



TECHNICAL MEMORANDUM #2

STUDY AREA INVENTORY

Date: July 22, 2024

To: Oregon Department of Transportation, Region 3
City of Roseburg

From: David Evans and Associates, Inc.

Subject: I-5 Exits 124/125 Interchange Area Management Plan & Garden Valley Corridor Plan

This memorandum presents baseline inventory information for the project study area using information from the Exit 124/125 Interchange Area Management Plan (IAMP) (2013, not adopted), Interstate-5 (I-5) Bottleneck Corridor Segment Plan (2021, not adopted) and Roseburg Transportation System Plan (TSP) Update (2020), as well as information readily accessible online.

This memorandum is organized in the following sections:

- 1) Study Area
- 2) Land Use and Population Inventory
- 3) Environmental and Natural Resources
- 4) Transportation Inventory
- 5) Access Inventory

1 STUDY AREA

To help define the extent of the land use and transportation review for this study effort, a study area has been drafted as depicted in Figure 1. As the figure shows, the study area has been drawn to include those areas within the vicinity of the two interchanges that have or are expected to have a direct impact on the daily function of the Exit 124 and Exit 125 interchanges, as well as the Garden Valley corridor.

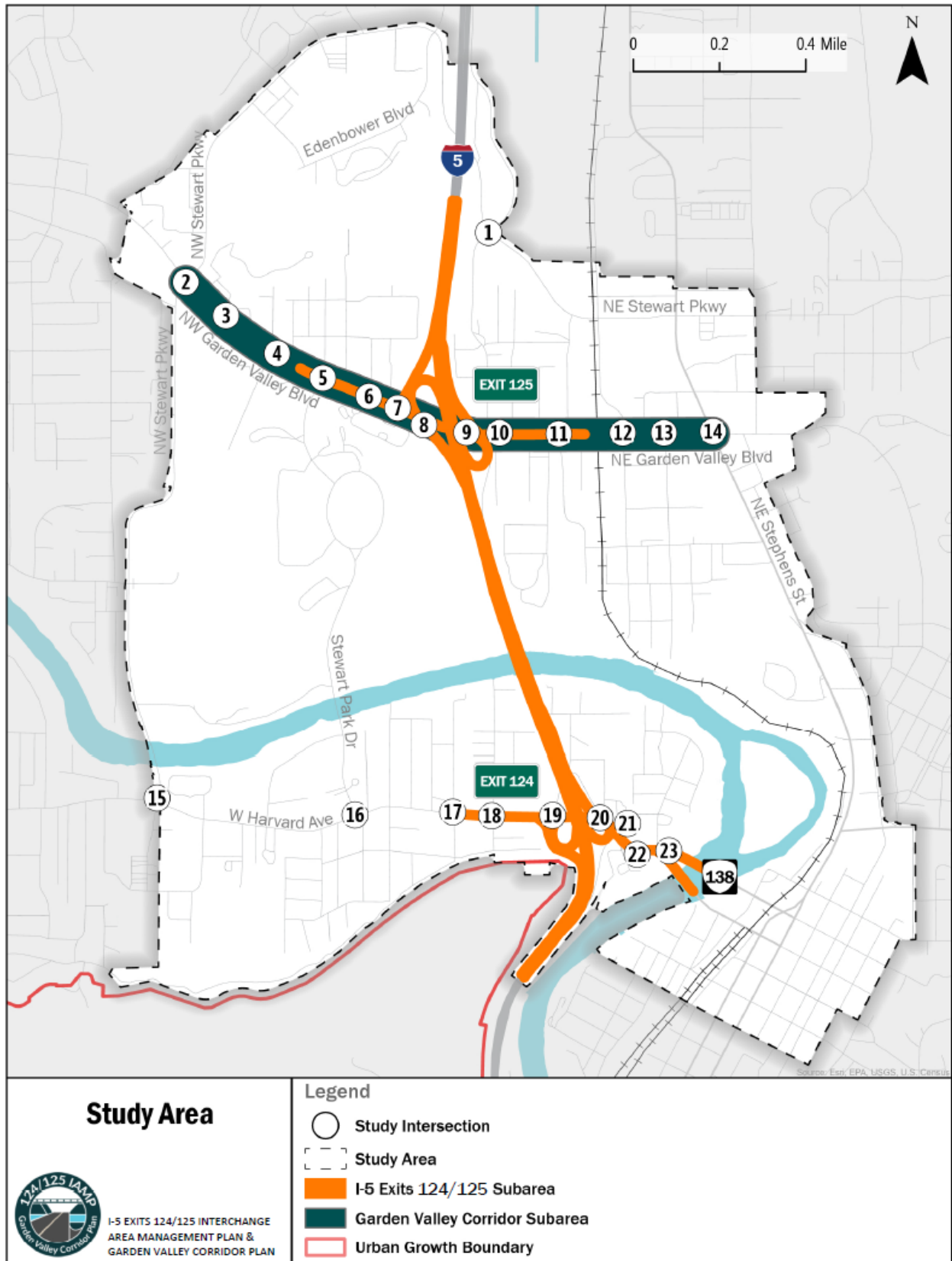
This study area includes two distinct subareas for detailed operational, safety and access analysis:

- I-5 Exits 124/125 Interchange (IAMP) Subarea: Includes roads/accesses within a ¼-mile of the ramp terminals and the merge, diverge and weaving area of the I-5 mainline.
- Garden Valley Corridor (GVC) Subarea: Garden Valley Boulevard between and including the intersections with Stewart Parkway and Stephens Street.

Although not included in the study area boundary, the alternatives analysis will include an assessment of the interchanges to the north and south of the study area. This is to assess the impacts and ability of the proposed changes to safely and efficiently collect, distribute, and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network.¹

¹ Federal Highway Administration's (FHWA) Policy on Access to the Interstate System
<https://www.fhwa.dot.gov/design/interstate/170522.cfm>

FIGURE 1. STUDY AREA



2 LAND USE AND POPULATION INVENTORY

This section provides a description of the existing land use patterns and zoning regulations within the study area. Land use is a key factor in developing a functional transportation system; the amount of land planned for development, the types of land uses, and how they relate to each other have a direct relationship to the anticipated demands on the transportation system. Similarly, the makeup of the population influences the types of facilities and programs needed to move the residents and visitors within the community.

2.1 EXISTING LAND USES

The following is a summary of the existing land uses within the study area and the associated requirements that govern development and redevelopment. This overview is intended to provide an indication of the type and intensity of land uses that can be expected within the planning horizon in order to determine future traffic generation.

2.1.1 Comprehensive Plan and Zoning Designations

The study area is located within the city limits and urban growth boundary (UGB) of the City of Roseburg. Land in the study area is subject to the land use regulations of the City of Roseburg. Land use regulations are implemented through Comprehensive Plan designations and zoning designations shown in Figure 2 and Figure 3. Because future development and redevelopment in the study area will be subject to the regulations associated with the City's land use designations, knowing the designations and permitted uses provides an idea of the type and intensity of traffic to be expected in the area. Table 1 (page 7) presents a summary of zoning within the study area. To better define and describe the zoning and land uses within the study area, a special map has been created to delineate smaller sections with the study area (Figure 4). Table A-1 in Attachment A provides a detailed summary of the purposes, permitted uses, and lot standards in each zoning district and corresponding Comprehensive Plan designation.

I-5 Exits 124/125

In general, the land surrounding Exit 124 is designated substantially as commercial around the interchange and through the core of Downtown with residential designations largely surrounding these commercial areas. There are significant designations for public/semi-public uses directly east and west of the interchange. The study area around Exit 125 is largely designated public/semi-public/open space with significant amounts of land designated for commercial, industrial, and residential uses.

Garden Valley Corridor

The land immediately adjacent to Garden Valley Boulevard is either commercial, industrial, professional office, public/semi-public or public open space. The majority of the accesses through the GVC subarea serve commercial uses both west and east of the interchange. Low and medium-density residential land uses are also accessible via driveways and roads connecting to Garden Valley Boulevard; however travelers must pass through other uses to get there.

