



2015 – 2040

***Regional
Transportation
Plan***

Adopted March 17, 2016

Revised September 25, 2018

Middle Rogue Metropolitan Planning Organization

The MRMPO is staffed by the Rogue Valley Council of Governments

MIDDLE ROGUE
REGIONAL TRANSPORTATION PLAN

Prepared for

MIDDLE ROGUE METROPOLITAN PLANNING ORGANIZATION

the City of Gold Hill
the City of Grants Pass
the City of Rogue River
Josephine County
Jackson County
Oregon Department of Transportation

and

ROGUE VALLEY COUNCIL OF GOVERNMENTS
Board of Directors

Adopted by the MRMPO Policy Committee, March 17, 2016
U.S. Department of Transportation Air Quality Conformity Determination, April 2016

Rogue Valley Council of Governments
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Resolution Number 2016 - 1
Middle Rogue Metropolitan Planning Organization - Policy Committee
Adoption of the 2015-2040 Regional Transportation Plan
for the Middle Rogue Metropolitan Planning Organization

Whereas, the Rogue Valley Council of Governments (RVCOG) has been designated by the State of Oregon as the Metropolitan Planning Organization (MPO) for the Grants Pass Urban Area; and

Whereas, the RVCOG has delegated responsibility for MPO policy functions to the MRMPO Policy Committee, a Committee of elected officials from Gold Hill, Grants Pass, Rogue River, Josephine County, Jackson County, and the Oregon Department of Transportation; and

Whereas, a project identification and selection process was carried out through the development of the 2015-2040 Regional Transportation Plan (RTP); and

Whereas, a public involvement process consistent with the MRMPO Public Participation Plan was developed and implemented throughout the development of the RTP; and

Whereas, the MRMPO, as required by law, held a 30-day public comment period to secure input and comment on the RTP and proposed conformity determination and the comments received were explicitly considered; and

Whereas, the 2015-2040 RTP has been shown to meet state and federal air quality requirements as demonstrated in the Air Quality Conformity Determination; and

Whereas, the projects contained in the 2015-2040 RTP demonstrate financial constraint;

NOW THEREFORE, the Metropolitan Planning Organization Policy Committee approves and adopts the 2015-2040 Regional Transportation Plan.

Adopted by the Middle Rogue Metropolitan Planning Organization Policy Committee on this 17th day of March 2016.



Darin Fowler
MRMPO Policy Committee Chair

Middle Rogue Metropolitan Planning Organization

2015 -2040 Regional Transportation Plan

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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.

“Regional transportation planning recognizes the critical links between transportation and other societal goals.”

Development and adoption of an RTP is required to ensure that the metropolitan planning 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 Fixing America’s Surface Transportation (FAST), 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's Transportation Planning and Analysis Unit (TPAU).

1. Planning Period

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. The Plan looks at different types of transportation opportunities

"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."

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.

Although the RTP focuses on intra-regional (within the region) travel, it also addresses inter-regional (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.

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 (PM₁₀) 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 PM₁₀ 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 PM₁₀ non-attainment area to attainment for the NAAQS for PM₁₀ and approved the maintenance plan.

Current Carbon Monoxide (CO) and PM₁₀ Status

Oregon Department of Environmental Quality (ODEQ) developed a CO and PM₁₀ 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 PM₁₀ 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 PM₁₀ 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 MPO 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).

“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.”

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 short-range funding programming document, the Metropolitan Transportation Improvement Program (MTIP). The RTP is intended to be regularly updated to reflect such changes.

E. Development Process

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 March 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 Plan Implementation contained in Chapter 6 and the Vision and Goals contained in Chapter 2.

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).

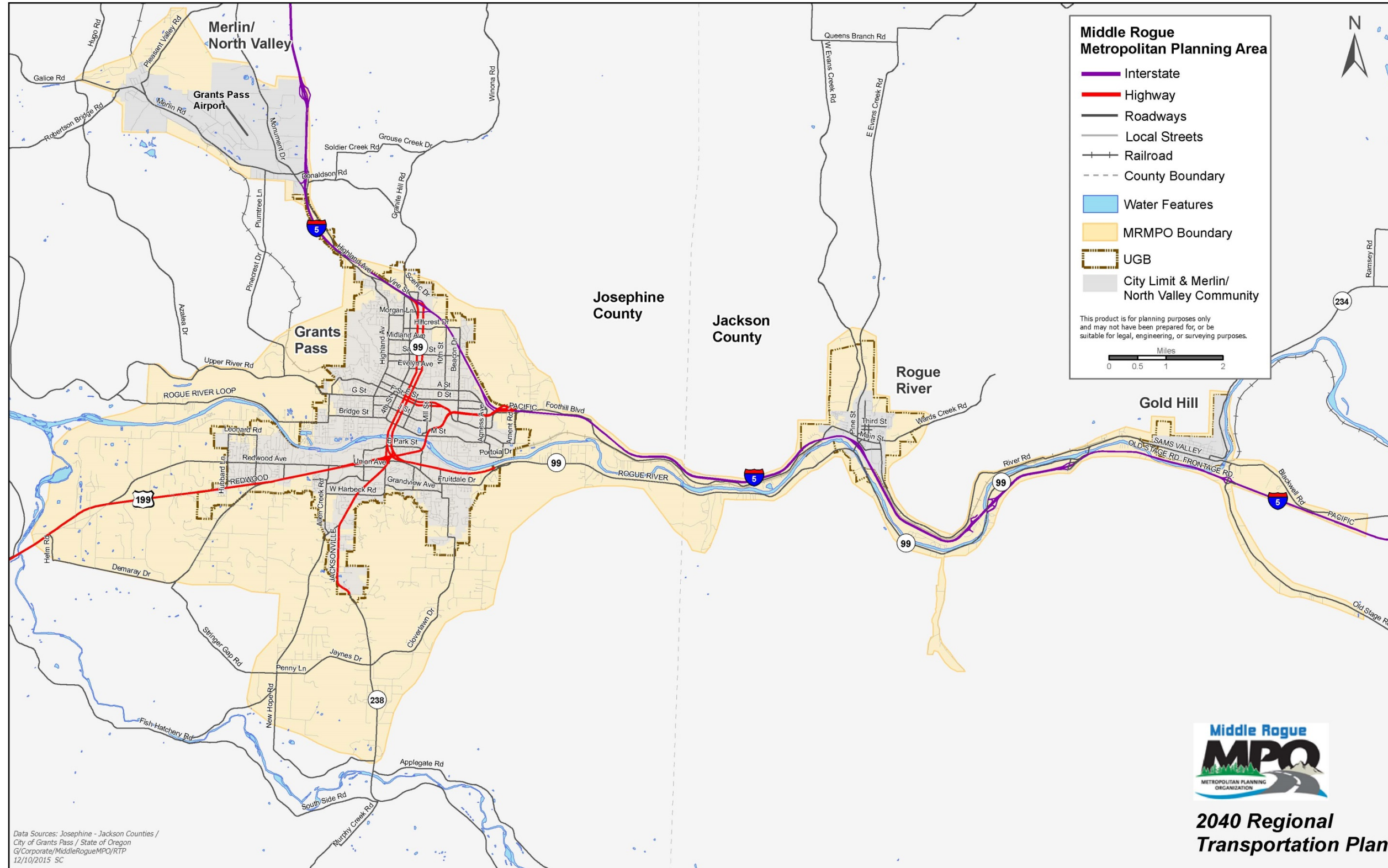
Finally, the MRMPO Policy Committee steered the development of the Plan at the policy level. According to federal rules, the adoption of the Plan by the MRMPO Policy Committee constitutes the approval of a Transportation Plan for the MRMPO Planning Area.

F. Document Structure

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 how the plan will be implemented. 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 safety information about safety, such as a crash analysis, and a discussion about security issues.

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 policies, 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:

Table 3-1: RTP Goals

1	Develop and implement an economic regional plan that will cultivate, maintain and enhance the region's economic vitality.
2	Develop, implement and maintain a series of plans to increase the safety and security of the region's transportation system.
3	Identify, develop and implement the ability to increase and maintain accessibility and mobility choices in the region.
4	Develop and implement policies and plans to protect, preserve, and enhance the social, historical, and natural environments of the region.
5	Identify, develop and implement the best available technology for the MRMPO to utilize for maximize system effectiveness.
6	Improve and enhance integration and connectivity of the transportation system across and between modes.
7	Identify and develop projects that emphasize maintenance and preservation of the existing transportation system.

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
Safety - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.	2
Infrastructure Condition - To maintain the highway infrastructure asset system in a state of good repair.	7
Congestion Reduction - 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
Freight Movement and Economic Vitality - 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
Environmental Sustainability - To enhance the performance of the transportation system while protecting and enhancing the natural environment.	4
Reduced Project Delivery Delays - 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 (PM₁₀) 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 3 - Public Involvement

The Middle Rogue Metropolitan Planning Organization and its public officials highly value citizen participation in public decision-making processes. The MRMPO Policy Committee adopted a Public Participation Plan in August 2014 which outlines the methods, strategies, and desired outcomes for public involvement regarding the Regional Transportation Plan (RTP):

“Updated every four years, the RTP is a long-range (20-year) plan that contains the region’s goals and policies, projects, funding forecasts, strategies, and projected demands on the transportation system. The Technical Advisory Committee (TAC) discussed the plan update over several meetings. The MRMPO hosted three open house sessions, a 30-day comment period and public hearing. Comments received will be responded to and included in the final document.

The draft RTP, and other research, as needed, is posted on the website and mailed to interested parties. Open house meetings are advertised in the newspaper, on the website and by mailing to individuals and organizations on transportation mail lists.

A. Continuous Outreach

Throughout the development of the Plan, members of the public were provided opportunities to comment at all meetings of the Policy Committee. All material (agendas, minutes of the meetings, draft documents, etc.) were made available on the MRMPO website.

B. Community Outreach

In addition to the continuous outreach effort, special outreach and public involvement opportunities were structured into the process. These included vision and goals workshops, open houses, and final public meetings.

1. Public Meetings

During the initial part of the planning process, three workshops were held to gather public input on the Plan’s Goals and Policies. Notices for each workshop were posted on the MPO website and were published in the *Grants Pass Courier and Rogue River Press* newspapers. Interested citizens and members of the area’s transportation related committees were emailed regarding notification of the events. Public input from the workshops helped to further refine the Plan’s Vision and Goals and identify transportation issues to be addressed by the Plan.

In January and February 2016, the MRMPO held three public workshops on the draft 2015-42 Regional Transportation Plan (RTP), 2015-18 Transportation Improvement Plan (TIP) and Air Quality Conformity Determination (AQCD). The workshops were held in Grants Pass, Rogue River and Gold Hill. In addition to the public workshops, the MRMPO hosted a virtual open house where interested parties could use the internet to access information about the RTP, TIP and AQCD and provide comments. All meetings were advertised and copies of the draft

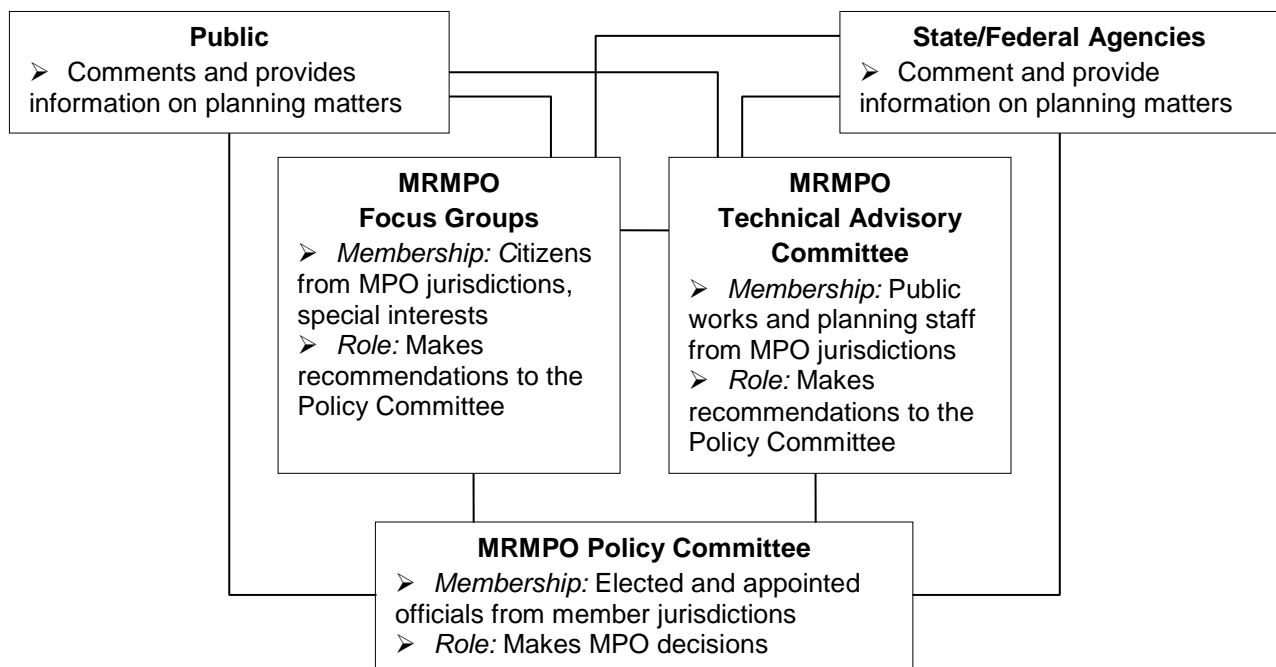
Transportation Plan, TIP, and AQCD were made available to the public. The public was informed of the anticipated adoption schedule and additional opportunities for providing comments.

2. Public Hearing

The MRMPO Policy Board held a public hearing on March 17, 2016 to receive public testimonies prior to deliberations on the RTP. A summary of written comments was provided to the Policy Committee. The public was also informed about the adoption schedule of the Transportation Plan.

The MRMPO organizational structure chart below, illustrates how the public may participate in decision-making.

Figure 3-1 MRMPO Organizational Structure



C. RTP Planning Process

Development of this RTP update occurred over a two-year period and involved close coordination with member jurisdictions at both the staff and policy level. Critical parts of the plan, including the forecasts, policy statements and project selection were developed in MRMPO TAC meetings, individual consultation with jurisdictions and public review and comment. Drafts of data and analysis were posted on the MRMPO web site. Meetings at which plan components were discussed were announced by email. Meetings also were advertised from time to time in the local news media. Activities were conducted according to standards and requirements of the MRMPO Public Participation Plan. The participation plan, adopted in 2014, establishes goals to provide citizens and interested parties with reasonable opportunities

to participate in the metropolitan transportation planning process. Beyond efforts to provide information to the public, this goal encompasses a wide range of strategies and activities to enable the public to be involved in a meaningful way in the MRMPO's decision-making process. Ultimately, efforts to bring more voices and wide-ranging interests to the table will yield better planning results.

Chapter 4 - Planning Area Characteristics

This section provides information on the political and physical characteristics of the Planning Area, as well as area demographics, employment characteristics, commute patterns, and forecasting future conditions.

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), Jacksonville Highway (OR 238), 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.

“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.

City of Grants Pass

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), 6th and 7th Streets, Hwy 99, Jacksonville 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 (6th Street southbound and 7th Street northbound; E Street westbound and F Street eastbound). Both sets of facilities include pedestrian and bicycle improvements, although the bike lane on 6th Street is diverted to 4th 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.

“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.”

Much of the industrial land in Grants Pass is located in the eastern portion of the city. Higher-density 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 Foothills Road is a small cluster of commercial structures that comprise the Foothills 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.

“Community focal points, such as schools and parks, are important to understanding travel patterns...Awareness of the location of these facilities is important to planning for an effective regional transportation system.”

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.

Table 4-1: Public Schools by Jurisdiction

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

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.

Data Notes: 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 does. 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. Additionally, please keep in mind that there is a margin of error (MOE) associated with every estimate in this section, although not individually noted. An MOE is an indicator of the reliability of the data estimates by proving a range where the true value of the estimate most likely falls. For example, a 20% poverty rate could have a (+/- 2%) MOE, meaning that the poverty rate is actually likely between 18-22%. For smaller communities such as Gold Hill or Rogue River, MOEs for ACS data estimates are generally larger due to the smaller sample sizes.

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.

Table 4-2: Population

Jurisdiction	2000 U.S. Census	2010 U.S. Census
Grants Pass Urbanized Area (MRMPO Planning Area)*	43,811	50,520
Josephine County	75,726	82,713
Jackson County	181,269	203,206
City of Grants Pass	23,003	34,533
City of Rogue River	1,847	2,131
City of Gold Hill	1,073	1,220
Merlin (Unincorporated Rural Community)	Not Available	1,615

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 4-2 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.

Table 4-3: Households

Jurisdiction	Number of Households	Average Household Size
Grants Pass Urbanized Area (MRMPO Planning Area)*	20,697**	2.36**
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

Source: 2010 U.S. Census, DP-1 Table; **2010-2014 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%.

Table 4-4: Median Age and Senior Population

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%

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 4-5: 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 Planning Area residents reported living below the **poverty level** in the past 12 months according to ACS data for 2010-2014. This is higher than the statewide average of 16.7%. The current percentage of the population living in poverty within Grants Pass is 22.3%, with Rogue River and Gold Hill at 19.7% and 19.1%, respectively.

Table 4-6: Poverty

Jurisdiction	Population Living Below the Poverty Level (w/in past 12 months)
State of Oregon	16.7%
Grants Pass Urbanized Area (MRMPO Planning Area)*	20.5%
Josephine County	19.7%
Jackson County	17.8%
City of Grants Pass	22.3%
City of Rogue River	19.7%
City of Gold Hill	19.1%
Merlin (Unincorporated Rural Community)	11.9%

Source: 2010-2014 ACS, Table DP03

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

Approximately 88.5% of Planning Area residents aged 25 years or older are **high school graduates**, with 15.2% having obtained a **bachelor's degree or higher**. These numbers are similar for the City of Grants Pass and Josephine County. Statewide, the percent of high school graduates is just slightly higher at 89.4% and those that hold a bachelor's degree or higher being greater at 30.1%.

Table 4-7: Education Level (ages 25+)

Jurisdiction	High School Graduate or Higher	Bachelor's Degree or Higher
State of Oregon	89.4%	30.1%
Grants Pass Urbanized Area (MRMPO Planning Area)*	88.5%	15.2%
Josephine County	88.7%	17.3%
Jackson County	88.7%	25.1%
City of Grants Pass	89.1%	16.0%
City of Rogue River	88.9%	10.8%
City of Gold Hill	92.3%	11.8%
Merlin (Unincorporated Rural Community)	95.2%	4.9%

Source: 2010-2014 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%.

Table 4-8: Households with a Child (less than 18 years)

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%

Source: 2010 U.S. Census, Table P20

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

The percentage of **vacant housing units** is quite varied throughout the MRMPO planning area. The City of Grants Pass had 8.5% of housing units vacant, with Rogue River and Gold Hill at 15.7% and 13.9%, respectively.

In the state of Oregon, the percentage of **owner-occupied housing units** outnumber **renter-occupied housing units** 61.5% to 38.5%, respectively. Similarly, but to a lesser degree, owner-occupied units also outnumber renter-occupied units in the MRMPO Planning Area, at 55.1% vs. 44.9%. The City of Gold Hill has the highest percentage of owner-occupied units at 71.2%, while the City of Grants Pass has half of all housing units (49.9%) being renter-occupied and half owner-occupied (50.1%).

Table 4-9: Housing Occupancy

Jurisdiction	Owner-Occupied	Renter-Occupied	Vacant Units
State of Oregon	61.5%	38.5%	9.7%
Grants Pass Urbanized Area (MRMPO Planning Area)*	55.1%	44.9%	8.3%
Josephine County	66.0%	34.0%	10.1%
Jackson County	64.2%	37.6%	9.1%
City of Grants Pass	50.1%	49.9%	8.5%
City of Rogue River	46.9%	53.1%	15.7%
City of Gold Hill	71.2%	28.8%	13.9%
Merlin (Unincorporated Rural Community)	69.6%	30.4%	0.0%

Source: 2010-2014 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.

**Table 4-10: Age of Housing Stock
Grants Pass Urbanized Area (MRMPO Planning Area)**

Built before 1950	14.4%
1950 – 1969	17.1%
1970 – 1989	32.3%
1990 – 2009	35.8%
2010 and later	0.3%

Source: 2010-2014 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 2010-2014 ACS Census data represents current data available for each of the jurisdictions.

Because the 2010-2014 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 5.7% for the Grants Pass Urbanized Area (MRMPO Planning Area) for November 2015, as compared to 10.2% for November 2010.

According to 2010-2014 ACS data, approximately 51.3% of the MRMPO Planning Area **population age 16 and over are in the labor force**. For comparison purposes, 62.5% of the statewide population age 16 and over are in the workforce, and 63.9% 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 6 of this chapter.

Median household incomes within the MPO Planning Area are lower than the statewide median household income. The 2010-2014 ACS data estimates median household income within the state of Oregon to be \$50,521 and \$33,868 for the MPO Planning Area. The median household income was \$28,344 in Rogue River, \$37,163 in Gold Hill, and \$33,240 in Grants Pass.

ACS data (2010–2014) indicates that **major employment sectors** throughout the MRMPO Planning Area included educational services, health care and social assistance (26%); retail trade (17%); and manufacturing (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 2010-2014 American Community Survey, 59.4% of **workers in the Planning Area** lived in the Planning Area, while 40.6% of working residents worked outside of the Planning Area. Additionally, 13.9% of the worker population commute into the Planning Area for work.

Table 4-11: Planning Area Worker Populations (workers 16 yrs+)

Worker Population Types	Share of Worker Population
<i>Live in and Employed in MRMPO Planning Area</i>	59.4%
<i>Live in, but Employed Outside MRMPO Planning Area</i>	40.6%
<i>Live Outside, but Employed in MRMPO Planning Area</i>	13.9%

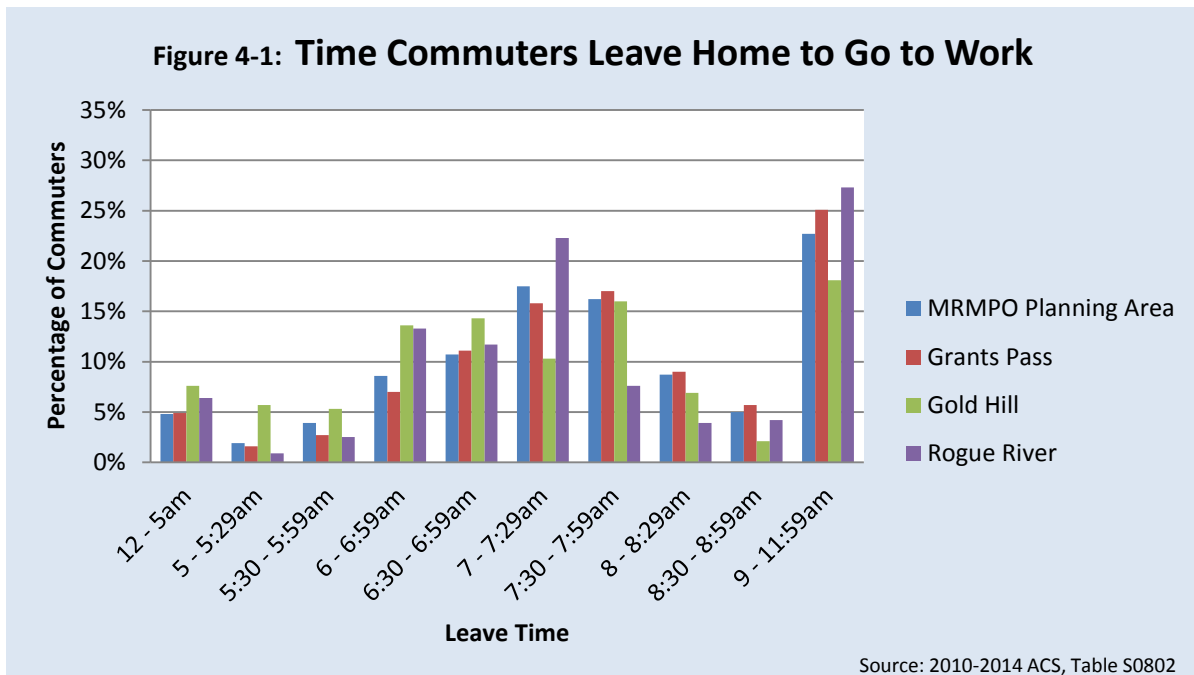
Source: 2010-2014 ACS, Table B08008

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

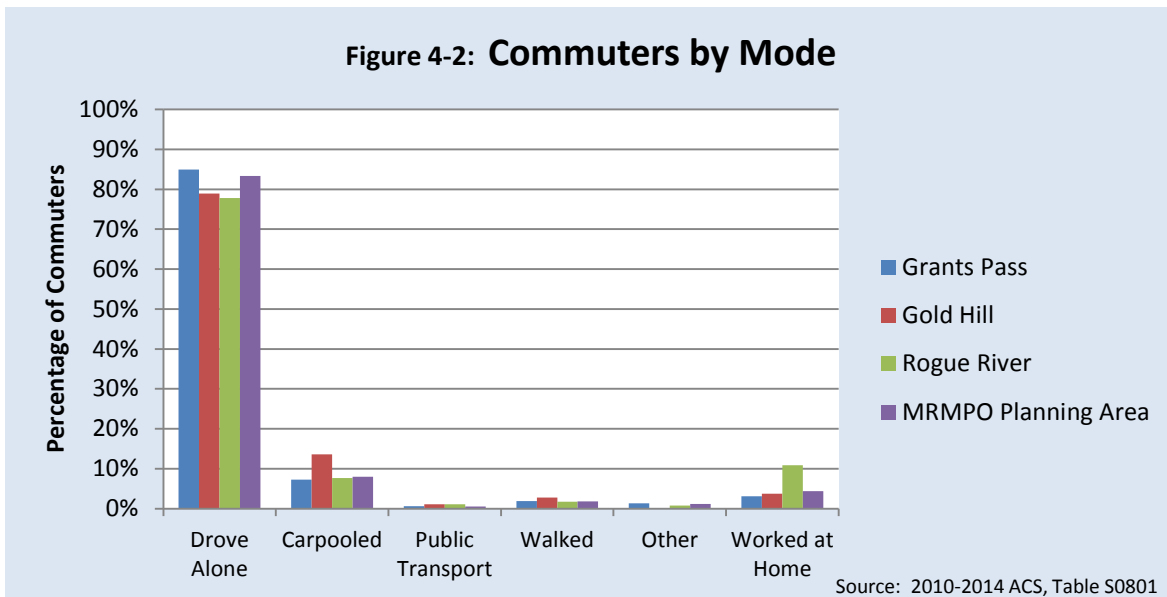
In the MRMPO Planning Area, 1.5% of **households did not have access to a vehicle**, with 1.6% of households in Grants Pass, 2.3% in Gold Hill and 1.9% of households in Rogue River not having a vehicle available.

Figure 4-1 on the following page illustrates when commuters in the MRMPO Planning Area **leave home to go to work** according to 2010-2014 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.

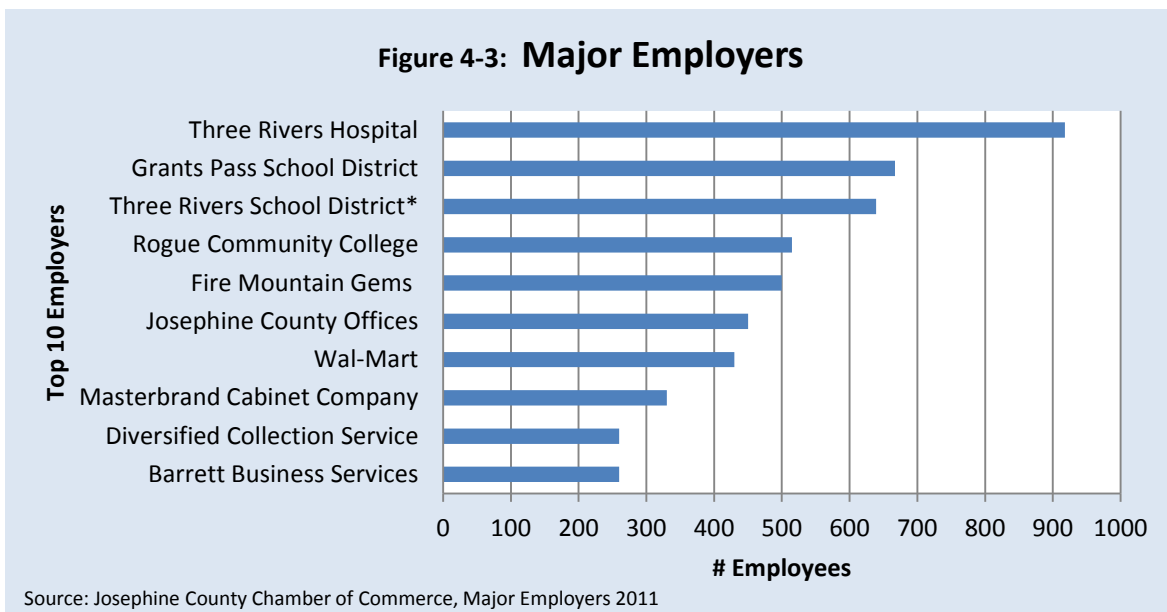
Commute times by all modes for MRMPO Planning Area residents were much less than for statewide residents, with a commute time of 19 minutes or less for 68.3% of MRMPO residents as compared to 44.2% of statewide residents.



Throughout Oregon an estimated 71.4% of workers 16 years and older **drove alone while commuting to work**, according to 2010-2014 ACS data. In comparison, the following percentages reflect commuters in MRMPO jurisdictions who drove to work alone: 83.0% for Grants Pass, 77.8% in Rogue River, 78.9% in Gold Hill, and 83.3% throughout the MRMPO Planning Area. Of those in the Planning Area who did not drive to work alone, an estimated 8.0% carpooled, 0.5% used public transit, 1.8% walked and 1.2% used “other” means of transportation. An estimated 4.4% worked at home. Figure 4-2 illustrates the percentage of commuters by mode for jurisdictions over a five-year period from 2010-2014.



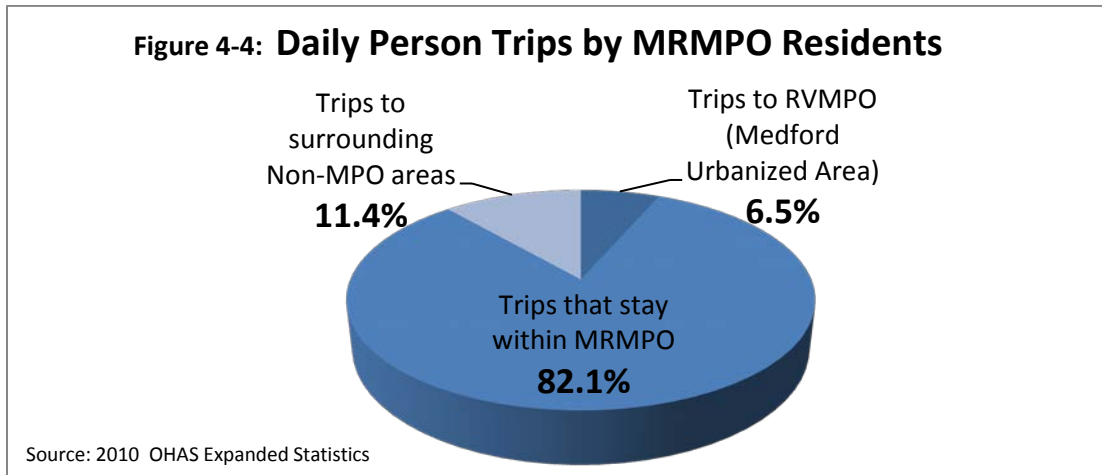
The location of **major employers** helps to identify commuter travel patterns, including heavily used corridors and peak-hour transportation needs. Major employers within the Planning Area are shown on Figure 4-3, below, and on Map 4-4.



*School district office located within MRMPO boundary, but not all schools lie within boundary.

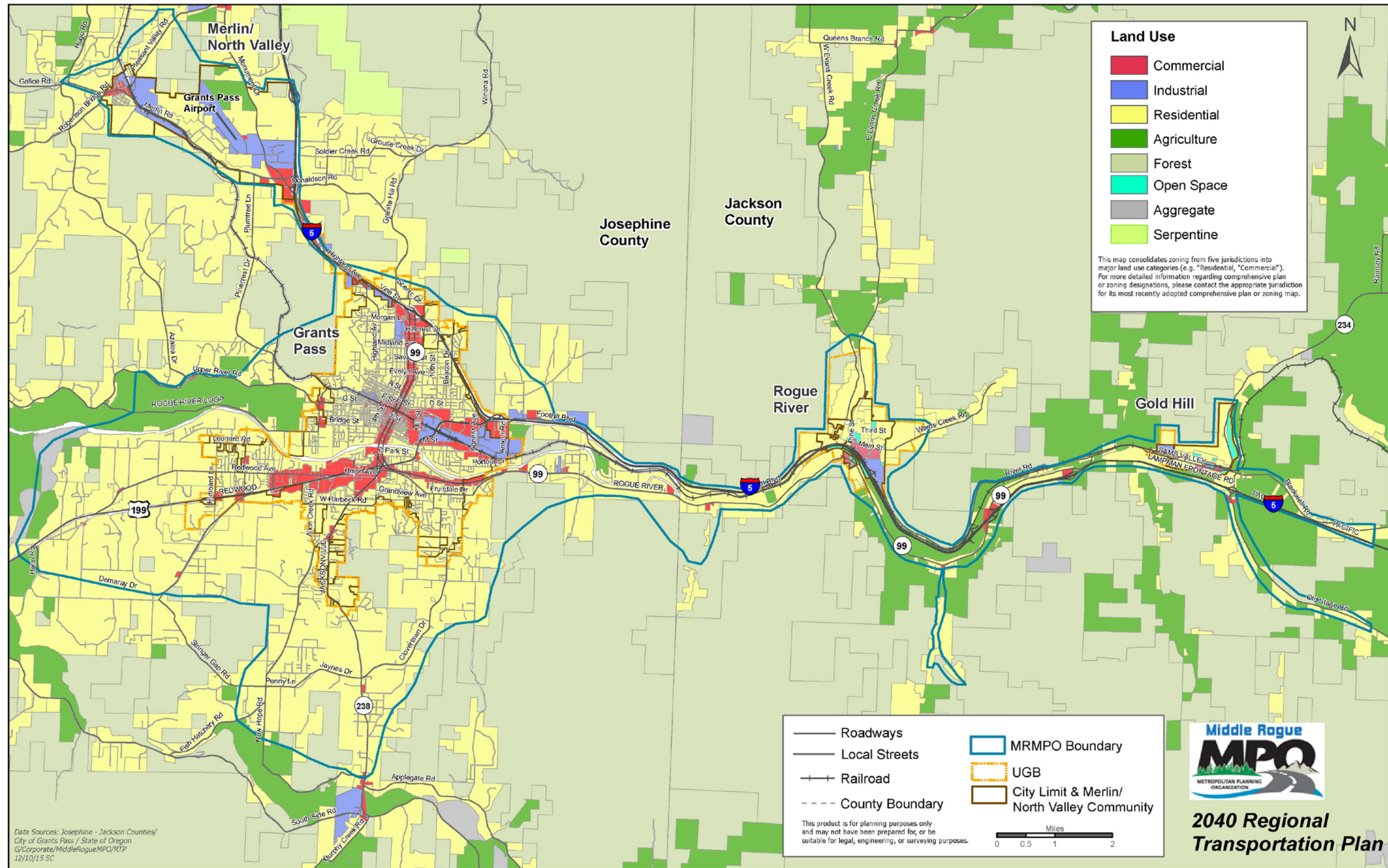
1. Travel Patterns between the Grants Pass and Medford Urbanized Areas

As mentioned previously, many MRMPO residents travel to the Medford Urbanized Area (Rogue Valley MPO) for work, shopping and services. Utilizing data from the 2010 Oregon Household Survey (OHAS), Figure 4-4 shows estimated weekday travel characteristics of MRMPO residents, including: percentage of person trips that remain within the MRMPO, those that go to the Medford Urbanized Area (RVMPO), and trips to surrounding non-MPO areas.

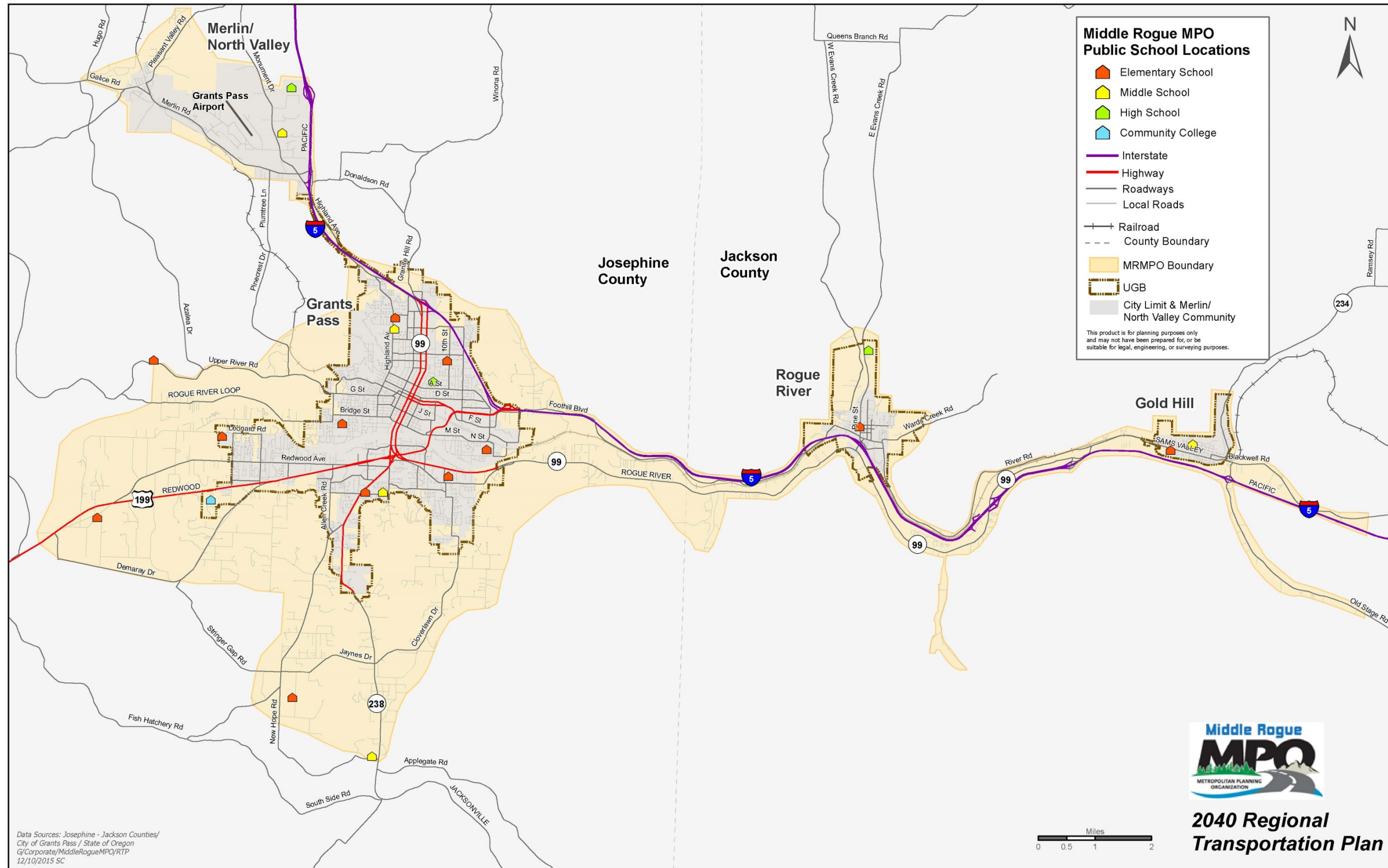


In relation, approximately .8% of weekday person trips made by Medford Urbanized Area (RVMPO) residents go to the Grants Pass Urbanized Area (MRMPO). Given the number of inter-regional trips that occur between the Grants Pass and Medford urbanized areas, it is estimated that 40% of the average daily traffic on I-5 between the two regions are MRMPO residents traveling to/from RVMPO (9,100 daily person trips), and RVMPO residents traveling to/from MRMPO (3,988 daily person trips).

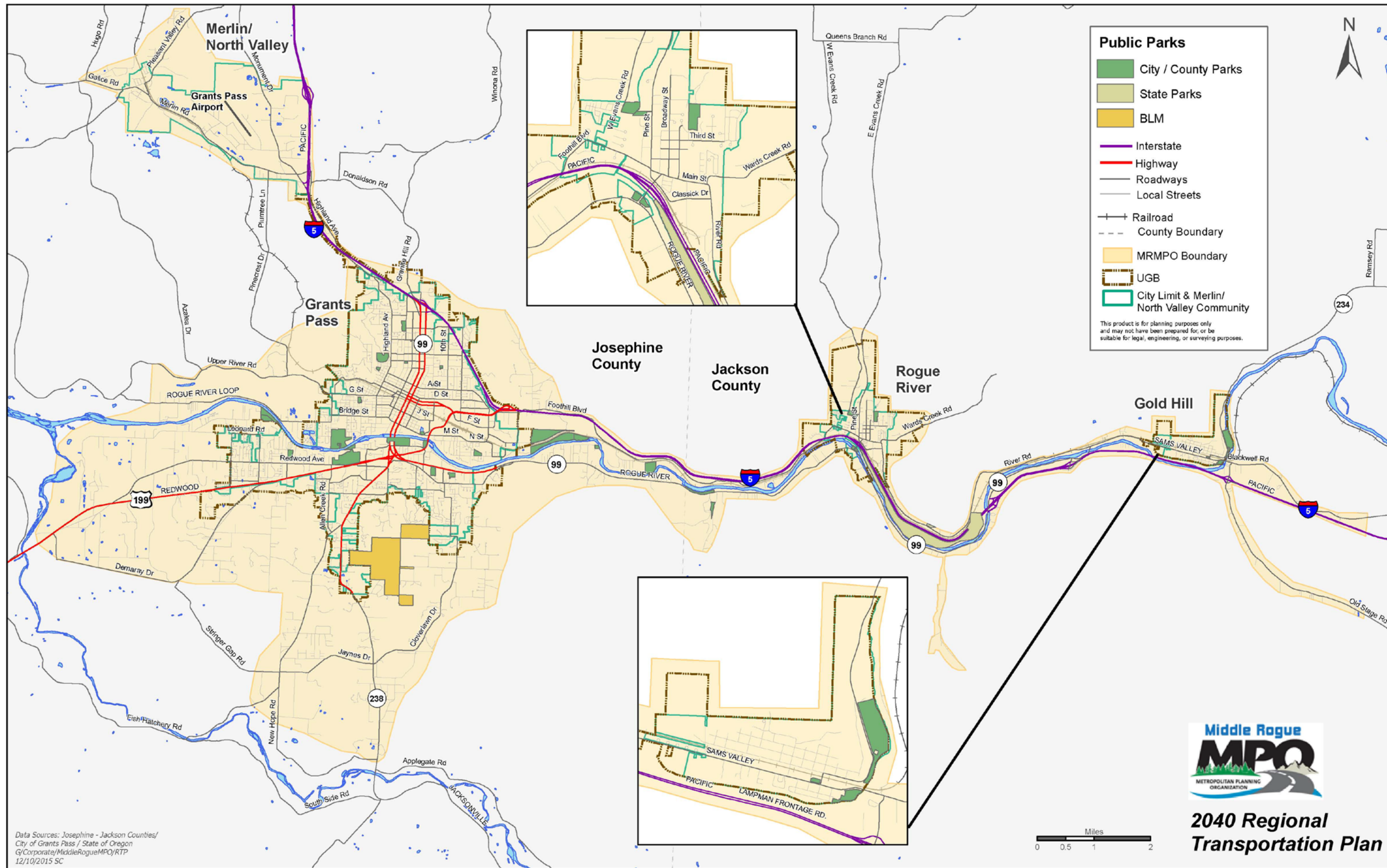
Map 4-1 – Land Use



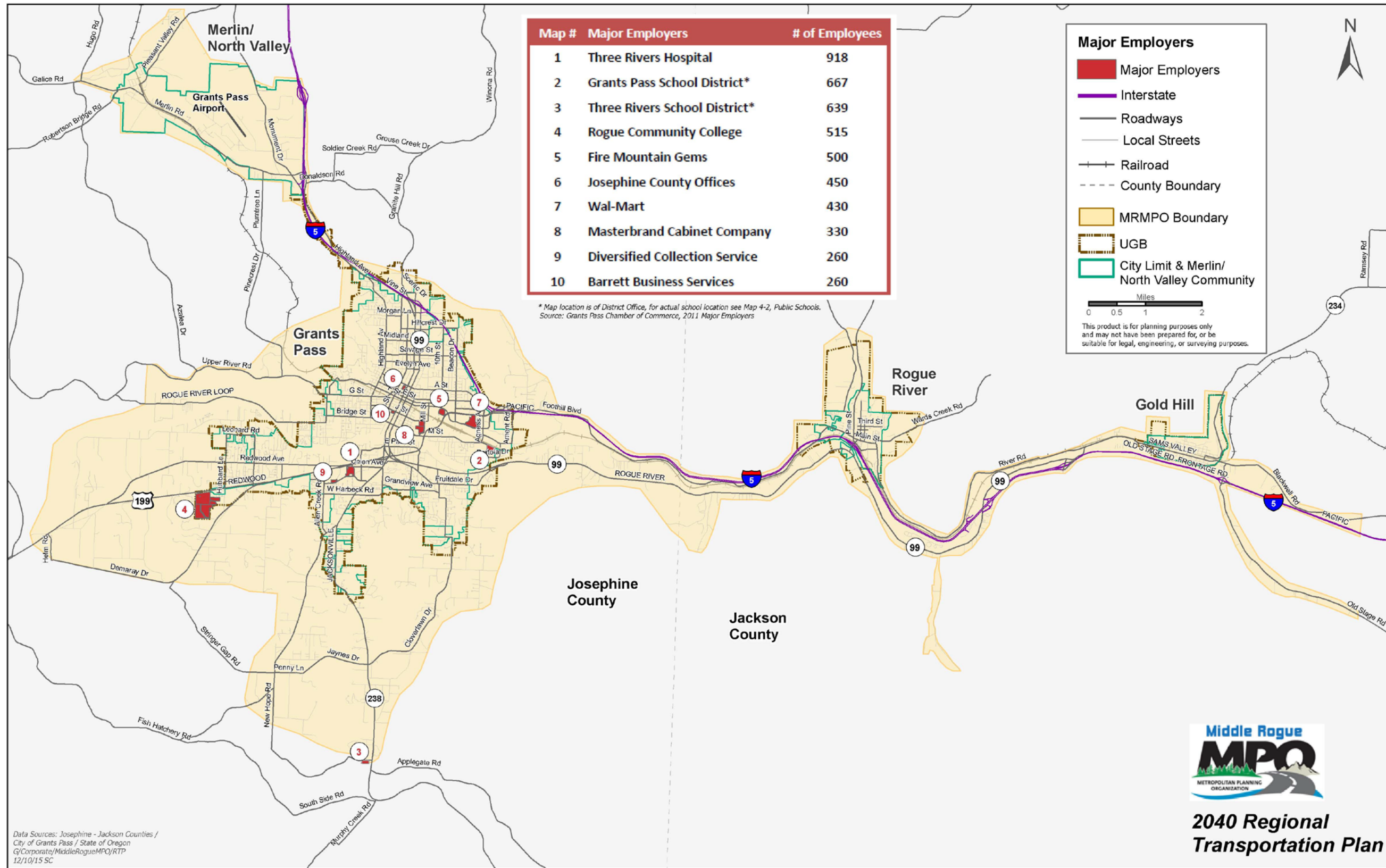
Map 4-2 – Public Schools



Map 4-3 – Public Parks



Map 4-4 – Major Employers



Chapter 5 - Existing Transportation System

This chapter describes the capacity and functioning of the existing transportation system and describes weaknesses or deficiencies where they may exist.

A. Roadways

This section summarizes the roadway characteristics for the federally classified and regionally adopted roadways within the Planning Area.

“Functional Classification is a grouping of roadways based on the levels of mobility and accessibility that they provide.”

1. Jurisdictional Responsibility and Functional Classification

The public entities that have jurisdictional responsibility for roadways in the Planning Area include: ODOT, Josephine County, Jackson County, and the cities of Grants Pass, Rogue River and Gold Hill. Map 5-1 depicts jurisdictional responsibility for classified roadways in the Planning Area.

Functional Classification is a grouping of roadways based on the levels of mobility and accessibility that they provide. Principal Arterials provide the highest mobility for through traffic and the least accessibility to the adjacent land. Conversely, local streets are designed for the lowest mobility and the highest accessibility. The classification defines the desirable roadway width, right-of-way needs, access spacing and pedestrian and bicycle facilities. The MRMPO has adopted its Functional Classifications of roadways, as depicted in Map 5-2. Functional Classification of roadways in the Planning Area includes the following designations: Principal Arterials, Minor Arterials, Major Collectors, Minor Collectors, and Local Roads.

The Oregon Highway Plan includes a classification or ranking system for the state highways intended to guide investment and management decisions.

Statewide Highways primarily provide inter-urban and inter-regional mobility and connections to larger urban areas, ports and major recreation areas that are not served by Interstate Highways. ODOT’s management objective for highways of statewide significance is high-speed, continuous flow operation.

Regional Highways provide connections to regional centers and the Statewide or Interstate Highways or economic and activity centers of regional importance. The management objective for Regional Highways is high-speed, continuous flow in rural areas and moderate to high speed in urban areas. Secondly, they serve local land uses near the highways.

District Highways are of countywide significance and are largely county or city arterials or collectors. They link smaller population centers and serve more local travel needs. They are intended to provide moderate to high-speed continuous flow in rural areas and moderate to low speed operation in populated areas. They also serve pedestrians and bicycles. Along any of these highways, ODOT may designate a **Special Transportation Area**. These are highway segments where a downtown, business district or community center straddles the highway. Local auto,

pedestrian, bike and transit movements are generally as important as through traffic in these areas and slower speeds are allowed. There are no Special Transportation Areas within the MRMPO boundary.

Principal Arterials

Principal Arterials are the highest roadway classification and serve larger volumes of regional traffic at higher speeds than roads in the lower classifications. Arterials generally emphasize regional mobility over access to the adjacent land uses. ODOT has responsibility for the design, maintenance, repair, and construction of these facilities. Principal Arterials in the Planning Area include the following:

Table 5-1 – Principal Arterials

Road Name	Jurisdiction
Interstate 5 (I-5)	State
Rogue River Highway (OR 99)	State
Redwood Highway (US-199)	State
Jacksonville Highway (OR 238)	State
Downtown section of E Street in City of Grants Pass (0.5 mile)	Grants Pass
Downtown section of F Street in City of Grants Pass (0.9 mile)	Grants Pass

Interstate 5 passes through the MPO for a distance of just under 25 miles and is the primary transportation connector for the three member cities and the region. Redwood Highway (US-199) is an expressway through the Grants Pass urban area before continuing to the northern California/southern Oregon coast. The Oregon Highway Plan (OHP) classifies it as a Statewide Highway and it is part of the National Highway System (NHS). Redwood Highway is also a statewide freight route. Although replaced by Interstate 5 as the principal transportation route through the MRMPO, Rogue River Highway (OR 99) incorporates the Sixth and Seventh couplet through downtown Grants Pass before crossing the river and proceeding eastward to Rogue River and Gold Hill. Jacksonville Highway (OR 238) proceeds southeasterly from Sixth Street approximately six miles to the southern boundary of the MPO before continuing to Applegate, Jacksonville, and Medford.

