

Regional **Transportation Plan** 2024-2049

Adopted March 21, 2024



MIDDLE ROGUE METROPOLITAN PLANNING ORGANIZATION

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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 21, 2024

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Chapter 1 – Introduction

Purpose

This update to the Middle Rogue Regional Transportation Plan (RTP) is a multi-modal transportation review of the existing 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."

The development, adoption of, and updates to the RTP are required to ensure that the metropolitan planning area remains eligible to receive state and federal transportation funding. Federal rules requiring completion and adoption of the Plan include the Infrastructure Investment and Jobs Act (IIJA) also known as the "Bipartisan Infrastructure Law" and the U.S. Clean Air Act amendments of 1990.

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 lays out in sufficient detail the type and location of individual projects. Local projects that MRMPO jurisdictions build with local funds are not included in this plan.

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 2049, 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).

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 2049. 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 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 interregional (through-region) travel. Ultimately, the Plan reflects the balance the region strikes between competing demands for funding and competing views as to the best course for development across the region. The funding resources identified in the financial section are only those upon which the region can rely, so the projects identified may be reasonably anticipated to occur with known funding.

"The RTP serves as a guide for the management of existing transportation facilities and for the design and implementation of future transportation facilities through 2049."

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). On December 26, 2023, MRMPO reached the end of the maintenance period and is considered to be in attainment. MRMPO is no longer required to demonstrate conformity for its projects.

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.

The Middle Rogue MPO Planning Area

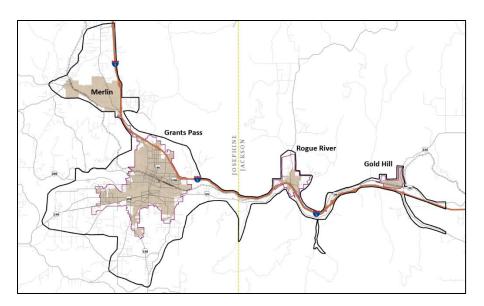
The MRMPO planning area includes the cities of Gold Hill, Grants Pass, Rogue River, and adjacent parts of Josephine and Jackson Counties which are anticipated to become urbanized over the 20-year planning horizon. In addition, the following agencies participate in the MRMPO planning processes:

- Oregon Department of Transportation (ODOT)
- Oregon Department of Environmental Quality (ODEQ)
- Oregon Department of Land Conservation and Development (DLCD)
- 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.

- Federal Highway Administration (FHWA)
- Federal Transit Administration (FTA)
- 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."

Figure 1-1- Middle Rogue MPO Planning Area



The Grants Pass area reached the population threshold and was designated as 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.

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.

Keeping the RTP Current

Because MRMPO reached attainment in December of 2023 and with that it does not have to demonstrate conformity every four years. MRMPO RTP will be updated at least every 5 years now that it reached attainment area (23 CFR § 450.324)(c).

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.



Aside from such updates, 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. For a project to move forward to completion it must be included in the MRMPO's short-range funding programming document, the Transportation Improvement Program (TIP).

Development Process

The MRMPO 2049 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 2020.

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 3 – Public Involvement.

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

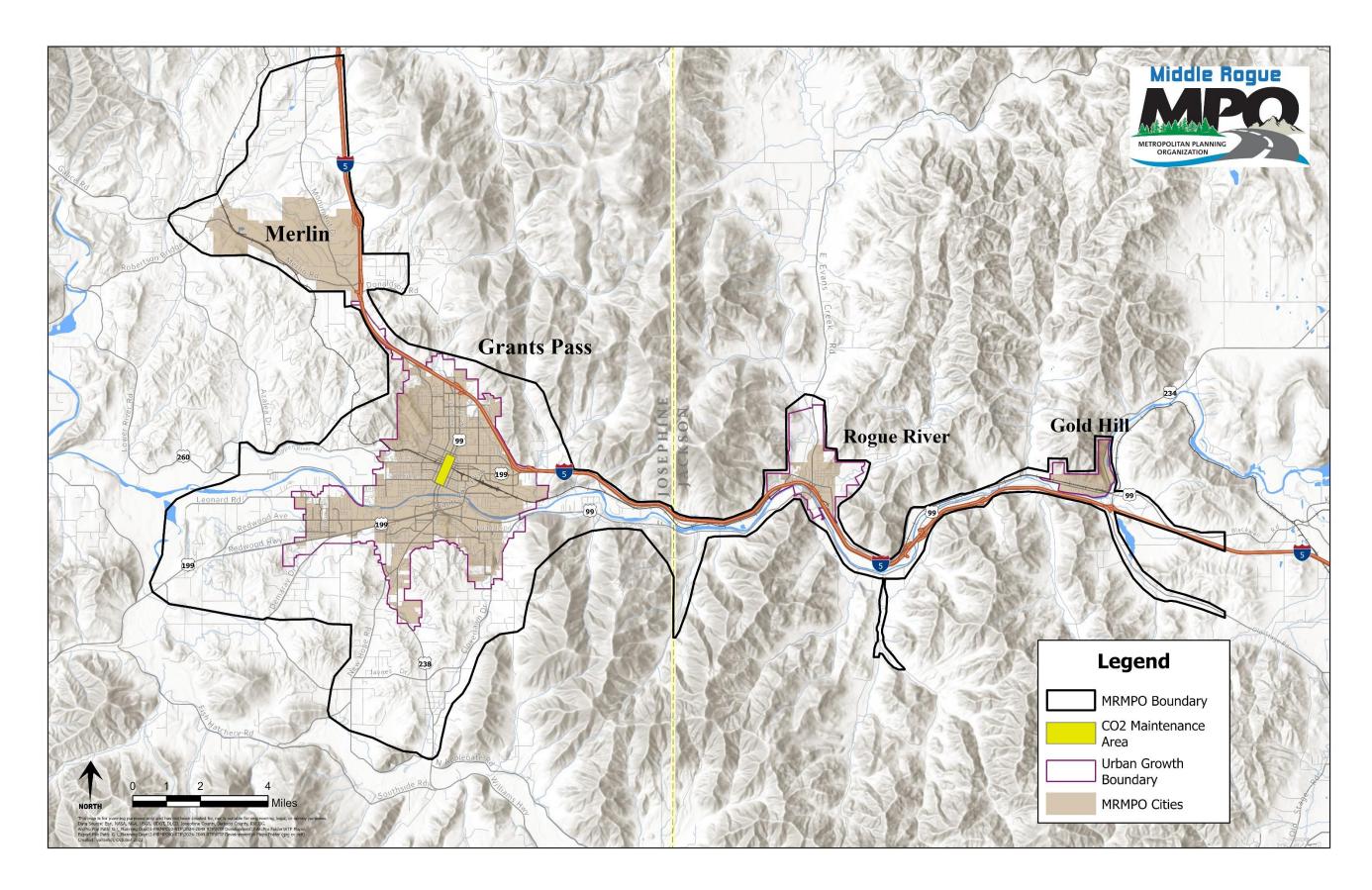
The resulting technical work was prepared for review by the public and elected officials. Additionally, the technical track also retained applicable data analyses and modeling forecasts completed by ODOT's Transportation Planning Analysis Unit (TPAU).

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.

Document Structure

This introduction forms Chapter 1 of the document and Chapter 2 states the Plan's Vision and Goals. Chapter 3 provides more detail on the public involvement process. Chapters 4 and 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 through 11 include evaluation and system performance regarding air quality conformity and environmental considerations. Chapter 12 includes 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: MRMPO Planning Area

Chapter 2 – Vision and Goals

The vision and goals chapter of the Regional Transportation Plan (RTP) provides 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 2049 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
- The performance measures evaluate how the MPO is achieving its stated goals

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."

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 2-1 – RTP Goals

1	Cultivate, maintain, and enhance the region's economic vitality
2	Increase the safety and security of the region's transportation system
3	Increase and maintain accessibility and mobility choices in the region
4	Protect, preserve, and enhance the social, historical, and natural environments of the region
5	Utilize the best available technology for the MRMPO to maximum system effectiveness
6	Emphasize maintenance and preservation of the existing transportation system

23 CFR 450.306 (b) - Planning Factors

Current federal transportation planning regulations under 23 CFR 450.306 (b) require MPOs to address 10 planning factors (see table 2-2 below) as part of the planning process. Table 2-2 provides a summary of how the six RTP Goals address the 10 federal planning factors.

Table 2-2 – Planning Factor Correlation

	Planning Factors	Relates to Goal Number
1.	Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency	Vision Statement & Goal 1
2.	Increase the safety of the transportation system for motorized and non-motorized users	Vision Statement & Goal 2
3.	Increase the security of the transportation system for motorized and non-motorized users	Goal 2
4.	Increase accessibility and mobility of people and freight	Goal 1
5.	Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns	Goal 4
6.	Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight	Goals 1, & 3
7.	Promote efficient system management and operation	Goal 6
8.	Emphasize the preservation of the existing transportation system	Goal 6
9.	Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation	Goal 4
10.	Enhance travel and tourism	Goal 6

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

Objectives

- G1 O1 Encourage the coordination of land use and transportation planning to ensure that developments are adequately connected by the region's transportation system and appropriately located to preserve the quality of life in surrounding areas
- G1 O2 Encourage transportation investments and policies that facilitate sustainable business growth and tourism growth in the region which are consistent with local and regional comprehensive plans
- G1 O3 Encourage economically strong regional activity centers with a mix of job, housing, services, and recreation in an intermodal environment.
- G1 O4 Encourage improvement of the freight transportation network to enhance the ability of local communities to access regional and national markets

GOAL 2: Increase the safety and security of the region's transportation system

Objectives

- G2 O1 Strive to reduce transportation related crashes, injuries, and fatalities using current design standards, advanced technologies, and education
- G2 O2 Collaborate with first responders, transportation, and health agencies as they develop emergency and disaster plans and other security related plans for the region
- G2 O3 Encourage transportation investments and policies that result in a higher level of personal security for pedestrians, cyclists, motorists, and users of transit, including those waiting for transit

GOAL 3: Increase and maintain accessibility and mobility choices in the region

Objectives

- G3 O1 Increase transit effectiveness so that people can reach destinations such as educational facilities, shopping, and entertainment and return home conveniently (e.g., increase transit frequency, direct routing, and flexible services)
- G3 O2 Increase transit effectiveness so that people can reach job sites and return home conveniently, so that employers can hire workers to work when needed
- G3 O3 Support a complete streets policy that promotes the use of alternative transportation modes including pedestrians, bicyclists, and transit users. Improvements could include new or improved sidewalks, bicycle routes or other accommodations, bus pullouts, and passenger amenities like shelters, benches, bike racks, and waste receptacles, etc. as part of future roadway construction/reconstruction and private development projects
- G3 O4 Support local incentives to promote transit as a commuting option, and to encourage Transit-Supported Housing (TSH)
- G3 O5 Encourage public transportation services such as commuter services, park and ride lots, ridesharing, and carpooling programs which help reduce the number of single occupancy vehicle trips within the region

GOAL 4: Protect, preserve, and enhance the social, historical, and natural environments of the region

Objectives

- G4 O1 Pursue transportation projects and other transportation related technologies that result in positive benefits to improved air quality and energy efficiency
- G4 O2 Encourage transportation investments that reduce greenhouse gases, and other emissions, and support the reduction of single occupancy vehicle trips
- G4 O3 Ensure that transportation decisions in the region are made with full consideration of the requirements of Title VI and Environmental Justice provisions and the MRMPO Public Participation Plan
- G4 O4 Encourage transportation investments that support sustainable development, enhance quality of life, and promote healthy communities

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

Objectives

- G5 O1 Encourage the use of Transportation Options (TO) principles to mitigate capacity deficiencies on congested roadways and at intersections
- G5 O2 Promote the installation and use of Park & Ride facilities where appropriate, including multi-use parking lots and other small lots
- G5 O3 Promote Traffic Calming Techniques. Traffic Calming refers to various design features and strategies intended to reduce vehicle traffic speeds and volumes on a particular roadway.
- G5 O4 Consider the use of transportation technology in all projects to maximize effectiveness and safety
- G5 O5 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

GOAL 6: Emphasize maintenance and preservation of the existing transportation system.

Objectives

- G6 O1 Prioritize investment to preserve the existing transportation system including all modes
- G6 O2 Encourage the efficient and safe movement of people, goods, and information with minimal adverse impacts on residents and the environment

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 <u>Public Participation Plan in 2022</u> which outlines the methods, strategies, and desired outcomes for public involvement regarding the Regional Transportation Plan (RTP):

Updated every five 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."

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.

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 review, virtual open houses, and final public meetings.

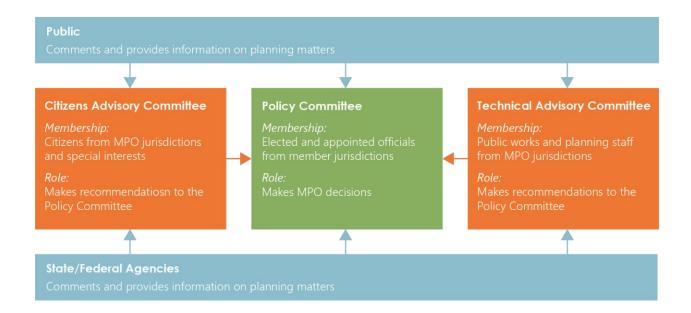
Public Meetings

The MRMPO had scheduled and advertised a series of public meetings and virtual open houses for public outreach and participation. All the meetings and virtual open house were posted on the MRMPO 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 Hearing

The MRMPO Policy Board held a public hearing on March 21, 2024, 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 the decision-making process.

Figure 3-1 – MRMPO Organizational Structure



RTP Update 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 website. 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 2022, 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.

Political and Physical Characteristics

The Middle Rogue Planning Area is located in the Rogue Valley of southwestern Oregon. The Planning Area covers approximately 73.49 square miles (47,038 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 as 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), Sam's Valley Highway (OR 234), Redwood Highway (US 199/OR 99), 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.

Land Use and Zoning

Understanding the interactions between land use and transportation is critical to transportation and land use planning. The locations of human activities and the lay of the 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.

"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."

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 the 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

"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."

include pedestrian and bicycle improvements. The Grants Pass Comprehensive Plan identifies neighborhood centers, which are located throughout the city, primarily along major arterials and collectors.

Much of the industrial land in Grants Pass is located in the eastern part 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 eastern edge of the city, located between the freeway and North River Road. Multi-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 state highway 99.

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 in the upland areas. At the intersection of Rogue River Highway and Foots Creek Road is a small cluster of commercial structures that comprise the Foots Creek Rural Service Center.

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 36 public, charter and private schools, including Rogue Community College (RCC), within the study area. Grants Pass city limits, including six elementary schools, two middle schools, and three high schools, in addition to five private schools, one charter school. Other schools in Josephine County outside of the Grants Pass city limits include four elementary schools, two middle schools, one high school, one K-12 private school, and one charter 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 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	Alternative Schools*
City of Grants Pass	6	2	3	1
City of Rogue River	1	1	1	0
City of Gold Hill	1	1	0	0
Unincorporated Josephine County	4	2	1	0

^{*} Include virtual and blended learning schools. Also, serving students in 6th through 12th grade. This does not include Private or charter schools.

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 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. located at the end of this chapter displays parks within the MPO region.

Demographics

Population trends are a key factor affecting the volume of travel in the region. 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 2020 US Census and the most recent American Community Survey (ACS) data. Where appropriate, the characteristics are compared to statewide or countywide data¹. The Census Bureau defines urban areas as having 2,500 or more residents and 2,000 or more housing units.

Population

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. As of 2020, U.S. Census Bureau, the population of the MRMPO planning area is identified in Table 4-2 below.

Table 4-2 – Population

Member Jurisdictions	2010 Population 2020 Population chan		nge	
Grants Pass Metro Area (MRMPO)	82,713	88,090	5,377	6.5%
Jackson County	203,206	223,259	20,053	9.9%
Josephine County	82,713	88,090	5,377	6.5%
Gold Hill	1,220	1,335	115	9.4%
Rogue River	2,131	2,407	276	13.0%
Grants Pass	34,533	39,189	4,656	13.5%

Source: 2020 Census Data Downloaded from PSU

As shown in Table 4-2 above, results of the 2020 US Census when compared to 2010 US Census data demonstrate a rise in population within the cities and counties that make up the Middle Rogue MPO Planning Area.

¹ 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.

Households

Table 4-3 below shows the estimated number of households for the MPO planning area and each MPO jurisdiction and unincorporated place.

Table 4-3 – Households

Jurisdiction	Households	Avg. Household Size
Oregon	1,658,091	2.49
Jackson County	89,467	2.44
Josephine County	36,148	2.40
Grants Pass Urbanized Area	36,148	2.40
City of Gold Hill	482	2.43
City of Grants Pass	16,231	2.34
City of Rogue River	876	1.96
Merlin	712	2.48

Source: 2016-2021 ACS 5-Year Estimates, Table S1101

Age

Table 4-4 below shows that the median age of 47.1 for residents of the planning area is higher than the statewide median of 39.6 years. The City of Gold Hill has the lowest median age in the Planning Area at 39.9, while the City of Rogue River is highest at 55.6 years.

The Planning Area has a relatively high percentage (25.8%) of senior residents (age 65+) compared to the statewide average (17.7%). A large degree of variation exists in the area, however. For example, in Rogue River, 35.1% of the population is 65 years or older while the estimate for neighboring Gold Hill is 21.3%.

Table 4-4 – Median Age and Senior Population

Jurisdiction	Median Age	Pop. 65+
Oregon	39.6	17.7%
Jackson County	42.4	21.9%
Josephine County	47.1	25.8%
Grants Pass Urbanized Area	47.1	25.8%
City of Gold Hill	39.9	21.3%
City of Grants Pass	40.0	20.0%
City of Rogue River	55.6	35.1%
Merlin	54.9	25.7%

Source: 2016-2021 ACS 5-year Estimates, Table S0101

Race

Table 4-5 below shows that in the planning area, 82.6% of residents identified themselves as White Alone in the 2020 U.S. Census. 8.0% of the planning area population identified as Hispanic or Latino. For a statewide comparison, 71.7% of Oregon residents identified themselves as White Alone and 13.9% of the state's population identifying as Hispanic or Latino.

Table 4-5 – White Alone and Hispanic/Latino Populations

Jurisdiction	White Alone (Not Hispanic or Latino)	Hispanic or Latino
Oregon	71.7%	13.9%
Jackson County	76.2%	13.6%
Josephine County	82.6%	8.0%
Grants Pass Urbanized Area	82.6%	8.0%
City of Gold Hill	84.6%	5.2%
City of Grants Pass	79.9%	10.0%
City of Rogue River	84.8%	7.4%
Merlin	83.6%	6.6%

Source: 2020 Decennial Census, Table P2

Poverty

Table 4-6 below shows that over 16% of planning area residents reported living below the poverty level in the past 12 months according to ACS data for 2016-2021. This is higher than the statewide average of 12.1%. The current percentage of the population living in poverty within the City of Grants Pass is 16.4%, with Rogue River and Gold Hill at 16.2% and 15.3%, respectively.

Table 4-6 – Poverty

Jurisdiction	Percent Living Below Poverty Level		
Oregon	12.1%		
Jackson County	13.5%		
Josephine County	16.1%		
Grants Pass Urbanized Area	16.1%		
City of Gold Hill	15.3%		
City of Grants Pass	16.4%		
City of Rogue River	16.2%		
Merlin	10.5%		

Source: 2016-2021 ACS 5-Year Estimates, Table S1701

Education

Approximately 90.8% of Planning Area residents aged 25 years or older are high school graduates, with 18.1% having obtained a bachelor's degree or higher (Table 4-7). These numbers are similar for the City of Grants Pass and Josephine County. Statewide, the percentage of high school graduates is just slightly higher at 91.5% and those that hold a bachelor's degree or higher being greater at 35%.

Table 4-7 – Education Level (Age 25+)

Jurisdiction	High School Graduate +	Bachelors Degree +	
Oregon	91.5%	35.0%	
Jackson County	90.9%	30.0%	
Josephine County	90.8%	18.1%	
Grants Pass Urbanized Area	90.8%	18.1%	
City of Gold Hill	93.1%	12.6%	
City of Grants Pass	90.6%	17.2%	
City of Rogue River	89.2%	13.6%	
Merlin	81.5%	23.8%	

Source: 2016-2021 ACS 5-Year Estimates, Table S1501

Households with a Child

Table 4-8 below shows that the City of Grants Pass has the highest percentage of households with a child less than 18 years old (31.6%), while Rogue River had the lowest percentage (17.2%). The planning area has a slightly lower proportion (26.2%) than the state (27.7%).

Table 4-8 – Households with a Child Under 18

Jurisdiction	Percent of Households		
Oregon	27.7%		
Jackson County	26.7%		
Josephine County	26.2%		
Grants Pass Urbanized Area	26.2%		
City of Gold Hill	28.6%		
City of Grants Pass	31.6%		
City of Rogue River	17.2%		
Merlin	20.6%		

Source: 2016-2021 ACS 5-Year Estimates, Table S2501

Housing Occupancy

In the state of Oregon, the percentage of owner-occupied housing units outnumber renter-occupied housing units 63.2% to 36.8%, respectively. Owner-occupied units also outnumber renter-occupied units in the MRMPO Planning Area, 69.5% vs. 30.5%. Merlin has the highest percentage of owner-occupied units at 83.8%, while the City of Grants Pass has the largest proportion of renter-occupied units (46.3%)

Table 4-9 – Housing Occupancy

Jurisdiction	Owner- Occupied	Renter- Occupied	
Oregon	63.2%	36.8%	
Jackson County	64.6%	35.4%	
Josephine County	69.5%	30.5%	
Grants Pass Urbanized Area	69.5%	30.5%	
City of Gold Hill	75.3%	24.7%	
City of Grants Pass	53.7%	46.3%	
City of Rogue River	56.7%	43.3%	
Merlin	83.8%	16.2%	

Source: 2016-2021 ACS 5-Year Estimates, Tables S2504 & H1

Housing Age

Table 4-10 below shows that the age of the housing stock varies throughout the MRMPO Planning Area.

Table 4-10 – Age of Housing Stock

Grants Pass Urbanized Area	Percent of Occupied Homes
2020 or later	0.0%
2010 to 2019	5.5%
2000 to 2009	17.2%
1980 to 1999	28.9%
1960 to 1979	29.7%
1940 to 1959	13.1%
1939 or earlier	5.6%

Source: 2016-2021 ACS 5-Year Estimates, Table S2504

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. Employment numbers and locations have a significant effect on transportation planning outcomes. The following 2016-2021 ACS Census data represents current data available for each of the jurisdictions.

Because the 2016-2021 ACS data is aggregated over a five-year 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 3.8% for the Grants Pass Urbanized Area (MRMPO Planning Area) for 2016-2021, as compared to 5.7% for 2015 (Table 4-11).

Approximately 49.6% of the MRMPO Planning Area population age 16 and over are in the labor force compared to 62.6% for the state. 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 2016-2021 ACS data estimates median household income within the state of Oregon to be \$70,084 and \$51,733 for the MPO Planning Area.

Employment Density within the Planning Area are shown in Map 4-3 at the end of the chapter.

Table 4-11 – Employment

Jurisdiction	Unemployed	Pop. 16+ Years old in Work Force	Median Household Income (\$)
Oregon	3.5%	62.6%	70,084
Jackson County	3.2%	57.8%	61,020
Josephine County	3.8%	49.6%	51,733
Grants Pass Urbanized Area	3.8%	49.6%	51,733
City of Gold Hill	4.0%	55.0%	50,750
City of Grants Pass	3.1%	56.4%	49,355
City of Rogue River	4.9%	41.5%	33,704
Merlin	7.7%	51.5%	61,613

Source: 2016-2021 ACS 5-Year Estimates, Table DP03

Industry

Table 4-12 below indicates that major employment sectors throughout the MRMPO Planning Area included educational services, health care and social assistance (24.9%); retail trade (11.8%); arts, entertainment, and recreation, and accommodation and food services (11.2%); and manufacturing (10.3%).

Comparing 2016-2021 data to 2005-2010 data shows several significant industry changes for the Grants Pass Urbanized Area. Educational services, and health care and social assistance grew by 4.6% and arts, entertainment, and recreation and food service grew by 2.7%. Meanwhile, construction decreased by 3.0% and retail trade decreased by 2.6%.

Table 4-12 – Industries

Industry	Oregon	Jackson County	Josephine County	Grants Pass Urbanized Area	City of Gold Hill	City of Grants Pass	City of Rogue River	Merlin
Agriculture, forestry, fishing and								
hunting, and mining	2.9%	3.5%	4.1%	4.1%	2.6%	1.5%	1.3%	7.5%
Construction	6.6%	6.4%	6.2%	6.2%	11.2%	6.0%	7.0%	6.6%
Manufacturing	11.0%	8.0%	10.3%	10.3%	16.7%	9.2%	6.3%	11.4%
Wholesale trade	2.6%	2.2%	1.7%	1.7%	1.0%	2.1%	1.5%	0.0%
Retail trade	11.6%	13.7%	11.8%	11.8%	9.2%	10.5%	19.2%	18.2%
Transportation and warehousing,								
and utilities	4.6%	4.4%	3.8%	3.8%	4.5%	3.7%	7.2%	1.6%
Information	1.6%	2.2%	1.2%	1.2%	3.7%	0.9%	0.0%	0.4%
Finance and insurance, and real								
estate and rental and leasing	5.5%	5.3%	4.8%	4.8%	0.6%	4.7%	0.0%	4.3%
Professional, scientific, and								
management, and administrative								
and waste management services	11.5%	8.3%	9.5%	9.5%	9.2%	10.7%	6.5%	16.5%
Educational services, and health								
care and social assistance	23.4%	25.7%	24.9%	24.9%	26.1%	26.2%	22.0%	25.5%
Arts, entertainment, and recreation,								
and accommodation and food								
services	9.4%	10.4%	11.2%	11.2%	6.7%	13.8%	13.3%	0.0%
Other services, except public								
administration	4.6%	5.4%	5.0%	5.0%	6.5%	5.5%	10.7%	5.0%
Public administration	4.7%	4.3%	5.7%	5.7%	2.0%	5.1%	5.0%	3.0%

Source: 2016-2021 ACS 5-Year Estimates, Table DP03

Commute Patterns

Commuting 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.

Commute Origins and Destinations

According to the 2016-2021 ACS (Table 4-13), 41.1% of people within the MRMPO boundary who are employed live and work within the MRMPO boundary, while 21.2% work within it but live outside it.

Table 4-13 – MRMPO Commute Patterns

Worker Population Types	Population	Proportion
Total Employed Within MRMPO Boundary	32,655	100.0%
Live In and Employed Within MRMPO Boundary	13,422	41.1%
Live In, but Employed Outside MRMPO Boundary	6,921	21.2%
Live Outside, but Employed within MRMPO Boundary	12,312	37.7%

Source: 2016-2021 ACS 5-Year Estimates, Table B08008

Commute Schedule

Figure 4-1 below shows what times commuters in the MRMPO planning area leave home to go to work. The largest bracket for people to leave home is between 9:00 a.m. and 11:59 a.m., although the most popular 30-minute window is from 7:30 a.m. to 7:59 a.m. Notable spikes include Rogue River residents' tendency to leave between 6:00 a.m. and 6:30 a.m. and Merlin residents' habit of largely leaving home after 9:00 a.m.

Figure 4-1 – MRMPO Departure Time to Work

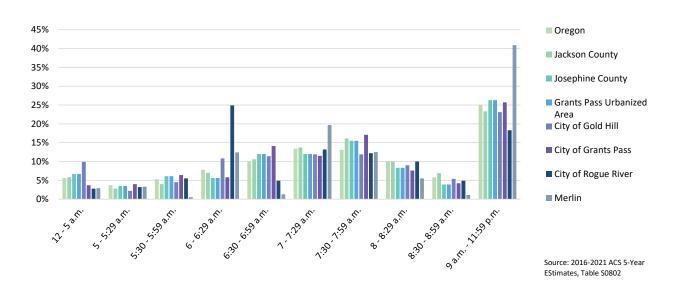


Figure 4-2 below shows how long it takes residents in the MRMPO planning area to get to work in the morning. The most common travel time for the planning area is less than 10 minutes, but for Gold Hill residents the most common travel time is 25-29 minutes and for Merlin residents it's 45-59 minutes. The City of Grants Pass shows a distinct trend for shorter travel times over all, whereas the City of Rogue River leans in the other direction.

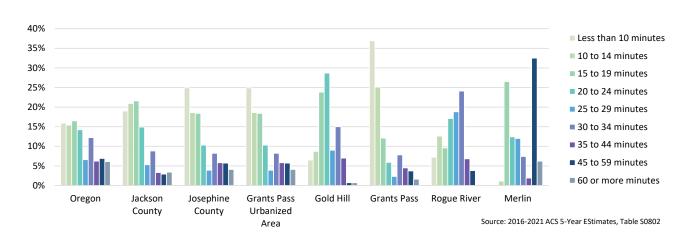


Figure 4-2 – MRMPO Travel Times to Work

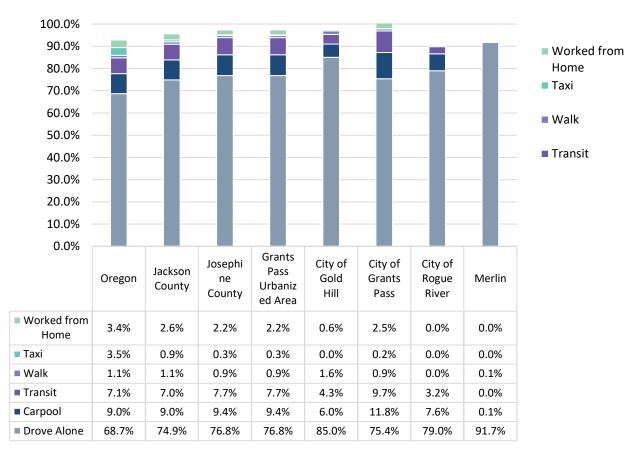
Vehicle Access

In the MRMPO planning area, 5.2% of households do not have access to a personal vehicle, compared to 9.7% for the City of Grants Pass, 1.7% for the City of Gold Hill, and 7.3% for the City of Rogue River (2016-2021 ACS 5-Year Estimates, Table B08201).

