# **Chapter 1 – Introduction**

### A. Purpose

The Middle Rogue Regional Transportation Plan (RTP) is a multi-modal transportation plan designed to meet the anticipated 25-year transportation needs within the Middle Rogue Metropolitan Planning Organization (MRMPO) planning area boundary.

Regional transportation systems have significant and long-term impacts on economic well-being and quality of life. Not only does the transportation system provide for the mobility of people and goods, it also influences patterns of growth and economic activity through accessibility to land. Furthermore, the performance of the transportation system affects public policy concerns such as air quality, environmental resource consumption, social equity, economic development, safety and security.

Regional transportation planning recognizes the critical links between transportation and other societal goals. The planning process is more than merely listing highway and transit capital investments; it requires developing strategies for operating, managing, maintaining and financing the regional transportation system in such a way to advance long-term goals.

Development and adoption of an RTP is required to ensure that the MPO area remains eligible to receive state and federal transportation funding. Federal and state rules requiring completion and adoption of the Plan include the federal transportation act Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), the U.S. Clean Air Act amendments of 1990, and Oregon's Transportation Planning Rule (TPR). The RTP serves as the Regional Transportation System Plan required by the TPR.

As a product of multi-jurisdiction collaboration, the RTP reflects local jurisdiction policy and planning. While it is consistent with local plans, the RTP horizon extends beyond the horizon of most other adopted plans to fulfill federal requirements. Many of the long-range analysis and conditions described here are not within the scope of existing local plans and, therefore, should not be interpreted as the conditions planned or anticipated by the local jurisdictions. Within the region, transportation policy and planning are directed at the jurisdiction level, and as timeframes for local plans advance, the RTP will be amended accordingly.

As a regional plan, this document does not provide designs for individual projects. Nor does it identify the smaller, local projects that MRMPO jurisdictions build with local funds. Such details are not within the scope of a regional plan. Project design is completed on a project-by-project basis, typically with close involvement of the jurisdictions within the immediate project areas.

The RTP uses projections for future growth and development that are based on current trends and approved land uses, policies and ordinances. It identifies the basic land-use assumptions through the year 2040, including forecasts of future population and employment, and the resulting demand on the region's arterial and collector street system. Future travel conditions were developed through travel demand modeling, using a peer-reviewed model developed in collaboration with the Oregon Department of Transportation (ODOT) Transportation Planning and Analysis Unit (TPAU).

#### 1. Planning Period

Although the RTP focuses on intra-regional (within the region) travel, it also addresses interregional (through-region) travel. Ultimately, the Plan reflects the balance the region strikes between competing demands for funding and competing views as to the best course for development across the region. The funding resources identified in the Plan Implementation section are only those upon which the region can rely, so the projects identified may be reasonably anticipated to occur with known funding.

The Plan looks at different types of transportation opportunities that are available and potentially beneficial, and considers how these various elements could fit together to foster a coordinated system by improving system management and operation. The RTP serves as a guide for the management of existing transportation facilities and for the design and implementation of future transportation facilities through 2040. The Plan provides the framework and foundation for the region's transportation future. Policies and project descriptions are provided to enable agencies and the public to understand and track projects that will be needed over the next 25-years.

#### 2. Air Quality Conformity

The U.S. Congress approved amendments to the Clean Air Act on November 15, 1990. Shortly thereafter, urban airsheds were tested and classified on the basis of their attainment or non-attainment to National Ambient Air Quality Standards (NAAQS). The Grants Pass Urban Growth Boundary (UGB) was designated as a non-attainment area for particulate matter less than ten micrometers ( $PM_{10}$ ) and the Grants Pass Central Business District (CBD) non-attainment for carbon monoxide (CO). However, monitoring data since that time has shown that pollutant levels are decreasing. CO and  $PM_{10}$  levels have steadily declined and continue to be far below the NAAQS.

- On October 30, 2000, the Environmental Protection Agency (EPA) re-designated the Grants Pass CO non-attainment area to attainment, and approved the maintenance plan.
- On December 26, 2003, the EPA re-designated the Grants Pass PM<sub>10</sub> non-attainment area to attainment for the NAAQS for PM<sub>10</sub> and approved the maintenance plan.

### Current Carbon Monoxide (CO) and PM<sub>10</sub> Status

Oregon Department of Environmental Quality (ODEQ) developed a CO and  $PM_{10}$  Limited Maintenance Plan (LMP) for the Grants Pass area, which was submitted to EPA in April 2015 and will go into effect in September 2015. Based on ODEQ's review of the 2002 – 2005 CO and  $PM_{10}$  emissions data for Grants Pass, the area meets the requirements for a limited maintenance plan.

As an area with a limited maintenance plan, the MRMPO is no longer required to perform emissions analysis for CO, but still must demonstrate conformity as discussed below. This is a considerable cost-savings to the MRMPO. The 2040 RTP meets federal Clean Air Act requirements. Analysis shows that through the horizon of the Plan, under land-use conditions described and projects and policies that can be implemented within the current funding forecast, the region will meet standards for emissions of CO within the Grants Pass area, and  $PM_{10}$  within the entire planning area. Information about this analysis and details about the process for meeting air quality requirements is contained in the *Air Quality Conformity Determination* developed for this Plan.

## **B.** The Middle Rogue Planning Area

The MRMPO planning area includes the cities of Gold Hill, Grants Pass, Rogue River, and adjacent parts of Josephine and Jackson Counties which are anticipated to become urbanized over the 20 year planning horizon. In addition, the following agencies participate in the MRMPO planning processes: the Oregon Department of Transportation (ODOT), Oregon Department of Environmental Quality (ODEQ), Oregon Department of Land Conservation and Development (DLCD), Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and U.S. Environmental Protection Agency (EPA).

Congress requires that metropolitan areas of at least 50,000 in population establish a metropolitan planning process that is continuing, collaborative and comprehensive, in order for the region to continue receiving federal transportation funds. Currently there are over 400 metropolitan planning organizations in the nation. This Plan fulfills federal requirements that metropolitan areas develop and maintain long-range transportation plans.