FIGURE 2. COMPREHENSIVE PLAN DESIGNATIONS

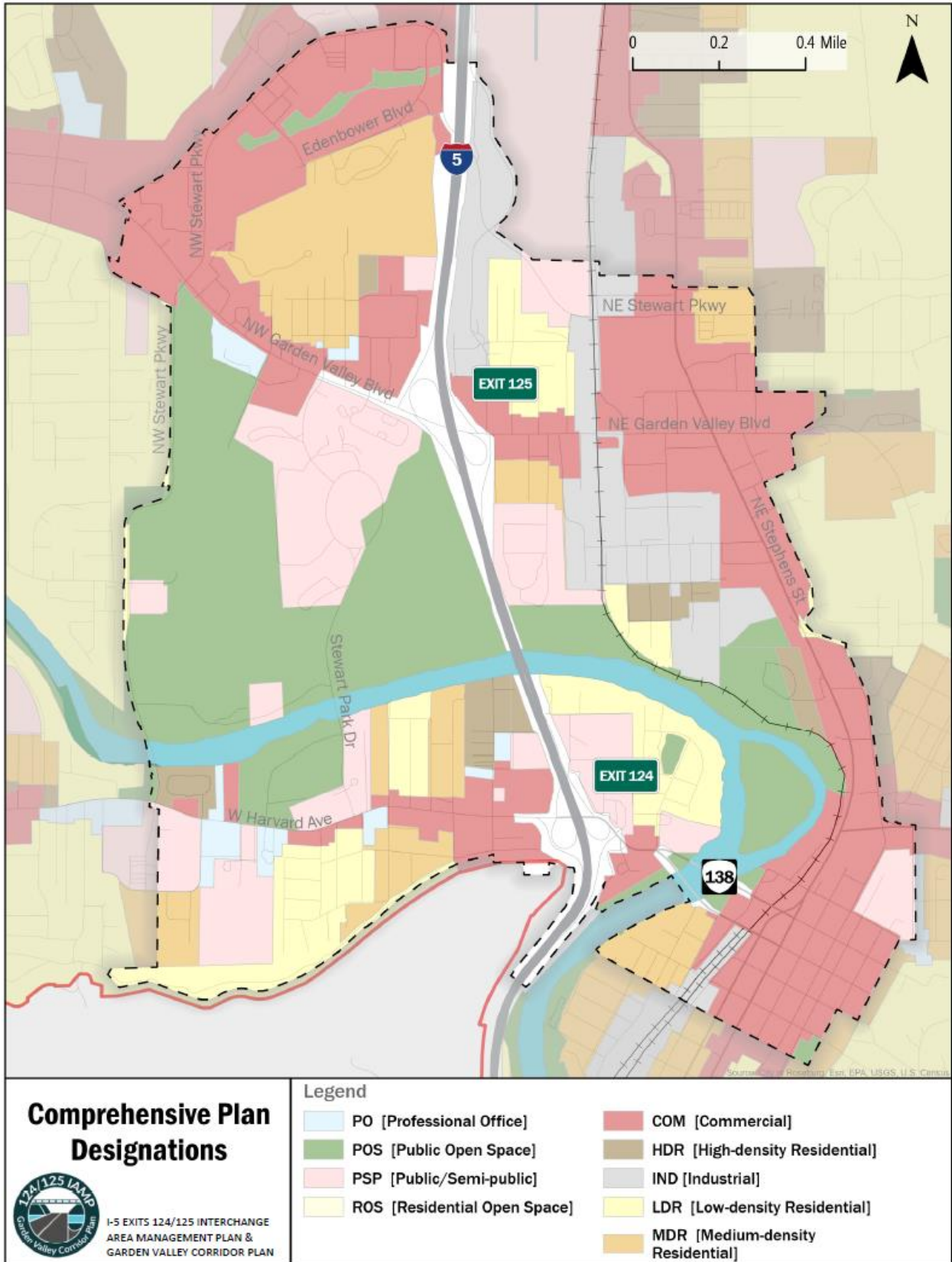


FIGURE 3. CITY OF ROSEBURG ZONING DESIGNATIONS

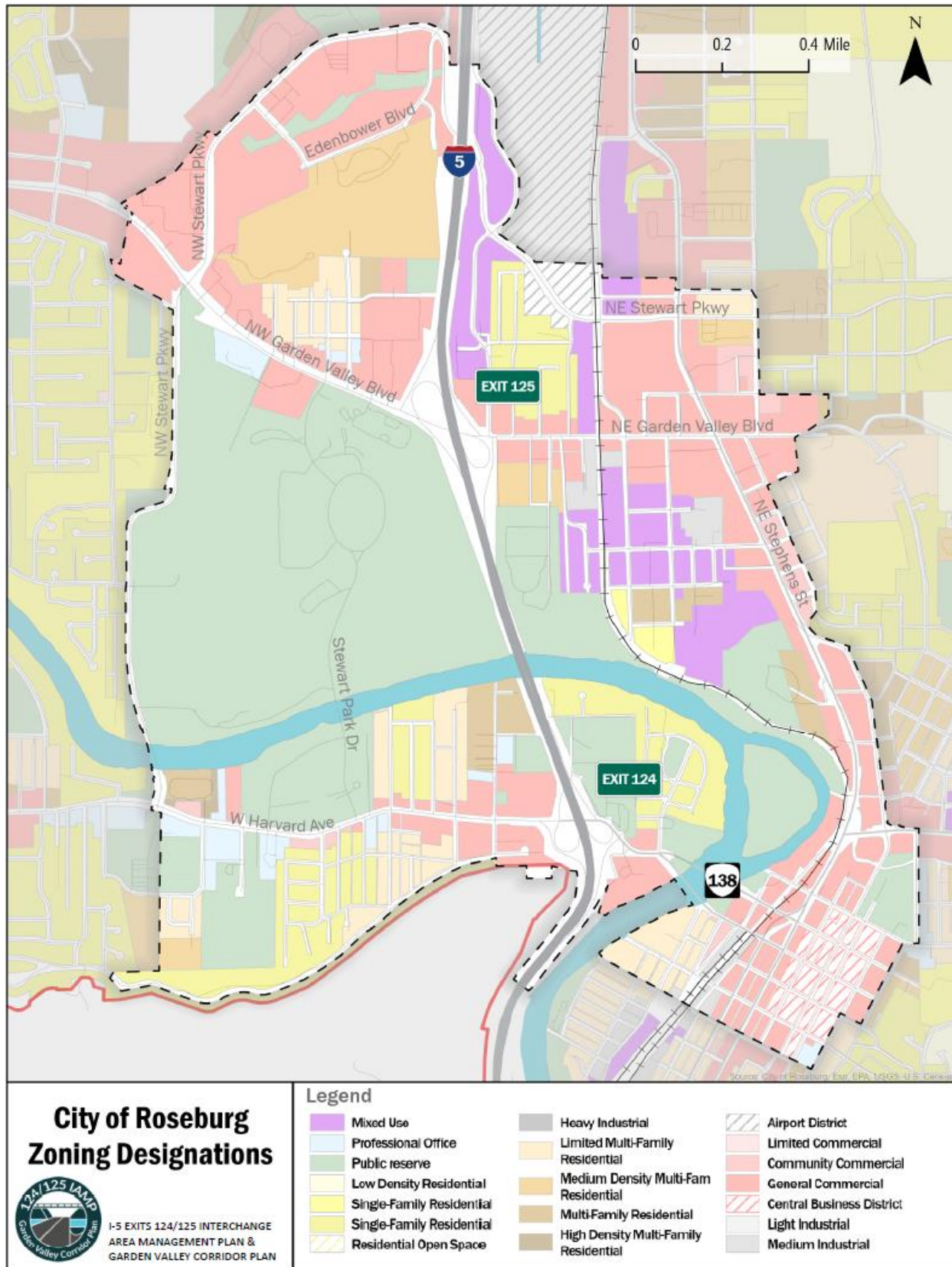


FIGURE 4. STUDY AREA – SECTIONS

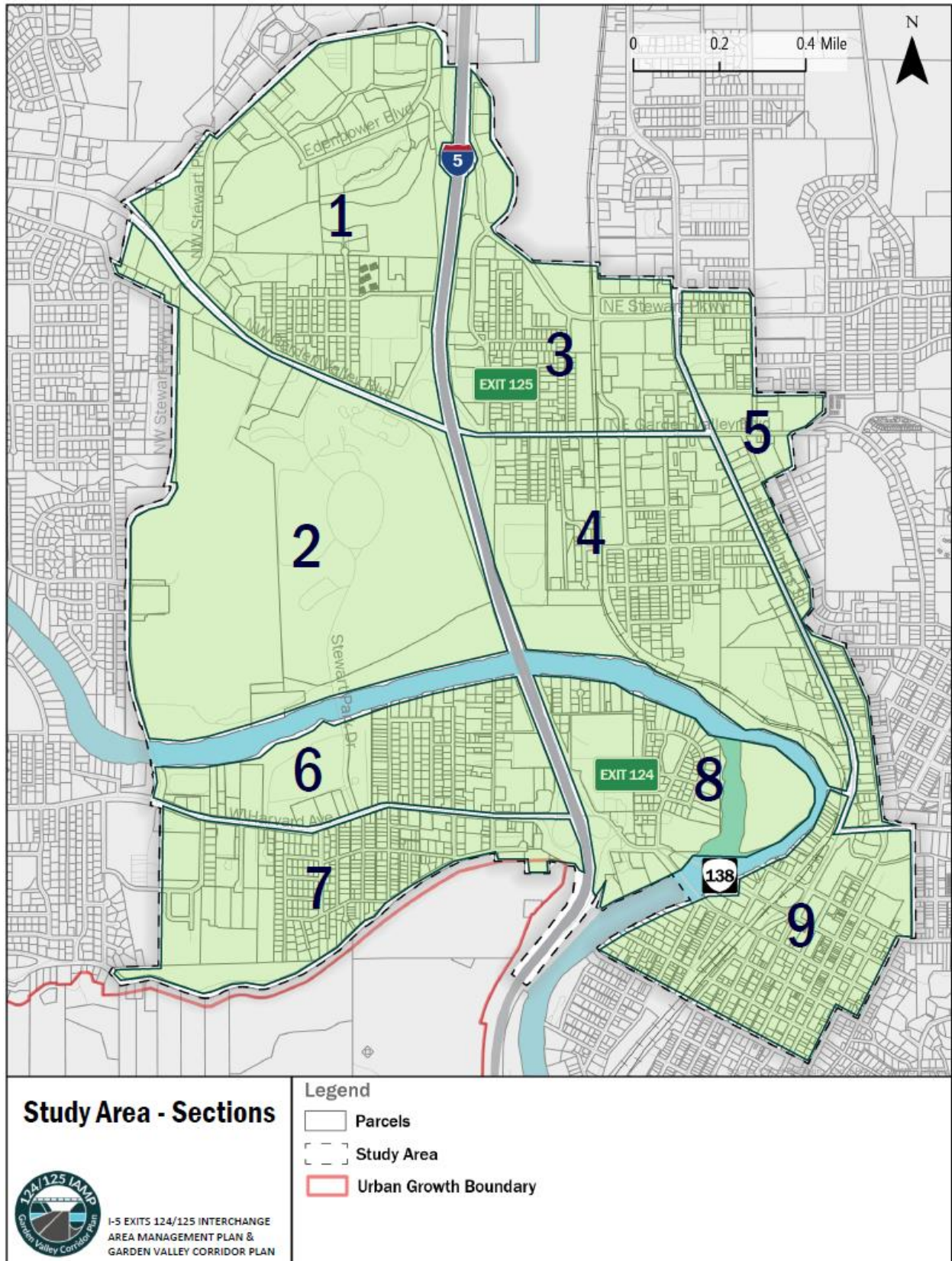


TABLE 1. SUMMARY OF ZONING WITH STUDY AREA – BY SECTION

STUDY AREA SECTION (SEE FIGURE 4)	OVERVIEW OF ROSEBURG ZONING DESIGNATIONS
1	<ul style="list-style-type: none"> • Zoning is predominantly multi-family residential. • Commercial zoning is found along Garden Valley Boulevard and Stewart Parkway.
2	<ul style="list-style-type: none"> • Zoning is almost entirely Public Reserve. • Outside the study area, single-family residential zoning is designated along the west side of Stewart Parkway.
3	<ul style="list-style-type: none"> • The core of the section is zoned single-family residential. • Residential zoning is surrounded by mixed use, commercial, and airport zoning (adjacent to NW Mulholland Street, the Central Oregon & Pacific (CORP) rail line, Garden Valley Boulevard, and NE Stephens Street/Old Highway 99).
4	<ul style="list-style-type: none"> • The majority is zoned Public Reserve (adjacent to I-5) and mixed use surrounded by commercial zoning (adjacent to Garden Valley Boulevard and NE Stephens Street/Old Highway 99). • There are three smaller pockets of the section zoned residential.
5	<ul style="list-style-type: none"> • NE Stephens Street/Old Highway 99 is lined by commercial zoning. • A combination of single-family residential and multi-family residential zoning is located east of NE Stephens Street/Old Highway 99 and its commercial zoning.
6	<ul style="list-style-type: none"> • These sections are zoned predominantly public reserve and residential (single-family and multi-family).
7	<ul style="list-style-type: none"> • A cluster of commercial zoning is located adjacent to Harvard Avenue directly west of Exit 124. • There are scattered areas of professional office zoning in these sections.
8	<ul style="list-style-type: none"> • Zoning is predominantly public reserve. • The rest of the section is zoned single-family residential with the exception of one area of commercial zoning between the interchange and the river.
9	<ul style="list-style-type: none"> • The core of this section (Downtown) is zoned commercial and Central Business District. • The core is surrounded by a combination of public reserve and multi-family zoning. • Medium industrial zoning is found along the rail line between the Downtown core and the river.

The study area is relatively built-out and the developed uses largely follow the zoning in the study area described in the previous section. The most significant vacant lots include:

- Commercial/industrial: Two lots in the southern part of study area section 4 that do not have access to major roads (16.6 total acres).
- Commercial: A parcel just outside the study area southwest of the intersection of Harvard Avenue at Stewart Parkway (13.5 acres).

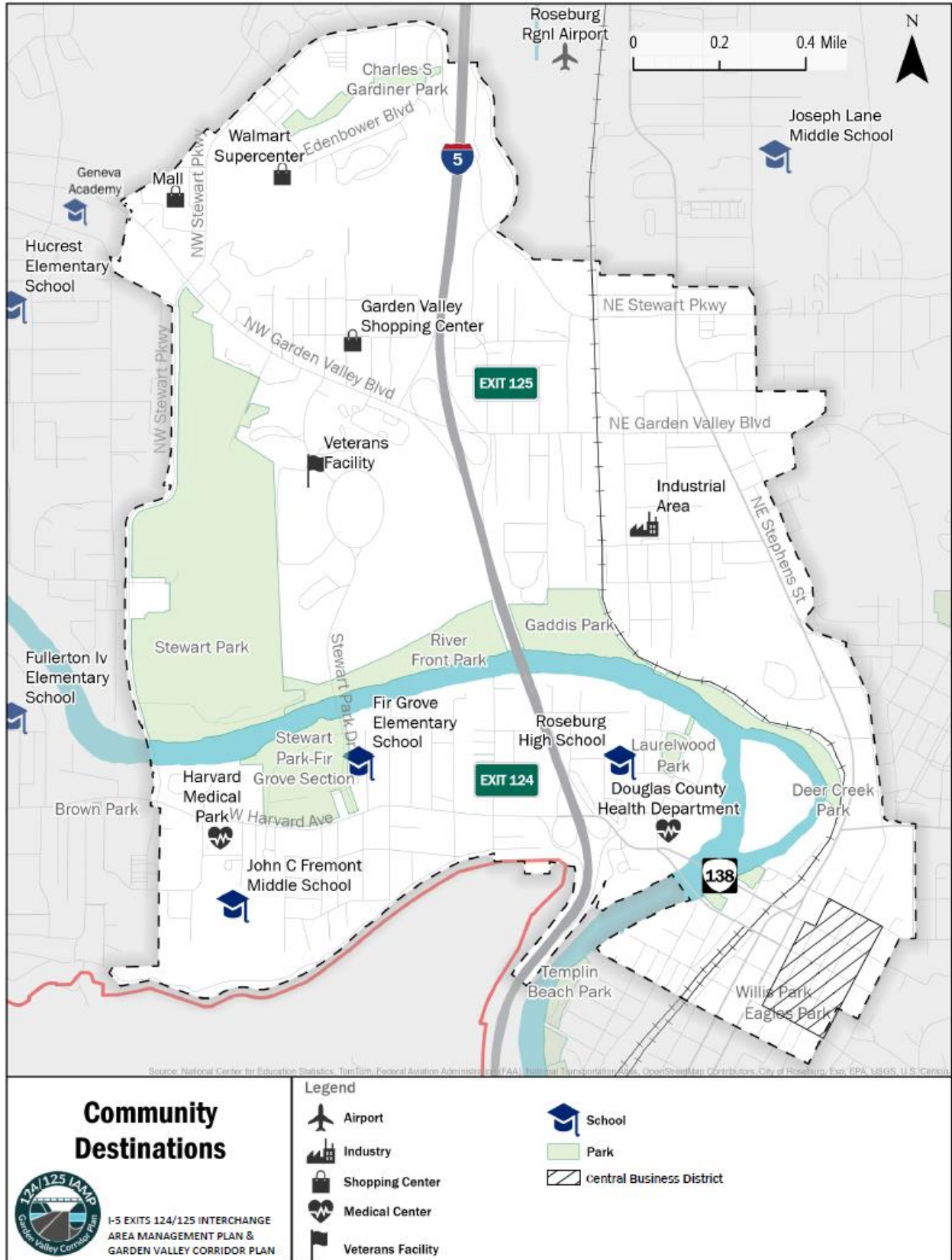
Given the large size of the study area, City of Roseburg staff provided input regarding particular existing land uses and potential future uses that may have a significant impact on the study area and transportation facilities approaching the interchanges, and that may have particular service needs related

to the freeway and other transportation facilities. These uses are summarized in Table 2. Figure 5 highlights the existing community destinations within the study area.

TABLE 2. NOTABLE EXISTING AND POTENTIAL FUTURE LAND USES BY SECTION

STUDY AREA SECTION (SEE FIGURE 4)	OVERVIEW OF ZONING
1	<ul style="list-style-type: none"> • Significant commercial uses mark this study area section including Wal-Mart and a mall to either side of Stewart Parkway north of Garden Valley Boulevard. • A strip mall with two gas stations currently take access on Garden Valley Boulevard directly to the west of Exit 125 and the southbound off-ramp. • Includes medical facilities on Edenbower Boulevard and is adjacent to the hospital.
2	<ul style="list-style-type: none"> • Fred Meyer is a significant commercial use and employer in this section. • The US Veterans Facility is a major employer. A new development is currently being constructed on the federally-owned land. • There are significant open spaces of Stewart Park and River Front Park.
3	<ul style="list-style-type: none"> • The Roseburg Regional Airport is located at the north end of this section. • Airport Road parallels the CORP rail line that runs north-south.
4	<ul style="list-style-type: none"> • Access to the freeway and rail is important for a Fed Ex facility between I-5 and the railroad and for existing and potential future industrial uses between the railroad and NE Stephens Street/Old Highway 99.
5	<ul style="list-style-type: none"> • Commercial uses line NE Stephens Street/Old Highway 99. • Diamond Lake Urban Renewal Area is east of this section along OR 138 (Diamond Lake Boulevard).
6	<ul style="list-style-type: none"> • Fir Grove Elementary School is located between housing and Stewart Park near the intersection of Centennial Drive and W Harvard Avenue.
7	<ul style="list-style-type: none"> • Harvard Medical Park is a major employment site located just south of Harvard Avenue near the intersection with Stanton Street. • John C. Fremont Middle School is located south of the medical center.
8	<ul style="list-style-type: none"> • Roseburg High School is a major public use directly east of Exit 124. • Douglas County Health Department is a major employer in this section, located off of Madrone Street east of Exit 124.
9	<ul style="list-style-type: none"> • Downtown features existing and potential future mixed uses. • Significant trucking operations exist in this section, which need access to I-5.

FIGURE 5. COMMUNITY DESTINATIONS



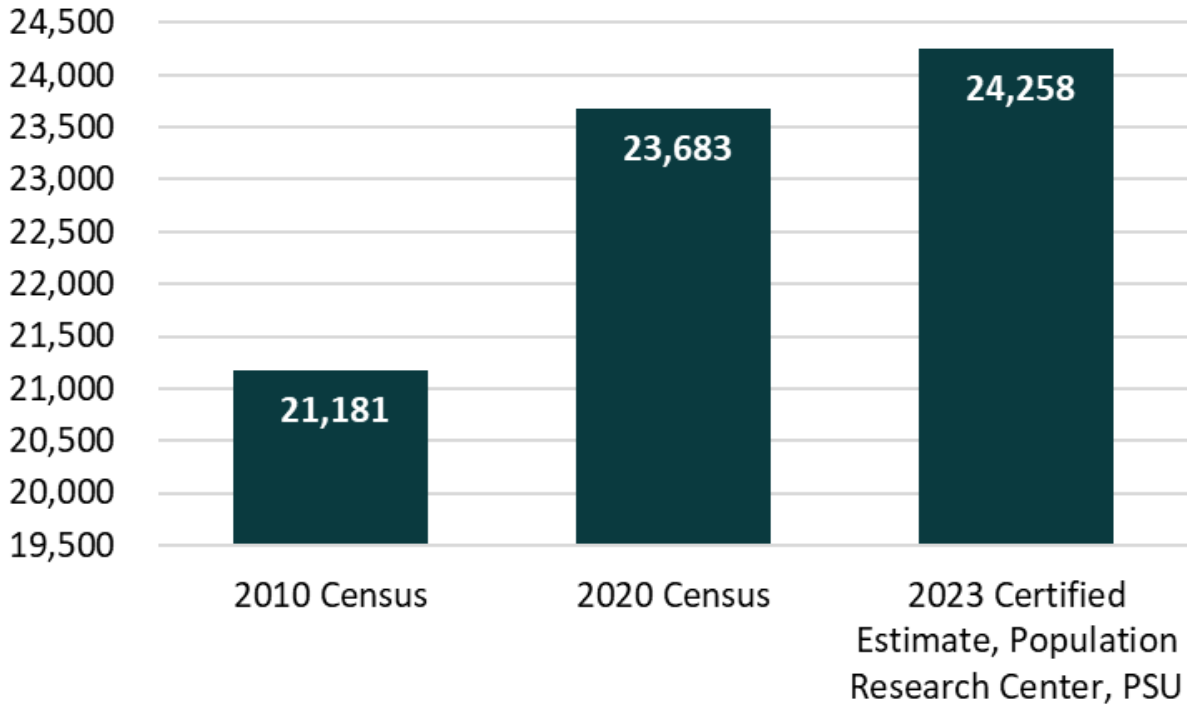
2.2 DEMOGRAPHICS

This section includes demographic information including employment, population and Title VI and Environmental Justice Populations.

2.2.1 Population and Employment

As seen in Exhibit 1, the most recent (2023) population estimate for Roseburg within the city limits was 24,258.

EXHIBIT 1. ROSEBURG (CITY LIMIT) POPULATION ESTIMATES



According to Portland State University’s population forecast for the area, Roseburg’s population within the UGB is expected to grow to 33,708 by the year 2045, which represents an average annual growth rate of 0.53% for the UGB. Roseburg encompasses Douglas County’s largest urban area and is expected to capture the largest share of total countywide population growth during the 20-year forecast period.²

Commute Patterns

Roseburg has its own unique transportation identity, although it is important to recognize its connection to the region; many people live in one community and work in another. Table 3 summarizes the year 2021 employment destinations for people who lived within the City Limits of Roseburg; 2021 is the most recent year of available data. The majority of Roseburg workers actually live outside of the city, further emphasizing the dependence on the transportation network to get from home to work.

² Population Forecast for Douglas County, its Urban Growth Boundaries (UGB), and Area Outside UGBs 2022-2072, Portland State University Population Research Center

TABLE 3. INFLOW/OUTFLOW JOB COUNTS, 2021

Condition	Count	Share
Living and employed in Roseburg	4,103	28.7%
Commuting to Roseburg from elsewhere	10,187	71.5%

Source: U.S. Census Bureau. 2024. OnTheMap Application. Longitudinal-Employer Household Dynamics Program.
<http://onthemap.ces.census.gov/>

2.2.2 Transportation-Disadvantaged Population

A community’s transportation system should provide efficient and accessible transportation that serves the daily transportation needs of all its citizens. To achieve this goal, it is important to know where the transportation-disadvantaged communities are, and to accommodate these populations through improved multi-modal connectivity to community activity centers and key destinations.

Elderly and Youth Population

Age is a key factor in determining mode choice decisions. Roseburg’s oldest residents are less likely to drive. Similarly, most of Roseburg’s youngest population, those under 18 years old, are heavily dependent on active transportation modes such as walking, biking, and transit.

Like most areas in the state, Roseburg’s population is aging. Table 4 compares Roseburg’s age groups to Douglas County and Oregon. Approximately 20% of the City’s population is 65 years or older, which is less than the County as a whole (27%) but on par with the rest of the state (19%). As shown in Figure 6, this population is generally dispersed throughout the City, with a few notable exceptions west of I-5 near NW Garden Valley Boulevard, where a concentration is shown due to retirement and care facilities.

Approximately 21% of the City’s population is under the age of 18. The percent of population under the age of 18 is just above that of Douglas County (19%) and the state as a whole (20%). As shown in Figure 7, concentrations of areas with a high percentage of youth are spread throughout residential areas in the city.