Minor Arterials

Minor Arterials also are intended to favor mobility over access. These roadways provide a higher level of accessibility to adjacent land uses, but a lesser degree of mobility than the Principal Arterials. Minor Arterials in the Planning Area include the following:

Table 5-2 – Minor Arterials

Road Name	City	County	Jurisdiction
Jacksonville Highway	N/A	Josephine	State
Rogue River Highway	N/A	Jackson/Josephine	State
Sams Valley Highway	N/A	Jackson	State
Lower River Road	Grants Pass	Josephine	State
Lincoln Road	Grants Pass	Josephine	State/County
Allen Creek Road	N/A	Josephine	County

Highland Avenue	Grants Pass	Josephine	County
New Hope Road	N/A	Josephine	County
Redwood Avenue	Grants Pass	Josephine	County
Upper River Road	N/A	Josephine	County
3 rd Street	Grants Pass	Josephine	Municipal Street
G Street	Grants Pass	Josephine	Municipal Street / County
Vine Street	Grants Pass	Josephine	Municipal Street / County
A Street	Grants Pass	Josephine	Municipal Street
Agness Avenue	Grants Pass	Josephine	Municipal Street
Allen Creek Road	Grants Pass	Josephine	Municipal Street
Bridge Street	Grants Pass	Josephine	Municipal Street
Dimmick Street	Grants Pass	Josephine	Municipal Street
E Street	Grants Pass	Josephine	Municipal Street
F Street	Grants Pass	Josephine	Municipal Street
Foothill Boulevard	Grants Pass	Josephine	Municipal Street
M Street	Grants Pass	Josephine	Municipal Street
N Street	Grants Pass	Josephine	Municipal Street
Oak Street	Grants Pass	Josephine	Municipal Street
Parkdale Drive	Grants Pass	Josephine	Municipal Street
East Evan Creek Road	Rogue River	Jackson	Municipal Street
Depot Street	Rogue River	Jackson	Municipal Street
Pine Street	Rogue River	Jackson	Municipal Street

Major Collectors

Major Collectors are intermediate roadways that typically serve as a direct link between local streets and the arterial street system. Mobility and access functions are important for collectors. Major Collectors in the Planning Area include the following:

Table 5-3 – Major Collectors

Road Name	City	County	Jurisdiction
Upper River Road	N/A	Josephine	State
10 th Street	N/A	Josephine	County
Ament Road	N/A	Josephine	County
Blackwell Road	N/A	Jackson	County
Cloverlawn Drive	N/A	Josephine	County
Cutrate Road	N/A	Josephine	County
Darneille Lane	N/A	Josephine	County
Demaray Drive	N/A	Josephine	County
Donaldson Road	N/A	Josephine	County
Drury Road	N/A	Josephine	County
Fish Hatchery Road	N/A	Josephine	County
Foothill Boulevard	N/A	Josephine	County
Fruitdale Drive	N/A	Josephine	County

Galice Road	N/A	Josephine	County
Granite Hill Road	N/A	Josephine	County
Helm Road	N/A	Josephine	County
Hillcrest Drive	N/A	Josephine	County
Jaynes Drive	N/A	Josephine	County
Merlin Road	N/A	Josephine	County
Monument Drive	N/A	Josephine	County
New Hope Road	N/A	Josephine	County
Old Stage Road	N/A	Jackson	County
North River Road	N/A	Jackson	County
Robertson Bridge Rd	N/A	Josephine	County
Stringer Gap Road	N/A	Josephine	County
Beacon Drive	Grants Pass	Josephine	County
Cloverlawn Drive	Grants Pass	Josephine	County
Darneille Lane	Grants Pass	Josephine	County
Dowell Road	Grants Pass	Josephine	County
Foothill Boulevard	Grants Pass	Josephine	County
Fruitdale Drive	Grants Pass	Josephine	County
Grandview Avenue	Grants Pass	Josephine	County
Hubbard Lane	Grants Pass	Josephine	County
Leonard Road	Grants Pass	Josephine	County
N Street	Grants Pass	Josephine	County
Scenic Drive	Grants Pass	Josephine	County
Ringuette Street	Grants Pass	Josephine	County
W. Harbeck Road	Grants Pass	Josephine	County
Willow Lane	Grants Pass	Josephine	County
3 rd Street	Grants Pass	Josephine	Municipal Street
4 th Street	Grants Pass	Josephine	Municipal Street
9 th Street	Grants Pass	Josephine	Municipal Street
10 th Street	Grants Pass	Josephine	Municipal Street
Allen Creek Road	Grants Pass	Josephine	Municipal Street
D Street	Grants Pass	Josephine	Municipal Street
Drury Lane	Grants Pass	Josephine	Municipal Street
East Park Street	Grants Pass	Josephine	Municipal Street
Evelyn Avenue	Grants Pass	Josephine	Municipal Street
F Street	Grants Pass	Josephine	Municipal Street
Fairgrounds Road	Grants Pass	Josephine	Municipal Street
Fairview Avenue	Grants Pass	Josephine	Municipal Street
Gladiola Avenue	Grants Pass	Josephine	Municipal Street
George Tweed Blvd	Grants Pass	Josephine	Municipal Street
Hamilton Lane	Grants Pass	Josephine	Municipal Street
Harbeck Road	Grants Pass	Josephine	Municipal Street
Haviland Drive	Grants Pass	Josephine	Municipal Street
Hawthorn Avenue	Grants Pass	Josephine	Municipal Street
Hawthorne Avenue	Grants Pass	Josephine	Municipal Street

Hillcrest Drive	Grants Pass	Josephine	Municipal Street
J Street	Grants Pass	Josephine	Municipal Street
Kellenbeck Avenue	Grants Pass	Josephine	Municipal Street
Leonard Road	Grants Pass	Josephine	Municipal Street
Lincoln Road	Grants Pass	Josephine	Municipal Street
Manzanita Avenue	Grants Pass	Josephine	Municipal Street
Midland Avenue	Grants Pass	Josephine	Municipal Street
Mill Street	Grants Pass	Josephine	Municipal Street
Morgan Lane	Grants Pass	Josephine	Municipal Street
North 6 th Street	Grants Pass	Josephine	Municipal Street
N Street	Grants Pass	Josephine	Municipal Street
NE Anderson Street	Grants Pass	Josephine	Municipal Street
Parkdale Drive	Grants Pass	Josephine	Municipal Street
Ramsey Avenue	Grants Pass	Josephine	Municipal Street
Redwood Access Rd	Grants Pass	Josephine	Municipal Street
Ringuette Street	Grants Pass	Josephine	Municipal Street
Savage Street	Grants Pass	Josephine	Municipal Street
Schutzwohl Lane	Grants Pass	Josephine	Municipal Street
Scoville Road	Grants Pass	Josephine	Municipal Street
Spalding Avenue	Grants Pass	Josephine	Municipal Street
SW Grandview Ave	Grants Pass	Josephine	Municipal Street
SW Ramsey Ave	Grants Pass	Josephine	Municipal Street
Union Avenue	Grants Pass	Josephine	Municipal Street
Vine Street	Grants Pass	Josephine	Municipal Street
West Park Street	Grants Pass	Josephine	Municipal Street
Washington Blvd	Grants Pass	Josephine	Municipal Street
Depot Street	Rogue River	Jackson	Municipal Street
Foothill Boulevard	Rogue River	Jackson	Municipal Street
Main Street	Rogue River	Jackson	Municipal Street
North River Road	Rogue River	Jackson	Municipal Street

Minor Collectors

A collector road or distributor road is a low-to-moderate-capacity road which serves to move traffic from local streets to arterial roads. Unlike arterials, collector roads are designed to provide access to residential properties. Minor Collectors in the Planning Area include the following:

Table 5-4 – Minor Collectors

Road Name	City	County	Jurisdiction
Granite Hill Road	N/A	Josephine	County
Hugo Road	N/A	Josephine	County
Merlin Avenue	N/A	Josephine	County
Pinecrest Drive	N/A	Josephine	County
Pleasant Valley Road	N/A	Josephine	County

Plumtree Lane	N/A	Josephine	County
Shannon Lane	N/A	Josephine	County
W Evans Creek Road	N/A	Jackson	County
Wards Creek Road	N/A	Jackson	County
Angler Lane	Grants Pass	Josephine	Municipal Street
B Street	Grants Pass	Josephine	Municipal Street
Beacon Drive	Grants Pass	Josephine	Municipal Street
Boundary Road	Grants Pass	Josephine	Municipal Street
Curtis Drive	Grants Pass	Josephine	Municipal Street
Dowell Road	Grants Pass	Josephine	Municipal Street
Elmer Nelson Lane	Grants Pass	Josephine	Municipal Street
Estates Lane	Grants Pass	Josephine	Municipal Street
Fairgrounds Road	Grants Pass	Josephine	Municipal Street
Hamilton Lane	Grants Pass	Josephine	Municipal Street
Morgan Lane	Grants Pass	Josephine	Municipal Street
NE Madrone Street	Grants Pass	Josephine	Municipal Street
Nebraska Avenue	Grants Pass	Josephine	Municipal Street
Portola Drive	Grants Pass	Josephine	Municipal Street
SE N Street	Grants Pass	Josephine	Municipal Street
SE Rogue Drive	Grants Pass	Josephine	Municipal Street
Terry Lane	Grants Pass	Josephine	Municipal Street
W Schutzwohl Lane	Grants Pass	Josephine	Municipal Street
Broadway Street	Rogue River	Jackson	Municipal Street
Cedar Street	Rogue River	Jackson	Municipal Street
Classick Drive	Rogue River	Jackson	Municipal Street
First Street	Rogue River	Jackson	Municipal Street
Second Street	Rogue River	Jackson	Municipal Street
Third Street	Rogue River	Jackson	Municipal Street
Wards Creek Road	Rogue River	Jackson	Municipal Street

Local Roads

Other roadways in the Planning Area are classified as local roads. Local roads or residential streets provide maximum accessibility to adjacent land uses and minimum mobility.

2. Number of Lanes and Roadway Width

The number of lanes helps define the capacity and streetscape of a roadway. Map 5-3 shows the number of lanes for arterials and collectors in the Planning Area.

Most of the arterials and collectors in the Planning Area have one lane in each direction, although some of the arterials and collectors in Grants Pass have more. This includes:

- 6th Street (three lanes southbound)
- 7th Street (three lanes northbound)
- E Street (two lanes westbound)
- F Street (two lanes eastbound)

- Grants Pass Parkway
- Redwood Highway 199
- Jacksonville Highway 238

Roadway widths for urban collectors generally range from 30 to 40 feet. Widths of urban minor arterials and urban principal arterials may exceed 60 feet.

3. Posted Speed Limits

Posted speed limits affect the capacity and characterize the function of a roadway. Posted speed limits are generally 25 mph through central Grants Pass, Gold Hill and Rogue River, and range from 30 to 45 mph on other arterials and collectors within Grants Pass, Gold Hill and Rogue River. Toward the outer edges of the Planning Area, speed limits are generally 45 to 50 mph, rising to 55 mph on state highways outside of urban growth boundaries. Interstate 5 has a 65 mph limit throughout the region.

4. Signalized Intersections

There are more than 50 signalized intersections in Grants Pass, two signalized intersections at the I-5 ramps in Rogue River, and none in Gold Hill. There is one signalized intersection located in unincorporated Josephine County and Jackson County within the Planning Area.

5. Pavement Condition

MPO member jurisdictions use a variety of methods to track pavement conditions within their jurisdictions. Most jurisdictions within the MPO maintain a database of their pavement conditions.

ODOT conducts pavement conditions surveys to determine the overall condition of the state highway system. The pavement condition data also enables ODOT to track pavement performance and determine rehabilitation and funding needs on a network wide basis. The pavement condition uses a rating system with five categories ranging from Very Good to Very Poor. Most state roads in the Planning Area are rated Fair to Very Good. Rogue River Loop, west of Grants Pass and the connection between I-5 and Sams Valley Highway at OR 234 have been rated Poor.



6. Bridge Condition

Bridges in the Planning Area include city, county, and state bridges. Map 5-4 shows bridge locations and sufficiency ratings.

The sufficiency rating formula is a method of evaluating highway bridge data by calculating four separate factors to obtain a numeric value which is indicative of bridge sufficiency to remain in service. The result of this method is a percentage in which 100 percent would represent an entirely sufficient bridge and zero percent would represent an entirely insufficient or deficient bridge. The four factors are: (1) structural adequacy and safety (55% max); (2) serviceability and functional obsolescence (30%); (3) essentiality for public use (15%); and (4) special reductions

(-13% max). Although this index has fallen out of favor with many states, the Federal Highway Administration uses this index in evaluating the nation’s bridges for funding distribution and eligibility. Those bridges with a sufficiency rating of 80 or less are eligible for rehabilitation. Those bridges with a sufficiency of 50 or less are eligible for replacement.

Tables 5-5, 5-6 and 5-7 below list the bridges within the MRMPO by roadway, owner, sufficiency rating and county. Table 5-5 lists the bridges with sufficiency ratings 81 to 100, Table 5-6 lists the bridges with sufficiency ratings of 51 to 80, and Table 5-7 lists the bridges with sufficiency ratings of 0 to 50 (no bridges had a score below 21.80).

Table 5-5 – Bridge Sufficiency Ratings: 81 to 100

SUFFICIENCY RATING: 81 to 100 - GOOD CONDITION				
BRIDGE NAME	ROADWAY	OWNER	SUFFICIENCY RATING	COUNTY
Owl Creek, Hwy 60 (Little Savage Creek)	OR 99 (HWY 060)	State Highway Agency	100.00	Jackson
Irrigation Ditch, Hwy 1 Frtg Rd Rt at MP F40.85	I-5 (HWY 001) FR	State Highway Agency	100.00	Jackson
Irrigation Ditch, Hwy 1 Frtg Rd Rt at MP F40.92	I-5 (HWY 001) FR	State Highway Agency	100.00	Jackson
Green Creek, Hwy 60	OR 99 (HWY 060)	State Highway Agency	100.00	Josephine
Main Low Canal, Hwy 60	OR 99 (HWY 060)	State Highway Agency	100.00	Josephine
Blackwell Creek, Hwy 486	OR 99 (HWY 486)	State Highway Agency	100.00	Jackson
Skunk Creek, Hwy 25 at MP -1.30	US199 (HWY 025)NB	State Highway Agency	100.00	Josephine
Kane Creek, Hwy 1 Front Rd Lt	I-5 (HWY 001) CON	State Highway Agency	98.00	Jackson
Irrigation Canal, Cloverlawn Dr	CLOVERLAWN DRIVE	County Hwy Agency	97.90	Josephine
Upper Ditch South Hogland Canal, Hwy 272	OR 238 (HWY 272)	State Highway Agency	97.00	Josephine
Irrigation Ditch, Hwy 1 Frtg Rd Lt at MP F41.18	I-5 (HWY 001) FR	State Highway Agency	97.00	Jackson
Harris Creek, Tavis Dr	TAVIS DRIVE	County Hwy Agency	97.00	Josephine
Sparrowhawk Creek, Leonard Rd	LEONARD ROAD	County Hwy Agency	96.30	Josephine
Allen Creek & Golf Cart Path, Hwy 272	OR 238 (HWY 272)	State Highway Agency	96.00	Josephine
Sand Creek, Sand Creek Rd	SAND CREEK ROAD	County Hwy Agency	94.60	Josephine
Louse Creek, Pleasant Valley Rd	PLEASANT VALLEY RD	County Hwy Agency	94.50	Josephine
Jones Creek, Foothill Blvd	FOOTHILL BLVD.	County Hwy Agency	94.40	Josephine
Louse Creek & Conn, Hwy 1 SB	I-5 (HWY 001) SB	State Highway Agency	93.30	Josephine
Louse Creek & Conn, Hwy 1 NB	I-5 (HWY 001) NB	State Highway Agency	93.30	Josephine
Irrigation Canal, Ringuette St	RINGUETTE STREET	County Hwy Agency	93.10	Josephine
Fruitdale Creek, Hamiltin Ln	HAMILTON LANE	County Hwy Agency	93.00	Josephine
Louse Creek, Hwy 1 Conn #2	I-5 (HWY 001) CON	State Highway Agency	92.80	Josephine
Evans Creek, W Main St	WEST MAIN ST	CTY/MUN Hwy AGCY	92.60	Jackson
Ward Creek, Classic Dr	CLASSIC DR	CTY/MUN Hwy AGCY	92.20	Jackson
Rogue River, Hwy 482 Spur	HWY 482 SPUR	State Highway Agency	91.50	Josephine
Louse Creek, Haines Ln	HAINES LANE	County Hwy Agency	91.00	Josephine
Hwy 1 over Hwy 482 Spur	I-5 (HWY 001)	State Highway Agency	90.60	Josephine
Hwy 1 NB over Beacon Dr	I-5 (HWY 001)	State Highway Agency	90.50	Josephine
Harris Creek, Monument Dr	MONUMENT DRIVE	County Hwy Agency	89.70	Josephine
Hwy 60 SB & Hwy 25 over Hwy 272	OR 99 (HWY 060)	State Highway Agency	89.40	Josephine
Harris Creek, Pleasant Valley Rd	PLEASANT VALLEY RD	County Hwy Agency	89.30	Josephine
Fruitdale Creek, Hwy 60	OR 99 (HWY 060)	State Highway Agency	89.00	Josephine
Jumpoff Joe Creek, Hugo Rd	HUGO ROAD	County Hwy Agency	88.40	Josephine
Irrigation Canal, Arnold Ave	ARNOLD AVE	County Hwy Agency	87.70	Josephine
Irrigation Canal, Dowell Rd	DOWELL ROAD	County Hwy Agency	86.80	Josephine
Sand Creek, Hubbard Ln	HUBBARD LANE	County Hwy Agency	85.90	Josephine
Foots Creek, Right Fork Foots Rd # 915	RT FRK FOOTS CR RD	County Hwy Agency	85.50	Jackson
Rogue River, Depot St	DEPOT STREET	State Highway Agency	85.10	Jackson
Irrigation Canal, Hwy 25 at MP 3.38	HWY 25	State Highway Agency	85.00	Josephine
Allen Creek, Hwy 25	HWY 25	State Highway Agency	85.00	Josephine
Irrigation Ditch, Hwy 25 at MP 0.49	HWY 25	State Highway Agency	85.00	Josephine
Hwy 1 SB over Beacon Dr	I-5 (HWY 001)	State Highway Agency	83.60	Josephine
Stockpass, Hwy 1 at MP 39.74	I-5 (HWY 001)	State Highway Agency	83.00	Jackson
Blackwell Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	83.00	Jackson
Equipment Pass, Hwy 1 at MP 50.80	I-5 (HWY 001)	State Highway Agency	83.00	Jackson
Kane Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	83.00	Jackson
Equipment Pass, Hwy 1 at MP 52.12	I-5 (HWY 001)	State Highway Agency	83.00	Jackson
Galls Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	83.00	Jackson
Equipment Pass, Hwy 1 at MP 53.51	I-5 (HWY 001)	State Highway Agency	83.00	Josephine
Tokay Canal, Hwy 1	I-5 (HWY 001)	State Highway Agency	83.00	Josephine
Sand Creek, Leonard Rd	LEONARD ROAD	County Hwy Agency	82.60	Josephine
Hwy 1 over Scoville Rd	I-5 (HWY 001)	State Highway Agency	82.50	Josephine
Irrigation Canal, Hwy 272 at MP S0.24	HWY 272	State Highway Agency	81.00	Josephine
Irrigation Canal, Willow Ln	WILLOW LANE	County Hwy Agency	80.60	Josephine
Onion Creek, Hwy 272	OR 238 (HWY 272)	State Highway Agency	80.40	Josephine
Jumpoff Joe Creek, Russell Rd	RUSSELL ROAD	County Hwy Agency	80.40	Josephine

Table 5-6 – Bridge Sufficiency Ratings: 51 to 80

SUFFICIENCY RATING: 51 to 80 - ELIGIBLE FOR REHABILITATION				
BRIDGE NAME	ROADWAY	OWNER	SUFFICIENCY RATING	COUNTY
Irrigation Canal, Elk Ln	ELK LANE	County Hwy Agency	79.90	Josephine
Irrigation Canal, Gaffney Way	GAFFNEY WAY	CTY/MUN Hwy AGCY	79.10	Josephine
Hwy 1 over Depot St	I-5 (HWY 001)	State Highway Agency	79.00	Jackson
Kane Creek, Kane Creek Rd #835	COUNTY RD 835	County Hwy Agency	78.80	Jackson
Irrigation Canal, Hamilton Ln	HAMILTON LANE	County Hwy Agency	78.70	Josephine
Hwy 1 over Foley Lane Frontage Rd	I-5 (Hwy 001)	State Highway Agency	78.50	Jackson
Louse Creek, Monument Dr	MONUMENT DRIVE	County Hwy Agency	77.30	Josephine
Irrigation Canal, Drury Lane	DRURY LANE	County Hwy Agency	76.90	Josephine
Hwy 1 over Hillcrest Dr	I-5 (HWY 001)	State Highway Agency	76.90	Josephine
Hwy 1 SB over Hwy 60	I-5 (HWY 001) SB	State Highway Agency	76.10	Jackson
Hwy 1 over Galls Creek Front Rd Conn	I-5 (HWY 001)	State Highway Agency	75.10	Jackson
Louse Creek, Carton Way	CARTON WAY	County Hwy Agency	74.00	Josephine
Irrigation Canal, College Dr	COLLEGE DRIVE	County Hwy Agency	73.80	Josephine
Irrigation Ditch, New Hope Rd	NEW HOPE ROAD	County Hwy Agency	72.70	Josephine
Jones Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	72.00	Josephine
Wards Creek, Main St	MAIN ST	CTY/MUN Hwy AGCY	71.40	Jackson
Galls Creek, Lampman Rd.	Lampman Rd. (#807)	County Hwy Agency	70.10	Jackson
Hwy 1 SB over Foothill Blvd	I-5 (HWY 001) SB	State Highway Agency	70.00	Josephine
Gilbert Creek, Hwy 260	G STREET	CTY/MUN Hwy AGCY	69.40	Josephine
Sand Creek, Hwy 25	US199 (HWY 025)	State Highway Agency	68.00	Josephine
Hwy 486 Spur over Hwy 1 (S Gold Hill)	OR 99 (HWY 486)	State Highway Agency	67.90	Jackson
Hwy 1 NB over Foothill Blvd	I-5 (HWY 001) NB	State Highway Agency	67.60	Josephine
Hwy 1 over Hwy 25 NB	I-5 (HWY 001)	State Highway Agency	67.60	Josephine
Louse Creek, Highland Frontage Road	HIGHLAND AVENUE	County Hwy Agency	66.80	Josephine
Quartz Creek, Ward Rd	WARD ROAD	County Hwy Agency	64.90	Josephine
Hwy 60 over Hwy 1	OR 99 (HWY 060)	State Highway Agency	64.40	Jackson
Main Canal, Cloverlawn Dr	CLOVERLAWN DRIVE	County Hwy Agency	62.20	Josephine
Sardine Creek, Hwy 271	OR 99 (HWY 271)	State Highway Agency	60.60	Jackson
Foots Creek, Hwy 60	OR 99 (HWY 060)	State Highway Agency	59.90	Jackson
Hwy 1 NB over Hwy 60	I-5 (HWY 001) NB	State Highway Agency	59.90	Jackson
Rogue River, Hwy 486 (Gold Hill Spur)	OR 99 (HWY 486)	State Highway Agency	59.90	Jackson
Ward Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	58.90	Jackson
Rogue River, Hwy 1 NB (Homestead)	I-5 (HWY 001) NB	State Highway Agency	58.70	Jackson
Rogue River, Hwy 25 NB (7th St)	US199 (HWY 025)NB	State Highway Agency	57.90	Josephine
Kane Creek, Old Stage Rd	OLD STAGE ROAD	County Hwy Agency	57.50	Jackson
Rogue River +, Hwy 271 (Rock Point)	OR 99 (HWY 271)	State Highway Agency	53.40	Jackson
Rogue River, Hwy 1 SB (Homestead)	I-5 (HWY 001) SB	State Highway Agency	53.30	Jackson

Table 5-7 – Bridge Sufficiency Ratings: 0 to 50

SUFFICIENCY RATING: 0 to 50 - ELIGIBLE FOR REPLACEMENT				
BRIDGE NAME	ROADWAY	OWNER	SUFFICIENCY RATING	COUNTY
Hwy 1 over Foothill Blvd	I-5 (HWY 001)	State Highway Agency	49.80	Josephine
Millers Gulch, Hwy 60	OR 99 (HWY 060)	State Highway Agency	49.70	Jackson
Hwy 272 over NB Hwy 25	OR 238 (HWY 272)	State Highway Agency	49.50	Josephine
Savage Creek, Hwy 60	OR 99 (HWY 060)	State Highway Agency	47.80	Jackson
Birdseye Creek, Hwy 60	OR 99 (HWY 060)	State Highway Agency	47.10	Jackson
Merlin Hill Frtg Rd (Highland Av) over Hwy 1	FT RD(HIGHLAND AV)	State Highway Agency	42.50	Josephine
Right Fork Roots Creek, Right Fork Roots Creek R	RT FRK FOOTS CR RD	County Hwy Agency	35.00	Jackson
Evans Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	35.00	Jackson
Rogue River, Hwy 25 SB (6th St, Caveman)	Hwy 99 SB	State Highway Agency	31.90	Josephine
Sand Creek, Elmer Nelson Way	Elmer Nelson Way	CTY/MUN Hwy AGCY	21.80	Josephine

7. Freight Routes

Freight movement on highways is critical to the economic health of a region. A major element of traffic in the Planning Area is freight movement via truck on the two designated statewide freight routes that extend through the Planning Area, Interstate 5 and OR 199. ODOT’s *Traffic Volume and Vehicle Classification Report* for 2013 indicates that truck traffic on Interstate 5 increases from 17.7% of total volume southeast of Gold Hill to 23.1% north of the Merlin interchange. Truck traffic on Highway 199 represents about 2.6% of total volume in Grants Pass, and 14.1% near the Applegate River.

Map 5-5 illustrates the typical flow of truck freight traffic in the Planning Area, showing the annual average daily traffic on freight routes.

B. Transit System

The general public transit system is operated by Josephine County Public Works under the name Josephine Community Transit (JCT). Map 5-6 shows the existing fixed route and commuter route transit lines. Also operated by JCT is the Rogue Valley Commuter Line which provides service to Grants Pass, Rogue River, Gold Hill and Medford. The other general public transit providers are the intercity operators Greyhound and South West Point. Greyhound provides service along the I-5 corridor, while SW Point provides service between Klamath Falls and Brookings.

1. Fixed-Route Transit

Josephine Community Transit (JCT)

JCT provides local fixed route and commuter route transit services in Josephine County and intercity transit service between Grants Pass and Medford with stops in Rogue River and Gold Hill. Fares currently are \$1.00 for full fare on the fixed routes and \$2.00 on the commuter routes. Discounts are available for those that qualify due to age, disability or qualification into the JCT’s reduced fare program. There are no discounted fares on the Rogue Valley Commuter Line.

JCT provides four fixed route within the Grants Pass Urban Growth Boundary (UGB). The existing routes provide coverage to commercial, employment, educational and government

destinations throughout the greater Grants Pass area. Service operates Monday through Friday only between the hours of 6:30 a.m. to 6:30 p.m. Two routes operate with a 30 minute service frequency and two operate every 60 minutes. Transfers can be made between routes for free, with a valid transfer, within 60 minutes of deboarding any JCT route.



JCT also operates two commuter routes within Josephine County, one to the north and the other to the south. The Route 50 provides five round trips each weekday to Cave Junction serving the Hwy 99 corridor with additional stops in Wonder, Selma, and Kerby. There are two trips in the a.m., one mid day and two in the p.m. Route 80 serves the areas to the north of Grants Pass and turns around in Wolf Creek. There are additional stops made in Merlin, Hugo, and Sunny Valley. This route only provides for three trips per day (a.m., mid-day and p.m.).

Senior and Disabled Transit Service

All JCT's vehicles are accessible and can hold up to two mobility devices at any given time. All stops within the fixed route system are Americans with Disabilities Act (ADA) compliant. In addition to the fixed route and commuter services, JCT also provides paratransit and demand response service for those that qualify.

Paratransit service is a requirement under the ADA. This service consists of door to door service, on demand, for those that qualify. To qualify a person has to have a disability that prevents them from using the fixed route for all or some of their trips. Service is only available within $\frac{3}{4}$ mile on each side of an existing fixed route. There is no associated paratransit service for the commuter routes. The fare is double the full fare for the fixed routes. Once qualified a person needs to call the prior day, between 8:00 a.m. and 5:00 p.m. to schedule a ride. There can be no ride denials and request for service has to be met at 100% to continue compliance with the ADA.

Demand response services are also available for those over the age of 62. This is essentially the same as the paratransit service except a person only has to be over 62 to qualify. Under times of high demand all trip request for these passengers might not be met. If a person applies under the over 62 category and appears to qualify for paratransit, they will be informed they have that option as well.

The hours of operation for the paratransit and demand response service are the same as the fixed routes, Monday through Friday 6:30 a.m. and 6:30 p.m. The cost for both is double the fixed route full fare. Users of these services are encouraged to use the fixed routes since the fare is .50¢ and there is no prior day scheduling requirement. There is no paratransit or demand response services associated with the commuter routes.

The Rogue Valley Commuter Line does make connections to the paratransit services in Grants Pass as well as RVTD's Valley Lift Service in Medford. This means that a qualified passenger

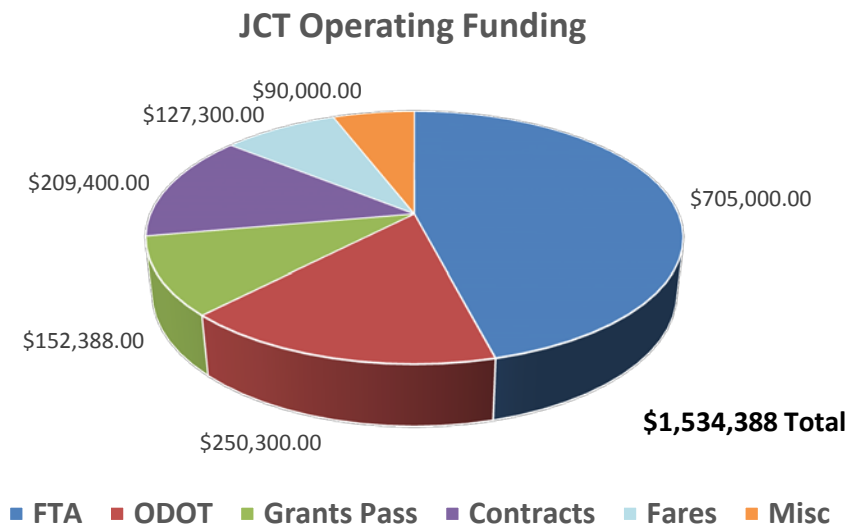
could use the associated paratransit services on either end of the Rogue Valley to complete their trip. Since all vehicles are lift equipped a qualified person could use paratransit service to reach the RVCL then paratransit service once they arrive in Medford or Grants Pass.

Ridership and Funding

Funding for transit operations comes from a variety of state and federal funds, all of which are dedicated specifically for transit use only. In addition to state and federal funds, JCT has a variety of operating agreements with local agencies such as the Rogue Community College (RCC), Non-emergency Medical Transportation (NEMT) and multiple social service agencies. These funds are used to provide the local match requirement to receive other Federal Transit Administration (FTA) dollars.

The City of Grants Pass also pays the match requirement on a grant that is used to purchase fixed route transit from JCT. The funds are used to purchase transit service from JCT and provide the local match requirement. The funds are from the FTA 5310 program and are exclusively for elderly and disabled transportation services.

Figure 5-1 – Transit Operating Funds



Unfortunately, JCT doesn't access all the funding available for transit in the MRMPO due to lack of local match dollars. Match rates for transit operations is typically 50%, or dollar for dollar of total project cost. JCT is not able to access approximately \$240,000 of FTA operating funds annually. Fares from the operation of transit services are not an eligible source of local match. The funds not currently being utilized, plus required match, are approximately 30% of the existing budget if they were available.

In 2015 JCT charges passengers \$1.00 per local ride and \$2.00 for trips to Cave Junction. Monthly passes are available (\$38 for full fare, \$50 for Cave Junction and \$19 for reduced fare).

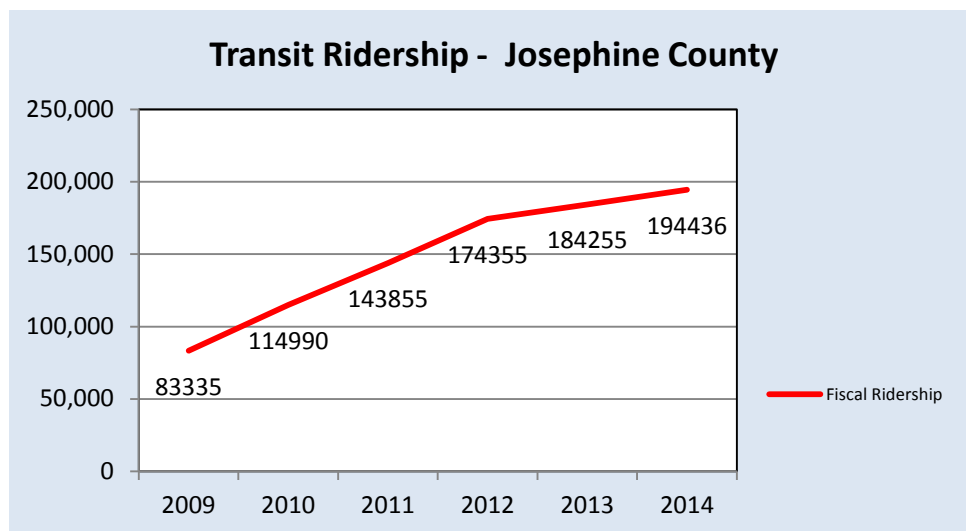
Paratransit rides are, per the ADA, double the full fare of the fixed route. Fare rates can be changed after proper public input and are not necessarily static in nature.

In July of 2009 and again in December 2012, improvements were made to the transit system and that drastically changed the operational parameter from a rural local system to principles you would find in large urban areas. Specifically, the routes were realigned into a grid system where transfers between routes (and direction) could be made throughout the entire system and not just one major spot. This enabled riders to complete their trips faster and in a more direct route that what was available previously.

As a result, ridership has increased by 133% since 2009. The system now operates at an overall capacity of 42%; meaning that at any given time 42% of the seats are taken. That is system-wide and statistics will vary from route to route. For the fixed routes within Grants Pass, the busiest route (Rt 10, 2 vehicles with 30 minute frequency) has an average capacity of 65%. The same route averages 16.5 passengers per hour of operations. Combined, all fixed routes within the City are averaging 14.5 passengers per hour of service. The commuter routes average 12.3 passengers per revenue hour of service.

Based on current American Community Survey data (2009-2013 5-year estimates), only 0.4 percent of commuters in the Grants Pass Urbanized Area (MRMPO Planning Area) used public transit. Residents who are transit-dependent likely make up the majority of transit users in the region. Slightly over 8 percent of commuters indicated that they carpooled by car, van or truck. Approximately 83 percent of work trips in the Planning Area are made by single-occupant vehicles. This does not include other types of trips such as to school, medical, shopping or recreational. So, actually all transit trips would encompass many more people and many more transit trips than just those by commuters.

Figure 5-2 – Transit Ridership



Due to lack of local match, there are no plans for further expansions to existing service at this time. With that said, there is strong demand for additional service along the Hwy 238 corridor all the way to Murphy and Williams. There is also strong demand for Saturday service as well.

2. Non-Emergency Medical (Medicaid) Transportation

Translink and Ready Ride are the Medicaid transportation brokerages serving Oregon Medical Assistance Program (OMAP) clients in Josephine and Jackson counties. The Rogue Valley Transportation District (RVTD) administers Translink; a service providing approximately 3,200 trips per month for MRMPO Planning Area residents. ReadyRide is another non-emergency medical transportation provider arranging approximately 5,700 trips per month for Josephine County residents. Both services note nearly 80% of the rides that originate in Josephine County or the cities that make up the MRMPO (Grants Pass, Rogue River, and Gold Hill) stay within the Grants Pass Urbanized Area. The remaining 20% go to Medford. Changes to the Oregon Health Plan in February 2003 cut the number of eligible clients and reduced the number of covered trips by about half from prior year levels.

3. Specialized Public Transportation Services

As of the end of 2015, a number of specialized transportation services also operated in Josephine County, as described below. Upon request, JCT does take solicitations for their Class C vehicles that have reached the end of their useful life and are being taken out of service. Meaning that JCT gives those vehicles to other agencies to utilize for their transportation needs. These other agencies are providing for client only transportation services.

Options of Southern Oregon serves as the Community Mental Health Program for Josephine County. Options provides for resident patient transportation and utilizes ODOT Public Transit Division (PTD) funds for preventative maintenance and replacement vehicles. For outpatient clients, Options utilizes Ready Ride and Translink transportation services. Options also has their own fleet of vehicles that they use to provide for their own client transportation needs.

Southern Oregon Aspire is a nonprofit organization that provides residential and vocational support to people with intellectual and developmental disabilities in Jackson and Josephine Counties. Aspire provides for client only transportation between worksites/activity centers. They also have vehicles for specific group homes, as well.

Boys and Girls Club of Grants Pass serves local youth. They have their own vehicle for their own clients and activities.

Coalition for Kids is a nonprofit organization helping kids and families. They have a vehicle and provide for their own clients and activities.

Wildlife Images is a wildlife rehabilitation and education center. They run their own trolley between three stops in Grants Pass and their facility on Lower River Rd. This service is during the summer months, only.

Taxi Service – There are multiple taxi providers operating in Grants Pass, many of which originate in Medford and provide intercity service connections, as well.

4. Intercity Bus Service

Greyhound provides weekday intercity bus service along the I-5 corridor between Portland and Sacramento. As of winter 2003, Greyhound made four daily stops in Grants Pass in each direction. Greyhound terminals are located on Agness Avenue and can make connections with the JCT routes at that location as well.

Southwest Point also stops in Grants Pass twice per day. Once is on the way to Klamath Falls and the other is on the way to Smith River, CA. Southwest Point can make connections to the JCT routes in Cave Junction, Selma, and Grants Pass. Southwest Point also services the Rogue Valley Airport as well as makes a connection to Amtrak in Klamath Falls.

The Rogue Valley Commuter Line (RVCL) also is operated by JCT. It makes five trips per day between the cities of Grants Pass, Rogue River, Gold Hill and Medford. The stop in Medford is at the RVTD Front Street Transfer Station. Transfers can be made from the RVCL to the JCT or RVTD system for free within 60 minutes of arrival. The three services of JCT, RVCL and RVTD effectively connect the entire Rogue Valley from Cave Junction and Wolf Creek all the way to Ashland.



5. School Bus Routes

The MRMPO Planning Area is also served by numerous public school bus routes operated by First Student. These routes rely on the Planning Area’s arterial and collector roadway system to connect the homes of individual students or groups of students with the area’s public schools.

Maps and times for existing routes for Grants Pass public schools are available on the Grants Pass School District No. 7 website (www.grantsspass.or.schoolwebpages.com). Unincorporated county school bus information can be found on the Three Rivers School District website (www.threerivers.k12.or.us). Rogue River school bus information is available by contacting First Student, and Gold Hill students are served by the Central Point School District located within the Medford Urbanized Area.

C. Pedestrian System

Pedestrian facilities that are accessible, convenient, and safe to use are essential components of the transportation system. As the *Oregon Bicycle and Pedestrian Plan* (OBPP) explains, virtually everyone is a pedestrian at some point during the day and therefore benefits from accessible facilities. Pedestrians include children walking to and from school, people using wheelchairs or other forms of mobility assistance, workers walking to lunch, and people walking to and from their vehicles. In addition, walking meets the commuting, recreational, and social transportation needs for a significant portion of the population that cannot or chooses not to drive. The community’s pedestrian system also offers recreational opportunities for both local and out-of-town users.

According to the OBPP, pedestrian facilities are defined as any facilities used by a pedestrian, including walkways, traffic signals, crosswalks, curb ramps, and other amenities such as illumination or benches. The Planning Area has several different types of walkways, which are defined in the OBPP as “transportation facilities built for use by pedestrians and persons in wheelchairs,” including the following:

Sidewalks: Sidewalks are separated from the roadway with a curb and/or planting strip. ODOT’s minimum standard sidewalk width is 6-feet. The City of Grants Pass requires 5 to 6-foot minimum sidewalks and an 8-foot minimum in the Central Business District. Gold Hill requires sidewalks in subdivisions, only. Rogue River requires 4 to 6-foot sidewalks on arterials and collectors, as well as in subdivisions.

Multi-Use Paths: Multi-use paths are used by a variety of non-motorized users, including walkers, bicyclists, skaters, and runners. Multi-use paths may be paved or unpaved, and are often 10 or 12 feet wide – significantly wider than the average sidewalk. Multi-use paths are discussed in detail in the bicycle section.

Roadway Shoulders: Roadway shoulders often serve as pedestrian routes in rural areas. On roadways with low traffic volumes (i.e. less than 3,000 vehicles per day), roadway shoulders are often adequate for pedestrian travel. These roadways should have shoulders wide enough so that both pedestrians and bicyclists can use them, usually 6 feet or greater. There are several roadways like this in the Planning Area.



Pedestrian Activated Crosswalks: Pedestrian activated crosswalks are roadway crossings for pedestrians that include a push button for activating a blinking yield light, a marked crosswalk, and often a raised median for pedestrian refuge. Upon the activation of the yield light by a pedestrian, the yield light starts blinking and signals to the motorists the presence of a pedestrian who intends to cross the street. Vehicles stop before the crosswalk and allow the pedestrian to safely cross the street. Examples of these types of facilities are in Grants Pass on SW G Street at Booth, and on NW 3rd Street at the railroad crossing.

1. Existing Sidewalks

The pedestrian system in the Planning Area is comprehensive in certain areas, such as in downtown Grants Pass, and along most arterial and collector roadways within city limits. Sidewalks are lacking in other areas, such as on the outskirts of the Planning Area and on roadways in unincorporated areas. Sidewalk obstructions and encroachments, typically mailboxes, overgrown vegetation, and utility poles, impede safe and accessible pedestrian travel in some areas. Map 5-7 displays the existing sidewalk network within the MRMPO region.

2. Pedestrian Destinations

Major pedestrian destinations are located in the following areas of the region:

Downtowns: Grants Pass, Gold Hill and Rogue River have downtown cores that are destinations for pedestrians.

Schools: Most of the arterial and collector streets around schools in the Grants Pass Urban Growth Boundary have sidewalks on at least one side of the street and are generally in good or fair condition. The exceptions are the schools fronting on county roads outside of the Grants Pass Urban Growth Boundary. Hanby Middle School and Patrick Elementary School in Gold Hill also lack a complete system of sidewalks.

Parks/Recreation Centers: Most of the parks and recreation centers in the Planning Area are accessible by sidewalk or multi-use path. Other parks are accessible by bicycle or by walking on a wide shoulder or bicycle lane. Pearce Park Road accessing Tom Pearce Park east of Grants Pass has relatively narrow shoulders, although the park may be accessed from NE Spaulding which includes a multi-use path. Cathedral Hills Park near the Grants Pass Golf Course also has limited pedestrian access although one of its primary attractions is hiking trails.

Shopping/Retail Centers: Shopping/retail centers are located throughout the region, clustered in downtown Gold Hill, Rogue River and Grants Pass, along the roadways. Most of these shopping and retail centers are accessible on sidewalks. However, the high traffic volumes and curb-tight sidewalks can make the walking experience uncomfortable. Additionally, many retail and shopping areas have limited pedestrian access from the sidewalk to the business itself, forcing pedestrians to walk through a large parking lot without a clear walkway.

Employment Centers: Employment centers in the Planning Area include government offices in the Grants Pass downtown core, retail services mentioned above, RCC, medical facilities surrounding Three Rivers Medical Center, and industry throughout the region. Major employment centers have good sidewalk connectivity and access, and some have internal pathway systems that improve pedestrian access.

3. Pedestrian System Deficiencies

Although many of the arterials and collectors in the Planning Area have adequate pedestrian facilities and a complementary multi-use path system, there are still several barriers pedestrians must overcome:

Auto-Oriented Land Uses: Auto-oriented land uses clustered outside of the downtown cores force many pedestrians to walk along and cross high-volume arterial roadways to access destinations. Many of these roadways have sidewalks but they are only 5-feet wide and adjacent to the curb (no buffers). The lack of a buffer next to high-speed traffic can make walking uncomfortable and potentially dangerous.

Limited Crossings: Crossing larger arterials like Redwood Highway and Williams Highway is challenging due to long distances between signalized intersections and marked crossings. Gaps, or opportunities to cross the roadway, are decreasing due to increasing traffic volumes and signal timing that has not been adjusted to reflect the changing roadway

conditions. These conditions discourage pedestrians from walking to services along the roadway and may endanger those who choose to dart across the roadway to reach their desired destinations.

Lack of Handicapped Accessibility: Some areas of the arterial and collector street systems lack ADA-compliant curb ramps and driveway cuts. This can make traveling by wheelchair or motorized mobility device challenging, if not impossible. The Wards Creek Bridge in Rogue River is an example of a major impediment that requires wheelchairs and motorized scooters to utilize the vehicle travel lanes.

Poor Sidewalk Connectivity: Though sidewalk connectivity is generally good in Grants Pass and in the downtown area of Rogue River, older residential areas in the unincorporated counties and in Gold Hill lack sidewalks and, in many cases, a shoulder or bicycle lane that would provide pedestrians with a place to walk beside the roadway.

It should be noted that a number of sidewalk projects in Grants Pass area are expected to be constructed within the short and medium range years of the RTP. Additionally, a section of the Rogue River Greenway is planned for construction within the short range (2015 – 2020). Please refer to the RTP Project List for more information on upcoming projects that include pedestrian facilities.

D. Bicycle System

Bicycle facilities are integral elements of the transportation system and valuable components in a strategy to reduce reliance on automobiles and provide greater transportation options to everyone. The community benefits in many ways from adequate bicycle facilities including reducing traffic congestion, supporting tourism, improving public health, and providing accessibility to all parts of the community. Further, there is a segment of the population who do not drive or who do not have access to an automobile.

The relatively small size of Grants Pass, Rogue River, and Gold Hill is amenable to travel by bicycle. Depending on the type of trip, studies indicate a willingness of people to walk between a quarter and a half mile, and bicycle upwards of 2 or 3 miles.

According to 2009-2013 U.S. Census data from the American Community Survey, 1% of the workers in Grants Pass commute to work by bicycle. This does not include recreational rides or rides for other purposes, however, which include a much larger number of people riding bicycles in the community.



Map 5-7 identifies bicycle facilities in the Planning Area.

1. Types of Bicycle Facilities

According to the American Association of State Highway Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities* (2012) and the Oregon Department of

Transportation (ODOT) *Oregon Bicycle and Pedestrian Design Guide* (2011), there are several different types of bicycle facilities. Bicycles are allowed on all roadways in Grants Pass, Gold Hill, Rogue River, and the surrounding areas. Bikeways are distinguished as preferential roadways that have facilities to accommodate bicycles. Accommodation can be a bicycle route designation, bicycle lane striping, and roadway shoulders with a minimum 4-foot width. Multi-use paths are facilities separated from a roadway for use by cyclists, pedestrians, skaters, runners, or others.

The following types of bikeways, recognized by AASHTO and ODOT, are found in the Planning Area:

Shared Roadway / Shared Lane: Bicyclists and motorists share the same roadway or travel lane. A shared roadway is the most prevalent type of bikeway; common on neighborhood residential streets, on rural roads and low-volume highways. The most suitable roadways for shared bicycle use are those with low speeds (25 mph or less) or low traffic volumes (3,000 ADT or less). A ‘sharrow’ pavement marking is often used to indicate shared travel lanes.

Bicycle Boulevards: A street segment, or series of contiguous street segments, that has been modified to accommodate through bicycle traffic and minimize through motor traffic. Traffic calming devices control traffic speeds discourage through trips by automobiles. Traffic controls limit conflicts between automobiles and bicyclists and give priority to through bicycle movement.

Shoulder Bikeway: These are paved roadways that have striped shoulders wide enough for bicycle travel. ODOT recommends a 6-foot paved shoulder to adequately provide for bicyclists, or 4-foot minimum in constrained areas. Roadways with shoulders less than 4-feet are considered shared roadways. Sometimes shoulder bikeways are signed to alert motorists to expect bicycle travel along the roadway.

Bike Lane: A portion of the roadway designated specifically for bicycle travel via a striped lane and pavement stencils. The standard width for a bicycle lane is 6-feet. The minimum width of a bicycle lane against a curb or adjacent to a parking lane is 5-feet. A bicycle lane may be as narrow as 4-feet, but only in very constrained situations. Bike lanes are most appropriate on arterials and major collectors where high traffic volumes and speeds warrant greater separation.

Multi-Use Path: A paved pathway that is physically separated from the roadway and shared by all non-motorized users, including walkers, joggers, skaters, and bicyclists. In general, multi-use paths are desirable for recreational uses, particularly by families and children. They are also preferred corridors for bicyclists for both transportation and recreation purposes as they have few intersections or crossings and reduce the potential for conflicts with motor vehicles.

2. Existing Bikeway Locations

Existing bicycle lanes, shoulder bikeways, a bicycle boulevard, and multi-use paths make up the region’s bikeway system, as shown on Map 5-7.

Within the Planning Area, there are approximately 97 miles of dedicated bikeways and 46% of arterial and collector roadways have bicycle facilities. Within Grants Pass, 51% of all arterials and collectors have bike facilities, and a dedicated bicycle boulevard runs north/south through the city from the Rogue River near Reinhart Park to Ogle Park at NE Midland Avenue. In the City of Rogue River 50% of arterials and collectors have bicycle facilities, and 66% in Gold Hill.

Traditional grid patterns and good street connectivity in the cities of Rogue River, Gold Hill, and north of the Rogue River in Grants Pass present options for bicyclists to travel throughout each of the urbanized areas on existing bikeways and shared roadways. Gaps and challenges do exist, however, which are described on the following pages.

In addition to the on-street facilities, the Planning Area also contains a 20-mile network of multi-use paths. Many are located on the south side of the Rogue River in Grants Pass, and also included is the Rogue River Greenway which currently connects the cities of Rogue River and Gold Hill (planned to continue west to Grants Pass and east to meet the Bear Creek Greenway in Central Point). All multi-use paths in the Planning Area are presented on Map 5-7.

Outside of the Grants Pass city limit, many of the arterials and collectors in unincorporated Josephine County that lie within the MRMPO have shoulders 4-feet wide or greater, meeting the definition of a bikeway.

3. Destinations for Bicyclists

Major destinations for bicyclists are primarily the same as those for pedestrians: downtowns, schools, employment centers, shopping centers, neighborhood commercial areas, and parks/recreation areas. Connections to major destinations within the Planning Area are generally good. For example, a multi-use path connects the Rogue Community College to existing bikeways within the City of Grants Pass. Additionally, many of the collector streets serving public schools and parks throughout the Planning Area contain bike facilities which connect to surrounding lower-volume residential streets. Gaps and challenges do exist however, which are described below.

4. Bicycle System Challenges

Recognizing and addressing the following deficiencies will improve the safety, quality, connectivity, and use of bicycling in the region by eliminating hazards, improving comfort, and completing regional connections:

Substandard Facilities: Some facilities in the region do not adhere to current design standards and best practices, for example, where a bicycle lane is provided on only one side of a roadway or is less than 4-feet wide. Identifying these facilities and planning a systematic modification and modernization program is a good next step. Many of these discrepancies will be eliminated as streets are brought up to standard.

Maintenance of bikeways also poses challenges, such as potholes, crumbling asphalt, and debris on roadway shoulders and in bike lanes.

Gaps in the Bikeway System: Although the bicycle facility network is fairly comprehensive in the Planning Area, there are a number of existing gaps that create challenges for cyclists. These gaps exist because of financial and/or political constraints. To close the gaps would require actions such as reducing vehicle lanes or widening roadways to allow for bike lanes, or purchasing right-of-way to construct separated, multi-use trails.

Perceived Safety: Public perception of the safety of bicycling has been shown to be the greatest barrier to bicycle use. Elements of bikeway and roadway design such as lower speed limits, wider bike lanes, lane buffers, and separated paths increase a bicyclists' sense of comfort, perceived safety – and likelihood of use.

Future Development: As the area grows, it is increasingly important to recognize the benefits of good connectivity for bicyclists and pedestrians. Developers should be encouraged to improve access and connectivity by implementing pedestrian and bicycle-friendly designs, like clear pathways from on-street facilities, bicycle parking, internal trail systems, and orienting storefronts to the roadway.

It should be noted that a number of projects that include bicycle facilities in the Grants Pass area are expected to be constructed within the short and medium range years of the RTP. Additionally, a section of the Rogue River Greenway is planned for construction within the short range (2015 – 2020). Please refer to the RTP Project List for more information on upcoming projects that include bicycle facilities.

E. Parking

1. Introduction

Oregon's Transportation Planning Rule (TPR) requires that metropolitan area jurisdictions reduce their overall parking capacity. A reduction in parking is part of an overall strategy to reduce reliance on automobiles as the principal mode of travel and to help achieve a reduction in per capita vehicle miles traveled. The challenge of this goal is to reduce the amount of parking in ways that help achieve the travel-reduction goal and are equitable for all parties involved.

Some Parking Strategies

The state Transportation Planning Rule offers some options for meeting parking requirements, including:

- Reduce minimum off-street parking requirements for all non-residential uses from 1990 levels;
- Allow provision of on-street parking, long-term lease parking, and shared parking to meet minimum off-street parking requirements;
- Establish off-street parking maximums in appropriate locations, such as downtowns, designated regional or community centers, and transit-oriented developments;
- Exempt structured parking and on-street parking from parking maximums;
- Require that parking lots over 3 acres in size provide street-like features along major driveways (including curbs, sidewalks, and street trees or planting strips); and
- Provide for designation of residential parking districts.

Parking reduction strategies are proposed to help the metropolitan area meet the TPR requirements. Strategies include changes to parking codes and policies, re-designation of existing parking, and management of roadway space. Next, some potential results are discussed (limited data availability). Finally, some parking optimization techniques are presented, which may make it easier for motorists, employers, and employees to make use of available parking.

2. Parking Standards

The TPR requires implementation of a parking plan that achieves a 10 percent reduction in the number of parking spaces per capita in the MPO area over the planning period. This may be accomplished through a combination of restrictions on development of new parking spaces and requirements that existing parking spaces be redeveloped to other uses.

Ultimately, the parking plan must aid in achieving the overall requirement to reduce vehicle miles traveled per capita (VMT) in the MPO area. In MPO areas of less than 1 million population, including the MRMPO, a 5 percent VMT reduction is required.

It is anticipated that metropolitan areas will accomplish reduced reliance by changing land use patterns and transportation systems so that walking, cycling, and use of transit are highly convenient and so that, on balance, people need to and are likely to drive less than they do today.

The requirement to reduce VMT as it relates to parking offers some options. Local jurisdictions may set minimum and maximum parking standards in appropriate locations, such as downtowns, designated regional or community centers and transit centers.

3. Parking Code and Policy Changes

Older parking regulations specified only minimum standards, and some developments, such as retail stores, to provide an excess of parking. In 2014, Grants Pass made significant reductions in parking standards. For example, the old residential parking standards were based on the number of bedrooms. A one bedroom home required 1 space, two bedrooms 1.5 spaces, three to four bedrooms 2 spaces, and five or more bedrooms 3 spaces. The code was revised to require 1 space per dwelling with no limit on the number of bedrooms. Hotels and motels went from 1 space per room to .75 spaces per room. The major change in Grants Pass parking standards is for retail uses that went from 5 spaces per 1,000 square feet of gross floor area to 2 spaces per 1,000 square feet (a 60% reduction). Finally, Grants Pass now allows for on-street parking to be counted toward the minimum parking requirements when it is on the block face abutting the subject use. Both Jackson County and the City of Rogue River have bike parking standards. Josephine County's parking standards allow for the applicant to set the number of parking spaces for their development, which in hard economic times, will likely result in fewer spaces than most codes would require.