Figure 1-1: Middle Rogue MPO Planning Area

The Grants Pass area reached the population threshold and was designated an Urbanized Area (UA) after the 2010 Census. As a result, the Rogue Valley Council of Governments (RVCOG) was designated by the Governor of Oregon to staff the MRMPO on March 20, 2013. The RVCOG Board of Directors subsequently delegated responsibility for MRMPO policy functions to a Policy Committee of elected and appointed officials from all member jurisdictions.

Ultimately, MPOs provide the forum for the many jurisdictions and agencies within a particular metropolitan region to come together to address the transportation issues that confront them.

# C. Regional Planning and Quality of Life

Taking a regional approach to transportation planning gives communities the opportunity to look at projected future development and resulting travel demands and make decisions to avoid some of the unwelcome consequences of growth: sprawl development, traffic congestion and deteriorating air quality.

Thorough planning has become more significant as the cost of expanding roads to meet traffic demand has grown and the land on which to build has become scarcer and more valuable to the region for uses other than transportation. At the regional level, links between land use and roadway congestion may be more clearly seen and addressed. Through this Plan the public can see future transportation needs and take necessary steps now to address them efficiently and effectively.

The State and Federal regulatory framework that guides RTP development embodies many of the goals routinely brought forward by citizens when they talk about the region's future. None of the jurisdictions within the MRMPO exists in isolation: residents live in one jurisdiction, work in another, shop and recreate in others. Significant development in one jurisdiction is bound to affect conditions in other jurisdictions.

The RTP, like the regional transportation system, links the region's jurisdictions. It identifies a transportation need they all hold in common and offers a foundation for addressing that need as the region grows.

# **D.** Keeping the RTP Current

This is the initial regional transportation plan for the MRMPO. Because of the air quality conditions in the Grants Pass area (air quality "maintenance area"), the MRMPO must be able to show consistently that the region is in conformity with air quality standards for at least 20 years into the future. That conformity demonstration must be made at least every four years, and triggers an update of the RTP. The next such update will be required in spring 2020.

These updates give the MRMPO the opportunity to evaluate past projections for growth and anticipated use of the system. During the plan update process, the MRMPO compares the existing land use, recent development trends, and the use of the different modal components of the transportation system. This new perspective permits the MRMPO to refine growth projections and their implications for travel.

While such updates are infrequent, the RTP is routinely amended. Most commonly it is amended to include local projects that are newly nominated to receive federal funding. If a local project were set to receive such funding, the MRMPO would consider amending the RTP to include that project.

For a local project to receive federal funding it must be in this Plan and in the MRMPO shortrange funding programming document, the Metropolitan Transportation Improvement Program (MTIP). The RTP is intended to be regularly updated to reflect such changes.

#### E. Development Process (this section to be updated/completed later in the year)

The MRMPO 2040 RTP was developed through a collaboration of local governments, ODOT, citizens and stakeholders, as well as special interest groups in the Grants Pass Urbanized Area. The Plan was adopted in January 2016.

The first step in the plan development process was establishing a vision and goals for the future transportation system of the Planning Area. Next, the existing conditions of the Middle Rogue MPO area transportation system were inventoried. The lists of projects and policies recommended in this plan are within the framework of the Preferred Alternative contained in Chapter X.

The development of the Plan involved three cohesive and integrated tracks: a public participation and input process, technical analyses, and directives from the MRMPO Policy Committee.

The role of the public and the agency's efforts to engage the public in the development of the Plan are described in Chapter 4 - Public Involvement.

The technical track involved the work of MRMPO's Technical Advisory Committee, comprised of public works and transportation staff of the member jurisdictions, staff of the MRMPO and ODOT.

The resulting technical work was prepared for review by the public and the elected officials. Additionally, the technical track also retained applicable data analyses and modeling forecasts completed by ODOT's Transportation Planning Analysis Unit (TPAU).

Finally, the MRMPO Policy Committee steered the development of the Plan at the policy level. According to federal rules, the adoption of the Plan by the MRMPO Policy Committee constitutes the approval of a Transportation Plan for the MRMPO Planning Area.

#### **F. Document Structure** (confirm this section once chapters finalized)

This introduction forms Chapter 1 of the document and Chapter 2 states the Plan's Vision and Goals. Chapter 3 provides detail on the public involvement process. Chapters 4 & 5 describe the Planning Area and the elements of the existing transportation system in the area. Chapter 6 presents the alternatives considered for meeting the goals of the Plan. Chapter 7 considers sustainability within the transportation sector, and Chapter 8 includes the Financial Plan for the MRMPO. Chapters 9 thru 11 include evaluation and system performance regarding air quality conformity and environmental considerations. Chapter 12 includes the recommendations of the Plan. Chapter 13 describes efforts to improve safety and security for all system users, and

Chapter 14 outlines how goals and policies are implemented through procedures and criteria used by the MRMPO to identify projects.

The Appendices of the Plan follow the main body of the document. Maps have been inserted at the end of each applicable chapter.

Map 1-1 – MRMPO Planning Area



# **Chapter 2 - Vision and Goals**

The vision and goals chapter of the Regional Transportation Plan (RTP) provide the policy framework that guides development of the plan itself as well as subsequent decisions about system management, and project selection and implementation. The goals provide criteria to evaluate how well the plan reflects the values expressed by the community. The 2040 RTP includes the goals, policies, strategies and performance measures established to address national and state requirements, and regional/local issues as outlined below.

- The goals are intended to guide future transportation decisions in the region.
- The policies are established to help the region move closer to the intended goals.
- The strategies state how the Metropolitan Planning Organization (MPO) will achieve the polices, and
- The performance measures are established to evaluate how the MPO is achieving its stated goals.