TABLE 4. SUMMARY OF AGE GROUPS

Age	Roseburg	Douglas County	Oregon
Under 18 Years	21%	19%	20%
65 Years and Over	20%	27%	19%
Median Age (Years)	40.3	46.4	40.5

Source: U.S. Census Bureau, 2020

FIGURE 6. ELDERLY POPULATION

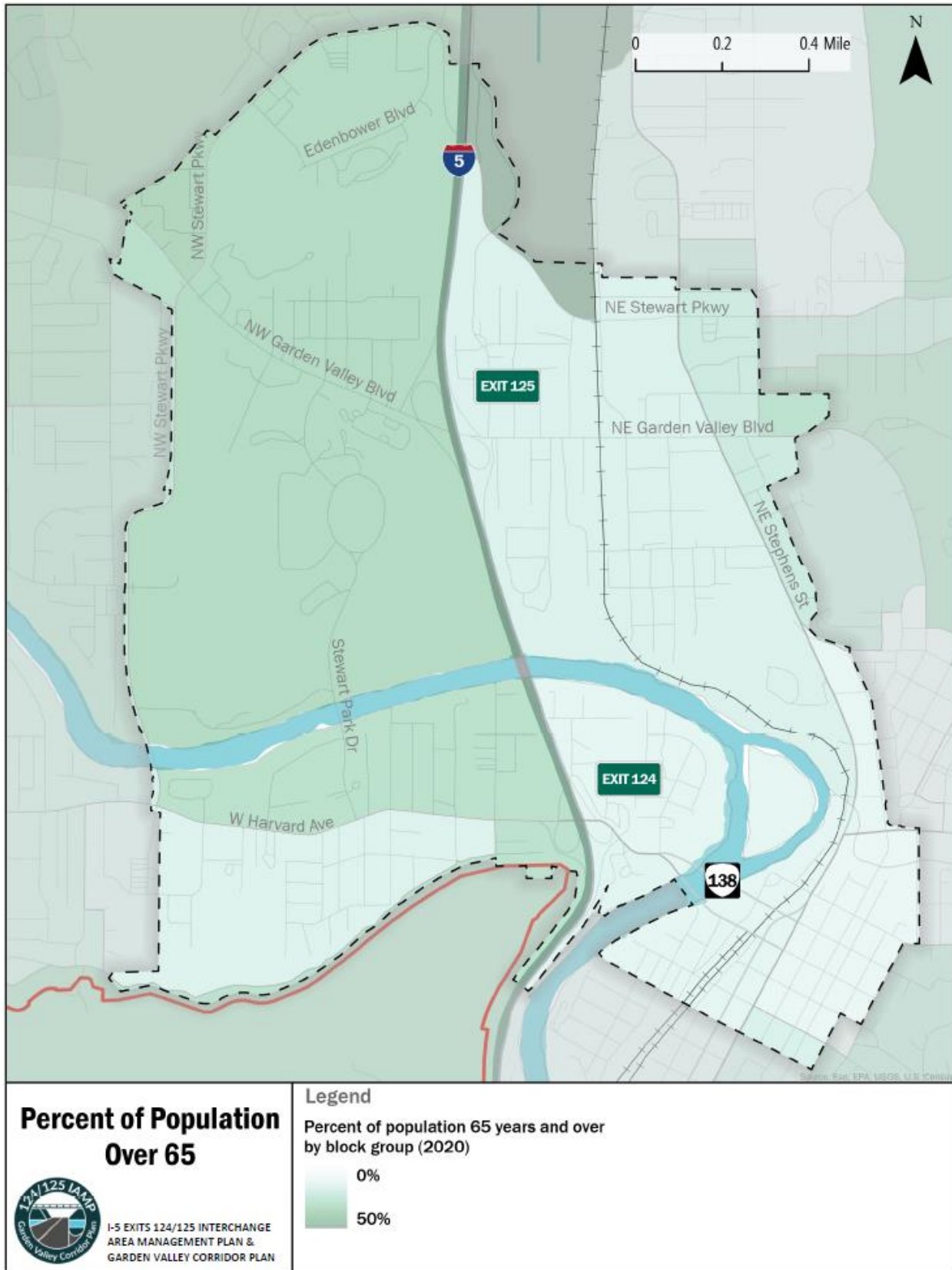
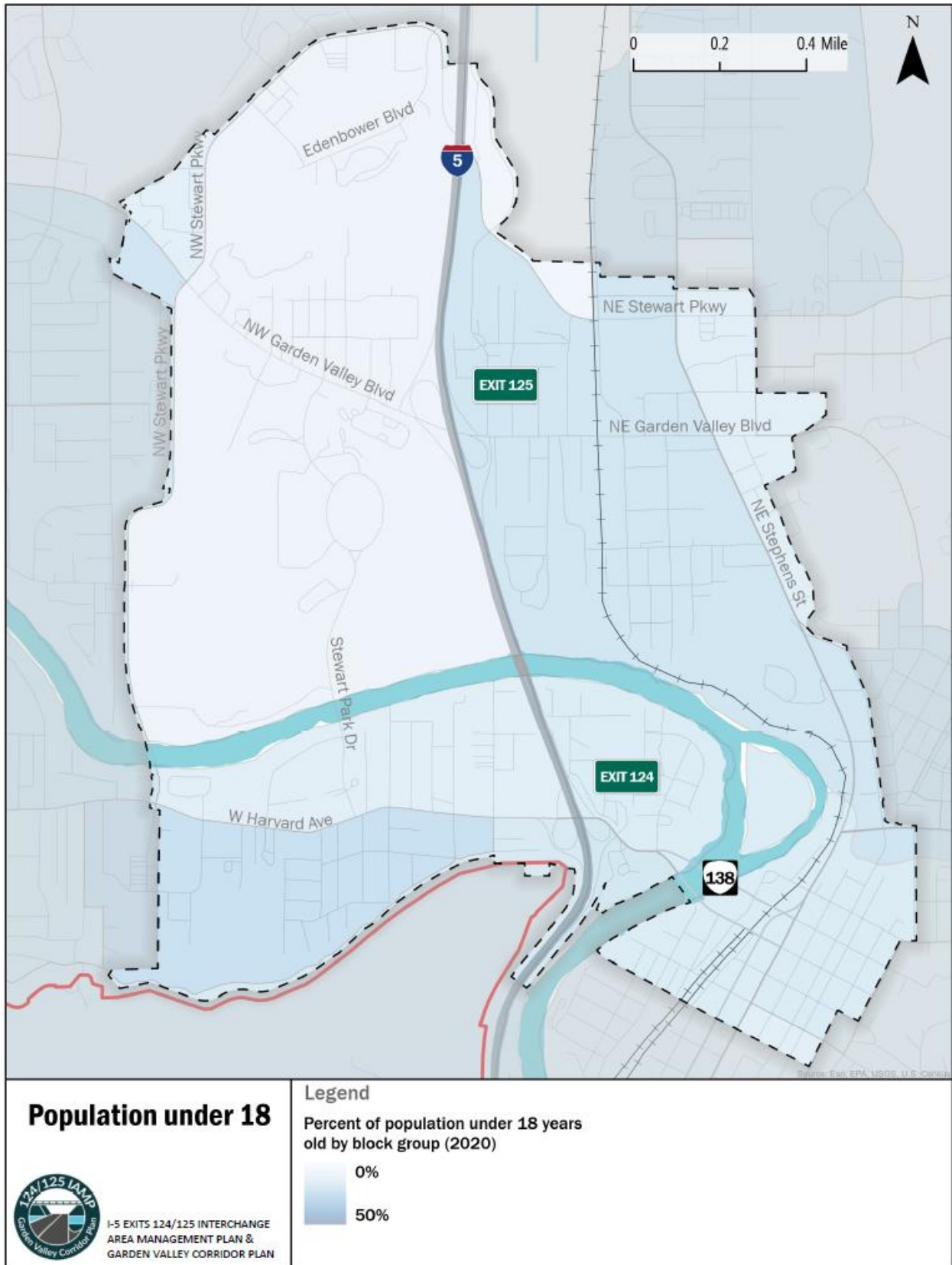


FIGURE 7. YOUTH POPULATION



Minority Population

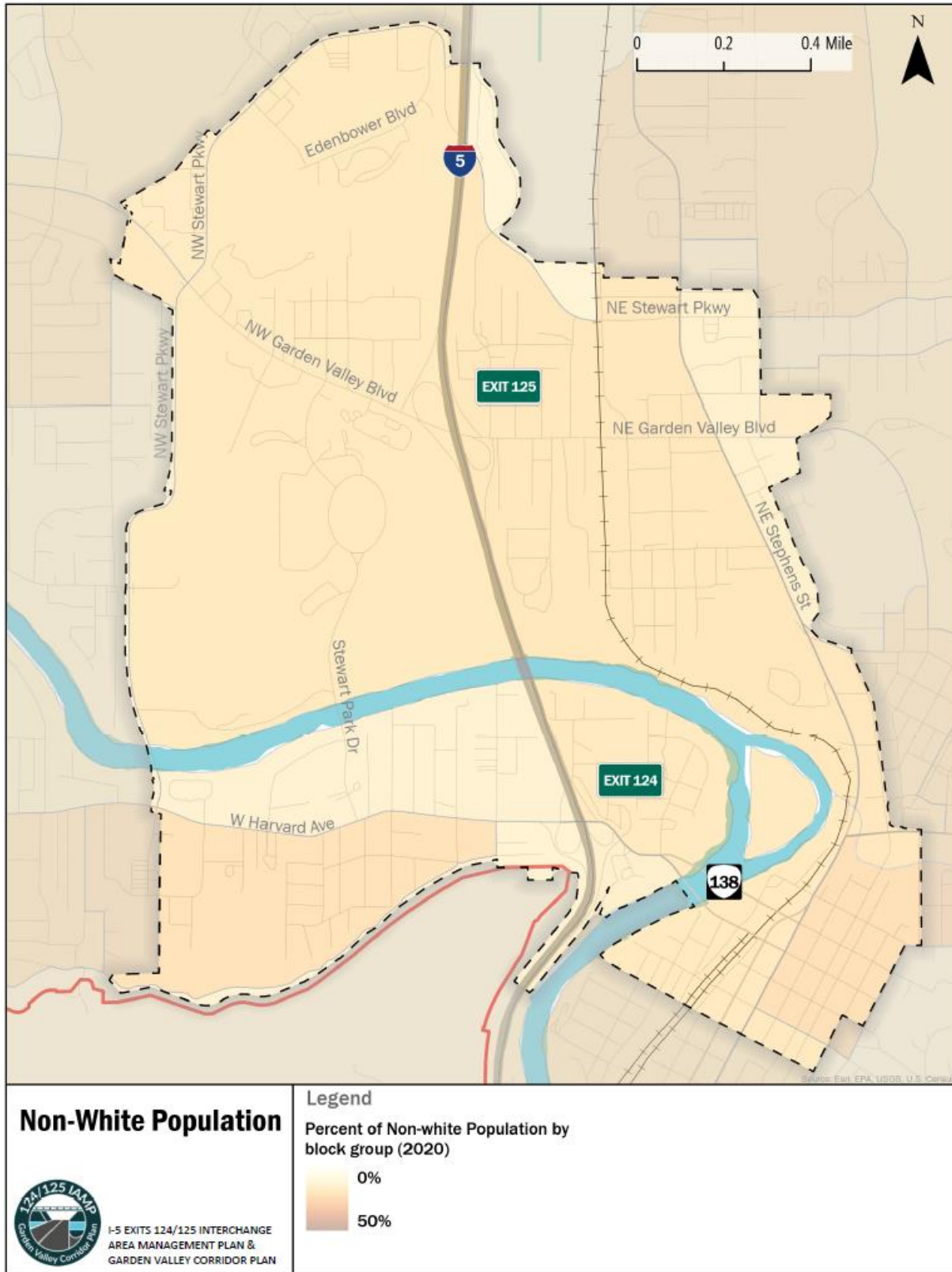
Roseburg is slightly more diverse than the County, but less so compared to the state. As shown in Table 5, the Hispanic/Latino population comprises the largest single minority group, with approximately 7.55% of the population. Compared to the state, all minority groups are underrepresented in Roseburg, with the exception of American Indian and Alaskan Natives and some other race alone.

TABLE 5. RACE AND ETHNICITY POPULATION

Race and Ethnicity	Roseburg		Douglas County		Oregon	
	Count	Percentage	Count	Percentage	Count	Percentage
Hispanic or Latino	1,789	7.55%	6,654	5.98%	588,757	13.89%
Not Hispanic or Latino:	21,894	92.45%	104,547	94.02%	3,648,499	86.11%
White alone	20,163	85.14%	96,048	86.37%	3,036,158	71.65%
Black or African American alone	130	0.55%	400	0.36%	78,658	1.86%
American Indian and Alaska Native alone	404	1.71%	1,950	1.75%	42,042	0.99%
Asian alone	373	1.57%	1,231	1.11%	191,797	4.53%
Native Hawaiian and Other Pacific Islander alone	47	0.20%	164	0.15%	18,197	0.43%
Some Other Race alone	603	2.55%	2,103	1.89%	22,962	0.54%
Two or More Races:	1,963	8.29%	9,305	8.37%	258,685	6.11%

Source: U.S. Census Bureau, 2020

FIGURE 8. NON-WHITE POPULATION



Low-income Population

Vehicle ownership has a strong impact on mode choice, and lower income residents are less likely to own one or more vehicles. A larger population of low-income residents is more likely to be reliant on non-automotive forms of transportation.

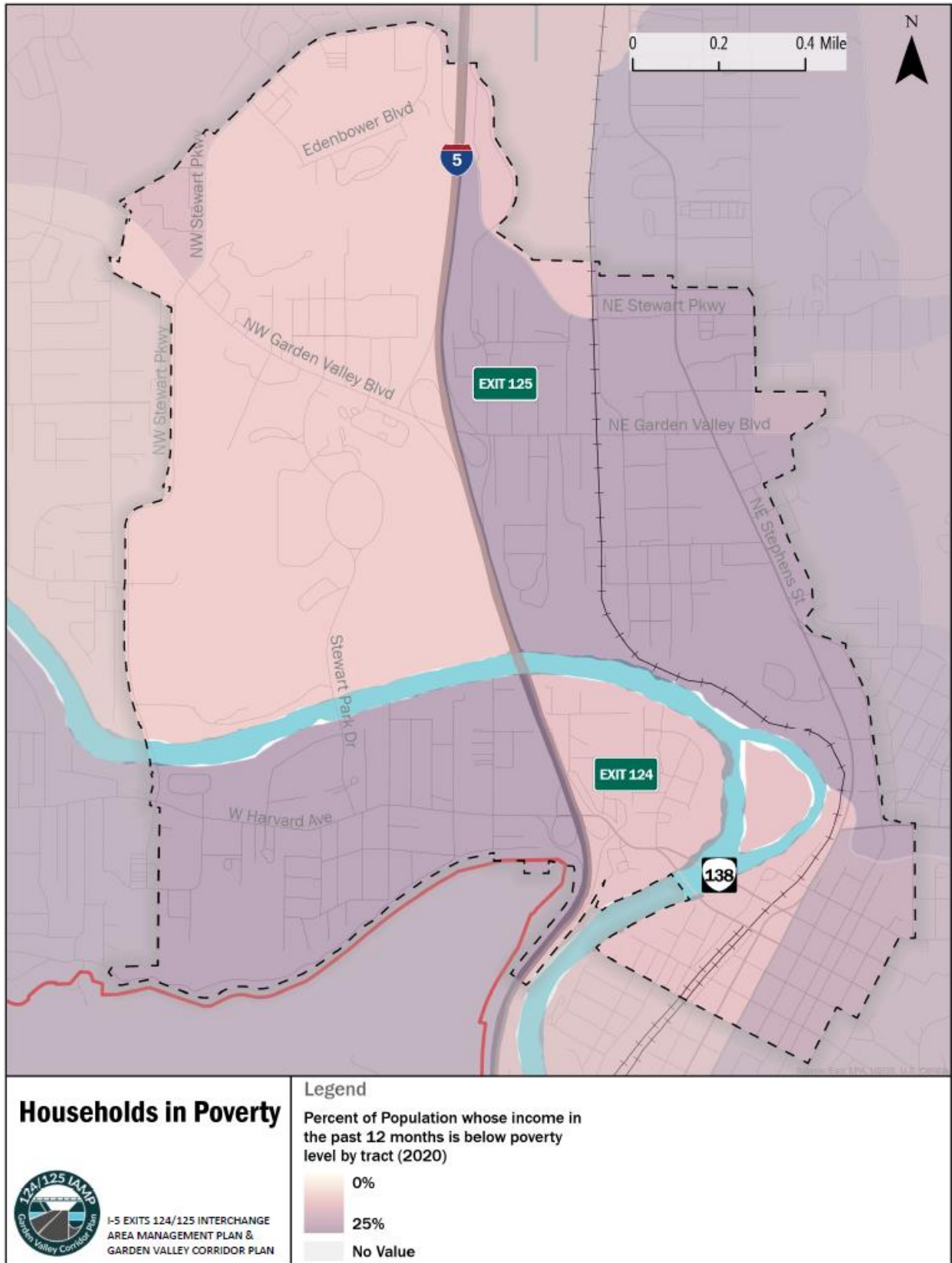
Table 6 provides a comparison of low-income population within Roseburg. Approximately 20% of the City’s population is below the poverty level. Roseburg’s poverty rate is slightly higher than Douglas County (17.7%) and a higher rate of poverty compared to the state (12.1%). As shown in Figure 9, within the study area, there are higher concentrations of people below the poverty line in two areas: west of I-5 and south of Harvard Avenue and east of I-5 north of the river. Improved non-motorized connections, facilities and transit service may be more important to and within these areas.

