

Chemawa Road IAMP: Technical Memorandum 4.1

Data Collection Inventory Memorandum

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This memorandum outlines the data collection methods that were conducted for the Chemawa Interchange Area Management Plan (IAMP).

Study Area Limits

The study area of the Chemawa Road interchange includes three different jurisdictions; the City of Keizer, the City of Salem, and Marion County. The study area limits generally include Hyacinth Road to the south, Pacific Highway 99E to the east, Chemawa Road-Lockhaven Drive to the north, and River Road to the west. Additional intersections outside of this area were included in the study to help understand and interpret travel pattern shifts that may result from future development and highway design modifications.

This traffic study includes 24 key intersections in the vicinity of the Chemawa Road and Interstate-5 freeway interchange. The 24 intersections were selected based on proximity to the interchange and sensitivity to expected future land use occurring in the study area.

Traffic Counts

Ramp volumes were collected for Salem Parkway traffic near the Chemawa/I-5 interchange and for all on and off ramps at the Portland Avenue/I-5 interchange. The counts were collected for 72 hours (Tuesday-Thursday) during the weeks of February 18th, 2008 and March 17th, 2008. Northbound and southbound roadway counts along Interstate-5 were also collected for 3 hours near the Chemawa/I-5 interchange. These counts were taken during the week of March 17th, 2008.

Turning movement counts were collected at the 24 study intersections. For 21 of the intersections, a contractor was hired to collect 16-hour turning movements during the weeks of February 18th, 2008 and March 17th, 2008. The turning movement counts were taken on Tuesday, Wednesday, or Thursday of the week. Three of the study intersections' 16-hour turning movement counts were provided by the Oregon Department of Transportation from a previous study conducted in July, 2007. All of the turning movement counts were classified by passenger car and truck vehicle types.

Table 1 shows the count source, date, and hours for the roadway and turning movement counts. Figures 1-4 show a map of the count locations.

TABLE 1
Chemawa IAMP Count Locations

ID #	Location	Count Source	Count Date	Count Hours
Roadway Counts				
1	NB off-ramp from I-5	Current Project	2/19-2/21, 2008	72 Hrs
2	NB ramp to Chemawa Rd. from Salem Parkway	Current Project	2/19-2/21, 2008	72 Hrs
3	SB off-ramp from I-5 to the Salem Parkway	Current Project	2/19-2/21, 2008	72 Hrs
4	NB on-ramp from the Salem Parkway to I-5	Current Project	2/19-2/21, 2008	72 Hrs
5	SB ramp from the SB I-5 on-ramp to the Salem Pkwy.	Current Project	2/19-2/21, 2008	72 Hrs
6	SB on-ramp to I-5 south of the ramp to the Salem Pkwy	Current Project	2/19-2/21, 2008	72 Hrs
7	SB Off-ramp from I-5	Current Project	3/18-3/20, 2008	72 Hrs
8	NB On-Ramp from SB OR99E/Portland Road	Current Project	3/18-3/20, 2008	72 Hrs
9	NB Off-Ramp from I-5	Current Project	3/18-3/20, 2008	72 Hrs
10	SB On-Ramp from NB OR99E/Portland Road	Current Project	3/18-3/20, 2008	72 Hrs
11	SB On-Ramp from SB OR99E/Portland Road (Loop)	Current Project	3/18-3/20, 2008	72 Hrs
12	NB On-Ramp from NB OR99E/Portland Road (Loop)	Current Project	3/18-3/20, 2008	72 Hrs
Turning Movement Counts				
1	Lockhaven Drive at River Road	ODOT Archive	7/25, 2007	16 Hrs (6am-10pm)
2	Trail Avenue at Lockhaven Drive	Current Project	3/18, 2008	16 Hrs (6am-10pm)
3	Lockhaven Drive at 14th Avenue-Kafir Drive	ODOT Archive	7/23, 2007	16 Hrs (6am-10pm)
4	Lockhaven Drive at McLeod Lane	Current Project	2/20, 2008	16 Hrs (6am-10pm)
5	Lockhaven Drive at Chemawa Road-Keizer Station Blvd.	Current Project	2/20, 2008	16 Hrs (6am-10pm)
6	Chemawa Road at Stadium Drive-Ulali Drive	Current Project	2/20, 2008	16 Hrs (6am-10pm)
7	Chemawa Road at Southbound I-5 interchange ramp	Current Project	2/20, 2008	16 Hrs (6am-10pm)
8	Chemawa Road at Northbound I-5 interchange ramp	Current Project	2/20, 2008	16 Hrs (6am-10pm)
9	Chemawa Road at Indian School Road	Current Project	2/20, 2008	16 Hrs (6am-10pm)
10	Chemawa Road at Pacific Highway 99E	Current Project	2/20, 2008	16 Hrs (6am-10pm)
11	Hazegreen Road at Cordon Road	Current Project	2/20, 2008	16 Hrs (6am-10pm)
12	Cordon Road at Kale Street	Current Project	2/20, 2008	16 Hrs (6am-10pm)
13	Portland Road at Kale Street	Current Project	2/20, 2008	16 Hrs (6am-10pm)
14	Portland Road at Lancaster Drive	ODOT Archive	7/23, 2007	16 Hrs (6am-10pm)
15	Portland Road at Blossom Drive	Current Project	2/20, 2008	16 Hrs (6am-10pm)
16	Chemawa Road at Verda Lane	Current Project	3/18, 2008	16 Hrs (6am-10pm)
17	Salem Parkway at Verda Lane-Hyacinth Street	Current Project	7/16, 2007	16 Hrs (6am-10pm)
18	Portland Road at Hyacinth Street	Current Project	3/18, 2008	16 Hrs (6am-10pm)
18	Portland Road- Pacific Highway 99E at Astoria-Ward St.	Current Project	3/18, 2008	16 Hrs (6am-10pm)
20	Brooklake Road at Pacific Highway 99E	Current Project	3/18, 2008	16 Hrs (6am-10pm)
21	Brooklake Road at I-5 NB Ramps	Current Project	3/18, 2008	16 Hrs (6am-10pm)
22	Brooklake Road at I-5 SB Ramps	Current Project	3/18, 2008	16 Hrs (6am-10pm)
23	Brooklake Road at River Road	Current Project	3/18, 2008	16 Hrs (6am-10pm)
24	Perkins Road at 35th Avenue NE	Current Project	3/18, 2008	16 Hrs (6am-10pm)