# A. Vision

The Vision of the Transportation Plan was developed based on the most common elements of the visions described in the area's transportation and land use plans. The draft vision was reviewed and modified by the general public, the Technical Advisory Committee (TAC), and the Policy Committee. Through these processes the Policy Committee adopted the following Vision for the Transportation Plan:

"An intermodal transportation system that provides for safe, efficient, and convenient movement of people and goods to support a robust and burgeoning regional economy"

# **B.** Goals

The Goals of the Transportation Plan were developed based on a review of the goals found in the area's transportation plans and in conformance with the above vision and the regulations set out in the Middle Rogue Metropolitan Planning Organizations' (MRMPO) adopted Title VI Plan. The TAC reviewed and commented on the Goals, and in accordance with their recommendations, the Policy Committee adopted the following Goals for the Transportation Plan:

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#### Table 3-1: RTP Goals

# **C. MAP-21**

Moving Ahead for Progress in the 21st Century Act (MAP-21) is the current national transportation law that provides the guiding principles for transportation decision-making in metropolitan areas throughout the U.S. MAP-21 sets forth seven planning factors to guide transportation decisions. Table 1-2 provides a summary of how the seven RTP Goals address the seven MAP-21 federal planning factors.

### Table 3-2: MAP-21 Planning Factor Correlation

MAP-21 Planning Factors	Relates to Goal Number
<b>Safety</b> - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.	2
<b>Infrastructure Condition</b> - To maintain the highway infrastructure asset system in a state of good repair.	7
<b>Congestion Reduction</b> - To achieve a significant reduction in congestion on the National Highway System	3, 5
System Reliability - To improve the efficiency of the surface transportation system.	5,6
<b>Freight Movement and Economic Vitality</b> - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.	1
<b>Environmental Sustainability</b> - To enhance the performance of the transportation system while protecting and enhancing the natural environment.	4
<b>Reduced Project Delivery Delays</b> - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.	5

# Goal 1: Develop and implement an economic regional plan that will cultivate, maintain and enhance the region's economic vitality.

**Policies:** 

- **G1 P1** Improve the coordination of land use and transportation planning ensuring developments are adequately connected by the region's transportation system and appropriately located to preserve the quality of life in surrounding areas.
- **G1 P2** Apply transportation investments and policies facilitating sustainable business growth and tourism growth within the region, consistent with local and regional comprehensive plans.
- **G1 P3** Identify and utilize the existing investment and reinvestment of transportation resources into and within the MRMPO as a critical component to the overall economic health of the region.
- **G1 P4** Develop and Execute land use policies which create economically strong regional activity centers with a mix of job, housing, services and recreation in an intermodal environment.
- **G1 P5** Identify and initiate transportation investments and policies which will facilitate the movement of freight.

#### Strategies:

- **G1 S1** Work with the economic development community to identify current and potential deficiencies and threats to the economic vitality of the MRMPO area that relate to transportation, and work to mitigate those threats.
- G1 S2 Target transportation improvements that:
  - (a) Support downtowns as primary economic development generators.
  - (b) Support locations with ready and available industrial properties
  - (c) Support the reinforcement of investments in existing neighborhoods within the MRMPO.
- G1 S3 Give high priority to regional planning and funding for transportation facilities that serve the regional core and regional activity centers where individuals can switch easily from one transportation mode to another.
- G1 S4 Intercept automotive traffic at key locations by encouraging "park once" and providing alternatives to driving in regional activity centers.
- GI S5 Seek various and innovative funding sources, tools, and strategies to meet freight needs.

- a) Nurture public/private partnerships to leverage public funds.
- b) Support local, regional, and state bond measures to improve freight infrastructure.
- c) Ensure that economic benefits are considered for all viable freight modes when evaluating projects for transportation investments.

#### **Performance Measures:**

- **G1 PM1** Employment change in vicinity of projects.
- G1 PM2 Mode share.

# GOAL 2: Develop, implement and maintain a series of plans to increase the safety and security of the region's transportation system.

#### **Policies:**

- **G2 P1** Investigate and employ current best practices, design standards, advanced technologies and education to reduce transportation related crashes, injuries, and fatalities within the MRMPO.
- **G2 P2** Synchronize plans to work in partnership with first responders, transportation, and health agencies as they develop emergency and disaster plans and other security related plans for the region.
- **G2 P3** Identify and utilize transportation investments and policies which will result in a higher level of personal security for pedestrians, cyclists, motorists, and users of transit.
- **G2 P4** Develop and utilize Traffic Calming Techniques. Traffic Calming refers to various design features and strategies intended to reduce vehicle traffic speeds and volumes on a particular roadway.
- G2 P5 Develop and implement course of action to encourage the efficient and safe movement of people, goods, and information with minimal adverse impacts on residents and the environment.

#### Strategies:

- **G2 S1** Identify high severity crash locations within the Metropolitan Planning Area and program projects for these locations as soon as possible.
- G2 S2 Consider intersection improvements that provide safety benefits.

- G2 S3 Develop a regional safety plan, in cooperation with safety partners that supports the Oregon Strategic Highway Safety Plan.
- **G2 S4** Assist in developing incident management plans for major routes in the region, as appropriate.
- **G2 S5** Establish a plan of action to improve security measures and safety awareness for pedestrians, cyclists, motorists, and transit users within the Metropolitan Planning Area.
- **G2 S6** Support the implementation of effective safety measures, such as, skid-resistant pavement, elimination of roadside hazards and better intersection controls.

#### **Performance Measures:**

G2 - PM1 Track injury and fatal crashes.
G2 - PM2 Track non-injury crashes.
G2 - PM3 Measure the participation in safety education programs.
G2 - PM4 Track the number of projects built to improve safety.
G2 - PM5 Track the percent of dollars dedicated to safety improvements.
G2 - PM6 Track the reduction of Vehicle Miles Traveled (VMT).

# GOAL 3: Identify, develop and implement the ability to increase and maintain accessibility and mobility choices in the region.

