



## MEMORANDUM

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To: Mike Kuntz, Jackson County

CC: Allie Coates, Oregon Department of Transportation, Region 3

From: Matthew Bell and Susan Wright, P.E. Kittelson & Associates, Inc.

Project: Jackson County Transportation System Plan (TSP) Update

Subject: Draft Tech Memo #2: System Inventory

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## INTRODUCTION

This memorandum provides an overview of existing land uses and an inventory of existing transportation facilities within the unincorporated areas of Jackson County. The information included in this memorandum will be used as a basis for evaluating existing transportation conditions for the Jackson County Transportation System Plan (TSP) update. The inventory includes information on the street network, including the jurisdiction, functional classification, freight route designation, and general characteristics. The inventory also includes information on the bridges and culverts, pedestrian and bicycle facilities, public transit facilities and services, and the rail, air, water, and pipeline/transmission facilities within Jackson County.

Figures 1A through 1E illustrate the study area, including the location of the incorporated cities and the unincorporated city of White City. The study area consists of all areas of Jackson County located outside the urban growth boundaries (UGBs) of the incorporated cities. County and State facilities within the UGBs are addressed in local TSPs. However, significant issues identified in local TSPs or the Regional Transportation Plan (RTP – Reference 1), that affect County and State facilities inside the UGBs are reported as well.

Based on the requirements of the Oregon Transportation Planning Rule (TPR – Reference 2), the study of roadways and intersections is generally limited to those with the highest classifications – collectors and arterials – as well as the Interstate. However, local street issues, such as street connectivity and safety are also discussed where appropriate.

## LAND USES

Land is predominantly designated for resource uses in the County, with most land designated forest and agricultural. Approximately three percent of the total land in the county is zoned for a combination of urban and rural residential use, with a greater share being rural residential.

### Zoning and Comprehensive Plan Designations

The range of zoning designations identified in Figures 2A through 2E is reflected in Table 1. The table summarizes key regulations associated with the zoning designations, as established in Jackson County Land and Development Ordinance (LDO) Chapter 4 (Resource Districts), Chapter 6 (Use Regulations), and Chapter 8 (Dimensional Standards). The purpose statements, permitted uses, and development standards (lot size and density) for each zoning district are summarized in this table.<sup>1</sup>

The Jackson County LDO also contains the regulations for several overlay zoning districts. Overlay zoning districts are categorized as: environmental and cultural; floodplain; transportation and public facility; and urban. Overlay zoning districts are addressed in the Natural Resources and Environmental Section of this memorandum, in the context of mapped environmental, cultural, and other resource areas that may have bearing on the TSP update process.

### Existing Land Uses

The Jackson County Comprehensive Plan identifies four unincorporated urban areas, one of which is considered an urban fringe area adjacent to a city boundary. The three unincorporated urban areas include White City, the Highway 99 Area, and the Gibbons/Forest Acres Area. White City is unique among the unincorporated urban areas due to its unique urban residential zoning designations (see Figures 3A through 3E) and its potential for further development. Figure 4A through 4C shows multiple vacant commercial, residential, and miscellaneous parcels within the boundary of White City. Additionally there are multiple vacant industrial and farm parcels nearby.

Both the Highway 99 Area and the Gibbons/Forest Acres Area are not likely to undergo significant development as both areas are mostly improved with little to no vacant land. For the Highway 99 Area, future development is limited to a manner which will not further degrade the traffic capacity and safety of the highway. In addition, the Comprehensive Plan's policy for the Gibbons/Forest Acres Area is to limit urban densities to two units per acre after community water service is provided.<sup>2</sup>

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<sup>1</sup> This summary is intended to be a high-level overview for planning purposes and is not an exhaustive review of all applicable requirements. For example, not every permitted use is listed, nor is the procedure type through which the use is permitted identified. This level of detail is more relevant at the project development stage.

<sup>2</sup> [Jackson County Comprehensive Plan](#)

**Table 1: Jackson County Zoning**

Zoning	Acres	Zoning	Acres
Aggregate Removal (AR)	6,372	Rural Residential - 00 (RR-00)	5,418
Applegate Rural Residential - 5	141	Rural Residential - 10 (RR-10)	891
Applegate Rural Service Commercial	17	Rural Residential - 2.5 (RR-2.5)	6,478
CITY	157	Rural Residential - 5 (RR-5)	29,727
CITY OF CENTRAL POINT	53	Rural Service Commercial (RS)	151
Exclusive Farm Use (EFU)	249,822	Sams Valley Rural Service Commercial	25
Forest Resource (FR)	1,244,847	Urban Residential - 10 (UR-10)	134
General Commercial (GC)	587	Urban Residential - 30 (UR-30)	30
General Industrial (GI)	3,291	Urban Residential - 8 (UR-8)	25
Interchange Commercial (IC)	112	Urban Residential (UR-1)	2,528
Light Industrial (LI)	773	White City Urban Residential - 10	98
Limited Use (LU)	240	White City Urban Residential - 30	87
Neighborhood Commercial (NC)	1	White City Urban Residential - 4	150
Open Space Reserve (OSR)	38,069	White City Urban Residential - 6	410
Ruch Rural Service Commercial	41	White City Urban Residential - 8	297
Rural Light Industrial (RLI)	23	Woodland Resource (WR)	171,302
<b>Total</b>			<b>1,762,299</b>

## STREET NETWORK

The street network is the backbone of the transportation system in Jackson County. Motor vehicle, bicycle, pedestrian, transit, and freight transportation all rely on the street network to some degree. The street network also provides motor vehicle, bicycle, pedestrian, and transit access to air and rail facilities. The following section describes the street network’s jurisdiction, classifications, and characteristics.

### Jurisdiction

Streets within Jackson County are owned and maintained by four separate jurisdictions, including the US Forest Service, Bureau of Land Management (BLM), Oregon Department of Transportation (ODOT), and Jackson County. Each jurisdiction is responsible for determining the street’s functional classifications, defining its major design and multimodal features, and approving construction and access permits. Coordination is required among the jurisdictions to ensure that the streets are planned, operated, maintained, and improved to safely meet public needs. Figures 5A through 5E illustrate the jurisdiction of the streets within Jackson County and White City. The following summarizes the number of lane miles owned and maintained by each jurisdiction.

- The U.S. Forest Service and the Bureau of Land Management own approximately 4,687 miles of roadway in Jackson County.
- The Oregon Department of Transportation owns approximately 348 miles of roadway within Jackson County, including some of those most heavily traveled.

- Jackson County owns approximately 1,052 miles of roadway, including some roadways within incorporated cities.
- Local cities and private entities own most of the remaining public roadways.

### ***US Forest Service Routes***

The US Forest Service Routes within Jackson County are located within the four districts of Rogue River-Siskiyou National Forest: Applegate, Ashland, Butte Falls, and Prospect. Of the 2,551 miles of roads in the US Forest Service system, not all are in fully maintained status. A road is considered fully maintained when the completed maintenance activities leave the road in a condition that meets the maintenance criteria established by the Forest Service's road management objectives. The US Forest Service road mileage by maintenance level (ML) is as follows (Reference 3):

- 0.0 miles of ML 5 roads.
- 97 miles of ML 4 roads.
- 416 miles of ML 3 roads.
- 1,380 miles of ML 2 roads.
- 658 miles of ML 1 roads.

In accordance with the Highway Safety Act of 1966, maintenance level 3-5 roads are maintained for low-ground-clearance vehicles, such as passenger cars. Maintenance level 2 roads in an open status are maintained primarily for high-ground-clearance vehicles. Maintenance level 1 roads are closed to public vehicular traffic. Additional information on US Forest Service Routes within Jackson County can be found here: <http://www.fs.usda.gov/rogue-siskiyou/>.

### ***Bureau of Land Management Roads***

The Bureau of Land Management owns roads that are used primarily for logging, recreational use and administrative purposes. Of the 2,500 miles of roads under its jurisdiction, only 150 miles are paved. The rest are crushed-rock surfaced roads which experience low to medium traffic volumes. Many BLM roads connect to County roads and serve to provide residential access over the first half-mile to a mile from the junction with a County road. Additional information on BLM Routes in Jackson County can be found here: <http://www.blm.gov/or/districts/medford/index.php>.

### ***State Highways***

The Oregon Department of Transportation (ODOT) owns the following State Highways within Jackson County:

- Interstate 5 (I-5) is a four-lane interstate highway that provides regional mobility within the County. I-5 is the main north-south route along the West Coast, running from the Canadian

border south of Vancouver, B.C. through Seattle, Portland, Eugene, Medford, Sacramento, and Los Angeles to the Mexican border south of San Diego. Locally, it is the main route from the California border on the south to Josephine County on the west. Seven of the County's eleven incorporated cities are located on or near Interstate 5. A total of 18 interchanges serve Jackson County.

- Crater Lake Highway (Highway 62) is classified as a Statewide Highway south of Highway 140 and as a Regional Highway north of Highway 140. It is also designated as an Expressway from Delta Waters Road to Linn Road. It is a main north-south roadway that provides access to White City and the Upper Rogue Valley. Some of Highway 62's urban sections within the County carry higher traffic volumes than rural sections of I-5 in the County.
- Rogue River, Rogue Valley, and Siskiyou Highways (Highway 99) are District Highways that connect communities along the I-5 corridor. The highways are known locally by several other names, including Riverside Avenue, Siskiyou Boulevard, Main Street, etc. Highway 99 remains a high-volume roadway, even though I-5 now carries the through traffic that once used Highway 99. Siskiyou Highway is signed as a historic highway
- Lake of the Woods Highway (Highway 140) is a Statewide Highway that connects the Rogue Valley to the Klamath Basin. It is part of the route of the old "Winnemucca-to-the-Sea Highway." Highway 140 is a modern two-lane rural highway.
- Jacksonville Highway (Highway 238) is a District Highway and is an alternate route to I-5 between Medford and Grants Pass. It is also a primary access roadway to the historic city of Jacksonville and the Applegate Valley.
- Sams Valley Highway (Highway 234) is a District Highway that traverses Sams Valley from Gold Hill to north of Eagle Point, connecting I-5 to Highway 62.
- Green Springs Highway (Highway 66) is a District Highway connecting Ashland and Klamath Falls.
- Diamond Lake Highway (Highway 230) is designated as a Regional Highway within Jackson County. It departs Highway 62 in the northeast section of the County and connects to Highway 138 in Douglas County near Diamond Lake.