TABLE 6. LOW-INCOME POPULATION

Roseburg		Douglas County		Oregon	
Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
20%	+/-3.5	17.7%	+/-2.9	12.1%	+/-0.4

Source: Poverty Status in the Past 12 Months: U.S. Census Bureau, 2022 American Community Survey 5-Year Estimates

FIGURE 9. LOW-INCOME POPULATION



3 ENVIRONMENTAL AND NATURAL RESOURCES

The following summarizes the existing natural resources and environmental features found in Roseburg. The following sections illustrate and describe areas that may pose barriers to providing transportation access or improvements. The inventory is based on available Geographic Information System (GIS) maps, previous reports, and known resource sites. Further resources may exist in the study area that are not yet documented or are not visually apparent.

3.1 NATURAL RESOURCES

This section summarizes the wetlands and flood hazards in the study area.

3.1.1 Wetlands

The City of Roseburg has not conducted a Local Wetlands Inventory (LWI). As such, wetland information was gathered from the National Wetland Inventory (NWI) developed by the U.S. Fish and Wildlife Service. The NWI relies on high-altitude aerial photos, supplemented with limited field work.

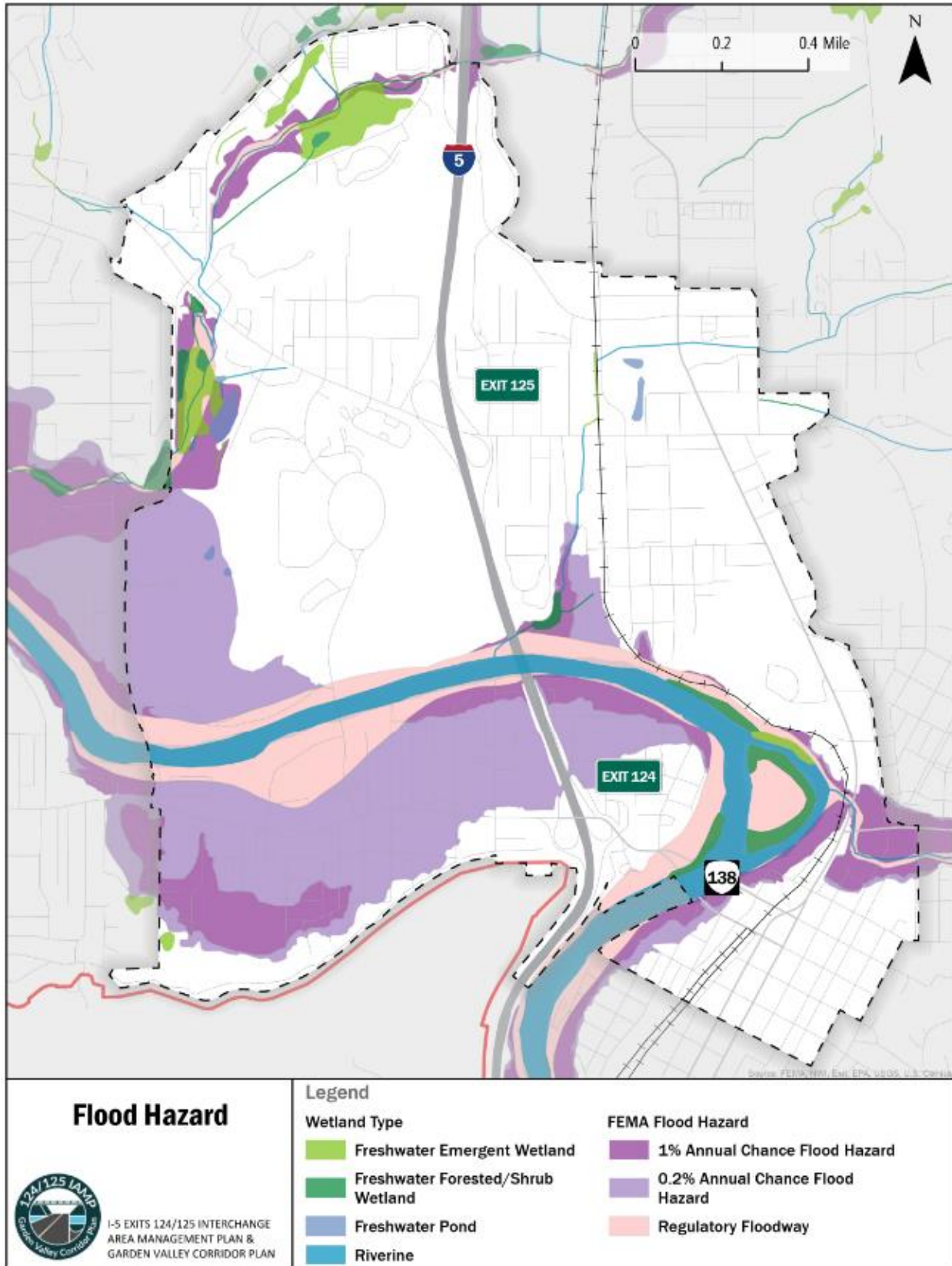
Most wetland areas in Roseburg are classified as freshwater emergent wetlands. Emergent wetland vegetation is described as being present for most of the growing season in most years and are wetlands usually dominated by perennial plants. Figure 10 illustrates the extent, approximate location, and type wetlands and deepwater habitats in the study area. As shown in the figure, there areas are concentrated around the South Umpqua River, particularly east of I-5, and along Newton Creek near the northwest edge of the study area.

3.1.2 Flood Hazards

There are two large rivers and two creeks in Roseburg that contribute to potential flood zones in the study area. The large rivers include the North Umpqua River and the South Umpqua River. The contributing creeks include Newton Creek and Deer Creek, each connecting to the South Umpqua River.

Figure 10 illustrates the flood hazard areas that have been identified and mapped by FEMA. The 100-year flood is the area that has 1% chance of being equaled or exceeded in any single year. The 500-year flood is the area that has 0.2% chance of being equaled or exceeded in any single year.

FIGURE 10. WETLANDS AND FLOOD HAZARDS



3.1.3 Threatened and Endangered Species

Threatened and endangered (T&E) species data as defined under the federal and state Endangered Species Acts (ESA) was obtained from the Oregon Biodiversity Information Center (ORBIC) within a two mile radius of the study area. The findings from this query are summarized in Table 7. As shown in the table, there are several animal and plant species located within two miles of the study area that are listed as having either Federal or State T&E status. As such, any potential circulation improvements of modifications within the study area will need to be cognizant of potential impacts to the identified T&E species listed below.

TABLE 7. IDENTIFIED THREATENED & ENDANGERED SPECIES NEAR STUDY AREA

Scientific Name	Common Name	Federal Status	State Status
<i>Actinemys marmorata</i>	Western pond turtle	SOC	SC
<i>Bassariscus astutus</i>	Ringtail	-	SV
<i>Lampropeltis getula</i>	Common kingsnake	SOC	SV
<i>Oncorhynchus kisutch</i> pop 3	Coho salmon (Oregon Coast ESU)	LT	SV
<i>Oncorhynchus mykiss</i> pop 31	Steelhead (Oregon Coast ESU, winter run)	SOC	SV
<i>Oncorhynchus tshawytscha</i> pop 27	Chinook salmon (Oregon Coast ESU, spring run)	-	SC
<i>Oregonichthys kalawatseti</i>	Umpqua chub	SOC	SC
<i>Bombus franklini</i>	Franklin's bumblebee	SOC	-
<i>Arabis koehleri</i> var. <i>koehleri</i>	Koehler's rockcress	SOC	C
<i>Limnanthes alba</i> ssp. <i>Gracilis</i>	Slender meadow-foam	-	C
<i>Perideridia erythrorhiza</i>	Red-root yampah	SOC	C
<i>Sisyrinchium hitchcockii</i>	Hitchcock's blue-eyed grass	SOC	-

SOC – Species of Concern

ESU – Evolutionary Significant Unit (Pacific salmon population that is substantially reproductively isolated from other populations and represents an important component of evolutionary legacy)

LT – Listed-Threatened

SC – Sensitive-Critical

C – Candidate for Listing as Threatened or Endangered

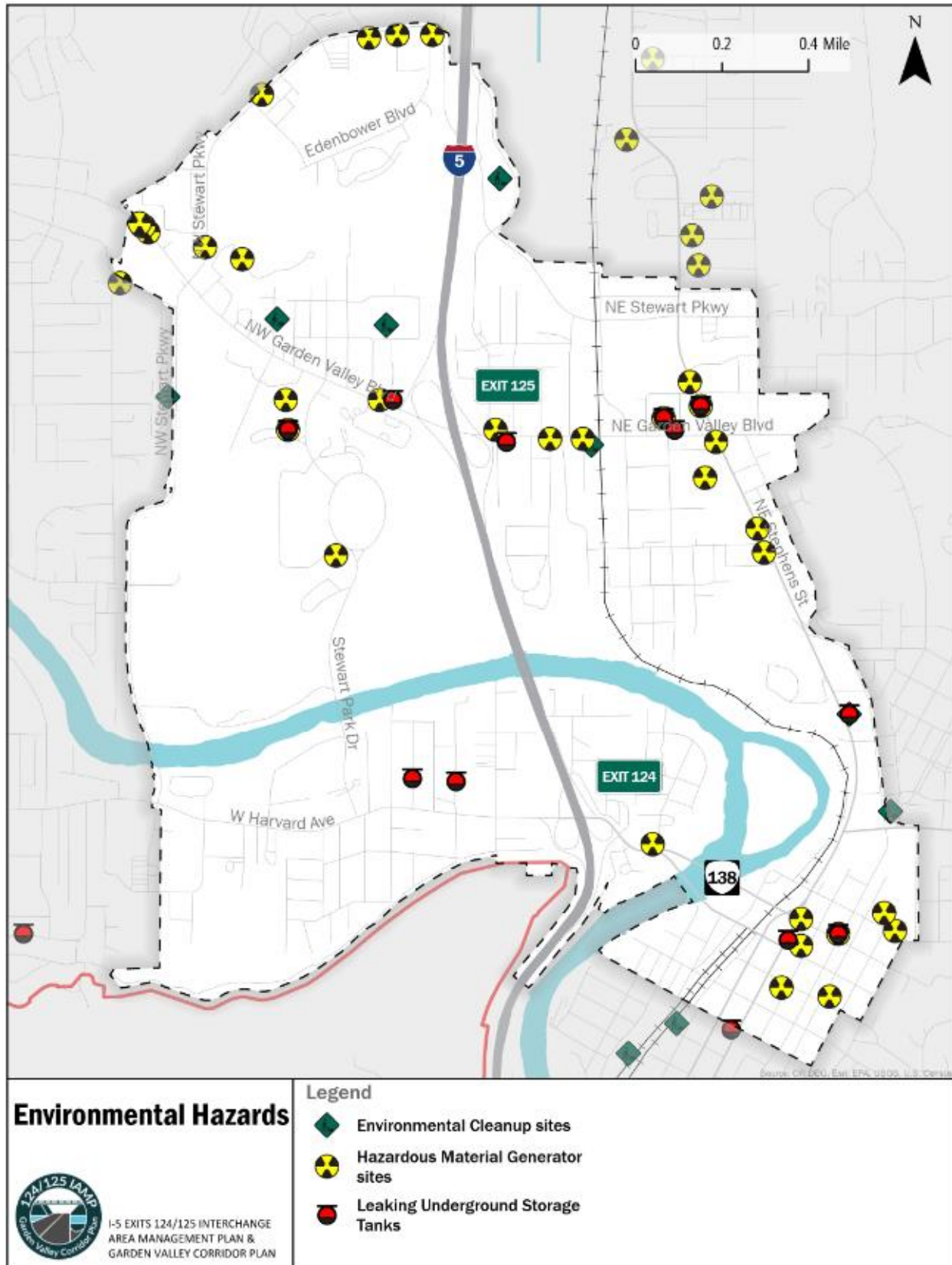
SV – Sensitive-Vulnerable

Source: Oregon Biodiversity Information Center (ORBIC). Information current as of 08/23/13.

3.1.4 Environmental Hazards

The Oregon Department of Environmental Quality (DEQ) databases for Environmental Cleanup Site Information (ESCI) and Leaking Underground Storage Tank (LUST) cleanup sites were used to show the general location of hazardous material locations within Roseburg (see Figure 11). These figures identify all existing locations (per current DEQ databases) that are current hazardous waste site/generators, have leaking underground storage tanks (where cleanup has not been completed), and are/were environmental cleanup sites. An assessment of each permit would be necessary to determine future impacts on transportation project development; such a review would indicate if an identified hazard location were in good standing, has completed cleanups where an issue was previously identified, is in the process of completing a cleanup, or if no further action is required to address the noted issue. The majority of hazardous sites are located near NW Garden Valley Boulevard, NE Stephens Street and around the downtown area.

FIGURE 11. ENVIRONMENTAL HAZARDS



3.2 HISTORIC RESOURCES

Under Section 106 of the National Historic Preservation Act of 1966, federal agencies, and the state and local agencies to which the federal agency has delegated responsibility, are directed to avoid undertakings that adversely affect properties that are included in or are eligible for inclusion in the National Register of Historic Places (NRHP). The NRHP identifies and documents (in partnership with state, federal, and tribal preservation programs) districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture. This section summarizes NRHP resources in the study area as well as other historic, prehistoric, and cultural resources.

The State Historic Preservation Office (SHPO) database was consulted to identify any historical resources located within the interchange study area. There are four registered historic districts that overlap the study area:

- Laurelwood Historic District – a residential neighborhood located east of Roseburg High School
- Roseburg Downtown Historic District – downtown commercial historic district listed in 2003
- Roseburg Veterans Administration Historic District

3.3 SECTION 4(F) AND 6(F) RESOURCES

Section 4(f) refers to the original section within the U.S. Department of Transportation Act of 1966 which established a formal requirement that certain land uses be carefully considered and protected during the planning and construction of federally funded transportation improvement projects. Section 4(f) resources typically fall into the following categories:

- Recreational areas and parks (publicly owned and open to the public) of national, state, or local significance
- Wildlife and waterfowl refuges (publicly owned) of national, state, or local significance
- Historic sites (in public or private ownership) of national, state, or local significance

Under these definitions, potential 4(f) resources within the study area include:

- All historic resource sites listed in the Laurelwood Historic District, Roseburg Downtown Historic District and the Roseburg Veterans Administration Hospital Historic District.
- Riverside Park
- Stewart Park
- Riverfront Park
- Gaddis Park
- Deer Creek Park
- Templin Beach Park
- Roseburg Municipal Golf Course

In 1965, the Land and Water Conservation Fund (LWCF) Act was formed to assist local, state, and federal agencies in meeting the demand for outdoor recreation sites. Section 6(f) of this act states that once a city, county, or agency has used funds for this purpose, either the land or the park cannot be eliminated or acquired without coordination with the National Park Service (NPS) and mitigation that replaces the eliminated items. The Oregon Parks and Recreation Department (OPRD) LWCFD Viewer indicates there

are multiple 6(f) properties within the study area.³ The property boundaries are only updated periodically and may not reflect new grants, conversions or boundary changes; boundaries should be verified with OPRD staff prior to project development.

The following parks are identified as 6(f) properties:

- Stewart Park
- Fir Grove Park

There is also 6(f) properties just outside of the study area boundary. These properties are listed below:

- Stewart Parkway Open Space (northwest corner of the intersection of Harvard Avenue at Stewart Parkway)
- Micelli Park

³ Oregon Parks and Recreation Department LWCF Viewer:

<https://geo.maps.arcgis.com/apps/webappviewer/index.html?id=aa95d948d84b43fca256bb28ecec6a4>

4 TRANSPORTATION INVENTORY

This section summarizes the inventory information for the existing street, bicycle, pedestrian and transit networks within the study area. The transportation inventory also includes bridge, air, water, rail and pipeline inventories.

4.1 EXISTING STREET NETWORK

This section documents the existing physical and operational characteristics of roadways within the study area including jurisdiction, functional classification, geometric characteristics and pavement conditions.

4.1.1 Roadway Facilities to be Analyzed

There are 23 study intersections that will be included in the analysis of traffic operations, as shown Figure 1 (page 2) and summarized in Table 8. The analysis will also consider freeway operations on I-5 between MP and MP (just north of I-5 Exit 125 to just south of I-5 Exit 124).