#### **Policies:**

- **G3 P1** Identify and expand upon areas of transit effectiveness so the public is able to reach employment centers, medical and education hubs and their homes conveniently, in addition to employers being capable of hiring employees to work when needed (e.g., increase transit frequency).
- **G3 P2** Develop and implement a complete streets policy promoting the use of alternative transportation modes for pedestrians, bicyclists, and transit users. Improvements could include new or improved sidewalks, bicycle routes or other accommodations, (bus pullouts, and other facilities/improvements) as part of future roadway construction/reconstruction and private development projects.
- **G3 P3** Develop and utilize local incentives to encourage employers to support employees in considering transit as a commuting option, and to encourage Transit Oriented Development (TOD).

**G3 - P4** Develop and provide incentives to encourage public transportation services – such as commuter services, park and ride lots, ridesharing, and carpooling programs – helping reduce the number of single occupancy vehicle trips within the region.

#### Strategies:

- **G3-S1** Implement a regional bicycle/trail/pedestrian plan and include bicycle and pedestrian facilities in new transportation projects and improvements.
- **G3 S2** Develop a Transportation Options program.

#### **Performance Measures:**

**G3 – PM1** Track funding for bicycle, pedestrian and transit projects.

# GOAL 4: Develop and implement policies and plans to protect, preserve, and enhance the social, historical, and natural environments of the region.

#### **Policies:**

- **G4 P1** Coordinate roadway and infrastructure projects with guidelines established by federal, state, and local historic preservation planning agencies and the principles of Context Sensitive Solutions (CSS) treatments.
- G4 P2 Identify and pursue transportation projects and other transportation related technologies resulting in positive benefits to improved air quality and energy efficiency.
- G4 P3 Analyze and implement transportation investments which will help reduce greenhouse gases, and other emissions, and support the reduction of single occupancy vehicle trips.
- **G4 P4** Ensure transportation decisions in the region are made with full consideration of the requirements of Title VI and Environmental Justice provisions.
- **G4 P5** Identify and utilize transportation investments which will support sustainable development, enhance quality of life opportunities and promote healthy communities.

#### Strategies:

- **G4-S1** When evaluating transportation projects, recognize the connections between transportation efficiency and land uses and densities.
- G4-S2 Promote street and pathway connectivity, including off-road corridors for non-

motorized vehicles.

- **G4 S3** Provide environmentally-sensitive transportation options.
- G4 S4 Consider potential environmental impacts and mitigation to maintain and restore affected environmental functions in consultation with appropriate federal, state and local agencies.
- G4 S5 Plan and implement transportation and related facilities that are aesthetically pleasing.

#### **Performance Measures:**

G4 - PM1 Change in mixed-use and downtown development.
G4 - PM2 Impacts on identified resource areas using most up-to-date data.
G4 - PM3 Expansion of off-network paths. Improve air quality through projects that reduce carbon monoxide (CO), particulates (PM<sub>10</sub>) and greenhouse gases.
G4 - PM4 Measure percent of funding by project dedicated to "streetscapes" (benches, trees, planters, and traffic calming).

# GOAL 5: Identify, develop and implement the best available technology for the MRMPO to utilize for maximize system effectiveness.

#### **Policies:**

- **G5 P1** Develop and implement the use of Transportation Demand Management (TDM) principles to mitigate capacity deficiencies on congested roadways and intersections.
- **G5 P2** Analyze and consider the use of transportation technology in all projects to maximize effectiveness and safety.
- G5 P3 Identify, develop and encourage greater use and acceptance of access management policies and devices (e.g. medians, turn restrictions, combined entrances) to maintain adequate transportation system capacity coordination between roadway design and land use and to enhance safety for the traveling public.
- **G5 P4** Develop, implement, and maintain an Intelligent Transportation System (ITS) architecture as a means of achieving better management and support deployment of appropriate ITS investments.

#### **Strategies:**

- **G5 S1** Develop a list of high priority projects that are designed to improve the regional transportation system by addressing problem locations having capacity, safety and/or modal connection problems; and program.
- **G5 S2** Support projects that upgrade traffic signals, improve signal timing, and improve signal coordination.
- **G5 S3** Identify future Park & Ride locations.
- **G5 S4** Deploy technologically advanced systems to monitor and manage traffic and to control and coordinate traffic control devices including providing priority to transit vehicles where appropriate.

#### **Performance Measures:**

- **G5 PM1** Percentage of high priority projects constructed.
- **G5 PM2** Track the number of projects that upgrade traffic signals, improve signal timing, and improve signal coordination.
- **G5 PM3** Track the number of newly identified Park & Ride locations.

# GOAL 6: Improve and enhance integration and connectivity of the transportation system across and between modes.

#### **Policies:**

- **G6 P1** Develop and integrate land use and transportation project planning for new development and redevelopment.
- **G6 P2** Identify and develop projects for existing transportation facilities to retrofit, where possible, and to accommodate pedestrians, bicyclists, and transit users to enhance connectivity between modes.
- **G6 P3** Identify areas and develop plans to improve capacity, pavement maintenance, and design of roadways and bridges that connect significant origins and destinations within the MRMPO to accommodate higher traffic flows where it is necessary, especially for freight.

#### Strategies:

**G6 - S1** Design future roadways and bridges to accommodate the anticipated level of freight traffic – both in terms of volume and in cargo weight.

**G6 – S2** Inventory the existing sidewalk system and identify areas where new sidewalks and sidewalk ramp improvements are needed within the MRMPO.

#### **Performance Measures:**

- **G6 PM1** Percent of regional corridors that have facilities for at least three modes (e.g.: pedestrians, transit or motor vehicles, and bicyclists).
- **G6 PM2** Measure the increase in intermodal activity.
- **G6 PM3** Number of new mixed use development which include residential dwelling units.

# Goal 7: Identify and develop projects that emphasize maintenance and preservation of the existing transportation system.

- **Policies:**
- **G7 P1** Identify and implement innovative and sound funding practices to implement the RTP.
- **G7 P2** Identify, prioritize and apply for investment opportunities to preserve the existing transportation system including all modes.