### **County Roads**

The major County roads in the study area are the following:

- Table Rock Road is Jackson County's only direct route north of Medford between Crater Lake Highway 62 and I-5. Antelope Road is a major east-west roadway that connects White City to Crater Lake Highway 62 and continues west to Table Rock Road. It provides access to industrial areas west of Crater Lake Highway 62 and to residential areas east of the highway.
- Tiller-Trail Highway provides access to the commercial forest land located in northern Jackson County. The road continues north to Douglas County then east to Canyonville.

- Old Stage Road travels between Gold Hill and Jacksonville where it becomes Oregon Street.
- South Stage Road runs from Highway 99 between Medford and Phoenix west to Jacksonville, where it becomes California Street.
- Vilas and Hamrick Roads constitute one of the few east-west connections between I-5 and Crater Lake Highway 62. These roads serve an area with a substantial amount of land zoned or planned for commercial and industrial use. These roads also serve areas near the Medford/Jackson County airport and areas within the urban growth boundaries of Central Point and Medford.
- North Phoenix and Foothills Roads travel north-south on the east side of Medford.
- E Pine Street connects OR 99 to I-5 and I-5 to the Rogue Valley International-Medford Airport. The segment of E Pine Street/Biddle Road classified as an Intermodal Facility on the National Highway System and is the highest volume County road.
- Butte Falls Highway travels east-west between OR 62 (Crater Lake Highway) and the City of Butte Falls where it becomes Broad Street.
- Dead Indian Memorial Road travels north east from OR 66 (Green Springs Highway) in Ashland to OR 140 (Falls Highway) in Klamath County.
- East Evans Creek Road travels north from the Rogue River along Evan Creek where it connects with Meadows Road, which connects to OR 234 (Sams Valley Highway).

### ***City Roadways***

The incorporated cities of Ashland, Butte Falls, Central Point, Eagle Point, Gold Hill, Jacksonville, Medford, Phoenix, Rogue River, Shady Cove, and Talent have roadways that are maintained by the individual city authority. While the majority of the streets are City owned and maintained, each city has County or State roads passing through. I-5 and Highway 99 pass through Rogue River, Gold Hill, Central Point, Medford, Phoenix, Talent, and Ashland; Highway 62 passes through Shady Cove and Eagle Point; Highway 238 passes through Jacksonville; Butte Falls Highway starts in Butte Falls and connects to Highway 62.

White City is comprised of roadways that are either state or county operated facilities as it is an unincorporated community. White City is located at the junction of Highway 62 and Highway 140 with the majority of the community being in the northeast corner of the junction. Antelope Road, one of the major County roads in Jackson County also passes through White City.

### ***Intermodal Connections***

The 1999 Oregon Highway Plan (OHP) describes the intermodal connectors as short lengths of roads that connect intermodal facilities to the state highway system. The two defined intermodal connectors on the National Highway System located in Jackson County include 1) Biddle Road and Pine

Street/Freeman Road to OR 62 (2.78 miles), and 2) Airport Road/Biddle Road to Biddle Road (0.51 miles). The section of Biddle Road and Pine Street from I-5 to Table Rock Road is under County ownership. Both the connectors are owned by City of Medford.

## Functional Classification

A roadway's functional classification is determined by several factors, including how the facility connects with the rest of the system, the volume of traffic (local or through) it is expected to carry, and the types of trips it is expected to carry. The functional classification considers the adjacent land uses and the kinds of transportation modes that should be accommodated. The public right-of-way should also provide sufficient space for utilities to serve adjacent land uses.

The functional classification system for Jackson County divides all County roadways into Urban and Rural classifications. All of the County roadways within urban growth or urban containment boundaries fall under the urban classification. All other County roadways fall under the rural functional classification. Within these groups, roadways are categorized as Freeways, Arterials, Major Collectors, Minor Collectors, or Local Streets or Roads. The following functional classifications are defined in the County's current TSP:

- **Freeway:** The primary function of a freeway is to carry high levels of regional vehicular traffic and public transit at high speeds; full access control, with access limited to interchanges; street crossings via grade separations; widely spaced access points; has a median; pedestrian and bicycle traffic discouraged or prohibited. High volumes of through freight traffic.
- **Arterial:** Primary function is to serve both local and through traffic as it enters and leaves urban areas; serves major traffic movements; access control may be provided through medians and/or channelization; restricted on-street parking; sidewalks and bicycle facilities provided; will be used by public transit in urban areas. Carries high volumes of freight traffic that have both local and external destinations.
- **Major Collector (Urban Minor Arterial);** Primary function is to serve traffic between neighborhoods and community facilities; provides some degree of access to adjacent properties, while maintaining circulation and mobility for all users; carries lower traffic volumes at slower speeds than arterials; typically has two or three lanes; pedestrian and bicycle facilities provided; may be used by public transit in urban areas. Some freight traffic is destined for local delivery or local markets.
- **Minor Collector:** Primary function is to get traffic from neighborhoods and business areas to the arterial and major collector system; has slower speeds enhancing safety for pedestrians and bicyclists; on-street parking may be provided in urban areas; pedestrian and bicycle facilities are provided; bicycle facilities should be exclusive in urban areas and shared in rural areas; may be used by public transit in urban areas. Freight traffic tends to be destined for local delivery or local markets.

- **Local Street:** Primary function is to provide direct access to adjacent land uses; characterized by short roadway distances, slow speeds, and low volumes; offers a high level of accessibility; serves passenger cars, pedestrians, and bicycles, but not through trucks; may be used by public transit in urban areas; pedestrian facilities are provided in urban areas. Low volumes of freight traffic.

There are, however, other functional classifications used by various County departments. The Pavement Management System designation of functional classification is based on traffic volume only and is different from the one used in this plan. Figures 6A through 6E illustrate the Functional classification of County Streets.

## Freight Routes

### ***Motor Carrier Transportation Division (MCTD) Freight Routes***

The MCTD freight routes are shown in Figure 7A through 7E. The following provides a description of the different routes per the MCTD Freight Mobility Map:

- **Black and Yellow Routes:** Routes that are highly restricted to truck and oversize load traffic. May be important for local access by permit, but not for general use. These routes should not be considered for use as a viable detour route for any trucks.
- **Magenta Routes:** Routes that have some restrictions for both length and/or width. These routes will not be viable detour for all trucks/load.
- **Blue Routes:** Routes that are unrestricted to standards freight truck traffic but are either weight or width restricted for non-divisible and/or heavy haul loads. These routes are viable detour routes for general freight trucks only, but will not accommodate certain oversize and overweight loads.
- **Orange Routes:** Generally unrestricted freight and oversize/overweight routes. The most heavily used truck routes in the state. Most viable route as an unrestricted detour.

The MCTD is a division of ODOT that promotes safe, efficient, and responsible commercial transportation industry by simplifying compliance, reducing regulatory requirements, wherever appropriate, preserving the infrastructure, enhancing the private/public partnership, fostering effective two-way communication, and delivering superior customer service while recognizing the vital economic interests of the commercial transportation industry.

### ***Rogue Valley Metropolitan Planning Organization (RVMPO) Freight Routes***

The Rogue Valley Metropolitan Planning Organization (RVMPO) freight routes are shown in Figures 8A through 8E. The RVMPO Freight Route Study (Reference 4) identifies these routes as freight routes because they were found to accommodate higher volumes of freight traffic than other routes; however, per the RVMPO Freight Study Report, the only officially designated freight routes are those

on the National Highway System (NHS), identified as part of the interstate system, other NHS routes, and Intermodal Connectors (see below).

All other mapped freight routes, such as those shown in Figures 8A through 8E are important corridors for transporting freight, but the designation does not require different design standards to accommodate freight. The designation is useful, however during road planning, evaluating consideration of the effect that a particular project will have on freight transport.

### ***National Highway System (NHS) Freight Routes***

The National Highway System (NHS) freight routes are shown in Figures 9A through 9E. These Routes include I-5, Highway 140, and Highway 62 between I-5 and Highway 140.

### ***Intermodal Connections***

Rogue Valley International-Medford Airport is the only County airport with regular air cargo service. East Pine Street east of I-5, Biddle Road north of Highway 62, and Airport Road are designated as intermodal connectors on the National Highway System, providing truck access to and from the airport. More information is located at <http://www.oregon.gov/ODOT/TD/TDATA/rics/docs/NHSMedfordF.pdf>

### ***ORS 366.215(No Reduction of Vehicle-Carrying Capacity)***

Under ORS 366.215, the Oregon Transportation Commission (OTC) may not permanently reduce vehicle-carrying capacity of identified freight routes. Exceptions are allowed by statute if it is in the best interest of the state and freight route or for safety and access considerations. ORS 366.215 review shall be completed on any planning, design, or project development on state highways.

## **Roadway Characteristics**

### ***Pavement Type***

There are four classifications of pavement type reported by Jackson County – paved, gravel, dirt, and primitive. Paved is the highest quality pavement type which any vehicle can travel on safely, while primitive has had minimal improvements and may not be suitable for all vehicle types to travel on. Based on the data, there are 1,935 miles of paved roadways, 4,275 miles of gravel roadways, 561 miles of dirt roadways, and 94 miles of primitive roadways within Jackson County. Figure 10A through 10E show the pavement types in the study area.

### ***On-Street Parking Locations***

On-street parking along County facilities is limited to minor arterials and local streets within urbanized areas of unincorporated Jackson County and along County facilities within incorporated cities.

### ***Posted Speed Limits***

In relation to functional classification, speed limits generally correspond with the functional classification of the roadway with higher classification (e.g. arterials) having greater speeds and lower classifications (e.g. locals) having lesser speeds. This correlation is not true for rural facilities where lower classifications may have high speeds. Figure 11A through 11E shows the posted speed limits on roadways within the study area.

### ***Stop Control Devices***

Stop control devices are reported for the TSP Update study intersections. While there are a number of stop control devices, there are only three types represented at the study intersections which include signals, two-way stop control, and all-way stop control. Of the 29 study intersections, 9 are signalized, 18 are two-way stop controlled, and 2 are all-way stop controlled. Figure 12A through 12E show the stop control devices at the TSP Update study intersections.