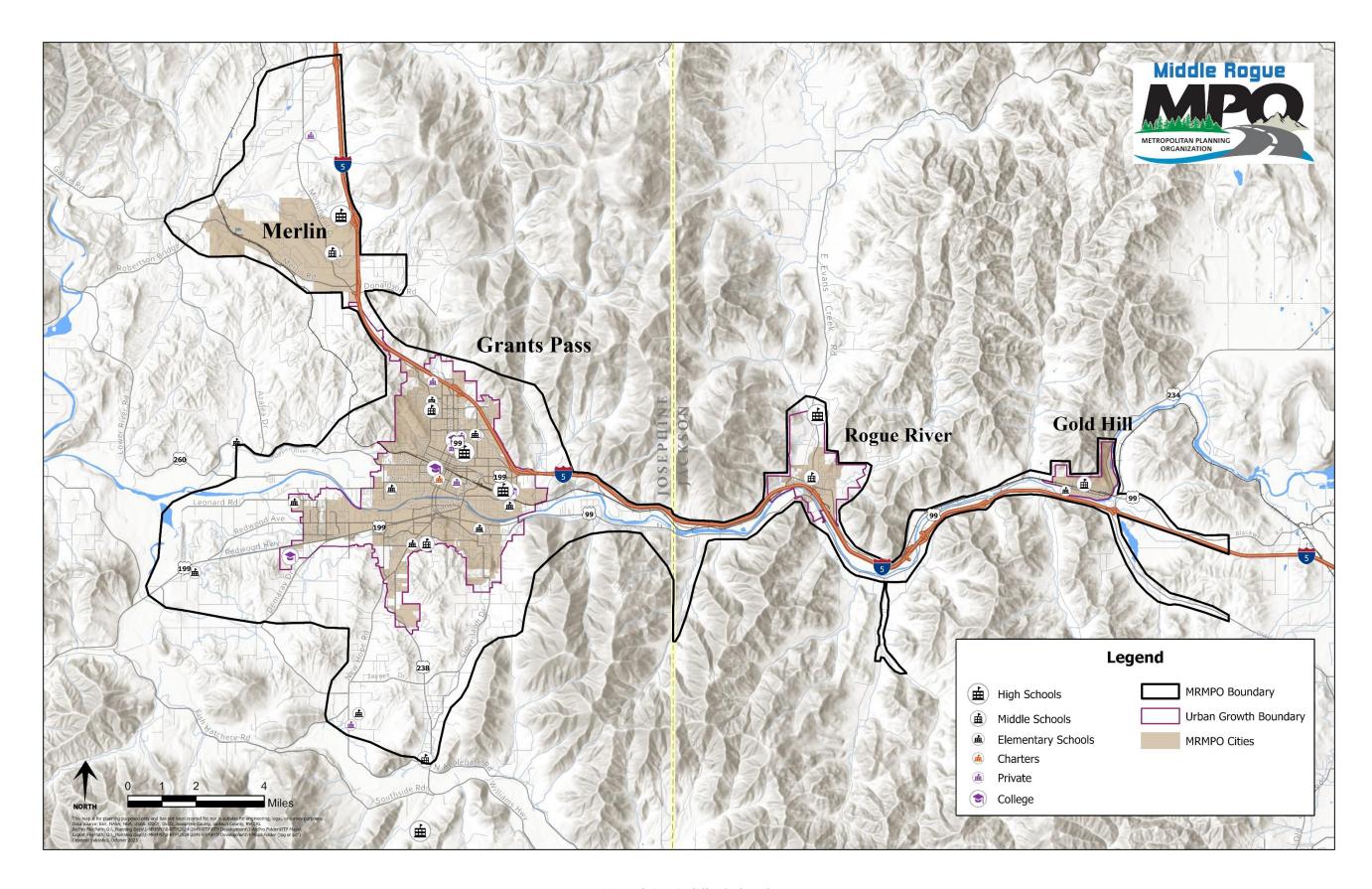
Travel Modes

Figure 4-3 below shows that for the MRMPO planning area, 76.8% of workers drove alone to get to work, compared to 68.7% for the state. 2.2% of people in the MRMPO planning area worked from home, while 3.4% did for the state.

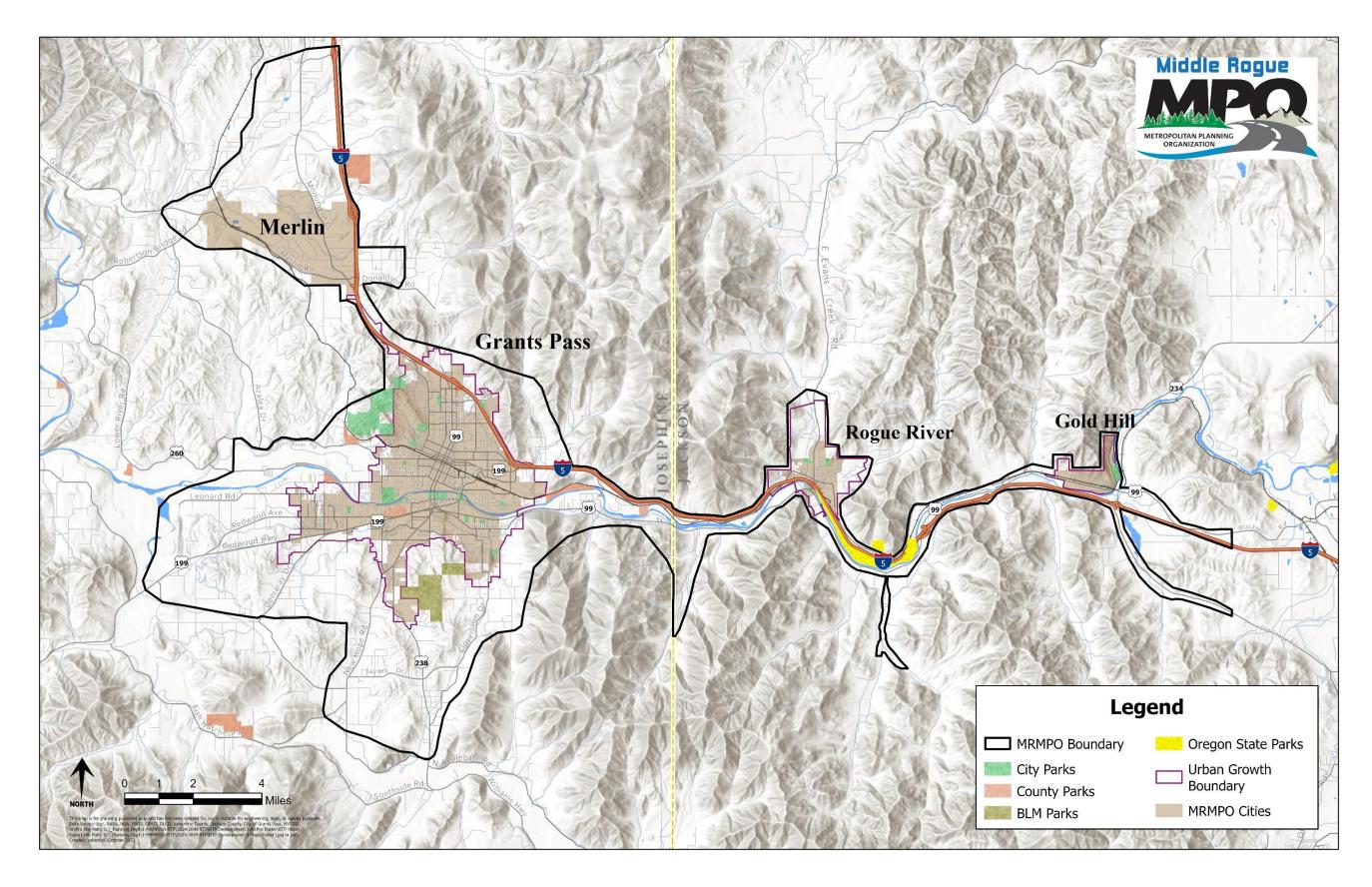
Figure 4-3 – MRMPO Travel Modes



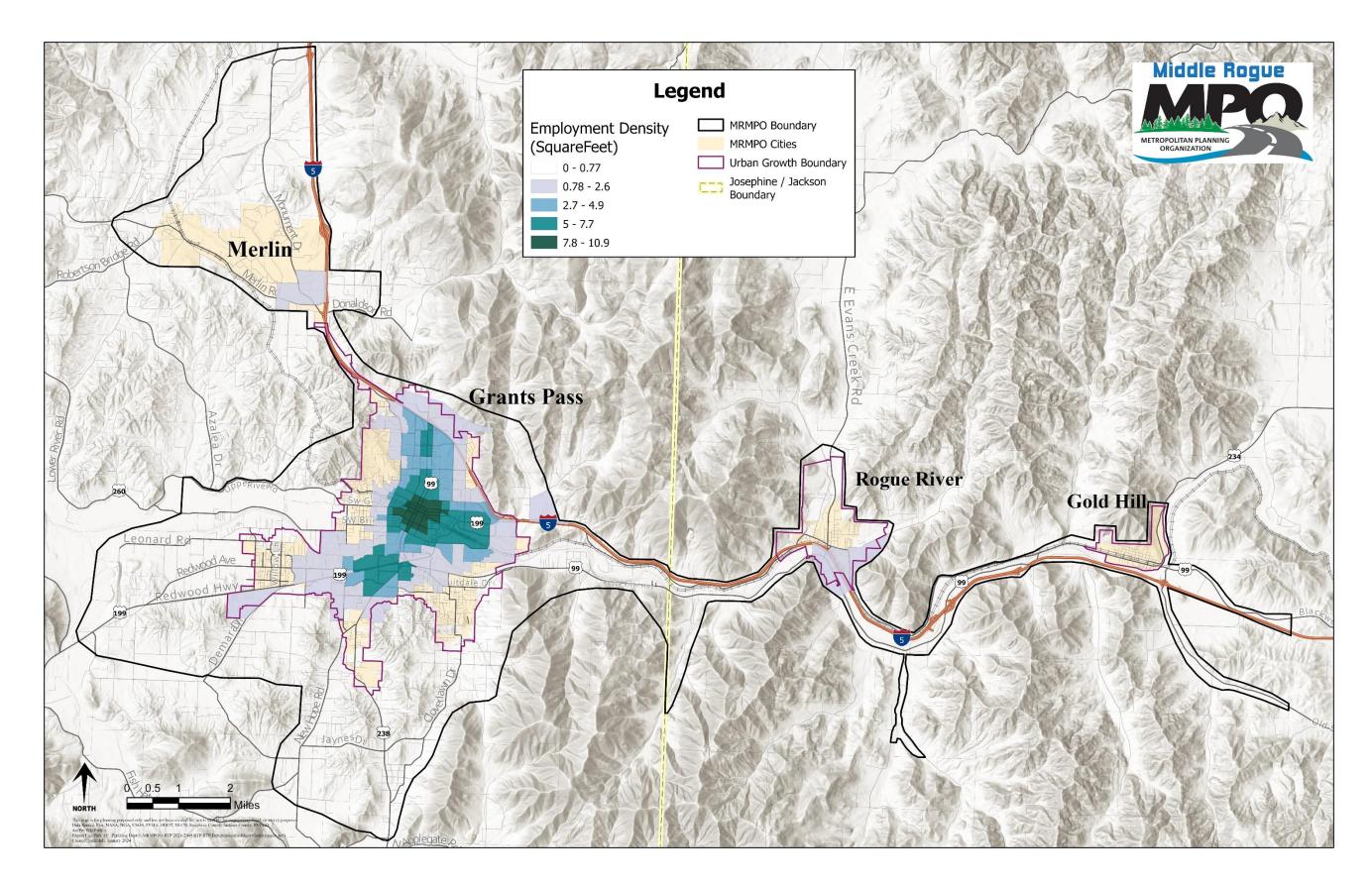
Source: 2016-2021 ACS 5-Year Estimates, Table S0801



Map 4-1 – Public Schools



Map 4-2 – Public Parks



Map 4-3 – Employment Density

Chapter 5 – Existing Transportation System

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

Roadways

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

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

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

adopted its Functional Classifications of roadways, as depicted in Map 5-2. Functional Classification of roadways in the Planning Area includes the following designations: Interstate, Principal Arterials, Minor Arterials, Major Collectors, Minor Collectors, Intermodal Connectors, and Local Roads.

The <u>Oregon Highway Plan (OHP)</u> includes a classification or ranking system for the state highways intended to guide investment and management decisions.

Interstate Highways – National Highway System (NHS) Interstate Highways (NHS) provide connections to major cities, regions of the state, and other states. A secondary function in urban areas is to provide connections for regional trips within the metropolitan area. The Interstate Highways are major freight routes, and their objective is to provide mobility. The management objective is to provide for safe and efficient high-speed continuous-flow operation in urban and rural areas. In Oregon, the National Highway System highways include all the Interstate and Statewide Highways

Statewide Highways primarily provide interurban and interregional 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. Secondarily, they serve local land uses near the highways.

Hwy 199 Expressway the Oregon Highway Plan (OHP) classifies US 199 (Redwood Highway) as a Statewide Highway and as an ORS 366.215 Freight Route. The OHP designates the segment of US 199 between SW Tussey Lane (Mile Point 0.20) and the Applegate River Bridge (Mile Point 6.92) as an Expressway.

Bypasses (not Classified as Expressways) A segment of US 199, Redwood Highway, Grants Pass Parkway (MP 0.35-0.25, Y-0.69 – Y-1.99) is designated as a bypass in the Oregon Highway Plan. Bypasses are highways designed to maintain or increase statewide or regional mobility. Generally, they relocate a highway alignment around a downtown, an urban or metropolitan area or an existing highway. The goal of bypass facilities is to effectively serve state and regional traffic trips. It is the policy of the State of Oregon to build bypasses to provide safe, efficient passage for through travelers and commerce.

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.

Freight Routes in the MRMPO area include I-5 and Hwg 199 through Grants Pass.

Principal Arterials

Principal Arterials are the second 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, except for E and F Streets which fall under Grants Pass jurisdiction, 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)	Interstate
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 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 that runs from Exit 55 (0.25 start MP) all the way to the west of Grants Pass (6.92 end MP) 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, Redwood Highway (OR 99) incorporates the Sixth and Seventh couplet through downtown Grants Pass before crossing the river and proceeding eastward, as Rogue River Highway (OR 99), 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. None the less, they do carry multimodal users as well. 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 (OR 260)	Grants Pass	Josephine	County
Lincoln Road	N/A & Grants Pass	Josephine	Municipal Street / County
Allen Creek Road	N/A	Josephine	Municipal Street / County
Highland Avenue	N/A & Grants Pass	Josephine	Municipal Street / County
New Hope Road	N/A	Josephine	County
Redwood Avenue	N/A & Grants Pass	Josephine	Municipal Street / County
Upper River Road	N/A	Josephine	County
3rd Street	Grants Pass	Josephine	Municipal Street
G Street	Grants Pass	Josephine	Municipal Street / County
Vine Street	N/A & 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
Morgan Lane	Grants Pass	Josephine	State
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	County
10th 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
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	State / 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	State / County
Fruitdale Drive	Grants Pass	Josephine	County
Grandview Avenue	Grants Pass	Josephine	County
Hubbard Lane	Grants Pass	Josephine	County

Road Name	City	County	Jurisdiction	
Leonard Road	Grants Pass	Josephine	Municipal Street / County	
N Street	Grants Pass	Josephine	County	
Scenic Drive	Grants Pass	Josephine	County	
Ringuette Street	Grants Pass	Josephine	Municipal Street	
W. Harbeck Road	Grants Pass	Josephine	County	
Willow Lane	Grants Pass	Josephine	Municipal Street	
3rd Street	Grants Pass	Josephine	Municipal Street	
4th Street	Grants Pass	Josephine	Municipal Street	
9th Street	N/A & Grants Pass	Josephine	Municipal Street / County	
10th Street	Grants Pass	Josephine	Municipal Street / County	
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	
North 6th 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	

Road Name	City	County	Jurisdiction
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 / County
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
NE 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

Road Name	City	County	Jurisdiction
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.

Number of Lanes and Roadway Width

The number of lanes helps define the capacity and streetscape of a roadway. 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.

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 speed limit throughout the region.

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.

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, Map 5-3 shows ODOT pavement conditions around the MRMPO.

Bridge Condition

Bridges in the Planning Area include city, county, and state bridges. Map 5-3 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 below list the bridges within the MRMPO by structure name, roadway, owner, bridge condition, sufficiency rating and county.

Table 5-5 – Bridge Condition & Sufficiency Ratings:

Bridge Condition & Sufficiency Rating						
ID	Structure Name	Roadway	Structure Owner	Bridge Condition	Sufficiency Rating	County
1	Sand Creek, Sand Creek Rd	SAND CREEK ROAD	County Hwy Agency	Good	99.9	Josephine
2	Louse Creek, Hwy 1 Conn #2	I-5 (HWY 001) CON	State Highway Agency	Good	98.5	Josephine
3	Gilbert Creek, NW Savage St.	NW Savage St.	City/Munici pal Hwy Agency	Good	98	Josephine
4	Irrigation Canal, Cloverlawn Dr	CLOVERLA WN DRIVE	County Hwy Agency	Good	97.9	Josephine
5	Sparrowha wk Creek, Leonard Rd	LEONARD ROAD	County Hwy Agency	Good	96.7	Josephine
6	Jones Creek, Foothill Blvd	FOOTHILL BLVD.	County Hwy Agency	Good	93.7	Josephine
7	Evans Creek, W Main St	WEST MAIN ST	City/Munici pal Hwy Agency	Good	90.2	Jackson

8	Irrigation Canal, Ringuette St	RINGUETTE STREET	County Hwy Agency	Good	89.1	Josephine
9	Irrigation Canal, Arnold Ave	ARNOLD AVE	County Hwy Agency	Good	87.7	Josephine
10	Jumpoff Joe Creek, Hugo Rd	HUGO ROAD	County Hwy Agency	Good	87.4	Josephine
11	Harris Creek, Pleasant Valley Rd	PLEASANT VALLEY RD	County Hwy Agency	Good	86.1	Josephine
12	Foots Creek, Right Fork Foots Rd # 915	RT FRK FOOTS CR RD	County Hwy Agency	Good	85.7	Jackson
13	Kane Creek, Hwy 1 Front Rd Lt	I-5 (HWY 001) CON	State Highway Agency	Good	82	Jackson
14	Upper Ditch South Hoghland Canal, Hwy 272	OR 238 (HWY 272)	State Highway Agency	Good	82	Josephine
15	Irrigation Canal, Dowell Rd	DOWELL ROAD	County Hwy Agency	Good	81.8	Josephine
16	Irrigation Canal, Elk Ln	ELK LANE	County Hwy Agency	Good	79.8	Josephine
17	Irrigation Canal, Gaffney Way	GAFFNEY WAY	City/Munici pal Hwy Agency	Good	79.1	Josephine
18	Irrigation Canal, Hamilton Ln	HAMILTON LANE	County Hwy Agency	Good	78.7	Josephine
19	Louse Creek. Monument Dr	MONUMEN T DRIVE	County Hwy Agency	Good	77.2	Josephine
20	Irrigation Canal, Drury Lane	DRURY LANE	County Hwy Agency	Good	76.8	Josephine
21	Louse Creek,	PLEASANT VALLEY RD	County Hwy Agency	Good	76	Josephine

	Pleasant Valley Rd					
22	Irrigation Ditch, New Hope Rd	NEW HOPE ROAD	County Hwy Agency	Good	72.8	Josephine
23	Irrigation Canal, College Dr	COLLEGE DRIVE	County Hwy Agency	Good	70	Josephine
24	Gilbert Creek, Hwy 260	G STREET	City/Munici pal Hwy Agency	Good	69.4	Josephine
25	Sand Creek, Hwy 25	US199 (HWY 025)	State Highway Agency	Good	51.3	Josephine
26	Irrigation Ditch, Hwy 1 Frtg Rd Rt at MP F40.85	I-5 (HWY 001) FR	State Highway Agency	Good	41	Jackson
27	Skunk Creek, Hwy 25 at MP - 1.30	US199 (HWY 025)NB	State Highway Agency	Good	41	Josephine
28	Irrigation Ditch, Hwy 25 at MP 0.49	HWY 25	State Highway Agency	Good	26	Josephine
29	Allen Creek, Hwy 25	HWY 25	State Highway Agency	Good	26	Josephine
30	Irrigation Canal, Hwy 272 at MP S0.24	HWY 272	State Highway Agency	Good	26	Josephine
31	Stockpass, Hwy 1 at MP 39.74	I-5 (HWY 001)	State Highway Agency	Good	11	Jackson
32	Cantilever VMS, Hwy 025 WB at MP 1.52	SIGN CANTILEVER	State Highway Agency	Good	-2	Josephine
33	Cantilever Sign Bridge, Hwy 272 at MP 0.24	SIGN BRIDGE	State Highway Agency	Good	-2	Jackson

34	Rogue River Greenway Trail Bridge A	Trail	11 State Pk/Frst/Res erv	Good	-2	Jackson
35	Rogue River Greenway Trail Bridge B	Trail	11 State Pk/Frst/Res erv	Good	-2	Jackson
36	Rogue River Greenway Trail Bridge C	Trail	11 State Pk/Frst/Res erv	Good	-2	Jackson
37	Sand Creek. Elmer Nelson Way	Elmer Nelson Way	City/Munici pal Hwy Agency	Fair	100	Josephine
38	Allen Creek & Golf Cart Path, Hwy 272	OR 238 (HWY 272)	State Highway Agency	Fair	96	Josephine
39	Harris Creek, Monument Dr	MONUMEN T DRIVE	County Hwy Agency	Fair	94.8	Josephine
40	Louse Creek & Conn, Hwy 1 NB	I-5 (HWY 001) NB	State Highway Agency	Fair	93.7	Josephine
41	Louse Creek & Conn, Hwy 1 SB	I-5 (HWY 001) SB	State Highway Agency	Fair	93.7	Josephine
42	Rogue River, Hwy 482 Spur	HWY 482 SPUR	State Highway Agency	Fair	92.6	Josephine
43	Hwy 1 SB over Beacon Dr	I-5 (HWY 001)	State Highway Agency	Fair	92.6	Josephine
44	Hwy 1 over Depot St	I-5 (HWY 001)	State Highway Agency	Fair	92	Jackson
45	Hwy 1 NB over Beacon Dr	I-5 (HWY 001)	State Highway Agency	Fair	91.6	Josephine
46	Hwy 1 over Hwy 482 Spur	I-5 (HWY 001)	State Highway Agency	Fair	91.6	Josephine
47	Hwy 60 SB & Hwy 25	OR 99 (HWY 060)	State Highway Agency	Fair	90.7	Josephine

	over Hwy 272					
48	Louse Creek, Carton Way	CARTON WAY	County Hwy Agency	Fair	86.2	Josephine
49	Louse Creek, Haines Ln	HAINES LANE	County Hwy Agency	Fair	85.9	Josephine
50	Hwy 1 over Scoville Rd	I-5 (HWY 001)	State Highway Agency	Fair	85.4	Josephine
51	Harris Creek, Tavis Dr	TAVIS DRIVE	County Hwy Agency	Fair	82.8	Josephine
52	Rogue River, Depot St	DEPOT STREET	State Highway Agency	Fair	82.6	Jackson
53	Sand Creek, Leonard Rd	LEONARD ROAD	County Hwy Agency	Fair	82.6	Josephine
54	Irrigation Canal, Willow Ln	WILLOW LANE	County Hwy Agency	Fair	80.6	Josephine
55	Onion Creek, Hwy 272	OR 238 (HWY 272)	State Highway Agency	Fair	80.5	Josephine
56	Ward Creek, Classic Dr	CLASSIC DR	City/Munici pal Hwy Agency	Fair	80.3	Jackson
57	Hwy 1 over Foley Lane Frontage Rd	I-5 (Hwy 001)	State Highway Agency	Fair	78.7	Jackson
58	Hwy 1 over Galls Creek Front Rd Conn	I-5 (HWY 001)	State Highway Agency	Fair	77.2	Jackson
59	Hwy 1 SB over Hwy 60	I-5 (HWY 001) SB	State Highway Agency	Fair	75.3	Jackson
60	Hwy 482 Spur over CORP	HWY 482 SPUR	State Highway Agency	Fair	75.2	Josephine
61	South Highline Canal, Cloverlawn Dr	CLOVERLA WN DRIVE	County Hwy Agency	Fair	74.8	Josephine

62	Louse Creek, Highland Frontage Road	HIGHLAND AVENUE	County Hwy Agency	Fair	73.6	Josephine
63	Wards Creek, Main St	MAIN ST	City/Munici pal Hwy Agency	Fair	72.9	Jackson
64	Hwy 1 SB over Foothill Blvd	I-5 (HWY 001) SB	State Highway Agency	Fair	69.9	Josephine
65	Jumpoff Joe Creek, Russell Rd	RUSSELL ROAD	County Hwy Agency	Fair	69.8	Josephine
66	Birdseye Creek, Hwy 60	OR 99 (HWY 060)	State Highway Agency	Fair	69.6	Jackson
67	Hwy 1 over Hwy 25 NB	I-5 (HWY 001)	State Highway Agency	Fair	67.8	Josephine
68	Evans Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	Fair	66.9	Jackson
69	Fruitdale Creek, Hamiltin Ln	HAMILTON LANE	County Hwy Agency	Fair	66.8	Josephine
70	Savage Creek, Hwy 60	OR 99 (HWY 060)	State Highway Agency	Fair	66.5	Jackson
71	Sand Creek, Hubbard Ln	HUBBARD LANE	County Hwy Agency	Fair	64.7	Josephine
72	Creek & County Rd + CORP, Hwy 1 at MP 49.46	I-5 (HWY 001)	State Highway Agency	Fair	62.6	Jackson
73	Hwy 1 over Hillcrest Dr	I-5 (HWY 001)	State Highway Agency	Fair	61.7	Josephine
74	Hwy 1 NB over Hwy 60	I-5 (HWY 001) NB	State Highway Agency	Fair	59	Jackson
75	Ward Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	Fair	58.9	Jackson

76	Foots Creek, Hwy 60	OR 99 (HWY 060)	State Highway Agency	Fair	58.2	Jackson
77	Rogue River, Hwy 25 NB (7th St)	US199 (HWY 025)NB	State Highway Agency	Fair	57	Josephine
78	Rogue River, Hwy 1 NB (Homestead	I-5 (HWY 001) NB	State Highway Agency	Fair	55.6	Jackson
79	Merlin Hill Frtg Rd (Highland Av) over Hwy 1	FT RD(HIGHLA ND AV)	State Highway Agency	Fair	54.1	Josephine
80	Rogue River, Hwy 1 SB (Homestead	I-5 (HWY 001) SB	State Highway Agency	Fair	54	Jackson
81	Kane Creek, Kane Creek Rd #835	COUNTY RD 835	County Hwy Agency	Fair	66.6	Jackson
82	Kane Creek, Old Stage Rd	OLD STAGE ROAD	County Hwy Agency	Fair	53.3	Jackson
83	Hwy 1 NB over Foothill Blvd	I-5 (HWY 001) NB	State Highway Agency	Fair	52.4	Josephine
84	Hwy 1 over Foothill Blvd	I-5 (HWY 001)	State Highway Agency	Fair	51	Josephine
85	Hwy 60 over Hwy 1	OR 99 (HWY 060)	State Highway Agency	Fair	50.5	Jackson
86	Sardine Creek, Hwy 271	OR 99 (HWY 271)	State Highway Agency	Fair	50.2	Jackson
87	Hwy 272 over NB Hwy 25	OR 238 (HWY 272)	State Highway Agency	Fair	49.4	Josephine
88	Rogue River, Hwy 486 (Gold Hill Spur)	OR 99 (HWY 486)	State Highway Agency	Fair	47.6	Jackson

89	Hwy 486 Spur over Hwy 1 (S Gold Hill)	OR 99 (HWY 486)	State Highway Agency	Fair	44.8	Jackson
90	Rogue River, Hwy 25 SB (6th St, Caveman)	US 199 (HWY 025)SB	State Highway Agency	Fair	44.6	Josephine
91	Millers Gulch, Hwy 60	OR 99 (HWY 060)	State Highway Agency	Fair	42.1	Jackson
92	Irrigation Ditch, Hwy 1 Frtg Rd Lt at MP F41.18	I-5 (HWY 001) FR	State Highway Agency	Fair	41	Jackson
93	Blackwell Creek, Hwy 486	OR 99 (HWY 486)	State Highway Agency	Fair	41	Jackson
94	Irrigation Ditch, Hwy 1 Frtg Rd Rt at MP F40.92	I-5 (HWY 001) FR	State Highway Agency	Fair	41	Jackson
95	Owl Creek, Hwy 60 (Little Savage Creek)	OR 99 (HWY 060)	State Highway Agency	Fair	40.1	Jackson
96	Main Low Canal, Hwy 60	OR 99 (HWY 060)	State Highway Agency	Fair	40	Josephine
97	Green Creek, Hwy 60	OR 99 (HWY 060)	State Highway Agency	Fair	40	Josephine
98	Galls Creek, Lampman Rd.	Lampman Rd. (#807)	County Hwy Agency	Fair	35.5	Jackson
99	Quartz Creek, Ward Rd	WARD ROAD	County Hwy Agency	Fair	26.6	Josephine
100	Rogue River +, Hwy 271 (Rock Point)	OR 99 (HWY 271)	State Highway Agency	Fair	26.5	Jackson

101	Irrigation Canal, Hwy 25 at MP 3.38	HWY 25	State Highway Agency	Fair	26	Josephine
102	Galls Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	Fair	24	Jackson
103	Kane Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	Fair	24	Jackson
104	Jones Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	Fair	24	Josephine
105	Tokay Canal, Hwy 1	I-5 (HWY 001)	State Highway Agency	Fair	24	Josephine
106	Equipment Pass, Hwy 1 at MP 53.51	I-5 (HWY 001)	State Highway Agency	Fair	24	Josephine
107	Equipment Pass, Hwy 1 at MP 52.12	I-5 (HWY 001)	State Highway Agency	Fair	24	Jackson
108	Equipment Pass, Hwy 1 at MP 50.80	I-5 (HWY 001)	State Highway Agency	Fair	24	Jackson
109	Blackwell Creek, Hwy 1	I-5 (HWY 001)	State Highway Agency	Fair	11	Jackson
110	Flume over Hwy 25 at MP 4.90	FLUME	26 Private(non Railroad)	Fair	-2	Josephine
111	Sign Truss Br, Hwy 25 at MP 0.08	SIGN BRIDGE	State Highway Agency	Fair	-2	Josephine
112	Sign Truss Br, Hwy 25 at MP 0.01	SIGN BRIDGE	State Highway Agency	Fair	-2	Josephine
113	Sign Butterfly Hwy 025 at MP 0.33	SIGN BRIDGE	State Highway Agency	Fair	-2	Josephine
114	Sign Truss Br, Hwy 25 at MP 6.54	SIGN BRIDGE	State Highway Agency	Fair	-2	Josephine
115	Rogue Valley Green W.	Gr. W. Trail	11 State Pk/Frst/Res erv	Fair	-2	Jackson

	Over					
	Sardine Cr.					
	Fruitdale	OR 99 (HWY	State			
116	Creek, Hwy	060)	Highway	Poor	39.7	Josephine
	60	000)	Agency			

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 Annual Average Daily Traffic (AADT) for 2022 show case that truck traffic on Interstate 5 was 5711 (AADT) southeasts of Gold Hill to 3495 (AADT) north of the Merlin interchange. Truck traffic on Highway 199 represents about 1060 (AADT) in Grants Pass, and 443 (AADT) near the Applegate River.

Map 5-4 illustrates the typical flow of truck freight traffic in the Planning Area, showing the Annual Average Daily Truck volume for 2022.

Transit System

The general public transit system is operated by Josephine County under the name Josephine Community Transit (JCT). Map 5-6 shows the existing fixed route and commuter route transit lines. The fixed routes operate primarily within the Grants Pass UGB, with commuter routes operating to the norther and southern ends of Josephine County. JCT also has a route along I-5 which connects to RVTD in downtown Medford. That route also services the cities of Rogue River and Gold Hill. The other general public transit providers are the intercity operators Greyhound and Southwest Point. Greyhound provides service further up the I-5 corridor, while SW Point provides service between Klamath Falls and Brookings as well as Cave Junction and Smith River California.

Fixed-Route Transit

Josephine Community Transit (JCT)

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 under JCT's reduced fare program.

JCT provides four fixed routes 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 9:30 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.