Figure 1. Salem Parkway Roadway Count Locations
(Near Chemawa/I-5 Interchange)
Map Source: Microsoft Live Maps

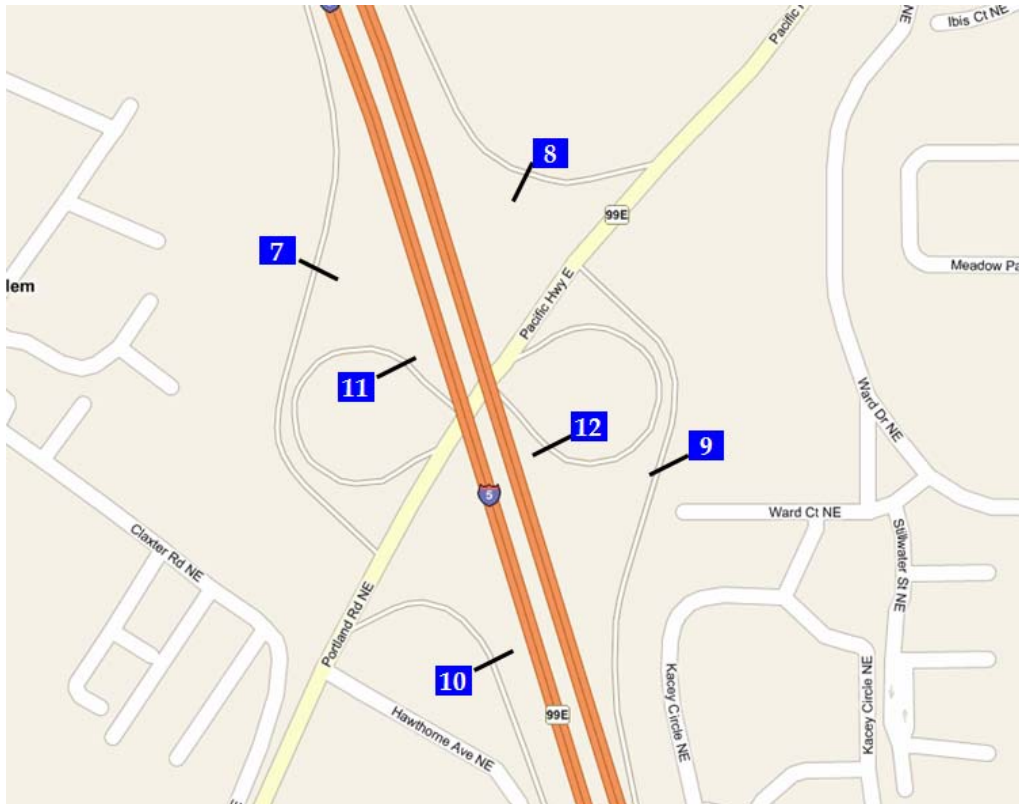


Figure 2. Portland Rd./I-5 Interchange Roadway Count Locations.
Map Source: Microsoft Live Maps