### ***National Highway System Facilities***

The National Highway System (NHS) consists of roadways that provide important connections for the nation's economy, defense, and mobility. NHS roadways can be interstates, other principal arterials, highways that are a part of the Strategic Highway Network (STRAHNET), major connectors of the STRAHNET, and intermodal connectors. NHS highways in Jackson County are I-5, Highway 140, Highway 62 between I-5 and Highway 140, and Biddle Road/East Pine Street from I-5 to Table Rock Road.

### ***Pavement Condition***

Jackson County maintains roads under its jurisdiction through its Pavement Management System. According to the Transportation Element of the Jackson County Comprehensive Plan, each year Jackson County utilizes a Point Management Program, which schedules road maintenance needs in the most effective manner. The Road System Plan indicates that about 20 miles of overlay and 60 to 80 miles of chip seal should be performed each year to maintain the existing system and to avoid costly road reconstruction.

The County collects an extensive amount of pavement condition data and compiles a pavement condition index (PCI). The County classifies each roadway link as follows:

- 70-100 PCI: Very Good
- 50-70 PCI: Good
- 25-50 PCI: Poor
- 0-25 PCI: Very Poor

The Oregon Department of Transportation goal is to have 78 percent of all their highway road mileage in fair (equivalent to the County's Good) or better (equivalent to the County's Very Good) condition.

The pavement management system data shows that of the 756.7 miles of County roadways, 562.5 miles (74%) are in "Very Good" condition, 148.4 miles (20%) are in Good condition, 40.2 miles (5%) are in Poor condition and 5.6 miles (0.1%) are in Very Poor condition. For the remaining 39.1 miles (1%) of roads under County jurisdiction, the data were missing or incomplete. Hence, the County maintains 94 percent of its roadways in fair or better condition, which meets the ODOT goal. Figure 13A through 13E show the pavement condition for County and State collector and arterial roads.

### *ODOT Facility Pavement Condition*

The Oregon Department of Transportation conducts pavement condition surveys biennially. It employs two separate and distinct pavement rating procedures. The National Highway System (NHS), consisting of the most important highways, is surveyed using the Objective Rating Method, which provides detailed data on pavement surface distress types, severity, and quantities. The methodology is time- and labor-intensive. NHS highways in Jackson County are I-5, Highway 140, and Highway 62 between I-5 and Highway 140. For non-NHS highways, the subjective Good-Fair-Poor (GFP) Rating Method is used, which relies on visual inspection of pavement surface and is rated from 1.0 to 5.0 based on the ride quality and surface distresses. The indexes resulting from both methodologies are then categorized into five conditions: "Very Good", "Good", "Fair", "Poor" and "Very Poor."

Based on the most recent survey data, most of the pavement on the State Highways is in fair, good, or very good condition. Poor pavement condition is reported at the following locations in Jackson County:

- Highway 99 between Central Point and Medford;
- Highway 62 through Shady Cove and east of the junction with Highway 230; and
- Sections of Highway 66 east of I-5.

A section of Highway 99 just above the Oregon-California border is reported as having very poor pavement condition and is the only reported location with very poor conditions in the county.

### *Other Roadway Characteristics*

Additional information on pavement width, lane width, shoulder width, right-a-way-width, and the locations of medians is currently unavailable.

## BRIDGES AND CULVERTS

### Bridges (over 20-feet)

ODOT maintains an inventory of bridge conditions within Jackson County. State, County, and City owned facilities over 20-feet in length are assigned a sufficiency rating based on inspections conducted at regular intervals, usually every two years. The sufficiency rating is a measure between 0 and 100 calculated by the Federal Highway Administration (FHWA), based on factors such as condition,

materials, load capacity, and geometry (i.e., dimensions). FHWA uses the rating as a tool to prioritize the allocation of funds for bridge repairs. In general, bridges with a sufficiency rating of less than 50 are given priority. The sufficiency rating is used to identify deficiencies, which may include structural issues or functional issues. For example, older bridges may be narrow and not designed to the same width or height clearance of today's standards. Therefore, a sufficiency rating does not necessarily indicate a structural issue. There are eleven bridges with sufficiency ratings below 50 within Jackson County.

- The County Road 670 Bridge over Bear Creek/Fern Valley Road in Phoenix (sufficiency rating 6) is currently in the process of being replaced as part of ODOT's Fern Valley Interchange project.
- The Main Street Bridge over Little Butte Creek in Eagle Point (sufficiency rating 21.8) is open with posted load restrictions. The superstructure condition received a rating of 4 out of 9.
- The East Main Street Bridge over I-5 in Ashland (sufficiency rating 33.8) is open without restrictions. The deck condition received a rating of 4 out of 9.
- The Table Rock Road Bridge over I-5 /Bear Creek (sufficiency rating 34.4) is open without restrictions. The low sufficiency rating is due to its narrow width.
- The Elder Mill Road Bridge over Trail Creek (sufficiency rating 34.4) is open without restrictions. The substructure condition received a rating of 4 out of 9.
- The Fern Valley Road Bridge over I-5 (Highway 001) in Phoenix (sufficiency rating 36) is currently in the process of being replaced as part of ODOT's Fern Valley Interchange project.
- The County Road 949 Bridge over Cobleigh Road (sufficiency rating 46.7) is open with posted load restrictions due to its current width and deck geometry.
- The OR 99 Bridges over Birdseye Creek (sufficiency rating 47.1) and Millers Gulch (sufficiency rating 49.7) and the OR 62 Bridge over Trail Creek (sufficiency rating 47.2) are open without restrictions, but scour has occurred at the bridge foundations.
- The OR 99 bridge over Savage Creek (sufficiency rating 47.8) is open without restrictions. The substructure condition received a rating of 5 out of 9.

Figures 14A through 14E illustrate the location and condition of over 300 bridges in Jackson County. As shown, the majority of the bridges are in acceptable conditions.

## Culverts

Figures 15A through 15E illustrate the location of culverts in Jackson County. As shown, the majority of the culverts are located within incorporated cities. It should be noted that the data availability for culvert locations is sparse. The data depicted in the figure, provided by ODOT, only represents about ten percent of the existing culverts. No other data sources are known at this time.

## BICYCLE/PEDESTRIAN NETWORK

Pedestrian and bicycle facilities are the elements of the transportation system that enable people to walk and bike safely and efficiently between land uses. Within Jackson County, pedestrian and bicycle facilities primarily serve short trips to major attractors, such as schools, parks, and transit stops. However, bicycle travel can be a viable commuting option for Jackson County residents when supported by facilities such as bicycle lanes or paved shoulders, secure bicycle parking, work-place showers, and bus-mounted bicycle racks. Walking can also be a viable commuting option when supported by facilities such as sidewalks, shared-use paths, and trails or when mixed-use developments give people the option to live near their work.

### Bicycle Facilities

The Oregon Bicycle and Pedestrian Design Guide (Reference 5) identifies four design treatments used to accommodate bicycle travel on roadways and one design treatment used to accommodate bicycle travel that is separated from the roadway. These design treatments are described below.

**Shared Roadway** — On a shared roadway, bicyclists and motorists share the same travel lanes. A motorist will usually have to cross over into the adjacent travel lane to pass a bicyclist. Shared roadways are common on neighborhood streets and on low volume rural roads and highways. Allowing bicycle traffic to mix with automobile traffic is acceptable where the average daily traffic (ADT) on a roadway is less than 3,000 vehicles per day. Generally, most collectors in the rural parts of Jackson County carry less than 3,000 ADT, but most arterials, and some collectors within UGBs, carry more than 3,000 ADT.

**Bicycle Boulevard** — The bicycle boulevard is a refinement of the shared roadway treatment. On bicycle boulevards, the typical operation of a local street is modified to function as a through street for bicyclist while maintaining local access for motor vehicles. Traffic calming devices reduce motor vehicle speeds and through trips and traffic controls limit the potential for conflicts between bicyclists and motorists.

**Shoulder Bikeway** — A shoulder bikeway is a paved shoulder that provides a suitable area for bicycling, reducing the potential for conflicts with motor vehicles. Most bicycle travel on the rural state highways system, and on many County roadways, is accommodated on shoulder bikeways.

**Bike Lane** — Some roadways dedicate a portion of the roadway for preferential use by bicyclists. Bike lanes are appropriate on urban arterials and major collectors where motor vehicle speeds are significantly higher than bicycle speeds. Bike lanes on local streets are appropriate where bicycle volumes are high, vehicle speeds are higher than 25 miles per hour, and/or poor sight distance exists. Bike lanes must always be well-marked to call attention to their preferential use by bicyclists.

**Shared-Use Path** — Shared-use paths are separated from the roadway by an open space or barrier. Shared-use paths are typically used by pedestrians and bicyclists as two-way facilities. Shared-use paths are appropriate in corridors with high traffic volumes not well served by the street system. Such paths can also be used to create pedestrian and bicycle short cuts and can serve as elements of a community recreational trail system.

The ODOT Bicycle and Pedestrian Design Guide recommends paved shoulder widths on rural roads of two to eight feet for bicycle travel, depending on the traffic volumes and roadway functional classification. The Jackson County TSP provides guidance on rural road shoulder widths which are provided in Table 2 for reference. The available data regarding shoulder width in Jackson County do not include specific shoulder width information, only the presence or absence of a minimum three-foot paved shoulder. As a result, further differentiation by shoulder width is not available.

**Table 2: Jackson County TSP Recommended Shoulder Widths for Rural Roads**

Functional Classification	Typical Average Daily Traffic	Recommended Should Width (feet)
Arterial	>5,000	6
Major Collector	4,500-15,000	6
Minor Collector	1,250-5,000	5
Local Road	0-200	2
	200-800	3
	700-1,500	4

ODOT is currently in the process of updating the Oregon Bicycle and Pedestrian Plan. The Plan will provide a vision for the entire state system, including locally owned facilities, while defining the role of the State and ODOT. The Plan will inform decision making and guide investments strategies made through Transportation System Plans, Facility Plans, the Statewide Transportation Improvement Program and other programs, but will not include the identification of projects.

The Jackson County Bicycle Master Plan (Reference 6) identifies one additional design treatment used to accommodate bicycle travel on roadways; Bicycle Routes (or Signed Bikeways) are roadways specifically designated for bicycle traffic. The Bicycle Master Plan notes that these facilities are not recommended by ODOT because they have not proven to serve the needs of bicyclists very well. However, bicycle routes can be appropriate for focusing initial investments on developing a minimally connected bicycle system, as an interim step to developing a more comprehensive bicycle system.