#### Strategies:

- **G7-S1** Public-Private partnerships and other innovative approaches can maximize resources.
- **G7 S2** Give priority to projects that do not expand the existing road system.
- **G7 S3** Identify and secure reliable sources of funding to ensure adequate maintenance, preservation and rehabilitation of the region's transportation system
- **G7 S4** Encourage local funding mechanisms.

#### **Performance Measures:**

- **G7 PM1** Track funding obligations and availability.
- **G7 PM2** Review and update MRMPO project funding criteria using quantitative methodologies to the extent practicable.

# **Chapter 4 - Planning Area Characteristics**

This section provides information on the political and physical characteristics of the Planning Area, in addition to area demographics, employment characteristics, and commute patters.

# A. Political and Physical Characteristics

The Middle Rogue Planning Area is located in the Rogue Valley of southwestern Oregon. The Planning Area covers just under 65 square miles (41,398 acres) extending from Grants Pass eastward to Gold Hill. The cities of Gold Hill, Grants Pass, and Rogue River are wholly within the Planning Area, as well the parts of Jackson and Josephine counties that are anticipated to urbanize over the next 20 years.

The arterial and collector roadways subject to this plan are under the jurisdiction of Jackson and Josephine counties, the three cities, and the Oregon Department of Transportation (ODOT). Major state highway facilities located within the Planning Area include Interstate 5 (I-5), Sams Valley Highway (OR 234), Redwood Highway (OR199), and Rogue River Highway (OR 99). In Chapter 1, Figure 1-1 depicts the Planning Area.

Topography varies from predominantly level areas near the Rogue River and the Merlin area to rolling foothills surrounding the valley. The Rogue River is the most prominent water feature in the area. Floodplains and numerous wetlands are located near the river and its tributaries.

### 1. Land Use and Zoning

The understanding of interactions between land use and transportation is critical to transportation and land use planning. Location of human activities and lay of land determine travel patterns, traffic volumes and the need for transportation facilities, while transportation infrastructure influences land use patterns.

The central areas of Grants Pass, Gold Hill and Rogue River are characterized by compact grid street patterns, while much of the remainder of the Planning Area is less dense and features a more random street pattern, adapting to terrain. Land designated for industrial use in Grants Pass is concentrated in the eastern part of town along the railroad corridor. Other areas of industrial land are between Interstate 5 and Merlin, an unincorporated rural community.

Commercial zones in the area follow major roadway corridors in addition to concentrations in downtown Grants Pass, Gold Hill, and Rogue River. Public land includes parks and surrounding Bureau of Land Management (BLM) and Forest Service lands. Much of the Planning Area is zoned as residential with farm and forest zones at the fringe.

#### **<u>City of Grants Pass</u>**

The City of Grants Pass is the primary commercial center of the Planning Area and contains more than two-thirds of the population. The most notable commercial areas of the city include the downtown central business district (CBD), 6<sup>th</sup> and 7<sup>th</sup> Streets, Hwy 99, Williams Highway

238, Hwy 199, and Redwood Avenue. Development in the Grants Pass CBD is relatively compact and includes a mixture of commercial uses. The street system in the downtown area is a grid pattern and includes two sets of one-way streets (6<sup>th</sup> Street southbound and 7<sup>th</sup> Street northbound; E Street westbound and F Street eastbound). Both sets of facilities include pedestrian and bicycle improvements, although the bike lane on 6<sup>th</sup> Street is diverted to 4<sup>th</sup> Street from A Street to Bridge Street. The Grants Pass Comprehensive Plan identifies neighborhood centers, which are located throughout the city, primarily along major arterials and collectors.

Much of the industrial land in Grants Pass is located in the eastern portion of the city. Higherdensity residential areas are generally east of the CBD north of the river, and in portions of the Fruitdale and Redwood districts. Lower-density residential areas are in the northern and western parts of the city.

#### **City of Rogue River**

The City of Rogue River is approximately 7-miles east of Grants Pass and is bisected by Interstate 5 and the Rogue River. The city center immediately north of the freeway includes a mix of retail and service commercial uses. Other commercial and employment uses are south of the river, with the largest industrial area at the southern edge of the city, located between the freeway and North River Road. Multiple family housing surrounds the downtown with single-family dwellings filling the remaining areas.

#### City of Gold Hill

Gold Hill is located near the eastern boundary of the Planning Area. Except for small pockets of multi-family housing, it is primarily a single-family residential community. Most commercial and employment uses are concentrated along Second Avenue, which is also a state highway.

A private rail crossing provides access to the largest industrially zoned area, located near the west edge of the city. This access reduces options for use of the property. The railroad runs the width of the city; two public crossings at Gustav Street and Highway 234 provide the only public street connections between the northern and southern portions of the city.

The Rogue River forms the southern and eastern boundaries of the city. Bridges at the east edge and farther to the west connect to Interstate 5.

#### **Unincorporated Josephine County**

The unincorporated portions of Josephine County include a mix of residential, farming, and forest uses with rural residential uses dominating the non-urban areas south of the river. The community of Murphy straddles the Applegate river at the south edge of the Planning Area. Most of the agricultural land in the Planning Area is west of Grants Pass and the largest farms are north of the river. The higher elevations surrounding the valley are zoned for forest use.

Several residential areas in the unincorporated portions of the county lie adjacent to the City of Grants Pass. Large portions of these intensely developed areas near Redwood Avenue, Upper River Road, and Demaray Drive are within the city's Urban Growth Boundary.

Merlin-North Valley Unincorporated Rural Community connects to the Planning Area via Interstate 5. It includes the North Valley Industrial Park, the Grants Pass Airport, the Rendata Industrial area and the Merlin townsite.