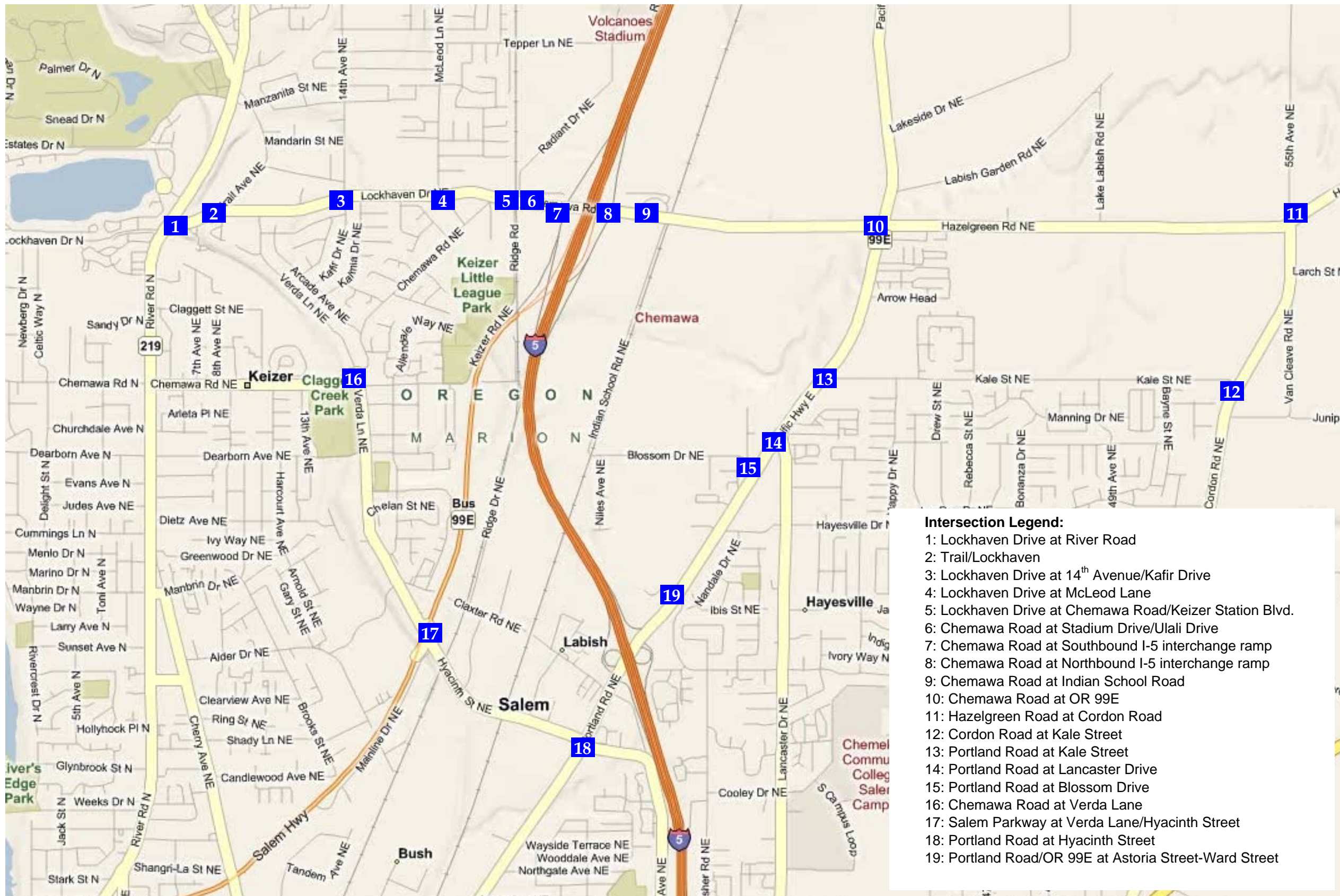


Figure 3. Chemawa Road IAMP Study Area intersections
 Map Source: Microsoft Live Maps



Figure 4. Chemawa Road IAMP Count Locations
 Map Source: Microsoft Live Maps

Safety Data

A crash data request was complied and submitted to Sylvia Vogel at ODOT on April 16, 2008. The request was for the most recent five years of crash data, which includes information on the type of crash (head-on, angle, turning, rear-end, etc.) and severity (property damage only, injury, or fatality). Crash data was requested at each study intersection as well as a few key segments of roadway within the study area. These segments are shown in Table 2.

TABLE 2
Chemawa IAMP Crash Analysis Segments

State Highway Number/Street Name	Route Number	Begin MP/Cross Street	End MP/Cross Street
81	OR 99E	44.46 / Hazelgreen Road	46.49 / Hyacinth Street
1	I-5	258.20 / OR 99E Interchange	261.90 / Perkins Road overpass
72	OR 99E BUS	0.00 / I-5	1.54 / Verda Lane
Lockhaven Drive	--	River Road	Keizer Station Blvd
Chemawa Road	--	Keizer Station Blvd	Pacific Union RR Crossing
Hazelgreen Road	--	Pacific Union RR Crossing	OR 99E

Field Data Collection

A field visit was conducted on March 5, 2008 by CH2M HILL staff. The data collected during the field visit is listed below.

- Photos of each leg of intersection, signal equipment and signs
- Channelization
- Movements by lane
- Lane widths
- Storage pocket lengths
- Crosswalks
- Sidewalk locations and widths
- Traffic control – stop sign, signal, roundabout, etc.
- Pedestrian push buttons
- Bicycle amenities
- Parking (include time restriction)
- Bus stop location and distance from stop bar
- Adjacent businesses
- Locations of nearby driveways