTH	OR194
200	TERRITORIAL	OR200 OR36
201	ALSEA-DEADWOOD	OR501
210	CORVALLIS-LEBANON	OR34 US20
211	ALBANY-LYONS	OR226
212	HALSEY-SWEET HOME	OR228
215	CLEAR LAKE-BELKNAP SPRINGS	OR126
222	SPRINGFIELD-CRESWELL	OR222
225	MCVAY	OR225
226	GOSHEN-DIVIDE	OR99

227	EUGENE-SPRINGFIELD	I-105 OR126
228	SPRINGFIELD	OR528
229	MAPLETON-JUNCTION CITY	OR36
230	TILLER-TRAIL	OR227
231	ELKTON-SUTHERLIN	OR138
233	WEST DIAMOND LAKE	OR230
240	CAPE ARAGO	OR540
241	COOS RIVER	OR241
242	POWERS	OR542
244	COQUILLE-BANDON	OR42S
250	CAPE BLANCO	OR250
251	PORT ORFORD	OR251
255	CARPENTERVILLE	OR255 US101
260	ROGUE RIVER LOOP	OR260
270	LAKE OF THE WOODS	OR140
271	SAMS VALLEY	OR234 OR99
272	JACKSONVILLE	OR238
273	SISKIYOU	OR273
281	HOOD RIVER	OR281
282	ODELL	OR282
290	SHERARS BRIDGE	OR216
291	SHANIKO-FOSSIL	OR218
292	MOSIER-THE DALLES	US30
293	ANTELOPE	OR293
300	WASCO-HEPPNER	OR19 OR206 OR207
301	CELILO-WASCO	OR206
320	LEXINGTON-ECHO	OR207
321	HEPPNER-SPRAY	OR207
330	WESTON-ELGIN	OR204
331	UMATILLA MISSION	OR331
332	SUNNYSIDE-UMAPINE	OR332
333	HERMISTON	OR207
334	ATHENA-HOLDMAN	OR334
335	HAVANA-HELIX	OR335
339	FREEWATER	OR339
340	MEDICAL SPRINGS	OR203
341	UKIAH-HILGARD	OR244
342	COVE	OR237
350	LITTLE SHEEP CREEK	OR350
351	JOSEPH-WALLOWA LAKE	OR351

360	MADRAS-PRINEVILLE	US26
361	CULVER	OR361
370	O'NEIL	OR370
380	PAULINA	OR380
390	SERVICE CREEK-MITCHELL	OR207
402	KIMBERLY-LONG CREEK	OR402
410	SUMPTER	OR410
413	HALFWAY-CORNUCOPIA	OR413
414	PINE CREEK	OR414
415	DOOLEY MOUNTAIN	OR245
422	CHILOQUIN	OR422 OR422S
424	SOUTH KLAMATH FALLS	OR140
426	HATFIELD	OR39
429	CRESCENT LAKE	OR429
431	WARNER	OR140
440	FRENCHGLEN	OR205
442	STEENS	OR78
449	HUNTINGTON	US30
450	SUCCOR CREEK	OR201 OR452
451	VALE-WEST	OR451
453	ADRIAN-ARENA VALLEY	OR453
454	ADRIAN-CALDWELL	OR454
455	OLDS FERRY-ONTARIO	OR201 OR52 US30 US30B US95S
456	I.O.N.	US95

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# APPENDIX G

## COMMON ALIGNMENT HIGHWAY REPORT

The following is a list of the highways that share a common alignment. Remember, the common alignment mileage is chargeable to the lower numbered highway.

This report is produced by Road Inventory and Classification Services at ODOT, and can be accessed by visiting the following website, and placing a checkmark in the box next to “1 Common Alignment”: [http://highway.odot.state.or.us/cf/highwayreports/exclude\\_parms.cfm](http://highway.odot.state.or.us/cf/highwayreports/exclude_parms.cfm)

HWY	Highway Name	Common Alignment Report				Length
		Rdwy ID	Dir	Mlge Type	Begin MP End MP	
002	COLUMBIA RIVER	1	E		35.63 43.38	7.75
100	HISTORIC COLUMBIA RIVER	1	E		22.25 30.00	7.75
002	COLUMBIA RIVER	1	E		47.62 61.81	14.19
100	HISTORIC COLUMBIA RIVER	1	E		34.49 48.68	14.19
002	COLUMBIA RIVER	2	E		35.58 43.11	7.53
100	HISTORIC COLUMBIA RIVER	2	E		22.18 29.71	7.53
002	COLUMBIA RIVER	2	E		47.61 61.76	14.15
100	HISTORIC COLUMBIA RIVER	2	E		34.51 48.66	14.15
005	JOHN DAY	1	S		38.07 38.27	0.20
300	WASCO-HEPPNER	1	E		40.68 40.88	0.20
006	OLD OREGON TRAIL	1	E		302.98 303.88	0.90
012	BAKER-COPPERFIELD	2	E		1.42 2.32	0.90
006	OLD OREGON TRAIL	2	E		302.94 303.80	0.86
012	BAKER-COPPERFIELD	1	E		1.57 2.43	0.86
008	OREGON-WASHINGTON	1	E		-0.70 0.00	0.70
067	PENDLETON	1	E		3.92 4.62	0.70
009	OREGON COAST	1	S		337.97 339.71	1.74
255	CARPENTERVILLE	1	S		339.68 341.22	1.54