Lower Minimum Parking Requirements

Lower parking minimums could have an impact on the total parking inventory, but there is no guarantee that developers would choose fewer parking spaces for their developments. Lower minimum parking requirements, however, might encourage some in-fill development. In-fill development can be encouraged to increase densities and remove land from its temporary status

as parking lots. Both the reduction of existing parking and increasing building densities will help lead to a more pedestrian friendly environment and encourage transit ridership – a primary goal of the TPR.

Parking Fees

Establishment of parking fees is not a policy of the MRMPO, but fees can be useful in some jurisdictions. Fees imposed on developers for each parking space are an indirect way of reducing the amount of parking provided by new developments. Fees can be levied on the developer, the tenant, or the end-user. These are fees for either the use or provision of each parking space. Fees levied on the developer may lead to smaller parking lots due to monetary considerations when building the project. Fees on the tenant may encourage them to seek out retail or office space in areas with smaller lots, thus putting market pressure on developers to build with less parking. Fees on end-users may result in different modal choices, bringing down parking demand and leaving land open for in-fill development or smaller parking facilities. Fees are an indirect strategy and may be difficult or impossible to implement as a stand-alone TPR-compliance parking reduction measure. No jurisdictions within the MRMPO use parking fees as a strategy to reduce the number of parking spaces.

Re-designation of Existing Parking

Changing existing general-use parking spaces to special-use parking can be used to promote the use of alternative modes and meet the requirements of the TPR. General parking provided on-street or in lots could be reclassified as preferential parking for carpools, or the handicapped. Preferential parking, especially close to building entrances, for carpooling or vanpooling is a common way of helping to promote these as alternatives to driving alone. Carpool parking need not be limited to parking lots. On-street parking spaces, including metered spaces, may be restricted to carpools. Typically, monthly permits are obtained and displayed when parked in a reserved carpool space in a lot or on the street.

As a side benefit, reclassification from general parking to carpool parking may help meet TPR requirements. Under TPR definitions, park and ride lots, handicapped parking and parking spaces for carpools and vanpools are not considered parking spaces for purposes of the TPR. The reclassification of a portion of the parking supply as permanent high occupancy vehicle (HOV) space may satisfy the TPR's parking reduction requirement.

In areas where easy access to free or low-cost parking has always been readily available, restrictions on parking may be poorly received by the public. Widespread conversion of general-use parking spaces to reserved parking for carpools or other restricted uses may lead to a high level of parking violations. This may place an undue burden on agencies for the enforcement of parking regulations at the expense of other activities.

Management of Roadway Space

There is considerable competition for use of the paved roadway space: through lanes and turn lanes for motor vehicles, bicycle lanes, on-street parking spaces, loading zones, and bus stops. Management of the roadway space and the allocation for these uses can have a measurable impact on the amount of parking in the region. Changing parking spaces to travel lanes can help improve traffic flow, promote use of alternative modes, and meet the TPR requirements.

Parking and Bike Lanes

Bike lanes on arterial and major collector streets are required under the provisions of the TPR. In many locations throughout the Middle Rogue region, this will be accomplished by parking removal and re-striping of the street, rather than by widening the roadway.

Parking and Turn Lanes

Re-striping for turn lanes is a transportation system management strategy that can be used to increase the capacity of intersections. In many cases, queuing distances at stop signs or traffic signals will require that no-parking zones be extended for more than 100 feet from the intersection. This could require removal of parking, which is sometimes permitted as close as 20 feet from a crosswalk at an intersection.

No-Parking Zones

Designating larger no-parking zones to increase sight distances at intersections is already implied in the vehicle code. Parking is not permitted within 50 feet of a stop sign, yield sign, or other traffic control device where such parking hides it from view. A blanket prohibition on parking within 50 feet of a corner would have a measurable impact on the number of parking spaces and would have other benefits related to sight distance.

Street Standards

Adopting new street standards for residential streets could include reducing street width to the extent that on-street parking would be permitted only on one side or eliminated.

Parking Optimization

There are techniques that can be used to make better use of parking, which may make it easier for residents, businesses, and employees to “live with” the parking reduction requirements of the TPR. However, optimizing the use of parking may defeat the other goal of the TPR, namely the reduction in per capita vehicle miles of travel. This is because the easy availability of free or low cost parking remains a significant factor in the individual’s choice of mode for trips to work, shopping, etc.

Shared Parking

Shared parking is the use of one or more parking facilities between developments with similar or different land uses. Each land use experiences varying parking demand depending on the time of day and the month of the year. It is possible for different land uses to pool their parking resources to take advantage of different peak use times.

Traditionally, parking lots have been sized to accommodate at least 90 percent of peak hour and peak month usage and serve a single development. For the most part, these lots are operating at a level considerably less than this amount. Shared parking schemes allow these uses to share parking facilities by taking advantage of different business peak parking times.

For example, a series of buildings may include such land uses as restaurants, theaters, offices, and retail – all of which have varying peak use times. A restaurant generally experiences parking peaks from 6 to 8 p.m., while offices typically peak around 10 a.m. and again around 2 p.m. on weekdays. Some retail establishments have their peak usage on weekends. Theaters often peak from 8 to 10 p.m. Without a shared parking plan, these uses would develop parking to serve each

of their individual peaks. This generally results in each lot being heavily used while the other lots operate at far less than capacity. Depending upon the combination of uses, a shared parking plan may allow some developments to realize a parking reduction of 10-15 percent without a significant reduction in the availability of parking at any one time. This is possible due to the different peak periods for parking.

Some of the major obstacles to implementing shared parking schemes are the codes of local jurisdictions themselves. Quite often, parking codes are written to express parking minimums as opposed to maximums. In some cases, the implementation of shared parking strategies may require changes to the minimum parking requirements contained in the parking policies of the metropolitan area jurisdictions.

Other issues surrounding shared parking are liability, insurance and the need for reciprocal access agreements allowing patrons of one establishment to cross land owned by another. Rogue River, Gold Hill and Jackson County allow for shared parking with Planning Commission approval.

Parking Management

Parking management and parking management associations (PMAs) are mechanisms that can facilitate shared parking among non-adjacent land uses by providing off-site central parking facilities. These facilities can be large parking structures or surface lots. Parking management can employ a wide range of techniques that will result in the efficient use of existing parking facilities. These include facilities like short-term on-street parking, medium-term nearby lot parking, High Occupancy Vehicle (HOV) priority parking, and long-term parking.

PMAs are entities responsible for conducting this management and providing access to resources that will ease the burden on the parking supply. Often PMAs are non-profit groups supported by retail or business district associations. PMAs can incorporate such programs as providing bus passes or tokens in lieu of parking validation, delivery services, shuttle buses from remote lots, clear and consistent signage for parking facilities, etc.

An effective PMA benefits its members and its district by functionally increasing the parking supply for all uses and creating a parking plan that provides adequate parking for the area in a compact and coherent way. A PMA increases the efficiency of the use of land for parking, which helps reduce wasted space previously dedicated to underutilized parking. This, in turn, frees up land for further development. In the end, a successful PMA can create an area where parking is easier and more convenient, while using less land.

F. Transportation Options

1. Introduction

The MRMPO is starting a Transportation Options (TO) program with assistance from the Rogue Valley Transportation District (RVTD). The goal is to reduce Single-Occupant-Vehicle (SOV) trips and vehicle miles traveled (VMT) by encouraging use of other

“The MRMPO is starting a Transportation Options (TO) program with assistance from the Rogue Valley Transportation District (RVTD).”

modes. It seeks to achieve these changes through better non-SOV facilities and education to make the use of these modes more attractive than driving alone. TO therefore includes ride-sharing, trip reduction and also transit, cycling and walking. TO is important because of the lack of adequate funds and space to maintain and expand road infrastructure nationwide. The traffic capacity of existing roads is quickly filling up; the auto encourages sprawl that requires extra facilities and more VMT per household; the auto is the largest producer of harmful emissions; and the largest consumer of petroleum-based fuels. TO can benefit society at a very reasonable cost compared to the cost of continuing on an SOV-focused system.

State Requirements for TO measures are based in the Oregon Highway Plan's Goal 4: "To optimize the overall efficiency and utility of the state highway system through the use of alternative modes and travel demand strategies."

Urban areas with populations over 25,000 are required by the Oregon Transportation Planning Rule (TPR) to address Transportation Options in their Transportation System Plans (TSPs). For these reasons, TO strategies are integral to the transportation planning being pursued in the Middle Rogue's Regional Transportation Plan (RTP). It is among the policy strategies in RTP Goal 3, which calls for using a variety of strategies to reduce reliance on single-occupant vehicles.

2. TO's Purpose

The purpose of TO is to reduce the number of single-occupant vehicles using the road system while offering travel options. TO employs a variety of improvements – both structural changes such as parking areas for carpoolers, and bike lanes, as well as policy initiatives such as staggered work schedules – to increase the capacity of the transportation system without the expense and inconvenience of major highway expansion. If implemented on an area-wide basis and actively supported by agencies, businesses, and residents, TO strategies may be able to reduce or delay the need for street improvements, save travelers some money, reduce energy consumption and improve air quality.

These benefits become increasingly important as the region continues to develop, and both the land and the funding for roadway construction grow scarcer. The Federal Highway Administration (FHWA) predicts that strategies to manage demand will be more critical to transportation operations than strategies to increase capacity (supply) of facilities. The inability to easily and quickly add new infrastructure, coupled with the growth in passenger and freight travel, are forcing metropolitan areas to pay more attention to managing demands.

3. How TO Works

The current transportation system in much of the US is built around the automobile with wide streets, high speeds, sprawling development, and a lack of pedestrian, bicycling and transit-supporting infrastructure. TO seeks to revitalize urban centers and assist rural areas to become friendlier to the pedestrian and bicyclist, making the auto less attractive. TO often relies on both incentives, such as bus pass programs, and disincentives such as SOV parking surcharges. Efforts have been made to encourage major trip generators such as universities and major employers to take the initiative in developing TO programs. Experience elsewhere, however, indicates that employers need encouragement and incentives to adopt TO measures affecting the work commute – a major target of TO programs.

Stakeholders in the transportation system may not see the true costs of an auto based society and observe many actions resulting in the majority of transportation funding being dedicated toward expanding and improving the road system.

“The current transportation system in much of the US is built around the automobile with wide streets, high speeds, sprawling development, and a lack of pedestrian, bicycling and transit-supporting infrastructure.”

The affected public needs to continue efforts to mobilize their public officials to provide adequate transportation facilities and services for pedestrians, cyclists and transit service. Stakeholders also need to become part of a critical mass to show that non-SOV modes have interest, feasibility and merit.

TO strategies are aimed at minimizing travel or encouraging travel by a mode other than a single-occupant automobile. A community or an employer could take a number of approaches to accomplish this. First, a community could attempt to decrease peak demand, either by shifting person-trips from the peak hour of demand, or by eliminating person-trips. (Person-trips represent the number of trips made by an individual, while vehicle trips account for multiple person trips depending upon the number of people traveling in the vehicle.) Second, for the person-trips that are necessary during the peak hours of demand, a community may encourage alternatives to single-occupant vehicles (SOVs).

There is a difference between TO outreach strategies for the employers and for the public. Employers can undertake a variety of marketing or promotional activities to support their employees not using a SOV, such as flyers, trip-reduction programs, incentives, and using the other modes themselves as a role model.

By contrast, not being organized around a workplace, the general population needs to be attracted into non-SOV travel with public outreach through special events such as Car Free Day. They can also take advantage of transportation-efficient mortgages, the real estate profit of having greenways nearby, and feeling secure about their kids walking to school on a sidewalk. Reaching this population relies on general marketing such as brochures, commercials, etc. and being available to be a personal consultant if needed.

Bicycling and walking are most applicable for short trips, while ridesharing and transit may be preferable for intermediate and long trips. Telework may be used as a trip alternative regardless of the distance. Finally, a community may reduce the demand on its surface transportation system by decreasing the distances traveled by vehicle trips. Some methods for reducing trip lengths include transit-oriented designs and compact, mixed-use developments. There is an important inter-relationship between the transportation options and land use.

The following are examples of policies and programs that can support TO.

Alternative Work Arrangements

Local governments and major employers (greater than 50 employees) encourage work arrangements providing an alternative to the 8-to-5 work schedule. These arrangements may include employee flextime programs, staggered work hours and compressed work weeks.

Employee Flex-Time Programs

One opportunity employers have to affect total trip demand is through influencing their own employees' peak versus off-peak travel behavior. A flexible schedule may allow employees to match their work hours with transit schedules, make carpool arrangements, or merely avoid peak congestion times. Active promotion of alternative schedules might slightly decrease total peak hour traffic. Flextime is most useful in offices, particularly for administrative and information workers. It may not be as applicable for non-office employers since their employees often have to work hours that are not during the peak hour of traffic demand anyway (e.g., retail employers), or because their work requires continuous communication between workers. In addition, flextime may be difficult for small employers to implement.

Staggered Work Hours

Staggered work hours is a policy of established starting and finishing times for different groups of employees. Unlike flextime, the employer, not the employee, determines the staggered work hours. Like flextime, this tool has greater applicability to employees of large offices, since many non-office employees already work staggered work hours, or work in an interdependent manner. Currently, some metropolitan area employers have staggered work hours due to the nature of their business. To have a significant impact on peak period traffic, however, a change in work hours would need to be much more widespread than it is today.

Government agencies could take a lead by establishing a standard work schedule that differs from the typical 8 a.m.-5 p.m. schedule. For example, employees can be encouraged to work a 7-to-4 or 9-to-6 day work schedule. This is often done for the street and parks crews in public works situations because of summer hours and weather conditions. It might also be established for other employees although some agencies and local governments have encountered opposition from employee groups claiming they should have additional compensation for unusual work hours. Staggered work hours have to be considered in light of the need to have service desk hours that meet the needs of residents, but could actually increase the opportunities for resident contact.

Compressed Work Week

Compressed workweeks involve employees working fewer days and more hours per day. One common form of this policy is the 4-day/40-hour week where the employee works four 10-hour days. A second common form is the 9-day/80 hour schedule, in which the employee works 9 days and 80 hours over a two-week period. With the 4/40 schedule, the employee gets one business day off each week; with the 9/80 schedule, the employee gets one business day off each two weeks.

Because of the extended hours, both policies usually shift at least one leg of a work trip per working day (either the arriving or departing leg) out of the peak hours. The 4/40 policy additionally eliminates an entire work trip every five business days (1/5 of the work trips). The 9/80 policy eliminates an entire work trip every 10 business days (1/10 of the work trips). One of the problems with a compressed work schedule is the potential for increases in non-work trips during the "off day." Increases in non-work travel may offset reductions in work related driving. Such trips, however, are often taken during non-peak periods and can be expected to provide benefits by reducing peak hour congestion and by improving air quality.

Telecommuting

Telecommuting is another way employers can reduce total trip demand. Telecommuting or telework is work done away from the worksite with the assistance of telecommunications technologies, serving to reduce trips to and from the worksite. Phones, pagers, faxes, emails, computers, and the Internet all are telework tools. Telecommuting for one or two days per week could save significant trip miles and still allow the benefits of working at the central work site. Telecommuting arrangements also may involve more than one employee, e.g., when an employer provides a satellite work center connected to the principal work center. Another telecommuting alternative is a neighborhood work center operated by more than one employer, or by an agency. Recent advances in communications technology should greatly enhance telecommuting options.

Ridesharing

Ridesharing includes two principal categories: carpooling and vanpooling. Carpooling uses an employee's private vehicle to carry other people to work or other destination, either by using one car and sharing expenses, or by rotating driving responsibilities and vehicles. Vanpooling involves the use of a passenger van consistently driven by one or more of the participating employees, with the costs partially paid by the other riders through monthly fares. A common feature of vanpooling is that the van is often owned by the employer, a public agency (such as a transit district), or a private, non-profit corporation set up for that purpose. Otherwise a lease agreement can be set up.

Ridesharing can be greatly influenced by special treatment at the work place. Participation can be increased by employer actions that make ridesharing more convenient, such as providing guaranteed ride home services, preferential car/vanpool parking, and area-wide and employer-based commuter matching services.

Guaranteed Ride Home (GRH)

A guaranteed ride home often makes ridesharing more attractive. Surveys have shown that many employees drive to work because they feel they need their automobile during the day or because they may work late. In some cases, they need their automobile for work trips or errands or want it available for emergencies. Therefore, provision of daytime and emergency transportation, by allowing use of a company vehicle or employer-sponsored free taxi, can encourage ridesharing.

Preferential Parking

Preferential carpool and vanpool parking is another simple, inexpensive way for an employer to encourage employees to rideshare by increasing the ease of access to the workplace. Ideally preferential carpool and vanpool parking spaces are provided close to the building entrance to provide convenient access to the building, particularly during inclement weather conditions. Adequate enforcement strategies need to be in place so that the spaces are not filled with SOV.

Ride-matching

Commuter matching services, whether area-wide or employer-based, help commuters find others with similar locations and schedules. An employer-based matching service offers the advantage of a shared destination, but presents the disadvantage of limiting the pool of potential riders. A carpool matching service can be one-time or continuous. For the study area, the Rogue Valley Transportation District serves as the carpooling agency and performs a variety of services to support and encourage the use of carpools, including matching of potential riders through Oregon's Drive Less Connect program (www.drivelessconnect.com).

Support for TO

Oregon State, County and City policies and goals include provisions to embrace TO measures. Health officials, real estate professionals, insurance companies, credit agencies, environmental stewards, people under the age of 16, people with disabilities, low-income populations can all benefit from TO measures.

Current TO Activities

Some of the current TO activities that are available to the MRMPO member jurisdictions offered by RVTD in conjunction with Josephine Community Transit (JCT) include:

- Alternative Transportation education programs that reach the public;
- Public outreach activities to promote TO and non-SOV transportation modes;
- Free assistance through the Drive Less Connect program with carpools, vanpools, telework, and trip-reduction incentives;
- Free employer trip-reduction analysis upon request;
- On site transportation fairs for employers upon request;
- Distribution of free materials in the community such as pedestrian and cycling reflectors;
- Trip Reduction Incentive Programs- Through the Drive Less Connect program by creating and assisting with building and maintaining a Trip Reduction program that tracks employees' trips and rewards those who use non-SOV modes;
- Coordination of events to raise awareness of efficient transportation such as the Drive Less Challenge; and
- Marketing of TO through general advertising in various media.

Future TO Activities

The following list of TO activities will be integrated with the current TO activities listed above as more resources become available:

- Government outreach to educate officials about TO measures including attending meetings to promote the use of TO measures, and reviewing planning documents and site design for TO-supportive policies and infrastructure;
- Supporting parking construction mitigation- reducing the need for parking expansion with TO measures;
- Bicycle parking review and site design;
- Individualized TO marketing programs;
- Marketing of TO through general advertising in various media; and
- Business commute challenge.

4. Educating the Public about TO

Education and marketing are important parts of any TO program. It is possible for education by itself to be an incentive or disincentive that causes positive transportation behavior changes. Education and marketing complement any incentive/disincentive programs in place by increasing awareness and understanding of those programs. Education can be hands-on such as supporting a bus/bike-buddy program or it can be through traditional media such as newspaper, radio and TV advertisement, flyers and brochures, transportation exhibits, attending public meetings and giving testimony to public officials. Education that would promote using alternative modes of

transportation would consist of highlighting the health and economic benefits, the environmental benefits as well as the facilities that a person can use. Marketing that would make driving a car less attractive could show the true cost of owning a car, the environmental impact, how it increases sprawl and dependence on foreign oil, to name a few. Although education and marketing are basic building blocks to a successful program they can only supply so much initiative for using alternative transportation. An example would be that many people know what times to catch a bus and where the bus stop is from successful education and marketing but they cannot use it because their work schedule runs after service hours, or possibly there is not connected sidewalk access from their work to the bus stop and they feel unsafe.

5. Facility and Service Requirements

TO addresses travel behavior – the choices people make – and seeks to establish conditions under which people will change a long-established habit of driving themselves to destinations. Providing the right kinds of facilities and services are crucial to the success of many of the policy changes and programs described in the preceding section. Several of those strategies are closely tied to land use planning and the provision of adequate pedestrian/bicycle facilities and transit services, and modifying parking requirements. Another example is that TO could include constructing of High Occupancy Vehicle (HOV) or “diamond” lanes or an exclusive busway.

Specific actions related to parking are included in the Parking section of Chapter 5. Strategies aimed at improving pedestrian and bicycle facilities are discussed separately in the Bicycle and Pedestrian sections of Chapter 5. Transit service is discussed in the Transit section of Chapter 5. One key to the success of several TO strategies is establishment of park-and-ride facilities. These facilities increase efficiency of the transportation system, reduce energy consumption and provide options to the single-occupant vehicle trip. Park-and-ride facilities increase the effectiveness of transit service by expanding the area from which a transit draws riders. Patrons living beyond walking distance of an established transit stop can drive or bike to the park-and-ride and use transit or meet carpool partners, instead of driving alone or cycling long distances to their destination. Having free easy-to-access, secure and safe, easy to understand layouts, and direct pedestrian and bicyclist connections make the use of park-and-ride lots desirable.

Park-and-rides are frequently located near freeway interchanges or at transit stations and may be either shared-use, such as at a church or Transit Oriented Development (TOD) center, or exclusive-use. Shared-use facilities are generally designated and maintained through agreements reached between the local transit operator and nearby businesses, churches, or other entities.

Public opinion also has indicated that SOV use continues to be the desirable option at least in part because of the relative lack of serious highway congestion and safety problems in the region. In short, driving isn’t difficult enough to force people to look for alternatives. While that attitude speaks well of our roads, it indicates that success with TO measures will be difficult. A challenge for the region in the short-term will be to set the conditions in place now to support greater transit use in the future – when more drivers will be looking for easier traveling alternatives. Those conditions include reserving space for High-Occupancy Vehicle (HOV), Bus Rapid Transit (BRT) or carpool lanes, and park-and-ride areas, as well as securing funds to expand transit service for those who need it.

6. Future Outlook

TO relies on efficient land use planning, education, and making the use of walking, cycling, carpooling and transit attractive. The 25-year outlook for TO should focus on how the cities in the MRMPO can begin having incentives for developers to make compact development accessible for pedestrians and bicyclists, and on how education can promote the use of these facilities. By engaging in these activities driving a car will become less and less attractive as an option. Transit is only one component of TO; pedestrians and cyclists need to be part of the program also.

Home-to-work and return trips comprise about one-fifth of total daily trips, and about half of the peak period traffic. Although all other types of trips are potential targets for TO alternatives, the effect is likely to be considerably less because the trips are not as regularly scheduled (e.g., shopping or business trips), often already have a higher vehicle occupancy (e.g., school trips), and sometimes involve the transfer of goods (e.g., shopping trips). Therefore, TO strategies recommended for the metropolitan area focus primarily on home-to-work and return trips. Strategies include establishing alternative work arrangements, promoting telecommuting and ridesharing, and, possibly, adopting a trip reduction ordinance.

7. Policy Issues and Actions

There are several actions that can be taken to further the aims of TO. They include:

- Identifying, encouraging and assisting role models who use alternative transportation. This can be done through awards, incentives and events.
- Encouraging developers to build high-density, multi-use buildings.
- Adopting maximum parking space requirements and an option to decrease parking further with the use of TO measures such as having attractive bicycle and pedestrian facilities, and carpool spaces within ¼ mile of transit service.
- Partnering with city government to encourage employers with more than 50 employees to adopt TO strategies.
- Prioritizing all city and county TSP bicycle and pedestrian construction projects to be completed in the earlier phases of this Plan.
- Encouraging developments with a large footprint to have a bicycle and pedestrian circulation plan.
- Securing funding for street aesthetics such as street furniture, landscaping, lighting, and creating dispersed tiny public places.
- Supporting the use of transit among major employers by encouraging the purchase of individual or subsidized group transit passes, having a bus shelter added nearby or other actions to reduce commuting trips; and
- Engaging in public, government and employer outreach to raise awareness about the use of TO strategies, including actively marketing to groups that have the greatest potential for reducing SOV trips

G. Air Facilities

1. Public Air Facilities

The Grants Pass Municipal Airport is an Oregon Aviation Department designated Category III Regional General Aviation Airport that is located approximately five miles northwest of Grants Pass. Approximately 150 aircraft are based at the facility. In 2011, the Board of Commissioners adopted a Public Use Airport and Safety Overlay Zone conforming to the Oregon Administrative rule Airport Planning Rule. An Airport Master Plan was also drafted during this period.

The Medford-Jackson County International Airport is a public use airport located in Medford, and approximately 27 miles from Grants Pass. It is owned and operated by Jackson County's Aviation Authority and is the largest public airport serving Southern Oregon. In terms of commercial passenger boarding, it is the third busiest airport in Oregon.

Currently, the only public transportation provider serving Josephine County with service to the Medford Airport is the Southwest Public Oregon Intercity Transit shuttle (SW POINT shuttle).

2. Private Air Facilities

No private airports or airstrips exist within the Planning Area. Private airstrips within 20 miles of the MRMPO boundary are located in or near the communities of Selma, Wonder, Wimer and Medford.

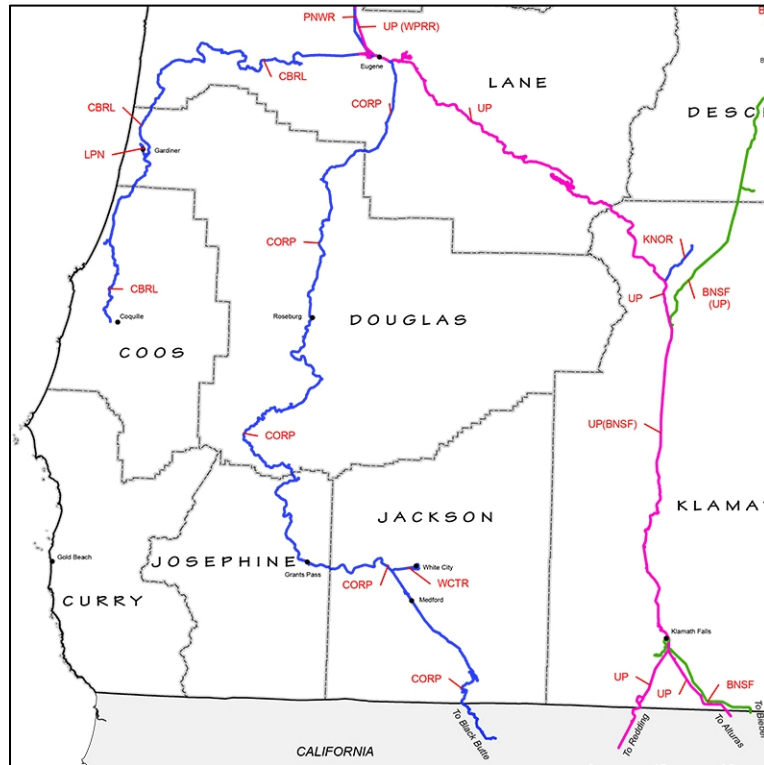
H. Rail System

1. Freight Rail

The Central Oregon and Pacific Railroad (CORP) is a Class II railroad (determined by revenue) that operates between Northern California and Eugene, Oregon with interchanges to the Coos Bay Rail Link, Union Pacific, White City Transfer Rail, and the Yreka Western Railroad. Traffic on CORP is approximately 16,000 cars predominately moving lumber, logs and plywood of national account lumber companies. Within the Planning Area, the rail line primarily follows the course of the Rogue River running through all cities within the MPO including Merlin.

The Siskiyou rail line is part of CORP, extending from Weed, California to Eugene, Oregon. The Siskiyou line has not been used since 2008. However, construction to upgrade the rail line is expected to be completed by Fall 2015. The reopening of this section of line is expected to renew and improve interstate freight rail options. It will allow Southern Oregon access to the Union Pacific mainline at Weed, California (access currently diverted through Eugene) and provide transportation options for the delivery of Southern Oregon lumber and manufactured goods.

Figure 5-3: Southwest Oregon Rail Lines



2. Passenger Rail

There is no passenger rail service within the Planning Area. The nearest Amtrak train station is located in Klamath Falls, approximately 100 miles from Grants Pass. Amtrak (Amtrak Cascades and Coast Starlight services) stops in Eugene and travels both north to Vancouver, British Columbia, and south to San Diego, California (Coast Starlight train only). Currently, both Greyhound and Southwest POINT shuttle provide service from Grants Pass to the Amtrak station in Klamath Falls.

From 2001 to 2007, the MPO for the Medford Urbanized Area, the RVMPO, had commissioned a number of studies examining commuter rail service using the CORP line between Ashland and Central Point, including an extension to Grants Pass. Additionally, in 2010, ODOT had published the Intercity Passenger Rail Assessment that included examining the feasibility of Eugene to Ashland intercity passenger rail service using the CORP line. The conclusions of all studies noted challenges primarily related to costs vs. estimated passenger numbers, as well as delays associated with CORP priority for freight with construction of a new rail line being cost prohibitive.

More recently, passenger rail service to Grants Pass is discussed in the *Oregon State Rail Plan (2014)*, which notes that out of travel markets not currently served by passenger rail, Southern Oregon (specifically, MRMPO to/from RVMPO) has good potential given its high percentage of interregional travel. This is based on data analyzed from the Oregon Household Activity Survey.

3. At-Grade Rail Crossings

All of the rail crossings in the Planning Area are at-grade, with the exception of the Redwood Highway overpass in Grants Pass and the I-5 overpass at Foothill Boulevard in Jackson County. At-grade crossings can cause conflicts between trains and vehicles, pedestrians, and bicyclists, as well as delays for roadway users, especially during peak traffic periods.

I. Waterways and Pipelines

1. Waterways

The Rogue River and Applegate River are the only navigable waterways within Planning Area boundaries. Within the Planning Area, both rivers are used for active and passive recreation, but most recreation occurs on the Rogue. Neither river is currently used for commercial navigation.

2. Pipelines

The Northwest Pipeline, a major interstate natural gas pipeline system, terminates in Grants Pass. The lateral provides natural gas service to Avista Corp, a local natural gas distribution company in Grants Pass. Avista's pipeline system provides service to the southern Oregon region. Transmission lines for electricity, telephone, cable, and internet service exist throughout the Planning Area. Water pipelines convey water from the Rogue River and the Grants Pass Irrigation District owns a water distribution system providing water for lands in the Rogue Valley. There are no known capacity constraints for pipeline or transmission line service within Planning Area boundaries.

J. Plan Consistency

1. Local Transportation Plans

In the MRMPO Planning Area, the RTP also serves as the region's Transportation System Plan (TSP) as required under Oregon land-use law. Oregon's Statewide Planning Goal 12 and its implementing division, the Transportation Planning Rule (TPR) (OAR Chapter 660, Division 12) requires such a plan. By adopting the RTP the MRMPO Policy Committee is not taking a land-use action under state law. Rather, local jurisdictions direct transportation policy and planning through adoption of their comprehensive plans, TSPs, and local street network plans.

The RTP draws projects from jurisdictions' TSPs and local street network plans, and so is consistent with those plans. The RTP will be implemented by local jurisdictions through the TSPs and local development-review processes. The RTP horizon, as required by federal law, extends beyond the horizons of the local plans, so not all long-range projects and strategies that could be in the RTP are identified. This means that the system performance analysis should be considered only for this plan. As jurisdictions update their TSPs, new projects will be added to the RTP. The RTP's frequent update cycle readily accommodates changes to local plans. The updates are intended to ensure that the regional plan can adapt to changing needs and circumstances.

2. State Transportation Plans

The RTP also must be consistent with Oregon Department of Transportation plans, including the 2006 Oregon Transportation Plan (OTP) and the Highway Plan. The OTP provides a framework for policy objectives including expansion of ODOT's role in funding non-highway investments, maintaining the assets in place, optimizing the existing system performance through technology and better system integration, creating sustainable funding and investing in strategic capacity enhancements.

The OTP has four sections: (1) Challenges, Opportunities, and Vision; (2) Goals and Policies; (3) Summary of Financial and Technical Analyses; and (4) Implementation. The OTP meets a legal requirement that the OTC develops and maintains a plan for a multimodal transportation system for Oregon. The OTP also implements the federal requirements for a state transportation plan, and meets land use planning requirements for state agency coordination and the TPR. The transportation rule requires ODOT, the cities, and the counties of Oregon, as well as MPOs, to cooperate and to develop balanced transportation systems.

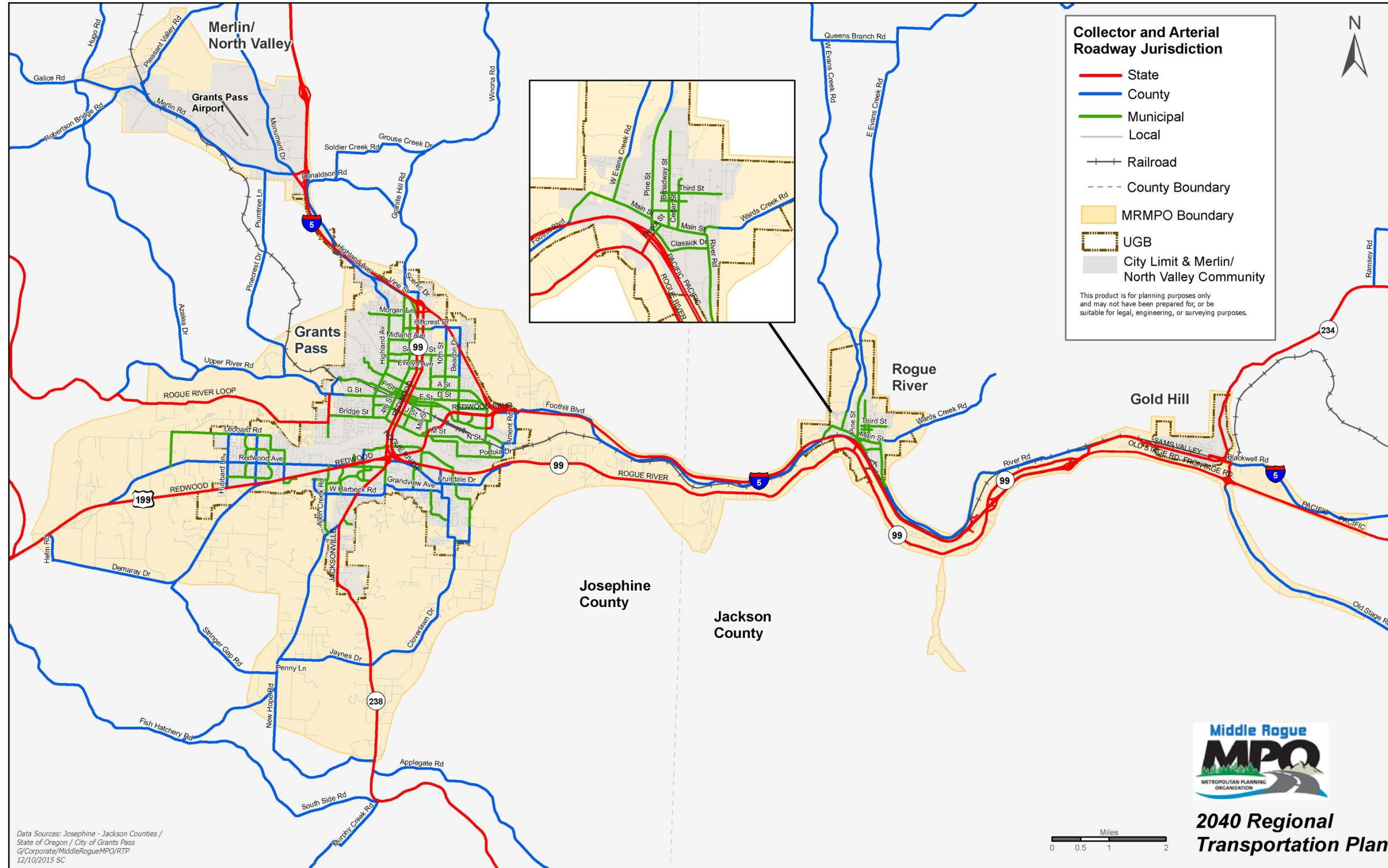
The Oregon Highway Plan establishes long-range policies and investment strategies for the state highway system. The Oregon Transportation Commission adopted the Oregon Highway Plan on March 18, 1999.

The plan contains the following elements:

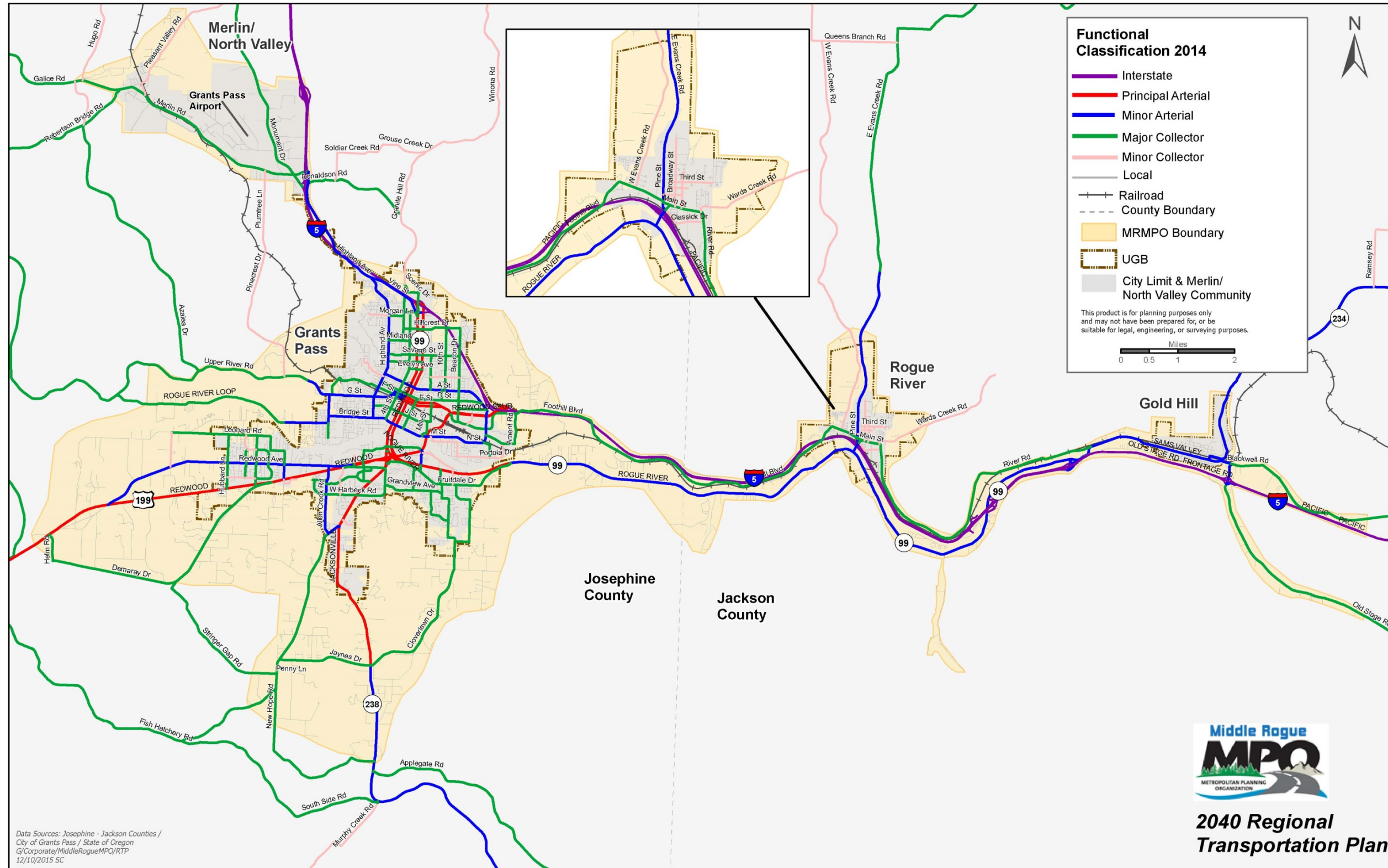
- **Vision** – presents a vision for the future of the state highway system, describes economic and demographic trends in Oregon and future transportation technologies and demographic trends in Oregon and future transportation technologies, summarizes the policy and legal context of the plan, and contains information on the current highway system.
- **Policy** – contains goals, policies and actions in five areas: system definition, system management, access management, travel alternatives and environmental and scenic resources.
- **System** – contains analysis of state highway needs, revenue forecasts, descriptions of investment policies and strategies, implementation strategy and performance measures.

Goals and policies of state transportation plans are considered in the development of the MRMPO's RTP Goals and Policies.

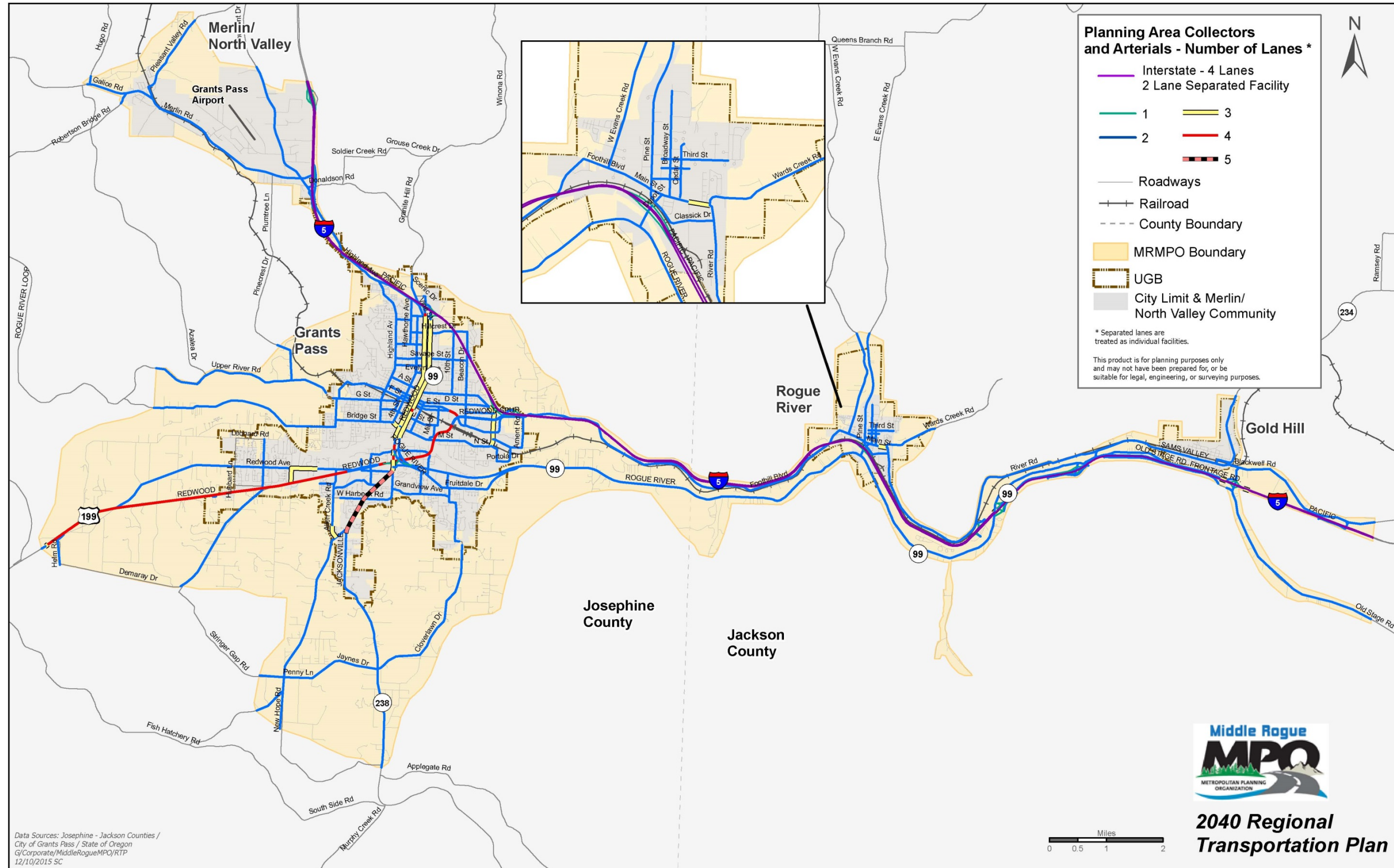
Map 5-1 – Roadway Jurisdiction



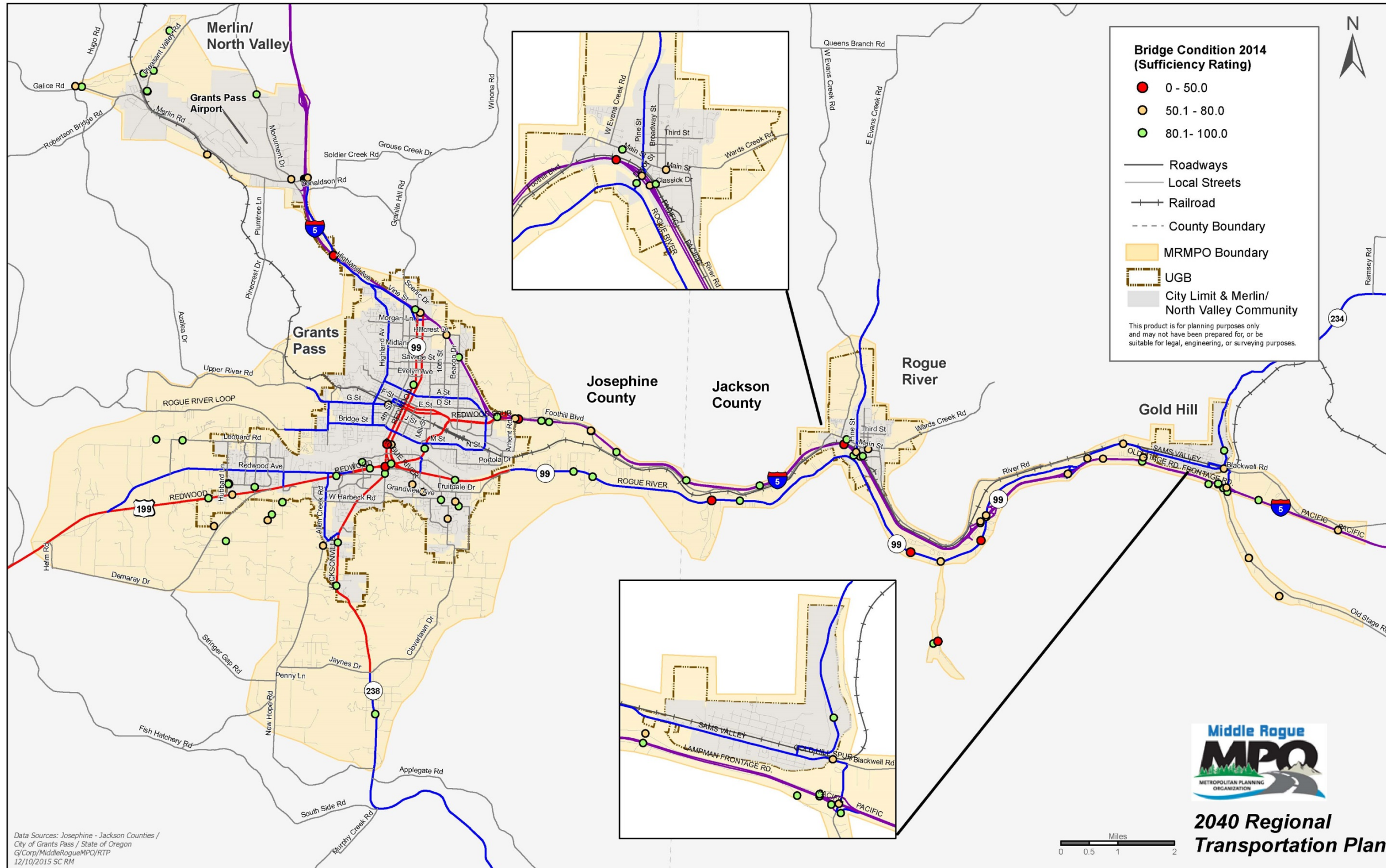
Map 5-2 – Functional Classification



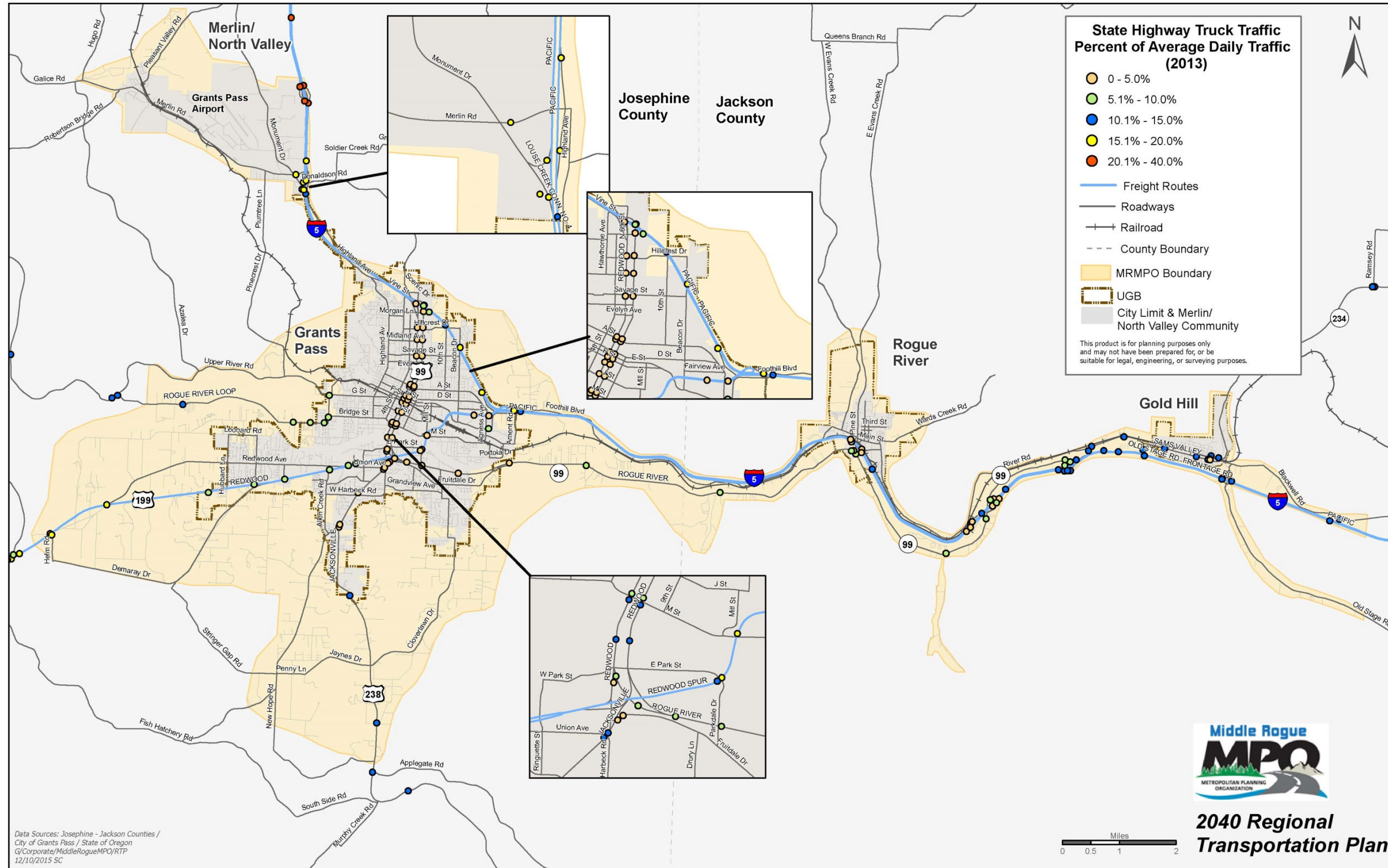
Map 5-3 – Number of Roadway Lanes



Map 5-4 – Bridge Condition



Map 5-5 – Truck Traffic

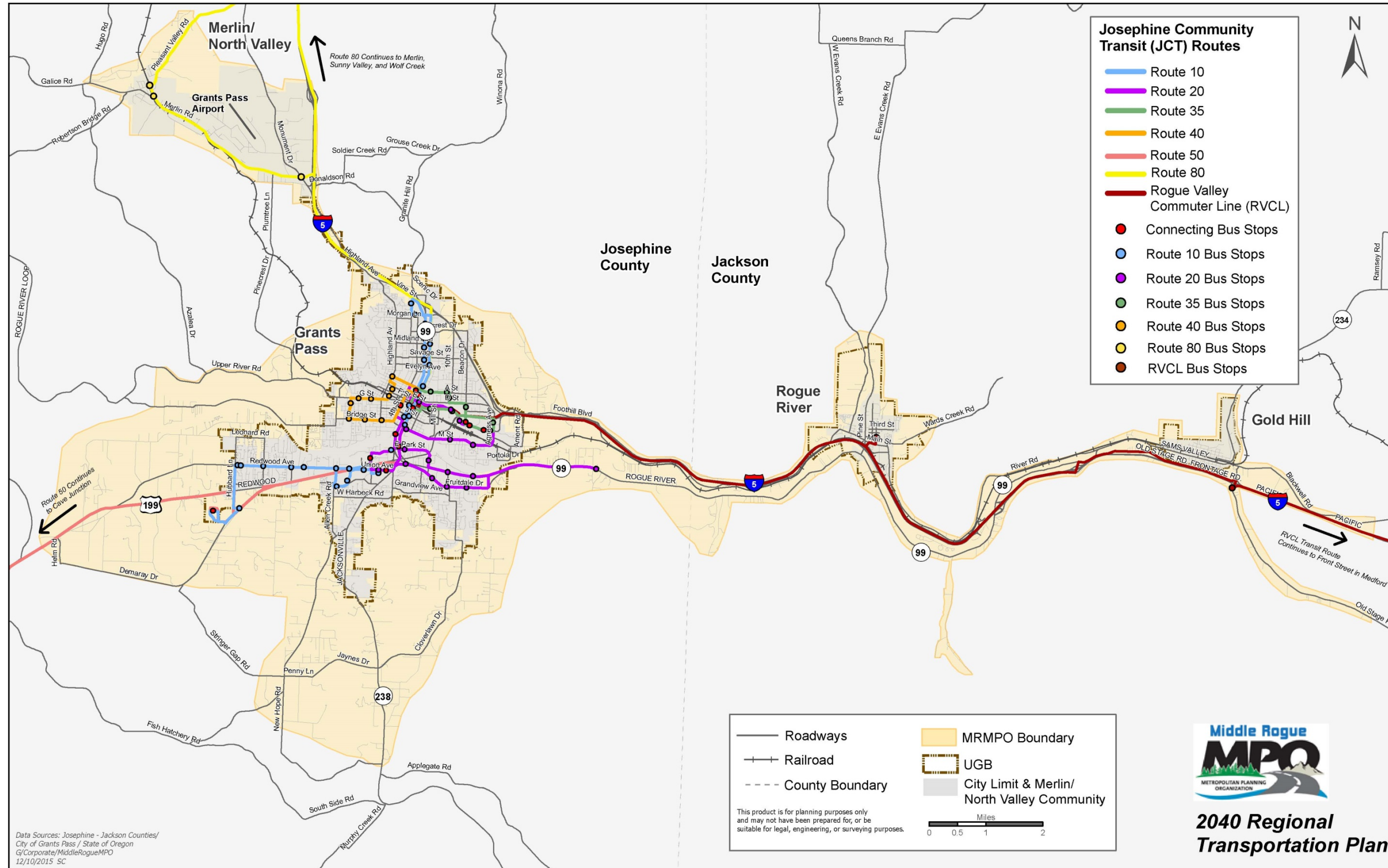


Data Sources: Josephine - Jackson Counties / City of Grants Pass / State of Oregon G/Corporate/MiddleRogueMPO/RTP 12/10/2015 SC

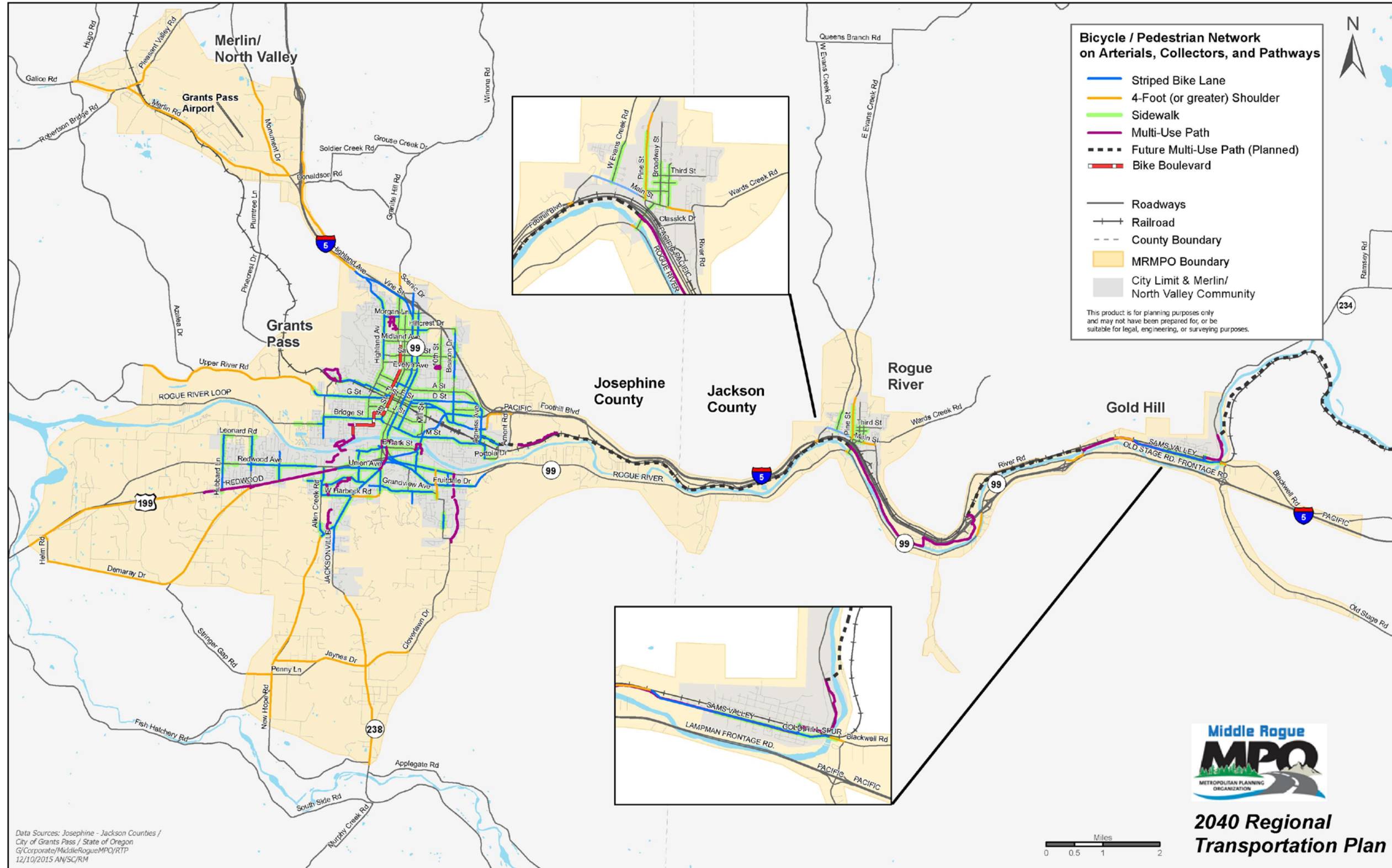


2040 Regional Transportation Plan

Map 5-6 – Transit Routes



Map 5-7 – Bicycle and Pedestrian Systems



Chapter 6 – Plan Implementation

This section shows how the goals and policies in Chapter 2 are implemented through procedures and criteria that the MRMPO uses to identify projects. The sections in this chapter contain and address: how and what projects are listed in the RTP, the criteria used by the MRMPO to fund projects, and the RTP Project List located at the end of the chapter.