There are many emerging design techniques for rural bikeways that are variations on the above treatments but that use a variety of different pavement color, texture, or striping to delineate the space for bicycles or that include signage and traffic calming techniques to improve the shared nature of the space. As indicated by the Shared Roadway and Shoulder Bikeway descriptions, rural highways and county roads are considered suitable for cycling if they have paved shoulders or relatively low

traffic volumes. Closer to cities, these roads can serve as bicycle commuter routes into urban areas from outlying residential areas.

Jackson County's bicycle facilities were inventoried using data from the County's Geographic Information System (GIS) database (Reference 7), and the Jackson County Bicycle Plan. Figures 16A through 16E illustrate the location and type of bicycle facilities on County roads and State highways. Note that the County's bicycle plan map identifies roads with shoulder width of three feet or more, while the standards identified in the design guide indicate six-foot shoulders for bicycle and pedestrian use. The County's pavement management system does not record shoulder width directly, only the presence or absence of a minimum three-foot shoulder. As a result, further differentiation by shoulder width is not available.

As shown, bike lanes and shared lanes are focused within the cities while 3 foot plus shoulders and on-street facilities are mainly between incorporated areas. A multi-use path (the Bear Creek Greenway) runs along Bear Creek from Ashland to Central Point along the I-5 and Highway 99 corridor and will be discussed further in the next sections. Figures 16A through 16E illustrate the location of the Bear Creek Greenway and the existing segments of the Rogue River Greenway trail. Additional information on these facilities is provided below.

### ***Bear Creek Greenway***

The Bear Creek Greenway (BCGW) is a 20-mile multi-use path connecting Ashland, Talent, Phoenix, Medford, and Central Point. The BCGW is used for recreation and commuting and runs through numerous parks that provide restrooms, drinking water, and picnicking areas. The BCGW is complete and there is now a focus to improve existing connections.

### ***Rogue River Greenway***

The Rogue River Greenway is a planned multi-use path that will add 30 miles of path to the system, connecting with the Bear Creek Greenway in Central Point and extending along the Rogue River to Grants Pass. The path will pass through Gold Hill and Rogue River. The path will provide commuting opportunities as well as access to areas for hiking, fishing, rafting, cycling, equestrian, whitewater, and wildlife viewing. Currently, only three sections are built – through Gold Hill, Gold Hill to Del Rio, and Depot Street Bridge through Valley of the Rogue State Park. The following sections are incomplete:

- Between Tom Pearce Park, Grants Pass and Depot Street Bridge, City of Rogue River;
- Between Twin Bridges Road (end of Valley of the Rogue State Park) and Del Rio;
- Upper River Road/Gold Ray Road from Gold Hill to Blackwell Road;
- Blackwell Road from Gold Ray Road to Dean Creek Road; and
- Dean Creek Road from Blackwell Road to connection with Bear Creek Greenway – The plan is to utilize Dean Creek Road as a shared facility.

### **Other Shared-use Paths and Trails**

The Jackson County Bicycle Master Plan identifies several system deficiencies in the current bicycle facility inventory. The projects listed below were chosen to complete connections between destination points:

- Old Stage Road, Ross Lane to Gold Hill: This project would complete the connection from Central Point to Gold Hill.
- Fern Valley Road, North Phoenix Road to Payne Road: This project would provide shoulder bike lanes from I-5 to Payne Road to serve new development on the east side of the freeway, and to provide a connection to North Phoenix Road. Payne Road is a portion of the eastside alternative route to the I-5 corridor.
  - The segment of Fern Valley Road from the I-5 northbound ramps to Breckinridge Drive has been completed.
- Foothill Road, Hillcrest Road to Corey Road: This project would combine with other improvements to provide bike lanes along the entire east side of the metropolitan area.
- Corey Road, Foothill Road to Kershaw Road: This project would tie into the Foothill Road improvement and provide a link to residential development.
- Agate Road, Railroad Crossing: Safety improvements at the railroad crossing were identified as a need to complement the existing bike lanes.
- Rogue River Drive, Highway 234 to Shady Cove: This project would provide shoulder bikeways from Highway 234 to Shady Cove.
- Highway 99, Grants Pass to Gold Hill: This project would provide a bicycle connection between Jackson and Josephine Counties. Currently, shoulder bikeways are provided from Medford through Gold Hill to just west of Sardine Creek Road.
  - Funding for this project was redirected to the Rogue River Greenway described above.

### **Pedestrian Facilities**

The Oregon Bicycle and Pedestrian Design Guide identifies two design treatments for accommodating pedestrians on roadways and one design treatment for accommodating pedestrians in other areas. These design treatments are described below.

**Sidewalks** — Sidewalks are typically located along roadways, separated with a curb and/or planting strip or swale, and have a hard, smooth surface. Sidewalks in many areas are sometimes used by bicyclists that are not comfortable riding on the street.

**Paths** — Paths are typically used by pedestrians, cyclists, skaters and joggers. The paths can be made of a variety of surface types, provided they are smooth and firm enough to meet Americans with Disability Act (ADA) requirements.

**Shoulders** — Paved shoulders along roadways can serve pedestrians in many rural areas. In rural areas where population densities are too low to justify sidewalks, shoulders should be wide enough to accommodate pedestrian and bicycle traffic. Jackson County's Rural County Roadway Standards require a minimum shoulder width of 2-4 feet on local streets, 5-6 feet on collectors, and 6 feet on arterials.

Sidewalks on County roadways and State highways are generally located within the incorporated urban areas, such as along Highway 99 in Medford, Talent, Phoenix, and Ashland. However, many of the County's collector and arterial streets have paved shoulders, which serve both pedestrian and bicycle modes. The White City Urban Containment Area is an exception. A Jackson County Urban Renewal project constructed and improved the local street network throughout the residential area bounded by Highway 62, Avenue A, Avenue H, and Atlantic Avenue. Sidewalks are currently provided along every street within White City with few exceptions. Figures 17A through 17E illustrate the location and type of pedestrian facilities on County roads and State highways.

### Bicycle and Pedestrian Gaps

Jackson County design standards do not require bicycle lanes and sidewalks on rural arterial, collector, or local streets, and therefore gaps in these types of facilities were not identified. The standards do required shoulders that vary in width from 1 foot on rural local streets to 6 feet on rural arterials; however, it is difficult to gage the width of shoulders based on aerial imagery and GIS data is not available; therefore gaps in these types of facilities were not identified.

Jackson County design standards require bicycle lanes and sidewalks on all urban arterial, collector and local streets. These streets primarily include County facilities within the incorporated cities and White City. The following provides a detailed description of the pedestrian and bicycle gaps within each City.

#### ***Ashland***

Clay Street, Peachey Road, and Paradise Lane are the three County facilities within Ashland. Clay Street lacks pedestrian and bicycle facilities south of Ashland Road. North of Ashland Road sidewalks are provided on one or both sides of the street. Peachey Road and Paradise Lane both lack pedestrian and bicycle facilities.

#### ***Central Point***

Central Point has seven county facilities, including Pittview Avenue, Old Upton Road, Raymond Way, Teresay Way, Boes Avenue, Upton Road, and Pine Street. Pittview Avenue lacks continuous pedestrian and bicycle facilities on both sides of the roadway. Old Upton Road lacks sidewalk on one side of the

road west of I-5 and bicycle facilities on both sides of the roadway. East of I-5, Old Upton Road lacks pedestrian and bicycle facilities. Raymond Way, Teresa Way, and Boes Avenue lack pedestrian and bicycle facilities. Upton Road and Pine Street both lack pedestrian and bicycle facilities, but they have wide paved shoulders. East of I-5, segments of Pine Street lacks sidewalks and bike lanes on the north and south sides of the roadway.

### ***Eagle Point***

Royal Avenue is the only County facility within Eagle Point and it lacks pedestrian and bicycle facilities south of Main Street. North of Main Street, a sidewalk is provided on one side of the street.

### ***Jacksonville***

Applegate Street is the only county facility within Jacksonville and it lacks pedestrian and bicycle facilities.

### ***Medford***

The County has a number of roadways within Medford. A majority of the roadways lack both pedestrian and bicycle facilities. The following facilities lack pedestrian and bicycle facilities:

- Runway Drive
- Schultz Road
- Gilman Road
- Lawnsdale Road
- Bullock Road
- Ellen Avenue
- Bursell Road
- Marilee Road
- Crews Road
- Corona Avenue
- Foothill Road
- Normil Terrace
- Annapolis Drive
- Cadet Drive
- Sycamore Way
- Maple Park Drive
- Sweet Road
- McAndrews Road
- Reager Street
- Lozier Lane
- Cherry Street
- Prune Street
- Crestbrook Road
- Princeton Way
- Harvard Place
- Yale Drive
- Standford Avenue
- Old Cherry Lane
- Cherry Lane
- Highcrest Drive
- Stardust Way
- Cloudcrest Drive
- Charlotte Ann Road
- Myers Lane
- Peach Street
- Agate Street
- Archer Drive
- Canal Street
- Meals Drive
- Milford Drive
- Thomas Road
- Sunset Drive
- Alamar Street

The following facilities lack bicycle facilities and pedestrian facilities on up to one side:

- Bateman Drive
- Vilas Road
- Pech Road
- Airport Road
- Connell Road
- Midway Road
- Roberts Road
- Orchard Home Drive
- Harbrooke Road
- Marshall Avenue
- Garfield Street
- Lillian Street
- Hart Street
- Diamond Street

### ***Phoenix***

Phoenix has four County facilities, including Houston Road, Colver Road, Camp Baker Road, and Fern Valley Road. Houston Road has pedestrian and bicycle facilities. Colver Road does not, but it does have paved shoulders that could be used by pedestrians and cyclists. Camp Baker Road lacks pedestrian and bicycle facilities. Fern Valley Road has bicycle lanes on both sides of the road and a sidewalk on one side east of the I-5, but lacks both facilities west of I-5. Upon completion of the Fern Valley Interchange project, jurisdiction of Fern Valley Road will change to ODOT and City. Sidewalks and bike lanes will be complete.

### ***Shady Cove***

There are two county facilities within Shady Cove: Rogue River Drive and Old Ferry Road. Both streets currently lack pedestrian and bicycle facilities.