TABLE 8. STUDY INTERSECTIONS

ID	INTERSECTION	SUBAREA	
		I-5 EXITS 124/125	GVCP
1	Stewart Pkwy at Mulholland Dr / Aviation Dr	X [^]	
2	Garden Valley Blvd at Stewart Pkwy	X [^]	X
3	Garden Valley Blvd at Sizzler entrance	X [^]	X
4	Garden Valley Blvd at Goetz St / Duck Pond St	X [^]	X
5	Garden Valley Blvd at Estelle St / Veterans Way	X	X
6	Garden Valley Blvd at Garden Valley Shopping Center / BLM	X	X
7	Garden Valley Blvd at Southbound Off-Ramp	X	X
8	Garden Valley Blvd at Southbound On-Ramps	X	X
9	Garden Valley Blvd at Northbound On-Ramps	X	X
10	Garden Valley Blvd at Northbound Off-Ramp/NW Mulholland Dr	X	X
11	Garden Valley Blvd at Highland St	X	X
12	Garden Valley Blvd at Airport Rd/Cedar St	X [^]	X
13	Garden Valley Blvd at Walnut St	X [^]	X
14	Garden Valley Blvd at Stephens St	X [^]	X
15	Harvard Ave at Stewart Pkwy	X [^]	
16	Harvard Ave at Stewart Park Dr	X [^]	
17	Harvard Ave at Harrison St	X	
18	Harvard Ave at Umpqua St	X	
19	Harvard Ave at Southbound Ramps / Bellows St	X	
20	Harvard Ave at Northbound On-Ramps	X	
21	Harvard Ave at Northbound Off-Ramp / Roseburg High School	X	
22	Harvard Ave at Corey Ct	X	
23	Harvard Ave at Madrone St	X	

Intersections identified by the carrot (^) may not directly affect the interchange but are expected to see changes in travel patterns due to proposed improvements.

4.1.2 Functional Classification and Jurisdiction

Roadways within the study area include state and city roadways. Figure 12 (page 26) illustrates the jurisdiction and functional classifications in the study area as recorded on ODOT’s TransGIS website. Table 9 provides the ODOT and City of Roseburg functional classification breakdown for study area roadways.

4.1.3 Roadway Characteristics

The lane configurations and traffic control for the study intersections are shown in Figure 13 (page 27). All signals are operated by ODOT. Characteristics each of the arterial and collector roadways intersecting a study area intersection are summarized in Table 10 (page 28).

TABLE 9. STUDY ROADWAY JURISDICTION AND FUNCTIONAL CLASSIFICATION

ROADWAY	JURISDICTION	ODOT FUNCTIONAL CLASSIFICATION ¹	CITY FUNCTIONAL CLASSIFICATION ²	SUBAREA ³
Interstate 5 (I-5)	ODOT	Interstate	Interstate	I-5 Exits 124/125
OR 138	ODOT	Principal Arterial	Principal Arterial	I-5 Exits 124/125
W Harvard Ave	City	Minor Arterial	Major Arterial	I-5 Exits 124/125
NW Garden Valley Blvd	City	Minor Arterial	Major Arterial	Both
NE Garden Valley Blvd	City	Principal Arterial	Major Arterial	Both
NW Stewart Pkwy	City	Minor Arterial	Major Arterial	Both
NE Stephens St	City	Principal Arterial	Major Arterial	Both
NW Aviation Dr	City	Collector	Major Collector	I-5 Exits 124/125
NW Mulholland Dr	City	Collector	Major Collector	Both
NE Airport Rd	City	Collector	Minor Collector	Both
NE Cedar St	City	Collector	Minor Collector	Both
Sizzler entrance	Private	--	--	Both
NW Goetz St	City	Local	Local	Both
Duck Pond St	City	Local	Local	Both
NW Estelle St	City	Local	Local	Both
NW Veterans Way	Private	Local	Local	Both
Garden Valley Shopping Center	Private	--	--	Both
BLM	Private	--	--	Both
NW Highland St	City	Local	Local	Both
NE Walnut St	City	Collector	Minor Collector	Both
NW Stewart Park Dr	City	Minor Collector	Minor Collector	I-5 Exits 124/125
W Harrison St	City	Local	Local	I-5 Exits 124/125
W Umpqua St	City	Local	Local	I-5 Exits 124/125
W Bellows St	City	Local	Minor Collector	I-5 Exits 124/125
Roseburg High School	Private	--	--	I-5 Exits 124/125
W Corey Ct	City	Local	Local	I-5 Exits 124/125
W Madrone St	City	Local	Local	I-5 Exits 124/125

1. ODOT TransGIS <https://gis.odot.state.or.us/transgis/>, effective date 2023.
2. Roseburg Transportation System Plan, Figure 9: Functional Classification, 2019.
3. I-5 Exits 124/125 Subarea and/or Garden Valley Corridor Subarea.

FIGURE 12. ROADWAY FUNCTIONAL CLASSIFICATIONS BY JURISDICTION

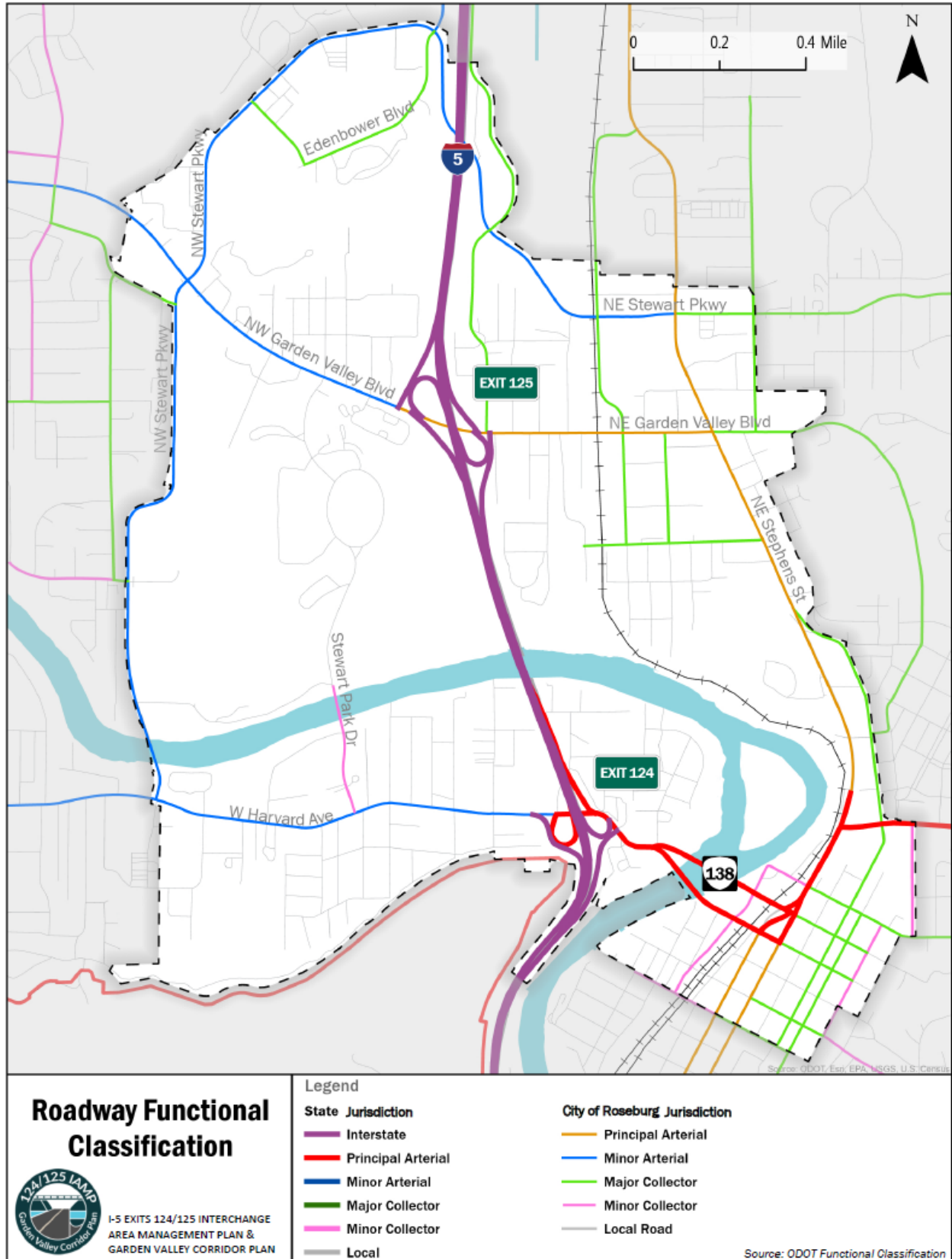
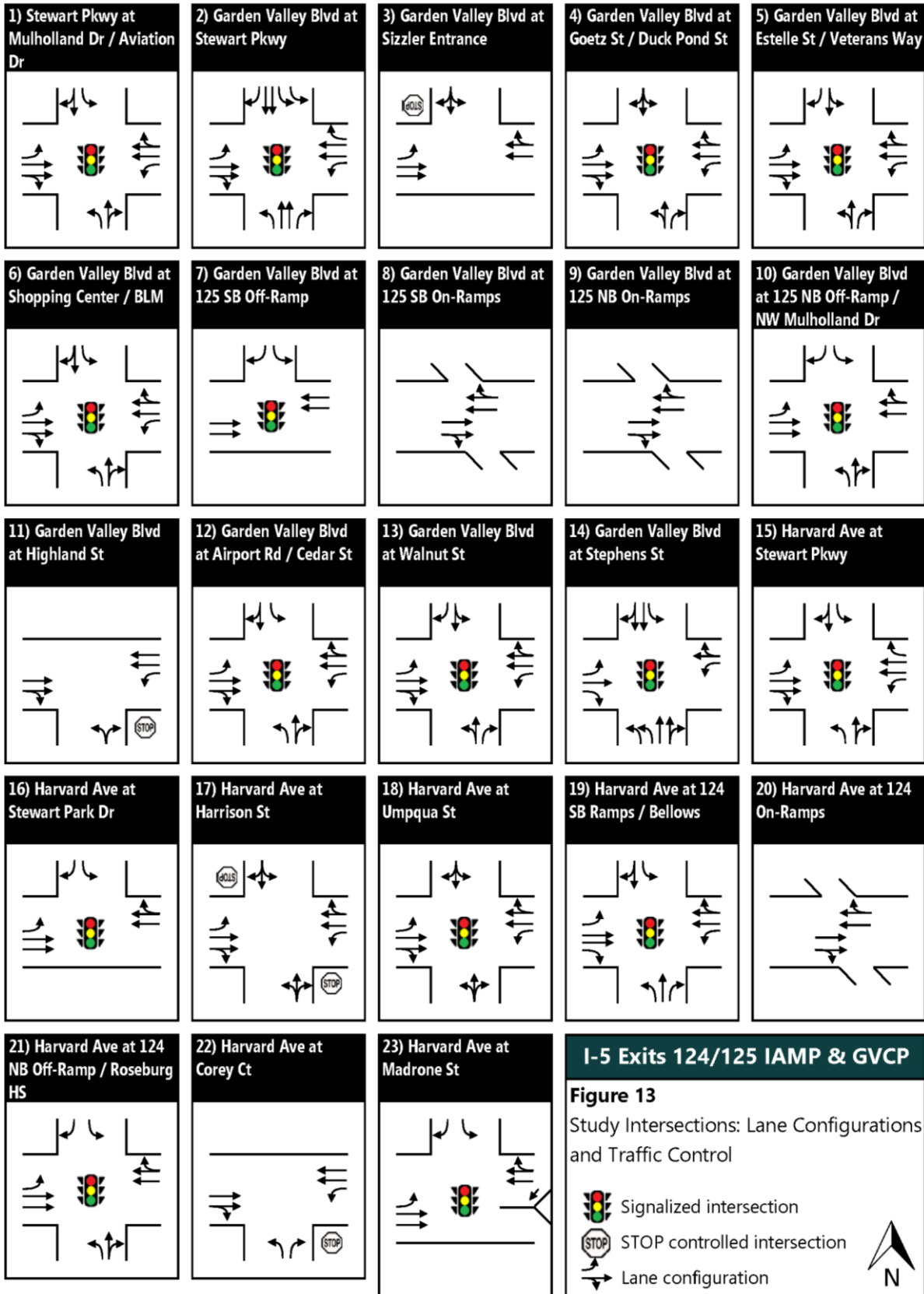


FIGURE 13. STUDY INTERSECTIONS LANE CONFIGURATIONS AND TRAFFIC CONTROL



Note: Intersection 10 (Garden Valley Boulevard at Interchange 125 Northbound Off-Ramp / NW Mulholland Drive) has completed improvements to add dedicated left, through and right movements; these changes will be reflected in the future baseline analysis

TABLE 10. ROADWAY CHARACTERISTICS

ROADWAY	LANES	POSTED SPEED (MPH)	LANE WIDTH (FT) ²	INDIVIDUAL SHOULDER WIDTH (FT) ²	TOTAL SURFACE WIDTH (FT) ²	SIDEWALKS?	BICYCLE LANES?	ON-STREET PARKING?	SUBAREA ³
I-5									
Northbound	2 ¹	60	12	4–16	32–52	No	No; Shared-use path under I-5	No	I-5 Exits 124/125
Southbound	2	60	12	6–10	40	No		No	I-5 Exits 124/125
OR 138									
W Harvard Ave	4 ¹	30	10	0–6	64–66	Yes	Yes	No	I-5 Exits 124/125
SE Washington Ave	2	30	12–14	0–4	30–37	Yes	Yes	No	I-5 Exits 124/125
SE Oak Ave	2	30	14–17	0–5	31–33	Yes	No	No	I-5 Exits 124/125
W Harvard Ave	4 ¹	30–35	12	0–4	60–62	Yes	No	No	I-5 Exits 124/125
NW Garden Valley Blvd	4 ¹	35	11–12	0–6	60–80	Yes	Yes	No	Both
NE Garden Valley Blvd	4 ¹	30	10–11	0–6	52–54	Yes	No	No	Both
NW Stewart Pkwy	2–4 ¹	35–40	12	0–6	56–94	Partial	Yes	No	Both
NE Stephens St	4 ¹	35–45	12	0–6	66–80	Yes	Yes	No	Both
NW Aviation Dr	2	30	10–14	6	42	Yes	Yes	No	I-5 Exits 124/125
NW Mulholland Dr	2 ¹	35	10	5	40	Yes	Yes	No	Both
NE Airport Rd	2 ¹	25	12–14	0–5	40	Yes	Partial	No	Both
NE Cedar St	1–2	20	10–14	3–5	38–40	Partial	Partial	No	I-5 Exits 124/125
NE Walnut St	2	25 (statutory speed)	12–14	0–6	40	Yes	No	Yes	I-5 Exits 124/125
NW Stewart Park Dr	2	25 (statutory speed)	10–12	0	20	Partial	No	No	I-5 Exits 124/125
W Bellows St	2	25 (statutory speed)	12–14	5	34–46	Yes	Yes	No	I-5 Exits 124/125

1. Value represents through lanes and does not include auxiliary lane or center turn lane.
2. Widths for ODOT facilities from ODOT Highway Inventory Detail Report, data refreshed 4/26/2024; City of Roseburg widths estimated from visual inspection of aerial imagery.
3. I-5 Exits 124/125 Subarea and/or Garden Valley Corridor Subarea.

4.1.4 Freight Routes

I-5 is designated as a Freight Route in the Oregon Highway Plan (OHP). The National Highway System (NHS) includes the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility. The NHS routes within the study area include:

- I-5
- OR 138 (Diamond Lake Boulevard)
- NE and SE Stephens Street
- SE Pine Street
- NE Garden Valley Boulevard (between the southbound ramp terminal and NE Stephens Street)

I-5 and OR 138 are also Reduction Review Routes. Any modifications to these routes may not permanently reduce the "vehicle-carrying capacity". In this context, "vehicle-carrying capacity" refers to the vertical and horizontal clearance of a highway section that can physically carry motor vehicles. A reduction of vehicle-carrying capacity means a permanent reduction in the horizontal or vertical clearance of a highway section, by a permanent physical obstruction to motor vehicles located on usable right-of-way.