#### **Unincorporated Jackson County**

The unincorporated portions of Jackson County represent a relatively small portion of the Planning Area. These areas are dominated by small residential lots along the river and small farms at the upland, open areas. At the intersection of Rogue River Highway and Foots Creek Road is a small cluster of commercial structures that comprise the Foots Creek Rural Service Center.

#### 2. Schools and Parks

Community focal points, such as schools and parks, are important to understanding travel patterns. These facilities attract pedestrians, bicyclists, transit users, and drivers and have specific transportation needs (e.g., pedestrian safety around schools). Awareness of the location of these facilities is important to planning for an effective regional transportation system.

#### **Schools**

Trips to and from school by students and teachers – via bus, walking, bicycling, or driving – affect transportation patterns and transportation infrastructure planning and design. Schools also attract people outside of school hours for sports, extracurricular events, and community events held at school facilities.

There are 27 public and private schools, including Rogue Community College, within the study area. Thirteen of the schools are inside the Grants Pass city limits, including nine elementary schools, two middle schools, and one high school, in addition to a K-12 private school. Other schools in Josephine County outside of the Grants Pass city limits include four elementary schools, two middle schools, one high school, and one K-12 private school. One elementary school, a middle school, and a high school are in Rogue River; one elementary school and one middle school are in Gold Hill.

See Map 4-2, *Public Schools*, at the end of this chapter for a visual depiction of school locations.

Jurisdiction within Planning Area	Elementary Schools	Middle Schools	High Schools
City of Grants Pass	9	2	1
City of Rogue River	1	1	1
City of Gold Hill	1	1	0
Unincorporated Josephine County	4	2	1

#### Table 5-1: Public Schools by Jurisdiction

#### **Rogue Community College (RCC)**

Grants Pass is home to the Rogue Community College Redwood campus, which is located just west of downtown along Hwy 199. The campus encompasses approximately 84 acres, including 30 campus buildings with over 200,000 square feet of building space. The campus provides parking for approximately 846 vehicles and has three designated bicycle parking areas.

#### Parks and Recreational Areas

Parks are important to the transportation system because they are popular destinations for residents and visitors. Parks sometimes need special transportation attention to serve particular park users, such as children.

Not counting sites set aside for future park use, there are 37 existing parks and open space areas in the Planning Area that cover more than 1,246 acres. In Grants Pass, Riverside Park and the Reinhart Volunteer Park are heavily used parks with a regional draw. Most parks are managed by Josephine County or the cities where they are located, with several exceptions. The Josephine County Fairgrounds in Grants Pass are managed by the County. Cathedral Hills Park is adjacent to Grants Pass, listed as a park by Josephine County, but is managed by the Bureau of Land Management. Valley of the Rogue Park is the only state park in the Planning Area. Map 4-3 located at the end of this chapter displays parks within the MPO region.

# **B.** Demographics

Population trends are a key factor affecting the volume of travel in the region. In addition, where and how people live greatly determines which transportation facilities and modes get used most and which warrant the greatest investment of transportation funding. Below and the following pages contain general demographic characteristics for the Planning Area based on the 2010 US Census and the most recent American Community Survey (ACS) data. Where appropriate, the characteristics are compared to statewide or countywide data.

Note: Beginning with the 2010 U.S. Census, the decennial census no longer collects the same extent of socio-economic information. The American Community Survey now collects this information. For those tables containing ACS data, it is important to note that estimates are based on a sample of the population using five-year averages rather than a count at one point in time, such as the decennial census.

The Census Bureau defines two types of urban areas:

- Urbanized Areas (UAs) of 50,000 or more people;
- Urban Clusters (UCs) of at least 2,500 and less than 50,000 people.

In the 2000 Census, the Grants Pass urban area was an *Urban Cluster* with a population of 43,811. In the 2010 US Census, the Grants Pass urban areas became an *Urbanized Area* with a population of 50,520. In federal transportation law, this is the threshold for establishing an MPO.

2000 U.S. Census	2010 U.S. Census
43,811	50,520
75,726	82,713
181,269	203,206
23,003	34,533
1,847	2,131
1,073	1,220
Not Available	1,615
	43,811 75,726 181,269 23,003 1,847 1,073

#### Table 5-2: Population

Source: 2000 & 2010 U.S. Census, Table DP-1

\*MRMPO Planning Area boundary encompasses the Grants Pass Urbanized Area boundary, and is therefore slightly larger.

As shown in Table 5-2 above, results of the 2010 US Census when compared to 2000 US Census data demonstrate a rise in **population** within the cities and counties that make up the Middle Rogue MPO Planning Area.

Table 5-3 below shows the estimated **number of households** for the MPO Planning Area and each MPO jurisdiction and unincorporated place based on numbers from the 2010 U.S. Census.

#### Number of Households Average Household Size Jurisdiction Grants Pass Urbanized Area 21,276\*\* 2.31\*\* (MRMPO Planning Area)\* **City of Grants Pass** 14,313 2.34 City of Rogue River 1,054 2.02 City of Gold Hill 509 2.40 Merlin (Unincorporated Rural Community\*) 686 2.35

#### Table 5-3: Households

Source: 2010 U.S. Census, DP-1 Table; \*\*2010-2012 ACS, Table DP02

\*MRMPO Planning Area boundary encompasses the Grants Pass Urbanized Area boundary, and is therefore slightly larger.

The **median age** of 42.9 for residents of the Planning Area is higher than the statewide median of 38.4 years. The City of Grants Pass has the lowest median age in the Planning Area at 39.3, while the rural community of Merlin is highest at 51.8.

The Planning Area has a relatively high percentage of **senior residents (age 65+)** compared to the statewide average of 12.9%. A large degree of variation exists in the area, however. For example, in Rogue River 29.6% of the population is age 65 years or older while the estimate for neighboring Gold Hill is less than half of that, at 14.4%.