### ***Talent***

A section of Rapp Road is the only county facility within Talent and it lacks pedestrian and bicycle facilities.

### ***White City***

The pedestrian and bicycle gaps in White City are shown in Figure 17E.

## **PUBLIC TRANSIT SERVICES INVENTORY**

Public transportation service within Jackson County includes fixed-route service operated by the Rogue Valley Transportation District (RVTD) and specialized transportation services for users such as senior citizens and persons with disabilities. In addition, ODOT provides public utility commission (PUC) licenses to private companies and charter service providers. Intercity transit service is provided by Greyhound and by Amtrak Thruway bus service.

## Intercity Bus

Greyhound provides intercity bus service in Jackson County with one stop in Medford where passengers can transfer to a local shuttle service that serves stops in Ashland, White City, and Gold Hill. Service is provided along I-5, with eight stops in Medford daily.

## Passenger Rail

Amtrak has bus stops in Medford, Ashland, White City, and Gold Hill. None of the stops have a ticketing office and are for pick up and drop offs only. The nearest full service station is in Klamath Falls, which has a ticket office, enclosed waiting area, and restrooms. Amtrak Thruway bus service provides service from the stops in Jackson County to the station in Klamath Falls.

## Park & Ride Lots

Park & ride lots are transit system components that provide patrons with a connection point to transit service. Patrons drive private automobiles (or ride bicycles) to a transit station, transit stop, or car/vanpool waiting area and park the vehicle in the area provided for that purpose. Five park & ride lots are located in Jackson County; two are located in White City and one in each of Central Point, Jacksonville, Medford, and Talent. Each lot has limited stalls; one offers only three stalls. Both of the park and ride lots in White City are served by RVTD Route 60. RVTD Route 40 serves the lot located in Central Point. The Jacksonville park & ride lot is served by RVTD Route 30. A permit is required for the Medford lot which is located at the RVTD transfer station and is served by all RVTD routes. Talent's park and ride lot is served by RVTD Route 10.

## Fixed-Route Transit

The Rogue Valley Transportation District (RVTD) is the primary provider of public transportation service in Jackson County. RVTD operates seven fixed routes, all of which connect at the Front Street Transfer Station in Medford. Fixed-route service provides direct connections from Medford to White City, Central Point, Jacksonville, Phoenix, Talent, and Ashland. Complementary demand-responsive service<sup>3</sup>, required by the American with Disabilities Act (ADA) is provided within ¼ mile of fixed-route service. RVTD service is provided on weekdays excluding national holidays. Figures 18A through 18E illustrate the locations of RVTD routes and the Front Street Transfer Station. No service is provided on Saturdays or Sundays. The fixed-route bus lines include:

- Route 21, *RVIM Popular Drive*, which provides hourly service within Medford. Service outbound from the RVTD Front Street Station is provided primarily along Biddle Road.

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<sup>3</sup> <sup>1</sup> *Complementary demand-response service* is the term used to describe demand-responsive ADA service that supplements the fixed-route service. The term does not indicate that the service is free.

Inbound service is provided along Poplar Drive, McAndrews Road, Royal Avenue, and Stevens Street before entering onto Biddle Road.

- Route 2, *Main Street/West Medford*, provides service to local streets within southwest Medford. Service is provided twice per hour.
- Route 24, *East Barnett/RVMC*, provides hourly service along Siskiyou Boulevard and Barnett Road.
- Route 10, *Ashland/Talent/Phoenix*, provides service every 20-minutes from 7:00 a.m. to 5:00 p.m. along Highway 99 between Medford and Ashland. The hours from 5:00 to 7:00 a.m. and p.m. have half hour headways. Stops are made in Phoenix, Talent, and Ashland, with minimal local street circulation.
- Route 30, *Medford/Jacksonville*, provides service from Medford to Jacksonville via Main Street and Jacksonville Highway 238. Service is provided ten times per day, with varying headways; 45-minute headways during the a.m. (6:15-7:00 a.m.), afternoon (11:30 a.m. to 12:15 p.m.), and p.m. peaks (3:00-6:00 p.m.) and 3.25 hour and 2.75 hour gaps in service between the peaks, respectively.
- Route 40, *Medford/Central Point*, provides a connection between downtown Medford and Central Point with half hour headways.
- Route 60, *Medford/White City*, provides service every half hour along Highway 62 between White City and Medford.

RVTD has a *bike-and-ride* program under which bicycle riders can mount and secure their bicycles on exterior racks while riding the bus for no extra charge. There is a short (ten-minute) training session required, and a five-dollar fee to use the program.

## Specialized Transportation Services

Jackson County has several providers of transportation services for special populations. Typically, these services are limited to medical transportation for individuals with specific transportation challenges, such as the elderly or persons with disabilities. The service providers are described below.

### ***TransLink***

RVTD sponsors a service called TransLink that serves as a brokerage for medical transportation services for Medicaid patients. The service is provided for Jackson, Josephine, Coos, Curry, and Douglas Counties. TransLink is not a direct provider, but coordinates with several transportation services, including Valley Lift, Rogue Valley Connector, NET Care, and private services such as taxis and ambulances. Advance notice requirements are dependent on the individual providers.

### ***Valley Lift***

A program of the RVTB, the Valley Lift program, provides door to door transit service for non-ambulatory passengers who qualify for ADA service. Prior day scheduling is required, although efforts are made to provide same-day service when necessary. Service is free of charge and hours of operations are the same at the fixed-route service.

### ***Rogue Valley Connector***

Rogue Valley Connector provides service for the disabled and low income families. The service area currently is the upper Rogue Valley including White City, Eagle, Shady Cove, and Trail with plans to expand to Prospect and Butte Falls. Operating hours are Monday through Friday 6:30am to 5:00pm.

### ***N.E.T Care, Inc.***

N.E.T Care provides ambulatory, wheelchair, and stretcher transportation within Jackson and Josephine Counties. Service hours are Monday through Friday, 5:00am to 5:00pm. Special accommodations can be made for transport outside of regular service areas for reasons such as surgeries and relocation.

### ***Other TransLink Contractors***

TransLink contracts through many service providers that serve Jackson County and the state of Oregon. These providers include Mobile Car, LGA Transportation, Saulog Transit, Metro Medicial, LLC, J.A.S.D. Transport, B & R Medical Transport, and Valley Transportation.

### ***Upper Rogue Community Center***

Upper Rogue Community Center provides medical transportation service to seniors, persons with disabilities, and Oregon Health Plan participants, primarily in the rural Upper Rogue Valley area including Prospect, Butte Falls, Shady Cove/Trail, Eagle Point, and parts of White City. The service operates four vans, which provide 16 to 20 rides per day when fully scheduled. According to recent monthly reporting, the service provides 50 people with approximately 450 rides per month. Clients are encouraged to call in advance and typically are provided with next-day service. When necessary, TransLink is contacted for additional transportation resources.

### ***RSVP Call-a-Ride & TransMed***

Retired Senior Volunteer Program (RSVP) provides medical transportation services for retired seniors and persons with disabilities under the Call-a-Ride program. Call-a-Ride service is provided by volunteers using personal vehicles. Participants must enroll in the program, for which there is an approximately two-week wait, and there is a \$22 annual fee. Once enrolled, there is no charge for transportation. Advance notice of at least three working days is required to schedule transportation service for Call-a-Ride.

RSVP has recently begun a new service called TransMed, which provides transportation services for Medicaid patients only. Similar to Call-a-Ride, the TransMed service is provided by volunteers. The TransMed service has less stringent requirements, as drivers for TransMed have been more readily available to date.

### ***Private and Charter Services***

The following private services provide medical transportation on a fee basis: Mobile Care, Net Care, City Ride, and Central Point Medical Transportation.

### ***Rogue Valley Commuter Line***

Josephine County Transit operates the Rogue Valley Commuter Line which offers service between Grants Pass and Medford. Additional stops in Rogue River and Gold Hill can be made by request; requested stops must be called in in advance. The route runs five times a day Monday through Friday. Fares are \$2 each way and are cash only. No reduced fares are offered but children six years old and younger ride for free.

### ***South West Point***

A program of Public Oregon Intercity Transit (POINT) and ODOT, operated by Klamath Shuttle, this route operates between Klamath Falls and Brookings. The route runs once a day and has seventeen stops. Within Jackson County, the route has stops in White City, Medford, and Gold Hill including the Medford Airport, Greyhound, and Amtrak stations. South West Point service uses 21-passenger buses with wheelchair accessibility, free wi-fi, and are equipped to store baggage and bicycles. Fares range from \$13 to \$30.

## **RAIL INVENTORY**

Jackson County's freight rail facilities are discussed in this section. Passenger rail was included in the section on public transit.

### **Lines and Operators**

The Central Oregon & Pacific Railroad (CORP) provides freight service along the I-5 corridor, connecting with the Union Pacific Railroad in Black Butte, California and Eugene, Oregon. The CORP operates 389 miles of mainline in this area. Connections are also made with Rouge Valley Terminal Railroad Corporation (RVT) in Oregon and with Yreka Western in California. Traffic is primarily lumber, logs and plywood that serve national lumber companies at the interchanges mentioned above.

The RVT (previously named White City Terminal Railroad) operates a 14 mile railroad that connects the Medford Industrial Park in White City to a junction north of Medford with the CORP. The major

commodities moved by WCTR are lumber, timber products, fly ash, asphalt and industrial chemicals. Superior Lumber Company also operates a small railroad that connects its wood products facility to the CORP main line at Glendale.

There are two yard-engines in Medford, which are used on demand. Most of the traffic originating in Medford heads south to California. The portion of the line south from Ashland to Black Butte has no weight restrictions. However, the tunnels both north and south of Rogue Valley cannot accommodate large containers. As a result, dimensional restrictions are in place.

According to the Oregon Rail Plan (Reference 9), the Federal Railroad Administration (FRA) has established nine track classes, which set maximum speeds for freight and passenger trains, based on the track condition. CORP track is maintained to FRA Class 1 and 2 conditions and with no weight or dimensional restriction except for the section of the line south of Ashland. Class 1 limits freight trains to 10 mph and passenger trains to 15 mph, and Class 2 limits freight trains to 25 mph and passenger trains to 30 mph.