A. Projects in the RTP

Requirements for metropolitan plans are described in Federal Highway Administration rules, 23 CFR Part 450.322. The plan must show through a horizon of at least 20 years the capital investment, operations and management strategies planned to lead to an integrated multimodal transportation system. Funding for all projects shown in the plan must be identified, or there must be a reasonable expectation for funding; meaning that the RTP Project List must be financially constrained.

The MRMPO developed the funding expectations for this plan in consultation with ODOT and the member jurisdictions. The estimates are the best available at the time, but are likely to change – especially in the long-range years (2031-2040). Details about the financial planning process and funding sources are shown in Chapter 8 *Financial Plan*.

It is important to note that not all transportation projects planned within the region are contained in this plan. Numerous local improvements are planned and implemented solely by the jurisdiction. Such projects are undertaken through the local Transportation System Plan (TSP), a state planning document required under Oregon land use law and generally incorporated into the local Comprehensive Plan.

Federal transportation planning regulations specify what types of projects to be included in the Regional Transportation Plan (RTP). These projects are:

“Regionally significant projects” are defined as being on a facility that serves regional transportation needs, such as access to an area outside the region, major activity centers in the region, major developments and planned developments.

- **Any regionally significant project, regardless of funding source;**
- **Any project that will require federal environmental clearance;**
- **Any project that will be programmed in the MTIP; and**
- **Any project that will receive state or federal transportation funds.**

The Clean Air Act further defines the projects that must be included in MPO plans and included in analysis for the transportation conformity process. Because areas of the MRMPO have been designated by the Environmental Protection Agency as

“attainment and maintenance areas” for carbon monoxide and particulates, Clean Air Act requirements must be met in this plan (see details in Chapter 9 *Air Quality* and in the *Air*

Quality Conformity Determination, published separately).

1. Local Jurisdiction Transportation System Plans

Transportation planning begins in the local jurisdictions through the state-required Transportation System Plans. These plans identify local goals, existing and future system deficiencies and needs, and describe the projects that will be undertaken to address those needs, generally over a 20-year period. Public input is a key component of the TSP process. Plans reflect the kind of transportation system the public believes the region should have. Because of the significance of the TSPs in the MRMPO, the MRMPO has followed a policy of drawing projects for the RTP Project List from the local TSPs.

The MRMPO planning process considers TSPs from a regional level, focusing primarily on improvements to roads – including construction of bicycle lanes, sidewalks and landscaping – and transit that serve the regional travel need.



2. Projects Not Specifically Identified in the RTP

Oregon DOT Region 3 serves Coos, Curry, Douglas, Jackson, and Josephine County. The Region is subdivided into two separate Districts: District 7 - comprised of Coos, Curry, and Douglas Counties, and District 8 - comprised of Jackson and Josephine Counties. Beyond the capacity enhancement projects individually identified in the RTP, the RVMPO expects that ODOT Region 3 will expend additional dollars on projects classified under three categories: preservation, safety, and operations.

Preservation projects include, but are not limited to, projects such as: repaving of roadways, culvert replacements and installations, restriping of lanes, roadway treatments such as adding asphalt sealant and guardrail repairs.

Safety projects include, but are not limited to, projects such as: guardrail installation, restriping of lanes and/or reconstruction of lanes to promote safer vehicular movements along a road and/or through an intersection, installation of warning/caution signage, lane reflectors, rumble strips, etc.

Operation projects include, but are not limited to, projects such as: interconnection of traffic signals to promote more efficient operations of critical roadways, installation of Variable Message Signs along critical corridors, and/or interstates and TDM strategies.

Utilizing trend numbers for the years 2013 through 2021, as provided by ODOT, RVMPO staff developed a yearly funding projection out to the year 2042 with an inflation rate of 2% applied to the average of the trend numbers for each category. In the table below are the calculated totals per category:

Preservation	\$	168,983,913
Safety	\$	121,312,600
Ops	\$	120,216,082

Although Region 3 is comprised of two districts, the majority of the population is in District 8. Over a ten year period it is anticipated that roughly 60% of the funds in the three categories identified above may be spent in District 8 and roughly 40% will be expended in District 7.

B. Project Selection Criteria

There are two project funding sources over which the MRMPO has discretion. Both are federal programs funded through the Highway Trust Fund. They are the Surface Transportation Program (STP), a flexible funding source where funds can be spent on a variety of transportation related projects; and the Congestion Mitigation and Air Quality (CMAQ) program, to deal with transportation related air pollution. Details of these two funding programs can be found in Chapter 8 *Financial Plan*, and in Chapter 9 *Air Quality*.

The MRMPO has developed criteria for evaluating and scoring applications for STP and CMAQ funds in a way that treats all applications and jurisdictions fairly and provides the greatest possible public benefit. Goals and requirements are grouped into four broad performance categories:

- **Mobility**
- **Community Vitality and Livability**
- **Transportation Options**
- **Resource Conservation**

A total of 18 project evaluation criteria have been developed related to the above performance categories. Each criterion has guidelines on how it would be applied in project evaluation. Table 6.1 further describes the performance categories.

Table 6.1 – Policy Foundation for MRMPO Project Selection (established prior to RTP adoption)

MRMPO Recommended Goals and Objectives		
1: <i>Mobility</i>		Plan for, develop and maintain a balanced multi-modal transportation system to address existing and future needs.
		Optimize safety and security of the transportation system.
2: <i>Community Vitality & Livability</i>	Continue to work toward more fully integrating transportation and land use planning.	Use transportation investments to foster compact, livable communities. Develop a plan that builds on the character of the community, is sensitive to the environment and enhances quality of life.
		Use transportation investments to foster economic opportunities.
3: <i>Transportation Options</i>	Increase integration and availability of transportation options.	Use incentives and other strategies to reduce reliance on single-occupant vehicles.
4: <i>Resource Conservation</i>	Incorporate environmental and energy conservation into the MRMPO planning process.	Maximize efficient use of transportation infrastructure for all users and modes.
		Encourage use of cost-effective emerging technologies to achieve regional transportation goals.

1. Evaluation and Review

Evaluation procedures were developed by the MRMPO technical advisory committee and staff, and adopted by the Policy Committee. Projects are initially evaluated by staff, and those results as well as applicant information and evaluation materials are posted on the MRMPO website and advertised for public comment. The TAC reviews all materials (applications and staff evaluations) and makes any agreed upon adjustments. The TAC then will make their final funding recommendation to the Policy Committee, with the Policy Committee making all final project funding decisions.

C. RTP Project List

This section of Chapter 6 shows all RTP projects by jurisdiction. These projects provide facilities for motorists, buses, bicyclists and pedestrians. They serve long-range needs for mobility and accessibility based on anticipated development.

Projects listed (referred to as Tier 1 projects) do not represent all of the transportation actions anticipated. Each jurisdiction will plan and carry out a multitude of local projects, which don't meet the criteria to be part of the MRMPO process. The local activities are based on the local Transportation System Plans (TSPs), which cities and the counties develop as part of their state comprehensive planning obligations. The MRMPO projects are first identified in the local TSPs.

This plan identifies nearly \$95 million expected to be available to invest in the regional transportation system through 2040. Details about the financial assumptions used to calculate these sums and financially constrain the projects in this chapter are provided in Chapter 8

Financial Plan.

1. Project Timing

The project lists on the following pages provides a brief description of the work to be done, estimated cost based on year of construction or implementation (inflation adjusted) and the timing.

Projects are scheduled by the following timeframes:

- **Short Range – Between 2015 and 2020**
- **Medium Range – Between 2021 and 2030**
- **Long Range – Between 2030 and 2040.**

The project number, or “RTP number”, shown in the left hand column are internal tracking numbers for project identification within the MRMPO. As projects are implemented they are added to the MRMPO programming document, the Metropolitan Transportation Improvement Program (MTIP) and forwarded into ODOT’s Statewide Transportation Improvement Program (STIP) for authorization to proceed. At the MTIP-STIP stage, projects receive a programming Key Number, which differs from RTP numbers. The key number is useful for tracking projects through implementation.

Map 6.1 shows project locations by RTP number and is located at the end of this chapter, immediately following the project lists.

2. Other Projects

Additional projects identified as necessary and important by all jurisdictions (called Tier 2 projects) are presented in Table 6.5 at the end of this chapter. No funding has been identified for the Tier 2 projects. They have not gone through the regional Air Quality Conformity process required for the official RTP projects.

Table 6.2 – RTP Project List by Jurisdiction, Short Range Projects (2015 – 2020)

PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	COST	Short Range Funding Sources (2015 - 2020)						Cost by Phase	Conformity Status	Project Located in CO or PM10 Maintenance Area?
					CMAQ	STP	Enhance-It	Local	Transit Funds	State ODOT			
Funds Available - Short Range					\$5,955,357	\$1,963,904	\$0						
Gold Hill					\$0								
0	No Short Range Projects	No Short Range Projects	Short	\$0									
Short Range Total												\$0	
Grants Pass					\$6,987,083								
200	Transit Enhancements - Sidewalk Construction	Install 4 miles of sidewalks, replace missing/non-conforming sidewalks, Install stop sign/amenities (funds obligated prior to MPO designation)	Short	\$1,914,740	\$1,714,740	\$0	\$0	\$200,000	\$0	\$0	\$1,914,740	Exempt	NA
201	Allen Creek Rd. Improvements	Allen Creek Rd. from W. Harbeck to Denton will be upgraded to City Arterial standards (CMAQ & STP funds awarded prior to MPO designation).	Short	\$4,420,000	\$2,760,095	\$950,000		\$709,905	\$0	\$0	\$4,420,000	Exempt	PM ₁₀
202	G Street: Lincoln Road to Leonard Street	Full reconstruction of arterial to include TWLTL, bike lanes, sidewalks, parking one side.	Short	\$1,124,643	\$504,571	\$325,000	\$0	\$295,072	\$0	\$0	\$1,124,643	Exempt	PM ₁₀
203	Fruitdale Drive: Parkdale Drive to Overland Drive	Full reconstruction of collector. 42' wide, bike lanes, sidewalk, parking one side.	Short	\$3,213,256	\$618,607	\$324,059	\$0	\$2,270,590	\$0	\$0	\$3,213,256	Exempt	PM ₁₀
204	G Street: Leonard Road to 3rd Street	Stripe for TWLTL	Short	\$903,013	\$0	\$810,274	\$0	\$92,739	\$0	\$0	\$903,013	Exempt	PM ₁₀
205	Fruitdale Drive: Overland Drive to Rogue River Hwy	Full reconstruction of collector. 42' wide, bike lanes, sidewalk, parking one side.	Short	\$4,498,558	\$504,571	\$316,571	\$0	\$3,677,416	\$0	\$0	\$4,498,558	Exempt	PM ₁₀
Short Range Total					\$1,627,749	\$1,775,904	\$0	\$6,335,817	\$0	\$0	\$9,739,470		
Funds Remaining					\$4,327,608	\$188,000	\$0	\$651,266	\$0	\$0			
Jackson County					\$47,000								
300	Rogue River Greenway: N. River Road Section	PE (design) and Right-of-way (ROW) Phase	Short	\$450,000	\$0	\$0	\$0	\$47,000	\$0	\$403,000	\$450,000	Exempt	NA
Short Range Total					\$0	\$0	\$0	\$47,000	\$0	\$403,000	\$450,000		
Funds Remaining					\$4,327,608	\$188,000	\$0	\$0	\$0	\$0			
Josephine County					\$0								
403	Galice Rd #2401: Chip seal (MP 0.0 - 15.4)	Chip seal and related prep work; guardrail updates	Short	\$939,000	\$0	\$0	\$0	\$0	\$0	\$0	\$939,000	Exempt	NA
Short Range Total					\$4,327,608	\$188,000	\$0	\$0	\$0	\$0	\$939,000		
ODOT					\$0								
500	OR99: Rogue River (6th St. Cavemen)	Bridge repair, Seismic, deck overlay, joints, bearings, concrete repairs, br#01418	Short	\$4,844,000	\$0	\$0	\$0	\$0	\$0	\$4,844,000	\$4,844,000	Exempt	PM ₁₀
501	I-5: N. Grants Pass - Evans Creek Paving	Paving, Grid/Inlay.	Short	\$8,056,000	\$0	\$0	\$0	\$0	\$0	\$8,056,000	\$8,056,000	Exempt	PM ₁₀
502	I-5: Exit 58 6th & Morgan	Reconfig intersection, reconfig & lengthen SB Offramp	Short	\$1,500,000	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$1,500,000	Exempt	PM ₁₀
503	Jackson & Josephine Sign & Delineation Upgrades	Enhanced curve signage, pavement markings, & alignment delineation.	Short	\$729,191	\$0	\$0	\$0	\$0	\$0	\$729,191	\$729,191	Exempt	NA
504	FFO-15: Exit 61 (Louse Creek)	Interchange improvements, Right Turn Lane on Merlin WB, Signals Placed on Merlin NB, Left Turn Lane on Merlin-I-5	Short	\$2,550,000	\$0	\$0	\$0	\$0	\$0	\$2,550,000	\$2,550,000	Exempt	NA
Short Range Total					\$0	\$0	\$0	\$0	\$0	\$17,679,191	\$17,679,191		
Rogue River					\$432,000								
601	E. Main Street Bridge	Bridge replacement at Wards Creek, widen or replace to arterial standard.	Short	\$570,000	\$0	\$188,000	\$0	\$382,000	\$0	\$0	\$570,000	Exempt	NA
Short Range Total					\$0	\$188,000	\$0	\$382,000	\$0	\$0	\$570,000		
Funds Remaining					\$4,327,608	\$0	\$0	\$50,000	\$0	\$0			
Josephine Community Transit					\$0								
700	Josephine County - 5311	Rural Operations	Short	\$133,541		\$0	\$0	\$0	\$133,541	\$0	\$133,541	Exempt	NA
701	JCT - 5307 Transit Operations	Transit Operating Assistance	Short	\$1,433,036		\$0	\$0	\$0	\$1,433,036	\$0	\$1,433,036	Exempt	NA
702	JCT - 5309	Capital Purchase - Replacement Vehicle	Short	\$560,000		\$0	\$0	\$0	\$560,000	\$0	\$560,000	Exempt	NA
703	Commuter Service	Transit service between Grants Pass and Medford.	Short	\$499,926	\$448,584	\$0	\$0	\$0	\$51,345	\$0	\$499,929	Exempt	NA
704	Vehicle Replacement - 2016	Capital Purchase - Replacement Vehicle	Short	\$350,000		\$0	\$0	\$0	\$350,000	\$0	\$350,000	Exempt	NA
705	Vehicle Replacement - 2017	Capital Purchase - Replacement Vehicle	Short	\$350,000		\$0	\$0	\$0	\$350,000	\$0	\$350,000	Exempt	NA
706	Vehicle Replacement - 2018	Capital Purchase - Replacement Vehicle	Short	\$350,000		\$0	\$0	\$0	\$350,000	\$0	\$350,000	Exempt	NA
707	Vehicle Replacement - 2019	Capital Purchase - Replacement Vehicle	Short	\$350,000		\$0	\$0	\$0	\$350,000	\$0	\$350,000	Exempt	NA
708	Vehicle Replacement - 2020	Capital Purchase - Replacement Vehicle	Short	\$350,000		\$0	\$0	\$0	\$350,000	\$0	\$350,000	Exempt	NA
723	5310 E & D Transit Capital STP Transfer	Purchase service	Short	\$350,000		\$0	\$0	\$0	\$304,775	\$0	\$304,775	Exempt	NA
Short Range Total					\$448,584	\$0	\$0	\$0	\$4,232,697	\$0	\$4,681,281		
Funds Remaining					\$3,879,024	\$0	\$0	\$0	\$799,274	\$0			
Total Short Range RTP (2015 - 2020)										\$34,058,942			



Table 6.3 – RTP Project List by Jurisdiction, Medium Range Projects (2021 – 2030)

PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	COST	Medium Range Funding Sources (2021 - 2030)						Cost by Phase	Conformity Status	Project Located in CO or PM10 Maintenance Area?
					CMAQ	STP	Enhance-t	Local	Transit Funds	State ODOT			
Funds Available - Medium Range					\$12,193,563	\$6,967,068	\$16,200,000			\$7,918,604	\$0		
Gold Hill													
0	No Medium Range Projects	No Medium Range Projects	Medium										
Medium Range Total					\$0								
Grants Pass													
Medium Range Total								\$17,242,076					
206	Vine Street: Highland Ave to Hawthorne Ave	Full reconstruction of arterial to include bike lanes and sidewalks.	Medium	\$2,448,182	\$1,000,000	\$576,658	\$0	\$871,524	\$0	\$0	\$2,448,182	Exempt	PM ₁₀
207	Willow Lane: Redwood Hwy to Redwood Ave	Full reconstruction of arterial to include bike lanes and sidewalks. Provide 60-ft ROW.	Medium	\$1,756,580	\$500,000	\$413,755	\$0	\$842,825	\$0	\$0	\$1,756,580	Exempt	PM ₁₀
208	Fruitdale Drive: Jacksonville Hwy to Parkdale Drive	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Medium	\$2,570,604	\$500,000	\$500,000	\$0	\$1,570,604	\$0	\$0	\$2,570,604	Exempt	PM ₁₀
209	Leonard Road: Willow Lane to Redwood School (UGB)	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Medium	\$3,213,256	\$1,000,000	\$500,000	\$0	\$1,713,256	\$0	\$0	\$3,213,256	Exempt	PM ₁₀
210	West Harbeck Road: Grandview Ave to Williams Hwy	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Medium	\$2,399,232	\$1,000,000	\$824,629	\$0	\$574,603	\$0	\$0	\$2,399,232	Exempt	PM ₁₀
211	Dimmick Street: C Street to Railroad Crossing	Full reconstruction of arterial with TWLTL	Medium	\$324,493	\$210,920	\$76,433	\$0	\$37,140	\$0	\$0	\$324,493	Exempt	PM ₁₀
212	Foothill Blvd: City Limits to Arment Road	Full reconstruction of collector. 42' wide, bike lanes, no parking and sidewalks.	Medium	\$1,799,430	\$1,169,630	\$350,000	\$0	\$279,800	\$0	\$0	\$1,799,430	Exempt	PM ₁₀
213	Hillcrest Drive: Ninth Street to Tenth Street	Full reconstruction of collector to include bike lanes, sidewalks, no parking.	Medium	\$1,214,615	\$789,500	\$286,097	\$0	\$139,018	\$0	\$0	\$1,214,615	Exempt	PM ₁₀
214	Hillcrest Drive: Tenth Street to Beacon Drive	Full reconstruction of collector to include bike lanes, sidewalks, no parking.	Medium	\$1,124,643	\$731,016	\$264,905	\$0	\$128,720	\$0	\$0	\$1,124,641	Exempt	PM ₁₀
216	Cloverlawn Drive: Eastview Place to Hamilton Lane	Full reconstruction of collector to provide bike lanes and sidewalks. Provide 60-ft ROW.	Medium	\$4,284,341	\$1,559,501	\$500,000	\$0	\$2,224,840	\$0	\$0	\$4,284,341	Exempt	PM ₁₀
217	Highland Ave: South Line Section 6 to N.W. UGB	Full reconstruction of arterial. 40' wide, bike lanes and sidewalk.	Medium	\$3,643,844	\$1,093,153	\$650,000	\$0	\$1,900,691	\$0	\$0	\$3,643,844	Exempt	PM ₁₀
218	Leonard Road: Dowell Road to Willow Lane	Full reconstruction of local collector. 36' wide and sidewalks.	Medium	\$3,213,256	\$1,243,458	\$656,190	\$0	\$1,313,608	\$0	\$0	\$3,213,256	Exempt	PM ₁₀
219	Scoville Road: Greenfield Road to Scenic Drive	Full reconstruction of collector to include bike lanes and sidewalks.	Medium	\$376,642	\$244,817	\$88,716	\$0	\$43,108	\$0	\$0	\$376,642	Exempt	PM ₁₀
220	East Park Street: Clara Ave to Hamilton Lane	Full reconstruction local collector. 36' wide and sidewalk.	Medium	\$1,259,600	\$818,740	\$296,693	\$0	\$144,167	\$0	\$0	\$1,259,600	Exempt	PM ₁₀
Medium Range Total					\$11,860,736	\$5,984,076	\$0	\$11,783,904	\$0	\$0	\$29,628,718		
Funds Remaining					\$332,827	\$982,992	\$0	\$5,458,172	\$0	\$0			
Jackson County													
0	No Medium Range Projects	No Medium Range Projects	Medium										NA
Medium Range Total											\$0		
Josephine County													
401	Bike/Ped	Monument Drive: North Valley High School to Hugo Road - Install bike lanes	Medium	\$1,095,500	\$0	\$982,992	\$0	\$112,508	\$0	\$0	\$1,095,500	Exempt	NA
Medium Range Total					\$0	\$982,992	\$0	\$112,508	\$0	\$0	\$1,095,500		
Funds Remaining					\$0	\$0	\$0	\$0	\$0	\$0			
Oregon Dept. of Transportation													
0	No Medium Range Projects	No Medium Range Projects	Medium										NA
Medium Range Total											\$0		
Rogue River													
0	No Medium Range Projects	No Medium Range Projects	Medium										NA
Medium Range Total											\$0		
Josephine Community Transit													
Medium Range Total									\$8,717,878				
709	Vehicle Replacement - 2021	Capital Purchase - Replacement Vehicle	Medium	\$380,000	\$0	\$0	\$0	\$0	\$380,000		\$380,000	Exempt	NA
710	Vehicle Replacement - 2022	Capital Purchase - Replacement Vehicle	Medium	\$380,000	\$0	\$0	\$0	\$0	\$380,000		\$380,000	Exempt	NA
711	Vehicle Replacement - 2023	Capital Purchase - Replacement Vehicle	Medium	\$380,000	\$0	\$0	\$0	\$0	\$380,000		\$380,000	Exempt	NA
712	Vehicle Replacement - 2024	Capital Purchase - Replacement Vehicle	Medium	\$380,000	\$0	\$0	\$0	\$0	\$380,000		\$380,000	Exempt	NA
713	Vehicle Replacement - 2025	Capital Purchase - Replacement Vehicle	Medium	\$380,000	\$0	\$0	\$0	\$0	\$380,000		\$380,000	Exempt	NA
714	Vehicle Replacement - 2026	Capital Purchase - Replacement Vehicle	Medium	\$380,000	\$0	\$0	\$0	\$0	\$380,000		\$380,000	Exempt	NA
715	Vehicle Replacement - 2027	Capital Purchase - Replacement Vehicle	Medium	\$380,000	\$0	\$0	\$0	\$0	\$380,000		\$380,000	Exempt	NA
716	Vehicle Replacement - 2028	Capital Purchase - Replacement Vehicle	Medium	\$380,000	\$0	\$0	\$0	\$0	\$380,000		\$380,000	Exempt	NA
717	Vehicle Replacement - 2029	Capital Purchase - Replacement Vehicle	Medium	\$380,000	\$0	\$0	\$0	\$0	\$380,000		\$380,000	Exempt	NA
718	Vehicle Replacement - 2030	Capital Purchase - Replacement Vehicle	Medium	\$380,000	\$0	\$0	\$0	\$0	\$380,000		\$380,000	Exempt	NA
Medium Range Total					\$0	\$0	\$0	\$0	\$3,800,000		\$3,800,000		
Funds Remaining					\$0	\$0	\$0	\$0	\$4,917,878	\$0			
Total Medium Range RTP (2021 - 2030)											\$34,524,218		



Table 6.4 – RTP Project List by Jurisdiction, Long Range Projects (2031 – 2040)

PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	COST	Long Range Funding Sources (2031 - 2040)						Cost by Phase	Conformity Status	Project Located in CO or PM10 Maintenance Area?	
					Funds Available - Short Range	CMAQ	STP	Enhance-It	Local	Transit Funds				State ODOT
Gold Hill					\$9,887,827	\$8,006,000	\$16,200,000			\$10,767,085	\$0			
0	No Long Range Projects	No Long Range Projects	Long										NA	
Long Range Total											\$0			
Grants Pass									\$29,393,611					
221	Scenic Drive, West: Granite Hill Road to Scoville Road	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Long	\$1,313,619	\$394,086	\$262,724	\$0	\$656,810	\$0	\$0	\$1,313,619	Exempt	PM ₁₀	
222	Hamilton Lane: Park Street, East to Rogue River Hwy	Full reconstruction local collector to include sidewalks.	Long	\$269,941	\$80,982	\$53,988	\$0	\$134,971	\$0	\$0	\$269,941	Exempt	PM ₁₀	
223	West Park Street: Rignuelle Street to Pansy Lane	Construct/reconstruction to local collector. 36' wide, bike lanes, no parking and sidewalks.	Long	\$3,045,712	\$913,714	\$609,142	\$0	\$1,522,856	\$0	\$0	\$3,045,712	Non-Exempt	PM ₁₀	
224	Nebraska Ave: McCarter Drive to S. Union Ave	Reconstruction east half of street to local collector. 36' wide and sidewalk.	Long	\$325,631	\$97,689	\$65,126	\$0	\$162,816	\$0	\$0	\$325,631	Exempt	PM ₁₀	
225	Beacon Drive: Madrone to Hillcrest	Full reconstruction of collector. Bike lanes and sidewalk.	Long	\$3,868,774	\$1,160,632	\$773,755	\$0	\$1,934,387	\$0	\$0	\$3,868,774	Exempt	NA	
226	Pansy Lane: Redwood Ave to North End	Full reconstruction of local collector. 36' wide and sidewalk.	Long	\$428,435	\$128,531	\$85,687	\$0	\$214,218	\$0	\$0	\$428,435	Exempt	PM ₁₀	
227	Hamilton Lane: Overland Drive to Cloverlawn Drive	Full reconstruction local collector to include sidewalks.	Long	\$5,128,375	\$1,538,513	\$1,635,333	\$0	\$1,954,529	\$0	\$0	\$5,128,375	Exempt	NA	
228	East Park Street: Gold River Lane to Clara Ave	Full reconstruction local collector to include sidewalks.	Long	\$1,079,657	\$323,897	\$215,931	\$0	\$539,829	\$0	\$0	\$1,079,657	Exempt	PM ₁₀	
229	Haviland Drive: Grandview Ave to Highline Canal	Full reconstruction local collector to include sidewalks.	Long	\$1,456,676	\$437,003	\$291,335	\$0	\$728,338	\$0	\$0	\$1,456,676	Exempt	PM ₁₀	
230	Portola Drive: 450-Feet West of Gladiola Ave	Full reconstruction of local collector. 36' wide and sidewalk.	Long	\$382,175	\$114,653	\$76,435	\$0	\$191,088	\$0	\$0	\$382,175	Exempt	PM ₁₀	
231	Portola Drive: Gladiola Ave to Shannon Lane	Full reconstruction of local collector. 36' wide and sidewalk.	Long	\$885,396	\$265,619	\$177,079	\$0	\$442,698	\$0	\$0	\$885,396	Exempt	PM ₁₀	
232	Shannon Lane: Portola Drive to North Railroad (ROW)	Full reconstruction of local collector. 36' wide and sidewalk.	Long	\$636,957	\$191,087	\$127,391	\$0	\$318,479	\$0	\$0	\$636,957	Exempt	PM ₁₀	
Long Range Total					\$5,646,405	\$4,373,928	\$0	\$8,801,016	\$0	\$0	\$18,821,348			
Funds Remaining					\$4,241,422	\$3,632,072	\$0	\$20,592,595	\$0	\$0				
Jackson County									\$0					
0	No Long Range Projects	No Long Range Projects	Long										NA	
Long Range Total											\$0			
Josephine County									\$335,638					
402	Monument Drive: Merlin Road to Timber Lane	Install left turn lanes at intersections	Long	\$2,932,500	\$0	\$2,596,862	\$0	\$335,638	\$0	\$0	\$2,932,500		NA	
Long Range Total					\$0	\$2,596,862	\$0	\$335,638	\$0	\$0	\$2,932,500			
Funds Remaining					\$0	\$1,035,210	\$0	\$0	\$0	\$0				
Oregon Dept. of Transportation									\$0					
0	No Long Range Projects	No Long Range Projects	Long										NA	
Long Range Total						\$0					\$0			
Rogue River									\$1,528,790					
602	Main Street	Realign Main Street so that E. Main and W. Main align at the Pine Street intersection.	Long	\$1,500,000	\$0	\$1,035,210	\$0	\$464,790	\$0	\$0	\$1,500,000	Exempt	NA	
Long Range Total					\$0	\$1,035,210	\$0	\$464,790	\$0	\$0	\$1,500,000			
Funds Remaining					\$0	\$0	\$0	\$1,064,000	\$0	\$0				
Josephine Community Transit									\$14,567,085					
719	Vehicle Replacement - 2031	Capital Purchase - Replacement Vehicle	Long	\$410,000	\$0	\$0	\$0	\$0	\$410,000	\$0	\$410,000	Exempt	NA	
720	Vehicle Replacement - 2032	Capital Purchase - Replacement Vehicle	Long	\$410,000	\$0	\$0	\$0	\$0	\$410,000	\$0	\$410,000	Exempt	NA	
721	Vehicle Replacement - 2033	Capital Purchase - Replacement Vehicle	Long	\$410,000	\$0	\$0	\$0	\$0	\$410,000	\$0	\$410,000	Exempt	NA	
722	Vehicle Replacement - 2034	Capital Purchase - Replacement Vehicle	Long	\$410,000	\$0	\$0	\$0	\$0	\$410,000	\$0	\$410,000	Exempt	NA	
Long Range Total					\$0	\$0	\$0	\$0	\$1,640,000	\$0	\$1,640,000			
Funds Remaining					\$4,241,422	\$0	\$0	\$0	\$12,927,085	\$0	\$0			
Total Long Range RTP (2031 - 2040)										\$24,893,848				
Total RTP (2015 - 2040)										\$93,477,008				

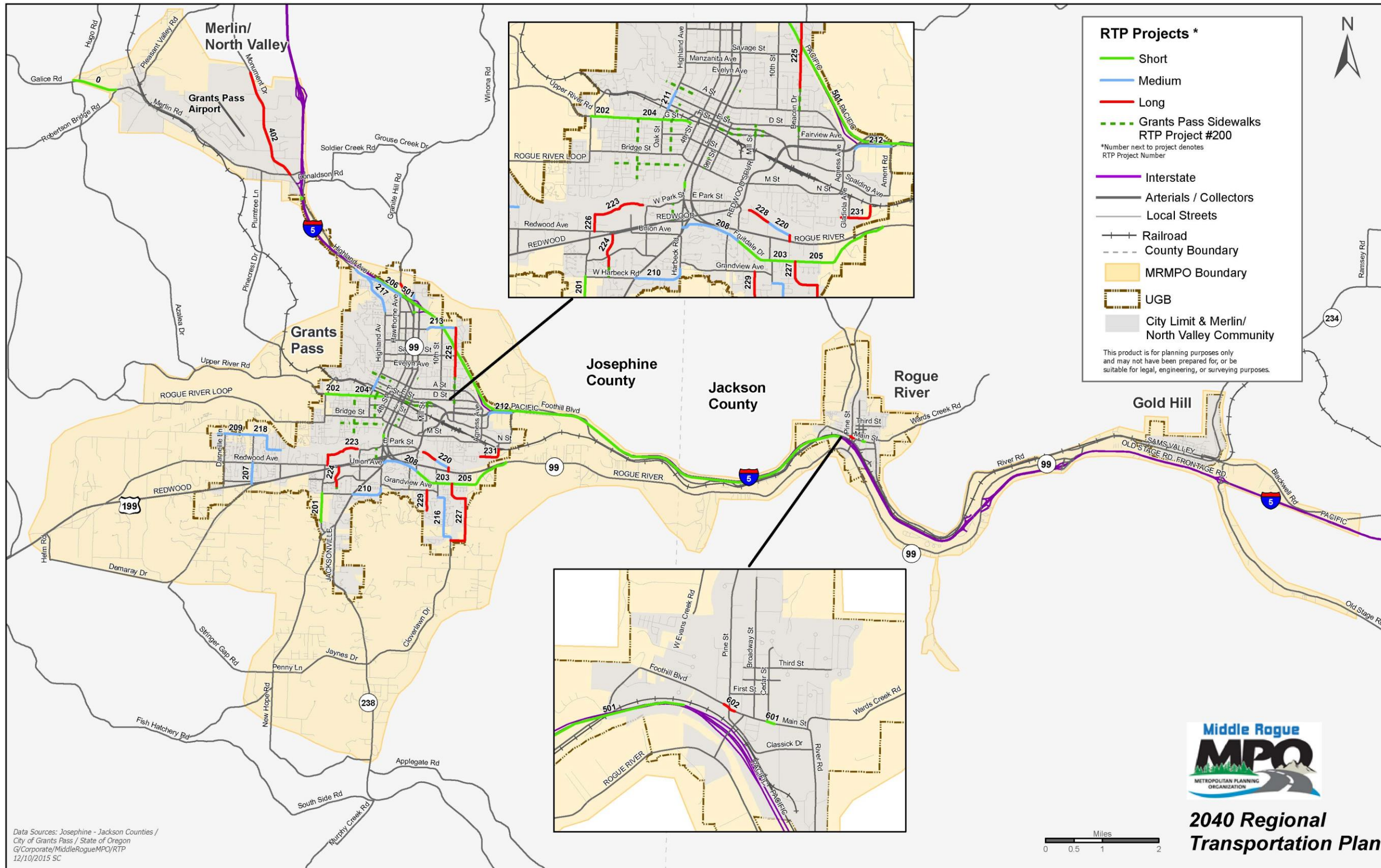


Table 6.5 – Tier 2 Projects (unfunded)

PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	COST	MRMPO 2015 - 2040 RTP Tier 2 Project List - Unfunded Needs					Cost by Phase	Conformity Status	Project Located in CO or PM10 Maintenance Area?
Jackson County												
Tier 2 Projects - Unfunded Needs												
300	N. River Road, Twin Bridges Rd. Rock Point	Add bicycle/pedestrian path	Tier 2	\$ 3,000,000						\$ 3,000,000		NA
	East Evans Creek Rd. Rogue River - Pleasant Cr.	Upgrade to rural major collector	Tier 2	\$ 3,890,000						\$ 3,890,000		NA
	Old Stage Road, Blackwell Road, Winterbrook Lane	Improve to rural two-lane with shoulder bikeways	Tier 2	\$ 2,500,000						\$ 2,500,000		NA
	N. River Road, Rogue River - Gold Hill	Upgrade to collector	Tier 2	\$ 4,750,000						\$ 4,750,000		NA
Total										\$ 14,140,000		
Josephine County												
Tier 2 Projects - Unfunded Needs												
	Dowell Road at Wolf Lane	Improve intersection	Tier 2	\$1,000,000						\$1,000,000		NA
	Cloverlawn Drive (MP .5 - 3.6)	Widen shoulders to min. 4-feet, resurface, improve intersection with Summit Loop Road	Tier 2	\$2,500,000						\$2,500,000		NA
	Rogue River Loop Highway / Lower River Road	Widen shoulders	Tier 2	\$17,037,500						\$17,037,500		NA
Total										\$20,537,500		
Rogue River												
Tier 2 Projects - Unfunded Needs												
	Rogue River	Provide multi-use pathway along both sides of the river. Create a multi-use pathway loop at N side of river connecting to a bike lane/path at N. River Road. Connect City pathways with a regional system.	Tier 2	per design						per design		NA
	Evans Creek	Provide a pathway following Pine St. and E. Evans Creek Rd. to the High School.	Tier 2	per design						per design		NA
	Various Arterials and Collectors	Provide access improvements, such as curbs.	Tier 2	per design						per design		NA
	Wards Creek	Provide pathway along Wards Creek.	Tier 2	per design						per design		NA
Total										NA		
Total Tier 2 Projects										\$ 34,677,500		



Map 6-1 – RTP Projects



Chapter 7 - Transportation Sustainability

It is a goal of this Regional Transportation Plan to incorporate sustainability measures into the practice of transportation planning, programming and project implementation to the extent possible.

A. Defining Sustainability

There is no standard definition for Sustainability nor is there a standard definition for Sustainable Transportation. According to the Oregon Transportation Plan Update (2006), sustainability is creating a balance between the economy, social needs, and the environment in order to ensure healthy and equitable lifestyles and resources for future human, plant and animal communities. The Oregon Revised Statutes (ORS 184.421) defines sustainability as follows:

“Sustainability” means using, developing and protecting resources in a manner that enables people to meet current needs and provides that future generations can also meet future needs, from the joint perspective of environment, economic and community objectives.

However, three distinctive characteristics distinguish Sustainable Transportation Planning from the traditional transportation planning. These are Stewardship of the Environment, Social Equity and Economic Vitality of the community.

The Stewardship of the Environment includes:

1. Measures that reduce depletion of non-renewable resources
2. Measures that reduce air pollution, particularly Greenhouse Gases (GHG)
3. Measures that reduce noise pollution
4. Measures that reduce water pollution
5. Measures that reduce hydrologic impacts
6. Measures that reduce habitat and ecological degradation.

“It is a goal of this Regional Transportation Plan to incorporate sustainability measures into the practice of transportation planning, programming and project implementation to the extent possible.”

The Social Equity includes:

1. Fair and equitable disbursement of transportation services to all people
2. Providing for the mobility of disadvantaged people
3. Affordability of services
4. Community cohesion
5. Aesthetics of built environment.

The Economic Vitality includes:

1. Creation of jobs

B. Recommended Sustainability Strategies

The Sustainability recommendations of this Regional Transportation Plan are mainly derived from the transportation-related measures recommended in the Oregon Transportation Plan.

These are:

1. Environmentally Responsible Transportation System

Strategy 1.1

Practice stewardship of air, water, land, wildlife and botanical resources. Take into account the natural environments in the planning, design, construction, operation and maintenance of the transportation system. Create transportation systems compatible with native habitats and species and help restore ecological processes, considering such plans as the *Oregon Conservation Strategy* and the *Oregon Plan for Salmon and Watersheds*. Where adverse impacts cannot reasonably be avoided, minimize or mitigate their effects on the environment. Work with state and federal agencies and other stakeholders to integrate environmental solutions and goals into planning for infrastructure development and provide for an ecosystem-based mitigation process.

Strategy 1.2

Encourage the development and use of technologies that reduce greenhouse gas emissions.

Strategy 1.3

Evaluate the impact of geological hazards and natural disasters including earthquakes, floods, landslides and rockfalls, on the efficiency and sustainability of the location and design of new or improved transportation facilities as appropriate.

Strategy 1.4

Work collaboratively to streamline permit procedures and gain efficiencies to transportation system improvements while meeting or exceeding environmental benefits or regulations.

Strategy 1.5

In the construction and maintenance of transportation infrastructure and facilities, reduce the consumption of non-renewable construction materials, promote their efficient use and reuse, and reduce other environmental impacts such as stormwater impacts where appropriate.

Strategy 1.6

To determine the most cost-effective investments, consider using life-cycle costs in transportation maintenance, purchase of equipment, selection of materials, and design and engineering of infrastructure where appropriate.

Strategy 1.7

To accomplish environmental stewardship and increase efficiencies, use environmental management systems.

2. Energy Supply

Strategy 2.1

Support efforts to develop a long range plan for moving toward a diversified and cleaner energy supply. Work with federal, state, regional and local jurisdictions and agencies as well as transportation providers, shippers and the general public.

Strategy 2.2

Support the conversion of passenger vehicles and public transportation fleets to more fuel-efficient and alternative fuel vehicles, especially to those using renewable and cleaner fuels. Review and change the tax credit provisions to encourage these activities as appropriate.

Strategy 2.3

Work with federal, state, regional and local jurisdictions and agencies as well as transportation providers, shippers and the general public to develop a contingency plan for fuel shortages affecting passenger and freight transportation.

3. Creating Communities

Strategy 3.1

Support the sustainable development of land with a mix of uses and a range of densities, land use intensities and transportation options in order to increase the efficiency of the transportation system. Support travel options that allow individuals to reduce vehicle use.

Strategy 3.2

Promote safe and convenient bicycling and walking networks in communities.

- Fill in missing gaps in sidewalk and bikeway networks, especially to important community destinations such as schools, shopping areas, parks, medical facilities and transit facilities.
- Enhance walking, bicycling and connections to public transit through appropriate community and main street design.
- Promote facility designs that encourage walking and biking.

Strategy 3.3

Promote location-efficient incentives to help increase the opportunities for individuals and families to purchase homes and businesses within areas well-served by transit.

Strategy 3.4

Promote transportation facility design, including context sensitive design, which fits the physical setting, serves and responds to the scenic, aesthetic, historic and environmental resources, and maintains safety and mobility.

Strategy 3.5

Reduce transportation barriers to daily activities for those who rely on walking, biking, rideshare, car-sharing and public transportation by providing:

- Access to public transportation and the knowledge of how to use it.
- Facility designs that consider the needs of the mobility-challenged including seniors, people with disabilities, children and non-English speaking populations.

Strategy 3.6

Consider the proximity and availability of public transportation when siting public facilities and services.

4. Economic Vitality

Strategy 4.1

Consider ways to promote economic vitality through:

- Considerations of infrastructure costs
- Consideration of costs to consumers
- Efforts to reduce traffic congestions
- Consideration of impacts on non-renewable resources.

Chapter 8 – Financial Plan

A. Introduction

This chapter presents all of the financial assumptions used to create the financially constrained project list for the street and transit system, as required by federal law. Financially constraining projects is particularly important for the Middle Rogue Metropolitan Planning Organization (MRMPO) region because of air quality conformity requirements described in the Air Quality Conformity Determination (AQCD) published by the MRMPO for this plan.

Forecasts of state and federal revenue sources are developed cooperatively by a statewide working group consisting of Oregon Department of Transportation (ODOT) staff and representatives from all Oregon MPOs and public transportation agencies. These forecasts have most recently been updated in 2013 to reflect federal requirements and are the basis of the financial forecasts used for the 2015-2040 MRMPO Regional Transportation Plan (RTP).

“Federal regulations under 23 USC 134(g)(2)(B) and 23 CFR 450.322(b)(11) outline the requirements for the Metropolitan Planning Organization (MPO) to prepare a financial plan that demonstrates how the adopted long-range transportation plan can be implemented.”

B. Federal Regulations for Financial Constraint

Federal regulations under 23 USC 134(g)(2)(B) and 23 CFR 450.322(b)(11) outline the requirements for the Metropolitan Planning Organization (MPO) to prepare a financial plan that demonstrates how the adopted long-range transportation plan can be implemented. Guidelines were first established in the federal Safe Accountable Flexible Efficient Transportation Equity Act -A Legacy for Users (SAFETEA-LU). The current transportation act, Moving Ahead for Progress in the 21st Century (MAP-21), continues the SAFETEA-LU requirements. The RTP’s financial plan demonstrates how the adopted long-range transportation plan can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out the plan, and recommends any additional financing strategies for needed projects and programs.

Furthermore: The financial plan may include, for illustrative purposes, additional projects that would be included in the adopted long-range transportation plan if reasonable additional resources beyond those identified in the financial plan were available. For the purpose of developing the long-range transportation plan, the metropolitan planning organization and State shall cooperatively develop estimates of funds that will be available to support plan implementation.

Federal and state revenue projections were provided by ODOT in a document entitled *Financial Assumptions for the Development of Metropolitan Transportation Plans* in September 2013. Most of the revenue projections of federal and state funds used in the RTP are based on the projections provided in this document.

C. Methods Used to Complete Financial Plan

To complete this chapter, the following steps were followed:

- **Reviewed existing data.** Primary documents reviewed included ODOT's September 2013 *Long-Range Revenue Forecast*
- **Conferred with staff from relevant State and local jurisdictions.** Discussions with staff from MRMPO member jurisdictions and ODOT Region 3 to gain insight into local transportation revenues and expenditures.

D. Other Key Terms and Acronyms

Fiscal Year End (FYE) denotes the completion of a one-year, or 12-month, accounting period. For example, FYE 2015 refers to the 2014-15 fiscal year, ending June 30, 2015.

Year of Expenditure (YOE) denotes that dollar values are reported as nominal values, which increase over time due to assumed inflation rates.

E. Street and Transit System Funding

This section provides details on the funding required to implement the capital projects in the RTP. Funding has been estimated over the 25-year duration of the plan and is linked to street system and transit projects to establish the MRMPO's financially constrained Tier 1 project list.

Tier 1 projects are in the plan based on their ability to fulfill RTP goals and to be implemented and funded within the 2040 planning horizon. Funds shown in this chapter establish financial constraint. Funding estimates were developed in consultation with ODOT, Oregon MPOs, and the MRMPO jurisdictions, consistent with federal and state requirements for determining financial constraint.

Information for this part was drawn from Federal, State and local revenue sources that are used to fund regional transportation system projects and programs and are described below. Funding used primarily for the road network is described below. Details about transit funding sources and sums follow. Summary estimates of capital funding availability required for Josephine Community Transit (JCT), Grants Pass, Rogue River, and Gold Hill are shown in Table 9.1.

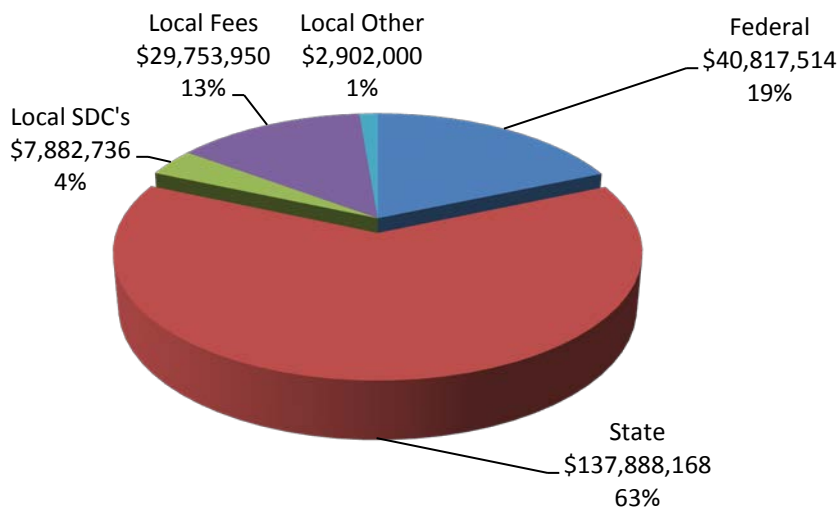
Table 9.1 – Revenue Forecast, All Sources

Jurisdiction	Revenues - Sources Percent of Total						Totals
	Federal	State	Local				
			SDC's	Fees	Other	MRMPO Future Discretionary Funds	
Gold Hill	0%	93%	0%	0%	7%	0%	100%
Grants Pass	2%	57%	5%	18%	0%	19%	100%
Rogue River	2%	57%	4%	6%	21%	10%	100%
JOCO	3%	87%	0%	0%	0%	10%	100%
JACO	8%	92%	0%	0%	0%	0%	100%
JCT	Federal	State	Local				
			Contracted Services		Farebox		
	64%	11%	14%		10%		100%

Table 9.1 on Page 3 shows how the various revenue sources are expected to contribute as a percentage of total revenues to the jurisdictions through 2040. As the table shows, the primary transportation funding source in the region is the State Highway Fund, which varies from 57 to 93-percent of the annual revenues for the MRMPO member jurisdictions.