Jurisdiction	Median Age	Population Age 65+
State of Oregon	38.4	12.9%
Grants Pass Urbanized Area (MRMPO Planning Area)*	42.9	20.9%**
Josephine County	47.3	22.3%
Jackson County	42.1	17.6%
City of Grants Pass	39.3	18.6%
City of Rogue River	49.3	29.6%
City of Gold Hill	43.9	14.4%
Merlin (Unincorporated Rural Community*)	51.8	24.5%

#### Table 5-4: Median Age and Senior Population

Source: Median Age – 2010 U.S. Census, Table P13; Senior Population - 2010 U.S. Census, Table P12 and \*\*Table QT-P1 \*MRMPO Planning Area boundary encompasses the Grants Pass Urbanized Area boundary, and is therefore slightly larger.

In the Planning Area, 87.6% of residents identified themselves as **"White alone"** in their choice of race and ethnicity during the 2010 U.S. Census. In choice of ethnicity, 7.4% of the Planning Area population identified as **"Hispanic or Latino"**. For a statewide comparison, 78.5% of Oregon residents identified themselves as White alone, with 11.7% of the state's population identifying as Hispanic or Latino.

#### Table 5-5: White Alone and Hispanic/Latino Populations

Jurisdiction	White Alone Population (not Hispanic or Latino)	Those Who Identify as Hispanic or Latino
State of Oregon	78.5%	11.7%
Grants Pass Urbanized Area (MRMPO Planning Area)*	87.6%	7.4%
Josephine County	88.6%	6.3%
Jackson County	83.6%	10.7%
City of Grants Pass	86.0%	8.5%
City of Rogue River	91.2%	5.3%
City of Gold Hill	92.0%	2.7%
Merlin (Unincorporated Rural Community*)	90.0%	5.2%

Source: 2010 U.S. Census, Table P12I and Table P12H

\*MRMPO Planning Area boundary encompasses the Grants Pass Urbanized Area boundary, and is therefore slightly larger.

Approximately 20% of Grants Pass and Josephine County residents reported living below the **poverty level** in the past 12 months, according to ACS data for 2008-2012. While those numbers are higher than the statewide average of 15.5%, the smaller communities within the Planning Area reported smaller estimates with Merlin at 14% and Foots Creek at 12.2%.

The current percentage of the population living in poverty within the Planning Area is 19.4%, with Rogue River and Gold Hill at 17.6% and 19.1%, respectively.

Jurisdiction	Population Living Below the Poverty Level (w/in past 12 months)
State of Oregon	15.5%
Grants Pass Urbanized Area (MRMPO Planning Area)*	19.4%
Josephine County	20.0%
Jackson County	16.6%
City of Grants Pass	20.7%
City of Rogue River	17.6%
City of Gold Hill	19.1%
Merlin (Unincorporated Rural Community*)	14.0%
Source: 2008-2012 ACS Table DP-03	

#### Table 5-6: Poverty

Source: 2008-2012 ACS, Table DP-03

\*MRMPO Planning Area boundary encompasses the Grants Pass Urbanized Area boundary, and is therefore slightly larger.

Approximately 87.8% of Grants Pass UA residents aged 25 years or older are high school graduates, with 13% having obtained a bachelor's degree or higher. These numbers are quite similar for the City of Grants Pass and Josephine County. Statewide, the percent of high school graduates is just slightly higher at 88.3%, with those that hold a bachelor's degree or higher being greater at 30.2%.

Jurisdiction	High School Graduate or Higher	Bachelor's Degree or Higher
State of Oregon	88.3%	30.2%
Grants Pass Urbanized Area (MRMPO Planning Area)*	87.8%	13.0%
Josephine County	87.9%	12.0%
Jackson County	84.9%	20.2%
City of Grants Pass	87.8%	13.4%
City of Rogue River	80.2%	7.8%
City of Gold Hill	90.0%	6.0%
Merlin (Unincorporated Rural Community*)	95.4%	6.4%

#### Table 5-7: Education Level (ages 25+)

Source: 2008-2012 ACS, Table S1501

\*MRMPO Planning Area boundary encompasses the Grants Pass Urbanized Area boundary, and is therefore slightly larger.

The City of Grants Pass had the highest percentage (30.7%) of households with a child less than 18 years old. In Gold Hill, 27.3% of the households had a child younger than 18, compared to 21.9% of households in Rogue River, and 28.0% of all Planning Area households. The statewide percentage was 30.1%.

Jurisdiction	Households with a Child
State of Oregon	30.1%
Grants Pass Urbanized Area (MRMPO Planning Area)*	28.0%
Josephine County	25.5%
Jackson County	28.7%
City of Grants Pass	30.7%
City of Rogue River	21.9%
City of Gold Hill	27.3%
Merlin (Unincorporated Rural Community*)	22.2%

#### Table 5-8: Households with a Child (less than 18 years)

Source: 2010 U.S. Census, Table P20

\*MRMPO Planning Area boundary encompasses the Grants Pass Urbanized Area boundary, and is therefore slightly larger.

**Housing vacancy** is quite varied throughout the MRMPO planning area. The City of Grants Pass had a vacancy rate of 7.7%, with Rogue River and Gold Hill at 11.9% and 11.5%, respectively.

In the state of Oregon, the percentage of **owner-occupied housing units** outnumber **renter-occupied housing units** 62.5% to 37.5%, respectively. Similarly, but to a lesser degree, owner-occupied units also outnumber renter-occupied units in the MRMPO Planning Area, at 55.5% vs. 44.5%. The City of Gold Hill has the highest percentage of owner-occupied units at 75.8%, while the City of Grants Pass has half of all housing units (49.8%) being renter-occupied and half owner-occupied (50.2%).

Jurisdiction	Owner-Occupied	Renter-Occupied	Vacancy Rate
State of Oregon	62.5%	37.5%	9.6%
Grants Pass Urbanized Area (MRMPO Planning Area)*	55.5%	44.5%	7.8%
Josephine County	66.5%	33.5%	9.4%
Jackson County	61.9%	38.1%	8.2%
City of Grants Pass	50.2%	49.8%	7.7%
City of Rogue River	56.9%	43.1%	11.9%
City of Gold Hill	70.4%	29.6%	11.5%
Merlin (Unincorporated Rural Community*)	59.6%	40.4%	0%

#### Table 5-9: Housing Occupancy

Source: 2008-2012 ACS, Table DP04

\*MRMPO Planning Area boundary encompasses the Grants Pass Urbanized Area boundary, and is therefore slightly larger.