VRT is in FRA excepted track status (lower than Class 1, with a maximum freight speed of 10 mph and restrictions on use), except for certain tracks, which are used to carry hazardous materials, which are maintained in Class 1 condition.

Figures 19A through 19E shows the map of the CORP and VRT route and location of at-grade crossings on major roads in Jackson County. At-grade crossings create important safety concerns as they are the locations where interactions with other transportation system users occur. There are 29 at-grade crossings on County roads, 16 on city collector or higher roadways, and three on state highways. Figures 19A through 19E also show the type of control used at these crossings. "Active Control" crossings usually have flashing lights and a gate. The exceptions are the Main Street crossing in Talent, which has flashing lights only; and Oak Street in Ashland and Gold Ray Road at Tolo Station, which are both "wig wag" types. The "Passive Control" crossings are signed only. There are 30 active control crossings and 18 passive control crossings in the County. Currently, a project at the Depoe Street crossing in Rogue River is underway which will improve the operation of the crossing.

## AIR, WATER, AND PIPELINE INVENTORIES

### Air

Jackson County is served by 23 air transportation facilities, including seven heliports and 16 airports. Only four of the facilities, all airports, are open to the public: Medford-Rogue Valley International Airport; Ashland Municipal Airport-Sumner Parker Field; Pinehurst State Airport; and Prospect State Airport. Table 3 lists all the airports in Jackson County and describes their major facilities.

**Table 3 Air Transportation Inventory**

Name	Use	Runway Dimension	Surface	# of Based Aircraft	FAA ID
Ashland Municipal Airport-Sumner Parker Field	Public/ Municipal	3603' x 75'	Asphalt	62	S03
Beagle Sky Ranch Airport	Private	3000' x 150'	Turf/Dirt	20	OR96
Burrill Airport	Private	2500' x 75'	Dirt	13	OR97
Croman Heliport	Private	120' x 150'	Concrete	2	39OR
East Oregon Cattle Co. Airport	Private	1700' x 100'	Turf	1	00R5
Erickson Air-Crane Admin Offices Heliport	Private	130' x 130'	Asphalt/Concrete	4	OG58
Firefly Ranch Airfield	Private	2100' x 20'	Asphalt	7	OG25
Fly By Night Airport	Private	1400' x 60'	Turf	0	OG13
Flying J Ranch Airport	Private	1950' x 60'	Turf	1	-
Light Valley Tree Farm Heliport	Private	60' x 60'	Gravel	2	80R8
Medford District Office Heliport	Private/Other	25' x 25'	Concrete	1	-
Medford-Rogue Valley International Airport	Public/County	8800' x 150'	Asphalt	207	MFR
Mucky Flat Airport	Private	1250' x 40'	Gravel	0	89OR
Oak Knoll Ranch Airport	Private	1300' x 60'	Turf	1	-
Pinehurst State Airport	Public/State	2800' x 30'	Asphalt	7	24S
Prospect State Airport	Public/State	4000' x 50'	Asphalt	1	64S
Providence Hospital Heliport	Private	40' x 40'	Asphalt	0	00R0
Rogue Valley Medical Center Heliport	Private	70' x 70'	Concrete	0	OR99
Shady Cove Airpark	Private	2600' x 50'	Turf/Gravel	18	OG31
Snider Creek Airport	Private	2300' x 60'	Turf	3	OR06
Springbrook Airport	Private	2500' x 60'	Asphalt	1	40R0
Sutton on Rogue Airport	Private	2500' x 75'	Turf	6	00R8
Timberland Shop Heliport	Private	150' x 150'	Concrete/Gravel	3	65OR

Note: Flying J Ranch, Medford District Office Heliport and Oak Knoll were identified in the previous TSP, but we were unable to verify the data via AirNav.

**Public Airports**

Figures 20A through 20E show the locations of the four public airports in Jackson County. These airports are included in the statewide air transportation study, the Oregon Aviation Plan, prepared by the Aeronautics Division of ODOT (Reference 10). The Plan assigns all statewide public use airports to the following five categories:

- **Category 1: Commercial Service Airports** – Scheduled commercial service. E.g. Medford-Rogue Valley International Airport.

- **Category 2: Business or High Activity General Aviation Airports** – 30,000 or more annual operations (i.e., take-offs and landings), of which a minimum of 500 are business-related (turbine) aircraft. Business-use heliports are also included in this category.
- **Category 3 – Regional General Aviation Airports** – Generally less than 30,000 operations and geographically significant location with multiple communities in the service area. The nearest Category 1 or 2 airport is more than 90 minutes average travel time by road. E.g. Ashland Municipal Airport-Sumner Parker Field.
- **Category 4: Community General Aviation Airports** – 2,500 or more annual operations, or more than ten based aircraft.
- **Category 5: Low Activity General Aviation Airports** – Less than 2,500 annual operations and no more than ten based aircraft. E.g. Prospect State and Pinehurst State Airports.

The information provided below is based on the Oregon Aviation Plan, AirNav Airport Information Website (Reference 11), individual airport websites where available, and the Rogue Valley International – Medford Airport Master Plan (Reference 12). The Oregon Aviation Plan identifies system deficiencies for each airport in terms of FAA requirements and other applicable standards. However it does not give details about specific deficiencies at each airport.

#### *Rogue Valley International – Medford Airport*

The Rogue Valley International-Medford Airport is a Category 1 airport with two active runways on the airfield. The primary Runway 14-32, which handles most commercial aircraft, is 8,800 feet long and 150 feet wide. The secondary Runway 9-27 is limited to small aircraft weighting less than 12,500 pounds. This runway is 3,136 feet long by 100 feet wide. It is the largest airport in the county and provides passenger, mail, and freight transportation.

In the year 2013, the airport served over 631,000 passengers and aircraft operations totaled over 40,000. Scheduled passenger service is provided by Alaska, Delta, Allegiant, and United Airlines. Allegiant Air's service is biweekly while the other three airlines serve the airport daily. Non-stop service is provided to Denver, Las Vegas, Salt Lake City, San Francisco, Portland, Los Angeles, and Seattle. There are approximately 56 arriving and departing flights daily. On average, 40% of the operations are transient general aviation, 32% air taxi, 14% commercial, 13% local general aviation, and less than 1% military. The airport master plan used enplanement-per-capita as its preferred measure when forecasting future passenger enplanements since this measure reflects population growth in the area and an increasing propensity to fly. A 2.4-percent average annual growth rate which is equal to the projected growth rate of the Terminal Area Forecast (TAF) for the airport through 2030 was used to forecast future demand.

The terminal at Rogue Valley International-Medford Airport provides 31,550 square feet of interior space. Services and amenities in the terminal include ticketing counters, car rental (five rental car agencies), baggage claims, a restaurant, gift shop, and restrooms. Several companies provide services to general aviation aircraft, air cargo operators, and persons wishing to charter aircraft.

Air freight and air mail services are provided at the airport by all-cargo carriers and scheduled airlines. Two all-cargo airlines, Ameriflight and Empire Airlines, contract with all-cargo companies—FedEx, United Parcel Service, and Airborne—to provide services using a combination of small turboprop planes and jets to transport air freight. In 2014, 5.75 million pounds of freight passed through the airport. Airmail is handled by scheduled airlines only, which carried 706,339 tons of mail in 1998. The master plan forecasts 5.6 percent annual growth for airfreight and 3.5 percent annual growth for airmail.

According to the Rogue Valley International-Medford Airport Master Plan, the following major development issues and improvement considerations at the airport are:

- Continual maintenance of Runway 14/32 and Taxiway A;
- Acquisition of RPZ land north of the Airport;
- Expansion of transient aircraft parking areas;
- Improvements to the east side aircraft parking apron and aviation use area;
- Improved vehicular access to the east side of the Airport;
- Programming of areas for future general aviation development in consideration of existing structures;
- Programming of areas for future air cargo development in consideration of the projected increase in air cargo activity at the Airport;
- Areas programmed for future non-aviation related development;
- Instrument approach capabilities of both existing and future runways;
- Off-airport land use compatibility and zoning;
- Programming for security improvements;
- Programming for development on the west side of the Airport in the vicinity of closed Runway 9/27; and
- Programming for a future parallel runway to Runway 14/32.

The Rogue Valley International-Medford Airport Master Plan identifies 31 projects in its short, intermediate, and long-term capital improvement program from 2001-2020, with a total cost of \$121.9 million.

#### *Ashland Muni-Sumner Parker Field*

Ashland Muni-Sumner Parker Field is also known as Ashland Municipal Airport and is a Category 3 airport. The airport is located two miles east of Ashland and serves 71 aircraft operations per day on average, with 77% of the operations transient general aviation, 17% local general aviation, 6% air taxi, and less than 1% military. Of the 62 aircraft based on the field, 49 are single-engine airplanes, 4 are multi-engine airplanes, 4 are ultralights, and 5 are helicopters.

The Oregon Aviation Plan identifies following deficiencies at the airport:

- Runway Length
- Taxiway Lighting
- Approach Type

#### *Pinehurst State Airport*

The Oregon Aviation Plan identifies the Pinehurst State Airport as a “Low Activity Airport with Emergency Use Significance,” Pinehurst State Airport is a Category 5 airport. Seven airplanes are based at the airport, six single-engine and one multi-engine, and 52 aircraft operations occur on average per month. The importance of the airport to the Oregon aviation system is based on its geographical location. The Oregon Department of Aviation identifies it as a “State Warning Airport.” When Ashland and Medford experience fog, Pinehurst is often found to be clear. About 76% of its operations are transient general aviation aircraft, while 24% are local general aviation aircraft.

Oregon Aviation Plan doesn’t identify any deficiencies at the airport.

#### *Prospect State Airport*

Also identified in the Oregon Aviation Plan as a “Low Activity Airport with Emergency Use Significance”, Prospect State Airport is a Category 5 airport with one based single-engine airplane and an average of 23 aircraft operations per week. Of these operations, 71% are transient general aviation, 16% are air taxi, and 12% are local general aviation.

Oregon Aviation Plan doesn’t identify any deficiencies at the airport.

## Water

Rogue River runs through Jackson County and does not serve as a major water transportation route. The river is used for recreational purposes only.