Figure 9.1 shows the sources of funding that are reasonably expected to be available to support the MRMPO regional street system for the 2015-2040 RTP. State funds make up the largest share of revenues (63%), well ahead of local and federal revenues. Typically, State and local funds are used by jurisdictions for administration, operations, and maintenance of the local street system. Federal funds are a main source for new projects.

Figure 9.1 – Street System Revenue Sources by Percent



F. Street System Revenue Sources

State Highway Fund (SHF) is composed of several major funding sources: Motor Vehicle Registration and Title Fees, Driver License Fees, Motor Vehicle Fuel Taxes, and Weight-Mile Tax. The SHF funds are apportioned to three jurisdiction levels in the following amounts: State (59%), Counties (25%), and Cities (16%).

Statewide Transportation Improvement Program (STIP) is Oregon’s four-year transportation capital improvement program. This program defines which projects will be funded by what amount of money throughout the planned four-year program period. Projects at all jurisdiction levels are included in the program; Federal, state, county, and city.

Surface Transportation Program (STP) is a major federal transportation program to provide “flexible” funds for transportation projects at the state and local levels. Funds are “flexible” in that they can be spent on a variety of transportation related projects, e.g., mass transit, bike-ped.

Congestion Mitigation and Air Quality (CMAQ) - The Intermodal Surface Transportation Efficiency Act (ISTEA) created the CMAQ program to deal with transportation related air pollution. States with areas that are designated as non-attainment for ozone or carbon monoxide (CO) must use their CMAQ funds in those non-attainment areas. A state may use its CMAQ funds in any of its particulate matter (PM₁₀) maintenance areas (such as the Grants Pass PM₁₀ Maintenance Area), which has achieved attainment status) if certain requirements are met. The projects and programs must either be included in the air quality State Implementation Plan (SIP) or be good candidates to contribute to attainment of The National Ambient Air Quality Standards (NAAQS). If a state does not have any non-attainment areas, the allocated funds may be used for STP or CMAQ projects. CMAQ requires a 10.27 percent local match unless certain requirements are met.

ODOT Fix-It and Enhance Program - In 2012 the Statewide Transportation Improvement Program (STIP) divided its funding into two categories: Fix-It and Enhance. The primary objective of this change was to enable ODOT to take care of the existing transportation assets (Fix-It) while still providing a measure of funding to enhance the state and local transportation system in a truly multi-model way.

STIP Enhance Projects have the following desired attributes:

- Projects with the potential to be both effective and efficient.
- Projects that involve multiple funding sources.
- Projects that are complementary to other projects or community development activities and offer the chance for the whole to be greater than the sum of the parts.
- Investments must achieve multiple objectives.
- Conduct proactive asset management (strategically take care of what we already have). Move toward a more multimodal transportation system by maximizing funding flexibility and consider a wider range of community issues and benefits.

The [STIP- Enhance Funding website](#) provides a central source of information on ODOT’s Enhance & Fix-It program.

Special City Allotment (SCA) – ODOT sets aside \$1 million per year to distribute to cities with populations less than 5,000. Projects to improve safety or increase capacity on local roads are reviewed annually and ranked on a statewide basis by a committee of regional representatives. Projects are eligible for a maximum of \$50,000 each.

System Development Charges (SDC) are fees collected when new development occurs. These fees are then used to partially fund capital improvements, such as new streets within the city.

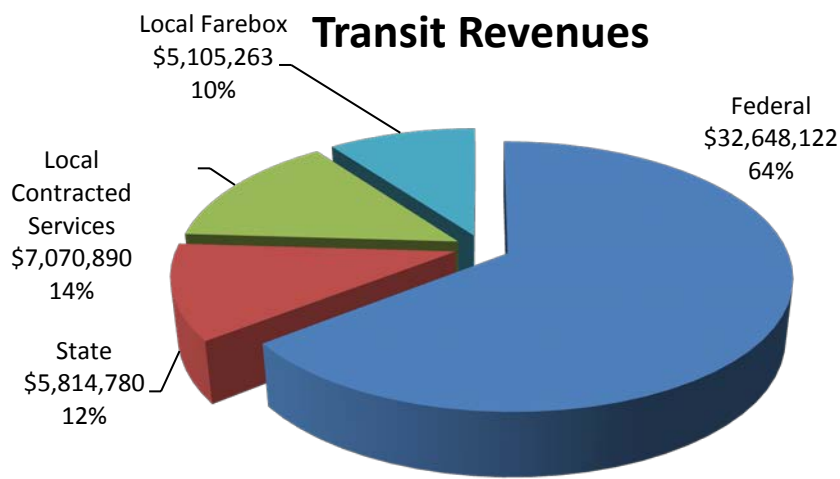
Street Utility Fees (SUFs) or Street Impact Fees (SIFs) – Most city residents pay water and sewer utility fees. Street utility fees apply the same concepts to city streets. A fee is assessed to all businesses and households in the city for use of streets based on the amount of traffic typically generated by a particular use. Street utility fees differ from water and sewer fees because usage cannot be easily monitored. Street user fees are typically used to pay for maintenance projects.

G. Transit System Revenue Sources

Transit services in the MRMPO are provided by the Josephine Community Transit (JCT), which relies on federal, state, and local funding sources. Revenues from these sources are described below. Further information on the assumptions used to estimate revenues are located in Appendix A.

Figure 9.2 shows the sources of funding that are reasonably expected to be available to support the MRMPO transit system for the 2015-2040 RTP. Federal funds make up the largest share (64%) of transit revenues, followed by Local Contracted Services and Farebox (24%) and State revenues (12%).

Figure 9.2 – Transit System Revenue Sources by Percent



Federal Transit Revenue Sources

The Federal Transit Administration (FTA) carries out the federal mandate to improve public transportation systems. It is the principal source of federal assistance to help urban areas (and, to some extent, non-urban areas) plan, develop, and improve comprehensive mass transportation systems. The FTA provides federal funding to the JCT. The FTA's programs of financial assistance to the JCT are described below. Federal grant funds are allocated to transit districts and other eligible providers by ODOT through the State Transportation Improvement Plan (STIP) process.

Urbanized Area Formula Grants (5307)

The largest of FTA's grant programs, this program provides grants to urbanized areas to support public transportation. Funding is distributed by formula based on the level of transit service provision, population, and other factors. The program remains largely unchanged in MAP-21 with a few exceptions:

Job access and reverse commute activities now eligible - Activities eligible under the former Job Access and Reverse Commute (JARC) program, which focused on providing services to low-income individuals to access jobs, are now eligible under the Urbanized Area Formula program for operating assistance (with a 50 percent local match) for job access and reverse commute activities. In addition, the urbanized area formula for distributing funds now includes the number of low-income individuals as a factor. There is no floor or ceiling on the amount of funds that can be spent on job access and reverse commute activities.

Expanded eligibility for operating expenses for systems with 100 or fewer buses - MAP-21 expands eligibility for using Urbanized Area Formula funds for operating expenses. Previously, only urbanized areas with populations below 200,000 were eligible to use Federal transit funding for of funding for operating expenses. Systems operating 75 or fewer buses in fixed route service during peak service hours may use up to 75 percent of their "attributable share" of funding for operating expenses. This expanded eligibility for operating assistance under the Urbanized formula program excludes rail systems.

Bus and Bus Facilities Program (5309) (Ladders of Opportunity Initiative)

The [Ladders of Opportunity Initiative](#) makes funds available to public transportation providers to finance capital projects to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities, including programs of bus and bus-related projects for assistance to sub-recipients that are public agencies, private companies engaged in public transportation, or private non-profit organizations. Projects may include costs incidental to the acquisition of buses or to the construction of facilities, such as the costs of related workforce development and training activities, and project development.

Enhanced Mobility of Seniors and Individuals with Disabilities (5310)

This program provides formula funding to increase the mobility of seniors and persons with disabilities. Funds are apportioned based on each State's share of the targeted populations and

are now apportioned to both States (for all areas under 200,000) and large urbanized areas (over 200,000). The former New Freedom program (5317) is folded into this program. The New Freedom program provided grants for services for individuals with disabilities that went above and beyond the requirements of the Americans with Disabilities Act (ADA). Activities eligible under New Freedom are now eligible under the Enhanced Mobility of Seniors and Individuals with Disabilities program.

Projects selected for funding must be included in a locally developed, coordinated public transit-human services transportation plan; and the competitive selection process, which was required under the former New Freedom program, is now optional. At least 55 percent of program funds must be spent on the types of capital projects eligible under the former section 5310 -- public transportation projects planned, designed, and carried out to meet the special needs of seniors and individuals with disabilities when public transportation is insufficient, inappropriate, or unavailable.

The remaining 45 percent may be used for: public transportation projects that exceed the requirements of the ADA; public transportation projects that improve access to fixed-route service and decrease reliance by individuals with disabilities on complementary paratransit; or, alternatives to public transportation that assist seniors and individuals with disabilities. Using these funds for operating expenses requires a 50 percent local match while using these funds for capital expenses (including acquisition of public transportation services) requires a 20 percent local match.

Rural Area Formula Grants (5311)

This program provides capital, planning, and operating assistance to support public transportation in rural areas, defined as areas with fewer than 50,000 residents. Funding is based on a formula that uses land area, population, and transit service. The program remains largely unchanged with a few exceptions:

Job access and reverse commute activities eligible - Activities eligible under the former Job Access and Reverse Commute (JARC) program, which provided services to low-income individuals to access jobs, are now eligible under the Rural Area Formula program. In addition, the formula now includes the number of low-income individuals as a factor. There is no floor or ceiling on the amount of funds that can be spent on job access and reverse commute activities.

State of Good Repair Grants (5337)

MAP-21 establishes a new grant program to maintain public transportation systems in a state of good repair. This program replaces the fixed guideway modernization program (Section 5309). Funding is limited to fixed guideway systems (including rail, bus rapid transit, and passenger ferries) and high intensity bus (high intensity bus refers to buses operating in high occupancy vehicle (HOV) lanes.) Projects are limited to replacement and rehabilitation, or capital projects required to maintain public transportation systems in a state of good repair. Projects must be included in a transit asset management plan (see next section) to receive funding. The new formula comprises: (1) the former fixed guideway modernization formula; (2) a new service-based formula; and (3) a new formula for buses on HOV lanes.

Bus and Bus Facilities Program (5339)

A new formula grant program is established under Section 5339, replacing the previous Section 5309 discretionary Bus and Bus Facilities program. This capital program provides funding to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities. This program requires a 20 percent local match.



H. State Transit Revenue Sources

State Special Transportation Fund (STF) – ODOT’s Public Transit section administers a discretionary grant program derived from state cigarette-tax revenues that provides supplementary support for transit-related projects serving the elderly and disabled. JCT uses their allocation for local match of other federal funds. A competitive process has been established for awarding STF funds, which are programmed on an annual basis.

Non-Emergency Medical Transportation (NEMT) – This fund source pays for non-medical transportation services for those who qualify for the Oregon Medical Assistance Program (OMAP).

I. Local Transit Revenue Sources

Farebox Revenues and Bus Pass Revenues – Farebox revenues, the fares paid by users of transit systems, and bus-pass revenues both are fees paid directly by users of the transit system. Such fees cover about twelve percent of JCT’s operating costs.

Other – Other funding includes contracted services, miscellaneous contracts, and an STF administrative allotment.

J. Revenue Projections

Projecting revenues over long time periods – in this case, 25 years – necessarily involves making several assumptions that may or may not prove valid. For example, changing social, economic and political conditions cannot be predicted, yet these factors play important roles in determining future funding levels for regional transportation system and local street improvement projects. In general, revenue projections for federal and state revenue sources described here rely on information provided by MRMPO member jurisdictions and ODOT.

K. Responding to Risk

Developing revenue forecasts over the long range requires assumptions about a broad range of unknowns, from fuel costs, consumption and sales, to levels of political support – federal, state and local – for transportation. A reasonable assumption, or set of assumptions, one year can change drastically with an election, or a shift in the economy. Circumstances underpinning some assumptions can change rapidly, such as enactment of a new transport act, while others, such as

the recent downward tick in gasoline consumption, develop over months and years. Given the resulting level of uncertainty associated with assumptions in this plan, it is important to remember that the plan is reviewed and updated every four years. The frequent re-evaluation of the financial assumptions helps to ensure their usefulness.

The revenue estimates include assumptions that while responsible and solidly based on history may not come to pass. Matching the financial uncertainty is the initiation locally of a new kind of regional planning process. The City of Grants Pass is emerging from a major Urban Growth Boundary (UGB) expansion effort with identified growth areas extending beyond the horizon of this plan. The City of Grants Pass UGB expansion sets the stage for region-level planning to enhance existing corridors and develop new corridors. Member jurisdictions are in the process of updating their state-mandated Transportation System Plans (TSPs) which will inform the RTP when completed.

TSPs are critical to the development of RTP project lists. Through the TSP process, needs on the local level are identified and addressed. Projects developed in TSPs flow into the RTP. As this RTP is being drafted, Grants Pass, Rogue River and Josephine County will be updating their TSPs and Gold Hill will begin development of a Local Street Network Plan (LSNP), so details about many long-range projects have yet to be determined. This magnifies the level of uncertainty, especially beyond funding commitments programmed through 2018.

L. MRMPO RTP Funding Forecasts, Assumptions

Table 9.2 below shows the projected 25-year capital funding scenario for regional transportation system's local street and transit projects. Transportation revenue estimates for MRMPO cities are shown by funding source. The estimated non-capital needs (e.g., operation and maintenance) are then subtracted to yield the final column – “capital funds available” - which will be used to fund RTP projects.

Because the MRMPO comprises only a portion of the Josephine County, Jackson County and Oregon Department of Transportation (ODOT) jurisdictional boundaries, revenue estimates have not been similarly identified for these agencies. Rather, projections of capital funding availability for Josephine & Jackson County MRMPO projects funded by these agencies have been made based on estimated State Highway Funds (SHF) prorated for the percent of rural population within the MRMPO boundary and any federally-funded projects located in the MPO area. Capital funding availability for Josephine and Jackson County and ODOT assumes that non-capital (operation and maintenance) needs are fully funded, consistent with Josephine and Jackson County and ODOT policies.

In addition to 25-year revenue projections, Table 9.2 shows estimated costs for implementation of the RTP Tier 1 projects. On the following pages, Table 9.3 describes the financial assumptions made by the MRMPO to calculate revenues.

Planned projects for which funding cannot be identified are in the Tier 2 (illustrative) project list, which is discussed in detail in another chapter.

Table 9.2 – Street & Transit System Revenue and Non-Capital Needs

Jurisdiction	Time Frame	Street System Revenues						Non-Capital Needs	Capital Funds Avail.	Tier 1 Regional & Federally Funded Projects	MRMPO Future Discretionary Funds
		Federal	State	Local			Total				
				SDC's	Fees	Other					
Gold Hill	short	\$0	\$522,057	\$0	\$0	\$50,000	\$572,057	\$263,718	\$308,339	\$0	\$0
	medium		\$1,147,677	\$0	\$0	\$100,000	\$1,247,677	\$536,395	\$711,282	\$0	\$0
	long		\$1,606,078	\$0	\$0	\$100,000	\$1,706,078	\$686,631	\$1,019,447	\$0	\$0
Grants Pass	short	\$3,403,653	\$14,917,560	\$1,127,325	\$5,584,042	\$123,000	\$25,155,580	\$14,764,844	\$6,987,083	\$9,739,470	\$3,403,653
	medium		\$32,794,413	\$2,913,172	\$10,747,367	\$205,000	\$46,659,952	\$30,069,143	\$16,590,810	\$29,628,718	\$17,844,812
	long		\$45,893,009	\$3,482,121	\$12,846,354	\$205,000	\$62,426,484	\$38,491,045	\$23,935,439	\$18,821,348	\$10,020,332
Rogue River	short	\$188,000	\$918,540	\$63,877	\$102,204	\$584,000	\$1,856,621	\$1,236,651	\$619,970	\$570,000	\$0
	medium		\$2,019,297	\$129,925	\$207,880	\$990,000	\$3,347,102	\$2,319,174	\$1,027,928	\$0	\$0
	long		\$2,825,835	\$166,315	\$266,104	\$545,000	\$3,803,254	\$2,274,463	\$1,528,790	\$1,500,000	\$1,035,210
Josephine Co. (MRMPO Area)	short	\$939,000	\$4,916,386	\$0	\$0	\$0	\$5,855,386	\$4,916,386	\$939,000	\$939,000	\$0
	medium		\$10,772,763	\$0	\$0	\$0	\$10,772,763	\$10,772,763	\$112,508	\$1,095,500	\$982,992
	long		\$15,026,718	\$0	\$0	\$0	\$15,026,718	\$15,026,718	\$335,638	\$2,932,500	\$2,596,862
Jackson Co. (MRMPO Area)	short	\$403,000	\$724,726	\$0	\$0	\$0	\$1,127,726	\$724,726	\$47,000	\$403,000	\$0
	medium		\$1,588,016	\$0	\$0	\$0	\$1,588,016	\$1,588,016	\$0	\$0	\$0
	long		\$2,215,093	\$0	\$0	\$0	\$2,215,093	\$2,215,093	\$0	\$0	\$0
ODOT (MRMPO Area)	short	These figures are not applicable to the MPO area - see assumptions table.							\$17,679,191	\$17,679,191	\$0
	medium	These figures are not applicable to the MPO area - see assumptions table.							\$0	\$0	\$0
	long	These figures are not applicable to the MPO area - see assumptions table.							\$0	\$0	\$0
Street System Totals		\$40,817,514	\$137,888,168	\$7,882,736	\$29,753,950	\$2,902,000	\$183,360,507	\$125,885,765	\$71,842,426	\$83,308,727	\$35,883,861
JCT	Time Frame	Transit Revenues					Total	Transit Expenses	Balance		
		Federal	State	Local							
	Contracted Services			Farebox							
	short	\$9,732,262	\$1,152,655	\$1,324,705	\$1,009,187	\$13,218,810	\$8,186,838	\$5,031,971			
	medium	\$10,372,359	\$1,977,973	\$2,589,545	\$1,895,857	\$16,835,733	\$14,135,493	\$7,732,211			
long	\$12,543,501	\$2,684,152	\$3,156,640	\$2,200,219	\$20,584,512	\$17,886,348	\$10,430,376				
Totals	\$32,648,122	\$5,814,780	\$7,070,890	\$5,105,263	\$50,639,055	\$40,208,680	\$10,430,376				

Table 9.3 – Street & Transit System Revenue and Non-Capital Needs Assumptions

Jurisdiction	Revenues						Non-Capital Needs	Capital Funds Avail.
	Federal	State	JCT	Local				
				SDC's	StreetUtilityFees (SUFs)	Other		
Gold Hill	ODOT (March 2014) estimates that approximately \$36 million in Enhance-It funds will be available to the MRMPO from 2015-2040. ODOT (September 2013) estimates that approximately \$24 million in CMAQ funds will be available to the MRMPO from 2015 to 2040 @ 1.4% annual increase. ODOT (September 2013) estimates that \$17 million in STP funds will be available to the RVMPO from 2015-2040 @ 1.4% annual increase. \$2.4M of the MPO's short term (2015-20) STP has been programmed for specific projects in the RTP. \$1.9M in STP remains unprogrammed through the short-range (through 2020). Short-range unprogrammed STP, as well as all medium and long-range STP funds are assumed to be available for projects included in the RTP.	ODOT (September 2013) provided estimates for Hwy Funds for 2015-2040. Current Law - MRMPO City Share = % of city's population divided by Oregon incorporated cities total population e.g., Grants Pass population - 34,855 / 2,716,667 = 1.2830% * \$177 million (2015 current law) = \$2.28 million Current Law - Josephine & Jackson County Share (population within MRMPO) = % of population within MPO area divided by total population of Oregon.	Revenues: 5307 - \$500K in 2105, 2% annual increase. NEMT - \$36K in 2015, 2% annual increase. 5311 - \$77K in 2015, 1% annual increase. STF - \$143K in 2015, 3.1% annual increase. Contract Services - \$210K in 2015, 2% annual increase. EIP - \$74K in 2015, 1.5% annual increase to 2017. Farebox - \$162K in 2015, 1.5% annual increase. CMAQ - \$441K for 2015 to 2017. 5309 - \$280K to 2020. 5310 - \$331K annually to 2020. Expenditures: Operations - \$828K in 2015, 2% annual increase. Maintenance - \$326K in 2015, 3% annual increase. Admin - \$122K in 2015, 2.5% annual increase. 5309 Capital - \$75K to 2020.	No SDC's	No SUFs	Other revenues include Small City Allotment (SCA) funds and are expected to average about \$50K per 3 years.	2015 expenses include: Maintenance \$41K. An annual increase of 2.5% is assumed for maintenance expenses through 2040.	Capital funds available for cities in the MRMPO equal the amounts in the "Revenues" column minus the amounts in the "Non-Capital Needs" column.
Grants Pass			SDC's are expected to be about \$100K in 2016 and increase by about 1.8% per year through 2040.	Street Utility Fees are expected to be \$888K in 2015 and increase by 1.8% per year until 2040.	Other revenues are expected to be \$123K Short Range, \$205K Medium Range and \$205K Long Range.	Expenses include administration \$602K in 2015 and maintenance \$1.7M in 2015. An annual increase of 2.5% has been assumed for these expenses through 2040.		
Rogue River			SDC's are expected to be about \$10K in 2015 and increase at 2.5% per year.	Street Impact Fees are expected to be about \$16K in 2015 and increase by 2.5% per year.	Other revenues include Small City Allotment (SCA) funds and are expected to average about \$50K per 3 years.	2015 expenses include: admin (\$10K) and maintenance (\$100K). An annual increase of 2.5% is assumed for these expenses through 2040. Debt service is \$89K from 2015 to 2035.		
Josephine Co. (MPO Area)	Because the MRMPO comprises only a portion of the Josephine County, Jackson County and Oregon Department of Transportation (ODOT) jurisdictional boundaries, revenue estimates have not been similarly identified for these agencies. Rather, projections of capital funding availability for Josephine & Jackson County MRVMPPO projects funded by these agencies have been made based on estimated State Highway Funds (SHF) prorated for the percent of rural population within the MRMPO boundary and any federally-funded projects located in the MPO area. Capital funding availability for Josephine and Jackson County and ODOT assumes that non-capital (operation and maintenance) needs are fully funded, consistent with Josephine and Jackson County and ODOT policies.							
Jackson Co. (MPO Area)								
ODOT (MPO Area)								

Chapter 9 – Air Quality

A. Introduction

To receive transportation funding or approvals from the Federal Highway Administration and the Federal Transit Administration, state and local transportation agencies with plans, programs or projects in nonattainment or maintenance areas, must demonstrate that they meet the transportation conformity requirements of the federal Clean Air Act, as implemented in specific federal and state transportation conformity rules.

To meet the requirements, Metropolitan Planning Organizations (MPOs) must show that the anticipated emissions resulting from implementation of transportation plans, programs and projects are consistent with and conform to the purpose of the State Implementation Plan (SIP) for air quality. A SIP is a plan mandated by the Clean Air Act and developed by the state that contains procedures to monitor, control, maintain and enforce compliance with the National Ambient Air Quality Standards (NAAQS). SIPs are required to be developed once a region has violated the standards. See map 9-1 AQMA boundaries.

“To meet the requirements, Metropolitan Planning Organizations (MPOs) must show that the anticipated emissions resulting from implementation of transportation plans, programs and projects are consistent with and conform to the purpose of the State Implementation Plan (SIP) for air quality.”

Within the MRMPO area, demonstration of conformity to two SIPs is required: a carbon monoxide (CO) limited maintenance plan, or SIP, within the Grants Pass Central Business District (CBD), and a particulate (PM₁₀) limited maintenance plan within the Grants Pass Urban Growth Boundary (UGB).

1. Carbon Monoxide Status

Oregon Department of Environmental Quality (ODEQ) developed a Carbon Monoxide Limited Maintenance Plan (LMP) for the Grants Pass area, which was submitted to EPA on April 22, 2015 and went into effect on September 28, 2015. To be eligible for CO LMP, an area has to have a design value at or below 7.65 ppm. Based on ODEQ’s review of the 2002 – 2005 CO emissions data for Grants Pass the area meets the requirements for an LMP.

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.

2. PM₁₀ Status

Grants Pass has been below the NAAQS for PM₁₀ since 1988. Oregon Department of Environmental Quality (ODEQ) developed a PM₁₀ Limited Maintenance Plan (LMP) for the Grants Pass area, which was submitted to EPA on April 22, 2015 and went into effect on September 28, 2015.

As an area with a limited maintenance plan, the MRMPO is no longer required to perform emissions analysis for PM₁₀ but still must demonstrate conformity as discussed below.

According to federal rules, while areas with approved limited maintenance plans are not required to perform a regional emission analysis, they are required to demonstrate conformity of the transportation plans as stated in 40 CFR Part 93, Subpart A.

3. Conformity Findings

The air quality conformity determination (AQCD) for this plan shows that with the implementation of the MRMPO 2015-2040 Regional Transportation Plan and 2015-2018 Metropolitan Transportation Improvement Program current federal air quality standards for regional transportation conformity will continue to be met in the Grant Pass CO and PM₁₀ Limited Maintenance Areas.

“As an area with a limited maintenance plan, the MRMPO is no longer required to perform emissions analysis for PM₁₀ but still must demonstrate conformity...”

4. How the MRMPO Demonstrates Conformity

An AQCD is required whenever the Regional Transportation Plan (RTP) or Metropolitan Transportation Improvement Program (MTIP) is updated, or every four years, whichever comes first. USDOT must make the conformity determination before the plan and program can go into effect.

In the MRMPO area, the conformity document must show that through the horizon of the plan and program transportation conformity requirements will be met. These requirements (CFR 40 Part 93 Subpart A) and how the MRMPO is meeting regulations in regards to the adoption of the 2040 RTP are presented below.

- a. Transportation plans and projects provide for timely implementation of SIP transportation control measures (TCMs) in accordance with 40 CFR 93.113;
 1. The equivalent State Rule is OAR 340-252-0140.
 2. There are no TCMs identified in the SIPs for the Grants Pass PM₁₀ and CO Maintenance areas.
- b. Transportation plans and projects comply with the fiscal constraint element per 40 CFR 93.108;
 1. The equivalent State Rule is OAR 340-252-0090.
 2. As required by federal regulations, the adopted MRMPO 2040 RTP is financially constrained, containing only those projects that funds are identified for or ‘reasonably expected’ to be available over the time frame of the plans.
 3. The financial constraint assumptions developed for the MRMPO 2040 RTP are shown in Chapter 8 of the RTP.

- c. The MPO's interagency consultation procedures meet applicable requirements of 40 CFR 93.105;
 - 1. The equivalent State Rule is OAR 340-252-0060.
 - 2. A draft of the AQCD document was circulated to ODOT, EPA, Oregon DEQ, FHWA, and FTA prior to adoption.

- d. Conformity of transportation plans is determined no less frequently than every four years, and conformity of plan amendments and transportation projects is demonstrated in accordance with the timing requirements specified in 40 CFR 93.104;
 - 1. The equivalent State Rule is OAR 340-252-0050 which currently specifies conformity to be determined every four years.

- e. The latest planning assumptions and emissions model are used as set forth in 40 CFR 93.110 and 40 CFR 93.111;
 - 1. The equivalent State Rule is OAR 340-252-0110 for the latest planning assumptions.
 - 2. Estimates of population and employment for the area have been made, which are based on the adopted comprehensive plans and TSPs for the MRMPO area. Assumptions regarding the financial situation the MRMPO area is anticipated to face over the next 24 years have been updated, in conjunction with ODOT, Josephine Community Transit, and the local jurisdictions.
 - 3. Equivalent State Rule is OAR 340-252-0120 regarding the latest emissions model.
 - 4. The Grants Pass area is designated as attainment for PM₁₀ and carbon monoxide. Limited maintenance plans for carbon monoxide and PM₁₀ for the area went into effect on September 28, 2015. As such, no regional emissions modeling is required for the conformity determination.

- f. Projects do not cause or contribute to any new localized carbon monoxide or particulate matter violations, in accordance with procedures specified in 40 CFR 93.123; and
 - 1. Projects included in the MRMPO 2040 RTP that are required to perform hot spot analysis will have this conducted by the project sponsors during the appropriate phase of the project.

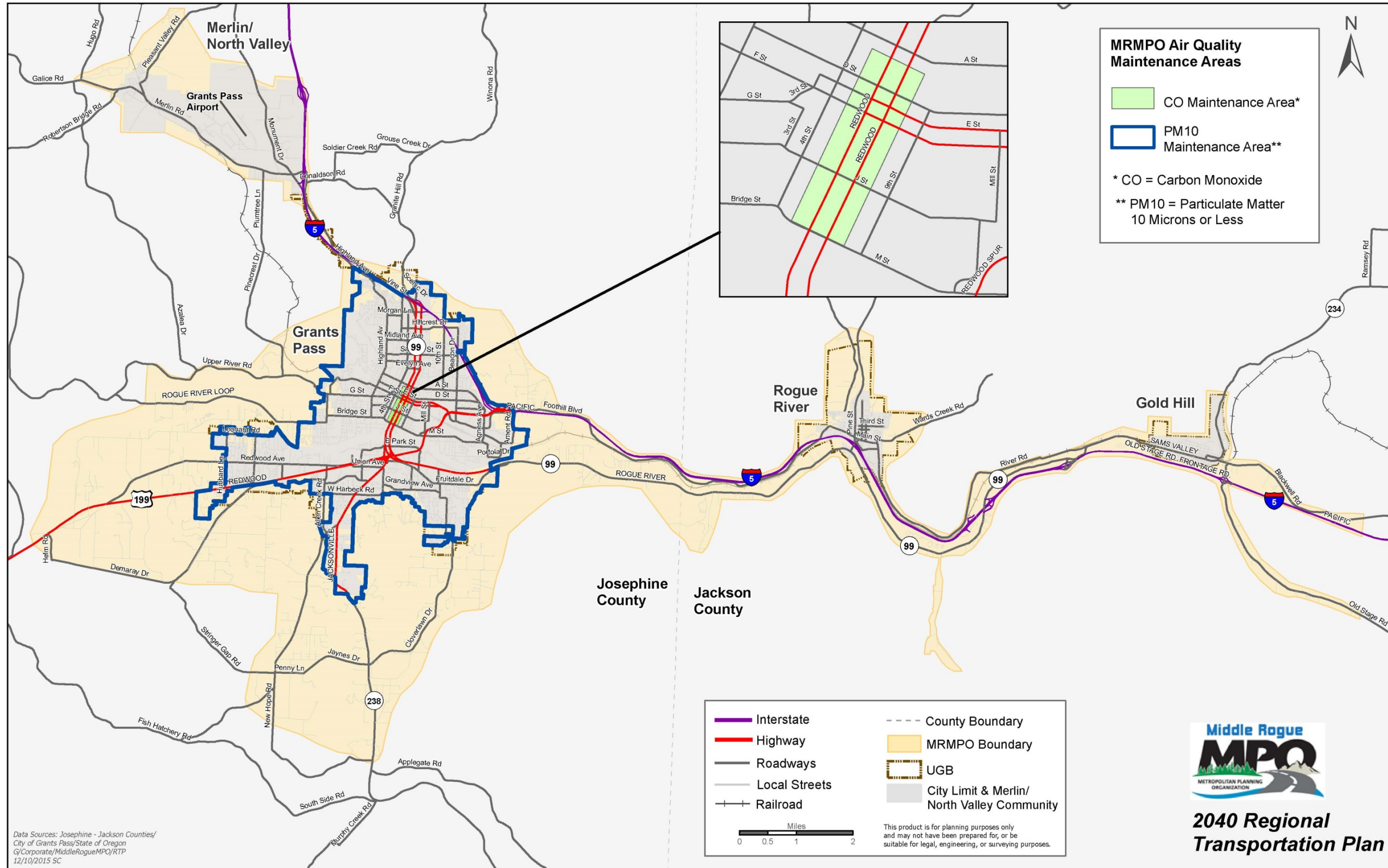
- g. Project sponsors and/or operators provide written commitments as specified in 40 CFR 93.125.
 - 1. Project sponsors and operators will conform to the CAA requirements.

Response to the applicable conformity criteria and procedures as they apply to the MRMPO 2040 RTP, as per State of Oregon conformity rules (OAR 340-252-0010 et seq.), is made in the following text. This checklist is provided to assist in the state and federal review of this conformity determination and the consultation requirements of OAR 340-252-0060.

5. Actions to be taken

The MRMPO Policy Committee, as the policy board for the federally designated Metropolitan Planning Organization, must formally adopt the findings described in the AQCD. Then, USDOT and the federal Environmental Protection Agency confer on the analysis. Ultimately, USDOT will make a conformity determination based on the AQCD. At that time, the MRMPO's 2015-2040 plan will go into effect, as well as the 2015-2018 MTIP.

Map 9-1 – Air Quality Maintenance Areas



Chapter 10 – Environmental Considerations

The Environmental Considerations Chapter includes a discussion of potential environmental impacts, avoidance and mitigation activities at the policy and strategy level rather than from a project-specific level. This analysis is a specific requirement of the Moving Ahead for Progress for the 21st Century (MAP-21), signed into law in 2012.

This discussion was developed in consultation with federal, state and tribal wildlife, land management, and regulatory agencies, as shown on Table 10.1.

Table 10.1

<i>Agency</i>
Confederated Tribes of Siletz Indians
Cow Creek Band of Umpqua Tribe of Indians
Oregon Department of Environmental Quality (DEQ)
Oregon Department of State Lands (DSL)
Oregon Department of Fish and Wildlife (ODFW)
Oregon Department of Transportation (ODOT)
Oregon Department of Land and Conservation (DLCD)
Oregon State Historic Preservation Office (SHPO)
U.S. Army Corps of Engineers (USACE)
U.S. Department of Commerce, National Marine Fisheries Service (NMFS)
U.S. Department of Transportation Federal Highway Administration (FHWA)
The Confederated Tribes of Grand Ronde
U.S. Department of Transportation Federal Transit Administration (FTA)
U.S. Environmental Protection Agency (EPA)
U.S. Fish and Wildlife Service (USFWS)

Environmental mitigation activities are defined in MAP-21 as strategies, policies, programs, actions and activities that over time will serve to minimize or compensate for the impacts to or disruption of elements of the human and natural environment associated with the implementation of the Regional Transportation Plan (RTP).

MAP-21 requires that metropolitan planning organizations, as part of the consultation process, discuss types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain

the environmental functions affected by the plan. These activities should also be developed in consultation with Federal, State and tribal wildlife, land management and regulatory agencies (23 U.S.C. 134(i)(2)(D)).

To fulfill this requirement, a comparison of projects in the RTP to historic and environmentally-sensitive areas was conducted to determine the environmental impacts and potential mitigation activities that could be implemented in areas where a project intersects a resource area.

MAP-21 requires a discussion of potential mitigation activities for each environmental resource affected by the RTP. These activities will be considered if the project, at the time of implementation, would produce any effect on the environment.

This RTP includes non-federally-funded regionally significant projects for air quality purposes and projects that receive federal funds. Some environmental laws and regulations are applicable regardless of the funding source. This chapter will outline the applicability of those laws and regulations as related to expected funding.

A. Inventory and Mapping

The MRMPO inventoried historic and natural resources within the MPO planning boundary. The work was coordinated with the appropriate federal, state, tribal, wildlife, land management and regulatory agencies.

The MRMPO collaborated with consultation partners to identify and obtain the most current, complete and accurate data possible from which to develop the inventory in this chapter.

This framework consists of a library of Geographical Information Systems (GIS) shape files (data layers); and a set of maps highlighting ecologically important areas, linkages within and outside of the valley, and conflicts with planned transportation projects or existing transportation structures (e.g., culverts).

Data was incorporated into GIS to create the maps that illustrate important environmental areas. Inventory and resource data are included in the discussion sections of this chapter; all maps appear in numerical order at the end of the chapter.

Environmental Considerations Maps 10-1 through 10-8 depict information pertaining to:

- Prime Agricultural Soils, Viticulture Areas, Vineyards, and Orchards
- Wetlands and Special Flood Hazard Areas
- Fish Passage Barriers, Salmonid Habitat, and Water Quality (TMDL) Limited Streams
- Conservation Opportunity Areas, Wildlife Sensitivity, and Wildlife Linkages
- Wildlife Movements
- Wildlife Collision Hotspots
- Historic Places
- RTP Projects Intersecting Selected Environmental or Historic Areas

Details about selected maps appear below, with more in depth discussion of issues surrounding environmental features in the sections that follow. Map pages begin on page 10-18.

Prime Agricultural Soils, Viticulture Areas, Vineyards, and Orchards Map 10-1 – RTP projects that are located on agricultural soils (irrigated soils classes 1-4). This soil information is derived from U.S. Department of Agriculture (USDA) soils data, which categorize soils into eight capability classes. Viticulture areas represent the areas that meet the criteria for High Value farmland within the Viticultural Area per ORS 195. Vineyard information for both counties is provided by Greg Jones, Professor of Environmental Science and Policy, Southern Oregon University.

Wetlands and Special Flood Hazard Area, Map 10-2 – illustrates RTP projects that intersect the National Wetlands Inventory, Grants Pass Local Wetlands Inventory, and FEMA’s Special Flood Hazard Area (100 year floodplain). Note: The National Wetlands Inventory has limitations for planning efforts including the lack of mapping wetlands smaller than one acre, farmland wetlands, and some other smaller features. Due to the lacking information, some mitigation opportunities and potential impact areas may be missed if better location information is not available. (DSL 2015)

Fish Passage Barriers, Salmonid Habitat, and TMDL (Water Quality Limited) Streams, Map 10-3 – Identifies fish passage barriers (primarily culverts and dams) and illustrates RTP projects that intersect with Salmonid habitat (Coho salmon, Chinook Salmon, and Steelhead) and TMDL approved streams (water quality limited streams). Streams for which management plans (Total Maximum Daily Load action plans) have been approved are shown.

Conservation Opportunity Areas, Wildlife Sensitivity, and Wildlife Linkages, Map 10-4 – Identifies ODFW’s priority areas for conservation actions that directly benefit wildlife and habitats (conservation opportunity areas), wildlife sensitivity data, and key movement areas for wildlife (linkages).

Wildlife Movements, Map 10-5 – illustrates RTP projects that overlap with ODFW wildlife movement data, which are key movement areas for wildlife, emphasizing areas that cross paved roads.

Wildlife Collision Hotspots Map 10-6 –illustrates RTP Projects that overlap with high frequency wildlife carcass incidents (from Oregon Department of Transportation dispatch records of carcass reports). Includes only records of deer and elk.

Historic Places, Map 10-7 – The National Parks Service National Register of Historic Places mapped with the RTP projects.

B. Environmental Justice

Environmental Justice encompasses three fundamental principles:

1. 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
2. Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process
3. Prevent the denial of, reduction in, or significant delay of these protections for minority and low-income populations.

These principles work to identify and appropriately address disproportionately high and adverse health or environmental effects on minority and low-income populations.

Environmental Justice stems from Title VI of the Civil Rights Act of 1964 and Executive Order 12898 of 1994. The latter, Executive Order 12898, states that federal agencies incorporate achieving Environmental Justice into their missions.

MRMPO maintains a separate civil rights plan:

http://www.mrpmo.org/images/Planning%20Documents/MRMPO.TitleVIPlan.FHWA_2.2015.pdf

One of the Middle Rogue Metropolitan Planning Organization's Environmental Justice goals is to achieve equal protection from environmental and health hazards and equal access to decision-making for all citizens of the MRMPO area in an effort to promote quality of life.

Environmental Justice principles are addressed through policy, as well as through actions by the **MRMPO** to promote equality. Through constant and consistent assessment the **MRMPO** will work to assure Environmental Justice.

C. Environmental Considerations in Planning

It is appropriate to begin considering the environmental consequences of any policy, project, and/or program that address transportation deficiencies. However, such consideration is not expected to be at the same level of detail as may be required by the National Environmental Policy Act (NEPA). It is important to note that a NEPA process is required for any transportation project having a federal nexus. A project has a federal nexus if it involves federal funding, a federal permit or approval, use of federal lands, or a federal program.

1. Early Consideration of Environmental Consequences

A common principle of environmental laws and regulations is a stepped process that focuses on:

- Avoiding impacts to resources;
- Minimizing those impacts that are unavoidable, and

- If impacts are not avoidable, mitigating for those impacts.

If these processes can be considered at a regional level, projects may be able to advance through required environmental processes more quickly than projects whose impacts must be evaluated and considered independently.

2. Use of Environmental Information

Environmental information is typically collected and analyzed in the transportation planning process. The **MRMPO** maintains a GIS library of environmental data that can be used to identify and document potentially affected environmental resources. This information can then be used to identify opportunities to avoid or minimize environmental impacts of any alternative transportation solutions being considered, modify alternatives being considered, or potentially eliminate alternatives with unacceptable or greater environmental consequences.

Maps 10-1 through 10-8 were created by overlaying the planned transportation projects with environmental data including wetlands, floodplains, fish (salmonid) habitat, wildlife critical habitats, and ecologically sensitive areas.

Documentation – Environmental information and/or analyses used in the planning process, and environmental impact avoidance or minimization actions taken, should be thoroughly documented. This will allow information to be used again, or incorporated as evidence of mitigation, resulting in effective and expedited environmental review.

3. Evaluation of Impacts

The evaluation of the impacts a roadway project has on natural areas and historic resources shall take into account (23 CFR Part 777.7):

- a. The importance of the impacted wetlands and natural habitats. Evaluation shall consider:
 - Wetland and natural habitat functional capacity
 - Relative importance of these functions to the total wetland or natural habitat resource of the area
 - Other factors such as uniqueness, aesthetics, or cultural values; and
 - Input from the appropriate resource management agencies through interagency coordination.
- b. The extent of roadway impacts on the wetlands and natural habitats
- c. Actions necessary to comply with the Clean Water Act, Section 404; the Endangered Species Act of 1973; and other relevant Federal statutes. The short and long-term effects of the project on wetland or natural habitat functional capacity.

4. Avoidance, Minimization, Mitigation

The MRMPO, utilizing GIS, species accounts, soil types and other relevant data, seeks to avoid or minimize environmental impacts to the greatest extent possible. Agency review (NOAA Fisheries 2015 and ODFW 2015) has also emphasized the importance of avoiding and minimizing impacts.

Where impacts cannot be avoided, efforts will be made to ensure appropriate mitigation. Additionally, the MRMPO works with other agencies to provide greater benefits to the environment regionally. Additional discussion of avoidance, minimization and mitigation appears in subsequent sections addressing specific resources.

The Rogue Valley Council of Governments has a Natural Resource Department that coordinates and facilitates resource projects within the region. Subsequently, this internal knowledge of natural resources, combined with regional collaboration, will lead to improved avoidance measures and natural resource mitigation activities.

Mitigation is the attempt to offset potential adverse effects of human activity on the environment. Mitigation is the last step of the avoidance and minimization process. The National Environmental Policy Act regulations define mitigation (40 CFR 1508.20) as follows:

1. Avoiding adverse impacts by not taking an action.
2. Minimizing impacts by limiting the degree of action.
3. Rectifying by repairing, rehabilitating, or restoring the affected environment.
4. Reducing or eliminating impacts over time through preservation and maintenance activities.
5. Compensating for an impact by replacing or providing substitute resources or environments. In most mitigation agreements, more of a resource or habitat must be provided than was originally present. Ratios greater than 1:1 are required in part to compensate for unrealized losses and the inability of technology to completely restore the natural environment.

5. Wetlands and Natural Habitats

The MRMPO encourages progressive approaches to wetlands and natural habitat mitigation. These approaches include the development of conservation and mitigation banking agreements or the purchase of intact natural areas. Conservation and mitigation banks differ to some degree. Mitigation bank could refer to mitigation of any habitat, although they are typically referring to wetland mitigation per federal guidance for Compensatory Mitigation for Losses of Aquatic Resources, Federal Register / Volume 73, Number 70, Thursday, April 10, 2008 / Rules and Regulations, Army Corps of Engineers (COR), 33 CFR Parts 325 & 332, Environmental Protection Agency (EPA), 40 CFR Part 230 or State guidance ORS 196.600 to 196.655.

Whereas conservation banks are oriented toward endangered, threatened and other at-risk species; habitats are selected and managed based upon the needs of those specific species. Roadway projects are linear, often resulting in many small, incremental impacts. Subsequently, on-site mitigation sometimes results in isolated wetlands and natural habitat that might not provide benefits commensurate with costs and time required to establish wetland and natural habitat functions.

Wetland or habitat banks have the ability to provide more wetland or habitat values and benefits per acre; consequently, the increased habitat benefits result in greater benefits to fauna, and often result in increased biodiversity. It is noteworthy that large contiguous habitat provides more benefits than small isolated habitats due to facilitated species movements, increased colonization rates, and decreased local extinction rates and that the mitigation area needs to receive sufficient

management to ensure their functions will be sustained in perpetuity. In some cases it may be mutually beneficial, both in preserving the environment and creating an effective transportation system, to preserve the same or similar habitats in relatively close proximity to the habitats being impacted. The MRMPO recognizes that the Rogue Valley provides valuable habitat along the Pacific flyway, one of four flyways nationwide. Therefore, the MRMPO will strive to lessen impacts to habitats upon which species are dependent.

Additionally, efforts will be made to establish and maintain regional collaboration, both in identifying potential mitigation areas and ensuring their management in perpetuity.

Reducing Impacts – There are a number of actions that can be taken to minimize the impact of roadway projects on wetlands or natural habitats (23 CFR Part 777.9).

- Avoidance and minimization of impacts to wetlands or natural habitats through: realignment and special design, construction features, or other measures.
 - Using best management practices to avoid introduction and spread of invasive species is another key issue. Road construction actions to avoid soil disturbance should be used to reduce the spread of noxious invasive plants.
 - Avoiding soil disturbance should be used to reduce the spread of noxious invasive plants.
 - Employing seasonal restrictions around bird nest sites during a critical season, thus avoiding and reducing short-term impacts to sensitive nest sites for a number of bird species in the area that could be affected, including bald eagle, golden eagle, and osprey.
- Compensatory mitigation alternatives, either inside or outside of the right-of-way. This includes, but is not limited to, such measures as on-site mitigation, when that alternative is determined to be the preferred approach by the appropriate regulatory agency; improvement of existing degraded or historic wetlands or natural habitats through restoration or enhancement on or off site; creation of new wetlands; and under certain circumstances, preservation of existing wetlands or natural habitats on or off site. Restoration of wetlands is generally preferable to enhancement or creation of new wetlands.
- Improvements to existing wetlands or natural habitats. Such activities may include, but are not limited to, construction or modification of water level control structures or ditches, establishment of natural vegetation, re-contouring of a site, installation or removal of irrigation, drainage, or other water distribution systems, integrated pest management, installation of fencing, monitoring, and other measures to protect, enhance, or restore the wetland or natural habitat character of a site.

6. Rogue Wild and Scenic River Designation

The Rogue Wild and Scenic River is best known for its outstanding natural scenery, fishing, whitewater boating, and wildlife and cultural resources. Eighty-four miles of the Rogue River was designated wild and scenic by Congress in 1968, under the Wild and Scenic Rivers Act, to preserve its outstanding qualities. The Applegate River (7 miles west of Grants Pass, Oregon) is the east boundary and Lobster Creek (11 mile east of Gold Beach, Oregon) is the west boundary.

The area gets over half a million visitors, annually. Recreation opportunities include: boating, fishing, guided motorized tour boat trips, guided whitewater fishing and float trips, camping, hiking, swimming, picnicking, wildlife viewing, and sun bathing.

Although the Wild and Scenic section is not within the MRMPO Boundary, consideration of downstream impacts of projects is recommended.

7. Mitigation Banks

The MRMPO encourages the use of mitigation banks, or other habitat preservation measures, to offset habitat impacts. Banks will be approved in accordance with the Federal Guidance for Compensatory Mitigation for Losses of Aquatic Resources, Federal Register / Volume 73, Number 70, Thursday, April 10, 2008 / Rules and Regulations, Army Corps of Engineers (COR), 33 CFR Parts 325 & 332, Environmental Protection Agency (EPA), 40 CFR Part 230, State guidance ORS 196.600 to 196.655, or other agreement between appropriate agencies. Where feasible, the MPO will attempt to collectively conserve habitat areas that provide greater environmental benefits.

Mitigation Bank Areas in the MRMPO

MAP-21 requires MPOs to provide a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities. This section of the chapter provides an overview of the potential areas to carry out mitigation activities.

There are no existing or proposed mitigation bank areas in the MRMPO area but the MRMPO area is part of the service area for the Oregon Department of Transportation (ODOT) operated Vernal Pool Mitigation/Conservation Bank (Bank) near Central Point, used for ODOT projects.

ODOT began an extensive search for prospective vernal pool complex bank sites in 2005. Several prospective sites were viewed in the field by staff from ODOT, the U.S. Fish and Wildlife Service (USFWS), the Oregon Department of Fish and Wildlife (ODFW), the U.S. Army Corps of Engineers (Corps), the Oregon Department of State Lands (DSL), the Oregon Department of Environmental Quality (DEQ), the National Marine Fisheries Service (NMFS), and the U.S. Environmental Protection Agency (EPA).

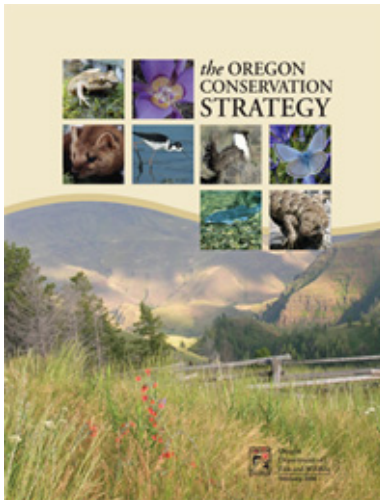
The Bank is located near the intersection of Newland and Truax Roads, in White City, Jackson County, Oregon. Originally the Bank consisted of the two parcels that comprise 80.23 acres and located west of and directly adjacent to the Nature Conservancy's Whetstone Savanna Preserve (a registered Oregon Natural Heritage Resource) and are of similar character. In 2014, ODOT completed the purchase of four additional parcels (106 acres) adjacent and to the west and north of the original Bank parcels to serve as Individual Permittee Responsible Mitigation for ODOT's Highway 62: Interstate 5 to Dutton Road Project.

The adjacent preserve's acreage is approximately 106 acres of which roughly 13 acres is high functioning. The remaining 100 plus acres will be enhanced and restored to high functioning habitat. In 2014, approximately 14 acres of the property was restored, with additional phases of restoration slated for 2015 through 2017. Cumulatively, upon completion of restoration

activities, approximately 196 acres of contiguous high functioning vernal pool complex will be protected and under management to sustain wetland functions and values.

8. Wildlife Habitat

The Oregon Department of Fish and Wildlife's (ODFW) follows a conservation strategy that focuses on habitat restoration and maintenance to address the needs of game and nongame species.



The strategy highlights specific actions that can conserve Oregon's fish and wildlife when the chances of success are greatest before they become sensitive or endangered.

The strategy provides information about species and habitats in every region in Oregon and the issues affecting their present and future health. This information is included in the RTP for the purpose of:

- Landowners and land managers who want to improve conditions for at-risk wildlife;
- Agencies and organizations interested in making conservation investments more effective and efficient; and
- Oregonians who want a better understanding of the conservation issues of concern in their area.

The link below offers more information on the ODFW Conservation Strategy for Oregon:
<http://www.dfw.state.or.us/conservationstrategy/contents.asp>

Conservation Strategy for Oregon – Klamath Mountains Ecoregion

The **MRMPO** is situated within the Klamath Mountains ecoregion which covers much of southwestern Oregon, including the Umpqua Mountains, Siskiyou Mountains and interior valleys and foothills between these and the Cascade Range. Several popular and scenic rivers run through the ecoregion, including: the Umpqua, Rogue, Illinois, and Applegate.

Within the ecoregion, there are wide ranges in elevation, topography, geology, and climate. The elevation ranges from about 600 to more than 7400 feet, from steep mountains and canyons to

gentle foothills and flat valley bottoms. This variation along with the varied marine influence support a climate that ranges from the lush, rainy western portion of the ecoregion to the dry, warmer interior valleys and cold, snowy mountains.

The Klamath Mountains ecoregion boasts a high rate of species diversity, including many species found only locally. In fact, the Klamath-Siskiyou region was included in the World Wildlife Fund's assessment of the 200 locations most important for species diversity world-wide.

The region is particularly rich in plant species, including many pockets of endemic communities and some of the most diverse plant communities in the world. For example, there are more kinds of cone-bearing trees found in the Klamath Mountains ecoregion than anywhere else in North America. In all, there are about 4,000 native plants in Oregon, and about half of these are found in the Klamath Mountains ecoregion.

The ecoregion is noted as an Area of Global Botanical Significance (one of only seven in North America) and world "Centre of Plant Diversity" by the World Conservation Union. The ecoregion boasts many unique invertebrates, although many of these are not as well studied as their plant counterparts.

While the Klamath Mountains ecoregion is ecologically unique, it embodies many of the conservation issues facing other parts of Oregon. For example, increasing population growth and development in rural residential and urban communities strain resources, particularly in the southern and eastern portions of the ecoregion. The Klamath Mountains is the second fastest-growing ecoregion in Oregon (the Willamette Valley is experiencing the fastest rate of expansion). Much of the population growth is concentrated in valleys along the Interstate 5 corridor. Demands for choice building sites often coincide with good quality habitat.

Land use conversion and urbanization, loss of habitat connectivity and invasive species are limiting factors identified by the Strategy for this ecoregion. Appropriate transportation planning as well as project design and implementation can be a valuable tool in addressing these factors.