Figure 5-1 - JCT Transit Center in Downtown Grants Pass

JCT also operates two commuter routes within Josephine County and one with a connection into Jackson County. The two commuter routes in Josephine County are Route 50 which provides service to Cave Junction and Route 80 going to Wolf Creek. Route 100 makes connections between Medford and Grants Pass with stops in Rogue River and Gold Hill. There are seven round trips each weekday on Rt 50 and Rt 100. There are three trips in the a.m., one at noon and three in the p.m. There are currently three trips per day on Rt 80, which serves the areas to the north of Grants Pass. There are stops made in Merlin, Hugo, and Sunny Valley and a turnaround in Wolf Creek. 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 ¾ mile on each side of an existing fixed route. There is no associated paratransit service for the commuter routes. The paratransit fare is double the full fare of 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. During times of high demand, all trip requests 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 9:30 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.

JCT is also operating a Transit on Demand (TOD) program between the hours of 6:30pm and 9:30pm. The service area is the same as the fixed route coverage during those hours. The TOD program provides curb to curb service that passengers can book online with a smart device. The service does not operate on a stop-by-stop basis, but rather from origin to destination anywhere in the normal service area (essentially the Grants Pass UGB). The cost for this service is \$1.00 per ride.

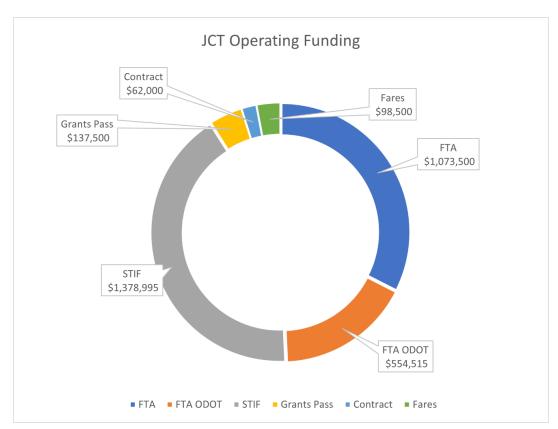
Ridership and Funding

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 provides matching funds for a FTA 5310 grant for elderly and disabled transportation services operated by JCT that serves the Grants Pass area. The majority of transit funding comes from the FTA and State Transportation Improvement Funds (STIF). The STIF funds are generated by state payroll tax dedicated specifically for improved transit services. The STIF funds can also be used as the required match for federal funds received. All funds are dedicated at their sources specifically for public transit service and cannot be used for other transportation projects or uses.





The STIF funds became available in 2019 and are prioritized for service improvements. The planned service improvements, by priority are:

- Saturday service abandoned due to lack of driver availability and vehicles. Goal for 2025
- Late evening service expansion expanded until 10:00pm Monday through Friday across all intown services
- Improve service frequency (Monday through Friday) One route remaining to improve
- Service expansion in Grants Pass and along the Hwy 238 corridor still in planning and will be accomplished after Saturday services is implemented.

After the listed improvements are made additional services can be evaluated and prioritized.

Ridership:

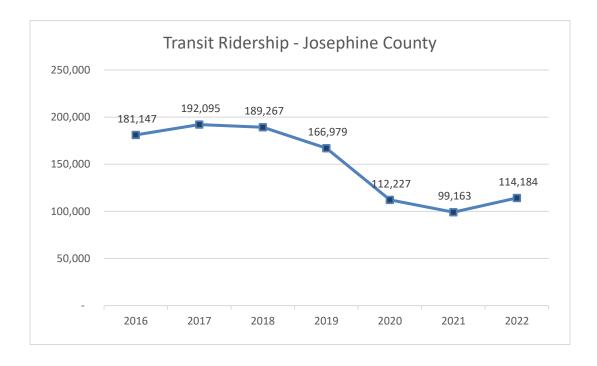
From 2009 to 2016 there was an 165% increase in ridership on the JCT system. At that point ridership growth slowed until three more commuter runs were added in 2017. In 2019-2020 ridership was projected to continue its upward trend, until April 2020. At that point ridership started to significantly drop due to COVID. Prior to that the average monthly ridership was 15,513. The ridership average from April to the end of June, fell to 9,116 per month.

The reduction in ridership was exacerbated by the fact that some services, or runs per day, had to be cut as well. This occurred on the regular fixed routes as well as the commute routes. The decrease in service also impacted the ridership trend and was the result of lack of drivers and lack of timely replacement vehicles in the fleet.

In Fiscal Year 2021-2022 the average monthly ridership hit an all time low of 8,264. In the following year ridership did increase slightly and then in March 2023 the monthly ridership trend legitimately turned upward. By the end of the fiscal year the monthly ridership average was showing an increase of 13.34% from the prior year.

The ridership trend continues upward as all services that were reinstated and additional service is planned as well. For the first 6 months of Fiscal Year 2023-2024, ridership has grown by 22% from the prior year. While not back to pre-pandemic levels, positive growth and increases in the ridership is occurring. If these projections hold, it will take 2 years to attain the pre-pandemic ridership levels.





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.

Specialized Public Transportation Services

As of the end of 2019, a number of specialized transportation services also operated in Josephine County, as described below. 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. In other words, JCT gives those vehicles upon request to other agencies to use for their transportation needs. These other agencies provide 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 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.

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

Intercity Bus Service

Greyhound provides intercity bus service along the I-5 corridor between Portland and Sacramento. As of January 2024, Greyhound no longer makes daily stops in Grants Pass.

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.



As mentioned above, **the Route 100 bus** is operated by JCT. It makes seven 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 for free within 60 minutes of arrival. The services of JCT and RVTD effectively connect the entire Roque Valley, from Cave Junction and Wolf Creek all the way to Ashland.

School Bus Routes

The MRMPO Planning Area is 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 <u>Grants Pass School District 7 website</u>. Unincorporated county school bus information can be found on the <u>Three Rivers School District website</u>. 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.

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.

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.

Pedestrian Destinations

Major pedestrian destinations are located across the region and include:

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. Redwood Elementary School, 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.

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 that 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.

Note 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.



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 2017-2021 U.S. Census data from the American Community Survey, 1% of the workers in Grants Pass Metro Area 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.

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 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.

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.

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 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.

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.

Parking

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.

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 workers to make use of available parking.

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.

Some Parking Management Alternatives

The state Transportation Planning Rule offers some options for lieu of adopting land use regulations without parking mandates under OAR 660-012-0420, including:

- Implementation of fair parking policy approach that include:
- A requirement that parking spaces for each residential unit in developments that include five or more leased or sold residential units on a lot or parcel be unbundled parking. Cities and counties may exempt townhouse and rowhouse development from this requirement;
- A requirement that parking spaces serving leased commercial developments be unbundled parking;
- 3. A tax on the revenue from commercial parking lots collecting no less than 10 percent of income, with revenues dedicated to improving transportation alternatives to drive-alone travel; and
- A reduction of parking mandates for new multifamily residential development to no higher than one-half spaces per unit, including visitor parking.

For more information on alternative approaches TPR 2022.pdf (oregon.gov)

Parking Code and Policy Changes

Older parking regulations stated only minimum standards, and some developments, such as retail stores, were made 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. For retail uses, the parking standards changed 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 vehicle parking spaces for their development, which 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 disabled. 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 considerably lower levels than that benchmark. Shared parking schemes allow these uses to share parking facilities by taking advantage of different 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 onstreet 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.

Transportation Options

The MRMPO is considering 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 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 includes ridesharing, 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 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.

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.

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 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.

"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 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 benefits 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 employer 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 are 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 workplace. 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
- 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 TOsupportive policies and infrastructure
- Supporting parking construction mitigation- reducing the need for parking expansion with TO measures
- Bicycle parking review and site design
- Marketing of TO through general and individualized advertising in various media
- Business commute challenge

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 may make driving a car less attractive when it can show the true cost of owning a car, the environmental impact, and 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. For example, many people could know what times to catch a bus and where the bus stop is located from successful education and marketing, but they cannot use it because their work schedule runs after service hours, or there is not connected sidewalk access from their work to the bus stop and they feel unsafe.

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.

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.

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, which may 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 1/4 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
- 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

Air Facilities

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. Airports falling in Class III group only serve scheduled operations of small air carrier aircraft. 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).

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.

Rail System

Freight Rail

The <u>Central Oregon and Pacific Railroad (CORP)</u> 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 17,000 cars per year 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. CORP reopened the 95-mile (153 km) section between Ashland and Weed in November 2015, after repairing rails, ties, and bridges. The project was funded by \$7.1 million of <u>Transportation Investment Generating Economic Recovery</u> (TIGER) money, \$30,000 combined from <u>Douglas</u> and <u>Jackson</u> counties, and a 25 percent match from CORP. The Siskiyou line allows Southern Oregon access to the Union Pacific mainline at Weed, California which provides transportation options for the delivery of Southern Oregon lumber and manufactured goods.

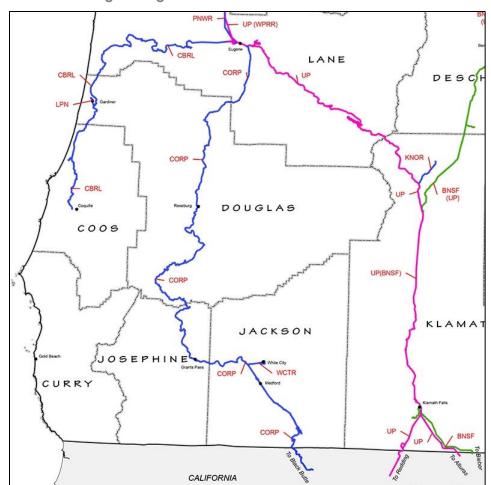


Figure 5-4 – Southwest Oregon Freight Rail Lines

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 studies to examine 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). This plan notes that, of travel markets currently not served by passenger rail, Southern Oregon (specifically, MRMPO to/from RVMPO) has good potential, given its high rates of interregional travel. This is based on data analyzed from the Oregon Household Activity Survey.

At-Grade Rail Crossings

All the rail crossings in the Planning Area are at-grade, except for 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.

Waterways and Pipelines

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.

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. 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.

Plan Consistency

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.

State Transportation Plans

The RTP also must be consistent with Oregon Department of Transportation plans, including the 2023 *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.

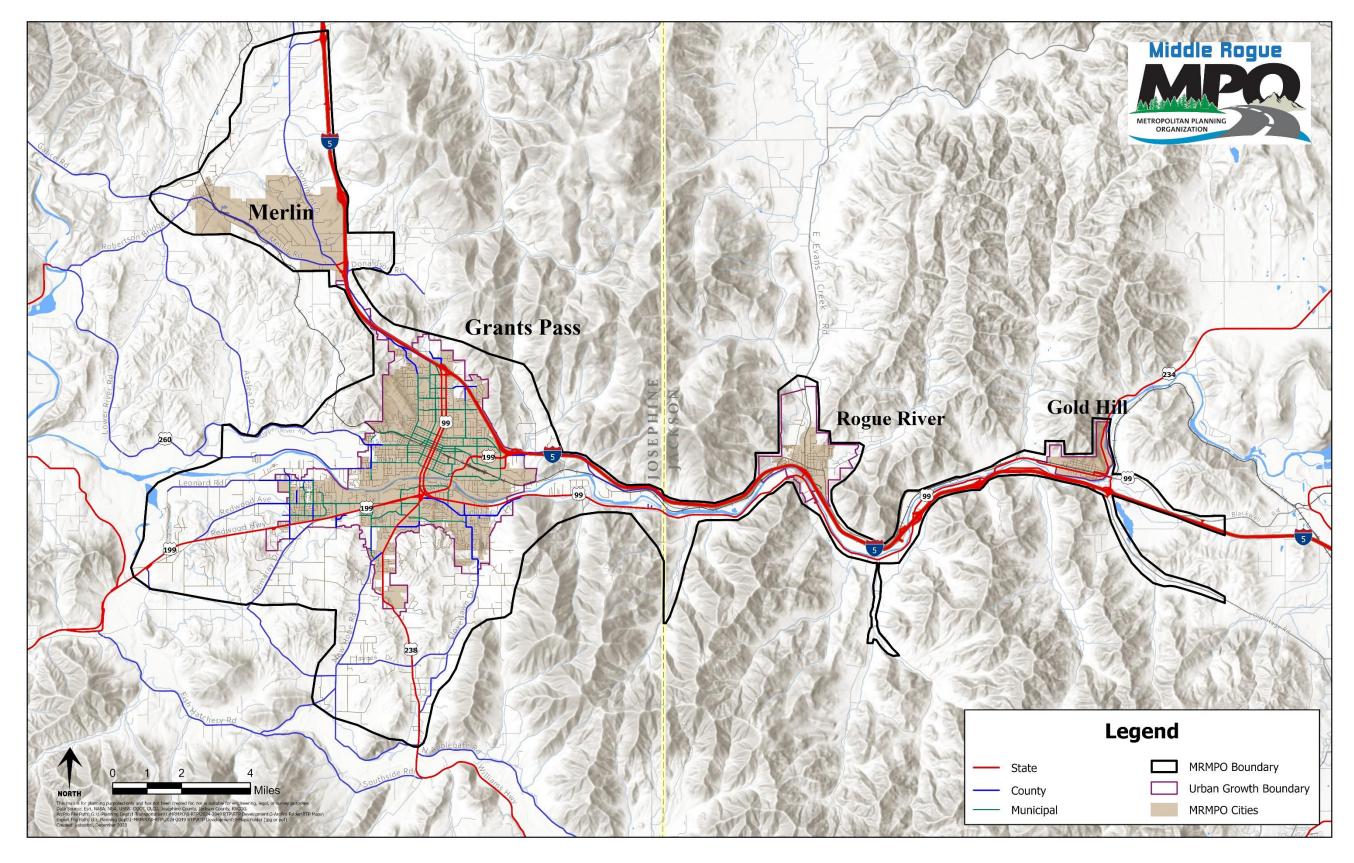
The Oregon Highway Plan establishes long-range policies and investment strategies for the state highway system. The Oregon Transportation Commission adopted the Oregon Highway Plan on March 18, 1999. It contains the following elements:

Vision – presents a vision for the future of the state highway system, describes economic and demographic trends in Oregon and future transportation technologies, summarizes the policy and legal context of the plan, and contains information on the current highway system.

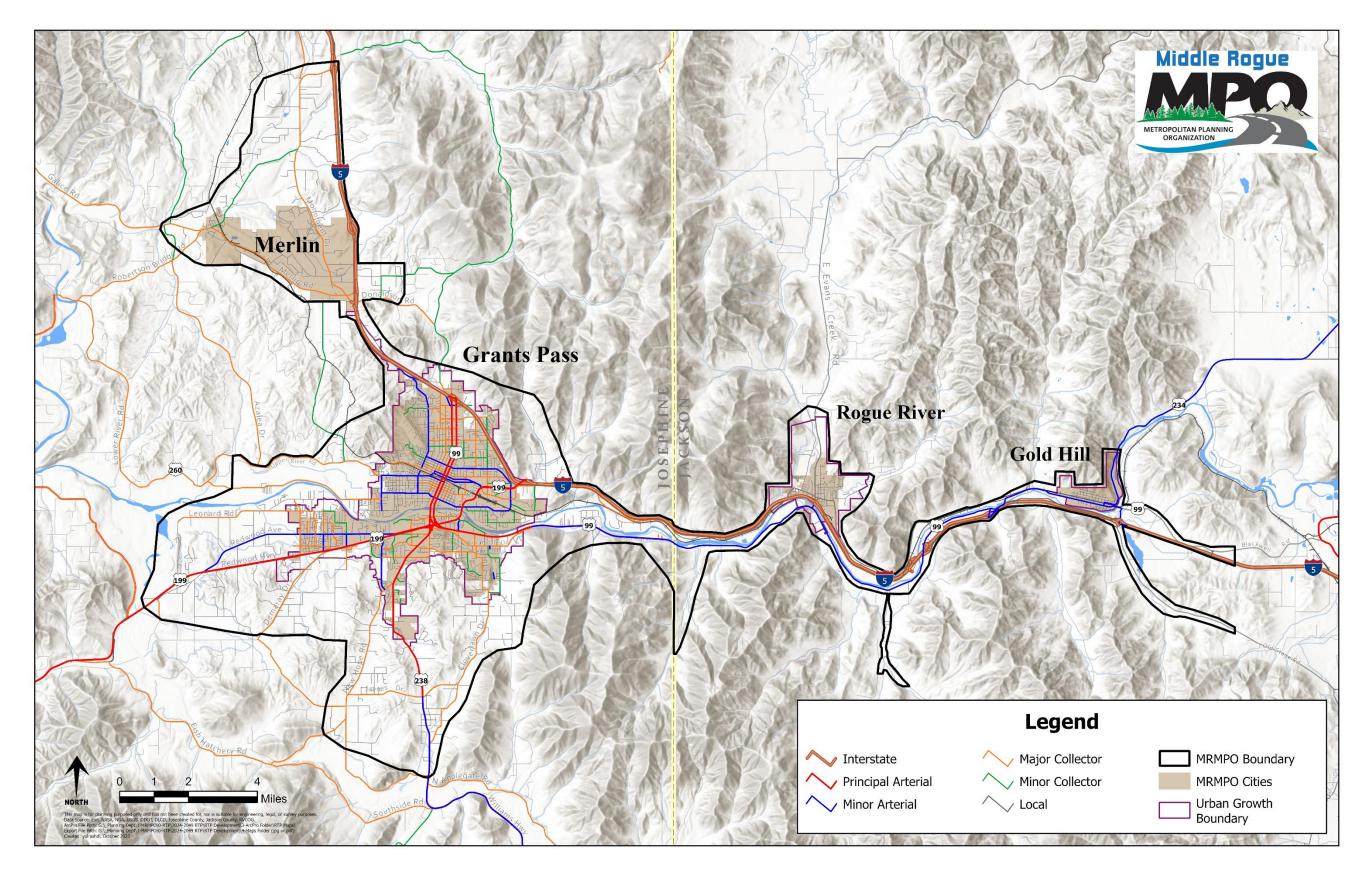
Policy – contains goals, policies and actions in five areas: system definition, system management, access management, travel alternatives, and environmental and scenic resources.

System – contains analysis of state highway needs, revenue forecasts, descriptions of investment policies and strategies, implementation strategy and performance measures.

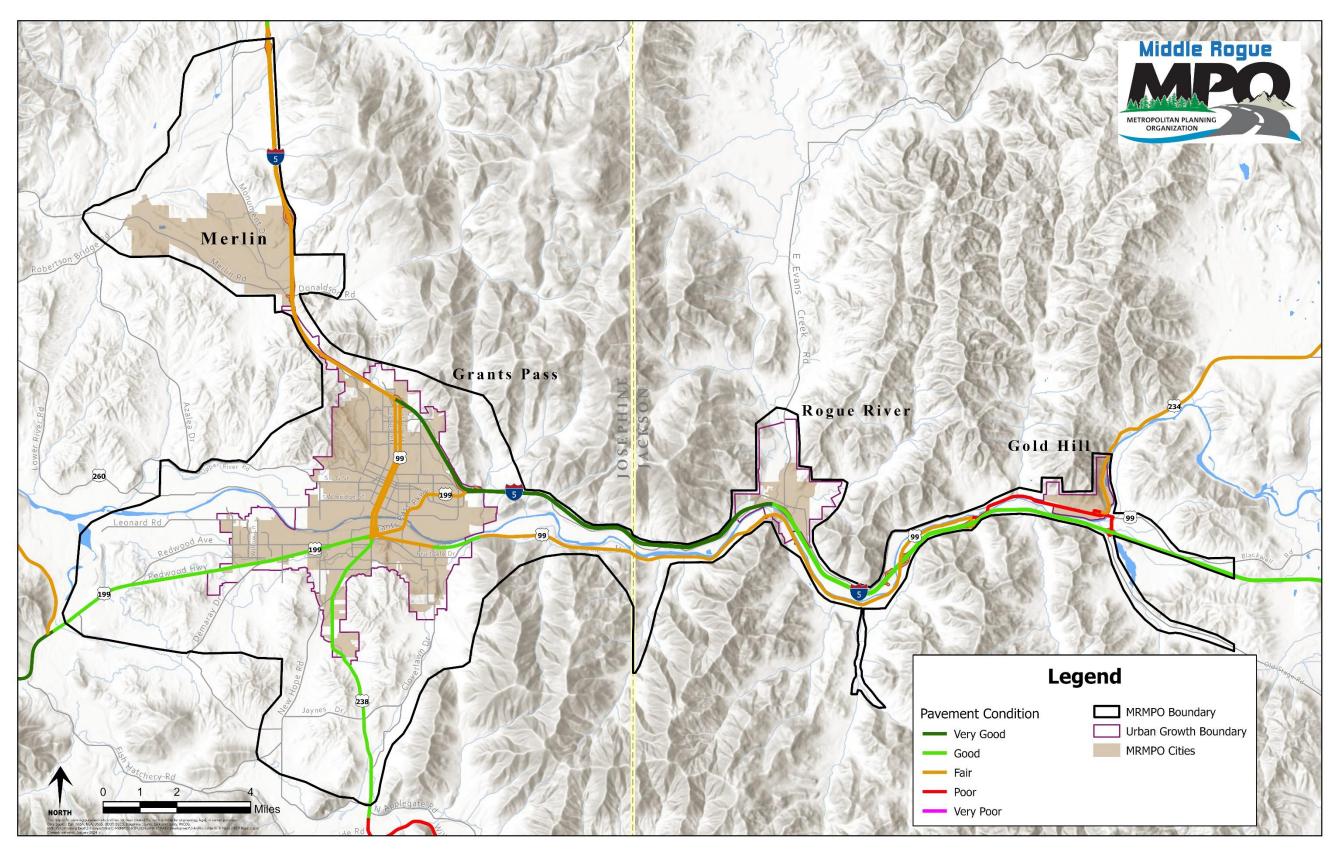
Page Left Blank Chapter 5 - Page 51 Middle Rogue Regional Transportation Plan