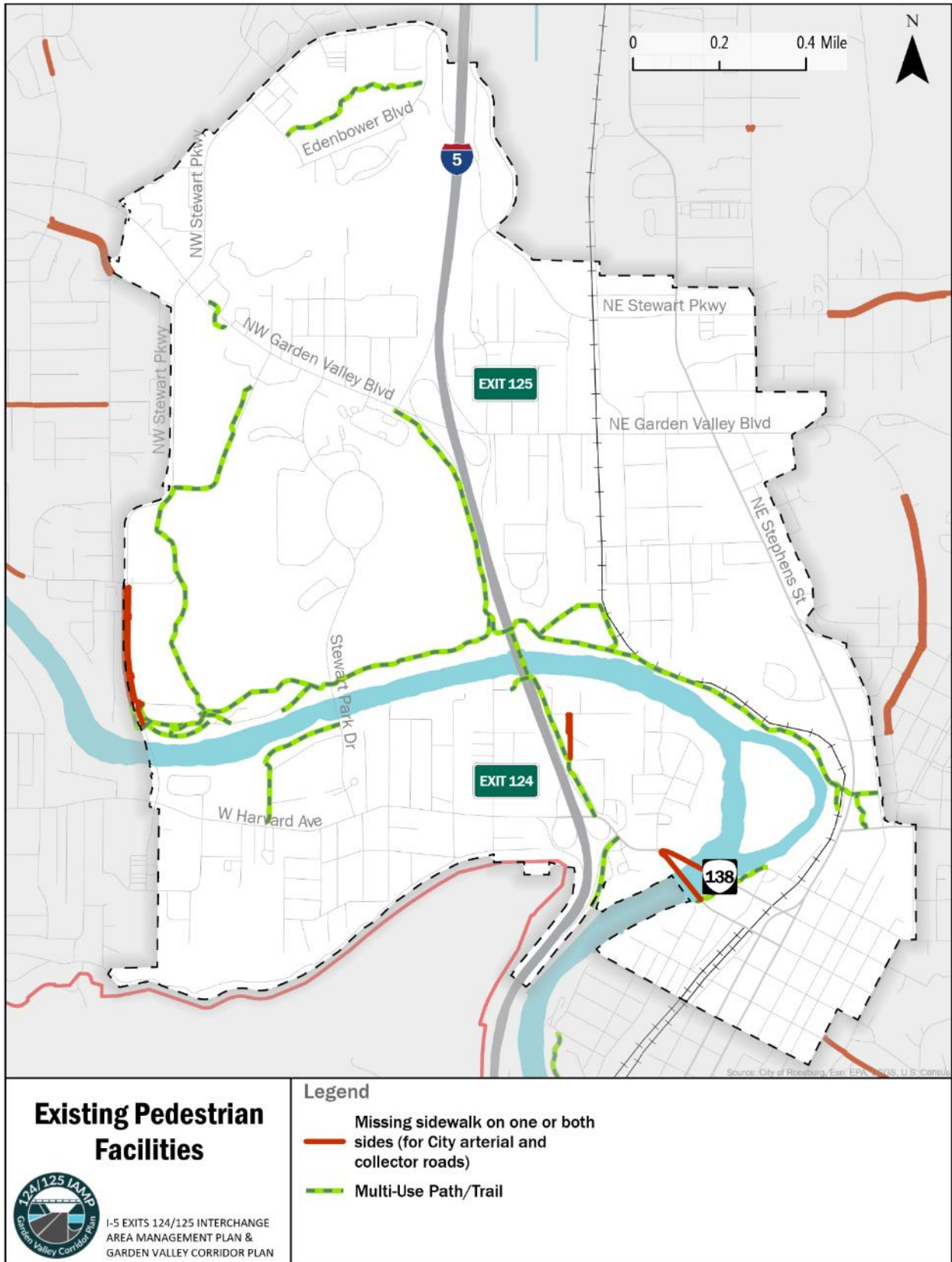
4.2 EXISTING PEDESTRIAN AND BICYCLE NETWORK

This section provides a basic inventory of the current pedestrian and bicycle network within the study area. For additional details, see the Roseburg *Bike Route Plan* (2023); the plan provides background and definitions of typical facilities, types of users, and barriers to travel.

4.2.1 Pedestrian Network

The pedestrian facility inventory reviews the presence of sidewalks on arterial or collector roads and the presence of multi-use paths. Figure 14 shows locations where sidewalks are missing on one or both sides of the street for arterials or collectors. Within the study area, only a few roads have incomplete sidewalk networks: SE Washington Avenue and SE Oak Avenue crossing the South Umpqua River (sidewalk on one side only) and SW Bellows St north of W Chatham Drive. In addition, the figure shows the location of existing multi-use paths that are shared with bicyclists and concentrated in the parks and golf course near the South Umpqua River.

FIGURE 14. EXISTING PEDESTRIAN FACILITIES



4.2.2 Bicycle Network

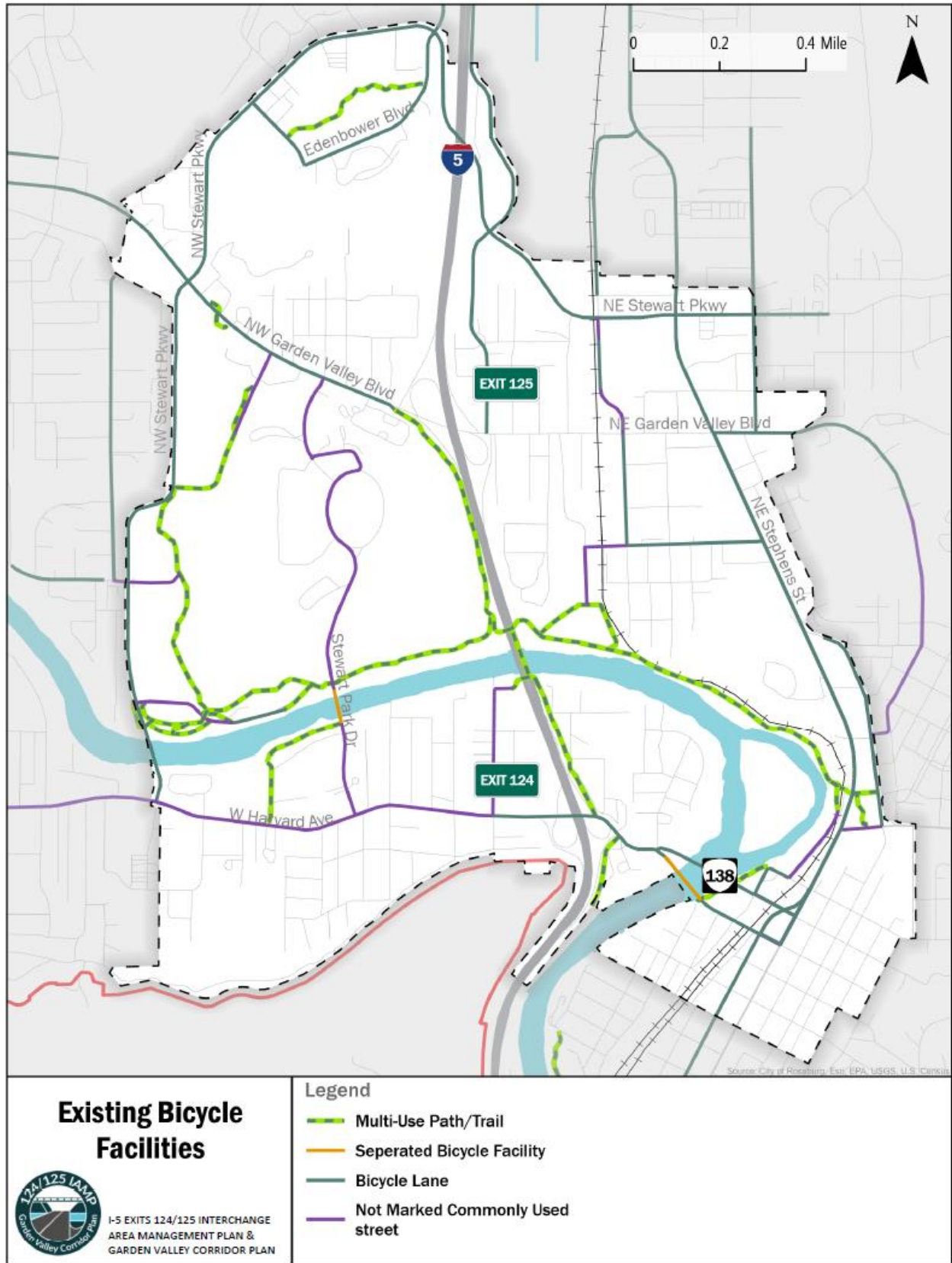
The City of Roseburg's existing bicycle network is shown in both Figure 15. The map categorizes facilities in the following ways:

- Multi-Use Path/Trail: Separated trail, which includes multi-use paths.
- Separated Bicycle Facility: Road-adjacent physically separated bikeway, which includes the protected shared sidewalk on the Oak Avenue bridge. There are few of these.
- Bicycle Lane: Shared roadway designated for bikes with striping/signing, which includes roads with bike lanes.
- Not Marked Commonly Used Street: Street does not have formal bicycle facilities.

Multi-Use Paths

The City of Roseburg offers several multi-use paths throughout its jurisdiction, though they are generally concentrated in parks and near the river. One multi-use path follows the northern edge of the South Umpqua River through Stewart Park, passing under I-5 and then following the river around Elk Island. This multi-use path terminates at Douglas Avenue. The Freeway Bike Trail runs along the eastern side of I-5 from the bridge at the South Umpqua River, then south to the Fairgrounds. There is also a multi-use path through Gaddis Park. In addition, one off-street bicycle path exists along Newton Creek between Rennan Street and Stewart Parkway.

FIGURE 15. EXISTING BICYCLE SYSTEM



4.3 TRANSIT

Public transit can provide intra- and inter-city transportation alternatives for those who cannot or choose not to drive motor vehicles. Public transportation in Roseburg is provided by Umpqua Public Transportation District (UPTD). UPTD provides fixed-route and paratransit for the greater Roseburg area, with commuter services to nearby cities. Six transit lines provide service in Roseburg. The route names and description are included in Table 11.

The Greenline and Redline routes are the primary routes within Roseburg and both routes pass through the Exit 124 and Exit 125 interchanges via Garden Valley Boulevard and Harvard Avenue. Route 99 travels between Umpqua Community College and Canyonville, with a stop in downtown Roseburg. The Sunshine Park route serves east Roseburg, connecting downtown to Sunshine Park via Diamond Lake Boulevard. The Winston Greyline connects Winston to downtown Roseburg with Stephens St. The Sutherlin BlueLine does not travel through the study area.

TABLE 11. TRANSIT SERVICE SUMMARY

Route Name	Service Frequency	Service Times	Route	Key Stops
Roseburg Greenline	Hourly service	6:35 AM – 8:10 PM	Umpqua Community College, Stephens St, Stewart Pkwy, Garden Valley Blvd, Diamond Lake Blvd, OR 138, W Harvard Ave	<ul style="list-style-type: none"> • Umpqua Community College • Mercy Hospital • BLM • Health Department
Roseburg Redline	Hourly service	6:15 am – 8:09 pm	W Harvard Ave, through downtown, Stephens St and NW Stewart Pkwy	<ul style="list-style-type: none"> • Umpqua Community College • Roseburg Valley Mall • Roseburg Municipal Airport • Downtown
Route 99	Peak service (AM, midday, and PM)	4:50 am – 8:00 pm	OR 99 between Seven Feathers Casino, Winston, and Roseburg	<ul style="list-style-type: none"> • Seven Feathers Casino • Winston • Downtown Roseburg
Sunshine Park Route	Peak service (AM, midday, and PM)	7:30 am – 7:15 pm	Sunshine Park along Diamond Lake Blvd	<ul style="list-style-type: none"> • Downtown • Sunshine Park

Source: Umpqua Public Transportation District, <https://www.umpquatransit.com>, accessed 6/17/2024.

4.4 INTELLIGENT TRANSPORTATION SYSTEMS FACILITIES

Within the study area there are two intelligent transportation systems (ITS), as shown in Table 12.

TABLE 12. ITS FACILITIES

LOCATION DESCRIPTION	TYPE
I-5 MP 125 (Exit 125)	Camera Weather Systems
I-5 MP 124 (Exit 124)	Camera

4.5 BRIDGE INVENTORY

Due to the existing topography and natural features, there are a number of significant bridges along the state and local roadways within the study area. The 2022 Bridge Condition Reports were reviewed for those bridges located along state highways. The latest 2013 bridge inspection reports were reviewed for local facility bridges. These bridges and their structural condition are listed in Table 13.

TABLE 13. ODOT BRIDGE CONDITION SUMMARY

BRIDGE NAME	BRIDGE NO.	HIGHWAY/ROADWAY SERVED	YEAR CONSTRUCTED	SUFFICIENCY RATING	STRUCTURAL CONDITION
I-5 over Harvard Ave	07669A	I-5	1976	91.8	Fair
I-5 over Bellows St	07668A	I-5	1976	95.8	Fair
I-5 over South Umpqua River (northbound)	07404A	I-5	1976	84.0	Fair
I-5 over South Umpqua River (southbound)	07404	I-5	1955	77.5	Fair
Garden Valley Boulevard bridge over I-5	07667	Garden Valley Blvd	1955	71.8	Fair
OR 138 (Washington Ave) bridge over South Umpqua River	08899	OR 138 (SE Washington Ave)	1961	65.7	Fair
South Umpqua River, Hwy 138 Conn (Oak Ave)	07016A	OR 138 (SE Oak Ave)	1971	77.9	Fair
OR 138 bridge over Deer Creek	06821A	OR 138	1967	97.1	Fair
Centennial bridge over South Umpqua River	26T05	Stewart Park Dr	1946	14.8	Poor
Stewart Parkway bridge over South Umpqua River	26T09	Stewart Pkwy	1978	62.3	Fair

4.6 EXISTING AIR, WATER, RAIL, AND PIPELINE INVENTORIES

While the movement of goods and commodities into, out of, and through the Roseburg area is heavily dependent on the highway system (see the discussion of the Freight Routes in the Existing Street Network section above), freight movement also occurs via rail and pipeline modes. This section describes air, water, rail, and pipeline facilities in Roseburg.

4.6.1 Air Facilities

The Roseburg Regional Airport is located on the north side of Roseburg near I-5. Owned and operated by the City of Roseburg, the Roseburg Regional Airport does not have commercial flights. The nearest airports for commercial flights are North Bend, Eugene, or Medford. A transient parking fee is charged per day and can be paid on-site.

There are regular freight flights into and out of Roseburg Regional Airport. Generally, three departing flights leave Roseburg, one for Medford in the morning, and two for Portland scheduled during the evening. Approximately seven flights arrive from Portland in a typical morning. Flight lessons are offered to pilots of all ages and experience levels.

Classified by the Oregon Aviation Plan (OAP 2007) as a Category III airport, Roseburg is a “Regional General Aviation Airport” and supports most twin and single engine aircraft. It may accommodate occasional business jets and supports regional transportation needs. As a Category III, the site is designed to handle less than 30,000 yearly operations and is more than 90 minutes from a commercial airfield. Especially during the summer months, Roseburg Regional Airport accommodates seasonal fire response activity for surrounding areas.

The airport updated their Master Plan in 2017.

Potential or proposed changes to the Interstate and other roadways within 20,000 feet of the airport will need to be vetted by Oregon Aviation and the Federal Aviation Administration (FAA) to understand impacts to navigable airspace.

4.6.2 Water Facilities

The South Umpqua River meets the North Umpqua River approximately eight miles northwest of downtown Roseburg. This confluence becomes the Umpqua River. The South Umpqua River is used primarily for fishing and recreational boating; north of the Stewart Parkway Bridge the river is considered non-navigable. The North Umpqua River is considered non-navigable above the Winchester Dam. Only the Umpqua River near Reedsport, Oregon, is used for limited shipments of raw timber.

4.6.3 Rail Facilities

One railroad line passes through Roseburg. The Central Oregon & Pacific Railroad (CORP) owns the railroad route within the study area that runs parallel to I-5. Currently, the railroad line is exclusively for freight, with 90 percent of their delivery consisting of forest products. The following cross streets within the study area contain at-grade railroad crossings:

- NW Stewart Parkway
- NE Garden Valley Boulevard

- NE Chestnut Avenue
- SE Douglas Avenue
- SE Washington Avenue
- SE Oak Avenue

CORP, headquartered in Roseburg, Oregon, has 389 miles of track between Eugene, Oregon and Black Butte, California. CORP tracks are maintained to Federal Railroad Administration (FRA) Class 1 (47 miles) and Class 2 (200 miles) conditions, which limits maximum speeds to 10 mph for Class 1 or 25 mph for Class 2.

Current service includes one northbound and one southbound train five days a week on eight routes:

- Eugene and Roseburg
- Glendale and Medford
- Roseburg and Dillard
- Dillard and Riddle
- Dillard and Glendale
- Springfield and Cottage Grove
- Sutherlin and Roseburg
- White City and Medford

The approximate schedule is one northbound train between 11:00 AM and 1:00 PM and one southbound train between 5:00 and 7:00 PM. The average crossing gate down for a 100 car train is approximately seven minutes.⁴

No passenger rail service is available in the study area; the closest available is AMTRAK located in Eugene, Oregon.

4.6.4 Pipeline Facilities

There is one major natural gas pipeline transportation system in the Roseburg UGB and numerous secondary natural gas distribution lines that spur off the mainline to provide gas to residences and businesses. The major pipeline is part of a system operated by Northwest Pipeline LLC and travels north-south along the western edge of Roseburg.⁵

5 ACCESS INVENTORY

ODOT provided a detailed inventory of public and private access points based on field observations and a review of access data as part of the previous IAMP work in 2013. Attachment B includes a summary of access points on Harvard Avenue and Garden Valley Boulevard in the study area.

Per Oregon Administrative Rule 734, Division 51 and the Oregon Highway Plan (OHP), no public or private access is permitted within the influence area of an interchange, i.e. 1,320 feet or ¼ mile from the ramp terminal. Within the I-5 Exit 124 Interchange Area there are 26 private and nine public access points within the interchange influence area. The I-5 Exit 125 Interchange Area has 24 private and 12 public access points within the interchange influence area.

⁴ Schedule information per email communication with Central Oregon and Pacific Railroad, June 13, 2024.