## Pipeline and Transmission System

### ***Water Transmission***

The Medford Water Commission (MWC) operates and maintains the water system that delivers drinking water to over 131,000 Rogue Valley residents with approximately 60% of these residents located in the City of Medford. The Medford Water Commission serves customers inside the City of Medford, and some outside customers such as in White City. The Commission’s wholesale customers include the cities of Central Point, Jacksonville, Phoenix, and Eagle Point. Other wholesale customers outside Medford include three domestic water districts. The Coker Butte Water Association, which

purchases its water from the Medford Water Commission contracts with the Commission to operate and maintain its systems. The City of Talent is not currently a MWC customer, but has entered into a contract with the Commission to facilitate future service. Talent is actively pursuing construction of an intertie to the MWC system.

The Medford Water Commission's principal source of water is Big Butte Springs, located about thirty miles northeast of Medford, Oregon and five miles east of the town of Butte Falls. The Rogue River is used as a supplemental source during the summer months of May through September.

### *Transmission and Distribution*

The Water Commission is responsible for the construction and maintenance of more than 490 miles of water mains. The water mains that come from the pumping stations are called feeder mains and vary in size from 24 to 48 inches in diameter. The feeder mains supply water to the service mains, which vary in size from 2 to 24 inches. The service mains carry the water to more than 500,000 service connections throughout the valley. The distribution system consists of these water mains and service lines plus valves, fire hydrants, and meters.

Water flows by gravity from Big Butte Springs to Medford in two transmission lines, with a combined daily capacity of 26.4 million gallons. Both transmission lines are underground throughout their entire 30.5-mile lengths and both terminate at the Capital Hill Reservoirs on the east side of Medford. The Big Butte Springs transmission lines are located on different routes, and each passes over approximately 75 different mountain summits. Pressure in the lower reaches is automatically controlled to maintain a full pipe by means of special backpressure control valves located at the Coal Mine Pressure Control Station near Coker Butte and Foothill Road on Line #1, and Nichols Gap in Eagle Point on Line #2.

The Rogue River supply transmission mains transport water from the Duff Treatment Plant to the City of Medford. The Table Rock Road transmission main consists of five miles of iron pipe. A second transmission main from the Rogue source consists of an iron main on Antelope Road and Crater Lake Highway. The Westside Transmission Main runs from Vilas Road to Stewart Avenue.

### *Natural Gas*

Avista Utilities is the natural gas provider serving Jackson County and other neighboring counties. Natural gas is transmitted from the north via the Williams Pipeline, which runs generally along the I-5 corridor. The PG&E Northwest Pipeline runs across Eastern Oregon, connecting Klamath Falls with Medford. A distribution network distributes natural gas throughout Jackson County and neighboring counties. For security reasons, Avista limits public dissemination of detailed information regarding the natural gas distribution system. Appendix B provides an Oregon Department of Transportation map of natural gas transmission and distribution lines.

## Power

Pacific Power is the provider of electric power in Jackson County. Efforts to obtain information regarding the power transmission system have not been successful to date.

## ENVIRONMENTAL INVENTORIES

The following summarizes the existing natural resources and environmental barriers within the study area including wetlands and flood hazards and natural resources, parks, and open space including historic resources and wildlife habitat.

### Wetlands & Flood Hazards

The National Flood Insurance Program was enacted by Congress to encourage local governments to adopt sound floodplain management programs and to provide subsidized flood insurance for property in flood hazard areas.

A draft flood insurance study has been prepared for the unincorporated areas of Jackson County. Detailed studies have been made along inhabited portions of twenty of the County's streams, creeks and rivers. The Soil Conservation Service has also prepared studies of the Applegate River and lower portions of Forest Creek. These detailed flood insurance studies generally define a regulatory floodway, a 100-year floodway fringe, and a 500-year floodplain. Where less population exists, approximate flood limit maps have been prepared.<sup>4</sup>

Jackson County contains over 42,000 acres of identified flood hazard areas, the majority of which is approximate (not A, AE, or AO) and near less populated areas. As seen in Table 4 There is approximately 5,200 acres regulated by Jackson County Land Development Ordinance. An additional approximate 6,000 acres were studied in detail and determined to be within the 100 year boundary, but are not regulated.

**Table 4: FEMA Flood Types**

FEMA Flood Type	Acres (excluding incorporated areas)
100 Year Boundary	26,857
100 Year Determined BFE – AE W/VFE	5,987
100 Year Shallow Flooding - AO	45
500 Year Boundary	4,419
Floodway	5,256
FEMA Floodplains Total	42,564

<sup>4</sup> [Jackson County Land Development Ordinance – Chapter 7](#)

Wetland information from Jackson County's GIS database is presented in Figures 21A through 21E. As shown in the figures, there numerous amounts of small wetlands spread through the entire county.

**Table 5: Wetlands**

Wetlands	Acres (excluding incorporated areas)
Wetlands	40,140

These wetlands are included in the County's designation of Goal 5 resources, as represented by Areas of Special Concern 90-10 (Ecologically or Scientifically Significant). The following regulations apply to Areas of Special Concern (ASC) 90-10. The regulations are specific to site types.

- All land use actions, other than forest operations which are governed by the Oregon Forest Practices Act, that are inconsistent with the stated management and objectives for "2A" and "3A" sites will be prohibited.
- Land use actions proposed on or adjacent to "3C" sites will be evaluated under a Type 2 process pursuant to Section 3.1.3 to ensure that potentially conflicting uses are adequately limited to retain the resource value identified in the Comprehensive Plan and identified in the Goal 5 Resources Background Document. (LDO Section 7.1.1(K))

### Natural Resources, Parks, and Open Spaces

Natural Resources, Parks, and Open Spaces are subject to the section 4(f) within the U.S. Department of Transportation Act of 1966 and section 6(f) of the Land and Water Conservation Act of 1965. Section 4(f) 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

Section 6(f) states that once a city, county, or agency has used funds for the purpose of creating outdoor recreation sites, either the land or the park cannot be eliminated or acquired without coordination with the National Park Service and mitigation that replaces the eliminated items.

Figures 22A through 22E identify recreational areas and significant wildlife habitat areas in the county. Numerous environmental overlays where additional development regulations and requirements apply for the purpose of protecting site-specific environmental resources are exhibited in these figures. Areas of special concern include the Ashland Watershed, Bear Creek Greenway, the Upper Rogue River Scenic

Area, Scenic Resources, and Ecologically or Scientifically Significant areas. Ecologically or Scientifically Significant Areas are addressed in the previous sub-section, so the following are regulations that apply to the Ashland Watershed, Bear Creek Greenway, the Upper Rogue River Scenic Area, and Scenic Resources Areas of Special Concern:

- Ashland Watershed (ASC 80-2) – The LDO grants authority to the County to impose special conditions on development approval to protect the quality of the water and reduce erosion. (LDO Section 7.1.1(A))
- Bear Creek Greenway (ASC 82-2) – Specified uses, including open space, parks, trails, and riparian enhancement, are permitted in these areas as Type 1 uses provided that the use is permitted as a Type 1 use in the underlying zone. All other uses permitted in the underlying zone must be reviewed through Type 3 procedures in these areas; consistency with the Bear Creek Greenway Plan must be demonstrated. The LDO grants authority to the County to impose special conditions on development approval to implement Bear Creek Greenway plans. (LDO Section 7.1.1(B))
- Upper Rogue River Scenic Area (ASC 90-7) – The LDO sets height restrictions and screening requirements for buildings proposed to be located within ¼ mile of the mean high water line of the river. The County is authorized to ensure that proposed land use actions will not significantly adversely impact the scenic, geologic, and fish and wildlife resources of the river. (LDO Section 7.1.1(H))
- Scenic Resources (ASC 90-9) – The LDO establishes several sets of regulations for these areas including: permitting uses without County review (e.g., conservation and maintenance of scenic resources, fish and wildlife habitat management, and passive recreation); requiring findings for all land use actions subject to County review in these areas that the actions will have no significant impact on the resources and will be compatible with the resources; and setting scenic quality performance standards for land divisions, surface mining, siting and screening of uses, structure design, road development, and landscaping. (LDO Section 7.1.1(J))

### **Historic Resources**

The State Historic Preservation Office (SHPO) database was consulted to identify the historical resources located within Jackson County and are displayed in Figures 23A through 23E. There is a combination of national and county registered historic properties as well as historical districts. Historic registered properties can be registered with the county register, national register, or both. As seen in Table 6, a majority of historic properties are nationally registered (44 of 56 identified properties) while a smaller portion are county registered (18 of 56 properties). County and national historic registered properties comprise of approximately 1,329 acres of land, of which the three largest are over 100 acres each:

- Hillcrest Orchard Historic District

- Fish Lake Shelter
- Chavner Family House

All properties on a County or National Historic Register are subject to Jackson County regulations limiting alterations, allowed uses, and moving and demolition.<sup>5</sup>

There are nine historic districts, all located within city jurisdictions. Four historic districts are located in the cities of Ashland and Medford each, while the ninth is located in Jacksonville.

**Table 6: Historic Register Types**

Registered Type	Properties	Acres
County & National Register	6	51.5
County Register	12	128.8
National Register	38	1148.5
Grand Total	56	1328.8

### ***Environmental Hazards***

The Oregon Department of Environmental Quality (DEQ) databases on Environmental Cleanup Site Information (ECSI) and Leaking Underground Storage Tank (LUST) Cleanup Sites were used to show the general location of environmental hazards within Jackson County in Figures 24A through 24E. These figures identify all existing locations (according to current DEQ databases) that are current hazardous waste sites/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 is 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 environmental hazard sites are located near urban areas or the I-5 corridor. A large portion of hazardous sites that are not near urban areas or the I-5 corridors can be found near major highways and roads.

### ***Wildlife Habitat***

There is approximately 662,000 acres of winter range identified as important for the survival of Black-tailed deer and Roosevelt elk herds (see Table 7). Identified winter range habitats are classified by

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<sup>5</sup> Regulations for Historic Resources (ASC 90-4) apply to proposals to: alter a designated historic landmark; engage in new construction or begin major new landscaping on a property designated as historic or that lies within an historic district; alter an exterior architectural feature; or place, erect, alter or relocate any sign within an historic district or on an historic resource site. Regulations address maintenance and repair, minor and major alterations, new construction, alterations to incompatible property, conditions that the County may impose on proposed alterations and new construction, moving and demolition, and allowable use permits for more intensive uses than provided for in the zoning district. (LDO Section 7.1.1(F))

ODFW as “Very Sensitive,” “Sensitive,” and “Other,” with commensurate levels of protection based on the carrying capacity of the range.<sup>6</sup>

As seen in Figures 25A through 25E, a majority of identified winter range habitats are classified as “Very Sensitive” and are predominantly located in the east half of the county. The two largest winter ranges include Big Butte Creek and Lake Creek, each over 100,000 acres each and located adjacent to each other in the central eastern part of the county.