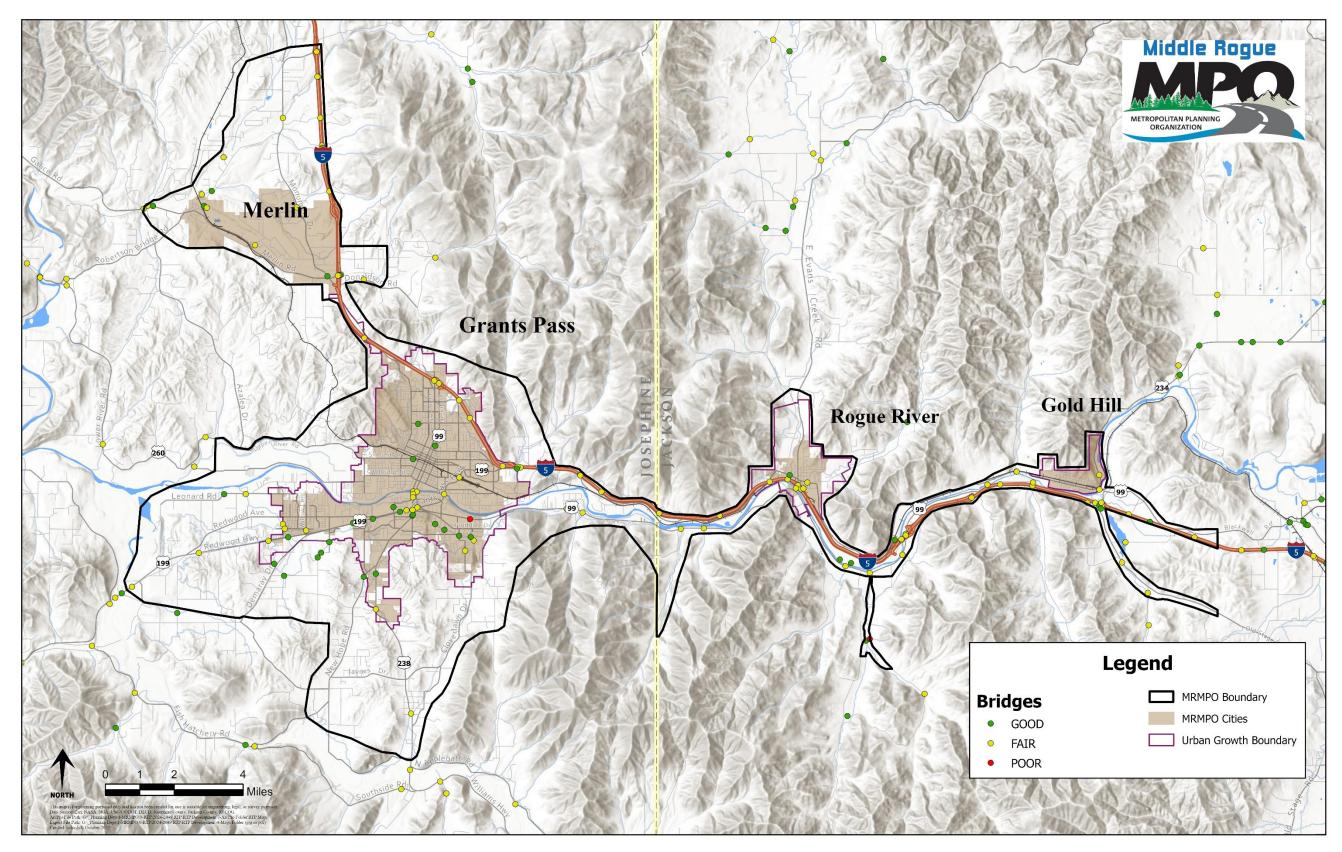
Map 5-1 Roadway Jurisdiction



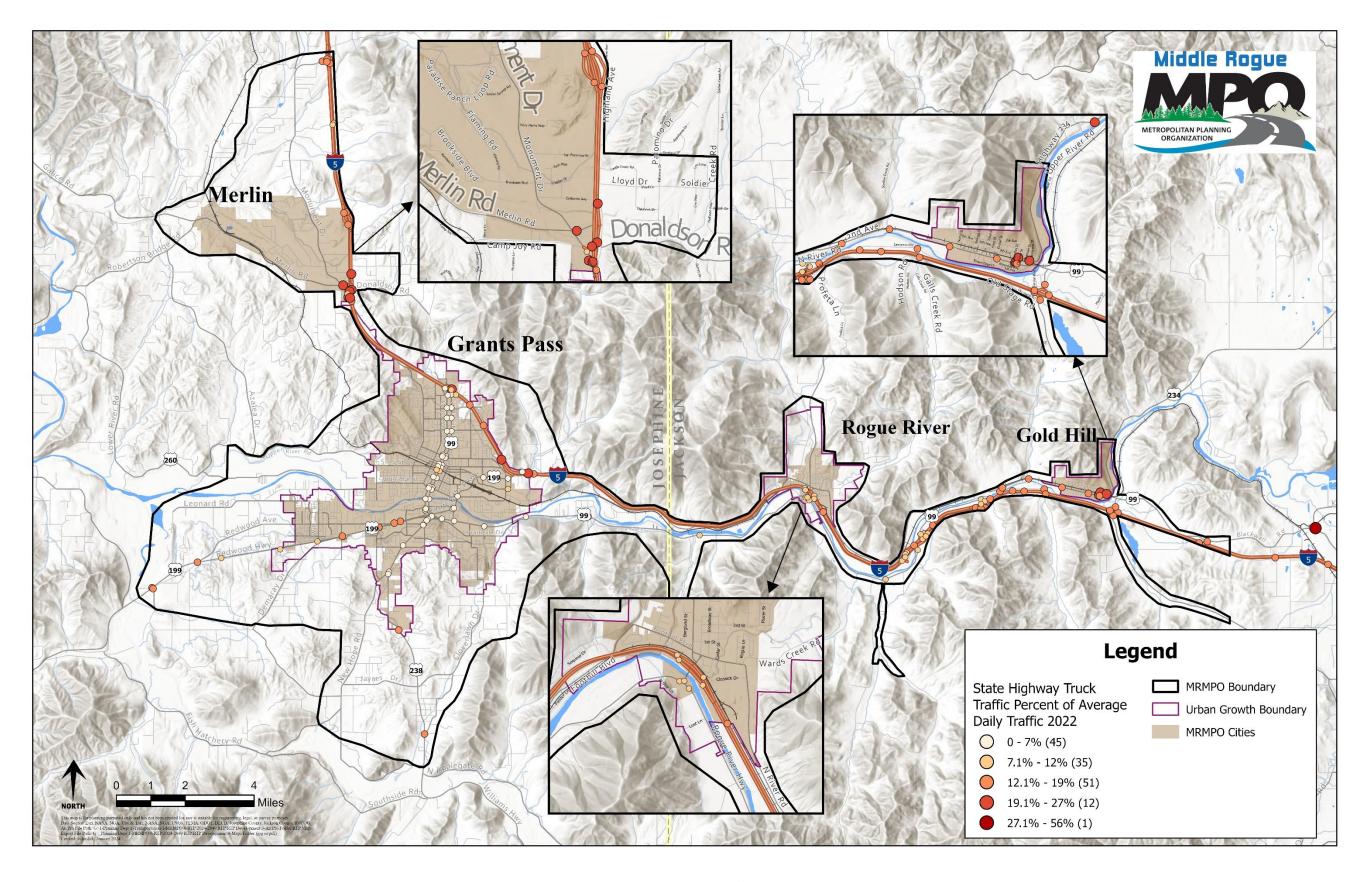
Map 5-2 Functional Classification



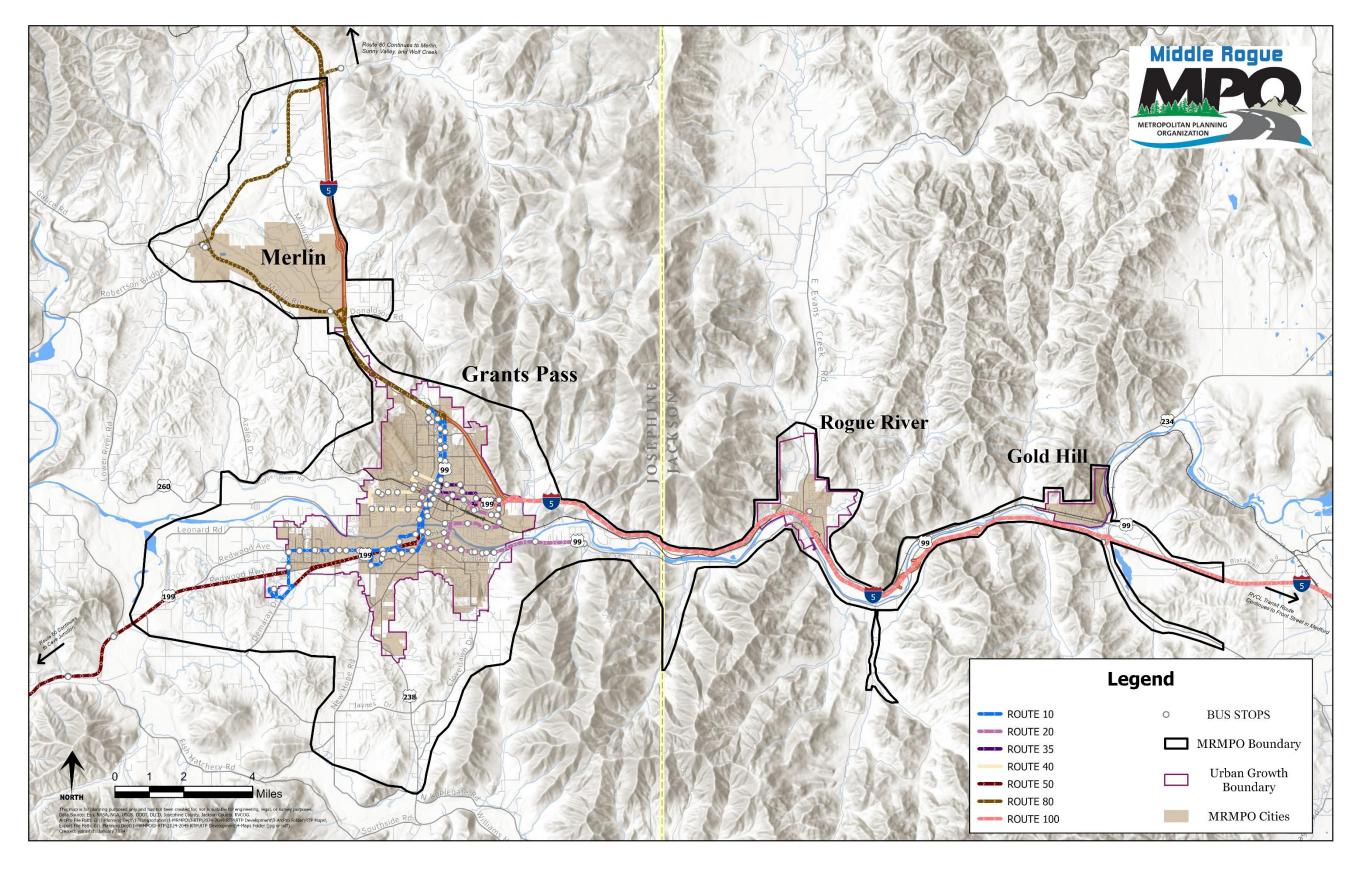
Map 5-3 Pavement Conditions



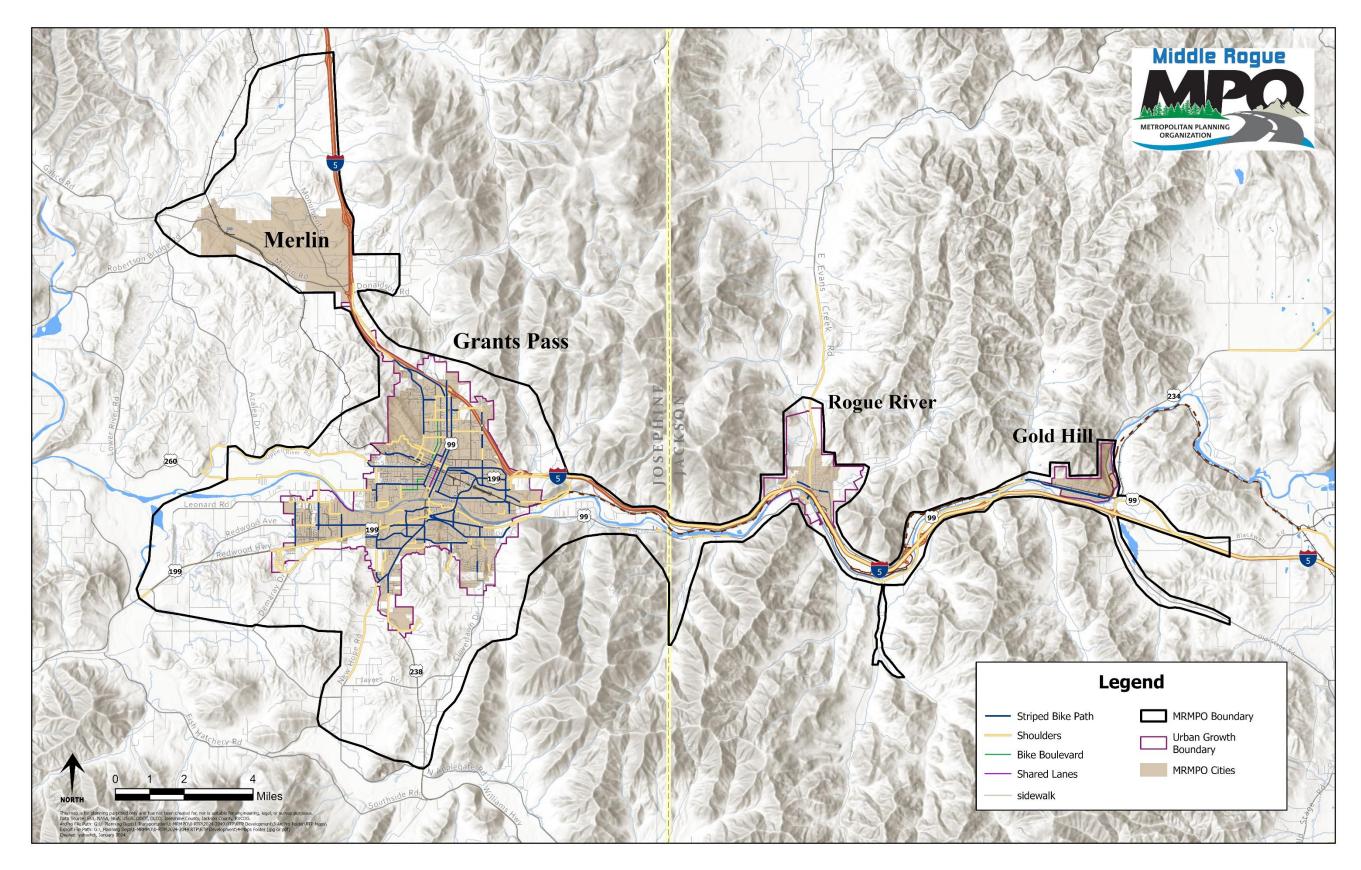
Map 5-4 Bridge Condition



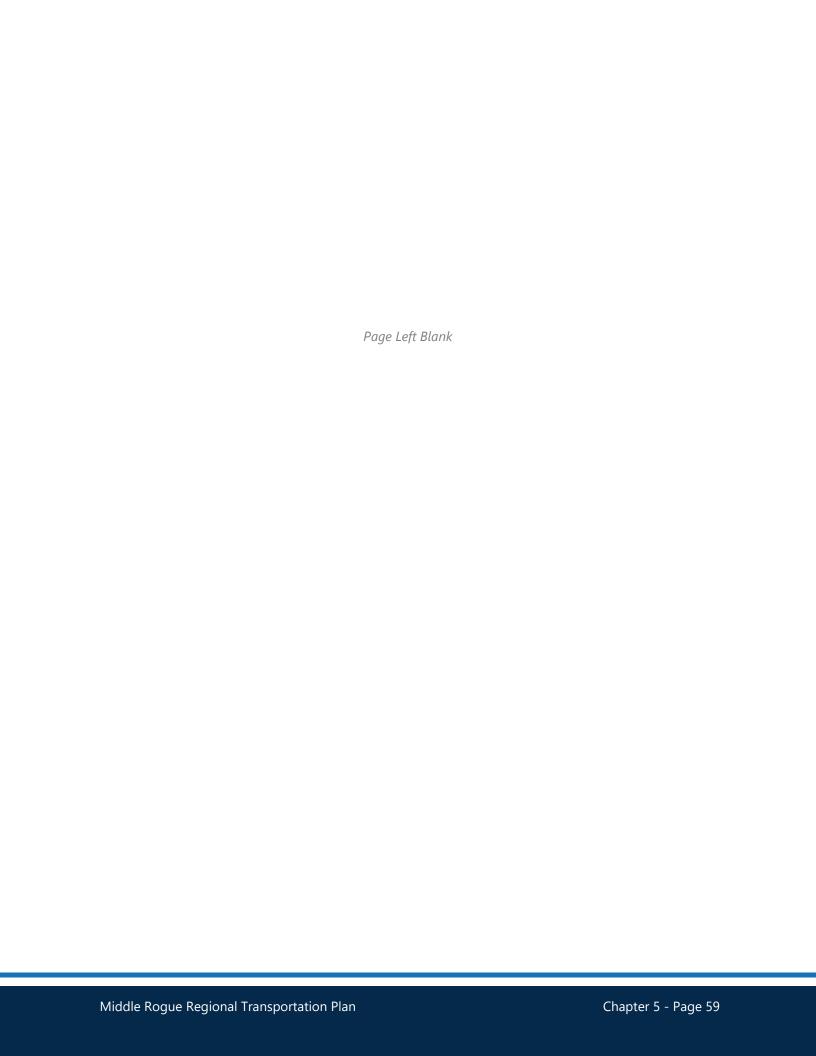
Map 5-5 Truck Traffic



Map 5-6 Transit Routes



Map 5-7 Bicycle & Pedestrian System



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.

Projects in the RTP

Requirements for metropolitan plans are described in Federal Highway Administration rules, 23 CFR Part 450.324. The plan must show the capital investment, operations and management strategies intended to lead to an integrated multimodal transportation system, over a horizon of at least 20 years. 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 (2039-2049). 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:

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

Please note, that the MRMPO have been designated by the Environmental Protection Agency as "attainment area" on December 26, 2023, for carbon monoxide and particulates, Clean Air Act requirements must be met in this plan (see details in Chapter 9 *Air Quality*).

"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.

Local Jurisdiction Transportation System Plans

Transportation planning begins in the local jurisdictions through the state-required Transportation System Plans (TSP). 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 financially constrained TSP project lists.

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.

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 serves Coos, Curry, and Douglas Counties, and District 8 serves Jackson and Josephine Counties. Beyond the capacity enhancement projects individually identified in the RTP, the MRMPO 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, restriping of lanes, and 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.

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

Utilizing revenue estimates of CMAQ and STBG funds for the years 2020 through 2049, as provided by ODOT for Region 3, MRMPO staff developed a yearly funding projection out to the year 2049 with an inflation rate of 2% applied to the average of the trend numbers for each category. Although ODOT does not program the funding by county and/or MPO in these broad categories, the table below is a rough calculation of the totals per category.

Table 6-1 – Estimated total funding for ODOT Region 3, up to 2049

Category	Est. Total	%
Preservation	\$315,279,283	41%
Safety	\$230,692,158	30%
Operations	\$223,002,419	29%
Total	\$768,973,860	100%

Although Region 3 is comprised of two districts, the majority of the population is in District 8. Over a tenyear 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.

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 Block Grant Program (STBG), 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*.

However, in the State of Oregon and with the passage of <u>HB2101</u>, small MPOs no longer receive STBG funds. Instead, they receive State Gas Tax Funds. These funds are far more flexible than federal funds and may be utilized by the local jurisdictions without a funding match requirement.

This change in funding types will necessitate that the MPO review and revise its project selection process for the next (FY 2027-30 TIP). Additionally, the state bill sunsets in 2027, and there is some level of uncertainty as to what type of funding will be available to small MPO's subsequent to the bill expiring.

The current MRMPO criteria for evaluating and scoring applications for STBG performance categories:

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

More than 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 6-2 further describes the performance categories.

Table 6-2 – Policy Foundation for MRMPO Project Selection (established prior to RTP adoption)

MRMPO Recommended Goals and Objectives					
1: Mobility		Plan for, develop and maintain a balanced multi- modal transportation system to address existing and future needs.			
	5	Optimize safety and security of the transportation system.			
2: Community Vitality &		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.			
Livability		Use transportation investments to foster economic opportunities.			
3: Transportation Options	Increase integration and availability of transportation options.	Use incentives and other strategies to reduce reliance on single-occupant vehicles.			
4:		Maximize efficient use of transportation infrastructure for all users and modes.			
Resource Conservation	into the MRMPO planning process.	Encourage use of cost-effective emerging technologies to achieve regional transportation goals.			

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.

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 counties develop as part of their state comprehensive planning obligations. The MRMPO projects are first identified in the local TSPs.

As stated, MPO's no longer receive STBG Funds; instead, they will receive State Gas Tax Funds until funding included in HB2101 ends. Once that happens, the MPOs will go back to receiving STBG funds.

This plan identifies nearly **\$40 million** in CMAQ & STBG\State Gas Tax funds and Street System revenues estimated at **\$50 million**, to be available for regional transportation projects through 2049. Details about the assumptions used to calculate the revenue available for the financially-constrained project list in this chapter are provided in Chapter 8 *Financial Plan*.

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 2020 and 2028
 Medium Range Between 2029 and 2038
 Long Range Between 2039 and 2049

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 Transportation Improvement Program (TIP) and forwarded into ODOT's Statewide Transportation Improvement Program (STIP) for authorization to proceed. At the TIP-STIP stage, projects receive a programming Key Number, which differs from RTP numbers. The key number is useful for tracking projects through implementation.

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

Table 6-3 – RTP Project List by Jurisdiction, Short Range Projects (2020 – 2028)

		Short Range Projects 2020 - 2028				
PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	соѕт		
			Funds Availab	le - Short Range		
Gold Hill						
GH-001	Street Paving/ADA ramps		Short	\$40,000		
		S	hort Range Tota	al	\$40,000	
Grants Pass						
GP-002	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	\$7,401,349		
GP-007	Lincoln Road: Bridge to G Street	Full reconstuction of arterial with TWLTL	Short	\$8,561,940		
		S	Short Range Total			
Jackson County						
0	No Short Range Projects	No Short Range Projects	Short	\$0		
			Short Range Total			
Josephine Coun	ty					
JoCo-003	New Hope Road	Sidewalk Infill Improvements-Bayard Dr. to Allen Crk	Short	\$169,500		
JoCo-004	G Street	Sidewalk Infill Improvements-Lincoln Road to Leonard St.	Short	\$276,000		
			hort Range Tota	al	\$445,500	
		She	ort Range RTP To	otal	\$16,448,789	

Table 6-4 – RTP Project List by Jurisdiction, Medium Range Projects (2029 – 2038)

Medium Range Projects 2029 - 2038						
PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	соѕт		
Grants Pass		F	unds Available	- Medium Range		
Gold Hill						
0	No Medium Range Projects	No Medium Range Projects	Medium			
		M	edium Range To	tal		
rants Pass						
GP-003	Leonard Road: Darneille Lane to Devonshire	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Medium	\$2,859,700		
GP-004	Leonard Road: Dowell Road to Moon Glo Drive	Miscelaneous Sidewalks	Medium	\$146,500		
GP-005	Bridge Street: Cottonwood to 4th Street	In-Fill sidwalks	Medium	\$505,600		
		Medium Range Total			\$3,511,800	
ackson County						
JACO-005	Old Stage Road: MPO Limit to I-5	Upgrade to 2-lane rural major collector standard with 4-foot shoulders consistent with Old Stage Road Plan	Medium	\$8,940,000		
JACO-006	North River Road: Rogue River City Limits to Twin Bridges Road	Install 6-foot shoulders consistent with rural major collector	Medium	\$12,400,000		
		Medium Range Total			\$21,340,000	
osephine Coun	ty					
JoCo-005	Merlin Road	Bicycle Rail Crossing Improvements	Medium	\$300,000		
		M	edium Range To	tal	\$300,000	
logue River*						
RR-001	Depot & Pine Street Intersection	Convert Pine St as through movement & Depot St to one-way	Medium	\$81,000		
RR-002	Pine & Main Street	Intersection improvement (Realigning, Signalize)	Medium	\$2,290,000		
RR-003	SB I-5	Lengthen ramp & queue storage, and widen I-5 bridge over Evans Creek	Medium	\$2,276,000		
RR-004	NB I-5	Add right turn lane	Medium	\$619,000		
RR-005	Depot & Main St	Convert Depot St to one-way	Medium	\$30,000		
	Medium Range Total				\$5,296,000	
		Med	ium Range RTP	Total	\$30,447,800	

Table 6-5 – RTP Project List by Jurisdiction, Long Range Projects (2039 – 2049)

Long Range Projects 2039 - 2049					
PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	соѕт	
			Funds Availab	le - Long Range	
Gold Hill					
0	No Long Range Projects	No Long Range Projects	Long		
			Long Range Tota	ıl	\$0
Grants Pass					
GP-008	Rogue River Highway: Hamilton to Fruitdale (Design/	Full reconstruction of arterial with TWLTL	Long	\$1,575,000	
GP-009	G Street: Lincoln Road to Leonard Street	Full reconstruction of arterial to include TWLTL, bike lanes, sidewalks, parking one side.	Long	\$890,000	
GP-010	Shutzwohl Lane: West Hanbeck Road to Dowel Road (design/ROW)	New Collector Street	Long	\$2,500,000	
GP-011	West Park Street Connection	Extend West Park Street from terminus to Allen Creek Road	Long	\$5,000,000	
			Long Range Total		\$9,965,000
Jackson County					
0	No Long Range Projects	No Long Range Projects	Long		•
Jacombina Court	4		Long Range Tota	1	\$0
Josephine Coun	•	N. L B Buitan	1		
0	No Long Range Projects	No Long Range Projects	Long	\$0	# 0
			Long Range Tota	l	\$0
Rogue River					
0	No Long Range Projects	No Long Range Projects	Long		
<u> </u>	1.15		Long Range RTP Total		\$9,965,000
			ggo		40,000,000

Table 6-6 – ODOT RTP Project list, Short Range (2020 - 2028)

ODOT Projects					
PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	cost	
		SHORT RANGE			
ODOT-001	Grants Pass (various locations on ODOT facilities)	Region 3 ADA scoping	Short	\$3,000,000	
ODOT-018	Clear Work Zone	Roadway Clear Zone - Remove trees near ODOT roadways to help prevent avoidable collisions and install traffic safety barriers to protect drivers from roadside hazards	Short	\$10,000,000	
ODOT-019	Southern Oregon Wrong Way Driver Mitigation	Install signs for wrong-way drivers on I-5 exit ramps throughout Southern Oregon to help improve safety to the travelling public.	Short	\$2,500,000	
ODOT-020	Monument Drive to North Grants Pass	Grind and inlay paving from Milepost 58 - 66	Short	\$20,000,000	
ODOT-005	Grants Pass Signal & Pedestrian Upgrades	Construction of left turn lane, signal improvements, raised median, install crosswalks, and ramp upgrades	Short	\$3,500,000	
ODOT-022	I-5: Evans Creek Bridge & Bridge over Depot Street	Widen the Evans Creek Bridge to the west side (southbound lanes), widen the bridge over Depot Street to the west side (southbound lanes). Remove portions of the bridge driving surfaces of both bridges and place new surface and replace the deck expansion joints.	Short	\$8,900,000	
ODOT-021	OR99: Fruitdale Creek Culver	Design, acquire ROW, and relocate utilities in preperation of a consturction project to replace a culvert with a bridge. The replacement will improve fish passage.	Short	\$2,150,000	
ODOT-023	OR99: Rogue River Bridge, Gold Hill Spur	Widen the deck, strengthen the bridge and replace timber walkway with an attached concrete ADA compliant walkway.	Short	\$3,081,000	
			Sh	ort Range Total	\$53,131,000

Table 6-7 – ODOT RTP Project list, Medium Range (2029 - 2038)

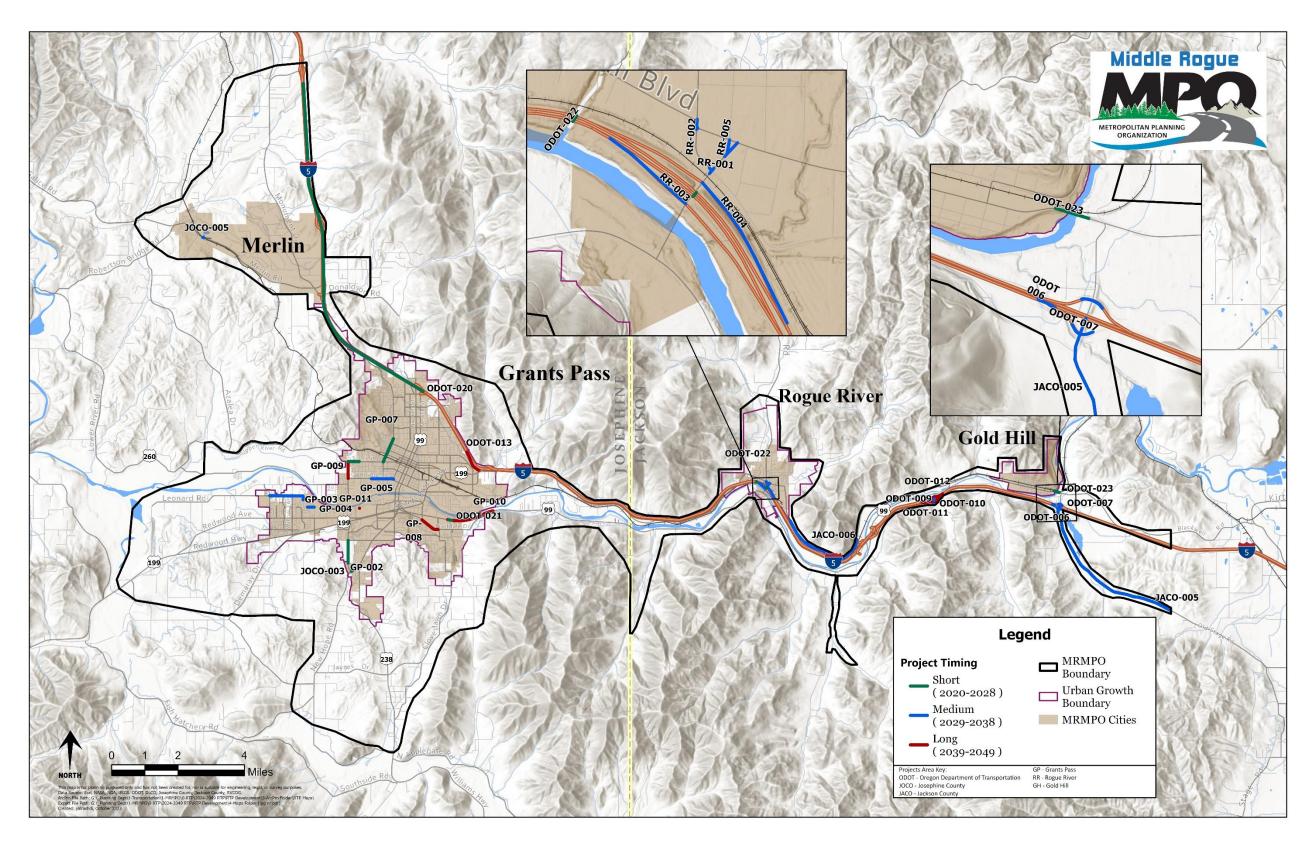
		ODOT Projects			
PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	соѕт	
Oregon Dept. of	Transportation		MID-RANGE		
ODOT-006	Exit 40 Improvements	Move guardrail and widen pavement in NW corner of I-5 Exit 40 Southbound Ramp Terminal	Medium	\$240,000	
ODOT-007	Exit 40 Improvements	Modify Traffic Control to All-Way Stop	Medium	\$10,000	
ODOT-009	Exit 43 Improvements	Improve turning radius, realign intersection and update traffic control	Medium	\$230,000	
ODOT-010	Exit 43 Improvements	Enhance multi-modal access across the bridge by adding signage to the structure	Medium	\$10,000	
ODOT-011	Exit 43 Improvements	Provide multimodal crossing of I-5 via the I-5 Exit 43 interchange with the use of "sharrows."	Medium	\$10,000	
			Medi	um Range Total	\$500,000

Table 6-8 – ODOT RTP Project list, Long Range (2039 - 2049)

		ODOT Projects			
PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	COST	
Oregon Dept. of	Transportation Transportation	LONG-RANGE			
ODOT-012	Exit 43 Improvements	Enhance multimodal access between I-5 and the City of Gold Hill. Add signage to travel lanes (main Street and Rogue River Hwy) and widen shoulders where ROW exists.	Long	\$465,000	
ODOT-013	Exit 55 Improvements	Realign intersection and improve weaving lanes from Southbound Ramp Terminal of I-5 onto US 199.	Long	\$2,500,000	
ODOT-017		Improve pedestrian and bicycle facilities throughout the city on ODOT facilities (6th and 7th Street, US 199, OR 238, and OR 99).	Long	\$2,000,000	
			Lo	ong Range Total	\$4,965,000

Table 6-9 – Josephine County Transit RTP Project list

		Josephine County Transit Projects			
PROJECT NUMBER	LOCATION	LOCATION DESCRIPTION		соѕт	
	Short Range				
JCT-003	Vehicle Replacement - 2023	Capital Purchase - Replacement Vehicle	Short	\$725,000	
JCT-004	Vehicle Replacement - 2024	Capital Purchase - Replacement Vehicle	Short	\$725,000	
JCT-005	Vehicle Replacement - 2025	Capital Purchase - Replacement Vehicle	Short	\$725,000	
JCT-006	Vehicle Replacement - 2026	Capital Purchase - Replacement Vehicle	Short	\$725,000	
JCT-007	Josephine County - FTA 5311	FFY2023 Rural Operations	Short	\$313,800	
JCT-008	Josephine County - FTA 5307	FFY2023 Transit Operating Assistance	Short	\$890,000	
JCT-009	Josephine County - FTA 5310	FFY2023 - Preventive Maintenance	Short	\$241,000	
			Sh	ort Range Total	\$4,344,800
	Mid-Range				
JCT-010	Vehicle Replacement - 2027	Capital Purchase - Replacement Vehicle	Medium	\$810,000	
JCT-011	Vehicle Replacement - 2028	Capital Purchase - Replacement Vehicle	Medium	\$810,000	
JCT-012	Vehicle Replacement - 2029	Capital Purchase - Replacement Vehicle	Medium	\$810,000	
JCT-013	Vehicle Replacement - 2030	Capital Purchase - Replacement Vehicle	Medium	\$810,000	
JCT-014	Vehicle Replacement - 2031	Capital Purchase - Replacement Vehicle	Medium	\$810,000	
JCT-015	Vehicle Replacement - 2032	Capital Purchase - Replacement Vehicle	Medium	\$810,000	
JCT-016	Vehicle Replacement - 2033	Capital Purchase - Replacement Vehicle	Medium	\$810,000	
JCT-017	Vehicle Replacement - 2034	Capital Purchase - Replacement Vehicle	Medium	\$810,000	
			Medi	ium Range Total	\$6,480,000
Josephine Comn	nunity Transit				
	Long Range				
	No Long Range Projects	No Long Range Projects	Long		
			Lo	ong Range Total	\$0



Map 6-1 RTP Projects

Chapter 7 – Transportation Sustainability

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.

Defining Sustainability

There is no standard definition for Sustainability nor is there a standard definition for Sustainable Transportation. 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." "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."

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

Stewardship of the Environment includes:

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

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

Economic Vitality includes:

1. Creation of jobs

Recommended Sustainability Strategies

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

Environmental Responsibility

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.

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.

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 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.

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 congestion
- Consideration of impacts on non-renewable resources.

Chapter 8 - Financial Outlook

Introduction

This chapter presents all the financial assumptions used to create the financial constrained project list for the street and transit system, as required by federal law under <u>23 U.S.C. 101(a)(5)</u> and <u>23 CFR 450.324(f)(11)</u>.

Toward that effort the MRMPO has identified the primary federal funding streams for the MRMPO: Surface Transportation Block Grant (STBG) \ State Gas Tax, Congestion Mitigation and Air Quality (CMAQ)

funds and Street System Revenue forecasts for MRMPO jurisdictions. In the case of the MRMPO, CMAQ funds can only be expended within the Urban Growth Boundary of the City of Grants Pass. Because of this restriction, only two jurisdictions have access to these funds: the City of Grants Pass and Josephine County (wherein the City lies). The availability of these funds is therefore somewhat competitive and will be addressed in the RTP and TIP on a case-by-case basis.

STBG funds are available to all of the member jurisdictions. They each have the opportunity to apply for funds on a tri-annual basis as each new Transportation Improvement Program is developed. These funds are distributed through a project selection process that is periodically reviewed and updated.

"Federal regulations under 23
USC 134(I)(2)(E) and 23 CFR
450.324(f)(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."

In chapter 6, it was mentioned that small MPOs in the State of Oregon will no longer be eligible for STBG funds due to the passing of <u>HB2101</u>. This change will be in effect until the state bill expires in 2027. Instead, these MPOs will receive a reduced amount of State Gas Tax Funds. Unlike federal funds, these funds offer greater flexibility and can be utilized by local jurisdictions without the need for a funding match. However, there is some uncertainty regarding what type of funding, STBG or State Gas Tax, will be available for MPOs once the state bill expires in 2027.

Local governments have several revenue sources that they can use to help fund the projects, see Table 8-2 for more information. Such sources include System Development Charges, Small City Allocations, Street Utility Fees, etc. In addition, it has been common for local governments to enter into a fund exchange with the Oregon Department of Transportation in order to pursue identified projects. In these cases, local match is not required.

With the passage of Oregon HB2101, the MRMPO will receive approximately \$700k in State Gas Tax Funds for 2024–2027. In 2027, when HB2101 ends, it is likely that the MPO will go back to receive STBG funds, around \$800k per year, with an approximate 2% annual increase which brings the total funding over the 25-year period to roughly \$28 million. CMAQ funding is projected to be around \$450k per year totaling \$11.7M over the next 25 years.

Street system revenues projections were developed with the cooperation with the local jurisdictions in MRMPO. Street System Revenues Sources section goes into detail on the local jurisdictions revenues and breaks down the sources. Overall, the street system revenue is projected to be around \$56M from 2024 to 2049, see Table 8-1. For all the assumption and estimates that are used to calculate these finds please see Table 8-3.

The Oregon DOT will also pursue projects within the MRMPO Planning Boundary over the timeframe covered by this RTP update. These projects are automatically assumed to be fiscally constrained. While specific capacity-enhancing and regionally significant projects will be identified within the update itself there are three categories of projects that will be referred to contextually: Preservation, Safety, and Operations. In this context, when specific projects are identified they will be amended into the TIP directly.

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 MRMPO 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, and installation of warning/caution signage, lane reflectors,
 rumble strips, etc.
- Operation projects include but are not limited to, such projects 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 ODOT financial forecasts for the years 2020 through 2049 of Region 3. The table below shows estimated total per category:

Category	Est. Total	%
Preservation	\$315,279,283	41%
Safety	\$230,692,158	30%
Operations	\$223,002,419	29%
Total	\$768,973,860	100%

Although Region 3 is comprised of two districts, the majority of the population is in District 8. Over a tenyear 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.

As previously stated, the RTP is required to be fiscally constrained. Towards that end, the MRMPO, in close coordination with ODOT and local jurisdictions, developed a funding table indicating how much funding may be available to the MRMPO over the 25-year period covered by the Regional Transportation Plan. Table 8-1 on the next page provides a summary, by year, of anticipated available funds.

Table 8-1 shows that the MRMPO will have approximately \$40M in STBG \ State Gas Tax funding. State Gas Tax funding is only accounted for 4 years (2024-2027). CMAQ funding is estimated at \$11.7M over the planning period. In addition, street system revenues are projected to be around \$56M in this RTP cycle. That brings the projected total of available funds during the 2024-2049 RTP period roughly to \$96M. Keep in mind that the total RTP project cost is around \$65M for all the jurisdiction projects, not including ODOT and JCT project costs. Please see Appendix E for Year of Expenditure (YOE) and jurisdictions financial breakdown.

Methods Used to Complete Financial Plan

To complete this chapter, the following steps were followed:

Federal, CMAQ & STBG, funding revenue projections were provided by ODOT for the MRMPO area. State Fuel Tax numbers were projected from <u>ODOT Guaranteed Fuels Tax Document</u>. Also, the MRMPO jurisdictions sent over their financial forecasts for this RTP update and that included Federal, State, and local revenues.