⁵ *National Pipeline Mapping System Public Map Viewer*, Pipeline and Hazardous Materials Safety Administration. 2017

ATTACHMENT A: DETAILED USES BY ZONING DISTRICT

Land in the study area is subject to the land use regulations of the City of Roseburg, in particular the City of Roseburg Comprehensive Plan and Roseburg Municipal Code (RMC) Title 12 – Land Use Development Regulations. Because future development and redevelopment in the study area will be subject to RMC Title 12, knowing the zoning designations, permitted uses, and lot standards in provides information about the type and intensity of transportation demand to be expected in the area.

Table A-1 provides a detailed summary of the purposes, permitted uses, and lot standards in each zoning district in the study area and the corresponding Comprehensive Plan designation.

TABLE A-1. ZONING INFORMATION AND COMPREHENSIVE PLAN DESIGNATION

ZONING DISTRICT	PURPOSE, PERMITTED USES, AND LOT STANDARD	CORRESPONDING COMPREHENSIVE PLAN DESIGNATION
Public Reserve Roseburg Municipal Code (RMC) RMC Section 12.04.020	Purpose <ul style="list-style-type: none"> • A variety of public service activities may be conducted without interference from inappropriate levels of residential, commercial, or industrial activities • Intended to be applied primarily to publicly owned lands Uses <ul style="list-style-type: none"> • Schools, parks, recreation areas, hospitals, nursing and group homes, places of worship, and electricity utility facilities are permitted outright • Waste and recycling centers and telecommunications facilities are permitted conditionally Lot Standards <ul style="list-style-type: none"> • No minimum lot size • Maximum lot coverage: 60% 	Public/Semi-public or Parks/Open Space and Hazard Areas

TABLE A-1. ZONING INFORMATION AND COMPREHENSIVE PLAN DESIGNATION

ZONING DISTRICT	PURPOSE, PERMITTED USES, AND LOT STANDARD	CORRESPONDING COMPREHENSIVE PLAN DESIGNATION
Airport District RMC Section 12.04.060	Purpose <ul style="list-style-type: none"> • Protects airport facilities and operations from incompatible uses and provides for future airport expansion • Preserve land for future commercial and industrial uses that are dependent on air transportation Uses <ul style="list-style-type: none"> • Aircraft sales, rental, repair, service, storage and schools, air cargo and passenger terminals, public and semi-public buildings for airport operations, and restaurants and bars are permitted outright • Offices and telecommunications facilities are permitted conditionally Lot standards <ul style="list-style-type: none"> • No minimum lot size or maximum coverage 	Public/Semi-public
Professional Office RMC Section 12.04.040	Purpose <ul style="list-style-type: none"> • Intended to provide areas for low-intensity office uses • Exterior design and landscaping serve as a transition or buffer between residential and more intensively developed areas Uses <ul style="list-style-type: none"> • Professional offices, business services, personal services, parks, and community centers are permitted outright • Multi-family housing (free-standing or above commercial uses), social services, civic uses, day care, and telecommunications facilities are permitted conditionally Lot Standards <ul style="list-style-type: none"> • No minimum lot size • Maximum lot coverage: 80% 	Professional Office

TABLE A-1. ZONING INFORMATION AND COMPREHENSIVE PLAN DESIGNATION

ZONING DISTRICT	PURPOSE, PERMITTED USES, AND LOT STANDARD	CORRESPONDING COMPREHENSIVE PLAN DESIGNATION
<p>General Commercial RMC Section 12.04.040</p>	<p>Purpose</p> <ul style="list-style-type: none"> • Provide a variety of retail and wholesale business • Serve general community-wide and regional commercial needs <p>Uses</p> <ul style="list-style-type: none"> • Retail and stores, personal services, restaurants, drive-up windows, theaters and amusement facilities, motels/hotels, parking lots, vehicle service stations, schools, public services and uses, libraries and museums, housing above commercial uses, and mobile home parks are permitted outright • Multi-family housing (freestanding), outdoor recreation facilities, and telecommunications facilities are permitted conditionally <p>Lot Standards</p> <ul style="list-style-type: none"> • No minimum lot size • Maximum lot coverage: 100% 	<p>Commercial</p>
<p>Community Commercial RMC Section 12.04.040</p>	<p>Purpose</p> <ul style="list-style-type: none"> • Provide community shopping facilities • Intended to preserve and enhance areas with a range of retail sales and services serving both long- and short-term needs on a community-wide basis <p>Uses</p> <ul style="list-style-type: none"> • Retail and stores, personal services, restaurants, theaters, motels/hotels, parking lots, vehicle service stations, schools, public services, libraries and museums, and housing above commercial uses are permitted outright • Multi-family housing (freestanding), drive-up windows, public services and uses, and telecommunications facilities are permitted conditionally <p>Lot Standards</p> <ul style="list-style-type: none"> • No minimum lot size • Maximum lot coverage: 100% 	<p>Commercial</p>

TABLE A-1. ZONING INFORMATION AND COMPREHENSIVE PLAN DESIGNATION

ZONING DISTRICT	PURPOSE, PERMITTED USES, AND LOT STANDARD	CORRESPONDING COMPREHENSIVE PLAN DESIGNATION
<p>Central Business District RMC Section 12.04.050</p>	<p>Purpose</p> <ul style="list-style-type: none"> • Provide for general retail, residential, professional office/service, and mixed use activities serving a regional/community-wide need • Design standards meant to ensure compatibility with adjacent land uses, and encourage high-quality design and development • Intended to promote a strong pedestrian orientation through its mix of permitted uses and specific development standards <p>Uses</p> <ul style="list-style-type: none"> • Business offices, business services, retail and stores under 10,000 square feet, personal services, restaurants, parking lots and garages, and housing above commercial uses are permitted outright • Retail/commercial uses over 10,000 square feet, drive-through banking, restaurants with outdoor seating for more than 12 customers, theaters, multi-family housing (freestanding), drive-up windows, and telecommunications facilities are permitted conditionally <p>Lot and Building Standards</p> <ul style="list-style-type: none"> • No minimum lot size • Maximum lot coverage: 60% • Maximum building height: 75 feet 	<p>Commercial</p>

TABLE A-1. ZONING INFORMATION AND COMPREHENSIVE PLAN DESIGNATION

ZONING DISTRICT	PURPOSE, PERMITTED USES, AND LOT STANDARD	CORRESPONDING COMPREHENSIVE PLAN DESIGNATION
<p>Mixed Use RMC Section 12.04.070</p>	<p>Purpose</p> <ul style="list-style-type: none"> • Provides areas for a variety of uses that serve community-wide and regional needs • Potential for high density uses • Strives to ensure compatibility with adjacent uses are compatible and the carrying capacity of public facilities <p>Uses</p> <ul style="list-style-type: none"> • Trucking, warehousing, wholesale businesses, textile production, laboratories, instrument and electrical/electronic equipment manufacturing, food processing and production, data center, professional offices (less than 30% of the total floor area), mini-retail (250 square feet), restaurants, amusement facilities, motels/hotels, parking lots, vehicle service stations, public services and uses, housing above or behind commercial uses, and mobile home parks are permitted outright • Multi-family housing (freestanding) and telecommunications facilities are permitted conditionally <p>Lot Standards</p> <ul style="list-style-type: none"> • Minimum lot size: 2 acres for business parks • Maximum lot coverage: 80% (for business parks and multi-family housing); 100% 	<p>Industrial</p>
<p>Medium Industrial RMC Section 12.04.070</p>	<p>Purpose</p> <ul style="list-style-type: none"> • Intended to create, preserve, and enhance areas containing a wide range of manufacturing and related establishments, and is typically appropriate to areas providing a wide variety of sites with good rail or highway access <p>Uses</p> <ul style="list-style-type: none"> • Trucking, truck/freight yards and terminals, warehousing, wholesale businesses, textile production, laboratories, instrument and electrical/electronic equipment manufacturing, food processing and production, paper/paper product manufacturing, meat processing, vehicle service stations, and public services are permitted outright • Data centers, restaurants, and telecommunications facilities are permitted conditionally <p>Lot Standards</p> <ul style="list-style-type: none"> • No minimum lot size • Maximum lot coverage: 100% 	<p>Industrial</p>

TABLE A-1. ZONING INFORMATION AND COMPREHENSIVE PLAN DESIGNATION

ZONING DISTRICT	PURPOSE, PERMITTED USES, AND LOT STANDARD	CORRESPONDING COMPREHENSIVE PLAN DESIGNATION
<p>High-density Multifamily Residential RMC Section 12.04.030</p>	<p>Purpose (Residential)</p> <ul style="list-style-type: none"> • Intended to provide a variety of housing opportunities • Standards to provide development flexibility, while striving for compatibility with existing neighborhoods <p>Uses (High-density multi-family residential)</p> <ul style="list-style-type: none"> • Townhouse and multi-family housing, care and residential homes and facilities, and churches on lots of at least 40,000 square feet are permitted outright • Day care, convenience commercial uses, churches on lots less than 40,000 square feet, and telecommunication facilities are permitted conditionally • Single-family and two-family housing, mobile home parks, schools, and parks are not permitted <p>Lot standards</p> <ul style="list-style-type: none"> • Minimum lot size: 30,000 square feet • Minimum lot area/unit: 800 square feet • Maximum lot coverage: 80% 	<p>High Density Residential</p>
<p>Multi-family Residential RMC Section 12.04.030</p>	<p>Uses</p> <ul style="list-style-type: none"> • All residential and care uses as well as churches on lots of at least 40,000 square feet are permitted outright • Schools, day care, parks, churches on lots less than 40,000 square feet, and telecommunication facilities are permitted conditionally • Mobile home parks are not permitted <p>Lot standards</p> <ul style="list-style-type: none"> • Minimum lot size: 10,000 square feet • Minimum lot area/unit: 1,500 square feet • Maximum lot coverage: 80% 	<p>High Density Residential</p>

TABLE A-1. ZONING INFORMATION AND COMPREHENSIVE PLAN DESIGNATION

ZONING DISTRICT	PURPOSE, PERMITTED USES, AND LOT STANDARD	CORRESPONDING COMPREHENSIVE PLAN DESIGNATION
<p>Medium-density Multifamily Residential RMC Section 12.04.030</p>	<p>Uses</p> <ul style="list-style-type: none"> • Most residential and care uses as well as churches on lots of at least 40,000 square feet are permitted outright • Residential care centers and facilities, schools, day care, parks, churches on lots less than 40,000 square feet, and telecommunication facilities are permitted conditionally <p>Lot standards</p> <ul style="list-style-type: none"> • Minimum lot size: 10,000 square feet • Minimum lot area/unit: 2,350 square feet • Maximum lot coverage: 80% 	<p>Medium Density Residential</p>
<p>Limited Multi-family Residential RMC Section 12.04.030</p>	<p>Uses</p> <ul style="list-style-type: none"> • Most residential and care uses as well as churches on lots of at least 40,000 square feet are permitted outright • Residential care centers and facilities, schools, day care, parks, churches on lots less than 40,000 square feet, and telecommunication facilities are permitted conditionally <p>Lot standards</p> <ul style="list-style-type: none"> • Minimum lot size: 10,000 square feet • Minimum lot area/unit: 3,000 square feet • Maximum lot coverage: 70% 	<p>Medium Density Residential</p>
<p>Single-family Residential RMC Section 12.04.030</p>	<p>Uses</p> <ul style="list-style-type: none"> • Single-family detached housing, two-family housing that is part of a subdivision, family day care homes, residential homes, and churches are permitted outright • Two-family housing, townhouses, residential facilities, day care, parks, and telecommunication facilities are permitted conditionally • Mobile home parks, residential care centers and facilities, and schools are not permitted <p>Lot standards</p> <ul style="list-style-type: none"> • Minimum lot size: 10,000/7,500/6,000 square feet (R10/R7.5/R6) • Maximum lot coverage: 55% 	<p>Low Density Residential</p>

ATTACHMENT B: EXISTING ROADWAY ACCESS INVENTORY

Source: Exit 124 & 125 IAMP Existing Conditions (Technical Memorandum #2 & #3), January 5, 2015.

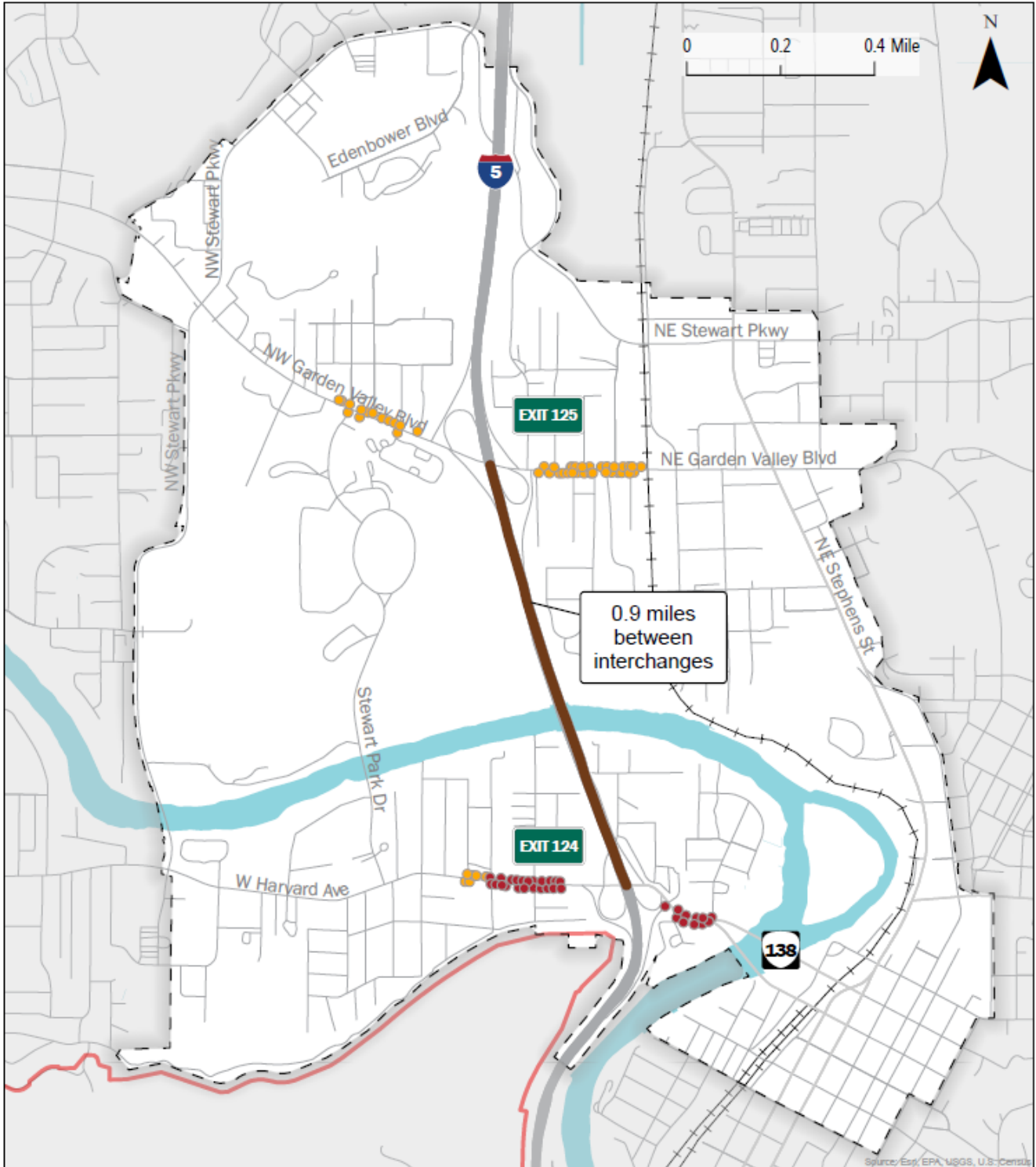
The table below summarizes the location and type of access points along Harvard Avenue and Garden Valley Boulevard in relation to the Exit 124 and Exit 125 interchanges.