Recent indicators suggest that water quality and riparian condition in the ecoregion may be improving. Much of this change could be attributed to local collaborative conservation efforts via watershed councils and other groups.

For more information on the Klamath Mountains Ecoregion and possible actions recommended to restore habitats identified in this ecoregion click on the link below:

http://www.dfw.state.or.us/conservationstrategy/document_pdf/b-eco_km.pdf

Habitat Conservation Opportunities

As defined in the Conservation Strategy, Conservation Opportunity Areas (COAs) are landscapes where broad fish and wildlife conservation goals would be best met. COAs were developed to guide voluntary, non-regulatory actions. ODFW is in the process of updating COA's and have expanded the North Medford COA so that a portion of the MRMPO planning area is now included.

9. Barriers to Wildlife Movement

Barriers to wildlife movement is identified in the Oregon Conservation Strategy as one of the key conservation issues facing Oregon's habitat and species. Highway and road networks are particularly disruptive to carnivore species that require long-distance movements to meet their life-history requirements, herptiles such as Pacific Giant Salamander, Northwestern Garter Snake, Common Kingsnake, Common Gartersnake and Western Pond Turtles in the area and migratory deer that are especially vulnerable during fall and spring to vehicle collisions ODFW is working with the Oregon Department of Transportation, county transportation departments, and other partners to identify and reduce fish passage barriers and areas where wildlife mortality on highways occurs. ODFW's fish passage rules can be found here: <http://www.dfw.state.or.us/fish/passage/> (OAR Chapter 635 Division 412).

ODFW notes that stream crossing designs must meet fish passage criteria in order to provide fish passage for Oregon's native migratory fish species. Barriers to migration are a big challenge to recovery for the fish species in the Rogue Basin. In the MRMPO area numerous tributaries have significant barriers near their confluence with the Rogue River. Restoration of native fish populations will lag if fish are not able to utilize the habitat available in the watershed, including urban stream areas.

During a project near a stream, it may be possible to utilize equipment and personnel to do smaller scale restoration projects on the nearby waterbody, such as adding some minor retrofits to improve fish passage. This can be scoped with ODFW pre-project.

ODOT is a cooperator on the Oregon Wildlife Movement Strategy, an interagency partnership to inventory and prioritize wildlife movement barriers on the state highway system. ODOT's Geo-Environmental Section is developing a Wildlife Collision Prevention Plan that addresses Federal Highway Administration and Oregon Department of Fish and Wildlife concerns for animal-vehicle collisions on the state highway system.

The effects of roads on wildlife can be mitigated through the design and construction of underpasses and overcrossings. For more information on wildlife and roads, click on the links below:

<http://www.wildlifeandroads.org/decisionguide/>

http://www.defenders.org/programs_and_policy/habitat_conservation/habitat_and_highways/index.php

10. Endangered Species Act

The Endangered Species Act (ESA) provides for the conservation of species that are endangered or threatened, as well as the conservation of the ecosystems on which they depend. Table 10.2 identifies a list of species (birds, fish, flowers, and mammals), their status at the local, state, or federal levels, and if there is critical habitat in the MRMPO area.

Table 10.2

<i>Species common name</i>	<i>Species scientific name</i>	<i>Status</i>	<i>Critical Habitat (CH)</i>
Birds			
Northern Spotted Owl	<i>Strix occidentalis caurina</i>	T	Y
Fish			
Coho salmon	<i>Oncorhynchus kisutch</i>	T	Y
North American Green Sturgeon	<i>Acipenser medirostris</i>	T	N
Pacific eulachon	<i>Thaleichthys pacificus</i>	T	N
Flowers			
Gentner's Fritillary	<i>Fritillaria gentneri</i>	E	N
Mammals			
Gray Wolf	<i>Canis lupus</i>	E	N
Fisher	<i>Martes pennanti</i>	pT	N

“incidental take” of a protected species. For the three fish species listed as threatened under the ESA potentially affected; Southern Oregon/Northern California Coasts (SONCC) coho salmon (*Oncorhynchus kisutch*), North American green sturgeon (*Acipenser medirostris*), and Pacific eulachon (*Thaleichthys pacificus*), as well as critical habitat designated for SONCC coho salmon, section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires entities to consult with NMFS when their actions adversely affect essential fish habitat (EFH) (NOAA Fisheries 2015).

11. Addressing Impaired Water Resources

This portion of the Rogue Valley, like many regions in the United States, has experienced development and modification of the natural landscape. Subsequently, modifications of the natural landscape have led to water resource impacts. Surface waters and associated vegetation have been altered, leaving bodies of water with impairments, such as increased temperatures, decreased dissolved oxygen levels, high levels of bacteria, and other concerns.

As a result of combined impairments to water bodies across the nation, the Clean Water Act was established. The Act includes a system for identifying and working to repair impaired water bodies. The system for identifying impaired water bodies is known as the 303(d) list and requires states to identify impaired waters within their state. The list identifies both the body of water and what impairments it has. The states are then required to prioritize their impaired water bodies and develop action plans, known as total maximum daily loads (TMDLs), to improve water quality of the listed systems.

TMDLs for the streams within the **MRMPO** (Rogue River Basin) have been approved that meet the requirements of Section 303(d) of the Federal 1972 Clear Water Act. Map 10.3 illustrates TMDL water bodies and fish passage barriers; the Rogue River is TMDL listed for bacteria (*E. coli* and Temperature). Table 10.2 lists TMDL stream segments within the **MRMPO** along with their identified impairments.

Table 10.3

<i>Stream/River</i>	<i>Pollutant(s)</i>
Applegate River	pH, mercury, flow modification, dissolved oxygen, and temperature
Birdseye Creek	temperature
Cheney Creek	dissolved oxygen
Evans Creek	bacteria and biological criteria
Galls Creek	temperature
Jackson Creek (Applegate)	dissolved oxygen
Jones Creek	E. coli and dissolved oxygen
Jumpoff Joe Creek	temperature
Kane Creek	biological criteria
Quartz Creek	temperature
Rogue River	bacteria, and temperature

12. Stormwater Monitoring and Management

Stormwater is the flow of water created by impermeable surfaces, such as roads, highways, bridges, sidewalks and parking lots. There are additional forms of development that contribute to stormwater runoff, such as commercial and residential buildings. Ultimately, the combinations of these impervious surfaces prevent water from infiltrating and percolating through the soils and into the groundwater (groundwater recharge). Consequently, water that used to be available through groundwater, as well as seeps, which may be needed by streams and other surface waters during the summer months may no longer be available. Therefore, a variety of interrelated impacts can occur.

A consequence of decreasing groundwater is a decrease in the amount of water available to surface waters, such as through seeps or springs. Typically during the warmer months when water levels are lower, seeps may be needed to augment stream flows in order to prevent surface waters (e.g., streams) from becoming shallow and warmer. Surface waters that do not receive appropriate inflow from seeps or springs may not properly function. Subsequently, the lower volumes of surface water lead to temperature increases which result in changes to aquatic and terrestrial species.

Impervious surfaces also lead to increased flows during months with high precipitation. Precipitation runs off and flows downhill (path of least resistance), and ends up in a receiving water body. It is noteworthy that increased runoff causes increased flow rates (seasonal peaks) which in turn cause scour and erosion, often resulting in modifications to the shape of the stream channel. For example, months with a lot of rain create peak flows in stream systems from the increased water being conveyed to them as a result of an increase in impervious surfaces.

Consequently, stream channels can scour and banks can erode resulting in the channel being altered and subsequent changes to habitats and composition of species.

As stormwater runoff flows over ground surfaces, it can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm drain untreated is discharged into the water bodies. Pollutants commonly found in stormwater include nutrients (nitrogen and phosphorus), oil, bacteria, fertilizers, and metals (e.g., copper, lead, and zinc from automobile brake pads).

Impacts to aquatic and terrestrial habitats and associated fish and wildlife can result from roads and other impervious surfaces. Erosion and scour that changes a stream channel will modify flow, vegetation and temperature, and subsequently favor species adapted to the newly created conditions. In addition, pollutants draining from roads and parking lots can contribute to impaired water quality and degraded wildlife habitat. In relation to fish and aquatic species, these pollutants are a source of potent adverse effects to the biotic ecosystem, even at ambient levels. They are known to accumulate in the prey and tissues of juvenile salmon where they cause a variety of lethal and sub lethal effects including disrupted behavior, reduced olfactory function, immune suppression, reduced growth, disrupted smoltification, hormone disruption, disrupted reproduction, cellular damage, and physical and developmental abnormalities (NOAA Fisheries 2015). Therefore, care in the design of the transportation system is important. Stormwater discharge is regulated under the Clean Water Act, Section 402. Projects will need to meet requirements of any local programs (e.g., NPDES Phase II) and design manuals (e.g. Rogue Valley Stormwater Water Quality Design Manual).

13. Historic and Archeological Considerations

Protection of historic and archeological resources must be considered as part of the decision-making process for transportation projects.

Numerous laws and regulations call for preservation and/or enhancement of cultural resources. These include the Department of Transportation (DOT) Act of 1966, the Federal-Aid Highway Act of 1968, the National Environmental Policy Act of 1969, the National Historic Preservation Act of 1966, the Archeological Resource Protection Act of 1979 and the Surface Transportation and Uniform Relocation Assistance Act of 1987. In addition, regulations by the Council on Environmental Quality (40 CFR, Part 1500-1508) and the Advisory Council on Historic Preservation (ACHP) (36 CFR, Part 800) have been promulgated to assure that effects on historic properties are considered in the development of federal undertakings. Historic properties are any historic district, site, building, structure or object included in, or eligible for inclusion in, the National Register of Historic Places.

Transportation officials are required to make a good faith effort to identify historic properties that may be affected by a transportation project. A discussion of the effects on historic properties must be included in the environmental documentation. This discussion is to be commensurate with the importance of the historic properties as well as the magnitude of the project's impacts on those properties.

The primary provisions related to historic preservation for transportation projects are Section 106 of the National Historic Preservation Act and Section 4(f) of the DOT Act. These provisions are applicable to actions that require federal approval or are undertaken with federal funds.

Section 106 of the National Historic Preservation Act of 1966 (NHPA) as amended through 2000 requires federal agencies to take into account the effects of their undertakings on historic properties and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on the undertaking. The historic preservation review and consultation process mandated by Section 106 is outlined in regulations issued by ACHP. Revised regulations, "Protection of Historic Properties" (36 CFR Part 800), became effective January 10, 2001 and were further amended in August 2004.

Federal agencies are responsible for initiating Section 106 review, most of which takes place between the agency and state and tribal officials. Appointed by the governor, the State Historic Preservation Officer (SHPO) coordinates the state's historic preservation program and consults with agencies during Section 106 review. Agencies also consult with officials of federally recognized Indian tribes when tribal lands or historic properties of significance to such tribes are involved. Some tribes have officially designated Tribal Historic Preservation Officers (THPOs), who function as a SHPO on tribal lands, while others designate representatives to consult with agencies as needed.

At this time, none of the Tribes in the Region have a THPO. The MPO will consult with the Confederated Tribes of Grande Ronde; Confederated Tribes of Siletz; and Cow Creek Band of Umpqua Indians for each Regional Transportation Plan update. The appropriate Tribe to consult will be determined based upon historic and current information provided.

According to the Advisory Council on Historic Preservation, Section 106 review and consultation requires federal agencies to do the following:

- Determine if Section 106 of the NHPA applies to a given project and, if so, initiate consultation;
- Gather information to decide which properties in the project area are listed in or eligible for the National Register Historic Places;
- Determine how historic properties might be affected;
- Explore alternatives to avoid or reduce harm to historic properties; and
- Reach agreement with the SHPO/THPO (and the ACHP in some cases) on measures to resolve any adverse effects to historic properties.

Another protection to park and wildlife areas is provided by Section 4(f) of the U.S. Department of Transportation Act of 1966. This environmental regulation applies to projects that receive Department of Transportation (FHWA or FTA) funds. Section 4(f) (recodified in 49 USC 303, but still known as Section 4(f)) includes provisions prohibiting federal transportation agencies from using land from a significant publicly owned park, recreation area, wildlife or waterfowl refuge, or any land from an historic site of national, state, or local significance unless:

- There is no feasible and prudent alternative to the use of land, and
- The action includes all possible planning to minimize harm to the property resulting from use.

In assessing the environmental effects of an action through the National Environmental Policy Act process, FHWA includes an evaluation of the use of land protected under Section 4(f). The environmental regulations for applying Section 4(f) to transportation project development can be found at 23 CFR 771.135. For other detailed guidance on applying the requirements of Section 4(f), the FHWA wrote the Section 4(f) Policy Paper, which discusses such topics as the history of Section 4(f), alternatives analysis, mitigation, and how Section 4(f) relates to other statutes and regulations which protect the same types of resources, including Section 106 of the National Historic Preservation Act.

In order for FHWA field offices to make key determinations on projects having minor impacts or a net benefit on areas protected by Section 4(f), the agency issued several Nationwide Section 4(f) Programmatic Statements. Section 4(f) is considered by the preservation community to be one of the most effective tools in the protection of historic properties. But its stringent standards and interpretations by various court rulings have had the transportation community seeking revisions to provide more flexibility in implementing the law.

14. RTP Projects and Environmental Features

Table 10.4 below lists 2016-2040 projects that intersect with a resource identified in this chapter. The projects are identified with RTP project number, location, and timing (reflected in the color of the text), and the corresponding environmental resource or feature.

The environmental and historic resources and concerns addressed in the chapter and listed in the tables below are: National Historic Districts, wetlands listed in Local Wetlands Inventories and/or National Wetlands Inventory; Special Flood Hazard Area; and fish habitat (Coho, and Steelhead habitat). Projects are mapped with environmental features beginning on Page 15.

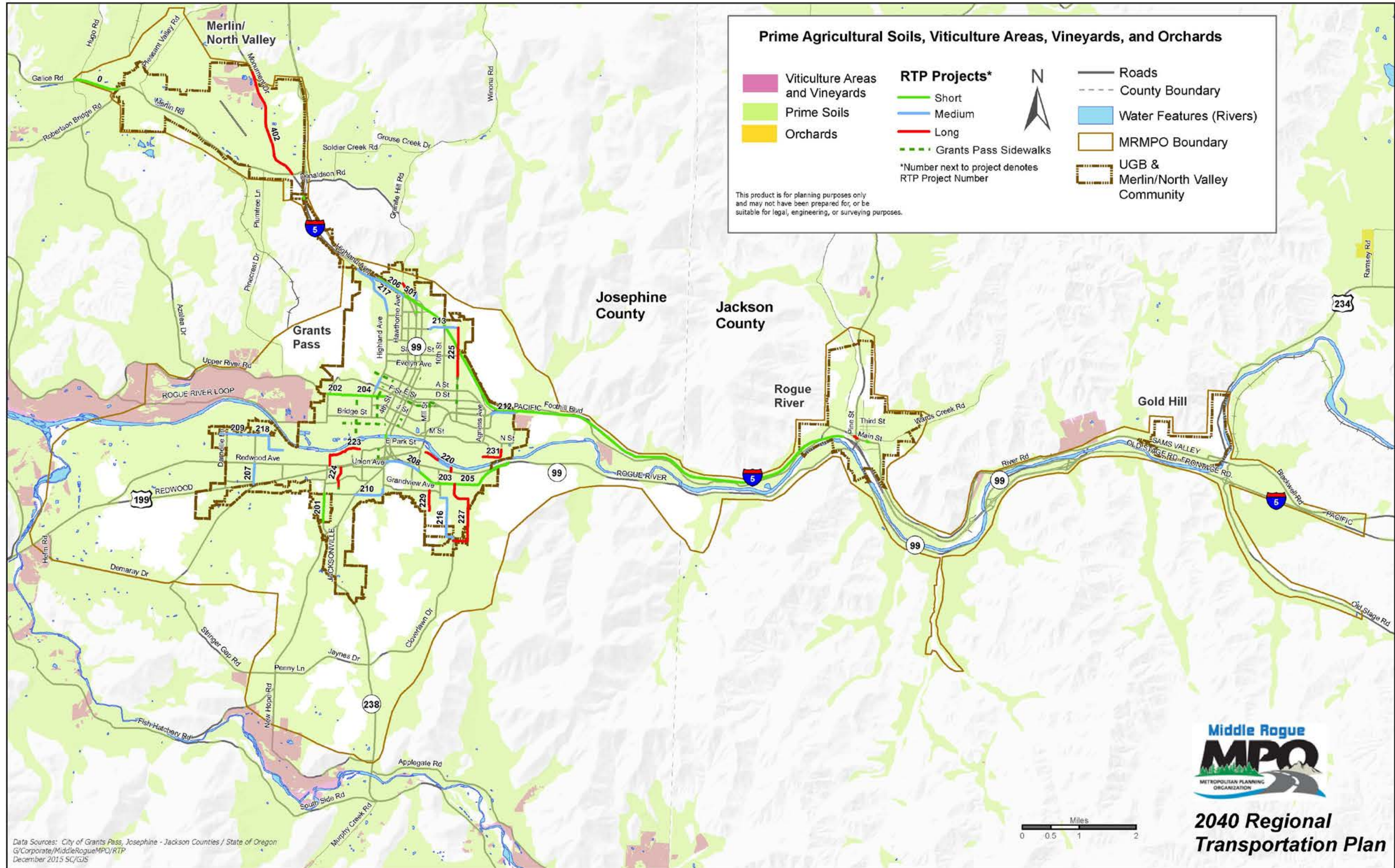
Table 10.4

<i>RTP Project Number</i>	<i>Project Location</i>	<i>Project Sponsor</i>	<i>Wetlands</i>	<i>Special Flood Hazard Area</i>	<i>Wildlife Movement</i>	<i>National Historic District</i>	<i>Steelhead</i>	<i>Coho Salmon (Threatened)</i>
201	Allen Cr Rd-W Harbeck to Denton Rd	Grants Pass	X					
202	G Street-Lincoln Rd to Leonard St	Grants Pass	X			X		
203	Fruitdale Dr-Parkdale to Overland	Grants Pass	X	X			X	X
204	G St-Leonard to 3rd St	Grants Pass	X	X		X	X	
205	Fruitdale Dr-Overland to RR Hwy 99	Grants Pass	X	X			X	X
206	Vine St-Highland to Hawthorne Ave	Grants Pass	X					
209	Leonard Rd- Willow Ln to school	Grants Pass	X					
212	Foothill: City Limits-Ament Rd	Grants Pass	X				X	X
213	Hillcrest: 9th to 10th Street	Grants Pass	X					
216	Cloverlawn Dr:Eastview-Hamilton Ln	Grants Pass	X				X	
217	Highland Av:S line sect 6 to NW UGB	Grants Pass	X					
218	Leonard Rd:Dowell to Willow Ln	Grants Pass	X					
220	E Park St:Clara to Hamilton	Grants Pass		X				
222	Hamilton Ln:Park St-RR Hwy	Grants Pass		X				
223	W Park St:Ringuette to Pansy Ln	Grants Pass	X	X			X	
227	Hamilton Ln:Overland Dr-Cloverlawn	Grants Pass	X	X			X	X
228	E Park St: Gold River Ln-Clara Av	Grants Pass		X				
230	Portola Dr: 450ft west of Gladiola	Grants Pass		X				
231	Portola Dr: Gladiola to Shannon Ln	Grants Pass		X				
232	Shannon Ln: Portola-N RR ROW	Grants Pass	X	X				
402	Monument Dr: Merlin Rd-Timber Ln	Josephine County	X	X			X	X
500	OR199-Bridge, 6th St (Cavemen)	ODOT	X				X	X
501	I-5: N Grants Pass-Evans Creek	ODOT	X	X	X		X	X
601	E. Main Street Bridge	Rogue River	X	X			X	
602	Main Street	Rogue River			X			

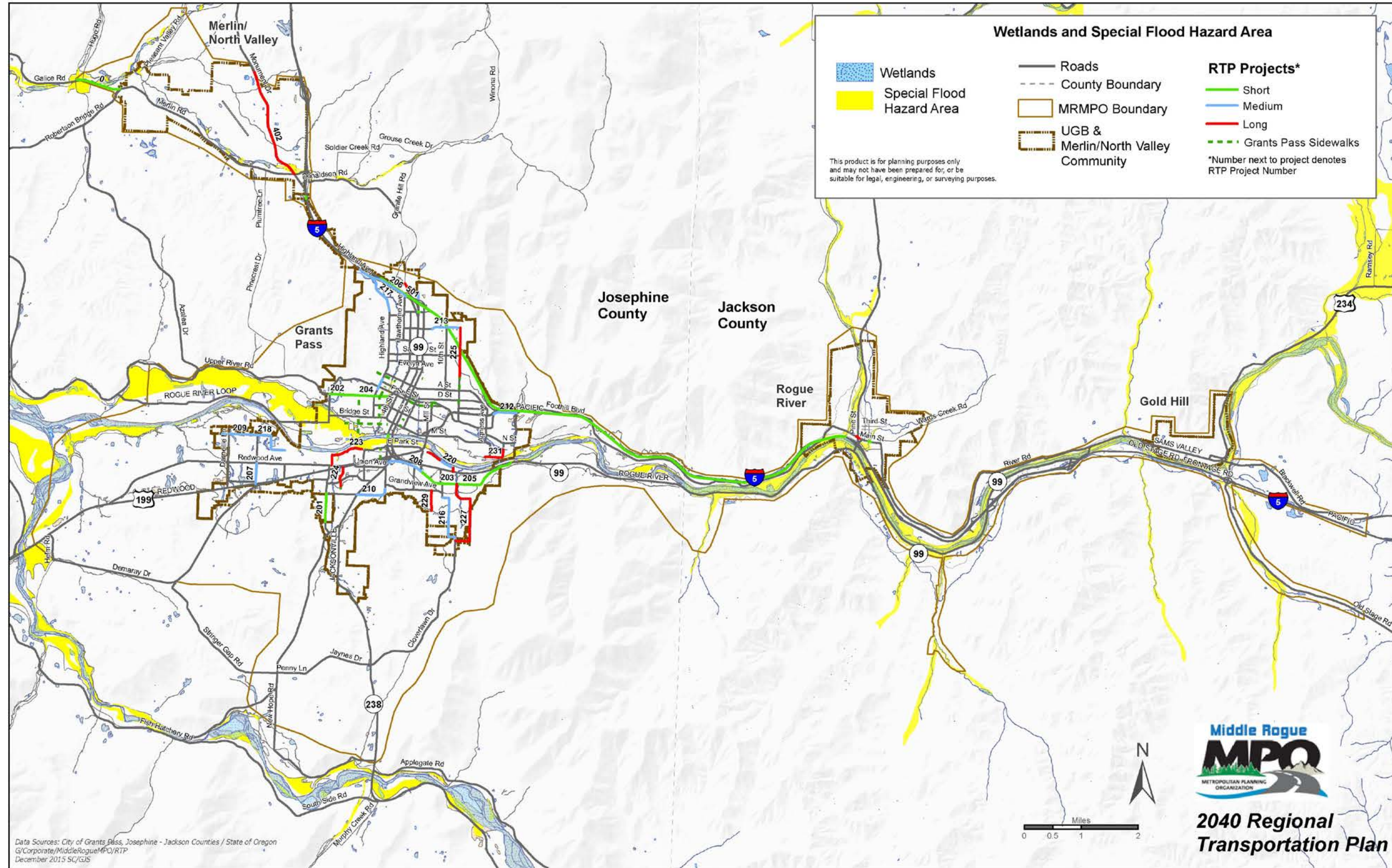
Green Short range projects.
 Blue Medium range projects.
 Red Long term projects.



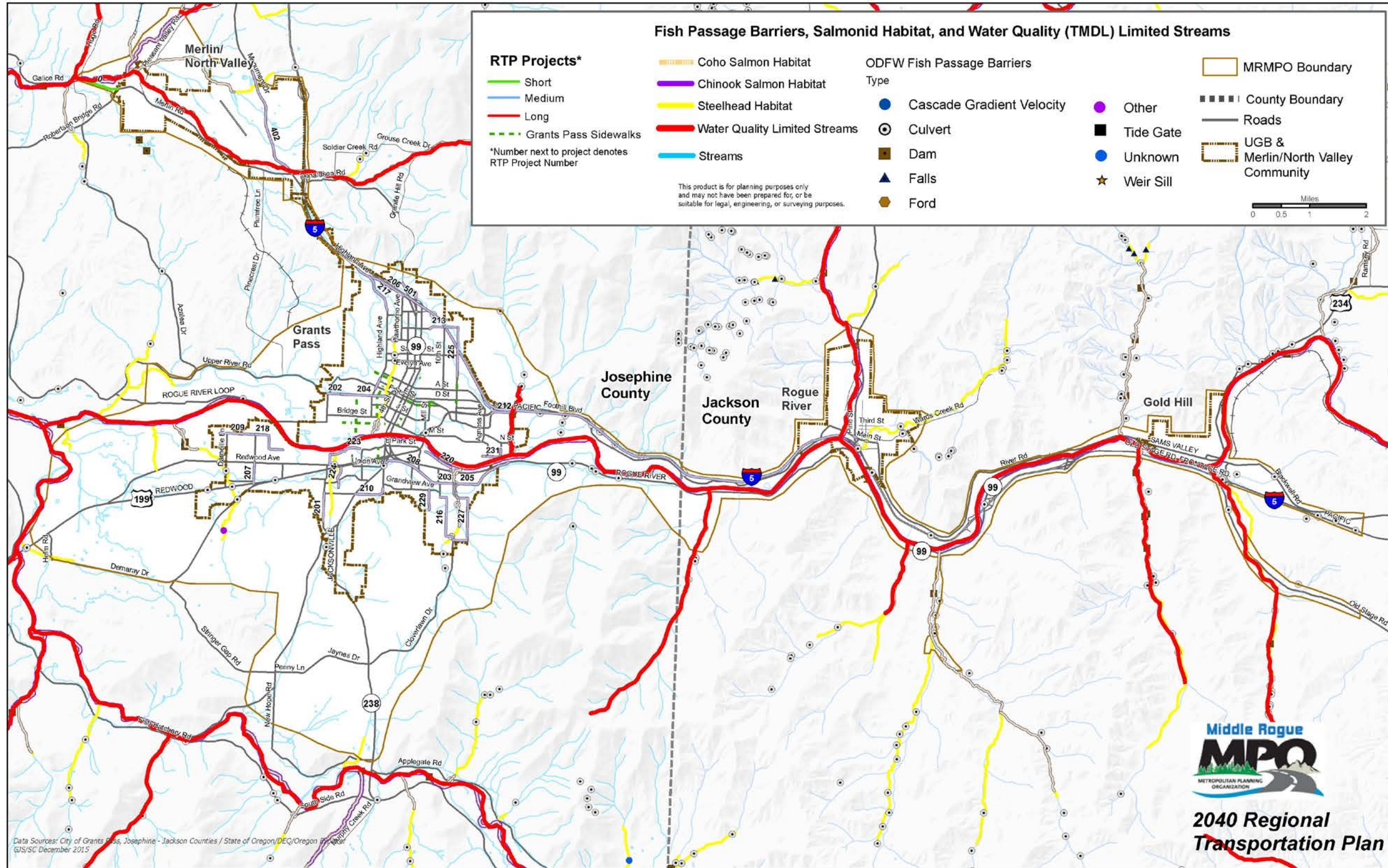
Map 10-1 – Prime Agricultural Soils, Viticulture Areas, Vineyards and Orchards



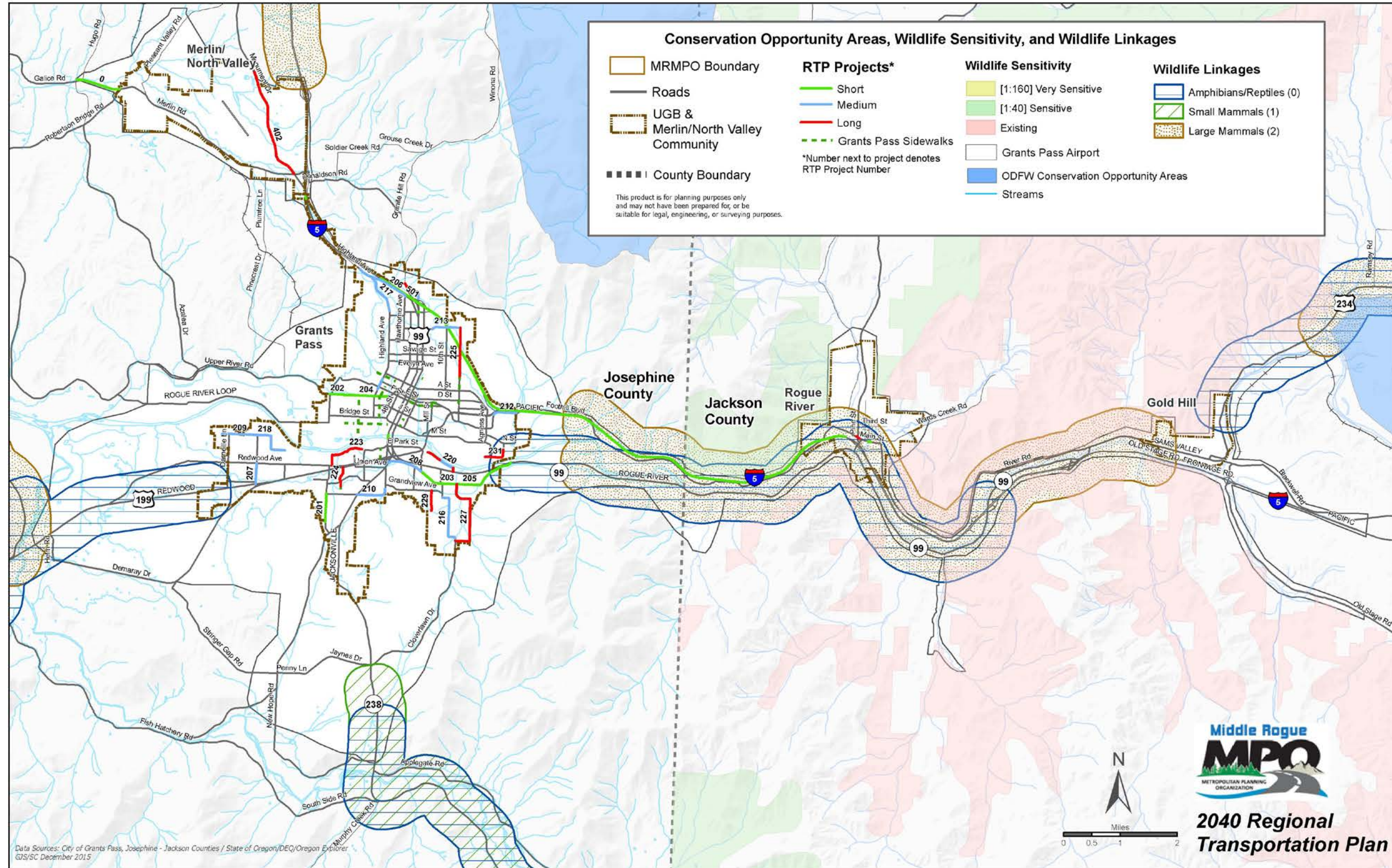
Map 10-2 – Wetlands and Special Flood Hazard Area



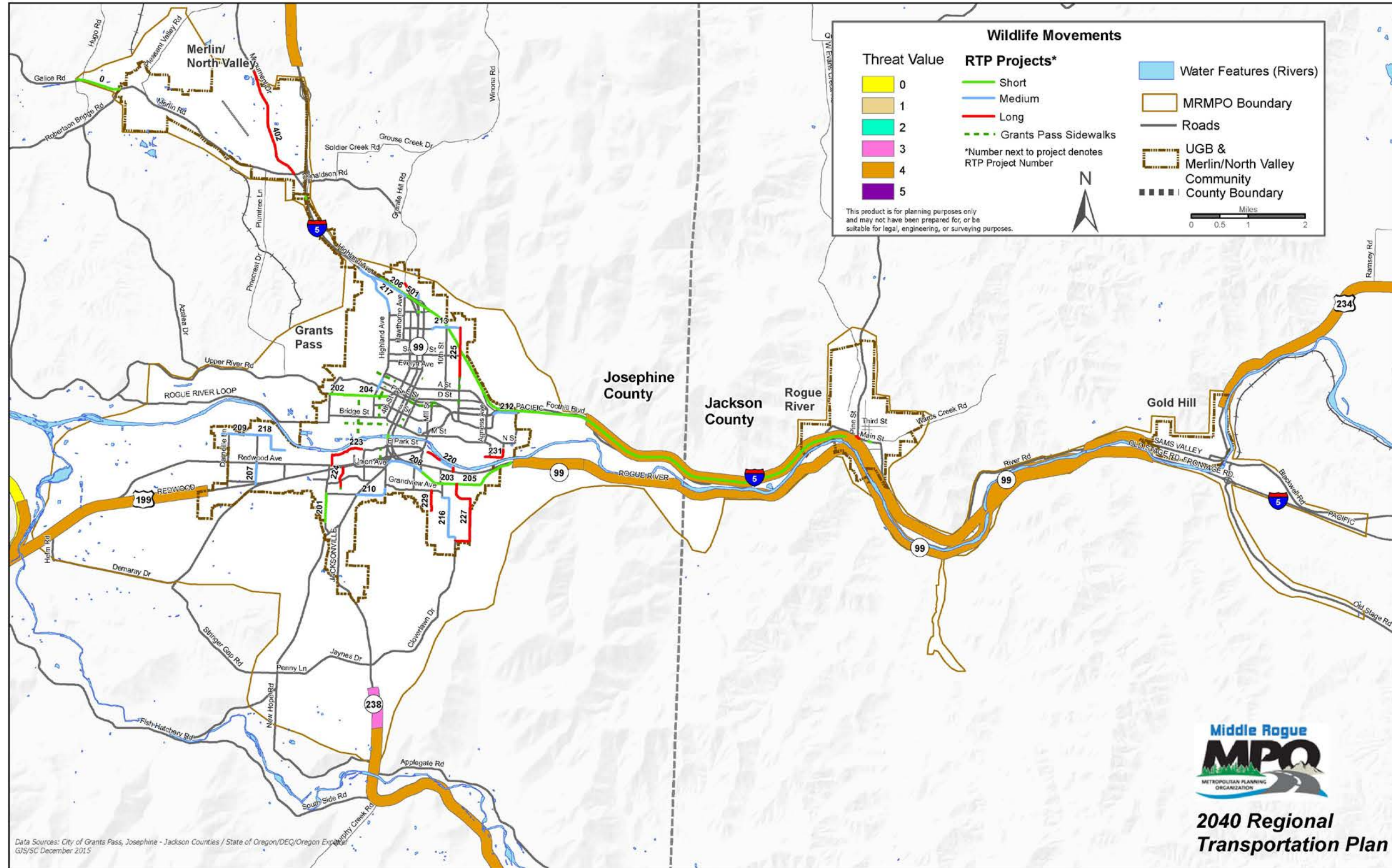
Map 10-3 – Fish Passage Barriers, Salmonid Habitat, and Water Quality (TMDL) Limited Streams



Map 10-4 – Conservation Opportunity Areas, Wildlife Sensitivity, and Wildlife Linkages



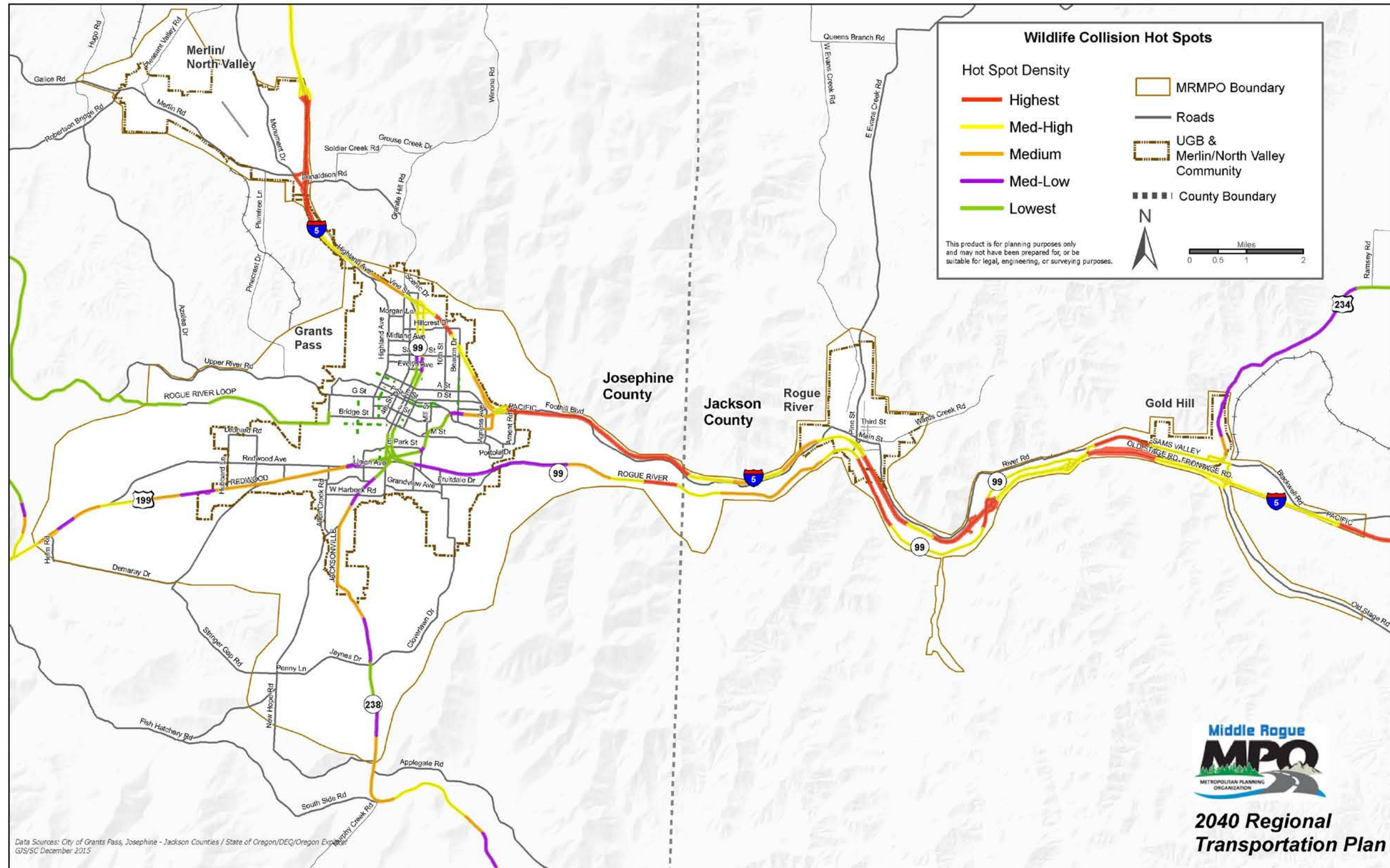
Map 10-5 – Wildlife Movements



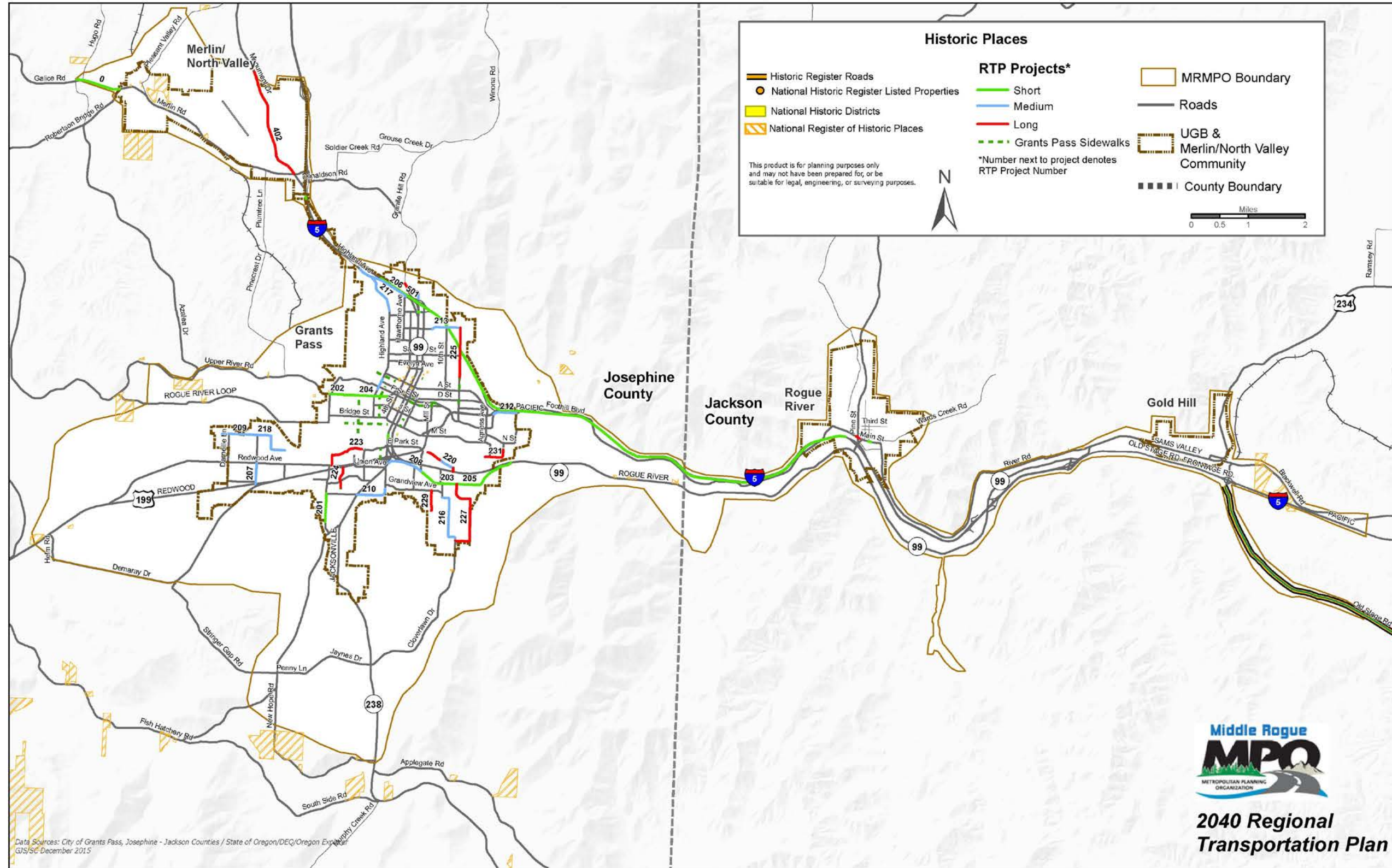
Data Sources: City of Grants Pass, Josephine - Jackson Counties / State of Oregon/DEQ/Oregon Environmental Services/SC December 2015



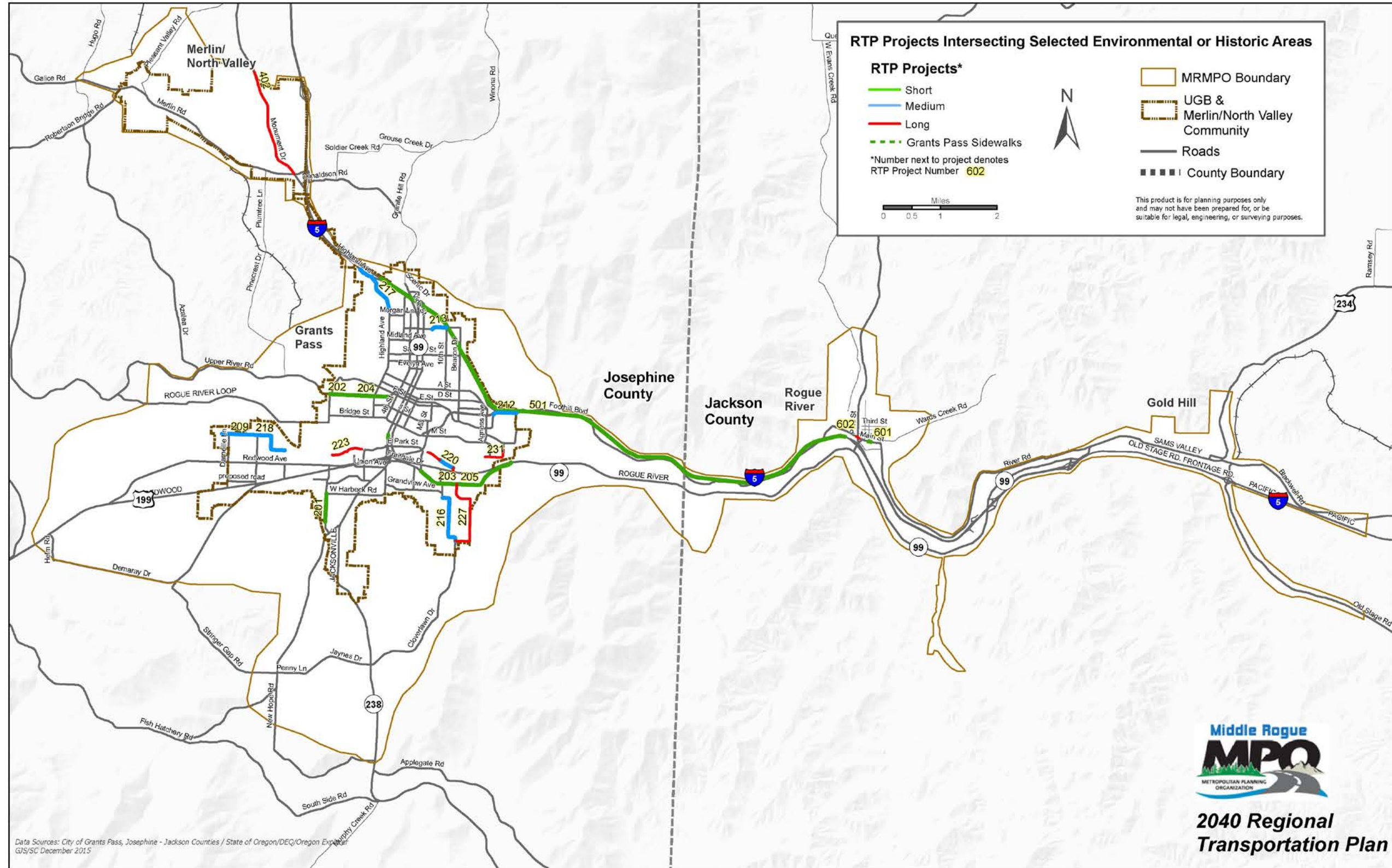
Map 10-6 – Wildlife Collision Hot Spots



Map 10-7 – Historic Places



Map 10-8 – RTP Projects Intersecting Environmental or Historic Areas



Chapter 11 – System Performance

Performance measures in this chapter are forecasts of future travel conditions—specifically traffic congestion. The forecasts are estimates produced by the Grants Pass travel demand model. The model, computer software that performs a series of calculations, is based on information the MRMPO obtained about future population and employment.

Estimates of the numbers of people, jobs and their locations within the region are critical to the model. Also, the transportation network itself is represented in the model.

The current system, including numbers of lanes, locations of intersections, signals, turn lanes and lane widths can be significant to traffic flow and road capacity. Future conditions for all of these factors are estimated in consultation with local, state and federal agencies and governments, and are incorporated into the model for specific future years.

A. Grants Pass Model

The model used for the RTP is the Grants Pass Oregon Small Urban Model (OSUM). The Grants Pass model was developed to address the need for a travel demand forecasting tool that could be used for a variety of purposes including; transportation system planning, subarea transportation studies, the analysis of the transportation system impacts of large-scale development proposals, and the evaluation of the effects of large-scale transportation projects.

The MRMPO will use the OSUM Grants Pass model through the first RTP (spring 2016), and then start building a new model before the second RTP that will cover the larger MRMPO boundary. The model itself, the information and running the software, is a cooperative project between MRMPO and ODOT's Transportation Planning and Analysis Unit (TPAU).

“Estimates of the numbers of people, jobs and their locations within the region are critical to the model.”

The model provides answers on a regional level for a variety of analyses.

Beyond the generalized, region-scale outputs that are reported in this chapter, the Grants Pass model is the foundation for more detailed analyses that jurisdictions, developers and project managers conduct to estimate fine-grained conditions such as:

- How much traffic will be generated by a particular development, what road will be affected and to what extent?
- How much traffic can be accommodated at a particular location and what happens to traffic conditions if a lane is added, or access points changed?
- How large does a facility such as a freeway interchange have to be in terms of number of lanes and their length to accommodate future anticipated traffic?

In developing the 2015-2040 RTP, the model was asked to provide answers to some basic questions about performance of the transportation system in future years, given the plan’s forecasts for growth. Results are described in the following sections.

B. Future Congestion

Generally, travel demand modeling shows that the region can expect congestion to increase. Table 11.1 below shows that in 2010, there were five (5) congested lane miles. By 2040, the number of congested lane miles increases to twenty-two (22), which is 3% of the total lane miles in model area.

Table 11.1

Grants Pass RTP 2010-2040 Percentage of Congested Lane-Miles* P.M. Peak Hour					
SCENARIOS MEASURED	Reference 2010	No-Build 2015	No-Build 2020	No-Build 2040	RTP 2040
Total Lane Miles	643	NA	NA	643	648
Congested Lane Miles	5	NA	NA	24	22
% of Congested Lane Miles	1%	NA	NA	4%	3%

* Congestion defined as model links with demand/capacity ratio ≥ 0.90

Planned roadway capacity projects alone are not expected to keep pace with the region’s anticipated growth. Through 2040, this plan anticipates an expansion of the regional transportation system of 5 lane miles.

Meanwhile, population is expected to increase by nearly 28 percent (from about 68,973 to 89,004), and employment by 45 percent (from 20,765 jobs to 30,030). These modeled estimates are based on existing local plans and coordination with the City of Grants Pass.

As Table 11.1 shows, with implementation of the 2040 RTP the amount of congested roadways will increase from about 5 lane miles today to 22 lane miles in 2040. If no improvements were made to roads (none of the RTP projects implemented), congested lane miles would increase to 24 by 2040.

Traffic ebbs and flows given the time of day. Locally, most roads at most times of the day are – and will continue to be – fairly clear and free-flowing. To look at congestion, the times of highest, or peak, travel are isolated. Traffic counts are taken continuously over multiple days, show that the peak hour in most cases is late afternoon to very early evening – the evening commute hours. Because of this travel pattern, many transportation demand management programs seek to offer travel alternatives so that fewer motorists are driving at the peak hours.

Table 11.2

Grants Pass RTP ₂₀₁₀₋₂₀₄₀ Other Evaluation Measures					
SCENARIOS MEASURED	Reference 2010	No-Build 2015	No-Build 2020	No-Build 2040	RTP-Build 2040
P.M. Peak Hour Mean Travel Time	8.96	N/A	N/A	8.97	8.96
P.M. Peak Hour VMT	116,751	N/A	N/A	155,731	155,613
P.M. Peak Hour VHT*	2,535	N/A	N/A	3,577	3,572
Daily Transit Mode Split	N/A	N/A	N/A	N/A	N/A

*VHT - vehicle hours traveled is a function of both travel time and total volume.

Table 11.2 shows that in 2010, the P.M. peak hour mean travel time was 8.96 minutes, and in 2040 the travel time is the same even though VMT increased by 33% between 2010 & 2040. VHT is the number of hours that vehicles spend in the traffic during the peak hour. In terms of VHT, Table 11.2 shows that in 2040 without the RTP the VHT will increase by 1,042 hours from the base year, but with the RTP the VHT will increase by 1,037 hours from the base year. In other words, there are 5 VHT reductions during the PM peak hour in the 2040 RTP Scenario.

C. Performance Comparison

Table 11.3 shows the year 2040 forecast volume-to-capacity ratios for freeways, principal arterials, minor arterials and collectors within the Grants Pass area per lane mile. The 72 miles of freeways within the MRMPO area in 2040 show little congestion (V/C of 0 – 0.59). Whereas, the 83 miles of principal arterials in the MRMPO area in 2040 show increased congestion ranging from 0 – 0.59 to 9.99.

Table 11.3

2040 RTP ₂₀₁₀₋₂₀₄₀ Peak Lane Miles				
Volume/Capacity Ratio Range	Freeway	Principal Arterial	Minor Arterial	Collector
0 - 0.59	71.72	48.05	72.84	342.56
0.59 - 0.69	0.00	5.75	2.52	4.05
0.69 - 0.79	0.00	6.13	1.23	3.67
0.79 - 0.89	0.00	6.47	1.84	0.93
0.89 - 0.99	0.00	5.24	1.22	0.71
0.99 - 9.99	0.00	11.82	1.48	0.98
TOTAL	71.72	83.46	81.13	352.90

D. Congested Roads

Travel conditions on several key roads were examined with the model. The analysis includes selected principal and minor arterial roadways identified by staff as key travel routes within the

model area. Results on Table 11.4 and 11.5 show estimated base year 2010 and future conditions. Travel conditions expressed are peak hour conditions, which are calculated to be typical conditions a motorist is likely to encounter at the late afternoon-early evening hours – the time of the greatest amount of travel in the MRMPO region.