- **Reviewed existing data.** Primary documents reviewed included ODOT's projections documents for the Federal Funds and Fuels Tax Funds.
- 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.

Table 8-1 - Available Funding for 2024-2049 RTP

	Total Funding Available 2024-2049								
Time		MRM	IPO Future	Local	RTP Projects				
Line	YEAR	CMAQ	Subtotal CMAQ	STBG \ State Gas Tax	Subtotal STBG	Street System Revenues	Cost		
d)	2024*	\$450,000		\$697,173	6 1				
Short Range	2025*	\$450,000	\$ 2,250,000	\$697,173	\$ 3,684,902				
T. R.	2026*	\$450,000	250	\$697,173	684	\$ 10,919,274	\$16,448,789		
ious	2027*	\$450,000	\$ 2,3	\$697,173	\$ 3,(
01	2028	\$450,000	•	\$896,210	• • • • • • • • • • • • • • • • • • • •				
	2029	\$450,000		\$915,927		\$ 17,074,178			
	2030	\$450,000	\$ 4,050,000	\$936,077	\$ 9,205,407		\$30,447,800		
a)	2031	\$450,000		\$956,671					
nge	2032	\$450,000		\$977,717					
Medium Range	2033	\$450,000		\$999,227					
diun	2034	\$450,000		\$1,021,210					
Nec	2035	\$450,000		\$1,043,677					
_	2036	\$450,000		\$1,066,638					
	2037	\$450,000		\$1,090,104					
	2038	\$450,000		\$1,114,086					
	2039	\$450,000		\$1,138,596					
	2040	\$450,000		\$1,163,645					
	2041	\$450,000		\$1,189,245					
	2042	\$450,000		\$1,215,409	9				
Range	2043	\$450,000	000,	\$1,242,148	12,1				
g Ra	2044	\$450,000	\$ 4,500,	\$1,269,475	\$ 12,858,716	\$ 28,545,540	\$ 9,965,000		
Long	2045	\$450,000	\$ 4,5	\$1,297,403	12,				
	2046	\$450,000		\$1,325,946	\$				
	2047	\$450,000		\$1,355,117					
	2048	\$450,000		\$1,384,930					
	2049	\$450,000		\$1,415,398					
	Total	\$11,700,000		\$27,803,548		\$ 56,538,992	\$62,032,949		

Total of (CMAQ + STBG)	\$39,503,548
Total of (CMAQ + STBG + Street System Revenues)	\$96,042,540
Total of RTP Project Costs	\$56,861,589
Difference	\$39,180,951

^{*} From 2024 to 2027 there are no STBG funds. Instead, MPO's will receive State Gas Tax Funds, highlighted in green, in a fund exchange program. After 2027 it is assumed that MPO's will go back to receiving STBG.

- \$450,000/year only projects located within the Grants Pass CO & PM10 Maintenances areas are eligible for CMAQ funds.
- For more information on Street System Revenues see Street Revenues Table
- Difference = Total of (CMAQ+ STBG+ Street System Revenues) Total of RTP Project Costs

Street System Revenue Sources

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 2049 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.

State funds generally make up the largest share of revenues 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.

Information for this part is 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. A detailed summary estimates of capital funding availability required for Josephine Community Transit (JCT), Grants Pass, Rogue River, and Gold Hill are shown in Table 8-2.

Figure 8-1 shows the sources of funding that are reasonably expected to be available to support the MRMPO regional street system for the 2024-2049 RTP. State funds make up the largest share of revenues (82%), 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.

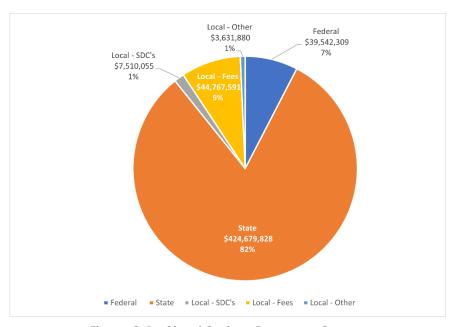


Figure 8-1 - Street System Revenues Sources

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%).

Fund Exchange Program - over the past few years, the Oregon Department of Transportation (ODOT) has been working with the Association of Counties (AOC) and the League of Oregon Cities (LOC) to revise the Fund Exchange program to address the declining state highway funds and its impact on the program. The 2023 Oregon legislature authorized HB2101. This new bill provides more stability to the Fund Exchange program by allocating \$35 million of HB 2017 dollars each year to eligible cities and counties.

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 Block Grant (STBG) - 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 like mass transit, bike-ped, etc.

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 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.

Special City Allotment (SCA) – is an annual allocation of state funds for local transportation projects. Incorporated cities with populations of 5,000 or less are eligible to apply. SCA funds may only be used upon streets that are "inadequate for the capacity they serve or are in a condition detrimental to safety" (ORS 366.805). Each project will be evaluated and scored on existing conditions and proposed improvements. Projects compete only against other projects within the same region. With a yearly program allocation is \$5M plus any savings carried forward.

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.

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.

Figure 8-2 shows the sources of funding that area reasonably expected to be available to support the MRMPO transit system for the 2024 -2049 RTP. Federal funds (FTA & FTA ODOT) make up the largest share (49%) of transit revenues, followed by State funds (42%) and local funds (City of Grants Pass, Contracts, Fares) for total of (9%).

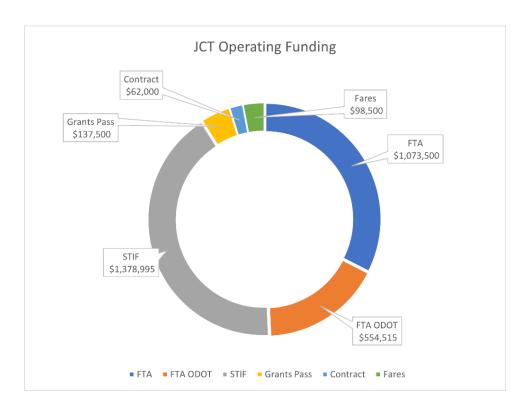


Figure 8-2 Transit System Revenue Sources

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.

There is a local funding match requirement for all federal funds. That match requirement ranges from 50% to 10.27% depending on the federal program. Typically, funds used for direct operational support require a 50% match.

Local matching funds can only come from non-federal sources and can't include program revenue. Program revenue are any funds that are generated through the spending of federal funds (typically bus fares or service charges).

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 Bipartisan Infrastructure Law continues without change the broad range of activities eligible under the Urbanized Area Formula Program, including:

- Capital projects
- Planning
- Job access and reverse commute projects
- Operating costs of equipment and facilities for use in public transportation (in urbanized areas with a population of fewer than 200,000 individuals)

Eligible activities include planning, engineering design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement of buses and overhaul and rebuilding of buses; crime prevention and security equipment; construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems, including rolling stock, overhaul, and rebuilding of vehicles, track, signals, communications, and computer hardware and software. All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs

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.

This program (49 U.S.C. 5310) provides formula funding to states for the purpose of assisting private nonprofit groups in meeting the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. Funds are apportioned based on each state's share of the population for these two groups. Formula funds are apportioned to direct recipients; for rural and small urban areas, this is the state Department of Transportation, while in large urban areas, a designated recipient is chosen by the governor. Direct recipients have flexibility in how they select subrecipient projects for funding, but their decision process must be clearly noted in a state/program management plan. The selection process may be formula-based, competitive or discretionary, and subrecipients can include states or local government authorities, private non-profit organizations, and/or operators of public transportation.

The program aims to improve mobility for seniors and individuals with disabilities by removing barriers to transportation service and expanding transportation mobility options. This program supports transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities in all areas – large urbanized (over 200,000), small urbanized (50,000-200,000), and rural (under 50,000). Eligible projects include both "traditional" capital investment and "nontraditional" investment beyond the Americans with Disabilities Act (ADA) complementary paratransit services.

Traditional Section 5310 project examples include:

- Buses and vans
- Wheelchair lifts, ramps, and securement devices
- Transit-related information technology systems, including scheduling/routing/one-call systems
- Mobility management programs
- Acquisition of transportation services under a contract, lease, or other arrangement
- Preventative maintenance

Nontraditional Section 5310 project examples include:

- Travel training
- Volunteer driver programs
- Building an accessible path to a bus stop, including curb-cuts, sidewalks, accessible pedestrian signals or other accessible features
- Improving signage, or way-finding technology
- Incremental cost of providing same day service or door-to-door service
- Purchasing vehicles to support new accessible taxi, rides sharing and/or vanpooling programs
- Mobility management programs

Any project using 5310 funds needs to be included in the funding priorities of an adopted Human Resources / Transit Service Coordination Plan. This is a federal and ODOT requirement of the program.

Rural Area Formula Grants (5311)

The Formula Grants for Rural Areas program provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations of less than 50,000, where many residents often rely on public transit to reach their destinations. The program also provides funding for state and national training and technical assistance through the Rural Transportation Assistance Program. Eligible activities include planning, capital, operating, job access and reverse commute projects, and the acquisition of public transportation services. Preventative maintenance and administrative support are also eligible activities within the 5311 programs.

State of Good Repair Grants (5337)

The State of Good Repair Grants Program (49 U.S.C. 5337) provides capital assistance for maintenance, replacement, and rehabilitation projects of high-intensity fixed guideway and bus systems to help transit agencies maintain assets in a state of good repair. Additionally, SGR grants are eligible for developing and implementing Transit Asset Management plans.

State of Good Repair Grants funds are available for capital projects that maintain a fixed guideway or a high intensity motorbus system in a state of good repair, including projects to replace and rehabilitate:

- Rolling stock
- Track
- Line equipment and structures
- Signals and communications
- Power equipment and substations
- Passenger stations and terminals
- Security equipment and systems
- Maintenance facilities and equipment
- Operational support equipment, including computer hardware and software
- As well as implement transit asset management plans.



Bus and Bus Facilities Program (5339)

The Bipartisan Infrastructure Law, enacted as the Infrastructure Investment and Jobs Act, continues the Grants for Buses and Bus Facilities program, which makes funding available to states, designated recipients, and local governmental entities that operate fixed route bus service to replace, rehabilitate, and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low- or no- emission vehicles or facilities. Funding is provided through formula allocations and competitive grants. Two sub-programs provide competitive grants for buses and bus facility projects, including one that supports low and zero-emission vehicles.

Capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities. Additionally, 0.5% of a request may be for workforce development training, and an additional 0.5% may be for training at the National Transit Institute. Applicants proposing any project related to zero-emission vehicles must also spend 5% of their award on workforce development and training as outlined in their Zero-Emission Transition Plan, unless the applicant certifies that their financial need is less

State Transit Revenue Sources

Statewide Transportation Improvement Fund (STIF) – program was introduced by the <u>House Bill 2017 Transportation Funding Package</u> to fund public transportation improvements across Oregon. STIF funds may be used for public transportation purposes that support the effective planning, deployment, operation, and administration of public transportation programs. STIF funds may not be used for light rail capital expenses and are not intended to supplant local funding sources to maintain existing services.

Investments from the STIF program have helped to make transportation in Oregon more equitable and affordable by supporting reduced-fare programs, expanded service coverage, and increased service frequency to low-income communities. This program has advanced greenhouse gas emission reduction efforts by funding the transition to low-emission vehicles. Funds have also supported expanded connectivity across Oregon's multimodal network through transit service, infrastructure, and technology improvements.

At its inception, the STIF program was funded solely by the Oregon "transit tax," which is a state payroll tax equal to one-tenth of 1 percent. The STIF program will also be funded by ID card fees, non-highway gas tax, and cigarette tax revenues once its merger with the Special Transportation Fund (STF) is effective July 1, 2023. The total funding amount will be estimated annually, and actual revenues will vary based on transit tax collections.

STIF revenues are allocated across four programs:

- 90% to STIF Formula
- 5% to STIF Discretionary

- 4% to STIF Intercommunity Discretionary
- 1% to Technical Resource Center

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).

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 10% of JCT's operating costs.

Other – Other funding includes contracted services, miscellaneous contracts, and service contracts like the arrangement with the City of Grants Pass, or the RCC Student/Staff Pass Program.

RTP Fund Forecasts & Assumptions

Table 8-2 - Revenues below shows the projected 25-year capital funding scenario for the 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 with addition to CMAQ and STBG funding.

In addition to 25-year revenue projections, Table 8-2 shows estimated costs for implementation of the RTP Tier 1 projects. On the following pages, Table 8-3 describes the financial assumptions made by the MRMPO to calculate revenues.

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.

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 federal, state and local political support 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 federal transportation 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.

Table 8-2 - Revenues

				R	levenues						
Jurisdiction						Local			Non Conital	Canital Funda	2024-2049
	Time Frame	Federal	State	SDC's	Fees	Other	Total Revenues	Non-Capital Expenses	Capital Funds Available	RTP Projects Expenses	
	short	\$0	\$534,248	\$0	\$0	\$0	\$534,248	\$269,941	\$264,307	\$40,000	
Gold Hill	medium	\$0	\$1,050,184	\$0	\$0	\$100,000	\$1,150,184	\$650,353	\$499,831	\$0	
	long	\$0	\$1,095,998	\$0	\$0	\$50,000	\$1,145,998	\$927,628	\$218,370	\$0	
	short	\$0	\$850,220	\$42,366	\$99,345	\$695,000	\$1,686,931	\$2,308,894	\$0	\$0	
Rogue River	medium	\$0	\$1,637,829	\$102,165	\$239,569	\$1,123,000	\$3,102,563	\$5,115,524	\$0	\$5,296,000	
	long	\$0	\$1,709,280	\$134,050	\$314,335	\$750,000	\$2,907,665	\$6,407,890	\$0	\$0	
	short	\$0	\$13,792,900	\$1,051,266	\$6,439,002	\$150,000	\$21,433,168	\$10,876,257	\$10,556,911	\$15,963,289	
Grants Pass	medium	\$0	\$22,860,701	\$2,535,120	\$15,527,608	\$300,000	\$41,223,428	\$26,210,664	\$15,012,765	\$3,511,800	
	long	\$0	\$19,287,413	\$3,615,956	\$22,147,732	\$330,000	\$45,381,102	\$37,385,460	\$7,995,642	\$9,965,000	
	short	\$5,658	\$117,716	\$4,252	\$0	\$19,541	\$147,167	\$49,111	\$98,056	\$0	
Jackson Co. (MRMPO Area)	medium	\$13,644	\$283,870	\$10,254	\$0	\$47,124	\$354,892	\$118,216	\$236,676	\$21,340,000	
	long	\$19,461	\$404,897	\$14,626	\$0	\$67,215	\$506,198	\$168,617	\$337,581	\$0	
	short	\$0	\$50,865,922	\$0	\$0	\$0	\$50,865,922	\$52,808,414	\$0	\$445,500	
Josephine Co. (MRMPO Area)	medium	\$0	\$124,002,825	\$0	\$0	\$0	\$124,002,825	\$122,677,918	\$1,324,907	\$300,000	
	long	\$0	\$186,185,824	\$0	\$0	\$0	\$186,185,824	\$166,191,878	\$19,993,947	\$0	
	•		•			•	•	Street System Totals	\$ 56,538,992	\$ 56,861,589	

			T	ransit Revenues	Sources				
	Time Frame	Federal	State		Local		Total Revenues	Transit Expenses	Net Balance
		rederal Sta	State	Grants Pass	Contracted Services	Farebox	itevenues		
JCT	short	\$ 5,642,669	\$ 10,727,373	\$ 722,745	\$ 325,892	\$ 517,748	\$ 21,166,427	\$ 21,149,830	\$16,598
	medium	\$ 15,162,003	\$ 28,824,740	\$ 1,942,036	\$ 875,682	\$ 1,391,204	\$ 56,329,663	\$ 56,156,865	\$172,798
	long	\$ 17,853,897	\$ 33,942,346	\$ 2,286,829	\$ 1,031,152	\$ 1,638,201	\$ 64,472,425	\$ 64,129,196	\$343,229
	Totals	\$38,658,569	\$73,494,458	\$4,951,610	\$2,232,726	\$3,547,153	\$141,968,516	\$141,435,891	\$532,625

^{*} Capital Funds Available = Total Revenues - Non-Capital Expenses

^{*} Net Balance = Total Revenues - Transit Expenses

^{*} **\$0** represents no funds that are available from that jurisdiction to be potentially used.

^{*} See Assumptions table, Table 8-3, for more information on the numbers used.

Table 8-3 - Revenues Assumptions

			Revenues				
Jurisdiction	Federal	State		Local		Non-Capital Needs	Capital Funds Avail.
	reuerai	State	SDC's	Street Utility Fees (SUFs)	Other		
Gold Hill			No SDC's No SUFs Small City Allotment (SCA) funds and are expected to average assumed for	2024 expenses include: Maintenance \$51K. An annual increase of 2.5% is assumed for maintenance expenses through 2049.			
Rogue River	Federal funds that are received by jurisdictions in the form of Federl Program or Grants	Cities sent over their expected/estimated State Funds, and this includes Fuels Tax. FYI, Gold Hill, Rogue River, and Grants Pass have their fuel tax estimates going down overtime and that ranges from 0.5% - 2.5%.	SDC's are expected to be about \$8K in 2024 and increase by about 2.5% per year through 2049.	Street Utility Fees are expected to be \$18K in 2024 and increase by 2.5% per year until 2049.	Includes \$89,000 per year from General Fund to 2025 and \$250,000 every four years from SCA.	2024 expenses include: admin (\$160K) and maintenance (\$190K). An annual increase of 2.5% is assumed for these expenses through 2049.	Capital funds available for cities in the MRMPO equal the amounts in the "Total Revenues" column minus the amounts in the "Non-Capital Needs" column.
Grants Pass			SDC's are expected to be about \$200K in 2024 and increase at 2.5% per year.	Street Impact Fees are expected to be about \$1.2M in 2024 and increase by 2.5% per year.	Other revenues are expected to be \$150K Short Range, \$300K Medium Range and \$330K Long Range.	Expenses include administration \$600K in 2024 and maintenance \$1.4M in 2024. An annual increase of 2.5% has been assumed for these expenses through 2049.	
JCT	Federal Revenues: FTA and 5309 Capital State Revenues: STIP and FTA (ODOT) Local Revenues: Grants Pass, Contract Services and Farebox These revenue sources assume a projection to an annual increase of 2.5% through 2049.						
Josephine Co. (MPO Area)	Numbers from 2024–2027 are more up-to-date estimates that the Josephine County received from AOC. Beyond that, the county estimated that their State fund has an annual increase of 3%. Non-Capital expenses are estimated to						
Jackson Co. (MPO Area)		Federal	, State, local and Non-Cap	pital expenses are all estimated to be a	nnually increasing by 2.5% fo	or Jackson County.	

Left blank intentionally Chapter 8 - Page 17 Middle Rogue Regional Transportation Plan

Chapter 9 – Air Quality

On December 26, 2023, MRMPO has reached the end of the maintenance period and is considered to be in attainment. When an area is designated as "attainment area," it means that the air quality within that region meets or is below the specified levels for all relevant pollutants as defined by the National Ambient Air Quality Standards (NAAQS).

In the context of air quality management and transportation planning, the term "attainment area" refers to a geographical area that has achieved and maintains compliance with the (NAAQS) set by the U.S. Environmental Protection Agency (EPA). These standards are established to protect public health and the environment by limiting the concentrations of specific air pollutants.

Areas that do not meet the air quality standards are classified as nonattainment areas or maintenance areas. And they are subject to additional regulatory requirements and limitations on certain types of development and transportation projects until they achieve compliance.

In summary, when a Metropolitan Planning Organization becomes an attainment area, it indicates that the region has successfully maintained air quality standards, allowing for more flexibility and fewer regulatory restrictions in transportation planning and development projects.

Please refer to Appendix G to see the Environmental Protection Agency (EPA) letter documenting the end of the MRMPO maintenance plan and reaching attainment. Also, additional information regarding the end of 20 years of maintenance is presented in the Office of Transportation and Air Quality's guidance document.

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 discussion was developed in consultation with federal, state, tribal, wildlife, land management, and regulatory agencies, as shown on Table 10-1.

Table 10-1 – Agency Partners

Agency
Confederated Tribes of Siletz Indians
Confederated Tribes of Grand Ronde
Tolowa Dee-Ni Nation
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)

The Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58), also known as the Bipartisan Infrastructure Law (BIL), contains a number of new programs targeted at mitigating the impacts of climate change, environmental impact and increasing the resilience of the surface transportation system. Funding for these programs is both apportioned (distributed) to States based on formulas specified in Federal law, and through competitive grant programs.

Some of the BIL programs are:

- Bridge Investment Program (BIP)
- Carbon Reduction Program (CRP)
- Congestion Mitigation and Air Quality (CMAQ) Improvement Program
- Emergency Relief Program (ER)
- National Culvert Removal, Replacement, and Restoration Grants (Culvert AOP Program)
- <u>Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation</u> (PROTECT) Formula Program
- National Electric Vehicle Infrastructure (NEVI) Formula Program
- Reduction of Truck Emissions at Port Facilities
- Safe Streets and Roads
- Wildlife Crossings Pilot Program

For additional information on the Bipartisan Infrastructure Law (BIL) programs visit FHWA BIL Fact Sheet.

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.

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:

- 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 Wildlife Collision Hot Spots
- Map 10-5 Historic Places

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 Chapter 10 - Page 20.

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

Shows 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.

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 Areas. 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 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.

Wildlife Collision Hotspots Map 10-4:

Illustrates RTP projects that overlap with high frequency wildlife mortality incidents (from Oregon Department of Transportation dispatch records of carcass reports).

Historic Places, Map 10-5:

The National Park Service's National Register of Historic Places mapped with the RTP projects.

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.

Environmental Justice stems from Title VI of the <u>Civil Rights Act</u> of 1964 and Executive Order 12898 of 1994. The latter, Executive Order 12898, directs federal agencies to incorporate achieving Environmental Justice into their missions.

The Middle Rogue Metropolitan Planning Organization maintains a separate civil rights plan: https://mrmpo.org/wp-content/uploads/2021/12/1A MRMPO TitleVIPlan UPADTED-08-2021-Full-Doc.pdf

One of MRMPO'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 ensure Environmental Justice.

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 <u>National Environmental Policy Act (NEPA)</u>. 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.

Early Consideration of Environmental Consequences

A common principle of environmental laws and regulations is a multi-step 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.

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 in this chapter were created by overlaying the planned transportation projects with environmental data including wetlands, floodplains, fish (salmonid) habitat, critical wildlife 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.

Evaluation of Impacts

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

- 1. 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.
- 2. The extent of roadway impacts on the wetlands and natural habitats.
- 3. 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.

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 and ODFW) 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. 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 (<u>Title 40 CFR § 1508.1</u>) as follows:

Mitigation means measures that avoid, minimize, or compensate for effects caused by a proposed action or alternatives as described in an environmental document or record of decision and that have a nexus to those effects. While NEPA requires consideration of mitigation, it does not mandate the form or adoption of any mitigation. Mitigation includes:

- 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."

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), <u>Title 33 CFR</u> § 325 & 332, Environmental Protection Agency (EPA), <u>Title 40 CFR § 230</u> 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 (<u>Title 23 CFR § 777.9</u>).

- 1. 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.

- 2. 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.
- 3. 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.

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 miles 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 sunbathing.

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

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), Title 33 CFR § 325 & 332, Environmental Protection Agency (EPA), Title 40 CFR § 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

The MRMPO provides a discussion of the 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 <u>Oregon Department of Transportation (ODOT) operated Vernal Pool Mitigation/Conservation Bank</u> (Bank) near Central Point, used for ODOT projects.

The Bank is located near the intersection of Newland and Truax Roads, in White City, Jackson County, Oregon. The bank objectives include protection and management of 80.23 acres of high functioning Agate Desert vernal pool complex (vernal pools, and uplands including chaparral, open prairie, and oak woodland), Including areas designated as critical habitat and wetlands. Bank operations include restoration of wetland hydrology to 3 acres of vernal pools.

The Bank is located west of and directly adjacent to the Nature Conservancy's Whetstone Savanna Preserve (a registered Oregon Natural Heritage Resource) and is of similar character. In 2014, ODOT completed the purchase of four additional parcels



Figure 10-1 - ODOT Vernal Pool Mitigation Bank

(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 Rogue Valley Council of Governments identified the site as one of the highest functioning vernal pool complexes remaining. A Vernal Pool complex functional assessment methodology developed by regulators and stakeholders identified this complex as one the three complexes with highest potential "sustainability" scores.

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. 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.

Wildlife Habitat

The Oregon Department of Fish and Wildlife (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 in their area.

The link follows offers more information on the ODFW Conservation Strategy for Oregon: <u>ODFW</u> Conservation (state.or.us)

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 supports 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 endemic species. In fact, the Klamath-Siskiyou region was included in the World Wildlife Fund's assessment of the 200 locations most important for species diversity worldwide.

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 are 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 check out <u>Klamath Mountains – Oregon Conservation Strategy</u>

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 the COAs and has expanded the North Medford COA so that a portion of the MRMPO planning area is now included.

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. Also, the Bipartisan Infrastructure Law (BIL) establishes a Wildlife Crossing Pilot Program (WCPP) to provide discretionary grants for projects that seek to achieve a reduction in the number of wildlife-vehicle collisions and improved habitat connectivity for terrestrial and aquatic species.

ODFW's fish passage rules can be found here: https://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 streams.

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:

- Oregon Department of Transportation: Wildlife Crossings: Geo-Environmental: State of Oregon
- http://www.defenders.org/programs and policy/habitat_conservation/habitat_and_highways/inde x.php

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 level, and if there is critical habitat in the MRMPO area.

Table 10-2 – Threatened and Endangered Local Species

Species common name	Species scientific name	Status	Critical Habitat (CH)
Birds			
Northern Spotted Owl	Strix occidentalis caurina	Т	Υ
Fish			
Coho Salmon	Oncorhynchus kisutch	T	Υ
North American Green Sturgeon	Acipenser medirostris	Т	N
Pacific Eulachon	Thaleichthys pacificus	Т	N
Flowers			
Gentner's Fritillary	Fritillaria gentneri	Е	N
Mammals			
Gray Wolf	Canis lupus	Е	N
Fisher	Martes pennanti	рТ	N

The ESA allows agencies to issue permits to entities who conduct activities that may result in "incidental take" of a protected species. For the three fish species listed as threatened under the ESA, as well as critical habitat designated for Southern Oregon/Northern California Coasts (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).

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 Clean 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 10-3 lists TMDL stream segments within the MRMPO along with their identified impairments.

Table 10-3 – Impaired Local Streams

Stream	Pollutants
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

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 is needed by streams and other surface waters during the summer months is no longer 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 led 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 causes 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 into 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 sublethal 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 the requirements of any local programs (e.g., NPDES Phase II) and design manuals (e.g. Rogue Valley Stormwater Water Quality Design Manual).

Historic and Archaeological Considerations

Protection of historic and archaeological 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 (NEPA) of 1969, the National Historic Preservation Act of 1966, the Archaeological 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 (<u>Title 40 CFR §1500-1508</u>) and the Advisory Council on Historic Preservation (ACHP) (<u>Title 36 CFR § 800</u>) 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) 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" (Title 36 CFR § 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.

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:

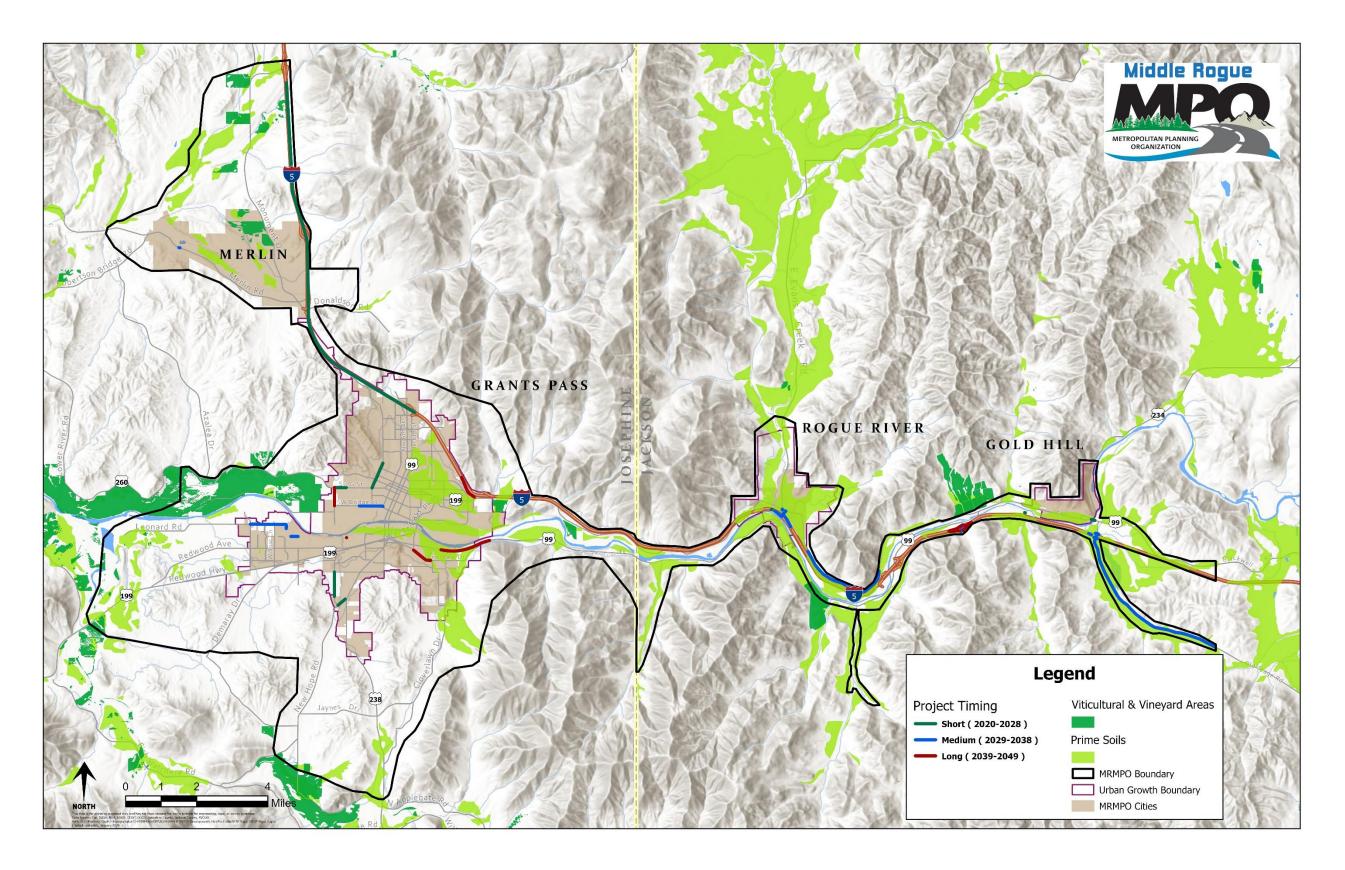
- Determine if Section 106 of the NHPA applies to a given project and, if so, initiate consultation;
- Gather information to decide which properties in the project area are listed in or eligible for the National Register Historic Places;
- Determine how historic properties might be affected;
- Explore 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:

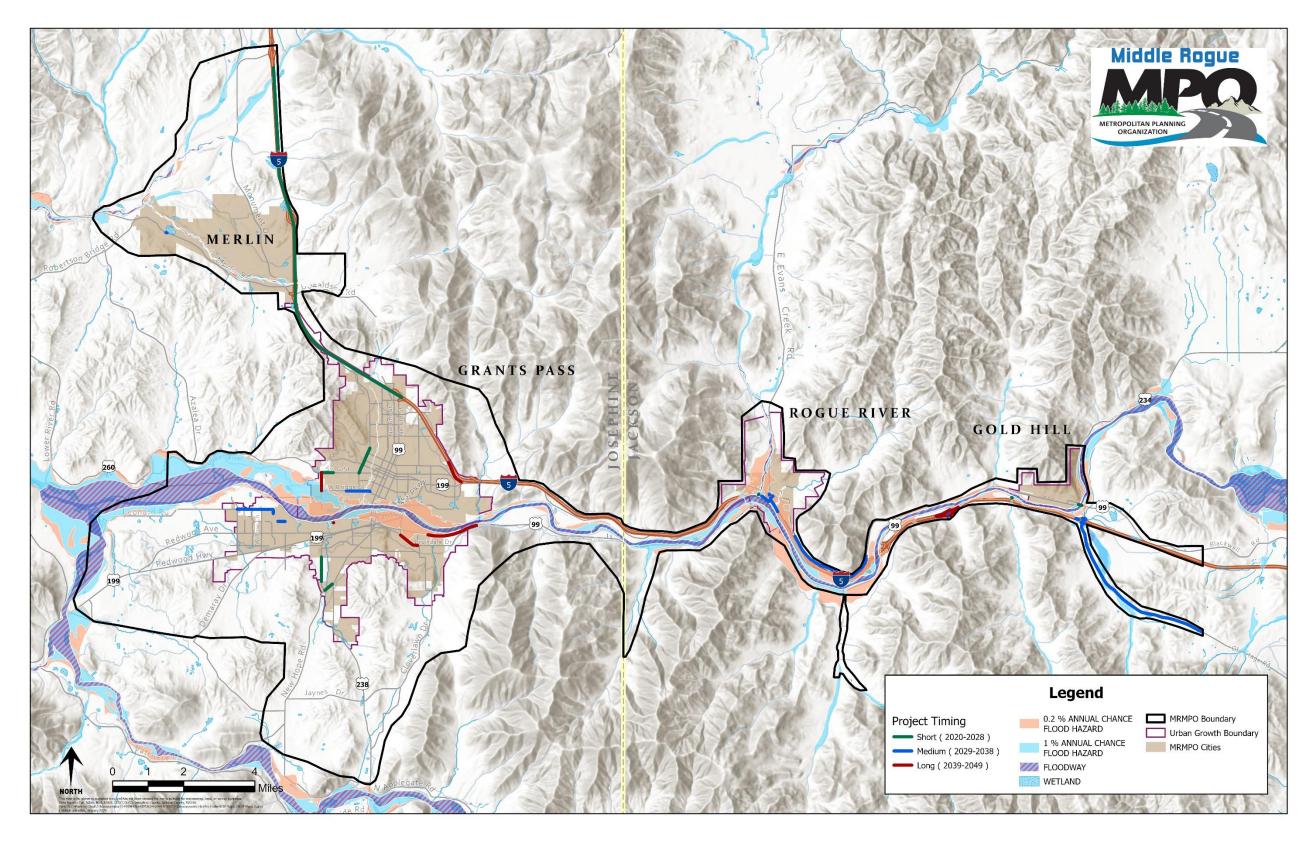
- There is no feasible and prudent alternative to the use of land, and
- The action includes all possible planning to minimize harm to the property resulting from use.