ID	MILE POINT/ROA STATION	SIDE OF ROADWAY	PUBLIC VS. PRIVATE/TYPE	USE	DISTANCE TO NEXT ACCESS POINT (FT)	ACCESS ROAD WIDTH (FT)
GARDEN VALLEY BOULEVARD						
1		N/S	Public/ Street	Stewart Pkwy	240	100
2		N	Private/ Commercial	Walgreens Store	340	45
3		N	Private/ Commercial	Rodeo Steak House & Grill	170	35
4		S	Private/ Commercial	Better Living Center	30	30
5		N	Private/ Commercial	Steelhead Run Plaza	215	40
6		N	Private/ Commercial	Steelhead Run Plaza	365	30
7		N/S	Public/ Street	Duck Pond St/ Goetz St	75	65
8		N	Private/ Commercial	We Give Great Haircuts	60	70
9		N	Private/ Commercial	Liberty Tax Service	125	25
10		N	Public/ Street	Crouch St	100	30
11		N	Private/ Commercial	Burger King	35	35
12		S	Private/ Commercial	Fred Meyer	95	40
13		N	Private/ Commercial	O'Reilly Auto Parts	75	30
14		N	Private/ Commercial	Long's Flowers	100	45
15	49+30	N/S	Public/ Street	Centennial Dr/ Estelle St	140	60
16	48+05	N	Private/ Commercial	James Fox Realty	20	40
17	47+87	S	Public/ Service	Roseburg Fire Dept.	135	30
18	46+15	N	Public/ Street	Dogwood St	120	45
19	45+06	N	Private/ Commercial	Wendy's	50	40
20	44+20	N	Private/ Commercial	Shell Station	60	45
21	43+55	N	Private/ Commercial	Shell Station	60	60
22	42+93	N/S	"Public/Street &	"Bureau of Land Management (S)/ Fred	200	55
23	40+96	N	Private/Commercial"	Meyer (N)"	170	50
24	38+04	N	Public/ Street	Best Western Garden Valley Inn	230	50
25	37+47	S	Public/ Ramp Terminal	I-5 SB Off-Ramp Terminal	10	70
26	29+21	N	Public/ Ramp Terminal	I-5 SB On-Ramp Terminal	725	70
27	29+16	S	Public/ Ramp Terminal	I-5 SB On-Ramp Terminal	10	65
28	27+95	N	Public/ Ramp Terminal	I-5 NB On-Ramp Terminal	130	70
29	27+75	N/S	Public/ Ramp Terminal	I-5 NB On-Ramp Terminal	100	65
30	26+62	S	Public/ Street/ Ramp Terminal	I-5 NB Off-Ramp Terminal/ Mulholland Dr	25	45
31	25+94	N	Private/ Commercial	News & Smokes	25	60
32	25+65	S	Private/ Commercial	Smoke House & Grill Food Truck	25	45
33	24+99	S	Private/ Commercial	News & Smokes	50	25
34	24+75	N	Private/ Commercial	Quality Inn	50	30
35		N	Public/ Street	Eden St	0	55
36	24+16	S	Private/ Commercial	Texaco Station	40	25
37	23+71	S	Private/ Commercial	Shaun's Precision Lube & Tune	50	30
38	23+17	S	Private/ Commercial	Shaun's Precision Lube & Tune	0	60

ID	MILE POINT/ROA STATION	SIDE OF ROADWAY	PUBLIC VS. PRIVATE/TYPE	USE	DISTANCE TO NEXT ACCESS POINT (FT)	ACCESS ROAD WIDTH (FT)
GARDEN VALLEY BOULEVARD						
39	22+98	N	Private/ Commercial	Quick Check Financial	40	55
40	22+55	S	Private/ Commercial	Casey's	15	30
41	22+47	N	Public/ Street	Ellan St	30	30
42	22+09	S	Private/ Commercial	Verizon Wireless	60	30
43	21+63	S	Private/ Commercial	KFC	0	15
44	21+55	N	Private/ Commercial	KFC	20	25
45	21+39	S	Public/ Street	Beacon St	40	15
46	20+94	N	Private/ Commercial	Sherwin-Williams Paint Store	50	40
47	21+00	S	Private/ Commercial	Comspan	90	40
48	20+66	N	Public/ Street	Hicks St	50	35
49	19+00	S	Private/ Commercial	Bailey Veterinary Clinic	90	30
50	18+10	N	Public/ Street	Highland St	20	30
51	18+39	S	Public/ Street	Fairmount Ave	55	20
52		S	Private/ Commercial	Wagon Wheel Restaurant	40	40
53		N	Private/ Commercial	Convenience Store	60	25
54		S	Private/ Commercial	J.C. Reeves Real Estate	35	45
55		N	Public/ Street	Park St	45	60
56		S	Private/ Commercial	Garden Valley Storage	65	25
57		N	Private/ Commercial	Chevron Fuel Facility	115	50
58		N	Private/ Commercial	Felten Motors	100	35
59		S	Private/ Commercial	Garden Valley Center	155	30
60		N/S	Public/ Street	Cedar St/ Airport Rd	110	50
61		N	Private/ Commercial	Papa Murphy's	120	75
62		N	Public/ Street	Willow St	50	35
63		S	Private/ Commercial	Vacant	200	30
64		N/S	Public/Street & Private/Commercial	Walnut St (S)/ Premier West Bank (N)	150	40
65		N	Public/ Street	Dee St	60	35
66		S	Private/ Commercial	McDonald's	40	25
67		N	Private/ Commercial	Ken's Cleaning	95	40
68		N	Private/ Commercial	Jack in the Box	50	30
69		S	Private/ Commercial	Los Dos Amigos Fiesta	190	25
70		N/S	Public/ Street	Stephens St	NA	100
W HARVARD AVENUE						
71		N/S	Public/Street	Stewart Pkwy	260	90
72		S	Public/Service	Oregon Department of Human Services	340	30
73		N/S	Public/Street	Homewood Lane (S)/Stanton St (N)	200	50
74		N/S	Private/Commercial	Kaul Family	80	50
75		S	Private/Commercial	Kaul Family	50	20
76		S	Private/Commercial	Parking Lot	170	20
77		N/S	Public/Street	Keady Ct.	160	85
78		S	Private/Service	First United Methodist Church	70	30
79		S	Private/Commercial	Business Park	70	20
80		N/S	Private/Commercial	Business Park (S)/Fremont Middle School	100	35
81		S	Public/Services	Clayton Insurance Agency	40	30
82		S	Public/Commercial	Hardward/Shoe Repair	70	20

ID	MILE POINT/ROA STATION	SIDE OF ROADWAY	PUBLIC VS. PRIVATE/TYPE	USE	DISTANCE TO NEXT ACCESS POINT (FT)	ACCESS ROAD WIDTH (FT)
W HARVARD AVENUE						
83		S	Public/Commercial	Hardward/Shoe Repair	50	20
84		S	Public/Commercial	The Dental Hearing Center	130	30
85		S	Public/Commercial	Cascade Denture Center	50	20
86		S	Public/Commercial	Cascade Denture Center	50	30
87		S	Private/Residential	Apartments	120	20
88		S	Private/Residential	Apartments	100	30
89		S	Public/Street	Fairhaven St.	110	50
90		S	Public/Commercial	T Mart	110	35
91		S	Public/Street	Union St.	90	50
92		S	Private/Commercial	Brooke Communications	80	40
93		S	Private/Commercial	Travel Leaders	80	20
94		N	Public/Service	Fir Grove Elementary	100	70
95		S	Public/Street	Wharton St.	30	60
96		S	Private/Commercial	Roseburg Audiology Center	45	75
97		N	Public/Street	Fir St	40	20
98		S	Private/Commercial	Cris Dental	50	25
99		N	Private/Commercial	76 Gas Station	75	100
100		N/S	Public/Street	Ballf St	75	35
101		N	Private/Commercial	Pete's Drive-In	0	20
102		S	Private/Commercial	Doctor Detail	0	45
103		N	Private/Commercial	The Human Bean	0	40
104		S	Private/Residential	Residence	20	20
105		S	Private/Commercial	Lighthouse Insurance Agency	70	15
106		S	Private/Commercial	Lighthouse Insurance Agency	30	20
107		S	Private/Commercial	Harvard Avenue Drugs	0	20
108		N	Public/Street	Elizabeth Street	95	40
109		S	Private/Commercial	Harvard Avenue Drugs	15	20
110		N	Private/Commercial	LKFC/ Long John Silver's/ Java Run	30	65
111		S	Private/Commercial	Cascade Community Bank	100	25
112		S	Private/Commercial	Cascade Community Bank	30	30
113		N	Public/Street	Maple St	75	35
114		N	Private/Commercial	The Mower Shop	30	60
115		S	Private/Commercial	-	70	20
116		N	Private/Commercial	Anderson Place Market	45	20
117	3+31	N/S	Public/Street	Harrison St	50	30
118	3+65	N	Private/Commercial	Charter Cable	20	35
119	3+75	S	Private/Commercial	Shell	55	24
120	4+47	N	Private/Commercial	Charter Cable	20	40
121	4+55	S	Private/Commercial	Shell	50	25
122	5+94	S	Private/Service	Wilson's Chapel of the Roses	50	55
123	5+53	N	Private/Commercial	Subway	55	28
124	5+94	S	Private/Service	Wilson's Chapel of the Roses	20	25
125	6+16	N	Private/Commercial	Grocery Outlet	30	25
126	6+45	S	Private/Commercial	Wilson's Chapel of the Roses	30	29
127	6+98	N	Private/Commercial	Grocery Outlet	30	34
128	7+10	S	Private/Commercial	Gay 90s Restaurant	35	18
129	7+45	N	Private/Commercial	Grocery Outlet	55	26
130	8+07	N/S	Public/Street	Umpqua St	85	33

ID	MILE POINT/ROA STATION	SIDE OF ROADWAY	PUBLIC VS. PRIVATE/TYPE	USE	DISTANCE TO NEXT ACCESS POINT (FT)	ACCESS ROAD WIDTH (FT)
W HARVARD AVENUE						
131	8+87	S	Private/Commercial	Taco Time	25	20
132	8+99	N	Private/Commercial	Aunt Em's Laundry Room	55	22
133	9+70	S	Private/Commercial	Taco Time	25	19
134	9+96	N	Private/Commercial	Hanger	35	31
135	10+38	S	Private/Commercial	Domino's	35	25
136	10+69	N	Private/Commercial	Charley's BBQ	50	20
137	10+89	N	Private/Service	Vacant Hospital Site	0	30
138	11+14	S	Private/Commercial	Preference Pools & Spa	275	22
139		S	Public/Ramp	I-5 SB On-Ramp	190	28
140	-0.94	N/S	Public/Ramp	I-5 SB On-Ramp (S)/ Bellows St (N)	430	38
141	-0.87	N	Public/Ramp	I-5 NB On-Ramp	240	60
142	-0.8	S	Public/Ramp	I-5 NB On-Ramp	95	40
143	-0.977	N/S	Public/Ramp	I-5 NB Off-Ramp (S)/RHS Dwy (N)	170	33
144	-0.75	S	Public/Street	Corey Ct	65	36
145	-0.732	S	Private/Commercial	76 Gas Station	40	42
146	-0.731	N	Private/Service	Mormon Ed. Building	110	24
147	-0.707	S	Private/Commercial	76 Gas Station	30	35
148	-0.7	N	Private/Commercial	Denny's	55	25
149	-0.691	N	Private/Commercial	Texaco	15	32
150	-0.683	S	Private/Commercial	Travelodge	85	30
151	-0.559	N/S	Public/Street	Madrone St	-	32



Access Spacing Map



Legend

Access

- Accesses not meeting 990' spacing standard from interchange on-ramp taper to last approach road, per Table 18, Appendix C of Oregon Highway Plan.
- Accesses not meeting 1320' spacing standard from interchange to first full-movement intersection per Table 18, Appendix C of Oregon Highway Plan.
- Interchange spacing standard of 3 miles not met between Exit 123 and Exit 125, per Table 12, Appendix C of Oregon Highway Plan.

ATTACHMENT C: EXISTING ROADWAY ACCESS INVENTORY

This attachment includes an inventory of ODOT managed accesses within the Study Area. ODOT does not manage any access adjacent to Exit 125 (Garden Valley Interchange).

ID (AMES Inventory ID)	Highway (Roadway)	Jurisdiction	Mile Point	Stationing (ROW)	Side (L/R)	Width	Surface	Public/Private Type	Property Use	Twmsp-Sect-Rng	Tax Lot	ROW Map	Owner
25989	138 North Umpqua 138 OR 138	ODOT	-0.78		R	24	paved	Public	Off Ramp	na	na	8B-22-1	ODOT
2799	138 North Umpqua 138 OR 138	ODOT	-0.78	9+12	L	35	paved	private	Highway School	270624AB & 270613DC	100	8B-22-1	School District No.4
25991	138 North Umpqua 138 OR 138	ODOT	-0.75		R	40	paved	Public	Corey CT	na	na	8B-22-1	City of Roseburg
25986	138 North Umpqua 138 OR 138	ODOT	-0.73	11+25	R	35	paved	private	Gas Station	270624AB	300	8B-22-1	WEST COAST PETROLEUM
25990	138 North Umpqua 138 OR 138	ODOT	-0.73	11+50	L	22	paved	private	church	270624AB	200	8B-22-1	CORP PRES BISHOP CHURCH OF JESUS
25987	138 North Umpqua 138 OR 138	ODOT	-0.71		R	40	paved	private	Gas Station	270624AB	300	8B-22-1	WEST COAST PETROLEUM
25992	138 North Umpqua 138 OR 138	ODOT	-0.7	12+36	L	24	paved	private	Dennys	270624AA	1700	8B-22-1	CSL FAY LLC & RAPACH HOLDINGS LLC
25993	138 North Umpqua 138 OR 138	ODOT	-0.69	13+32	L	30	concrete	private	Gas Station	270624AA	1600	8B-22-1	TI Harvard LLC
25988	138 North Umpqua 138 OR 138	ODOT	-0.68		R	32	paved	private	Inn	270624AA	1800	11B-7-5	315 WEST HARVARD LLC & GONE FISHIN' LLC
26205	138 North Umpqua 138 OR 138	ODOT	-0.56		L	32	paved	Public	Madrone Street	na	na	na	City of Roseburg
26188	138 North Umpqua 138 OR 138	ODOT	-0.66		R	20	paved	Public	Maintenace Access	na	na	na	City of Roseburg
26206	138 North Umpqua 138 OR 138	ODOT	-0.49		R	20	paved	Public	Flint Street	na	na	11B-7-5	City of Roseburg
26183	138 North Umpqua 138 OR 138	ODOT	-0.47	8+45	L	26	paved	private	City Park	270624AA	2200	11B-7-5	City of Roseburg
26207	138 North Umpqua 138 OR 138	ODOT	-0.47		R	28	paved	Public	Parrott Street	na	na	na	City of Roseburg
26182	138 North Umpqua 138 OR 138	ODOT	-0.46	6+35	L	12	paved	private	American Legion	270624AA	2300	11B-7-5	American Legion
26176	138 North Umpqua 138 OR 138	ODOT	-0.45	6+20	R	20	concrete	private	Flower Shop	270624AD	1500	11B-7-5	ELLA SUSAN FLURY REVOCABLE
26178	138 North Umpqua 138 OR 138	ODOT	-0.42		R	38	paved	Public	Spruce Street	na	na	11B-7-5	City of Roseburg
	138 North Umpqua 138 OR 138	ODOT	-0.42		L	35	paved	Public	Spruce Street	na	na	11B-7-5	City of Roseburg
26198	138 North Umpqua 138 OR 138	ODOT	-0.38	3+95	R	26	paved	private	villiage station	270624AD	200	11B-7-5	UMPQUA INDIAN
26199	138 North Umpqua 138 OR 138	ODOT	-0.38	3+72	L	34	paved	private		270519BC	2800	11B-7-5	POLAND, RICK A
91922	138 North Umpqua 138 OR 138	ODOT	-0.34	1+53	R	45	paved	private	commerical	270519BC	12700	11B-7-5	
26186	138 North Umpqua 138 OR 138	ODOT	-0.29		R	40	concrete	private	apartment	270519BC	3200&3400 & 3500	11B-7-5	Adapt
26187	138 North Umpqua 138 OR 138	ODOT	-0.25		R	36	concrete	private	apartment	270519BC	3200&3400 & 3500	11B-7-5	Adapt
	138 North Umpqua 138 OR 138	ODOT	-0.12		L	50	paved	private	Oregon Tool Supply	270519BB	2900	11B-7-5	ANDERSON, MILO H & JONI MTRS

ID (AMES Inventory ID)	Highway (Roadway)	Jurisdiction	Mile Point	Stationing (ROW)	Side (L/R)	Width	Surface	Public/Private Type	Property Use	Twmsp-Sect-Rng	Tax Lot	ROW Map	Owner
26189	138 North Umpqua 138 OR 138	ODOT	-0.08		L	18	paved	private	House	270519BB	3100	11B-7-5	IMPERIUM LLC
26175	138 North Umpqua 138 OR 138	ODOT	-0.05	1598+00	L	24	paved	private	Historical House	270519BB	3200	11B-7-5	Herrman, Mike & Cherri
21884	138 North Umpqua 138 OR 138	ODOT	0.06	2+78	R	32	paved	private	Auto Repair	270519BB	3500 & 3600	6B-12-3	Poland, Rick
67609	138 North Umpqua 138 OR 138	ODOT	0.06	2+77	L	34	paved	private	vacant	270519BB	200 & 300	11B-7-5	WICKS EMMETT HOLDINGS LLC
21890	138 North Umpqua 138 OR 138	ODOT	0.1	6+11	L	55	paved	Public	Winchester Street	na	na	10B-1-3	City of Roseburg
21886	138 North Umpqua 138 OR 138	ODOT	0.1	6+05	R	55	paved	Public	Jackson Street	na	na	10B-1-3	City of Roseburg
21898	138 North Umpqua 138 OR 138	ODOT	0.13	7+74	L	40	paved	private	Retail	270519BB	100	10B-1-3	K-QUAD LLC
21902	138 North Umpqua 138 OR 138	ODOT	0.17		R	45	paved	Public	Flower Street	na	na	na	City of Roseburg