Table 11.4

2010 Reference Peak Lane Mile Percentages													
Demand/Capacity Ratio Range	Rogue River Hwy (OR99)	Redwood Hwy (OR199)	Jacksonville Hwy (OR238)	Highland Ave	Redwood Ave	G St	A St	Allen Creek Rd	Bridge St	E St	F St	M St	Parkdale Drive
0 – 0.59	76%	70%	92%	100%	70%	69%	98%	100%	82%	100%	100%	85%	37%
0.59 – 0.69	16%	2%	4%	0%	3%	0%	0%	0%	5%	0%	0%	3%	24%
0.69 – 0.79	2%	15%	2%	0%	11%	18%	2%	0%	0%	0%	0%	0%	5%
0.79 – 0.89	2%	9%	2%	0%	6%	8%	0%	0%	0%	0%	0%	0%	0%
0.89 – 0.99	0%	2%	0%	0%	5%	4%	0%	0%	0%	0%	0%	0%	29%
0.99 – 9.99	4%	2%	0%	0%	4%	0%	0%	0%	13%	0%	0%	12%	5%
No Congestion	94%	87%	98%	100%	84%	87%	100%	100%	87%	100%	100%	88%	66%
Congestion	2%	11%	2%	0%	12%	12%	0%	0%	0%	0%	0%	0%	29%
High Congestion	4%	2%	0%	0%	4%	0%	0%	0%	13%	0%	0%	12%	5%
Total Lane Miles	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 11.5

2040 RTP ₁₀₋₄₀ Peak Lane Mile Percentages													
Demand/Capacity Ratio Range	Rogue River Hwy (OR99)	Redwood Hwy (OR199)	Jacksonville Hwy (OR238)	Highland Ave	Redwood Ave	G St	A St	Allen Creek Rd	Bridge St	E St	F St	M St	Parkdale Drive
0 – 0.59	61%	60%	82%	100%	66%	69%	93%	100%	76%	100%	100%	85%	0%
0.59 – 0.69	8%	3%	8%	0%	0%	0%	2%	0%	7%	0%	0%	0%	16%
0.69 – 0.79	14%	1%	4%	0%	8%	13%	3%	0%	0%	0%	0%	0%	0%
0.79 – 0.89	9%	8%	1%	0%	8%	14%	2%	0%	5%	0%	0%	3%	21%
0.89 – 0.99	2%	8%	3%	0%	8%	4%	0%	0%	0%	0%	0%	0%	9%
0.99 – 9.99	6%	20%	2%	0%	9%	1%	0%	0%	13%	0%	0%	12%	55%
No Congestion	83%	64%	94%	100%	75%	81%	98%	100%	82%	100%	100%	85%	16%
Congestion	11%	16%	4%	0%	16%	18%	2%	0%	5%	0%	0%	3%	29%
High Congestion	6%	20%	2%	0%	9%	1%	0%	0%	13%	0%	0%	12%	55%
Total Lane Miles	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

The numbers in the columns in these two tables are the percentages of lane miles on a particular road that are at the volume/capacity ratio ranges indicated in the first column. Congestion is expressed as a ratio of travel demand, or number of vehicle trips to roadway capacity for accommodating vehicles. High congestion indicates too many vehicles attempting to travel on the segment of road, causing delay. The estimates report peak hour travel - travel at certain hours in the day, generally mid-afternoon in the Grants Pass area. (Peak hour varies from region to region, dependent on conditions such as shift changes and school hours.) Congestion on the roads shown on these tables can lead to delays on intersecting roads as well. The model data may be used to identify highly traveled and congested roadways, which can be prioritized for funding through the MRMPO Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) project selection processes.

E. Congestions Maps

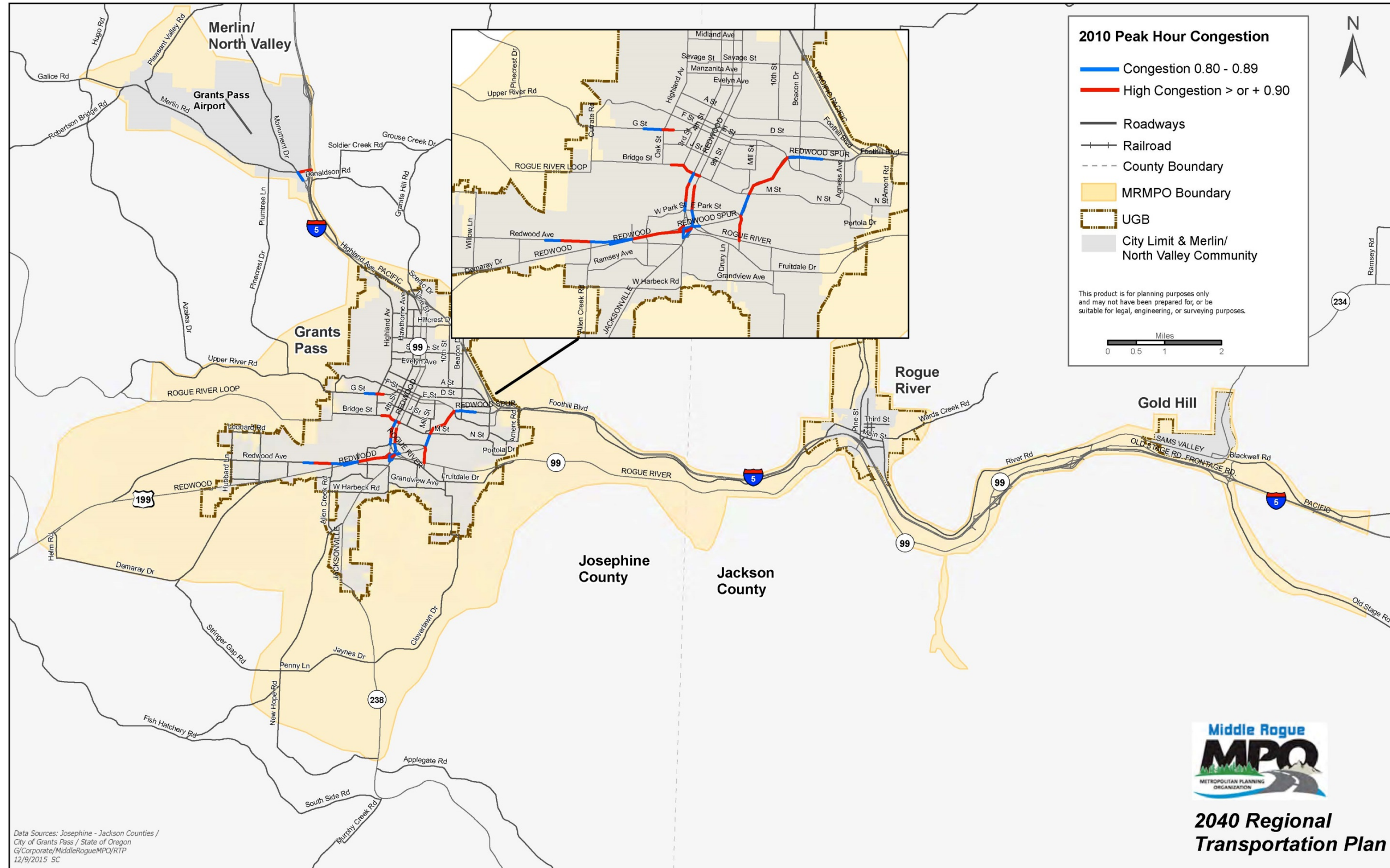
Maps below indicate locations where the MRMPO travel demand model estimates potential for congestion in future years.

Years shown are 2010 and 2040. By viewing the maps in succession, it’s possible to see how, where and when congested conditions are likely to expand.

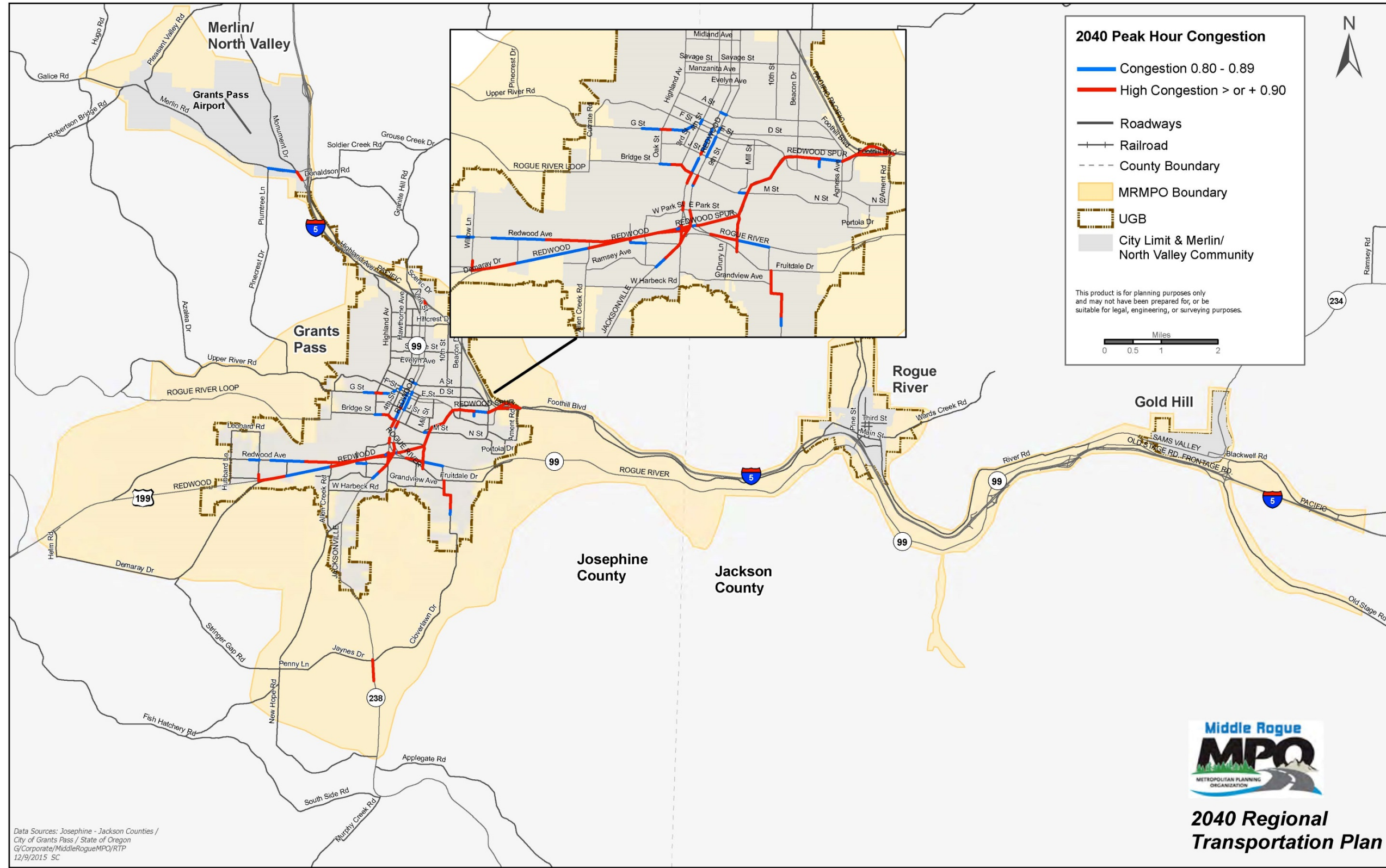
Rather than showing with absolute certainty future congested conditions, these maps indicate the locations most vulnerable to traffic pressures. The futures shown here are far from certain because MRMPO jurisdictions are in agreement that additional funds will need to be identified for projects not yet in the plan. Beyond that, there are projects being planned, but are not included in this analysis because RTP projects must be financially constrained, as described in Chapter 8 Financial Plan.



Map 11-1 - 2010 Peak Hour Congestion



Map 11-2 - 2040 Peak Hour Congestion



Data Sources: Josephine - Jackson Counties / City of Grants Pass / State of Oregon / G/Corporate/MiddleRogueMPO/RTP / 12/9/2015 SC



2040 Regional Transportation Plan



Chapter 12 – Safety & Security

A. Multi-Modal Safety

Public safety is by far the most important element considered in every transportation project. Its significance begins with federal goals and policies, continues with state transportation goals and on to the regional and local planning level. Safety is one of the planning factors in MAP-21 that must guide state and regional transportation planning.

The federal planning factors can be found in Vision and Goals, Chapter 2. According to the Bureau of Transportation Statistics' (BTS) Safety data Action Plan:

“Deaths and injuries are a major cost in transportation. Transportation fatalities rank third as the cause of lost years of life in the U.S. (behind heart disease and cancer). Several travel modes have death counts whose impact exceeds that of AIDS. But the Department of Transportation has not yet responded to this public health threat by developing data programs as capable as those used in the federal medical community.”

The ideal situation is that all elements of the multi-modal transportation system are safe. However, that is not always the case and plans must be made for elimination of physical transportation infrastructure hazards and problems to create a safer travel environment.

“Public safety is by far the most important element considered in every transportation project.”

Safety often is discussed along with security, but the two are different and must be addressed separately because they involve different issues and circumstances.

The simplest distinction between safety and security is that safety problems, crashes, are unpremeditated unfortunate events. As such, they may be caused by driver error or impairment, adverse weather, a temporary hazard in the right-of-way, poor infrastructure, poor vehicle design, inadequate vehicle maintenance, or all of the above. By contrast, security events always connote a negative intention (See Security Section).

1. Approach to Safety

There are two components to efforts toward improving transportation safety: public education, and facility improvement. Federal, state and local agencies engage in efforts addressing both. In the area of education, programs go beyond safe-driver programs to provide information to pedestrians, children traveling to school and workers in traffic zones. Crash data show driver error and the failure of bicyclist and pedestrians to obey the rules of the road are factors in most crashes, so traffic safety education can play a significant role in crash reduction. In addition, children, who are among the most vulnerable pedestrians, can be better protected through increasing their awareness of traffic hazards and safety rules.

Education includes law enforcement. ODOT research indicates a direct relationship between traffic law enforcement and crash rates. Due to funding shortfalls, the Josephine County Sheriff's Department does not respond to crashes within the County's jurisdiction. This may result in an under-reporting of crashes. In addition, the number of state police on the road has fluctuated but generally has remained below national average rates. Gold Hill does not have law enforcement. Jackson County Sheriff's department responds to crashes in Gold Hill. Crash records show that two common infractions have a significant impact on traffic crash rates and severity: red-light running and speeding.

These can be reduced through the consistent enforcement of safety-related traffic laws. While the behavior of system users is critical, the facilities themselves need to be designed, built, maintained and operated in ways that make them safe. In the design and construction area, this means following standards for everything from lane widths and driveway spacing to sign placement and crosswalk location. Operations and maintenance programs look at where crashes occur and why, to determine whether any change on the ground could make accidents less likely. Visibility, for example, is important especially at intersections, to allow motorists a clear view of signs, cyclists, pedestrians, and other cars.

Landscaping, which is used to improve appearances and conditions for neighbors and pedestrians, cannot be allowed to obstruct a clear line of sight when needed for traffic safety purposes.

"During the seven-year period from 2007 through 2013, 5,242 crashes were reported in the Grants Pass Urbanized Area..."

2. Safety

During the seven-year period from 2007 through 2013, 5,242 crashes were reported in the Grants Pass Urbanized Area, according to the ODOT Crash Analysis & Reporting Unit. The majority of these crashes occurred on arterial streets, with approximately 12% occurring on urban minor arterials and 44% occurring on urban principal arterials. Approximately 12% of crashes during this period occurred on urban collectors, 6% on urban local roads, and less than 23% occurred on rural roads. The majority of these crashes (73%) occurred in Grants Pass, while 2% occurred in Rogue River and 1% occurred in Gold Hill. Of these reported crashes, 48% sustained property damage only, 51% involved injuries and 1% of the crashes involved fatalities.

Crash Data – Functional Class

From 2007 through 2013, 1,247 crashes were reported along rural roadways (including the rural portions of Interstate 5) within the MRMPO Planning Area. Crashes on urban roads totaled 3,995, or 76% of the total crashes from 2007 to 2013. Within the Planning Area there were 2,682 injury crashes and 2,509 property damage only crashes. There were a total of 51 crashes involving a fatality from 2007 through 2013.

Table 12.1

Crashes - MRMPO Planning Area by Functional Class 2007 to 2013											
Years	2007	2008	2009	2010	2011	2012	2013	Totals	% of Total		
Rural Local	18	15	20	13	29	15	15	125	2%		
Rural Major Collector	43	46	37	59	63	53	45	346	7%		
Rural Minor Arterial	45	34	34	31	37	44	54	279	5%		
Rural Minor Collector	5	5	5	2	3	4	7	31	1%		
Rural Principal Arterial - Interstate	72	60	51	53	62	65	76	439	8%		
Rural Principal Arterial - Other	6	3	5	2	4	3	4	27	0.5%		
Urban Collector	94	76	83	85	116	125	76	655	12%		
Urban Local	38	40	34	33	54	46	47	292	6%		
Urban Minor Arterial	90	90	67	68	105	102	105	627	12%		
Urban Principal Arterial - Interstate	22	15	14	13	15	9	12	100	2%		
Urban Principal Arterial - Other	325	304	307	305	376	350	353	2320	44%		
Urban Principal Arterial - Other Freeways and Exp	0	0	1	0	0	0	0	1	0.02%		
Totals	758	688	658	664	864	816	794	5242	100%		

**MRMPO Crashes by Roadway Type
2007 to 2013**

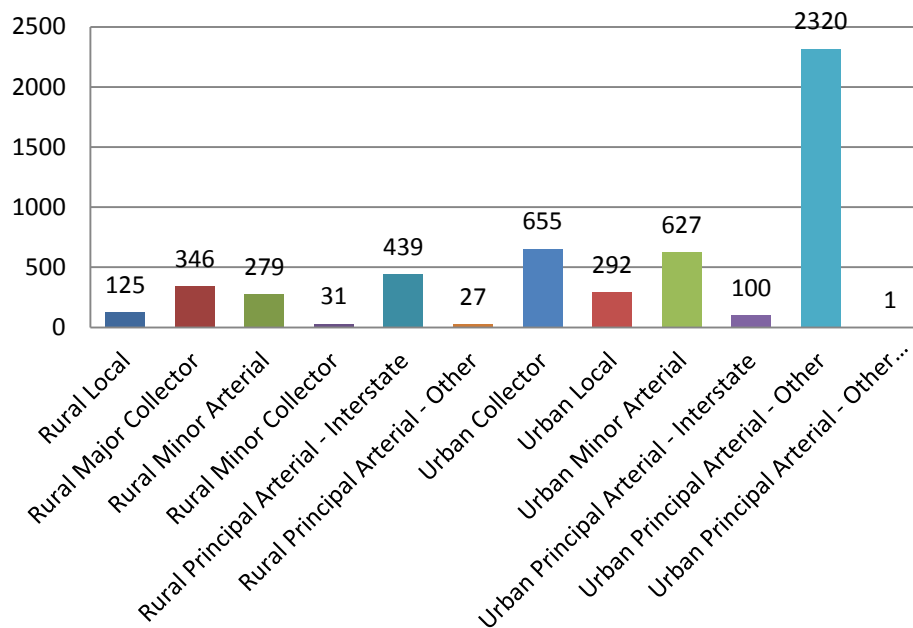


Figure 12.1

Crashes by Jurisdiction

From 2007 to 2013, there were 3,846 crashes in Grants Pass, 110 crashes in Rogue River, 34 crashes in Gold Hill and 1,252 crashes in the rural areas of the MRMPO.

Table 12.2

Crashes by Jurisdiction 2007 to 2013									
Years	2007	2008	2009	2010	2011	2012	2013	Totals	% of Total
Grants Pass	539	509	507	480	634	602	575	3846	73%
Rogue River	12	10	11	18	21	18	20	110	2%
Gold Hill	6	9	3	3	2	6	5	34	1%
Rural Areas	201	160	137	163	207	190	194	1252	24%
Totals	758	688	658	664	864	816	794	5242	100%

Crashes Types

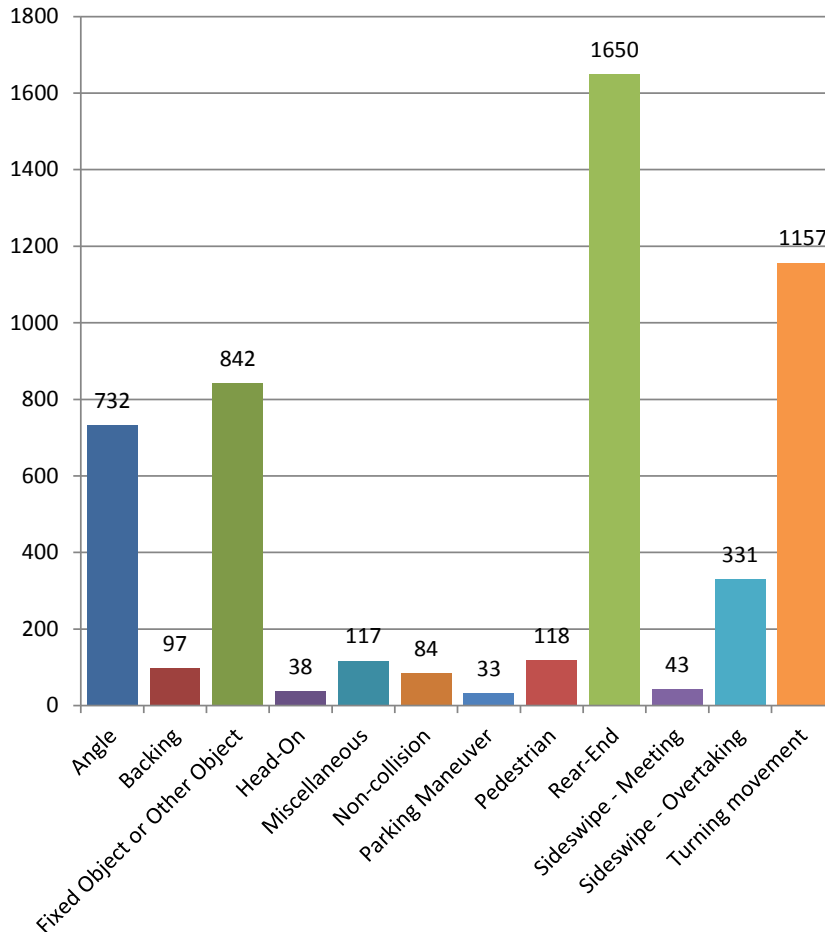
The number of traffic incidents within the Planning Area ranged from 658 to 864 crashes per year, with a low of 658 crashes in 2009 and a high of 864 crashes in 2011. The most common type of crash was rear-end, which comprised 31% (1,650 crashes) of all crashes over the 7-year period. Turning crashes made up 22% (1,157 crashes) of the crash total.

Table 12.3

Crash Types 2007 to 2013									
Years	2007	2008	2009	2010	2011	2012	2013	Totals	% of Total
Angle	128	106	85	72	103	122	116	732	14%
Backing	20	10	11	12	18	11	15	97	2%
Fixed Object or Other Object	121	92	115	100	141	128	145	842	16%
Head-On	10	4	5	1	6	6	6	38	1%
Miscellaneous	13	17	14	17	22	15	19	117	2%
Non-collision	11	17	12	8	15	8	13	84	2%
Parking Maneuver	3	8	2	4	4	8	4	33	1%
Pedestrian	12	14	19	17	18	22	16	118	2%
Rear-End	226	218	190	234	291	238	253	1650	31%
Sideswipe - Meeting	2	5	9	3	9	6	9	43	1%
Sideswipe - Overtaking	45	42	44	42	55	50	53	331	6%
Turning movement	167	155	152	154	182	202	145	1157	22%
Totals	758	688	658	664	864	816	794	5242	100%

Figure 12.2

MRMPO Crash Types 2007 to 2013



Crashes Data – City & Counties

During the 2007 - 2013 period, the majority of the crashes occurred within the City of Grants Pass (73%); 24% occurred in unincorporated areas of Josephine and Jackson Counties within the Planning Area, 1% in Gold Hill and 2% occurred within Rogue River.

Of crashes occurring within the urbanized area, 48% were property damage only and 51% incurred injury. There were fifty-one fatal accidents. The majority of crashes within urbanized areas were the result of rear-end collisions (31%) or turning movements (22%).

Table 12.4

Crash Severity 2007 to 2013									
Years	2007	2008	2009	2010	2011	2012	2013	Totals	% of Total
Fatalities	9	6	11	8	7	6	4	51	1%
Non-Fatal Injury	397	328	347	325	453	421	411	2682	51%
Property Damage Only	352	354	300	331	404	389	379	2509	48%
Totals	758	688	658	664	864	816	794	5242	100%

Crashes occurring for the years 2012 and 2013 are shown on Map 12-1.

Safety Priority Index System

ODOT has developed a safety priority index system (SPIS) to identify hazardous locations along state highways. This rating system considers not only the number of crashes at a particular intersection, but the rate of crashes based on the overall volume of traffic going through that intersection. Crash rates help paint a more complete picture of the safety conditions of a segment than the number of crashes. Rates account for the traffic volumes traveling along a specific segment of roadway, whereas crash numbers do not account for traffic levels.

The ODOT SPIS is considered when making decisions regarding expenditure of state funds for highway improvements. The highway locations with SPIS scores that are in the highest 10 percent of all SPIS scores are evaluated for potential safety improvements. The following locations in the Planning Area were among the top 10% of SPIS groups in the 2014 SPIS report, covering years 2011 - 2013:

Table 12.5

Intersection	SPIS Score	Percent
SE M St & SE 8 th St	75.82	95
SE M St & Redwood Hwy	70.53	95
NW D St & NW 5 th St	65.79	95
NW D St & NW 4 th St	55.91	90
Hubbard Lane & SW Ravenwood	47.52	90
SE M St & 9 th St	47.32	90
Hubbard Lane & SW Clementine	46.31	90

3. RTP Safety Projects

Virtually all the road projects listed in the RTP have a safety element. One of the most common types of improvement, urban upgrade, makes roads safer for motorists as well as bicyclists and pedestrians by adding sidewalks and bicycle lanes that are separate from motor traffic. For motor vehicle drivers also benefit from having marked lanes for non-motorized modes, marked crosswalks and signals. Options for the MRMPO planning include:

- Using published sources, continue to develop tables, charts and maps of transportation crashes and incident data by mode.

- As resources and source agency databases allow, create Geographic Information Systems (GIS) –related database files and maps of accident and incident data by mode.
- Coordinate with appropriate lead agencies, with the primary focus being on highway and pedestrian safety improvements accidents since those constitute the highest number of accidents, but also focusing on transit safety needs.
- Continue Intelligent Transportation Systems planning and project programming, particularly with a view to investments that will enhance safety.
- Continue reviewing with MRMPO committees and the public project evaluation matrix and other specific funding program scoring matrices to ensure that safety projects receive appropriate weighting and priority in plans and programs.
- Help jurisdictions identify additional transportation funding sources that are specifically targeted at safety projects to supplement the limited funds from conventional transportation sources.

B. Multi-Modal Security

The federal government in 1998, called for states and MPOs to address transportation security issues. In 2005, a new transportation act strengthened the requirement, which has been extended to the current MAP-21. The transportation acts require long-range regional transportation plans to consider security distinct from transportation safety. Furthermore, in 2002 Transportation Security Administration (TSA) was created with extensive requirements for operational and capital improvements relating to security. While the public’s eye has been on passenger aviation, TSA’s mission relates to all modes.

The federal government anticipates that over the next several years, security considerations will result in changes in how transportation is planned, designed, implemented and operated.

Transportation goals, planning processes, databases, analytical tools, decision-making considerations, and organizational structures will change due to security concerns.

Transportation will be on the front line in responding to security risks. The response to security concerns will be cross-jurisdictional and functional lines and be among the most complex and important challenges to transportation professionals. While it may be too early to begin changing our long-range infrastructure network plans in response to security risks, there will be changes in spending priorities in the near term and most probably over a longer period of time.”

There is a wide range of such incidents that could cause varying levels of disruption to the transportation system. One report recommending a national research and development strategy for improving surface transportation security presented a wide ranging list of possible threat scenarios. The list originated in a U.S. Department of Transportation vulnerability assessment of the U.S. transportation system. The nature of the threats was characterized primarily as being a

physical, biological, chemical or cyber attack. The types of responses would clearly be different depending on the nature of the attack.

The magnitude and scope of an incident will clearly be an important determinant for gauging the appropriate public safety/emergency response. And most studies of sudden disruptions to the transportation network, either from natural or man-made causes, have concluded that the redundancies in a metropolitan area’s transportation system provides a rerouting capability that allows the flow of people and vehicles around disrupted network links. For instance, in the MRMPO area, parallel routes offer that redundancy.

1. Definitions

The simplest distinction between safety and security is that safety problems, accidents – are just that – unpremeditated unfortunate events. As such, they may be caused by driver error or impairment, adverse weather, a temporary hazard in the right-of-way, poor infrastructure or vehicle design, or all of the above.

By contrast, security events always connote a negative intention, whether the perpetrator is a disgruntled single individual, a member of a gang, or a member of a political organization, that is, a terrorist. In number, terrorist attacks on transportation systems are few, with the vast majority of security breaches being perpetrated by non-political actors. But terrorist events, when they do occur, can be much more dramatic, harm many more people, and require much more to address.

“The simplest distinction between safety and security is that safety problems, accidents – are just that – unpremeditated unfortunate events.”

Table 12.6 below provides a description of various types of security problems that can arise in any transportation system.

Table 12.6

Event	Description
<u>Aggravated Assault</u>	An unlawful attack by 1 person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault usually is accompanied by the use of a weapon or by means likely to produce death or great bodily harm.
<u>Arson</u>	To unlawfully and intentionally damage, or attempt to damage, any real or personal property by fire or incendiary device.

<u>Burglary</u>	The unlawful entry of a structure to commit a felony or a theft. This includes offenses known locally as burglary (any degree), unlawful entry with intent to commit a larceny or felony, breaking and entering with intent to commit a larceny, housebreaking, safe cracking and all attempts at these offenses.
<u>Larceny/Theft</u>	The unlawful taking, carrying, leading or riding away of property from the possession or constructive possession of another. This includes pocket picking, purse snatching, shoplifting, thefts from motor vehicles, thefts of motor vehicle parts and accessories, theft of bicycles, theft from buildings, theft from coin operated devices or machines, and all other theft not specifically classified.
<u>Trespass</u>	To unlawfully enter land, a dwelling or other real property.
<u>Vandalism</u>	The willful or malicious destruction, injury, disfigurement or defacement of any public or private property, real or personal, without consent of the owner or person having custody or control by cutting, tearing, breaking, marking, painting, drawing, covering with filth, or any other such means as may be specified by local law.
<u>Terrorism</u>	The willful or malicious destruction, injury, disfigurement or defacement of any public or private property [etc. as above] by domestic or foreign nationals for the purpose of making a political impact.

2. An Approach to Security

FHWA guidance offers one approach to handling potential security or disaster incidents. The plan offers six options for action.

Prevention: This has several components, ranging from the actual stopping of an attack before it occurs, to providing improved facility designs that prevent large scale destruction. Surveillance, monitoring, and sensing technologies will likely play an important role in the prevention phase of an incident.

Response: A range of responses is offered.

Mitigation: Reducing the harmful impact of an attack as it occurs and immediately after. This entails identifying the most effective routing for emergency vehicles, evacuations and effective communication systems among emergency response teams and for general public information.

Monitoring: Recognizing that an incident is underway, characterizing it, and monitoring developments. Clearly, surveillance, monitoring, and sensing technologies would be critical to this phase of incident response, as would public information.

Recovery: Facilitating rapid reconstruction of services after an incident. Depending on the degree of damage to the community and/or transportation system, regaining some

level of normalcy will require bringing the transportation system back to adequate levels of operation.

Investigation: Determining what happened in an attack, how it happened, and who was responsible. This is primarily a security/police activity that reconstructs the incident and determines causality and responsibility.

Institutional Learning: Conducting a self-assessment of organizational actions before, during, and after an incident. This element provides a feedback to the prevention element in that by understanding what went wrong or right in response to an incident, steps can be taken to prevent possible new threats.

3. MRMPO Area Security Planning

Within the planning area, some specific strategies have been developed. They are discussed below in the context of national security planning initiatives.

Intelligent Transportation System (ITS) Program – In the past decade or so, a new federal transportation program focusing on information technology to address problems has been developed. This Intelligent Transportation Systems program can make a major contribution toward transportation security. It can assist in all four phases of security: planning, preparedness, response and recovery. However, planners must consider that because of ITS installations' dependence on computers and electrical power, they are also more vulnerable to security threats than are many other transportation elements.

Freight – Special security planning efforts focus on freight movements. The Federal Motor Carrier Safety Administration reviews security measures with motor carriers and shippers that may be the target of terrorist attack. Its mission is to increase the level of awareness of hazardous materials carriers to terrorist threats. The FMCSA field staff provide information in the form of recommendations and suggestions.



Transit – By law, 1 percent of urbanized funds / formula funds for transit are to be used for safety and security. More funding has been assigned over the past decade. The focus has been on intercity bus systems.

Activities have focused on protecting the driver; monitoring and communicating with over-the-road buses; implementing and operating passenger and baggage screening programs; assessing critical security needs and vulnerabilities; and training transportation personnel to recognize and respond to criminal attacks and terrorist threats, as well as in evacuation procedures. Because the security threat to bus operations is not limited to intercity services, all public transportation companies are required to have security plans. Josephine Community Transit with assistance from MRMPO, will prepare a security plan for its facilities and activities.

Emergency Planning - Another aspect of providing for secure transportation has to do with the subject of “emergency planning.” While transportation security is directly related to preventing attacks that are intended to harm people and damage facilities, harm modes of travel, and harm important transportation infrastructure, emergency planning is intended to respond to unforeseen natural events and disasters. A security incident is one that directly pertains to acts of terror resulting in regional, local, or specific location attacks on people, sites, facilities, or transportation infrastructure; whereas emergency response planning efforts address preparedness and response and recovery to natural disasters such as earthquakes, floods, hurricanes, violent weather, fires, and similar incidents. There are several agencies that coordinate on security and safety matters for the purpose of homeland security. The term “homeland security” refers to domestic governmental actions designed to prevent, detect, respond to, and recover from acts of terrorism, and also respond to natural disasters. Homeland security represents a concerted, national effort to protect the homeland by all levels of government at the Federal, State, and local levels, for the sole purpose of protecting the United States from internal and external hazards.

“Security planning efforts in the planning area are directed and managed by the emergency responders – police, fire, medical – representing all of the MRMPO jurisdictions.”

4. MRMPO Planning

Security planning efforts in the planning area are directed and managed by the emergency responders – police, fire, medical – representing all of the MRMPO jurisdictions.

The MRMPO will coordinate with the agencies on producing and maintaining emergency response plans. In areas involving transportation, public works staffs collaborate and assist the responders in both planning and incident response.

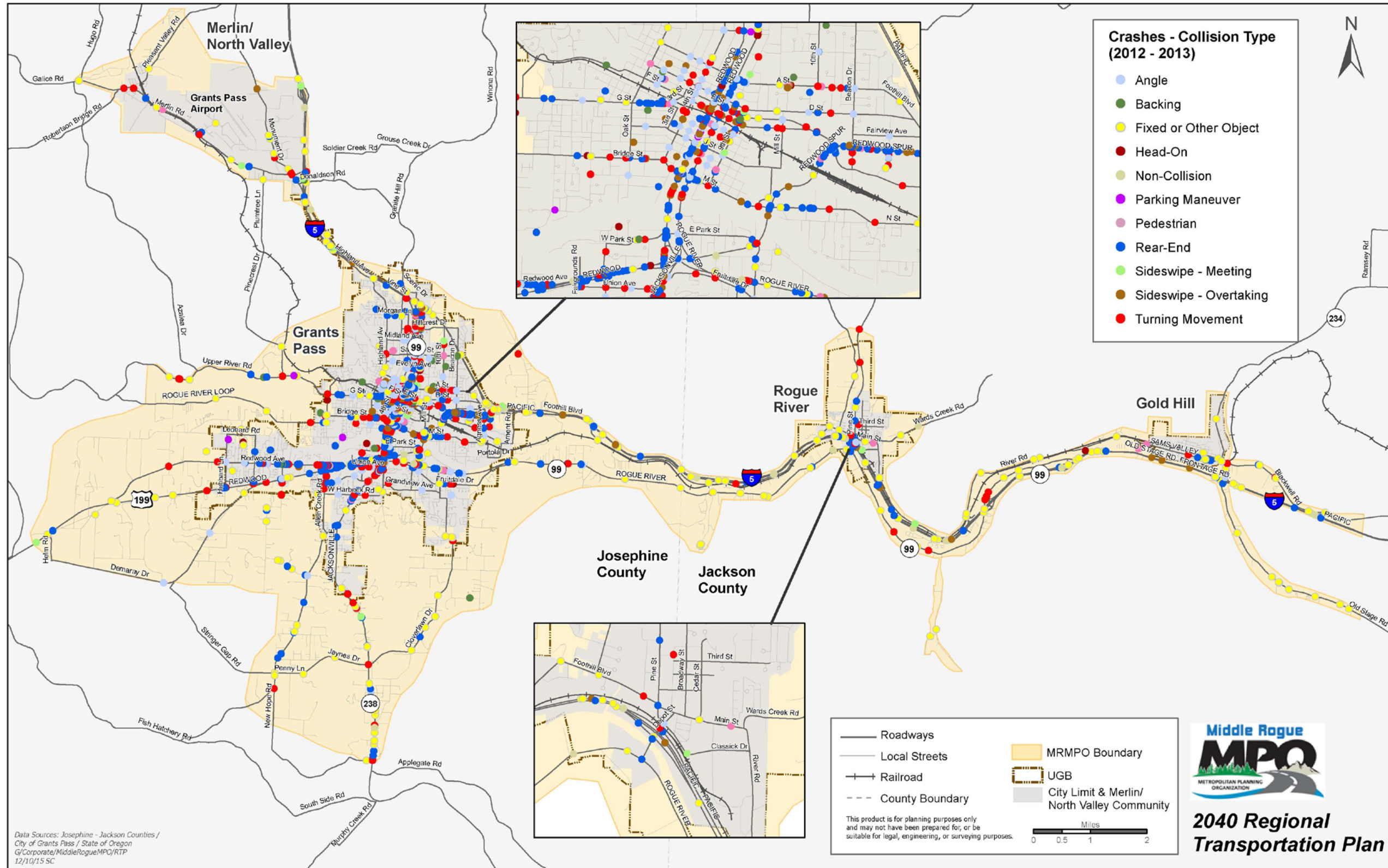
The RTP’s principal role is in identifying projects that assist responder efforts, most specifically in the area of Intelligent Transportation System (ITS) planning. The MRMPO will be developing an ITS plan in consultation with emergency responder representatives. As such, the MRMPO will provide a forum for agencies and the public to examine issues and identify needs and solutions.

Future contributions of the MRMPO are likely to focus in two areas: prevention and mitigation. Prevention planning can include: funding new strategies/technologies/projects that can help prevent events; providing a forum for security/safety agencies to coordinate surveillance and prevention strategies; finding funds for security-enhancing systems; continuing to coordinate with security officials in development of prevention strategies.

Other activities for the MRMPO could include:

- Using published sources, create annual tables of transportation security incident data by mode.
- Analyze the available databases for policy and program directions and review conclusions with appropriate lead agencies.
- Regularly review with the Technical Advisory Committee the MTIP scoring matrix and other specific funding program scoring matrices to ensure that security projects receive appropriate weighting and priority in the MTIP.
- Regularly review the Tier 1 and Tier 2 project development process for the Regional Transportation Plan (RTP) to ensure that security receives adequate priority in the development of the long range project list.

Map 12-1 – Crashes



#	Source	Comment Summary	MRMPO Response
1	Michael Baker, ODOT	Chapter 4, page 1: Add Jacksonville Highway (OR-238) to the third paragraph.	Change made. Jacksonville Highway (OR-238) added.
2	Michael Baker, ODOT	Chapter 4, page 2: Change "Williams Highway" to "Jacksonville Highway".	Change made. "Williams" changed to "Jacksonville".
3	Michael Baker, ODOT	Chapter 5, page 2: Change "OR-199" to "US-199" in Table 5-1 and in text.	Change made. "OR" changed to "US".
4	Michael Baker, ODOT	Chapter 5, page 2: Remove "Sams Valley Highway (OR 234)" from Table 5-1 and in text.	Change made. Sams Valley Highway removed.
5	Michael Baker, ODOT	Chapter 5, page 2: Add Lincoln Road and Lower River Road to Table 5-2.	Change made. Lincoln Road and Lower River Road added.
6	Michael Baker, ODOT	Chapter 5, page 7: Change "Williams Highway" to "Jacksonville Highway".	Change made. "Williams" changed to "Jacksonville".
7	Michael Baker, ODOT	Chapter 5, page 33: Change "Ashland" to "Eugene" in the last paragraph on the page.	Change made. "Ashland" to "Eugene".
8	Michael Baker, ODOT	Chapter 10, page 4: MRMPO Civil Rights Plan's web link does not work.	Change made. Web link updated to correct address.
9	Peter Fish, Public	The bridge limits bus and emergency vehicles to the town.	Comment acknowledged. Others have expressed the same concern.
10	Peter Fish, Public	The main intersection in town at 2nd Ave. and Dardanelles St. is hazardous because of poor sight lines, and needs some kind of traffic control.	ODOT evaluating intersection.
11	Cassandra Rosa, Public	Introduce more renewable transportation infrastructure in the community. Create a broad spectrum communication of transportation, city planning sourced by a representative, up to date on plans and proposals to share and incorporate information across transportation service.	Public Involvement chapter seeks to enhance flow of information and opportunities for public comment.

Appendix A

Regulatory Framework

This Transportation Plan is intended to meet both federal and state requirements for regional transportation plans as described in the federal transportation act Moving Ahead for Progress in the 21st Century (MAP-21), the U.S. Clean Air Act amendments of 1990, and Oregon's Transportation Planning Rule (TPR). This chapter describes the federal and state rules, regulations, and policies that influence the content of this document.

A. Federal Regulation

According to the 23 CFR, §450.322:

(a) The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20-year planning horizon as of the effective date. In attainment areas, the effective date of the transportation plan shall be its date of adoption by the MPO and then every four (4) years thereafter.

(b) The transportation plan shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

(c) The MPO shall review and update the transportation plan at least every four years in air quality nonattainment and maintenance areas and at least every five years in attainment areas to confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends and to extend the forecast period to at least a 20-year planning horizon. In addition, the MPO may revise the transportation plan at any time using the procedures in this section without a requirement to extend the horizon year. The transportation plan (and any revisions) shall be approved by the MPO and submitted for information purposes to the Governor. Copies of any updated or revised transportation plans must be provided to the FHWA and the FTA.

(d) In metropolitan areas that are in nonattainment for ozone or carbon monoxide, the MPO shall coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP);

(e) The MPO, the State(s), and the public transportation operator(s) shall validate data utilized in preparing other existing modal plans for providing input to the transportation plan. In updating the transportation plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO shall approve transportation plan contents and supporting analyses produced by a transportation plan update.

(f) The metropolitan transportation plan shall, at a minimum, include:

(1) *The projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;*

(2) *Existing and proposed transportation facilities (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan. In addition, the locally preferred alternative selected from an Alternatives Analysis under the FTA's Capital Investment Grant program (49 U.S.C. 5309 and 49 CFR part 611) needs to be adopted as part of the metropolitan transportation plan as a condition for funding under 49 U.S.C. 5309;*

(3) *Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods;*

(4) *Consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide; [Not Applicable to this Area];*

(5) *Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs. The metropolitan transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area's transportation system;*

(6) *...In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates;*

(7) *A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The discussion shall be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation;*

(8) *Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g);*

(9) *Transportation and transit enhancement activities, as appropriate; and*

(10) *A financial plan that demonstrates how the adopted transportation plan can be implemented.*

(i) *For purposes of transportation system operations and maintenance, the financial plan shall*

contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C. 101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53).

(ii) For the purpose of developing the metropolitan transportation plan, the MPO, public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under §450.314(a). All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.

(iii) The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the metropolitan transportation plan. In the case of new funding sources, strategies for ensuring their availability shall be identified.

(iv) In developing the financial plan, the MPO shall take into account all projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation. Starting December 11, 2007, revenue and cost estimates that support the metropolitan transportation plan must use an inflation rate(s) to reflect “year of expenditure dollars,” based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s).

(v) For the outer years of the metropolitan transportation plan (i.e. , beyond the first 10 years), the financial plan may reflect aggregate cost ranges/cost bands, as long as the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.

(vi) For nonattainment and maintenance areas, the financial plan shall address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP. [Not Applicable to this Area – the Grants Pass CO & PM₁₀ Maintenance Areas do not have any TCMs].

(vii) For illustrative purposes, the financial plan may (but is not required to) include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available.

(viii) In cases that the FHWA and the FTA find a metropolitan transportation plan to be fiscally constrained and a revenue source is subsequently removed or substantially reduced (i.e. , by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint; however, in such cases, the FHWA and the FTA will not act on an updated or amended metropolitan transportation plan that does not reflect the changed revenue situation.

(g) The MPO shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan. The consultation shall involve, as appropriate:

- (1) Comparison of transportation plans with State conservation plans or maps, if available; or
- (2) Comparison of transportation plans to inventories of natural or historic resources, if available.

(h) The metropolitan transportation plan should include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects for the MPA contained in the Strategic Highway Safety Plan required under 23 U.S.C. 148, as well as (as appropriate) emergency relief and disaster preparedness plans and strategies and policies that support homeland security (as appropriate) and safeguard the personal security of all motorized and non-motorized users.

(i) The MPO shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan using the participation plan developed under §450.316(a).

(j) The metropolitan transportation plan shall be published or otherwise made readily available by the MPO for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web.

(k) A State or MPO shall not be required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (f)(10) of this section.

(1) In nonattainment and maintenance areas for transportation-related pollutants, the MPO, as well as the FHWA and the FTA, must make a conformity determination on any updated or amended transportation plan in accordance with the Clean Air Act and the EPA transportation conformity regulations (40 CFR part 93). During a conformity lapse, MPOs can prepare an interim metropolitan transportation plan as a basis for advancing projects that are eligible to proceed under a conformity lapse. An interim metropolitan transportation plan consisting of eligible projects from, or consistent with, the most recent conforming transportation plan and TIP may proceed immediately without revisiting the requirements of this section, subject to interagency consultation defined in 40 CFR part 93. An interim metropolitan transportation plan containing eligible projects that are not from, or consistent with, the most recent conforming transportation plan and TIP must meet all the requirements of this section.

B. Oregon's Transportation Planning Rule (TPR)

The Transportation Planning Rule (TPR) (OAR660-012) requires MPOs to develop a Transportation System Plan (TSP) for a coordinated network of transportation facilities and services of regional significance. The TSP is to provide for a safe, convenient and economic transportation system that reduces reliance on the automobile so that air pollution, traffic and other livability problems typically faced by urban areas might be avoided.

As a TSP, this document must address:

(1) A TSP shall establish a coordinated network of transportation facilities adequate to serve state, regional and local transportation needs.

(2) The TSP shall include the following elements:

(a) A determination of transportation needs as provided in OAR 660-012-0030;

(b) A road plan for a system of arterials and collectors and standards for the layout of local streets and other important non-collector street connections. Functional classifications of roads in regional and local TSP's shall be consistent with functional classifications of roads in state and regional TSP's and shall provide for continuity between adjacent jurisdictions. The standards for the layout of local streets shall provide for safe and convenient bike and pedestrian circulation necessary to carry out OAR 660-0120045(3)(b). New connections to arterials and state highways shall be consistent with designated access management categories. The intent of this requirement is to provide guidance on the spacing of future extensions and connections along existing and future streets which are needed to provide reasonably direct routes for bicycle and pedestrian travel. The standards for the layout of local streets shall address:

(A) Extensions of existing streets;

(B) Connections to existing or planned streets, including arterials and collectors; and

(C) Connections to neighborhood destinations.

(c) A public transportation plan which:

(A) Describes public transportation services for the transportation disadvantaged and identifies service inadequacies;

(B) Describes intercity bus and passenger rail service and identifies the location of terminals;

(C) For areas within an urban growth boundary which have public transit service, identifies existing and planned transit trunk routes, exclusive transit ways, terminals and major transfer stations, major transit stops, and park-and-ride stations. Designation of stop or station locations may allow for minor adjustments in the location of stops to provide for efficient transit or traffic operation or to provide convenient pedestrian access to adjacent or nearby uses.

(D) For areas within an urban area containing a population greater than 25,000 persons, not currently served by transit, evaluates the feasibility of developing a public transit system at buildout. Where a transit system is determined to be feasible, the plan shall meet the requirements of paragraph (2)(c)(C) of this rule.

(d) A bicycle and pedestrian plan for a network of bicycle and pedestrian routes throughout the planning area. The network and list of facility improvements shall be consistent with the requirements of ORS 366.514;

(e) An air, rail, water and pipeline transportation plan which identifies where public use airports, mainline and branch line railroads and railroad facilities, port facilities, and major regional pipelines and terminals are located or planned within the planning area. For airports, the planning area shall include all areas within airport imaginary surfaces and other areas covered by state or federal regulations;

(f) For areas within an urban area containing a population greater than 25,000 persons a plan for transportation system management and demand management;

(g) A parking plan in MPO areas as provided in OAR 660-012-0045(5) (c);

(h) Policies and land use regulations for implementing the TSP as provided in OAR 660-012-0045;

(i) For areas within an urban growth boundary containing a population greater than 2500 persons, a transportation financing program as provided in OAR 660-012-0040.

(3) Each element identified in subsections (2)(b)-(d) of this rule shall contain:

(a) An inventory and general assessment of existing and committed transportation facilities and services by function, type, capacity and condition:

(A) The transportation capacity analysis shall include information on:

(i) The capacities of existing and committed facilities;

(ii) The degree to which those capacities have been reached or surpassed on existing facilities.

APPENDIX B

MRMPO FINANCIAL FORECASTS & ASSUMPTIONS

City of Gold Hill

Table A-1 depicts the City of Gold Hill’s estimated short, medium and long-range local revenues and non-capital expenses. City revenue resources for transportation operations and maintenance primarily come from allocations of State Highway Fund (SHF) revenue (discussed later in this Appendix) accounting for 90% of all revenue. The City anticipates receiving \$50,000 every three years from ODOT’s Small City Allotment (SCA) program.

Table A-1

City of Gold Hill										
Street System Local Revenues and Non-Capital Expenses										
City Revenue Sources							Non-Capital Expenses			
Year	System Dev Charges	Subtotals SDC	Street Utility Fee	Subtotals SUF	SCA	Subtotal Misc	Admin	Debt Service	Maint.	Subtotal Non Capital
2015	\$0		\$0		\$50,000		\$0	\$0	\$41,285	Short Range
2016	\$0		\$0		\$0		\$0	\$0	\$42,317	
2017	\$0		\$0		\$50,000		\$0	\$0	\$43,375	
2018	\$0		\$0		\$0		\$0	\$0	\$44,459	
2019	\$0		\$0		\$0		\$0	\$0	\$45,571	
2020	\$0	\$0	\$0	\$0	\$50,000	\$150,000	\$0	\$0	\$46,710	
2021	\$0		\$0		\$0		\$0	\$0	\$47,878	Medium Range
2022	\$0		\$0		\$0		\$0	\$0	\$49,075	
2023	\$0		\$0		\$50,000		\$0	\$0	\$50,302	
2024	\$0		\$0		\$0		\$0	\$0	\$51,559	
2025	\$0		\$0		\$0		\$0	\$0	\$52,848	
2026	\$0		\$0		\$50,000		\$0	\$0	\$54,169	
2027	\$0		\$0		\$0		\$0	\$0	\$55,524	
2028	\$0		\$0		\$0		\$0	\$0	\$56,912	
2029	\$0		\$0		\$50,000		\$0	\$0	\$58,335	
2030	\$0	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$59,793	
2031	\$0		\$0		\$0		\$0	\$0	\$61,288	Long Range
2032	\$0		\$0		\$50,000		\$0	\$0	\$62,820	
2033	\$0		\$0		\$0		\$0	\$0	\$64,391	
2034	\$0		\$0		\$0		\$0	\$0	\$66,000	
2035	\$0		\$0		\$50,000		\$0	\$0	\$67,650	
2036	\$0		\$0		\$0		\$0	\$0	\$69,342	
2037	\$0		\$0		\$0		\$0	\$0	\$71,075	
2038	\$0		\$0		\$50,000		\$0	\$0	\$72,852	
2039	\$0		\$0		\$0		\$0	\$0	\$74,673	
2040	\$0	\$0	\$0	\$0	\$0	\$150,000	\$0	\$0	\$76,540	
Totals	\$0	\$0	\$0	\$0	\$450,000	\$450,000	\$0	\$0	\$1,486,743	\$1,486,743
Assumptions	2.5% annual increase		2.5% annual increase				2.5% annual increase		2.5% annual increase	

Source: City of Gold Hill

City of Grants Pass

The City of Grants Pass owns and maintains a large segment of the regional roadway network in the MRMPO. Therefore, the city's revenues and expenses will reflect the size of the city's population and roadway network.