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 <u>Title 23 CFR § 771</u>. 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.

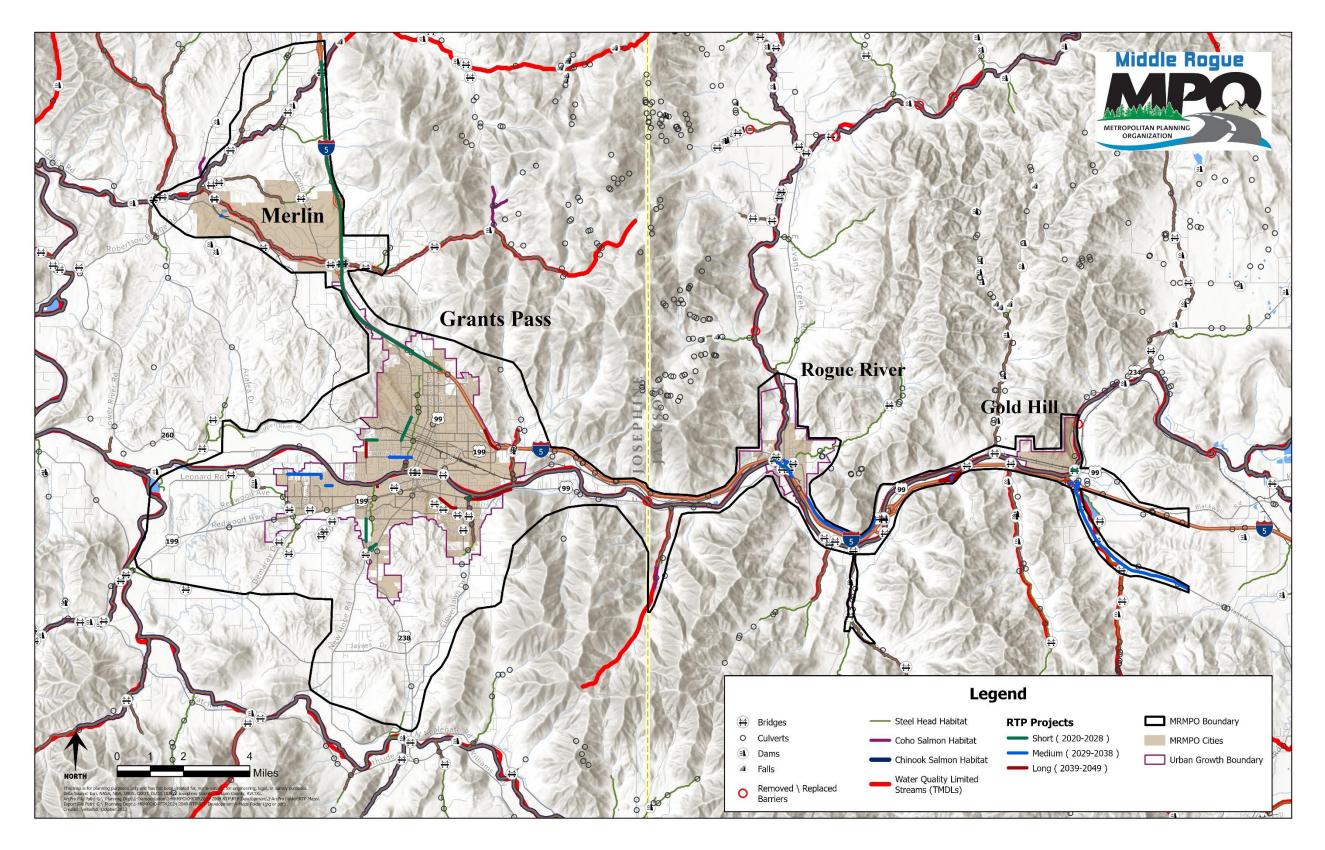
In order for FHWA field offices to make key determinations on projects having minor impacts or a net benefit on areas protected by Section 4(f), the agency issued several Nationwide Section 4(f) Programmatic Statements. Section 4(f) is considered by the preservation community to be one of the most effective 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.



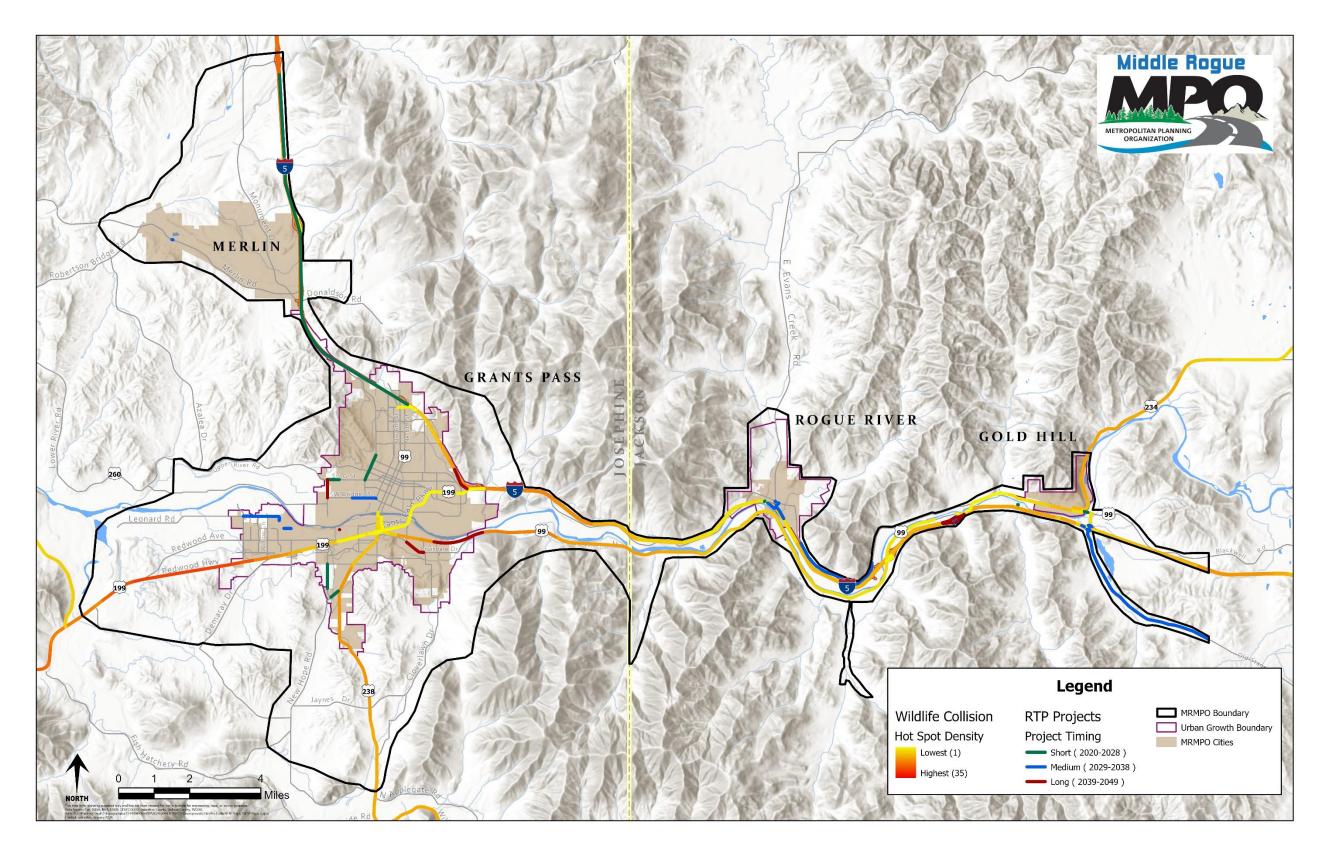
Map 10-1 - Prime Agricultural Soils, Viticulture Areas, Vineyards and Orchards



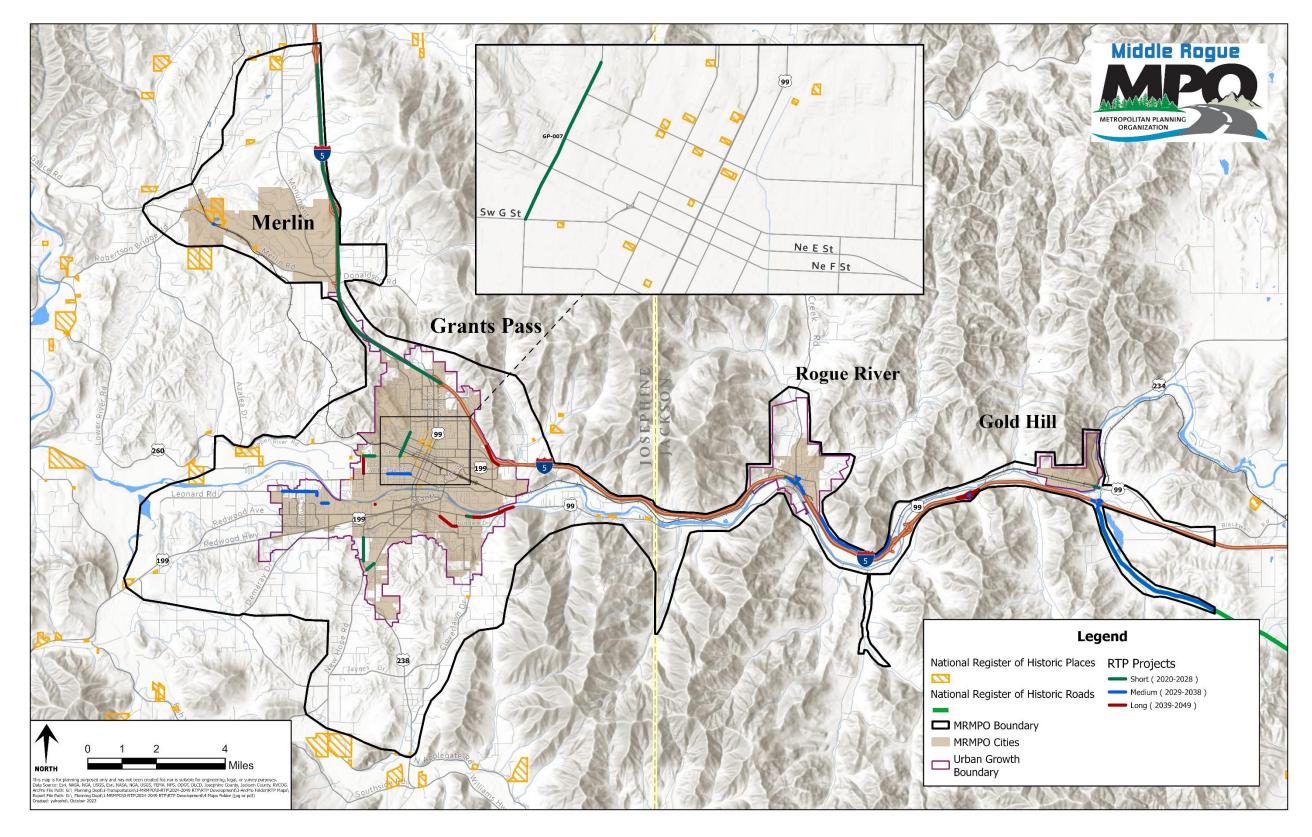
Map 10-2 - Wetlands and Special Flood Hazard Area



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



Map 10-4 - Wildlife Collision Hot Spots



Map 10-5 - Historic Places

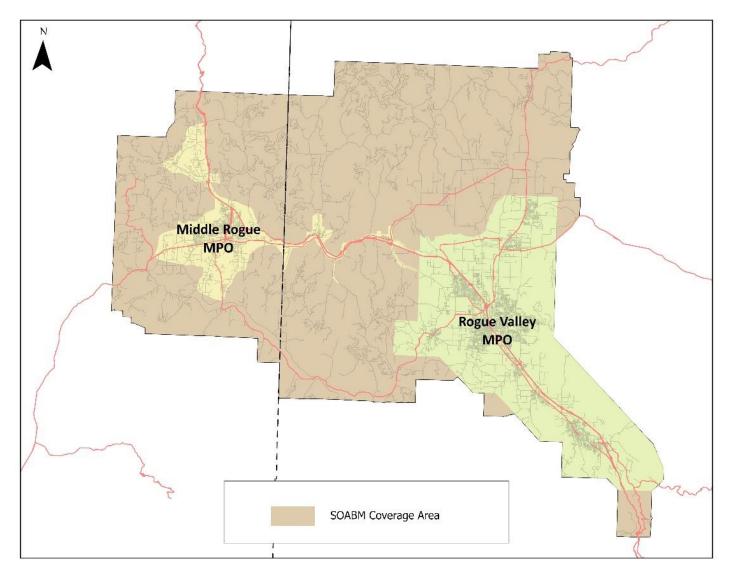
Chapter 11 – System Performance

System Performance in this chapter are forecasts of future travel conditions, for example, system performance, traffic congestion, Vehicle Mile Traveled (VMT), and Transit ridership. The forecasts are estimates produced by the <u>Southern Oregon Activity-Based Travel Demand Model (SOABM)</u>. The model is maintained and updated by Oregan Department of Transportation Planning Analysis Unit (TPAU). The model, computer software that performs a series of calculations, is based on information about population, employment, and land use.

This is the first and only Activity-Based Travel Model in the State of Oregon. Activity-based models incorporate significantly more detailed input information and produce significantly more detailed outputs than trip-based models. By operating at the level of individual persons and households, activity-based models can use a wider range of important explanatory variables to predict travel patterns than trip-based models.

Southern Oregon Activity-Based Travel Demand Model (SOABM)

The <u>Oregon Department of Transportation (ODOT)</u> Southern Oregon Activity-Based Travel Demand Model (ABM) is a new travel demand model for the <u>Middle Rogue</u> and <u>Rogue Valley</u> MPOs. The process of developing the model started in 2016. And it was first used for MRMPO & RVMPO RTP updates in 2020 and 2021. The new modeling system includes 50,000+ people in Grants Pass and 175,000+ people in the Rogue Valley urban areas; see Map 11-1 for coverage area.



Map 11-1- SOABM Coverage Area

Activity-Based Travel Model Background

Activity-based models are based on the principle that travel demand is derived from people's daily activity patterns. Activity-based models predict which activities are conducted when, where, for how long, for and with whom, and the travel choices they will make to complete them. Having this type of detailed model at their disposal allows policy makers to evaluate the effect of alternative policies on individuals travel behavior at a high level of temporal and spatial resolution and select the best policy alternative considering a potential wide range of performance indicators. For a comprehensive introductory overview of this paradigm, consider reading the <u>Activity Based Modeling Primer</u> published under SHRP2 in 2014.

Compared to traditional trip-based models, the model system has more detailed and accurate representation of space, time, travel patterns, and significantly more person and context-based explanatory variables. The ABM better models non-motorized travel, time-of-day, ride sharing, non-home-based travel, accessibility effects, and provides a flexible household travel survey-like database for custom summaries. This modeling system was also developed as the eventual framework for exploring new policy issues: new vehicle types and emissions, parking and different pricing scenarios, connected and automated vehicles, vehicle ownership moving to service, light-weight vehicle infrastructure, telecommuting, and others.

How do we use Travel Models?

Travel models are used to provide objective assessments of the advantages and disadvantages of different alternatives within SOABM. These alternatives may include transportation projects, capital investments, policies, land use configurations, socioeconomic and demographic assumptions, and many other factors. By running the travel model with different sets of input assumptions representing these alternatives, analysts can evaluate differences between alternatives using a broad range of metrics and can help answer decision makers' key questions.

"Trip" vs "Tour" vs "Activity"

- **Trip** (aka four step model) individual person trips, does not understand that trips are interrelated
- **Tour** strings together trips that will be typically done in sequence, but does not account for vehicle capacities or total course of the day
- **Activity** accounts for vehicle trips (accounts for vehicle capacity) and how trips would be strung together over the course of a day

In developing the 2024–2049 RTP, the SOABM was utilized to assess the performance of the transportation system in future years, given the plan's forecasts for growth. Results are described in the following sections.

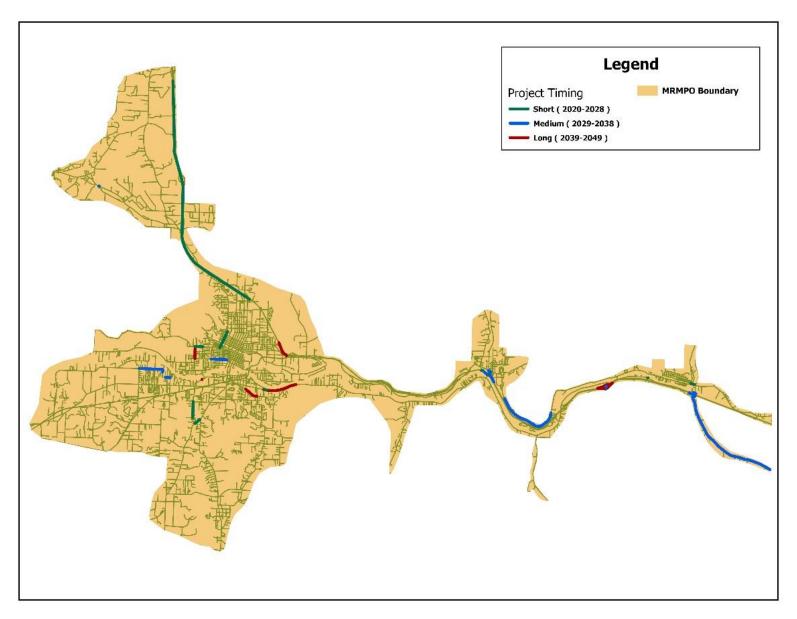
Model Output

Travel models are designed to provide travel forecasts that are based on generalized land use patterns and transportation networks. Since models do not represent individual land uses, driveways, or neighborhood-scale streets, the forecasts produced are not sensitive to these specific land use and transportation characteristics.

It is inappropriate to use raw model outputs for transportation and land use decisions. Post processing of the raw data is required to estimate the impacts these decisions have on the transportation system.

Because the current Oregon TPR (Transportation Planning Rule) requires having the daily VMT calculations by only the MPO internal zones to internal zones, which exclude the vehicle trips or VMTs from internal zones to external zones, from external zones to internal zones. As with the case of MRMPO, the internal zones are the zones within the MRMPO boundary and external zones are all other zones outside of the boundary.

Map 11-2 shows the MRMPO part of the SOABM with model network links with the RTP projects.



Map 11-2 - MRMPO Model Network links

The MRMPO 2020-2049 RTP projects were coded on the 2020 SOABM network to reflect the future year 2049 RTP network scenario; however, the future 2049 No Build SOABM scenario does not include the RTP projects but maintains the 2020 base year network conditions and utilizes the 2049 land use forecasts.

Vehicle Miles Traveled (VMT)

Table 11-1 shows the model output for the daily VMT per Capita for internal trips within the MRMPO planning area. In 2020, VMT was estimated at 8.7 miles per capita. The 2049 No-Build scenario estimates VMT per capita at 8.298 miles which is a 4.31% reduction in VMT per capita from 2020. The 2049 RTP Build scenario VMT per capita is estimated at 8.339 miles which is a 3.83% reduction from 2020 VMT per capita. The difference in VMT per capita between the two scenarios is that the MRMPO area will have several more lane miles (1,183 miles vs 1,175 miles) due to new transportation projects being built during the 25-year RTP planning period. Therefore, there will be more daily VMTs compared with No-Build scenario since the two scenarios share the same future land use data but different network.

Table 11-1: Daily Internal VMT/Capita

SOABM Scenario Forecasting	2020 Base Year	2049 No Build	2049 RTP Build
MRMPO Area Population	67,840	88,800	88,800
Total Lane Miles (within MRMPO)	1,175	1,175	1,183
Daily VMT (Internal-Internal)	588,266	736,822	740,524
Daily VMT/Capita	8.671	8.298	8.339
VMT Per Capita Change%	0%	-4.31%	-3.83%

Table 11-2

MRMPO RTP₂₀₋₄₉ Percentage of VMT by Demand/Capacity Ratio Range* P.M. Peak Hour

Demand/Capacity Ratio Range		rence)20	-	Build)49	RTP-Build 2049		
Ratio Range	VMT	% VMT	VMT	% VMT	VMT	% VMT	
0.0 - 0.59	135,124	80.7%	147,850	70.9%	139,348	67.1%	
0.60 - 0.69	26,573	15.9%	30,485	14.6%	28,309	13.6%	
0.70 - 0.79	3,284	2.0%	20,700	9.9%	30,747	14.8%	
0.80 - 0.89	1,146	0.7%	4,574	2.2%	4,955	2.4%	
0.90 - 0.99	216	0.1%	1,604	0.8%	1,511	0.7%	
> 1.0	1,065	0.6%	3,198	1.5%	2,848	1.4%	
Total	167,408	100%	208,411	100%	207,718	100%	

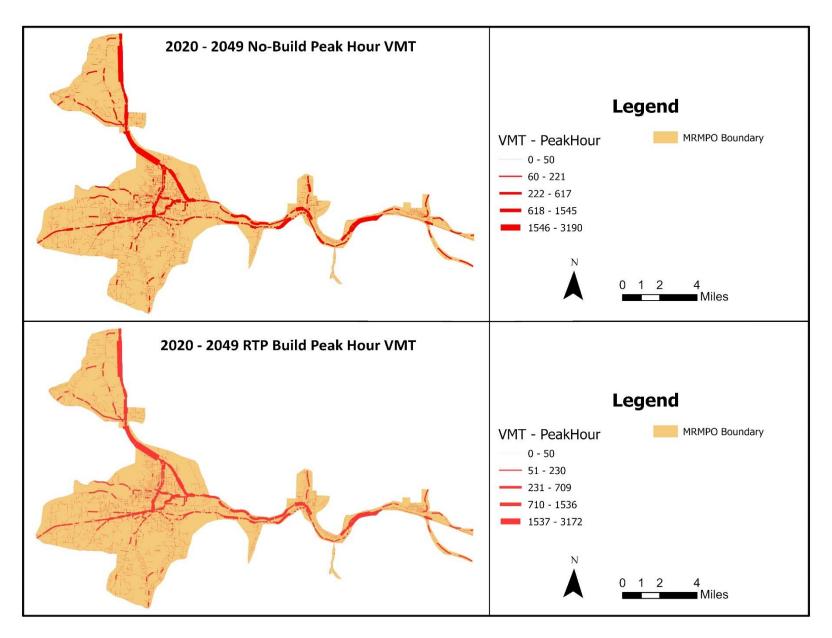
^{*} Congestion defined as model links with demand/capacity ratio ≥ 0.90

Table 11-2 shows VMT percentages in comparison to Demand to Capacity Ratio in Peak hours, PM peak hour (4:30-5:30 PM), of the MRMPO network. In the 2049 No-Build scenario, 97.6% of the network VMT falls between 0.0 to 0.89 which means no congestion. Moreover, 0.8% of the network VMT is shown to be considered congested and 1.5% of the network VMT is considered to be high congestion. However, in the 2049 RTP-Build scenario, 97.9% of the MRMPO VMT is going to come from not congested network. Also, 0.7% of the network VMT is shown to be congested and remaining 1.4% of the network VMT is classified as high congestion.

The main difference between the two scenarios is that what is classified as congestion and high congestion is actually going down in the scenario where the RTP Projects get built within the MRMPO network. Even though the numbers might not look that drastic, but the long-term effectiveness of the network is progressing positively.

Map 11-3 shows the comparison between the two scenarios on the MRMPO streets network. It illustrates the peak hours VMT and its clear that with the RTP build scenario the VMT is less than the No-build scenario within the MRMPO area.

^{*} High Congestion defined as model links with demand/capacity ratio > 1.0



Map 11-3 - VMT Peak Hours Comparison

Daily Modal Trips

One of the outcomes of the SOABM model is daily modal trips and their purpose. These modes include Biking, Walk-Transit, Park & Ride Transit, and other modes. Mode purposes also varies in what it includes, for example, discretionary which means not mandatory such as work commute, work-related, school, shopping basically trips that people make at their own judgement. Also, eating out, escorting, and other trips are calculated by the model as daily modal trips.

Table 11-3 shows percentages of the daily modal trips generated by the SOABM model. The trips are sorted by nine different trip types: Bike, Drive alone (DA), Kiss and Ride (KnR), Park and Ride (PnK), School bus, Shared -2 general lanes (SR2GP), Shared -3+ general lanes (SR3GP), Walk, Walk to Transit. In 2020 the drive alone trips are accounted for to be 52.37% of the total trips. Transit generated 0.2% trips in the same year with biking having 1.33% trips.

In 2049 Daily with No-Build scenario, the drive alone trips went up to 54.21% the same thing goes for transit, walking, and biking. Those trip categories slightly went up from the base year, 2020. On the other hand, the 2049 Daily with RTP Build scenario, the drive alone trips generate 54.03% with transit having 0.64% trips, higher than both the base year and No-Build scenario. The other mode of trips stays relatively the same throughout the two scenarios.

Table 11-3: Daily Modal Trips

	BIKE	DA	KnR	PnR	SCHOOL BUS	SR2GP	SR3GP	WALK	Walk to Transit
2020 Base Year	1.33 %	52.37 %	0.03 %	0.03 %	2.07%	24.84 %	12.57 %	6.57 %	0.21%
2049 DAILY (No- Build)	1.57 %	54.21 %	0.02 %	0.02 %	1.95%	23.89 %	10.26 %	7.61 %	0.46%
2049 DAILY (RTP Build)	1.54 %	54.03 %	0.03 %	0.04 %	1.95%	23.87 %	10.34 %	7.58 %	0.64%

Figure 11-1 showcase Table 11-3 numbers in a line chart to illustrate the changes overtime and the differences between trip types.

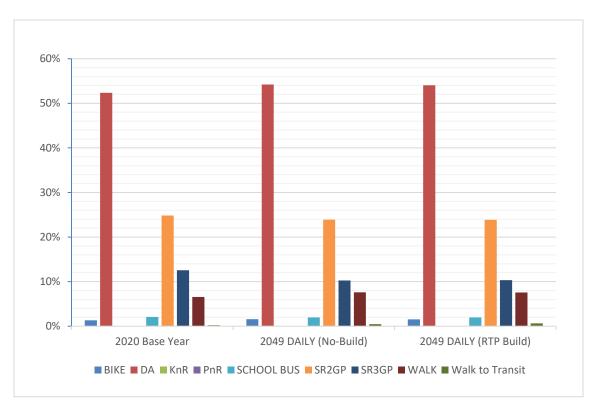


Figure 11-1 - Daily Modal Trips

Performance Comparison

System-wide performance measures were analyzed using aggregated PM peak hour congested vs. non-congested lane miles, VMT and VHT by the defined Demand to Capacity Ratio (DCR) ranges in the MRMPO area. As shown below, Table 11-4 displays the total lane miles, PM peak hour congested lane miles and congestion percentages, average speed, VMT and VHT.

Table 11-4 below shows percent of congested lane miles, travel speed and VMT for the roadway system in the MRMPO area. Roadway congestion is higher in the future years compared to the base year. It is interesting to note that the 2049 No-RTP (no build) scenario has 6.8 lane miles of congestion on 1,175 lane miles as compared to 6.4 congested lane miles on 1,183 lane miles in the 2049 RTP Build scenario.

Also, VMT and VHT numbers are increasing from the base year. But the 2049 No-RTP scenario is generating 208,411 in VMT and 5,673 VHT. On the other hand, 2049 RTP-Build scenario is generating 207,718 VMT and 5,668 VHT. This means less miles will be traveled and less hours will be spent in travel in the RTP Build scenario than the No-RTP scenario.