**Age of the housing stock** varies throughout the MRMPO Planning Area. Keep in mind that the ACS data used in this analysis is reflective of survey feedback collected between 2008 - 2012.

Built before 1950	14%
1950 – 1969	16.9%
1970 – 1989	33.0%
1990 - 2009	36.1%
2010 and later	<1%

#### Table 5-10: Age of Housing Stock Grants Pass Urbanized Area (MRMPO Planning Area)

Source: 2008-2012 ACS, Table DP04

# **C. Employment Characteristics**

Employment characteristics are important to the understanding of travel patterns and particularly work trips. Peak hour periods are used for travel forecasting and determination of needed transportation improvements, facilities, programs and strategies; and employment numbers and locations have a significant effect on transportation planning outcomes. The following 2008-2012 ACS Census data represents current data available for each of the jurisdictions.

Because the 2008-2012 ACS data is aggregated over a five-year time period, it does not necessarily reflect current economic conditions or dramatic shifts in trends. The most current information can be found in monthly data from the Oregon Employment Department, which for example, reported a seasonally-adjusted **unemployment rate** of 7.9% for Josephine County for February 2015, as compared to 14.9% for April 2009.

According to 2008-2012 ACS data, approximately 53.3% of the MRMPO Planning Area **population age 16 and over are in the labor force.** For comparison purposes, 63.7% of the statewide population age 16 and over are in the workforce, and 64.7% nationwide. Within the MRMPO Planning Area, the lower percentage of workforce likely reflects the high percentage of the population age 65+, as shown on page 5 of this chapter.

**Median household incomes** within the MPO Planning Area are lower than the statewide median household income. The 2008-2012 ACS data estimates median household income within the state of Oregon to be \$50,036, and \$33,634 for the MPO Planning Area. The median household income was \$32,426 in Rogue River, \$37,375 in Gold Hill, and \$32,991 in Grants Pass.

ACS data (2008–2012) indicates that **major employment sectors** throughout the MRMPO Planning Area included educational services and health care (23%); retail trade (17%); manufacturing (10%); and arts, entertainment, and recreation (10%).

In looking at **sector growth and decline** in Josephine County over time, Oregon Employment Department data from 2001 to 2013 shows professional and business services having grown by 48%, followed by education and health services having increased by 35%. The greatest declines were seen in the mining and logging sector, which saw a 52% decline in employment from 2001-

2013, and in the information sector where employment declined by 38%.

### **D.** Commute Patterns

Commute characteristics and patterns help determine where transportation system needs exist. Many of the MRMPO Planning Area residents commute to the Medford area for work, as well as traveling to the area for shopping and services. It is also important to note that many residents of outlying rural areas travel to the Grants Pass area for work, shopping, and services. Interstate 5, Hwy 99, Hwy 199, and Hwy 238 are all important commuter routes.

According to the 2008-2012 American Community Survey, 63.2% of workers in the Planning Area lived in the Planning Area, while 32.1% of working residents worked outside of the Planning Area. Additionally, 12.7% of the worker population commute into the Planning Area, as they live outside of the Planning Area.

Worker Population Types	Share of Worker Population
Live in and Employed in MRMPO Planning Area	55.2%
Live in, but Employed Outside MRMPO Planning Area	32.1%
Live Outside, but Employed in MRMPO Planning Area	12.7%
Source: 2008 2012 ACS Table BOROOR & Table	

#### **Table 5-11: Planning Area Worker Populations**

Source: 2008-2012 ACS, Table B08008 & Table

\*MRMPO Planning Area boundary encompasses the Grants Pass Urbanized Area boundary, and is therefore slightly larger.

In the MRMPO Planning Area, 1.3% of households did not have access to a vehicle, with 1.6% of households in Grants Pass, 0.8% in Gold Hill and 0.0% of households in Rogue River not having a vehicle available.

Figure 5-1 on the following page illustrates when commuters in the MRMPO Planning Area leave home to go to work according to 2008-2012 ACS data. As seen in the graph, the highest percentages of all area commuters left home between 9:00 a.m. and 11:59 a.m., with the next highest leave time bracket being 7:00 a.m. to 7:29 a.m. It is important to note, however, that all time brackets are one half hour, with the exception of the 9:00 a.m. to 11:59 a.m. time bracket being three hours.

Commute times by all modes for MRMPO Planning Area residents were much less than for statewide residents, with a commute time of 19 minutes or less for 71.5% of MRMPO residents as compared to 50.6% of statewide residents.



Throughout Oregon an estimated 71.7% of workers 16 years and older (not working at home) **drove alone while commuting to work**, according to 2008-2012 ACS data. In comparison, the following percentages reflect commuters in MRMPO jurisdictions who drove to work alone: 83.0% for Grants Pass, 83.6% in Rogue River, 84.1% in Gold Hill, and 81.9% throughout the MRMPO Planning Area. Of those in the Planning Area who did not drive to work alone, an estimated 8.4% carpooled, 0.4% used public transit, 2.2% walked and 2.4% used "other" means of transportation. An estimated 4.7% worked at home. Figure 5-2 illustrates the percentage of commuters by mode for jurisdictions over a five-year period from 2008-2012.



The location of **major employers** helps to identify commuter travel patterns, including heavily used corridors and peak-hour transportation needs. Major employers within the Planning Area are shown on the following page in Figure 5-3.



\*School district office located within MRMPO boundary, but not all schools lie within boundary (6 of 15).

# Map 5-1, Land Use (to be completed/inserted) Map 5-2, Public Schools





Attachment #4 (Agenda Item 5)