Common Alignment Report							
HWY	Highway Name	Rdwy ID	Dir	Mlge Type	Begin MP	End MP	Length
020	KLAMATH FALLS-LAKEVIEW	1	E		3.28	5.54	2.26
050	KLAMATH FALLS-MALIN	1	E		-2.24	0.00	2.24
047	SUNSET	1	E		45.41	49.28	3.87
102	NEHALEM	1	S		76.96	80.83	3.87
064	EAST PORTLAND FREEWAY	1	N		12.94	13.11	0.17
171	CLACKAMAS	2	E		4.73	4.90	0.17
064	EAST PORTLAND FREEWAY	2	N		12.63	13.18	0.55
171	CLACKAMAS	1	E		4.36	4.91	0.55
081	PACIFIC HIGHWAY EAST	1	S		31.70	32.87	1.17
140	HILLSBORO-SILVERTON	1	S		39.29	40.46	1.17
091	PACIFIC HIGHWAY WEST	1	S		22.89	23.20	0.31
140	HILLSBORO-SILVERTON	1	S		20.42	20.73	0.31
091	PACIFIC HIGHWAY WEST	1	S		23.20	23.31	0.11
140	HILLSBORO-SILVERTON	2	S		20.15	20.37	0.22
091	PACIFIC HIGHWAY WEST	1	S		23.34	23.45	0.11
140	HILLSBORO-SILVERTON	2	S		20.15	20.37	0.22
091	PACIFIC HIGHWAY WEST	1	S		44.68	44.75	0.07
153	BELLEVUE-HOPEWELL	1	E		6.23	6.30	0.07
091	PACIFIC HIGHWAY WEST	2	S		23.18	23.41	0.23
140	HILLSBORO-SILVERTON	1	S		20.19	20.42	0.23
200	TERRITORIAL	1	S		8.62	10.08	1.46
229	MAPLETON-JUNCTION CITY	1	E		45.95	47.41	1.46
334	ATHENA-HOLDMAN	1	S		8.44	9.57	1.13
335	HAVANA-HELIX	1	S		2.40	3.53	1.13
<b>Total Length:</b>							<b>59.46</b>

# APPENDIX H

## RELATED ITIS REPORTS

### **Bicycle – Pedestrian Facilities Reports**

1. Bike Lanes and Sidewalks Performance Measure Report
2. Sidewalk miles by Region and State Total  
Bike Facility miles by Region and State Total  
Shared Use Path miles by Region and State Total
3. Locate by LRS  
Sidewalk miles by District and State Total  
Bike Facility miles by District and State Total  
Shared Use Path miles by District and State Total
4. Locate by LRS  
Sidewalk miles by City and State Total  
Bike Facility miles by City and State Total  
Shared Use Path miles by City and State Total
5. Locate by LRS  
Bike Facilities by Type (BL-RS-SL), then by Highway
6. Functionally Good, Fair, and Poor Sidewalk miles by Region and State Total  
Functionally Good, Fair, and Poor Bike Facility miles by Region and State Total  
Functionally Good, Fair, and Poor Shared Use Path miles by Region and State Total
7. Locate by LRS  
Functionally Good, Fair, and Poor Sidewalk miles by District and State Total  
Functionally Good, Fair, and Poor Bike Facility miles by District and State Total  
Functionally Good, Fair, and Poor Shared Use Path miles by District and State Total
8. Locate by LRS  
Functionally Good, Fair, and Poor Sidewalk Locations Hwy & MP Begin/End by District  
Functionally Good, Fair, and Poor Bike Facility Locations Hwy & MP Begin/End by District  
Functionally Good, Fair, and Poor Shared Use Path Locations Hwy & MP Begin/End by District
9. Miles where Sidewalks are Needed but no Sidewalks are Present by Region and State Total  
Miles where Bike Facility are Needed but no Bike Facilities are Present by Region and State Total
10. Locate by LRS  
Miles where Sidewalks are Needed but no Sidewalks are Present by District and State Total  
Miles where Bike Facility are Needed but no Bike Facilities are Present by District and State Total
11. Locate by LRS  
Locations Hwy & MP Begin/End where Sidewalks are Needed but no Sidewalks are Present by District  
Locations Hwy & MP Begin/End where Bike Facility are Needed but no Bike Facilities are Present by District