Table 11-4: System-wide Peak Hour Performance Comparison

Performance Measures by Scenario	2020 Ref Year	2049 No RTP	2049 RTP Build		
Scenario Year (PM Peak Hour)	2020	2049	2049		
Model-wide Lane Miles	1,175	1,175	1,183		
Lane Miles Congested (V/C ≥ 0.90)	1.45	6.8	6.4		
Percent Lane Miles Congested	0.1%	0.6%	0.5%		
Mean Travel Speed (mph):	38	37	37		
Vehicle Miles Traveled (VMT)	167,408	208,411	207,718		
Vehicle Hours Traveled (VHT)	4,365	5,673	5,668		

Demand-to-Capacity

For the 2024-49 RTP update, a demand-to-capacity analysis was performed to show congestion levels on specific roadways in the MRMPO area. Demand-to-Capacity Ratios (DCR) for the 2020-2049 model run are shown in Table 11-5 below for freeway, principal arterial, minor arterial, and collector lane miles within the MRMPO area. Congestion is defined as roadways (model links) with a DCR equal to or greater than (≥) 0.90.

Table 11-5 shows the reference year, 2020, and the level of congestion across the MRMPO network. The light orange color with a DCR \geq 0.90 is considered congested. Table 11-5 shows there is less than 1 lane mile across the MRMPO network that is considered congested. The dark orange is considered a high congestion level where the DCR is greater than (>) 1. There is only 0.08 congested lane miles in the MRMPO network.

Table 11-5

20	2020 Reference Peak Lane Miles												
Demand/Capacity Ratio Range	Freeway	Principal Arterial	Minor Arterial	Collector									
0.0 - 0.59	90.92	63.33	77.36	178.83									
0.60 - 0.69	18.82	3.63	1.20	0.72									
0.70 - 0.79	0.00	2.32	0.64	0.44									
0.80 - 0.89	0.00	0.59	0.18	0.37									
0.90 - 0.99	0.00	0.13	0.07	0.14									
> 1.0	0.00	0.00	0.00	0.08									
TOTAL	109.74	70.00	79.45	180.58									

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

Table 11-6 shows the 2049 No-RTP scenario. In this scenario congestion levels are higher from what it was in the base year. There is 1.41 lane miles that are congested within functional class in the MRMPO area. Also, high congestion lanes have increased, total of 0.96 miles, within the network and this is without any additional lane miles added to the MRMPO network.

Table 11-6

20	2049 No RTP ₂₀₋₄₉ Peak Lane Miles												
Demand/Capacity Ratio Range	Freeway	Principal Arterial	Minor Arterial	Collector									
0.0 - 0.59	76.04	61.99	75.41	176.57									
0.60 - 0.69	21.68	2.02	1.97	1.31									
0.70 - 0.79	12.02	2.48	1.02	0.93									
0.80 - 0.89	0.00	2.74	0.64	0.58									
0.90 - 0.99	0.00	0.40	0.30	0.71									
> 1.0	0.00	0.37	0.11	0.48									
TOTAL	109.74	70.00	79.45	180.58									

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

^{*} High Congestion defined as model links with demand/capacity ratio > 1.0

^{*} High Congestion defined as model links with demand/capacity ratio > 1.0

Table 11-7 showcase the model numbers for RTP Build scenario. In this scenario, the total lane miles have increased from the base year by 8 miles with a total of 1,183 lane miles across the MRMPO. The model output indicated that there is around 1.31 lane miles that is considered congested across the MRMPO. In addition, there is 0.69 lane miles that is considered a high congestion within the network.

Table 11-7

	2049 RTP ₂₀₋₄₉ Peak Lane Miles												
Demand/Capacity Ratio Range	Freeway	Principal Arterial	Minor Arterial	Collector									
0.0 - 0.59	75.14	59.81	83.55	169.57									
0.60 - 0.69	16.40	2.83	2.00	8.07									
0.70 - 0.79	18.20	2.32	1.20	3.12									
0.80 - 0.89	0.00	2.73	0.42	2.05									
0.90 - 0.99	0.00	0.66	0.13	0.52									
> 1.0	0.00	0.14	0.15	0.40									
TOTAL	109.74	68.49	87.45	183.73									

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

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. Below Table 11-8, Table 11-9, and Table 11-10 show estimated outputs for base year 2020 and future conditions in 2049 with No-RTP build scenario and with RTP build scenario. 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.

The numbers in the columns in these two tables are the percentages of lane miles on a particular road that are at the demand-to-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 MRMPO 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

^{*} High Congestion defined as model links with demand/capacity ratio > 1.0

Table 11-8

	2020 Reference Peak Lane Miles %												
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	93%	87%	98%	100%	88%	91%	100%	99%	95%	99%	98%	92%	86%
0.59 - 0.69	3%	7%	1%	0%	7%	6%	0%	1%	0%	0%	0%	4%	14%
0.69 - 0.79	3%	4%	0%	0%	3%	3%	0%	0%	5%	0%	2%	3%	0%
0.79 - 0.89	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%
0.89 - 0.99	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
0.99 - 9.99	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
No Congestion	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	100%	99%	100%
Congestion	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
High Congestion	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total Lane Miles	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 11-9

	2049 No-RTP ₂₀₋₄₉ Peak Lane Miles %												
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	92%	84%	98%	94%	86%	91%	100%	95%	76%	94%	98%	90%	83%
0.59 - 0.69	0%	4%	1%	6%	7%	6%	0%	2%	15%	6%	0%	0%	3%
0.69 - 0.79	2%	7%	0%	0%	3%	0%	0%	2%	3%	0%	0%	3%	14%
0.79 - 0.89	6%	3%	0%	0%	3%	3%	0%	1%	0%	0%	0%	7%	0%
0.89 - 0.99	0%	1%	0%	0%	1%	0%	0%	0%	5%	0%	2%	0%	0%
0.99 - 9.99	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
No Congestion	100%	98%	100%	100%	99%	100%	100%	100%	95%	99%	98%	99%	100%
Congestion	0%	1%	0%	0%	1%	0%	0%	0%	5%	0%	2%	0%	0%
High Congestion	0%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	1%	0%
Total Lane Miles	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 11-10

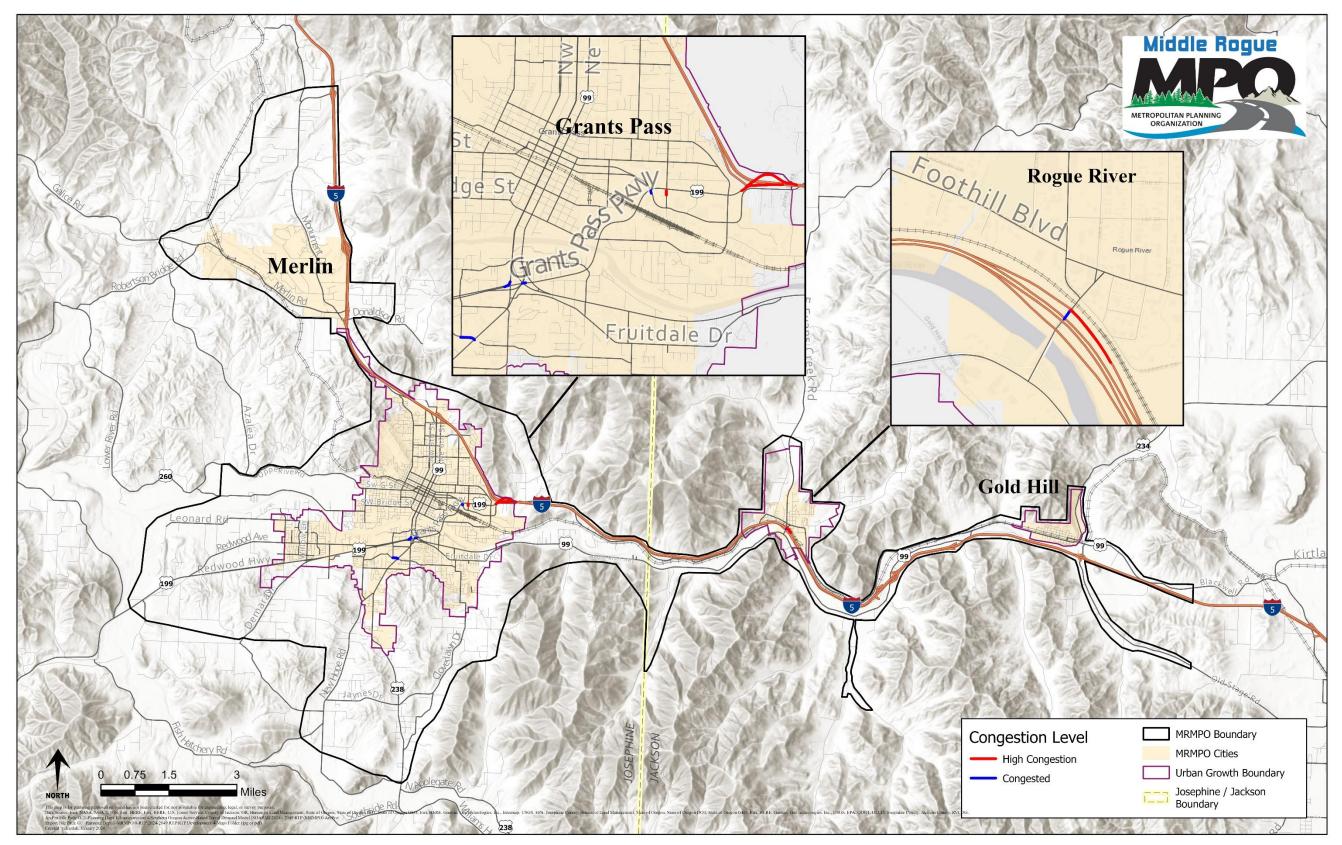
	2049 RTP ₂₀₋₄₉ Peak Lane Miles%												
Demand/Capacity Ratio Range	Rogue River Hwy (OR99)	Redwood Hwy (OR199)	Jacksonville Hwy (OR238)	Highland Ave	Redwood Ave	G St	A St	Allen Creek Rd	Bridge St	E St	F St	M St	Parkdale Drive
0 - 0.59	90%	83%	98%	99%	86%	83%	100%	95%	76%	91%	98%	89%	71%
0.59 - 0.69	1%	6%	1%	1%	7%	8%	0%	2%	24%	8%	0%	5%	12%
0.69 - 0.79	5%	4%	0%	0%	3%	6%	0%	2%	0%	0%	0%	3%	17%
0.79 - 0.89	3%	5%	0%	0%	3%	3%	0%	1%	0%	0%	0%	0%	0%
0.89 - 0.99	0%	2%	0%	0%	1%	0%	0%	0%	0%	0%	2%	0%	0%
0.99 - 9.99	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	3%	0%
No Congestion	100%	98%	100%	100%	99%	100%	100%	100%	100%	99%	98%	97%	100%
Congestion	0%	2%	0%	0%	1%	0%	0%	0%	0%	0%	2%	0%	0%
High Congestion	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	3%	0%
Total Lane Miles	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Congestion Maps

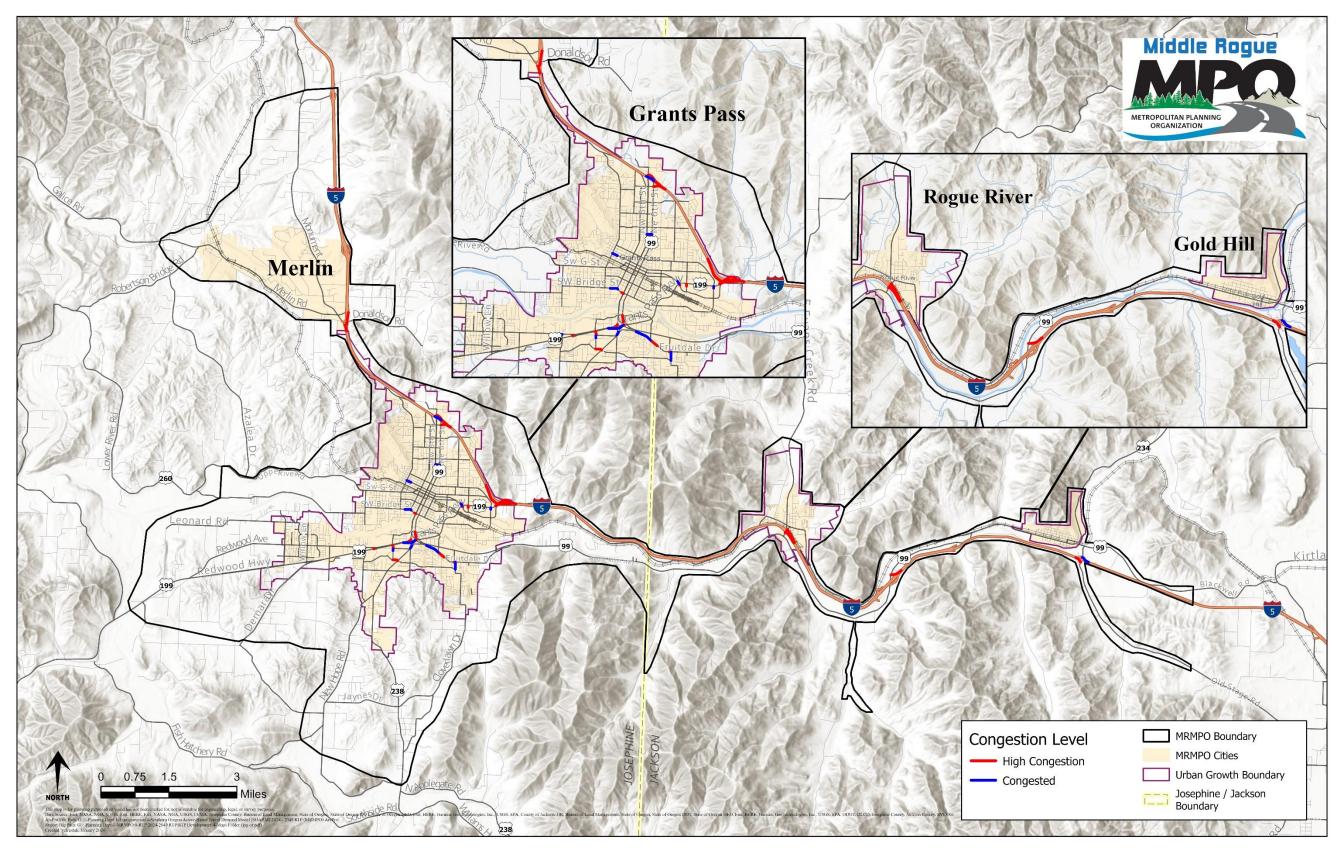
Maps on the following pages indicate locations where the MRMPO travel demand model estimates potential for peak hours congestion in future years. Please note that the maps showcase congestion across the MRMPO road network, except for local roads, and not limited to the roads mentioned in the previous tables.

Years shown are 2020 base year 2049 as the future year. Note that 2049 year do have two scenarios (1) No-RTP scenario and (2) 2049 RTP Build scenario. By viewing the maps in succession, it's possible to see how, where, and when congested conditions are likely to expand.

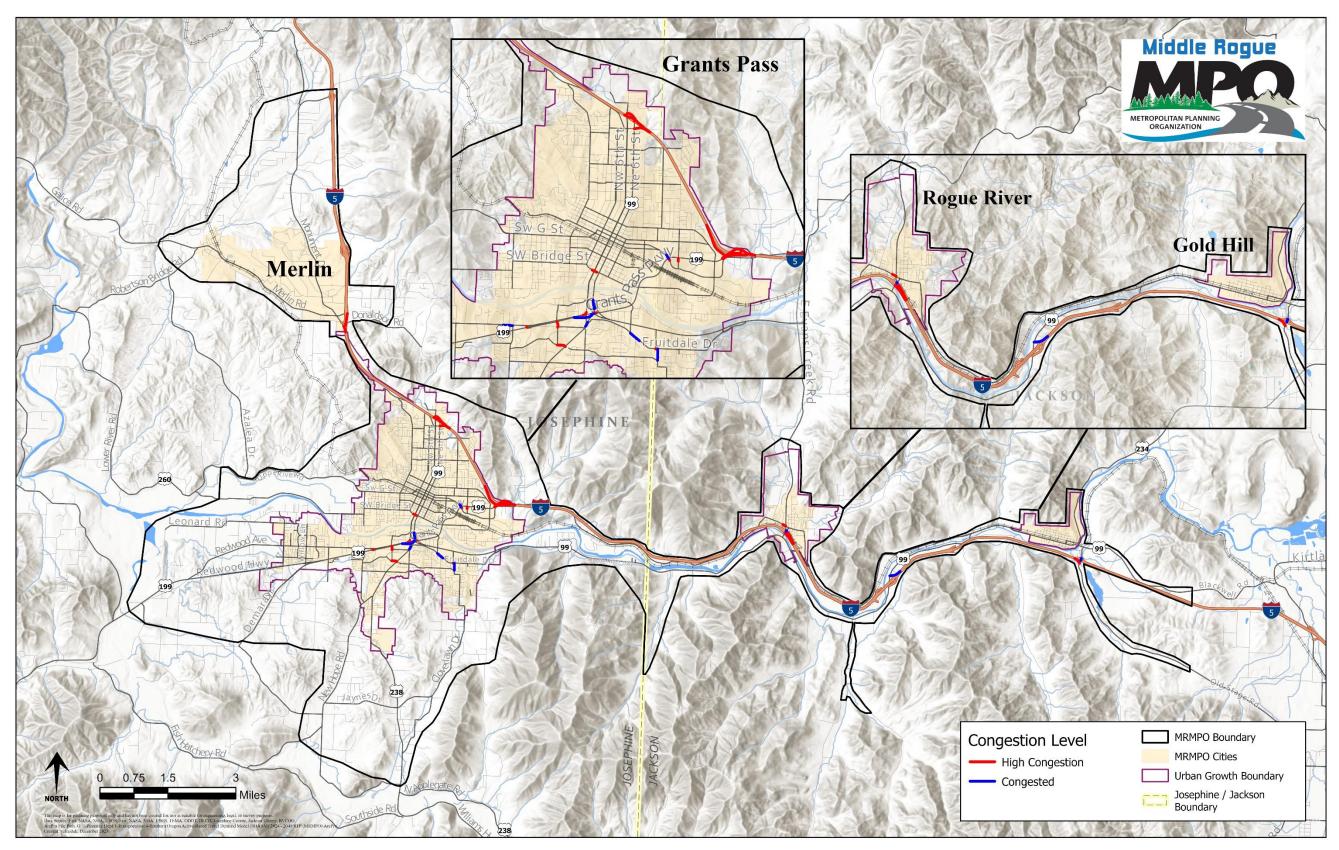
The futures shown here are far from certain because MRMPO jurisdictions are in agreement that additional funds will need to be identified for projects not yet in the plan. Beyond that, there are projects being planned, but are not included in this analysis because RTP projects must be financially constrained, as described in Chapter 8 Financial Plan.



Map 11-4 - 2020 Peak Hour Congestion



Map 11-5 - 2049 No-RTP Peak Hour Congestion



Map 11-6 - 2049 RTP-Build Peak Hour Congestion

Chapter 12 – Safety and Security

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 rounds out at the regional and local planning levels. Safety is one of the planning factors in <u>Infrastructure Investment and Jobs Act (IIJA)</u> also known as Bipartisan Infrastructure Law (BIL) that must guide state and regional transportation planning. The BIL provides around \$550 billion over a 5-year period (FY 2022 through 2026) in new Federal investment in infrastructure, including roads, bridges, and mass transit; water infrastructure; resilience; and broadband. The BIL directs \$350.8 billion of Federal investments to highway programs, including a total of \$303.5 billion in contract authority through FY 2026 and nearly \$47.3 billion in advance appropriations from the General Fund.

The BIL is estimated to deliver \$13 Billion over Fixing America's Surface Transportation (FAST) Act levels directly into improving roadway safety. According to US DOT, Oregon, over five years, will receive approximately \$26 million for highway safety traffic programs, which help states to improve driver behavior and reduce deaths and injuries from motor vehicle-related crashes. On an average annual basis, this represents about a 29% increase over FAST Act levels.

Local and tribal governments in Oregon are eligible to apply for \$6 billion in funding for a new Safe Streets for All program which will provide funding directly to tribes and local governments to support their efforts to advance "vision zero" plans and other improvements to reduce crashes and fatalities, especially for cyclists and pedestrians. In addition, Oregon can expect to receive approximately \$31.5 million over five years in funding to augment their commercial motor vehicle (CMV) safety efforts through the Federal Motor Carrier Safety Administration's Motor Carrier Safety Assistance Program (MCSAP) formula grant to reduce CMV crashes. Oregon will be able to apply for funds to modernize data collection systems to collect near real time data on all reported crashes, including fatal ones, to enhance safety and to allow the Department to understand and address trends as they are identified.

On top of that, FHWA administers the performance-based <u>Highway Safety Improvement Program</u> (HSIP) with the goal of reducing traffic fatalities and serious injuries on all public roads. The HSIP requires that each State develop a <u>Strategic Highway Safety Plan</u> (SHSP). The SHSP is a data-driven, multi-year, statewide-coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads. Many States, including Oregon, are committed to zero deaths visions through their SHSPs. According to <u>ODOT Transportation Safety Action Plan (TSAP)</u>, also serves as the State of Oregon's Strategic Highway Safety Plan, the TSAP lays the foundation to consider and prioritize safety for all modes and users of our transportation system to eliminate all deaths and life-changing injuries on Oregan's transportation system by 2035.

Supporting the HSIP is the <u>Safety Performance Management</u> (Safety PM), a part of the overall <u>Transportation Performance Management</u> program. FHWA defines Safety PM as a strategic approach that uses system information to make investment and policy decision to achieve national performance goals. At the state level, ODOT maintains data on crashes on all public roads, and produces an annual evaluation of the Oregon Traffic Safety Performance Plan. It contains data by type and region. Additional statewide information is available on the web at www.oregon.gov/ODOT/TS.

The Roadway Safety Problem

The United States Department of Transportation (U.S. DOT or the Department) mission is to ensure America has the safest transportation system in the world. Almost 95 percent of the Nation's transportation deaths occur on its streets, roads, and highways, and they are on the rise. The rate of roadway fatalities per 100 million vehicle miles traveled has not substantially improved over the last ten years and increased significantly in 2020. An estimated 38,680 people died in motor vehicle crashes in 2020, of which an estimated 6,236 were people walking. In the first six months of 2021 an estimated 20,160 people died in motor vehicle crashes, up 18.4 percent over 2020. That is the largest number of projected fatalities for January through June since 2006. Since 2015, the annual number of fatalities has exceeded 35,000, with millions more injured – sometimes permanently – each year. Traffic crashes are a leading cause of death for teenagers in America, and disproportionately impact people who are Black, American Indian, and live in rural communities.¹

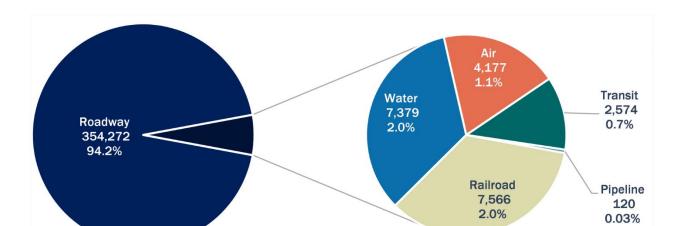
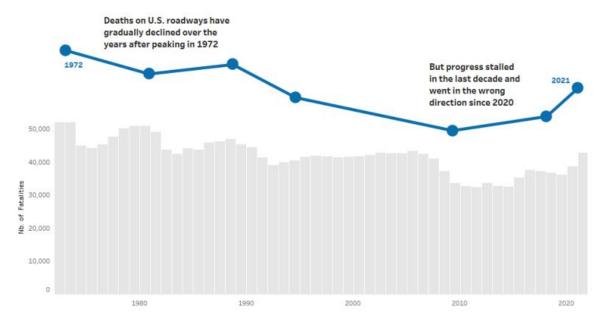


Figure 12-1 - Road Fatality From 2011-2020

^{*} Source: Bureau of Transportation Statistics

¹ National Roadway Safety Strategy

Figure 12-2 – Road Fatalities Overtime



^{*} Source: Early Estimates of Motor Vehicle Traffic Fatalities and Fatality Rate by Sub-Categories in 2021, National Highway Traffic Safety Administration, DOT HS 813 298, May 2022.

The crisis on the Nation's roadway serves as a reminder of the safety challenge that the whole country faces. To further USDOT vision of zero deaths and demonstrate progress, the Department set an intermediate, ambitious target in the USDOT Fiscal Year 2022-2026 Strategic Plan to reduce 66% of motor vehicle-related fatalities by 2040. FHWA strategic Plan addresses the safety issue along with others and aligns its priorities and goals to follow USDOT vision and goals.

FHWA Strategic Plan

This means a road system that is designed to protect its users, through implementing life-saving programs and infrastructure safety solutions. The <u>FHWA Strategic Plan for FY 2022-2026</u> outlines the aligned goals and objectives between US DOT and FHWA and reflects the priorities of the agency and safety is on top of the list among other goals.

According to the Strategic Plan the United States has one of the highest traffic fatality rates in the industrialized world, double the rate in Canada and quadruple that in Europe. All FHWA programs are ultimately focused on significantly reducing deaths and serious injuries on America's roadways.

Roadway fatalities in the United States had declined consistently for 30 years since 1975, but that decline stalled over the last decade. In 2020, roadway fatalities increased by 7.2 percent from the previous year, while vehicle miles traveled decreased across the board. Fatalities among pedestrians and bicyclists have been increasing even faster than the overall fatalities among all road users. While less than 20 percent of Americans live in rural communities, almost 50 percent of roadway fatalities across the country are happening on rural roads.

As the first step in working toward the long-term goal of zero roadway fatalities, the U.S. DOT released its <u>National Roadway Safety Strategy (NRSS)</u> in January 2022. The NRSS adopts the Safe System approach and outlines key actions to significantly reduce serious injuries and deaths on America's highways, roads, and streets. FHWA and other modal agencies are committed to supporting the NRSS and will collaborate with other agencies to implement NRSS key actions.

Figure 12-1 shows the safety strategies that were adapted by both US DOT & FHWA in their Strategic Plan for FY 2022-2026.

U.S. DOT STRATEGIC OBJECTIVE:

SAFETY

FHWA STRATEGIES



Safe Design:

Design and build transportation infrastructure and systems to improve safety outcomes.

- (SDO1) Advance roadway safety through interdisciplinary development and deployment of regulatory and policy tools across FHWA programs and initiatives, such as the Safe System approach.
- (SDO2) Conduct and coordinate Federal research to advance safety designs and accelerate use of innovations that mitigate fatality and serious injury crashes for all road users, including those served by Federal Land Management Agencies.

Safe System:

Strengthen the use of informed datadriven decision-making and apply comprehensive approaches such as the Safe System approach and safety management systems for all modes.

- (SSO1) Facilitate improvements in safety data collection, quality, analysis, integration, and management and expand FHWA's capacity for collecting non-motorized travel risk exposure data.
- (SSO2) Provide stewardship and oversight to stakeholders on safety activities and initiatives and on management of discretionary grants.

Safe Public:

Protect urban and rural communities and travelers, including vulnerable populations, from health and safety risks.

- (SPO1) Encourage stakeholders to develop and implement data-driven, equitable safety management programs.
- (SPO2) Expand the use of effective speed management practices in areas where drivers commonly interact with pedestrians and bicycles, including in high-visitation areas on Federal lands, such as National Parks.

Safe Workers:

Improve the health, safety, and wellbeing of transportation workers and first responders. (SWO1) Support worker safety training, provide technical assistance, and work
across Federal programs to evaluate and promote strategies to improve safety for
workers in transportation occupations such as construction, freight, and traffic
incident management.

Critical Infrastructure Cybersecurity:

Strengthen transportation system resilience to protect it from disruption from cyber and other attacks.

 (SCY1) Employ cross-functional, agency-wide expertise to integrate cybersecurity and resiliency considerations into all FHWA programs.

^{*} Source: FHWA Strategic Plan (2022-2026)

National Roadway Safety Strategy (NRSS):

The United States Department of Transportation <u>National Roadway Safety Strategy (NRSS)</u> outlines the Department's comprehensive approach to significantly reducing serious injuries and deaths on the Nation's highways, roads, and streets. This is the first step in working toward an ambitious long-term goal of reaching zero roadway fatalities. Safety is U.S. DOT's top priority, and the NRSS represents a department-wide approach to working with stakeholders across the country to achieve this goal.

The NRSS sets a vision and goal for the safety of the Nation's roadways, adopts the Safe System Approach principles to guide our safety actions, and identifies critical and significant actions the Department will take now in pursuit of five core objectives:

- Safer People,
- Safer Roads,
- Safer Vehicles,
- Safer Speeds, and
- Post-Crash Care

This document highlights new priority actions that target our most significant and urgent problems, and are, therefore, expected to have the most substantial impact. It also highlights notable changes to existing practices and approaches.

The NRSS is a collaborative effort between the Office of the Secretary of Transportation and the Operating Administrations (OAs) whose roles and responsibilities include roadway safety:

- Federal Highway Administration (FHWA)
- Federal Motor Carrier Safety Administration (FMCSA)
- Federal Railroad Administration (FRA)
- Federal Transit Administration (FTA)
- National Highway Traffic Safety Administration (NHTSA)
- Pipeline and Hazardous Materials Safety Administration (PHMSA)

As mentioned prior, the <u>Bipartisan Infrastructure Law</u> (BIL or the Infrastructure Investment and Jobs Act) is a generational investment in America's transportation network, and supports the funding, program, and policy provisions described in the NRSS safety actions.

Learn more about the National Roadway Safety Strategy by visiting <u>National Roadway Safety Strategy | US Department of Transportation</u>.

Multi-Modal Safety

The federal planning factors can be found in Safety Data Action Plan prepared by the Bureau of Transportation Statistics' (BTS) stating that:

"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.

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 problem crashes are unpremeditated unfortunate events. As such, they may be caused by driver error, driver 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).

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. The Josephine County Sherriff's Department is not able to respond to all crashes within the County's jurisdiction due to funding shortfalls. This certainly results 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: failure to obey traffic controls and failure to obey posted speed signs. 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.

Crash Data

The Crash Analysis & Reporting Unit at ODOT provides motor vehicle crash data through database creation, maintenance and quality assurance, information and reports, and limited database access. Ten years of crash data is maintained at all times. Vehicle crashes include those coded for city streets, county roads and state highways. The following is a link to their crash data site.

https://www.oregon.gov/odot/Data/Pages/Crash.aspx

Multi-Modal Security

The federal government in 1998, called for states and MPOs to address transportation security issues. The new transportation act strengthened the requirement, which has been extended to the current IIJA Law. The transportation acts require long-range regional transportation plans to consider security distinctly from transportation safety. Furthermore, in 2002 the 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.

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.

"The simplest distinction between safety and security is that safety accidents are just that: unpremeditated, unfortunate events."

Definitions

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

Table 12-1 below provides a description of various types of security problems that can arise in any transportation system.

Table 12-1 – Security Concerns for Transportation Systems

Event	Description
Aggravated Assault	An unlawful attack by a person upon another for the purpose of inflicting severe or aggravated bodily injury. This type of assault usually is accompanied by use
	of a weapon or other means likely to cause death or great bodily harm.
Arson	To unlawfully and intentionally damage, or attempt to damage, any real or
7110011	personal property by fire or incendiary device.
	The unlawful entry of a structure to commit a felony or a theft. This includes
Burglary	offenses known locally as burglary (any degree), unlawful entry with intent to
Dargiary	commit a larceny or felony, breaking and entering with intent to commit a
	larceny, housebreaking, safe cracking and all attempts at these offenses.
	The unlawful taking, carrying, leading or riding away of property from the
	possession or constructive possession of another. This includes pocket picking,
Larceny/Theft	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.
Trespass	To unlawfully enter land, a dwelling or other real property.
	The willful or malicious destruction, injury, disfigurement or defacement of any
	public or private property, real or personal, without consent of the owner or
Vandalism	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.
	The willful or malicious destruction, injury, disfigurement or defacement of any
Terrorism	public or private property [etc. as above] by domestic or foreign nationals for
	the purpose of making a political impact.