Table A-2

City of Grants Pass										
Street System Local Revenues and Non-Capital Expenses										
City Revenue Sources							Non-Capital Expenses			
Year	System Dev Charges	Subtotals SDC	Street Utility Fee	Subtotals SUF	Misc.	Subtotal Misc	Admin	Debt Service	Maint.	Subtotal Non Capital
2015	\$0		\$888,000		\$20,500		\$601,623	\$0	\$1,694,122	
2016	\$100,000		\$906,000		\$20,500		\$619,962	\$0	\$1,752,245	
2017	\$250,000		\$922,308		\$20,500		\$635,461	\$0	\$1,796,051	
2018	\$254,500		\$938,910		\$20,500		\$651,348	\$0	\$1,840,952	
2019	\$259,081		\$955,810		\$20,500		\$667,631	\$0	\$1,886,976	
2020	\$263,744	\$1,127,325	\$973,014	\$5,584,042	\$20,500	\$123,000	\$684,322	\$0	\$1,934,151	\$14,764,844
2021	\$268,492		\$990,529		\$20,500		\$701,430	\$0	\$1,982,504	
2022	\$273,325		\$1,008,358		\$20,500		\$718,966	\$0	\$2,032,067	
2023	\$278,245		\$1,026,509		\$20,500		\$736,940	\$0	\$2,082,869	
2024	\$283,253		\$1,044,986		\$20,500		\$755,363	\$0	\$2,134,940	
2025	\$288,352		\$1,063,796		\$20,500		\$774,248	\$0	\$2,188,314	
2026	\$293,542		\$1,082,944		\$20,500		\$793,604	\$0	\$2,243,022	
2027	\$298,826		\$1,102,437		\$20,500		\$813,444	\$0	\$2,299,097	
2028	\$304,204		\$1,122,281		\$20,500		\$833,780	\$0	\$2,356,575	
2029	\$309,680		\$1,142,482		\$20,500		\$854,624	\$0	\$2,415,489	
2030	\$315,254	\$2,913,172	\$1,163,047	\$10,747,367	\$20,500	\$205,000	\$875,990	\$0	\$2,475,876	\$30,069,143
2031	\$320,929		\$1,183,981		\$20,500		\$897,890	\$0	\$2,537,773	
2032	\$326,706		\$1,205,293		\$20,500		\$920,337	\$0	\$2,601,218	
2033	\$332,586		\$1,226,988		\$20,500		\$943,346	\$0	\$2,666,248	
2034	\$338,573		\$1,249,074		\$20,500		\$966,929	\$0	\$2,732,904	
2035	\$344,667		\$1,271,557		\$20,500		\$991,102	\$0	\$2,801,227	
2036	\$350,871		\$1,294,445		\$20,500		\$1,015,880	\$0	\$2,871,257	
2037	\$357,187		\$1,317,745		\$20,500		\$1,041,277	\$0	\$2,943,039	
2038	\$363,616		\$1,341,465		\$20,500		\$1,067,309	\$0	\$3,016,615	
2039	\$370,161		\$1,365,611		\$20,500		\$1,093,992	\$0	\$3,092,030	
2040	\$376,824	\$3,482,121	\$1,390,192	\$12,846,354	\$20,500	\$205,000	\$1,121,341	\$0	\$3,169,331	\$38,491,045
Totals	\$7,522,619	\$7,522,619	\$29,177,763	\$29,177,763	\$533,000	\$533,000	\$21,778,139	\$0	\$61,546,893	\$83,325,032
Assumptions	1.8% annual increase Based on Consumer Price Index - Urban (CPI-U)		1.8% annual increase Based on Consumer Price Index - Urban (CPI-U)				2.5% annual increase		2.5% annual increase	

Source: City of Grants Pass

Table A-2 above depicts the City of Grants Pass estimated short, medium and long-range local revenues and non-capital expenses. City revenue resources for transportation operations and maintenance primarily come from allocations of State Highway Fund (SHF) revenue (discussed later in this chapter) accounting for more than two thirds of all revenue. The City's Street Utility Fee (SUF) is the next largest source of revenue for transportation operations and maintenance and administration.

City of Rogue River

Table A-3

City of Rogue River										
Street System Local Revenues and Non-Capital Expenses										
City Revenue Sources							Non-Capital Expenses			
Year	System Dev Charges	Subtotals SDC	Street Impact Fee	Subtotals SIF	Misc.	Subtotal Misc	Admin	Debt Service	Maint.	Subtotal Non Capital
2015	\$10,000		\$16,000		\$89,000		\$10,000	\$89,000	\$100,000	Short Range
2016	\$10,250		\$16,400		\$139,000		\$10,250	\$89,000	\$102,500	
2017	\$10,506		\$16,810		\$89,000		\$10,506	\$89,000	\$105,063	
2018	\$10,769		\$17,230		\$89,000		\$10,769	\$89,000	\$107,689	
2019	\$11,038		\$17,661		\$139,000		\$11,038	\$89,000	\$110,381	
2020	\$11,314	\$63,877	\$18,103	\$102,204	\$89,000	\$634,000	\$11,314	\$89,000	\$113,141	\$1,236,651
2021	\$11,597		\$18,555		\$89,000		\$11,597	\$89,000	\$115,969	Medium Range
2022	\$11,887		\$19,019		\$139,000		\$11,887	\$89,000	\$118,869	
2023	\$12,184		\$19,494		\$89,000		\$12,184	\$89,000	\$121,840	
2024	\$12,489		\$19,982		\$89,000		\$12,489	\$89,000	\$124,886	
2025	\$12,801		\$20,481		\$139,000		\$12,801	\$89,000	\$128,008	
2026	\$13,121		\$20,993		\$89,000		\$13,121	\$89,000	\$131,209	
2027	\$13,449		\$21,518		\$89,000		\$13,449	\$89,000	\$134,489	
2028	\$13,785		\$22,056		\$139,000		\$13,785	\$89,000	\$137,851	
2029	\$14,130		\$22,608		\$89,000		\$14,130	\$89,000	\$141,297	
2030	\$14,483	\$129,925	\$23,173	\$207,880	\$89,000	\$1,040,000	\$14,483	\$89,000	\$144,830	
2031	\$14,845		\$23,752		\$139,000		\$14,845	\$89,000	\$148,451	Long Range
2032	\$15,216		\$24,346		\$89,000		\$15,216	\$89,000	\$152,162	
2033	\$15,597		\$24,955		\$89,000		\$15,597	\$89,000	\$155,966	
2034	\$15,987		\$25,578		\$139,000		\$15,987	\$89,000	\$159,865	
2035	\$16,386		\$26,218		\$89,000		\$16,386	\$89,000	\$163,862	
2036	\$16,796		\$26,873		\$0		\$16,796	\$0	\$167,958	
2037	\$17,216		\$27,545		\$50,000		\$17,216	\$0	\$172,157	
2038	\$17,646		\$28,234		\$0		\$17,646	\$0	\$176,461	
2039	\$18,087		\$28,940		\$0		\$18,087	\$0	\$180,873	
2040	\$18,539	\$166,315	\$29,663	\$266,104	\$50,000	\$645,000	\$18,539	\$0	\$185,394	
Totals	\$360,117	\$360,117	\$576,187	\$576,187	\$2,319,000	\$2,319,000	\$360,117	\$1,869,000	\$3,601,171	\$5,830,288
Assumptions	2.5% annual increase		2.5% annual increase		Includes \$89,000 per year from General Fund to 2025 and \$50,000 every 3 years from SCA		2.5% annual increase		2.5% annual increase	

Source: City of Rogue River

Table A-3 above depicts the City of Rogue River’s estimated short, medium and long-range local revenues and non-capital expenses. City revenue resources for transportation operations and maintenance primarily come from allocations of State Highway Fund (SHF) revenue (discussed later in this chapter) accounting for more than 60% of all revenue. The City’s local funds make up approximately 40% of revenue for debt service, maintenance and administration.

Table A-4 below depicts ODOT forecasts for total State Highway (SHF) revenues. ODOT forecasts steady growth in total SHF revenue through 2040, but the rate of growth (1.3%) is equal to the anticipated rate of inflation, resulting in a static annual funding amount as measured in constant 2015 dollars. SHF revenues have several major sources: Motor Vehicle Registration and title fees, driver license fees, motor vehicle fuel taxes and weight mile tax. Note that the forecast of SHF revenue is divided into two categories: "current law" reflects revenue from these sources according to rates in place prior to 2014, and "additional" revenue reflects increases in certain State taxes and fees that began to take effect in FYE 2014.

**Table A-4: Projected State Highway Fund Revenues
State of Oregon, FYE 2015 to 2040 (millions)**

	FYE	YOE \$		
		"Current Law"	"Additional"	Total SHF Revenue
Short	2015	\$ 1,073	\$ 29	\$ 1,103
	2016	\$ 1,087	\$ 50	\$ 1,137
	2017	\$ 1,101	\$ 71	\$ 1,172
	2018	\$ 1,116	\$ 93	\$ 1,208
	2019	\$ 1,130	\$ 116	\$ 1,246
	2020	\$ 1,145	\$ 140	\$ 1,285
Medium	2021	\$ 1,160	\$ 165	\$ 1,324
	2022	\$ 1,175	\$ 191	\$ 1,365
	2023	\$ 1,190	\$ 218	\$ 1,408
	2024	\$ 1,206	\$ 246	\$ 1,451
	2025	\$ 1,221	\$ 275	\$ 1,496
	2026	\$ 1,237	\$ 306	\$ 1,543
	2027	\$ 1,253	\$ 337	\$ 1,591
	2028	\$ 1,270	\$ 370	\$ 1,640
	2029	\$ 1,286	\$ 405	\$ 1,691
	2030	\$ 1,303	\$ 440	\$ 1,743
Long	2031	\$ 1,320	\$ 478	\$ 1,797
	2032	\$ 1,337	\$ 516	\$ 1,853
	2033	\$ 1,354	\$ 556	\$ 1,910
	2034	\$ 1,372	\$ 598	\$ 1,970
	2035	\$ 1,390	\$ 641	\$ 2,031
	2036	\$ 1,408	\$ 686	\$ 2,094
	2037	\$ 1,426	\$ 732	\$ 2,159
	2038	\$ 1,445	\$ 781	\$ 2,225
	2039	\$ 1,463	\$ 831	\$ 2,294
	2040	\$ 1,482	\$ 883	\$ 2,366

Source: ODOT Long-Range Financial Assumptions for MPOs

**Table A-5: Allocation of Projected State Highway Fund Revenues
State of Oregon, FYE 2015 to 2040 (millions)**

	FYE	YOE \$			
		State Share	County Share	City Share	Total
Short	2015	\$ 653	\$ 272	\$ 177	\$ 1,103
	2016	\$ 672	\$ 281	\$ 184	\$ 1,137
	2017	\$ 691	\$ 291	\$ 190	\$ 1,172
	2018	\$ 710	\$ 301	\$ 197	\$ 1,208
	2019	\$ 730	\$ 312	\$ 204	\$ 1,246
	2020	\$ 751	\$ 323	\$ 211	\$ 1,284
Medium	2021	\$ 772	\$ 334	\$ 218	\$ 1,324
	2022	\$ 794	\$ 345	\$ 226	\$ 1,365
	2023	\$ 817	\$ 357	\$ 234	\$ 1,408
	2024	\$ 840	\$ 369	\$ 242	\$ 1,451
	2025	\$ 864	\$ 382	\$ 250	\$ 1,496
	2026	\$ 889	\$ 395	\$ 259	\$ 1,543
	2027	\$ 914	\$ 409	\$ 268	\$ 1,590
	2028	\$ 940	\$ 422	\$ 277	\$ 1,640
	2029	\$ 967	\$ 437	\$ 286	\$ 1,691
	2030	\$ 995	\$ 452	\$ 296	\$ 1,743
Long	2031	\$ 1,024	\$ 467	\$ 306	\$ 1,797
	2032	\$ 1,053	\$ 483	\$ 317	\$ 1,853
	2033	\$ 1,084	\$ 499	\$ 328	\$ 1,910
	2034	\$ 1,115	\$ 516	\$ 339	\$ 1,969
	2035	\$ 1,147	\$ 533	\$ 350	\$ 2,031
	2036	\$ 1,180	\$ 551	\$ 362	\$ 2,093
	2037	\$ 1,215	\$ 569	\$ 374	\$ 2,158
	2038	\$ 1,250	\$ 588	\$ 387	\$ 2,225
	2039	\$ 1,286	\$ 608	\$ 400	\$ 2,294
	2040	\$ 1,323	\$ 628	\$ 414	\$ 2,365

Source: ODOT Long-Range Financial Assumptions for MPOs

SHF revenue is allocated to three jurisdiction levels: State, Counties, and Cities. Table A-5 reflects these allocations. Note that the “Additional” revenues allocate a higher share of SHF revenues to cities and counties than to the State, so that the amount of SHF revenue for cities and counties increases over time in constant 2015 dollars, while the State share of SHF revenue decreases.

Gold Hill, Grants Pass and Rogue River’s share of SHF revenue for this financial plan were calculated by determining the percent of each of the cities’ population to the statewide incorporated cities’ total population. For Josephine and Jackson Counties, their share of SHF revenue was calculated by estimating the percent of rural population for each county within the MPO boundary compared to statewide population. Population figures are from Portland State University (PSU) Population Research Center’s July 2013 certified population estimates.

Table A-6: MRMPO Population Estimates

Geography	Population
Oregon	3,919,020
Josephine County	82,815
Josephine County within MPO Area*	10,819
Jackson County	206,310
Jackson County within MPO Area**	1,596
Gold Hill	1,220
Grants Pass	34,855
Rogue River	2,145
MRMPO Total	50,635
Source: PSU July 2013	
* 13.06% of Josephine Co. Population within MPO (estimated)	
** 0.77% of Jackson Co. Population within MPO (estimated)	

Table A-6 above shows Portland State University’s Population and Research Center’s 2013 Oregon total population, Josephine & Jackson Counties’ population and estimated population within the MRMPO Planning Area, and the population totals for Gold Hill, Grants Pass and Rogue River.

Table A-7: MRMPO Population to Oregon’s Population

Geography	Population
Oregon	3,919,020
MRMPO	50,635
Ratio	1.3%

Table A-7 above depicts the MRMPO’s ratio to Oregon’s population. The MRMPO is 1.3% of Oregon’s total population.

Table A-8: Ratio of Population of Cities within MRMPO to Population of Oregon Incorporated Cities

Geography	Population
Population of Oregon Cities	2,716,667
Population of MRMPO Cities	38,220
Ratio	1.4%

Table A-8 on Page 7 above shows MRMPO's ratio to Oregon's incorporated cities population. Gold Hill, Grants Pass and Rogue River make up 1.4% of Oregon's total incorporated city population.

Table A-9: MRMPO Population to Oregon's Population

MRMPO Jurisdictions	PSU 2013 Population of Incorporated Cities	MRMPO Jurisdiction % of Incorporated Cities and Counties Statewide Totals	MRMPO Jurisdiction % of MPO Population
Gold Hill	1,220	0.04%	2%
Grants Pass	34,855	1.28%	69%
Rogue River	2,145	0.08%	4%
Josephine County	10,819*	0.28%	21%
Jackson County	1,596*	0.04%	3%
*Includes rural county population within MPO boundary			

Table A-9 above shows the estimated populations of each of the MRMPO member jurisdiction within the MPO area, percent totals of the jurisdictions compared to statewide and incorporated city total populations (these percentages are used to estimate State Highway Fund revenues), and the jurisdiction's percent of the MPO's population.

Table A-10: Ratio of ODOT Region 3 Population to Oregon's Population

Geography	Population
Oregon	3,919,020
Region 3	483,135
Ratio	12.3%

Table A-11: Ratio of MRMPO's Population to ODOT Region 3 Population

ODOT Region 3 Counties	Population
Coos	62,860
Curry	22,300
Douglas	108,850
Jackson	206,310
Josephine	82,815
Total	483,135
MRMPO	50,635
Ratio of MRMPO's Population to Region 3 Population	10.5%

Tables A-10 & A-11 show the ratios used to estimate ODOT Region 3's and the MRMPO's share of Oregon's non-modernization (Operations, Maintenance and Preservation) and modernization funding.

Table A-12 shows the estimated SHF revenue allocated to the MRMPO member jurisdictions from 2015 to 2040 using a 1.3% annual increase. FYE 2015, Gold Hill is forecast to receive approximately \$80,000; Grants Pass \$2.3 million; Rogue River \$140,000; Josephine County \$750,000 (within MPO boundary) and Jackson County \$111,000 (within MPO boundary). Gold Hill's forecast to grows to nearly \$186,000 in 2040; Grants Pass to \$5.3 million; Rogue River to \$327,000; Josephine County \$1.7 million and Jackson County \$ 256,000.

Table A-12: Allocation of Projected State Highway Fund Revenues to MRMPO Jurisdictions FYE 2015 to 2040

	Allocation to City of Grants Pass		Allocation to City of Rogue River		Allocation to City of Gold Hill		Allocation to Josephine County		Allocation to Jackson County	
	FYE	YOE \$	FYE	YOE \$	FYE	YOE \$	FYE	YOE \$	FYE	YOE \$
Short	2015	\$ 2,275,997	2015	\$ 140,143	2015	\$ 79,651	2015	\$ 750,986	2015	\$ 110,703
	2016	\$ 2,356,517	2016	\$ 145,101	2016	\$ 82,469	2016	\$ 777,190	2016	\$ 114,566
	2017	\$ 2,439,663	2017	\$ 150,221	2017	\$ 85,379	2017	\$ 804,244	2017	\$ 118,554
	2018	\$ 2,525,518	2018	\$ 155,507	2018	\$ 88,383	2018	\$ 832,175	2018	\$ 122,671
	2019	\$ 2,614,167	2019	\$ 160,966	2019	\$ 91,486	2019	\$ 861,011	2019	\$ 126,922
	2020	\$ 2,705,698	2020	\$ 166,602	2020	\$ 94,689	2020	\$ 890,780	2020	\$ 131,310
Medium	2021	\$ 2,800,204	2021	\$ 172,421	2021	\$ 97,996	2021	\$ 921,513	2021	\$ 135,840
	2022	\$ 2,897,778	2022	\$ 178,429	2022	\$ 101,411	2022	\$ 953,238	2022	\$ 140,517
	2023	\$ 2,998,516	2023	\$ 184,632	2023	\$ 104,936	2023	\$ 985,988	2023	\$ 145,345
	2024	\$ 3,102,519	2024	\$ 191,036	2024	\$ 108,576	2024	\$ 1,019,795	2024	\$ 150,328
	2025	\$ 3,209,890	2025	\$ 197,647	2025	\$ 112,334	2025	\$ 1,054,692	2025	\$ 155,473
	2026	\$ 3,320,734	2026	\$ 204,472	2026	\$ 116,213	2026	\$ 1,090,714	2026	\$ 160,782
	2027	\$ 3,435,163	2027	\$ 211,518	2027	\$ 120,217	2027	\$ 1,127,895	2027	\$ 166,263
	2028	\$ 3,553,287	2028	\$ 218,792	2028	\$ 124,351	2028	\$ 1,166,273	2028	\$ 171,921
	2029	\$ 3,675,225	2029	\$ 226,300	2029	\$ 128,619	2029	\$ 1,205,885	2029	\$ 177,760
	2030	\$ 3,801,097	2030	\$ 234,050	2030	\$ 133,024	2030	\$ 1,246,770	2030	\$ 183,787
Long	2031	\$ 3,931,025	2031	\$ 242,051	2031	\$ 137,571	2031	\$ 1,288,968	2031	\$ 190,007
	2032	\$ 4,065,139	2032	\$ 250,309	2032	\$ 142,264	2032	\$ 1,332,520	2032	\$ 196,427
	2033	\$ 4,203,569	2033	\$ 258,832	2033	\$ 147,109	2033	\$ 1,377,469	2033	\$ 203,053
	2034	\$ 4,346,452	2034	\$ 267,630	2034	\$ 152,109	2034	\$ 1,423,858	2034	\$ 209,891
	2035	\$ 4,493,928	2035	\$ 276,711	2035	\$ 157,270	2035	\$ 1,471,734	2035	\$ 216,949
	2036	\$ 4,646,141	2036	\$ 286,083	2036	\$ 162,597	2036	\$ 1,521,143	2036	\$ 224,232
	2037	\$ 4,803,240	2037	\$ 295,757	2037	\$ 168,095	2037	\$ 1,572,132	2037	\$ 231,749
	2038	\$ 4,965,380	2038	\$ 305,740	2038	\$ 173,769	2038	\$ 1,624,752	2038	\$ 239,505
	2039	\$ 5,132,718	2039	\$ 316,044	2039	\$ 179,625	2039	\$ 1,679,053	2039	\$ 247,510
	2040	\$ 5,305,417	2040	\$ 326,678	2040	\$ 185,669	2040	\$ 1,735,089	2040	\$ 255,770

Source: ODOT Long-Range Financial Assumptions for MPOs & RVCOG Forecasting

Table A-13 includes the projected STP, CMAQ and Enhance-It revenues for 2015 to 2040. The estimates for STP and CMAQ are based on a 1.4% annual increase. Enhance-It funds are estimated at \$1.6 million per year. Not all projects are eligible for Enhance-It funding. The selection process is competitive and ODOT notes that the criteria for projects may change.

Table A-13: MRMPO STP, CMAQ & Enhance-It Revenue - FYE 2015 to 2040

MRMPO STP, CMAQ & Enhance-It Revenue Projections								
2015 - 2040 RTP								
CMAQ (\$ X 1,000)			STP (\$ X 1,000)			Enhance-It (\$ X 1,000)		
YEAR	Total CMAQ	Available	YEAR	Total STP	Available	YEAR	Total	Available
2015	\$2,212	Short Range	2015	\$0	Short Range	2015	Funds are Committed to 2018	Short Range
2016	\$728		2016	\$57		2016		
2017	\$738		2017	\$0		2017		
2018	\$749		2018	\$626		2018		
2019	\$759		2019	\$636		2019		
2020	\$770	\$5,956	2020	\$645	\$1,964	2020	\$1,620	\$3,240
2021	\$780	Medium Range	2021	\$654	Medium Range	2021	\$1,620	Medium Range
2022	\$791		2022	\$663		2022	\$1,620	
2023	\$802		2023	\$672		2023	\$1,620	
2024	\$814		2024	\$682		2024	\$1,620	
2025	\$825		2025	\$691		2025	\$1,620	
2026	\$837		2026	\$701		2026	\$1,620	
2027	\$848		2027	\$711		2027	\$1,620	
2028	\$860		2028	\$721		2028	\$1,620	
2029	\$872		2029	\$731		2029	\$1,620	
2030	\$884	\$8,314	2030	\$741	\$6,967	2030	\$1,620	\$16,200
2031	\$897	Long Range	2031	\$751	Long Range	2031	\$1,620	Long Range
2032	\$909		2032	\$762		2032	\$1,620	
2033	\$922		2033	\$773		2033	\$1,620	
2034	\$935		2034	\$783		2034	\$1,620	
2035	\$948		2035	\$794		2035	\$1,620	
2036	\$961		2036	\$806		2036	\$1,620	
2037	\$975		2037	\$817		2037	\$1,620	
2038	\$988		2038	\$828		2038	\$1,620	
2039	\$1,002		2039	\$840		2039	\$1,620	
2040	\$1,016	\$9,555	2040	\$852	\$8,006	2040	\$1,620	\$16,200
	\$23,825	\$23,825		\$16,937	\$16,937		\$35,640	\$35,640
1.4% annual increase Only projects located within the Grants Pass CO & PM10 Maintenances are eligible for CMAQ funds.			1.4% annual increase STP funds can be used for projects within the entire MRMPO area.			\$1.62M/year available for eligible projects in Jackson & Josephine Counties. Competitive project selection process through the RFACT. Some projects may not be eligible for funding. Criteria may change.		

Source: ODOT Long-Range Financial Assumptions for MPOs; ODOT Region 3

The State of Oregon is responsible for operations and maintenance of state highways. Table A-14 below shows the State forecast for these costs through FYE 2040. In total, the State forecasts \$1.08 billion in annual operating costs in FYE 2015, with an annual growth rate of 3.1% per year.

Table A-14: Projected Annual Costs for ODOT Non-Modernization Highway Uses, FYE 2015 to 2040, Millions (YOE \$)

FY 2013 LONG RANGE ESTIMATES OF ODOT HIGHWAY PRESERVATION, MAINTENANCE AND OTHER COSTS										
(\$ Millions)										
Fiscal Year	Preservation	Maintenance	Safety	Traditional Operations	ITS	Bridge	Non-Mod. Debt S.	Central Services	Other	All Non-Mod Hwy Programs
	(YOE \$s)	(YOE \$s)	(YOE \$s)	(YOE \$s)	(YOE \$s)	(YOE \$s)	(YOE \$s)	(YOE \$s)	(YOE \$s)	(YOE \$s)
2015	220	225	41	32	8	171	136	62	184	1,079
2016	226	232	42	33	8	177	136	64	190	1,109
2017	233	240	43	34	9	182	136	66	196	1,139
2018	241	247	45	35	9	188	136	68	202	1,170
2019	248	255	46	36	9	194	136	70	208	1,202
2020	256	263	47	37	9	200	136	72	214	1,235
2021	264	271	49	39	10	206	136	75	221	1,269
2022	272	279	50	40	10	212	136	77	228	1,304
2023	280	288	52	41	10	219	136	79	235	1,340
2024	289	297	54	42	11	226	136	82	242	1,378
2025	298	306	55	44	11	232	136	84	250	1,416
2026	307	315	57	45	11	240	136	87	257	1,456
2027	317	325	59	46	12	247	136	90	265	1,497
2028	327	335	60	48	12	255	136	92	274	1,539
2029	337	346	62	49	12	263	136	95	282	1,582
2030	347	356	64	51	13	271	131	98	291	1,622
2031	358	367	66	52	13	279	131	101	300	1,668
2032	369	379	68	54	13	288	131	104	309	1,716
2033	381	391	70	56	14	297	131	108	319	1,765
2034	392	403	73	57	14	306	131	111	329	1,815
2035	404	415	75	59	15	315	131	114	339	1,868
2036	417	428	77	61	15	325	30	118	349	1,821
2037	430	441	80	63	16	335	30	122	360	1,876
2038	443	455	82	65	16	346	30	125	371	1,934
2039	457	469	85	67	17	356	30	129	383	1,993
2040	471	484	87	69	17	368	30	133	395	2,054

Source: ODOT Long-Range Revenue Tables 2013. Summarized by RVCOG.

Table A-15 below shows the estimated amount of funding for ODOT Region 3 Operations, Maintenance and Preservation (OM&P) within the MRMPO area based on population ratios. OM&P estimates are based on population ratios; ODOT Region 3 = 12.3% of Oregon's population and MRMPO's population is 10.5% of Region 3's population. This methodology is also used by the Corvallis Area MPO (CAMPO).

Table A-15: Projected Annual Costs for ODOT Region 3 & MRMPO Non-Modernization Highway Uses, FYE 2015 to 2040 (YOE \$)

Fiscal Year		All ODOT Non-Modernization Programs	Region 3 Share	MRMPO Share
Short	2015	\$1,079,379,083	\$132,763,627	\$13,940,181
	2016	\$1,108,620,735	\$136,360,350	\$14,317,837
	2017	\$1,138,768,878	\$140,068,572	\$14,707,200
	2018	\$1,169,851,613	\$143,891,748	\$15,108,634
	2019	\$1,201,897,913	\$147,833,443	\$15,522,512
	2020	\$1,234,937,648	\$151,897,331	\$15,949,220
Medium	2021	\$1,269,001,615	\$156,087,199	\$16,389,156
	2022	\$1,304,121,565	\$160,406,953	\$16,842,730
	2023	\$1,340,330,234	\$164,860,619	\$17,310,365
	2024	\$1,377,661,371	\$169,452,349	\$17,792,497
	2025	\$1,416,149,773	\$174,186,422	\$18,289,574
	2026	\$1,455,831,316	\$179,067,252	\$18,802,061
	2027	\$1,496,742,987	\$184,099,387	\$19,330,436
	2028	\$1,538,922,920	\$189,287,519	\$19,875,190
	2029	\$1,582,410,430	\$194,636,483	\$20,436,831
	2030	\$1,621,646,054	\$199,462,465	\$20,943,559
Long	2031	\$1,667,871,581	\$205,148,205	\$21,540,561
	2032	\$1,715,530,100	\$211,010,202	\$22,156,071
	2033	\$1,764,666,034	\$217,053,922	\$22,790,662
	2034	\$1,815,325,181	\$223,284,997	\$23,444,925
	2035	\$1,867,554,761	\$229,709,236	\$24,119,470
	2036	\$1,820,903,459	\$223,971,125	\$23,516,968
	2037	\$1,876,421,466	\$230,799,840	\$24,233,983
	2038	\$1,933,660,531	\$237,840,245	\$24,973,226
	2039	\$1,992,674,008	\$245,098,903	\$25,735,385
	2040	\$2,053,516,902	\$252,582,579	\$26,521,171

Source: ODOT Long-Range Revenue Tables 2013. Summarized by RVCOG.

Table A-16 below shows ODOT’s projected revenues for modernization under ORS 366.507. In FYE 2015, 31% of State revenue for modernization is dedicated to pay debt service on previous bonds for transportation projects. These debt service payments continue through FYE 2028. In FYE 2015, ODOT forecasts \$56.4 million in revenue for modernization projects net of debt service and federal match (i.e., revenue the ODOT can spend on new capital projects).

Table A-16: Projected Statewide Annual Revenue Available for Transportation Modernization Projects, ODOT, FYE 2015 to 2040, Millions (YOE \$)

Fiscal Year	Statewide Funds Reserved for Highway Modernization Under ORS 366.507	ORS 366.507 Funds Reserved for Debt Service	ORS 366.507 Funds Net of Debt Service & Federal Match
2015	\$82.6	25.2	56.4
2016	\$83.7	25.2	57.5
2017	\$84.8	25.2	58.5
2018	\$85.9	25.2	59.6
2019	\$87.0	25.2	60.7
2020	\$88.1	25.2	54.4
2021	\$89.3	25.2	63.0
2022	\$90.4	25.2	64.1
2023	\$91.6	25.2	65.3
2024	\$92.8	25.2	66.5
2025	\$94.0	25.2	67.6
2026	\$95.2	25.2	59.9
2027	\$96.4	25.2	70.1
2028	\$97.7	12.6	83.9
2029	\$99.0	0.0	97.8
2030	\$100.3	0.0	99.0
2031	\$101.6	0.0	100.3
2032	\$102.9	0.0	90.9
2033	\$104.2	0.0	102.9
2034	\$105.6	0.0	104.3
2035	\$106.9	0.0	105.6
2036	\$108.3	0.0	107.0
2037	\$109.7	0.0	108.4
2038	\$111.2	0.0	96.9
2039	\$112.6	0.0	111.2
2040	\$114.1	0.0	112.7

Source: ODOT Long-Range Revenue Tables 2013. Summarized by RVCOG.

ODOT uses an agreed upon formula to allocate modernization revenues to each of the five ODOT regions across the state. The formula is based on population, vehicle miles traveled (VMT), ton miles traveled, vehicle registrations, and revenue estimates from the 1999-2001 biennium. The MRMPO is located in Region 3. Table A-17 below shows the ODOT calculation of Region 3's share of total ODOT revenue for modernization projects, resulting in Region 3 receiving 15.6% of the State's revenues.

Table A-17: ODOT Region 3 Share of State Revenue for Transportation Modernization

County	Population	Vehicle Miles	Ton Miles	Vehicle	Projected	Modernization
	(2011)	Travelled (2011)	Travelled (2011)	Registrations (2011)	Revenue (FY 1999-2001)	
Coos	62,960	277,635,754	1,221,567,568	74,540	\$49,825,000	
Curry	22,335	114,100,278	404,787,891	29,849	\$18,165,000	
Douglas	107,795	1,032,748,776	9,301,213,627	133,992	\$144,523,000	
Jackson	203,950	884,841,906	5,057,214,273	225,579	\$126,362,000	
Josephine	82,820	449,210,209	3,164,471,386	101,631	\$62,470,000	
Region 3 Total	479,860	2,758,536,923	19,149,254,745	565,591	\$401,345,000	
Statewide Total	3,857,625	19,426,126,596	109,029,809,309	4,062,873	\$2,698,465,000	
Region 3 % of State	12.44%	14.20%	17.56%	13.92%	14.87%	15.6%

Source: ODOT Long-Range Revenue Tables 2013. Summarized by RVCOG.

There is no agreed upon formula for how Region 3 allocates ODOT revenue for modernization projects in different municipalities within the Region. Modernization funds for projects in Josephine and Jackson Counties are allocated through an application process facilitated by ODOT with recommendations for funding from the Rogue Valley Area Commission on Transportation (RVACT) made to the Oregon Transportation Commission (OTC). The Middle Rogue MPO has a voting member on the RVACT.

For the purposes of this analysis, the modernization funding revenue projections for the MRMPO are based on the most current (July 2014) Region 3 (12.3%) population ratio to the amount of statewide funding available for the planning period (2015 – 2040). These percentages are more conservative than the 15.6% estimate for Region 3 in Table A-17 above. Table A-18 below depicts the more conservative estimated modernization revenues for ODOT Region 3 and the MRMPO.

Table A-18: Projected Annual Allocation of Revenue to the MRMPO for Transportation Modernization Projects, FYE 2015 to 2040

Fiscal Year		ORS 336.507 Funds Net of Debt Service & Federal Match	Region 3 Share	MRMPO Share
Short	2015	\$56,402,673	\$6,937,529	\$728,440.52
	2016	\$57,462,510	\$7,067,889	\$742,128.32
	2017	\$58,536,112	\$7,199,942	\$755,993.88
	2018	\$59,623,656	\$7,333,710	\$770,039.51
	2019	\$60,725,323	\$7,469,215	\$784,267.55
	2020	\$54,419,235	\$6,693,566	\$702,824.42
Medium	2021	\$62,971,766	\$7,745,527	\$813,280.36
	2022	\$64,116,915	\$7,886,381	\$828,069.96
	2023	\$65,276,936	\$8,029,063	\$843,051.62
	2024	\$66,452,021	\$8,173,599	\$858,227.85
	2025	\$67,642,367	\$8,320,011	\$873,601.17
	2026	\$59,934,089	\$7,371,893	\$774,048.76
	2027	\$70,069,636	\$8,618,565	\$904,949.35
	2028	\$83,906,963	\$10,320,556	\$1,083,658.42
	2029	\$97,760,358	\$12,024,524	\$1,262,575.03
	2030	\$99,030,031	\$12,180,694	\$1,278,972.86
	Long	2031	\$100,316,193	\$12,338,892
2032		\$90,913,023	\$11,182,302	\$1,174,141.69
2033		\$102,938,842	\$12,661,478	\$1,329,455.15
2034		\$104,275,766	\$12,825,919	\$1,346,721.52
2035		\$105,630,053	\$12,992,496	\$1,364,212.13
2036		\$107,001,926	\$13,161,237	\$1,381,929.88
2037		\$108,391,616	\$13,332,169	\$1,399,877.72
2038		\$96,941,139	\$11,923,760	\$1,251,994.81
2039		\$111,225,371	\$13,680,721	\$1,436,475.67
2040		\$112,669,909	\$13,858,399	\$1,455,131.87

Source: ODOT Long-Range Revenue Tables 2013. Summarized by RVCOG.

Table A-19 shows the estimated revenue projection for Josephine Community Transit (JCT) for 2015 to 2040. Assumptions are included at the bottom of the chart.

Table A-19: JCT Revenue Projections, FYE 2015 to 2040

Revenues												
Year	5307	NEMT	5311	STF	Contract Services	EIP	Farebox	CMAQ	5309 Capital	5310	TOTALS	
Short	2015	\$500,000	\$36,000	\$77,000	\$143,000	\$210,000	\$74,000	\$162,000	\$145,000	\$280,000	\$331,000	\$1,958,000
	2016	\$510,000	\$36,720	\$77,770	\$147,433	\$214,200	\$75,110	\$164,430	\$147,000	\$280,000	\$331,000	\$1,983,663
	2017	\$520,200	\$37,454	\$78,548	\$152,003	\$218,484	\$76,237	\$166,896	\$149,000	\$280,000	\$331,000	\$2,009,823
	2018	\$530,604	\$38,203	\$79,333	\$156,716	\$222,854		\$169,400	\$0	\$280,000	\$331,000	\$1,808,110
	2019	\$541,216	\$38,968	\$80,127	\$161,574	\$227,311		\$171,941	\$0	\$280,000	\$331,000	\$1,832,136
	2020	\$552,040	\$39,747	\$80,928	\$166,582	\$231,857		\$174,520	\$0	\$280,000	\$331,000	\$1,856,675
Medium	2021	\$563,081	\$40,542	\$81,737	\$171,747	\$236,494		\$177,138	\$0	\$0	\$0	\$1,270,739
	2022	\$574,343	\$41,353	\$82,554	\$177,071	\$241,224		\$179,795	\$0	\$0	\$0	\$1,296,340
	2023	\$585,830	\$42,180	\$83,380	\$182,560	\$246,048		\$182,492	\$0	\$0	\$0	\$1,322,490
	2024	\$597,546	\$43,023	\$84,214	\$188,219	\$250,969		\$185,229	\$0	\$0	\$0	\$1,349,201
	2025	\$609,497	\$43,884	\$85,056	\$194,054	\$255,989		\$188,008	\$0	\$0	\$0	\$1,376,487
	2026	\$621,687	\$44,761	\$85,906	\$200,070	\$261,109		\$190,828	\$0	\$0	\$0	\$1,404,361
	2027	\$634,121	\$45,657	\$86,766	\$206,272	\$266,331		\$193,690	\$0	\$0	\$0	\$1,432,836
	2028	\$646,803	\$46,570	\$87,633	\$212,666	\$271,657		\$196,595	\$0	\$0	\$0	\$1,461,926
	2029	\$659,739	\$47,501	\$88,510	\$219,259	\$277,091		\$199,544	\$0	\$0	\$0	\$1,491,644
	2030	\$672,934	\$48,451	\$89,395	\$226,056	\$282,632		\$202,538	\$0	\$0	\$0	\$1,522,006
Long	2031	\$686,393	\$49,420	\$90,289	\$233,064	\$288,285		\$205,576	\$0	\$0	\$0	\$1,553,026
	2032	\$700,121	\$50,409	\$91,191	\$240,289	\$294,051		\$208,659	\$0	\$0	\$0	\$1,584,720
	2033	\$714,123	\$51,417	\$92,103	\$247,738	\$299,932		\$211,789	\$0	\$0	\$0	\$1,617,102
	2034	\$728,406	\$52,445	\$93,024	\$255,418	\$305,930		\$214,966	\$0	\$0	\$0	\$1,650,189
	2035	\$742,974	\$53,494	\$93,955	\$263,335	\$312,049		\$218,191	\$0	\$0	\$0	\$1,683,997
	2036	\$757,833	\$54,564	\$94,894	\$271,499	\$318,290		\$221,463	\$0	\$0	\$0	\$1,718,543
	2037	\$772,990	\$55,655	\$95,843	\$279,915	\$324,656		\$224,785	\$0	\$0	\$0	\$1,753,845
	2038	\$788,450	\$56,768	\$96,802	\$288,593	\$331,149		\$228,157	\$0	\$0	\$0	\$1,789,918
	2039	\$804,219	\$57,904	\$97,770	\$297,539	\$337,772		\$231,579	\$0	\$0	\$0	\$1,826,782
	2040	\$820,303	\$59,062	\$98,747	\$306,763	\$344,527		\$235,053	\$0	\$0	\$0	\$1,864,455
Totals	\$16,835,453	\$1,212,153	\$2,273,474	\$5,589,433	\$7,070,890	\$225,347	\$5,105,263	\$441,000	\$1,680,000	\$1,986,000	\$42,419,012	
Assumptions	2% annual increase	2% annual increase Non Emergency Medical Transportation	1% annual increase	3.1% annual increase	2% annual increase	1.5% annual increase Energy Incentive Program ends in 2017	1.5% annual increase	\$441k in MRMPO CMAQ funds for RVCL Funds will sunset after 2017	ODOT long range financial projections	\$331k annually		

Source: Josephine Community Transit; RVCOG forecasting

Table A-20 shows the estimated expenses for Josephine Community Transit (JCT) for 2015 to 2040. Assumptions are included at the bottom of the chart.

Table A-20: JCT Estimated Expenses, FYE 2015 to 2040

Expenses						
Year	Ops	Maint	Admin	5309 Capital	TOTALS	
Short	2015	\$828,200	\$326,800	\$121,500	\$75,000	\$1,351,500
	2016	\$844,764	\$336,604	\$124,538	\$75,000	\$1,380,906
	2017	\$861,659	\$346,702	\$127,651	\$75,000	\$1,411,012
	2018	\$878,892	\$357,103	\$130,842	\$75,000	\$1,441,838
	2019	\$709,572	\$367,816	\$134,113	\$75,000	\$1,286,502
	2020	\$723,764	\$378,851	\$137,466	\$75,000	\$1,315,081
Medium	2021	\$738,239	\$390,216	\$140,903	\$0	\$1,269,358
	2022	\$753,004	\$401,923	\$144,425	\$0	\$1,299,352
	2023	\$768,064	\$413,980	\$148,036	\$0	\$1,330,080
	2024	\$783,425	\$426,400	\$151,737	\$0	\$1,361,562
	2025	\$799,094	\$439,192	\$155,530	\$0	\$1,393,816
	2026	\$815,076	\$452,368	\$159,419	\$0	\$1,426,862
	2027	\$831,377	\$465,939	\$163,404	\$0	\$1,460,720
	2028	\$848,005	\$479,917	\$167,489	\$0	\$1,495,411
	2029	\$864,965	\$494,314	\$171,676	\$0	\$1,530,956
	2030	\$882,264	\$509,144	\$175,968	\$0	\$1,567,376
Long	2031	\$899,909	\$524,418	\$180,367	\$0	\$1,604,695
	2032	\$917,908	\$540,151	\$184,877	\$0	\$1,642,935
	2033	\$936,266	\$556,355	\$189,499	\$0	\$1,682,119
	2034	\$954,991	\$573,046	\$194,236	\$0	\$1,722,273
	2035	\$974,091	\$590,237	\$199,092	\$0	\$1,763,420
	2036	\$993,573	\$607,944	\$204,069	\$0	\$1,805,586
	2037	\$1,013,444	\$626,183	\$209,171	\$0	\$1,848,798
	2038	\$1,033,713	\$644,968	\$214,400	\$0	\$1,893,081
	2039	\$1,054,387	\$664,317	\$219,760	\$0	\$1,938,465
	2040	\$1,075,475	\$684,247	\$225,254	\$0	\$1,984,976
Totals	\$22,784,123	\$12,599,134	\$4,375,423	\$450,000	\$40,208,680	
Assumptions	2% annual increase	3% annual increase	2.5% annual increase	\$150k annually to 2020		

Source: Josephine Community Transit; RVCOG forecasting

Table A-21 is a summary of revenues and expenses for JCT for 2015 to 2040. The analysis shows that transit revenues will exceed expenses through the planning horizon of 2040, based on carryover from the short range timeframe of the plan.

Table A-21: JCT Revenue & Expense Summary, FYE 2015 to 2040

JCT Revenue Summary					
Revenue Source	Fund	Time Frame			Totals
		Short	Medium	Long	
Federal	S5307	\$3,154,060	\$6,165,582	\$7,515,810	\$16,835,453
	NEMT	\$227,092	\$443,922	\$541,138	\$1,212,153
	5311	\$473,705	\$855,150	\$944,618	\$2,273,474
State	STF	\$927,308	\$1,977,973	\$2,684,152	\$5,589,433
	EIP	\$225,347	\$0	\$0	\$225,347
Local	Contract Services	\$1,324,705	\$2,589,545	\$3,156,640	\$7,070,890
	Farebox Returns	\$1,009,187	\$1,895,857	\$2,200,219	\$5,105,263
Other Federal	CMAQ	\$441,000	\$0	\$0	\$441,000
	5309 Capital	\$1,680,000	\$0	\$0	\$1,680,000
	5310	\$1,986,000	\$0	\$0	\$1,986,000
Totals		\$11,448,405	\$13,928,029	\$17,042,578	\$42,419,012
JCT Expense Summary					
Expenses	Time Frame			Totals	
	Short	Medium	Long		
Operations	\$4,846,852	\$8,083,513	\$9,853,757	\$22,784,123	
Maintenance	\$2,113,876	\$4,473,392	\$6,011,865	\$12,599,134	
Administration	\$776,110	\$1,578,587	\$2,020,725	\$4,375,423	
5309 Capital Grants	\$450,000	\$0	\$0	\$450,000	
Sub-total	\$8,186,838	\$14,135,493	\$17,886,348	\$40,208,680	
Balance	\$3,261,567	\$3,054,103	\$2,210,333	\$2,210,333	

Source: Josephine Community Transit; RVCOG forecasting

Appendix C

COMMON TRANSPORTATION PLANNING ACRONYMS AND TERMS

ACT:	Area Commission on Transportation
ADA:	Americans with Disabilities Act
ADT:	Average Daily Traffic
AQMA:	Air Quality Maintenance Area
CAAA:	Clean Air Act Amendments
CBD:	Central Business District
CMAQ:	Congestion Mitigation & Air Quality
CO:	Carbon Monoxide
DLCD:	Department of Land Conservation and Development
EPA:	Environmental Protection Agency
FFY:	Federal Fiscal Year: from October 1 to September 31.
FHWA:	Federal Highway Administration
FTA:	Federal Transit Administration
FTZ:	Foreign Trade Zone
FY:	Fiscal Year: (Oregon state fiscal year from July 1 to June 30)
GCP:	General Corridor Planning
GIS:	Geographic Information Systems
HOT:	High Occupancy Toll lane with extra charge for single occupants
HOV:	High Occupancy Vehicle lane for vehicles with more than one occupant
HPMS:	Highway Performance Monitoring System
I/M or I & M:	Inspection and Maintenance Program for emissions control
ISTEA:	Intermodal Surface Transportation Efficiency Act (1991), replaced by TEA-21 , the Transportation Equity Act for the 21 st century, expired in 2003
ITS:	Intelligent Transportation Systems
LOS:	Level of Service, a measure of traffic congestion from A (free-flow) to F (grid-lock)
LRT:	Light Rail Transit, self-propelled rail cars such as Portland's MAX
MAP-21	Moving Ahead for Progress in the 21 st Century; 2013 transportation act.
MIS:	Major Investment Study
MOU:	Memorandum of Understanding
MPO:	Metropolitan Planning Organization, a planning body in an urbanized area over 50,000 population which has responsibility for developing transportation plans for that area
MTIP:	Metropolitan Transportation Improvement Program (same as TIP)
NAAQS:	National Ambient Air Quality Standards
NARC:	National Association of Regional Councils
NHS:	National Highway System
NPTS:	Nationwide Personal Transportation Survey
NTI:	National Transit Institute
OAR:	Oregon Administrative Rules

ODFW:	Oregon Department of Fish and Wildlife
ODOT:	Oregon Department of Transportation
ORS:	Oregon Revised Statutes
OTC:	Oregon Transportation Commission, ODOT's governing body
OTP:	Oregon Transportation Plan
PC:	MPO Policy Committee
PL Funds:	Public Law 112, Federal Planning Funds
PM ₁₀ :	Particulate Matter of less than 10 Micrometers
PM _{2.5} :	Particulate Matter of less than 2.5 Micrometers
RTP:	Regional Transportation Plan
RVACT:	Rogue Valley Area Commission on Transportation
RVCOG:	Rogue Valley Council of Governments
RVIA:	Rogue Valley International Airport
RVTD:	Rogue Valley Transportation District
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users, the current 6-year surface transportation act, expired Sept. 2009
SIP:	State Implementation Plan
SOV:	Single Occupancy Vehicle
STA:	Special Transportation Area
STIP:	Statewide Transportation Improvement Program
STP:	Surface Transportation Program
TAC:	MPO Technical Advisory Committee
TAZ:	Transportation Analysis Zones
TCM:	Traffic Control Measures
TDM:	Transportation Demand Management
TIP:	Transportation Improvement Program
TOD:	Transit Oriented Development
TPAU:	Transportation Planning Analysis Unit
TPR:	Transportation Planning Rule
TRADCO:	Transportation Advisory Committee
TSM:	Transportation Systems Management
TSP:	Transportation System Plan
UGB:	Urban Growth Boundary
UPWP:	Unified Planning Work Program
US DOT:	U.S. Department of Transportation
VMT:	Vehicle Miles of Travel

Appropriation - Legislation that allocates budgeted funds from general revenues to programs that have been previously authorized by other legislation. The amount of money appropriated may be less than the amount authorized.

Authorization - Federal legislation that creates the policy and structure of a program including formulas and guidelines for awarding funds. Authorizing legislation may set an upper limit on program spending or may be open ended. General revenue funds to be spent under an authorization must be appropriated by separate legislation.

Capital Costs - Non-recurring or infrequently recurring cost of long-term assets, such as land, buildings, vehicles, and stations.

Conformity Analysis - A determination made by the MPOs and the US DOT that transportation plans and programs in non-attainment areas meet the “purpose” of the SIP, which is to reduce pollutant emissions to meet air quality standards.

Emissions Budget - The part of the SIP that identifies the allowable emissions levels for certain pollutants emitted from mobile, stationary, and area sources. The emissions levels are used for meeting emission reduction milestones, attainment, or maintenance demonstration.

Emissions Inventory - A complete list of sources and amounts of pollutant emissions within a specific area and time interval (part of the SIP).

Exempt / Non-Exempt Projects - Transportation projects which will not change the operating characteristics of a roadway are exempt from the Transportation Improvement Program conformity analysis. Conformity analysis must be completed on projects that affect the distance, speed, or capacity of a roadway.

Federal-aid Highways - Those highways eligible for assistance under Title 23 of the United States Code, as amended, except those functionally classified as local or rural minor collectors.

Functional Classification - The grouping of streets and highways into classes, or systems according to the character of service that they are intended to provide, e.g., residential, collector, arterial, etc.

Key Number - Unique number assigned by ODOT to identify projects in the TIP/STIP.

Maintenance - Activities that preserve the function of the existing transportation system.

Maintenance Area - “Any geographical region of the United States that the EPA has designated (under Section 175A of the CAA) for a transportation related pollutant(s) for which a national ambient air quality standard exists.” This designation is used after non-attainment areas reach attainment.

Mobile Sources - Mobile sources of air pollutants include motor vehicles, aircraft, seagoing vessels, and other transportation modes. The mobile source related pollutants of greatest concern are carbon monoxide (CO), transportation hydrocarbons (HC), nitrogen oxides (NO_x), and particulate matter (PM₁₀). Mobile sources are subject to a different set of regulations than are stationary and area sources of air pollutants.

Non-attainment Area - “Any geographic region of the United States that the EPA has designated as non-attainment for a transportation related pollutant(s) for which a national ambient air quality standard exists.”

Regionally Significant – From OAR 340-252-0030 (39) "Regionally significant project" means a transportation project, other than an exempt project, that is on a facility which serves regional transportation needs, such as access to and from the area outside the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves, and would normally be included in the modeling of a metropolitan area's transportation network, including at a minimum:

- (a) All principal arterial highways;
- (b) All fixed guideway transit facilities that offer an alternative to regional highway travel; and
- (c) Any other facilities determined to be regionally significant through interagency consultation pursuant to OAR 340-252-0060.

3C - “Three C’s” = continuing, comprehensive, and cooperative - This term refers to the requirements set forth in the Federal Highway Act of 1962 that transportation projects in urbanized areas be based on a “continuing, comprehensive transportation planning process carried out cooperatively by states and local communities.” ISTEA’s planning requirements broaden the framework for such a process to include consideration of important social, environmental and energy goals, and to involve the public in the process at several key decision making points.

PERFORMANCE BASED PLANNING

When Congress passed the 2012 transportation bill called MAP-21 and again within the subsequent bill the FAST Act in 2015, they included the requirement that performance based planning be implemented by both states and MPOs. To support this effort, FHWA and FTA spent several years developing the different regulations covering the primary areas of concern which are:

- Pavement condition on the Interstate System and on remainder of the National Highway System (NHS)
- Performance of the Interstate System and the remainder of the NHS
- Bridge condition on the NHS
- Fatalities and serious injuries—both number and rate per vehicle mile traveled—on all public roads
- Traffic congestion
- On-road mobile source emissions (through CMAQ)
- Freight movement on the Interstate System
- Transit System Reliability/State of Good Repair
- Transit Safety

The State has developed targets for the performance measures mandated by the federal transportation law. One can find these goals at the link below.

<https://www.oregon.gov/ODOT/PerformMang/Documents/FHWA%20Performance%20Management%20Area%20Targets.pdf>

Metropolitan Planning Organizations have the option of either adopting the statewide goals or developing their own. The MRMPO and RVMPO intend to adopt the State's goals save one – on road mobile source emissions. This goal is pertinent to those organizations that receive Congestion Mitigation and Air Quality (CMAQ) funds. However, due to a recent redistribution of these funds and newly promulgated regulations on how those funds can be utilized, both the RVMPO and the MRMPO have seen significant reductions in both the amount of available CMAQ funds and how those funds may be used.

On the following page is a table showing all of the performance measures and their anticipated adoption dates.

Table i – Federal Performance Measures

Roadway Measures	First Target Due	
Safety - Final Rules as of May 27, 2016	ODOT	MPOs
- Serious Injuries per 100 million vehicle miles traveled	Aug-17	Feb-18
- Fatalities per 100 million vehicle miles traveled		
- Number of Serious Injuries		
- Number of Fatalities		
- Number of Fatalities and Serious Injuries for non-motorized users		
Pavement and NHS Bridge Condition as of March 2017		
Pavement	May-18	Nov-18
- Percentage of pavements of the Interstate System in Good Condition		
- Percentage of pavements of the Interstate System in Poor Condition		
- Percentage of pavements of the non-Interstate NHS in Good Condition		
- Percentage of pavements of the non-Interstate NHS in Poor Condition		
NHS Bridge		
- Percentage of NHS Bridges Classified as in Good Condition		
- Percentage of NHS Bridges Classified as in Poor Condition		
Performance of National Highway System as of March 2017		
Travel Time Reliability	May-18	Nov-18
- Percent of the Person-Miles traveled on Interstate System that are reliable		
- Percent of the Person-Miles traveled on non-Interstate System that are reliable		
Freight Movement		
- Truck Travel Time Reliability Index		
Congestion and Air Quality Improvement Program		
- Annual hours of Peak Hour Excessive Delay per Capita		
- Percent of non-SOV Travel		
- Total Emissions Reduction for All CMAQ funded projects		
Transit Measures		
System Reliability/State of Good Repair as of October 2016	Jan-17	Oct-18
- Major mechanical system failures		
- Other mechanical system failures		
Transit Safety - Final Rules TBD	Pending	180 days after state target due
- Total number of reportable fatalities and rate per total unlinked passenger trips by mode		
- Total number of reportable injuries and rate per total unlinked passenger trips by mode		
- Total number of reportable events and rate per total vehicle miles by mode		