12. Locate by LRS  
Sidewalk with Buffer miles by District and State Total  
Sidewalk without Buffer miles by District and State Total
13. Sidewalk miles and Asset Worth by Region and State Total  
Bike Facility miles and Asset Worth by Region and State Total  
Shared Use Path miles and Asset Worth by Region and State Total
14. Poor Sidewalk miles and Replacement Cost by Region and State Total  
Poor Bike Facility miles and Replacement Cost by Region and State Total  
Poor Shared Use Path miles and Replacement Cost by Region and State Total
15. Locate by LRS  
Functionally Poor Sidewalk miles and Replacement Cost by District and State Total  
Functionally Poor Bike Facility miles and Replacement Cost by District and State Total  
Functionally Poor Shared Use Path miles and Replacement Cost by District and State Total
16. Locate by LRS  
Functionally Poor Sidewalk Locations, Reasons, and Replacement Cost by District  
Functionally Poor Bike Facility Locations, Reasons, and Replacement Cost by District  
Functionally Poor Shared Use Path Locations, Reasons and Replacement Cost by District
17. Locate by LRS  
Locations Hwy & MP Begin/End where Sidewalks are Needed but no Sidewalks are Present and Construction Cost by District  
Locations Hwy & MP Begin/End where Bike Facility are Needed but no Bike Facilities are Present and Construction Costs by District

**Functionally Poor Condition** – Substandard Feature and/or Poor Physical Condition

### **Curb Reports**

1. Curb miles by Region and State Total
2. Locate by LRS  
Curb miles by District and State Total
3. Functionally Good, Fair, and Poor Curb miles by Region and State Total
4. Locate by LRS  
Functionally Good, Fair, and Poor Curb miles by District and State Total
5. Locate by LRS  
Functionally Good, Fair, and Poor Curb Locations Hwy & MP Begin/End by District
6. Curb miles and Asset Worth by Region and State Total
7. Poor Curb miles and Replacement Cost by Region and State Total
8. Locate by LRS  
Functionally Poor Curb miles and Replacement Cost by District and State Total
9. Locate by LRS  
Functionally Poor Curb Locations, Reasons, and Replacement Cost by District  
Functionally Poor Condition - Poor Height and/or Poor Physical Condition

## **Mid-Block Crossing Reports**

1. Locate by LRS  
Mid-Block Crossing Locations Hwy & MP by District, then by Highway

## **Parking Reports**

1. Locate by LRS  
Parking Locations Hwy & MP Begin/End by District, then by Highway
2. Locate by LRS  
Functionally Good, Fair, and Poor Parking Locations Hwy & MP Begin/End by District, then by Highway

**Functionally Poor Condition** – Substandard Width and/or Poor Physical Condition

## **ADA Ramp Reports**

1. ADA Ramps by Region and State Total
2. Locate by LRS  
ADA Ramps by District and State Total
3. Locate by LRS  
ADA Ramps by City and State Total
4. Locate by LRS  
ADA Ramps by Highway
5. Functionally Good, Fair, and Poor ADA Ramps by Region and State Total
6. Locate by LR  
Functionally Good, Fair, and Poor ADA Ramps by District and State Total
7. Locate by LRS  
Functionally Good, Fair, and Poor ADA Ramps Locations Hwy & MP by District
8. Numbers of ADA Ramps Needed but no ADA Ramps are Present by Region and State Total
9. Locate by LRS  
Numbers of ADA Ramps Needed but no ADA Ramps are Present by District and State Total
10. Locate by LRS  
Locations Hwy & MP where ADA Ramps are Needed but no ADA Ramps are Present by District
11. Locate by LRS  
Locations Hwy & MP and Corner Designation where ADA Ramps are Needed but no ADA Ramps are Present by District
12. ADA Ramps and Asset Worth by Region and State Total
13. Poor ADA Ramps and Replacement Cost by Region and State Total
14. Locate by LRS  
Functionally Poor ADA Ramps and Replacement Cost by District and State Total
15. Locate by LRS  
Functionally Poor ADA Ramps Locations, Reasons, and Replacement Cost by District

16. Locate by LRS  
Locations Hwy & MP where ADA Ramps are Needed but no ADA Ramps are Present and  
Construction Cost by District
17. Locate by LRS  
Locations Hwy & MP and Corner Designation where ADA Ramps are Needed but no ADA Ramps  
Are Present and Construction Cost by District

**Functionally Poor Condition** – Substandard Feature and/or Poor Physical Condition