**Table 7: Deer & Elk Winter Range**

Deer & Elk Winter Range	Acres
Very Sensitive	483,840
Sensitive	109,747
Existing	68,725
<b>Grand Total</b>	<b>662,312</b>

The Nongame Species Inventory includes a variety of species managed by various agencies such as Bureau of Land Management (BLM), United States Forestry Service (USFS), Oregon Department of Fish and Wildlife (ODFW), and other private entities. The largest nongame species areas are for the Spotted Owl, with an approximate combined area 80,800 acres and managed by the BLM or USFS.

Lands identified as significant bald and gold eagle, osprey, and great blue heron nesting areas are shown in Figures 25A through 25E and is subject to Jackson County regulations for the purpose of protecting habitat for aeries and rookeries.<sup>7</sup>

The northern portion of White City is identified as having Vernal Pool Fairy Shrimp habitat.

**Table 8: Nongame Species Inventory**

Nongame Species Inventory	Acres	Sites
Areas of Special Concern (County)		
Golden Eagle	85	3

<sup>6</sup> Deer and Elk Habitat (ASC 90-1) regulations apply to lands which affect the survival of Black-tailed deer and Roosevelt elk. The regulations set the following requirements: minimum parcel sizes (40-160 acres) in Sensitive and Especially Sensitive Winter Range units; gating requirements; findings that the proposed use will have minimal adverse effects on habitat; and ODFW-approved alternate siting plans. (LDO Section 7.1.1(C))

<sup>7</sup> Proposed land use actions, including road construction, are subject to the special regulations and development standards for Bald/Golden Eagle, Osprey, Great Blue Heron Nesting Areas (ASC 90-2). ODFW, ODF, BLM, and USFS will be notified of land use actions as needed. Proposed land use actions are to be reviewed according to Oregon Forest Practices Act (FPA) and interagency guidelines for species protection. The regulations allow the County to deny or require mitigation or modification of a proposed land use action determined by ODFW and ODF to be significantly adverse to the nesting area. County approval of applications in these areas is contingent upon the applicant submitting written evidence that an ODFW biologist and an ODF Forest Practices Officer have found that the area is adequately protected in a manner consistent with federal and state interagency guidelines and the FPA. (LDO Section 7.1.1(D))

Great Blue Heron	114	3
Bald Eagle Number by ODFW	345	5
Osprey	1,069	36
Jenny Creek Sucker Site <sup>8</sup>	2,848	5
Other Areas		
Siskiyou Mountain Salamander Site	8,450	36
Pileated Woodpecker/Pine Marten	20,909	28
FS Spotted Owl Management Area	40,741	45
Nest Site Number by ODFW	1,044	40
BLM Spotted Owl Management Area	40,112	87
Spotted Owl Number by ODFW	760	28
Vernal Pool Fairy Shrimp	7,579	17

## TITLE VI AND ENVIRONMENTAL JUSTICE INVENTORIES

Title VI of the Civil Rights Act of 1964 and associated authorities prohibit discrimination on the basis of race, color, national origin, income, gender, and age. As an important authority related to Title VI, the Federal Executive Order on Environmental Justice provides the following three guiding principles for programs and project receiving federal funding:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Because ODOT receives federal funding for its projects and programs, the agency established a Title VI program to address nondiscrimination in all of its functions, including transportation planning. ODOT’s 2002 Title VI Plan commits the agency to the following activities related to outreach and analysis:

- Make special efforts to contact and involve minority and low income groups in conducting planning studies and formal hearings held on transportation improvement plans and programs.
- Collect and analyze data on the impact of plans on minority and low income populations.

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<sup>8</sup> Jenny Creek Sucker Habitat (ASC 90-3) regulations require that ODFW, ODF, and BLM be notified of proposed land use actions in these areas. Proposed land use actions are to be reviewed according to FPA and interagency guidelines for species protection. The County is authorized to deny an application or require mitigation or modification if the application is found to conflict with or have adverse effects on habitat. County approval of applications in these areas is contingent upon the applicant submitting written evidence that an ODFW biologist, an ODF Forest Practices Officer, and the BLM have found that the area is adequately protected in a manner consistent with federal and state interagency guidelines and the FPA. (LDO Section 7.1.1(E))

In order to conduct these activities, populations protected by Title VI and related authorities must first be identified. Mapping 2013 American Community Survey (ACS) data, when available, helped identify these populations.<sup>9</sup> Maps of these populations and associated narrative are provided in the following sections.

**Non-white Population**

Approximately 16% of Jackson County is either non-white and non-Hispanic/Latino or Hispanic/Latino of any race. The Hispanic/Latino population comprises the largest minority of the population at approximately 11% of the population. The second largest non-white population group identifies as two or more races. Compared to the State of Oregon, Jackson County has a smaller percentage of total population for every non-white and non-Hispanic/Latino population except for those identified as two or more races as seen in Table 9.

Areas with the highest percentage of non-white population are located centrally within Jackson County, with the highest being located in White City or the City of Medford (see Figures 26A through 26E).

**Table 9: Non-white Population**

	Jackson County, Oregon		Oregon	
<b>Total Population</b>	<b>205,117</b>		<b>3,868,721</b>	
<b>Not Hispanic or Latino:</b>	<b>182,368</b>	<b>88.9%</b>	<b>3,406,820</b>	<b>88.1%</b>
White Alone	170,611	83.2%	3,018,414	78.0%
Black or African American Alone	1,280	0.6%	66,223	1.7%
American Indian and Alaska Native Alone	1,343	0.7%	37,750	1.0%
Asian Alone	1,954	1.0%	145,830	3.8%
Native Hawaiian and Other Pacific Islander Alone	547	0.3	14,572	0.4%
Some Other Race Alone	177	0.1%	6,049	0.2%
Two or More races	6,456	3.2%	117,982	3.1%
<b>Hispanic or Latino:</b>	<b>22,749</b>	<b>11.1%</b>	<b>461,901</b>	<b>11.9%</b>
White Alone	17,788	8.7%	278,735	7.2%
Black or African American Alone	154	0.1%	4,105	0.1%
American Indian and Alaska Native Alone	359	0.2%	9,661	0.3%
Asian Alone	42	0.0%	2,156	0.1%
Native Hawaiian and Other Pacific Islander Alone	0	0.0%	421	0.0%
Some Other Race Alone	2,907	1.4%	138,951	3.6%
Two or More races	1,499	0.7%	27,872	0.7%

<sup>9</sup> Data for race/ethnicity, age, and poverty could be found in the 2013 ACS data at the Census Block Group level.

## Population over 65 Years Old

Approximately 18% of the Jackson County population is over the age of 65. Census block groups within the County where 27% or more of the population are over the age of 65 are generally distributed around the county. Census block groups that have the highest percentages, over 41%, are concentrated along the I-5 corridor between the cities of Medford, Phoenix, and Talent (see Figures 27A through 27E).

## Households in Poverty

Approximately 16% of households within Jackson County are below poverty level. Compared to the State of Oregon, Jackson County has a slightly higher rate of poverty (see Table 10). As shown in Figures 28A through 28E, census block groups with high rates of poverty, at 23% or more, tend to occur near cities along the I-5 corridor. Other areas with high rates of poverty are found near White City, Jacksonville, and Shady Cove. Census block groups with the highest percentage of households in poverty, between 34-46%, are near White City and the City of Rogue River and within the City of Medford.

**Table 10: Households in Poverty**

	Jackson County Oregon		Oregon	
<b>Total</b>	<b>83,140</b>		<b>1,516,456</b>	
Income In The Past 12 Months Below Poverty Level	13,224	15.9%	223,711	14.8%
Family Households	6,831	8.2%	108,637	7.2%
Married-Couple Family	2,675	3.2%	43,866	2.9%
Other Family	4,156	5.0%	64,771	4.3%
Male Householder, No Wife Present	847	1.0%	13,033	0.9%
Female Householder, No Husband Present	3,309	4.0%	51,738	3.4%
Nonfamily Households	6,393	7.7%	115,074	7.6%
Male Householder	3,031	3.7%	52,047	3.4%
Female Householder	3,362	4.0%	63,027	4.2%
Income In The Past 12 Months At Or Above Poverty Level	69,916	84.1%	1,292,745	85.3%
Family Households	47,167	56.7%	858,331	56.6%
Married-Couple Family	38,076	45.8%	695,937	45.9%
Other Family	9,091	10.9%	162,394	10.7%
Male Householder, No Wife Present	2,647	3.2%	53,982	3.6%
Female Householder, No Husband Present	6,444	7.8%	108,412	7.2%
Nonfamily Households	22,749	27.4%	434,414	28.7%
Male Householder	9,686	11.7%	200,578	13.2%
Female Householder	13,063	15.7%	233,836	15.4%

## MAP ATLAS

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26. Non-White Population
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## REFERENCES

1. Rogue Valley Council of Governments. *Regional Transportation Plan*, 1994
2. Oregon Department of Transportation. *Oregon Transportation Planning Rule*, 1995
3. USDA Forest Services, Rogue River National Forest Transportation System.
4. Rogue Valle Metropolitan Planning Organization. *Freight Route Study*, 2012.
5. Oregon Department of Transportation. *Bicycle and Pedestrian Design Guide*, 2011.
6. Jackson County, Roads, Parks and Planning Services. *Jackson County Bicycle Master Plan*, May 1996
7. Jackson County Geographic Information System (GIS) Services. *SmartMap*, 2001.
8. Rogue Valley Council of Governments, Rogue Valley Transportation District, Oregon Department of Transportation, Rail Division. *Southern Oregon Commuter Rail Study*, 2001.
9. Oregon Department of Transportation, Rail Division. *Oregon Rail Plan*, 2001.
10. Oregon Department of Transportation Aviation Division. *Oregon Aviation Plan*, 2007.
11. Airport Information Website: <https://www.airnav.com/airports/>
12. Rogue Valley International Medford Airport. *Medford Airport Master Plan*, 2001.