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 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.

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, one 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 has adopted Public Transportation Agency Safety Plans (PTASP) in 2020 and it was funded by ODOT PTD.

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, 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.

MRMPO Planning

Security planning efforts in the planning area are directed and managed by the emergency responders: police, fire, and medical - representing all 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. A regional ITS plan was developed in 2016 that includes the MRMPO. As such, the MRMPO will provide a forum for agencies and the public to examine issues and identify needs and solutions.

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

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 TIP scoring matrix and other specific funding program scoring matrices to ensure that security projects receive appropriate weighting and priority in the TIP.
- Regularly review the Tier 1 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.

Appendix A

Regulatory Framework

This Transportation Plan is intended to meet federal requirements for regional transportation plans as described in the Code of Federal Regulations and the U.S. Clean Air Act amendments of 1990. This appendix describes the federal rules, regulations, and policies that influence the content of this document.

A. Federal Regulation

According to the <u>23 CFR</u>, <u>§450.324</u>:

- (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 formulating the transportation plan, the MPO shall consider factors described in § 450.306 as the factors relate to a minimum 20-year forecast period. In nonattainment and maintenance areas, the effective date of the transportation plan shall be the date of a conformity determination issued by the FHWA and the FTA. In attainment areas, the effective date of the transportation plan shall be its date of adoption by the MPO.
- (b) The transportation plan shall include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) 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 4 years in air quality nonattainment and maintenance areas and at least every 5 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 MPO shall approve the transportation plan (and any revisions) and submit it 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 used 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 current and 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, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities (e.g., 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.
 - (3) A description of the performance measures and performance targets used in assessing the performance of the transportation system in accordance with § 450.306(d).
 - (4) A system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in § 450.306(d), including—
 - (i) Progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data; and
 - (ii) For metropolitan planning organizations that voluntarily elect to develop multiple scenarios, an analysis of how the preferred scenario has improved the conditions and performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified performance targets.
 - (5) 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;
 - (6) 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.
 - (7) Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters. 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.

- (8) Transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner and strategies and investments that preserve and enhance intercity bus systems, including systems that are privately owned and operated, and including transportation alternatives, as defined in 23 U.S.C. 101(a), and associated transit improvements, as described in 49 U.S.C. 5302(a), as appropriate;
- (9) Design concept and design scope descriptions of all existing and proposed transportation facilities in sufficient detail, regardless of funding source, in nonattainment and maintenance areas for conformity determinations under the EPA's transportation conformity regulations (40 CFR part 93, subpart A). In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates;
- (10) 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 MPO shall develop the discussion in consultation with applicable Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation;
- (11) 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 the 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(s), 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. The financial plan may include an assessment of the appropriateness of innovative finance techniques (for example, tolling, pricing, bonding, public private partnerships, or other strategies) as revenue sources for projects in the plan.

- (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. 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.
- (vii) For illustrative purposes, the financial plan may 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.
- (12) Pedestrian walkway and bicycle transportation facilities in accordance with <u>23</u> <u>U.S.C. 217(g)</u>.
- (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 integrate the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the HSIP, including the SHSP required under 23 U.S.C. 148, the Public Transportation Agency Safety Plan required

- under 49 U.S.C. 5329(d), or an Interim Agency Safety Plan in accordance with 49 CFR part 659, as in effect until completion of the Public Transportation Agency Safety Plan, and may incorporate or reference applicable emergency relief and disaster preparedness plans and strategies and policies that support homeland security, as appropriate, to safeguard the personal security of all motorized and non-motorized users.
- (i) An MPO may, while fitting the needs and complexity of its community, voluntarily elect to develop multiple scenarios for consideration as part of the development of the metropolitan transportation plan.
 - (1) An MPO that chooses to develop multiple scenarios under this <u>paragraph (i)</u> is encouraged to consider:
 - (i) Potential regional investment strategies for the planning horizon;
 - (ii) Assumed distribution of population and employment;
 - (iii) A scenario that, to the maximum extent practicable, maintains baseline conditions for the performance areas identified in § 450.306(d) and measures established under 23 CFR part 490;
 - (iv) A scenario that improves the baseline conditions for as many of the performance measures identified in § 450.306(d) as possible;
 - (v) Revenue constrained scenarios based on the total revenues expected to be available over the forecast period of the plan; and
 - (vi) Estimated costs and potential revenues available to support each scenario.
 - (2) In addition to the performance areas identified in <u>23 U.S.C. 150(c)</u>, <u>49 U.S.C.</u> <u>5326(c)</u>, and <u>5329(d)</u>, and the measures established under <u>23 CFR part 490</u>, MPOs may evaluate scenarios developed under this paragraph using locally developed measures.
- (j) The MPO shall provide individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cashout program, shuttle program, or telework program), 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).
- (k) The MPO shall publish or otherwise make readily available the metropolitan transportation plan for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web.

- (l) A State or MPO is not required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (f)(11) of this section.
- (m) 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, subpart A). A 12-month conformity lapse grace period will be implemented when an area misses an applicable deadline, in accordance with the Clean Air Act and the transportation conformity regulations (40 CFR part 93, subpart A). At the end of this 12-month grace period, the existing conformity determination will lapse. 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, subpart A. 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.

Appendix B

Performance Based Planning

A. Performance Measures

The MRMPO adopted targets in February 2018 for the Safety performance measures (discussed below) and accepted the Transit Asset Management performance measures established by JCT (discussed below).

To be reported on annually as required for state DOTs and MPOs:

- 1. Fatalities
- 2. Fatality Rate (Fatalities/100M Vehicle Miles Traveled)
- 3. Serious Injuries
- 4. Serious Injury Rate (Serious Injuries/100M Vehicle Miles Traveled)
- 5. Nonmotorized Fatalities and Serious Injuries

Note that more detailed information on ODOT performance measures and targets is provided in the 2016 Oregon Transportation Safety Action Plan.

B. Safety

MPOs can use the state established targets or establish targets specifically for the planning area for performance measures listed above. The MRMPO is currently using ODOT's established targets, which are based on an S-curve forecast trend using five-year averages to achieve the vision of zero fatalities and life-changing injuries by 2035. The targets are applicable to all public roads in the MPO and must be reported annually. For reference, Table 1 below identifies each target baseline and five-year average target for the five performance measures out to 2015-2019 for the entire state of Oregon.

Table 1 - Statewide Safety Targets

Safety											
Base Period	Fatalities (People)	Fatality Rate (People per 100 Million VMT)	Serious Injuries (People)	Serious Injury Rate (People per 100 Million VMT)	Non-motorized Fatalities and Serious Injuries (People)						
2021 Baseline reported Crashes (2014-2018)	448	1.48	1,739	5.03	257						
2022 First Year Reported Crashes (2015-2019)	444	1.46	1,722	4.98	254						

How projects in the TIP help achieve Safety Targets

The safety of all users on our transportation system has always been a high priority for MRMPO and the local jurisdictions, especially vulnerable users. One of the goals of the MRMPO 2024-2049 Regional Transportation Systems Plan (RTSP) is to have a regional transportation system plan that is designed with the safety of all users in mind. The scoring criteria used to prioritize projects that are considered for MRMPO funding directly links the goals of the RTSP with the selection of projects.

Almost every project in the TIP has a safety element. Projects that more directly benefit the safety of the transportation system include:

- <u>HSIP projects</u> HSIP projects are specifically selected to improve the safety of the roadway. Projects include buffered bike lanes, road diet, enhanced pedestrian crossings, signal improvements, curve warning signs, rumble strips, turn lanes, and other proven safety measures.
- <u>Urban Upgrade Projects</u> Projects that add bike lanes and sidewalks along the roadway reduce the need for non-motorists to walk or bike in the roadway, along narrow shoulders, or in the ditch. Separating the vulnerable users from motor vehicles provides a safer environment, reducing the chances of dying or being seriously injured.
- <u>Intersection Improvements</u> Projects that add, or replace, traffic signals and/or add turn lanes reduce the potential for serious crashes. Most crashes occur at intersections.

C. Pavement and Bridge Condition

ODOT established statewide targets for each of the six pavement and National Highway System (NHS) bridge condition performance measures and reports progress every four years. The MRMPO has adopted the state's targets for this measure.

D. Performance of the National Highway System (NHS)

ODOT established statewide targets for each of the six performance measures evaluating the system performance of the NHS and reports on progress every four years. These include travel time reliability, freight movement, Congestion and Air Quality Program (CMAQ). For the CMAQ measures, only the total emissions reduction for all CMAQ funded project measure is required for MPOs with more than 200,000 people during the first reporting period (January 1, 2018 to December 31, 2021). The MRMPO is unaffected by this measure.

Table 2 Federal Performance Measures

FA	AST ACT (FHWA) Performance Measures		2022 Performance Baseline	2023 (2 Year) Performance Target	2025 (4 Year) Performance Target
	Pavement Co	ndition			
1. Percentage of par	ements of Interstate System in Good condition		57.7%	50.0%	50.0%
2. Percentage of par	rements of the Interstate System in Poor condition		0.2%	0.5%	0.5%
3. Percentage of par	rements of the non-Interstate NHS in Good condition		33.5%	30.0%	30.0%
4. Percentage of par	rements of the non-Interstate NHS in Poor condition		2.9%	5.0%	5.0%
	Bridge Cond	lition			
5. Percentage of NH	S bridges classified as in Good condition		13.%%	11.4%	10.0%
6. Percentage of NH	S bridges classified as in Poor condition		1.8%	2.4%	3.0%
	National Highway Syst	em Perforn	ance		
7. Percent of the pe	rs on-miles traveled on the Interstate that are reliable (I	nterstate	78%	78%	78%
Travel Time Reliabil	ity measure)				
8. Percent of person	-miles traveled on the non-Interstate NHS that are reli	able (Non-	78%	78%	78%
Interstate Travel Tir	ne Reliability measure)				
	Freight Movement on I	nterstate S	ystem		
9. Truck Travel Time	Reliability (TTTR) Index (Freight Reliability measure)		1.45	1.45	1.45
	Congestion Mitigation and Air Q	uality - Traf	fic Congestion).	
ODOT and CLMPO	10. Annual Hours of Peak Hour Excessive Delay (PHEC)) Per Capita	3.6 hours	8.5 hours	9 hours
ODOT and CLIVIFO	11. Percent of Non-SOV Travel		30.2%	33.0%	35.0%
ODOT and SKATS	10. Annual Hours of Peak Hour Excessive Delay (PHED)) Per Capita	7 hours	7 hours	7 hours
ODOT and SKATS	11. Percent of Non-SOV Travel		24%	23.2%	22.7%
	Congestion Mitigation and Air Quality-0	On-Road Mo	obile Source Er	missions	
12 Total Emissions	Reduction; 2-year and 4-year cumulative reported		Baseline	2 Year Kg/Day:	4 Year Kg/Day:
	s, for all projects funded by CMAQ funds, of each	VOC	N/A	N/A	N/A
	d applicable precursors (PM2.5, PM10, CO, VOC, and	со	92.25	46.13	92.25
Commence of Commence and Commence of Comme	AQ program for which the area is designated	NOx	0	0	0
nonattainment or m	(A) A:	PM10	1115.03	557.51	1115.03
		PM2.5	0	0	0

*FHWA Performance Areas and Measures are contained in the Oregon Highway Plan (OHP) Appendix D

The Oregon Highway Plan addresses the FHWA performance management requirements for National Highway Performance, Congestion Mitigation and Air Quality, and National Freight Movement. The performance based planning process and performance targets contained in this amendment are for ODOT's federal reporting requirements only. The requirements and targets addressed in this amendment are not applicable to the Transportation Planning Rule for consistency in regional and local transportation system plans. The federal performance areas and targets regarding public transportation are contained in the Oregon Transit As set Management Plan, and will be referenced in the Oregon Public Transportation Plan.

[~] Adopted May 17, 2018 (Original 2006 OTP is currently under Revision)

E. Transit Asset Management (TAM)

In 2012, MAP-21 mandated FTA to develop a rule establishing a strategic and systematic process of operating, maintaining, and improving public capital assets effectively through their entire life cycle. The FTA Final Rule for Transit Asset Management (49 USC 625) established four performance measures for transit districts.

- 1) Rolling Stock: The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB).
- 2) Equipment: The percentage of non-revenue service vehicles (by type) that exceed the ULB.
- 3) Facilities: The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale.
- 4) Infrastructure: The percentage of track segments (by mode) that have performance restrictions. Track segments are measured to the nearest 0.01 of a mile. (JCT does not operate a track system; therefore, this measure does not apply.)

JCT is designated as a Tier II transit agency and relies on the Oregon Public Transit Tier II Transit Asset Management Plan to meet the federal TAM target requirements. The MRMPO supports the Josephine Community Transit (JCT) Tier II TAM targets.

How projects in the TIP help achieve JCT TAM Targets

The MRMPO is committed to supporting the transit system in the area. Historically, MRMPO's federal funds have been used to help purchase approximately one bus per year as well as promote greater accessibility. For efficiency purposes, the funds for several years and sources have been combined for one larger purchase once every several years.

Table 3 on the following page shows Tier II transit agency TAM targets.

Table 3 Tier II TAM Plan Performance Targets

Tier II Group TAM Plan Performance Targets

Asset Type	2017	2018	2019	2020	2021	2022
Equipment - Automobiles	40%	40%	40%	25%	12%	8%
Equipment - Truck and other Rubber Tire Vehicles			40%	45%	44%	45%
Rolling Stock - Articulated Bus					30%	20%
Rolling Stock - Over the Road Bus	20%	20%			75%	78%
Rolling Stock - Bus	40%	40%	20%	25%	20%	25%
Rolling Stock - Cutaway	40%	40%	50%	40%	32%	38%
Rolling Stock - Van	40%	40%	45%	41%	45%	40%
Rolling Stock - Minivan	40%	40%	45%	41%	32%	34%
Rolling Stock - SUV	40%	40%	40%	23%	38%	31%
Rolling Stock - Automobile	40%	40%	45%	63%	50%	50%
Facilities - Passenger / Parking Facilities	10%	10%	50%	0%	0%	0%
Facilities - Administrative / Maintenance Facilities	10%	10%	20%	3%	1.5%	1.5%

Appendix C

Tier 2 Project List

Additional projects identified as necessary and important by all jurisdictions, called Tier 2 projects, are presented in Table C-1 on the following page. Please note, no funding has been identified for Tier 2 projects.

Table C- 1

	Tier RTP Pro	_		
PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	COST
Gold Hill				
0	No Teir 2 Projects		Teir 2	
			Teir 2 Total	\$0
Grants Pas	S			
GP-006	Fruitdale Drive: Parkdale Drive to Cloverlawn Drive	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Teir 2	\$2,209,800
NEW	Fourth Bridge and Approaches	Full Construction of bridge approaches and the bridge connecting Lincoln Road to Allen Creek Road	Teir 2	\$40,000,000
			Teir 2 Total	\$42,209,800
Jackson Co	ounty			
NEW	East Evans Creek Road: Rogue River City Limits to Rogue River High School	Widen to 3-lane urban major collector	Teir 2	\$4,500,000
NEW	Foothill Boulevard: Rogue River City Limits to Rogue River UGB	Widen to 3-lane urban major collector	Teir 2	\$3,000,000
NEW	Foothill Boulevard: Rogue River UGB to Josephine County Line	Install 6-foot shoulders consistent with rural major collector	Teir 2	\$12,400,000
			Teir 2 Total	\$19,900,000
Josephine	County			
Ō	No Teir 2 Projects		Teir 2	
			Teir 2 Total	\$0
Rogue Rive				
0	No Teir 2 Projects		Teir 2	
			Teir 2 Total	\$0
			Teir 2 RTP Total	\$62,109,800

Appendix D

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 21st 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 21st 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
PM₁₀: 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 ProgramTAC: MPO Technical Advisory CommitteeTAZ: 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 (NOx), and particulate matter (PM_{10}). 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.

APPENDIX E

MRMPO FINANCIAL FORECASTS & ASSUMPTIONS

City of Gold Hill

Table B-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. A 2% annual "year of expenditure" (YOE) or inflation factor is used to estimate future maintenance and operations costs.

Table B-1

						Ci	ty of Gold	Hill						
				Street Sys	tem Loc	al Revenu	es and Noi	n-Capital E	xpenses	(\$ x 1,000)				
				City Re	evenue S	ources						Non-Cap	oital Expense	s
							Lo	cal	1	1				
Year	Federl	Subtotal Federl	State	Subtotal State	System Dev Charges	Subtotals SDC	Street Utility Fee	Subtotals SUF	SCA	Subtotal SCA	Admin	Debt Service	Maint.	Subtotal Non Capital
2024	\$0		\$105,239		\$0		\$0		\$0		\$0	\$0	\$51,559	
2025	\$0		\$106,593		\$0		\$0		\$0		\$0	\$0	\$52,590	
2026	\$0		\$107,416		\$0		\$0		\$0		\$0	\$0	\$53,905	
2027	\$0		\$107,676		\$0		\$0		\$0		\$0	\$0	\$55,253	
2028	\$0	\$0	\$107,324	\$534,248	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$56,634	\$269,941
2029	\$0		\$107,403		\$0		\$0		\$50,000		\$0	\$0	\$58,050	
2030	\$0		\$106,866		\$0		\$0		\$0		\$0	\$0	\$59,501	
2031	\$0		\$106,332		\$0		\$0		\$0		\$0	\$0	\$60,988	
2032	\$0		\$105,800		\$0		\$0		\$0		\$0	\$0	\$62,513	
2033	\$0		\$105,271		\$0		\$0		\$0		\$0	\$0	\$64,076	
2034	\$0		\$104,745		\$0		\$0		\$0		\$0	\$0	\$65,678	
2035	\$0		\$104,221		\$0		\$0		\$0		\$0	\$0	\$67,320	
2036	\$0		\$103,700		\$0		\$0		\$50,000		\$0	\$0	\$69,003	
2037	\$0		\$103,181		\$0		\$0		\$0		\$0	\$0	\$70,728	
2038	\$0	\$0	\$102,665	\$1,050,184	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$72,496	\$650,353
2039	\$0		\$102,152		\$0		\$0		\$0		\$0	\$0	\$74,309	
2040	\$0		\$101,641		\$0		\$0		\$0		\$0	\$0	\$76,166	
2041	\$0		\$101,133		\$0		\$0		\$0		\$0	\$0	\$78,070	
2042	\$0		\$100,627		\$0		\$0		\$0		\$0	\$0	\$80,022	
2043	\$0		\$100,124		\$0		\$0		\$50,000		\$0	\$0	\$82,023	
2044	\$0		\$99,624		\$0		\$0		\$0		\$0	\$0	\$84,073	
2045	\$0		\$99,126		\$0		\$0		\$0		\$0	\$0	\$86,175	
2046	\$0		\$98,630		\$0		\$0		\$0		\$0	\$0	\$88,330	
2047	\$0		\$98,137		\$0		\$0		\$0		\$0	\$0	\$90,538	
2048	\$0		\$97,646		\$0		\$0		\$0		\$0	\$0	\$92,801	
2049	\$0	\$0	\$97,158	\$1,095,998	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$95,121	\$927,628
Totals	\$0		\$2,680,430		\$0		\$0		\$150,000		\$0	\$0	\$1,847,922	\$1,847,922
Assumptions			0.5% annual	decrease "YOE"		ial increase 'OE"		2% annual increase "YOE" refers to Year of Expenditure or inflation factor		2% annual increase "YOE"		2% annual increase "YOE"		

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. A 2.5% annual "year of expenditure" (YOE) or inflation factor is used to estimate future maintenance and operations costs.

Table B-2

1 anic					C	ity of Grai	nts Pass						
			Stre	et System L	ocal Reve	nues and	Non-Capita	al Expens	ses (\$ x 1	,000)			
			С	ity Revenue	Sources						Non-Capi	tal Expenses	5
						Loca	al						
Year	Federal	State "Gas Tax Share"	Subtotal State	System Dev Charges	Subtotals SDC	Street Utility Fee	Subtotals SUF	Misc.	Subtotal Misc	Admin	Debt Service	Maint.	Subtotal Non Capital
2024		\$2,900,000		\$200,000		\$1,225,000		\$30,000		\$600,000	\$0	\$1,475,000	
2025		\$2,827,500		\$205,000		\$1,255,625		\$30,000		\$615,000	\$0	\$1,504,500	
2026		\$2,756,813		\$210,125		\$1,287,016		\$30,000		\$630,375	\$0	\$1,542,113	
2027		\$2,687,892		\$215,378		\$1,319,191		\$30,000		\$646,134	\$0	\$1,580,665	
2028		\$2,620,695	\$13,792,900	\$220,763	\$1,051,266	\$1,352,171	\$6,439,002	\$30,000	\$150,000	\$662,288	\$0	\$1,620,182	\$10,876,257
2029		\$2,555,178		\$226,282		\$1,385,975		\$30,000		\$678,845	\$0	\$1,660,686	
2030		\$2,491,298		\$231,939		\$1,420,624		\$30,000		\$695,816	\$0	\$1,702,204	
2031		\$2,429,016		\$237,737		\$1,456,140		\$30,000		\$713,211	\$0	\$1,744,759	
2032		\$2,368,290		\$243,681		\$1,492,544		\$30,000		\$731,042	\$0	\$1,788,378	
2033		\$2,309,083		\$249,773		\$1,529,857		\$30,000		\$749,318	\$0	\$1,833,087	
2034		\$2,251,356		\$256,017		\$1,568,104		\$30,000		\$768,051	\$0	\$1,878,914	
2035		\$2,195,072		\$262,417		\$1,607,306		\$30,000		\$787,252	\$0	\$1,925,887	
2036		\$2,140,195		\$268,978		\$1,647,489		\$30,000		\$806,933	\$0	\$1,974,034	
2037		\$2,086,690		\$275,702		\$1,688,676		\$30,000		\$827,107	\$0	\$2,023,385	
2038		\$2,034,523	\$22,860,701	\$282,595	\$2,535,120	\$1,730,893	\$15,527,608	\$30,000	\$300,000	\$847,784	\$0	\$2,073,970	\$26,210,664
2039		\$1,983,660		\$289,660		\$1,774,165		\$30,000		\$868,979	\$0	\$2,125,819	
2040		\$1,934,068		\$296,901		\$1,818,519		\$30,000		\$890,703	\$0	\$2,178,965	
2041		\$1,885,717		\$304,324		\$1,863,982		\$30,000		\$912,971	\$0	\$2,233,439	
2042		\$1,838,574		\$311,932		\$1,910,582		\$30,000		\$935,795	\$0	\$2,289,275	
2043		\$1,792,610		\$319,730		\$1,958,346		\$30,000		\$959,190	\$0	\$2,346,507	
2044		\$1,747,794		\$327,723		\$2,007,305		\$30,000		\$983,170	\$0	\$2,405,169	
2045		\$1,704,099		\$335,916		\$2,057,488		\$30,000		\$1,007,749	\$0	\$2,465,298	
2046		\$1,661,497		\$344,314		\$2,108,925		\$30,000		\$1,032,943	\$0	\$2,526,931	
2047		\$1,619,960		\$352,922		\$2,161,648		\$30,000		\$1,058,766	\$0	\$2,590,104	
2048		\$1,579,461		\$361,745		\$2,215,689		\$30,000		\$1,085,236	\$0	\$2,654,857	
2049		\$1,539,974	\$19,287,413	\$370,789	\$3,615,956	\$2,271,082	\$22,147,732	\$30,000	\$330,000	\$1,112,366	\$0	\$2,721,228	\$37,385,460
Totals		\$55,941,014	\$55,941,014	\$7,202,342	\$7,202,342	\$44,114,342	\$44,114,342	\$780,000	\$780,000	\$21,607,025	\$0	\$52,865,356	\$74,472,381
Assumptions			al decrease OE"	2.5% annua "YC			ual increase OE"	of Exper		2.5% annual increase "YOE"		2.5 % annual increase "YOE"	

Source: City of Grants Pass

Table B-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 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 B-3 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 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 B-3

Vear Federal State Subtotal Federal State Subtotal State Subtotal State Subtotal Subto								R	ogue Rive	r						
Vear Federal Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Subtotal State Su						Street Syst	em Loca				xpenses (\$ x 1,000)				
Vear Federal State Subtotal State Subtotal State Subtotal State Subtotal Subtot						City Rev	enue Sc	urces						Non-Capita	al Expense	s
Veal Federal State Subtotal State Charges Charges Subtotal Su									Lo	cal						
2025 \$ - \$ 170,894.24 \$8,262 \$19,373 \$89,000 \$168,821 \$89,000 \$194,463 \$2026 \$ - \$ 170,039.76 \$8,468 \$19,857 \$89,000 \$173,041 \$89,000 \$193,325 \$2027 \$ - \$ 169,189.57 \$86,860 \$20,353 \$339,000 \$173,041 \$89,000 \$204,308 \$2028 \$ - \$ 168,346.62 \$850,220.18 \$8,897 \$42,366 \$20,862 \$99,345 \$89,000 \$695,000 \$118,001 \$89,000 \$204,308 \$2029 \$ - \$ 167,501.90 \$91,19 \$21,384 \$89,000 \$186,346 \$89,000 \$204,465 \$2,300 \$203,475 \$2,300 \$18,001 \$89,000 \$204,465 \$2,300 \$203,475 \$2,300 \$1 \$16,664.39 \$9,347 \$21,918 \$89,000 \$186,346 \$89,000 \$210,4651 \$2,300 \$203,475 \$2,300 \$1 \$16,664.39 \$9,347 \$21,918 \$89,000 \$191,005 \$89,000 \$220,017 \$2031 \$ - \$ 165,501.91 \$9,820 \$22,466 \$339,000 \$191,005 \$89,000 \$220,175 \$22,466 \$339,000 \$191,005 \$89,000 \$220,175 \$22,466 \$339,000 \$191,005 \$89,000 \$225,517 \$2032 \$ - \$ 165,001.91 \$9,820 \$23,028 \$89,000 \$206,675 \$89,000 \$225,517 \$2033 \$ - \$ 164,176.90 \$10,066 \$23,004 \$89,000 \$206,675 \$89,000 \$242,855 \$2035 \$ - \$ 163,502.24 \$10,575 \$24,194 \$89,000 \$216,605 \$89,000 \$242,855 \$2035 \$ - \$ 162,539.24 \$10,575 \$24,194 \$89,000 \$216,605 \$89,000 \$242,855 \$2036 \$ - \$ 161,726,54 \$10,840 \$25,418 \$221,507 \$0 \$221,507 \$0 \$255,152 \$2037 \$ - \$ 160,917.91 \$11,111 \$26,054 \$227,045 \$0 \$221,507 \$0 \$255,152 \$2037 \$ - \$ 160,917.91 \$11,111 \$26,054 \$227,045 \$0 \$221,507 \$0 \$255,152 \$2039 \$ - \$ 159,312.75 \$11,673 \$227,373 \$250,000 \$238,539 \$0 \$274,771 \$2040 \$ - \$ 156,394.99 \$12,571 \$29,478 \$226,000 \$238,539 \$0 \$274,771 \$2040 \$ - \$ 156,394.99 \$12,571 \$29,478 \$226,000 \$263,302 \$0 \$303,296 \$300,296 \$240,485 \$ - \$ 156,394.99 \$12,571 \$29,478 \$226,000 \$263,302 \$0 \$303,296 \$240,485 \$ - \$ 156,503.24 \$13,537 \$23,504 \$30,700 \$256,800 \$0 \$229,637 \$0 \$236,617 \$2040 \$ - \$ 156,394.99 \$12,571 \$29,478 \$226,000 \$263,302 \$0 \$303,296 \$31,305 \$226,400 \$204,85 \$ - \$ 156,503.29 \$11,399 \$102,165 \$28,057 \$ \$226,000 \$236,302 \$0 \$303,296 \$31,305 \$0 \$303,780 \$204,850 \$0 \$266,109 \$304,850 \$0 \$266,109 \$304,850 \$0 \$266,109 \$304,850 \$0 \$266,109 \$304,850 \$0 \$266,109 \$304,850 \$0 \$266,109 \$304,850 \$0 \$266,109 \$304,850 \$0 \$266,109 \$304,850 \$0 \$266,109 \$304,850 \$0	Year	Federal			State	Subtotal State	Dev				Misc.		Admin		Maint.	Subtotal Non Capital
2026 \$ - \$ \$ \$170,039.76 \$8,468 \$19,857 \$89,000 \$173,041 \$89,000 \$199,325 \$2027 \$ - \$ \$169,189.57 \$8,860 \$20,353 \$339,000 \$177,367 \$89,000 \$209,415 \$2,200 \$2028 \$ - \$ \$167,501.90 \$9,119 \$21,384 \$89,000 \$181,801 \$89,000 \$209,415 \$2,300 \$203,53 \$339,000 \$181,801 \$89,000 \$209,415 \$2,300 \$203,53 \$339,000 \$181,801 \$89,000 \$209,415 \$2,300 \$203,53 \$339,000 \$181,801 \$89,000 \$209,415 \$2,300 \$200,575 \$32,355 \$39,300 \$181,801 \$89,000 \$209,615 \$20,017 \$2031 \$ - \$ \$165,684.39 \$39,347 \$21,918 \$89,000 \$191,005 \$89,000 \$220,017 \$2031 \$ - \$ \$165,681.07 \$39,820 \$22,466 \$339,000 \$195,780 \$89,000 \$220,17 \$2032 \$ - \$ \$165,001.91 \$39,820 \$23,028 \$89,000 \$200,675 \$89,000 \$225,517 \$2033 \$ - \$ \$164,176.90 \$10,066 \$23,804 \$89,000 \$206,651 \$89,000 \$231,155 \$2033 \$ - \$ \$163,356.02 \$10,317 \$24,194 \$89,000 \$216,851 \$89,000 \$242,858 \$2035 \$ - \$ \$162,539,24 \$10,575 \$24,798 \$339,000 \$216,105 \$89,000 \$242,858 \$2035 \$ - \$ \$161,725,44 \$10,804 \$25,418 \$227,045 \$0 \$255,152 \$2037 \$ - \$ \$160,113.32 \$1,637,829,20 \$11,673 \$227,045 \$0 \$225,007 \$0 \$224,4503 \$0 \$226,691 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$226,001 \$0 \$0 \$0 \$0 \$0 \$0 \$0	2024	\$ -		\$	171,753.00		\$8,060		\$18,900		\$89,000		\$164,703	\$89,000	\$190,650	
2027 S S 169,189,57 \$8,680 \$20,353 \$339,000 \$177,367 \$89,000 \$204,308 \$2028 S S S \$166,843.62 \$89,220 \$89,347 \$21,384 \$89,000 \$181,801 \$89,000 \$293,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$203,415 \$2,300 \$2,41,615 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415 \$2,41,415	2025	\$ -		\$	170,894.24		\$8,262		\$19,373		\$89,000		\$168,821	\$89,000	\$194,463	
2028 \$ - \$ 168,343,62 \$ 850,220.18 \$9,897 \$42,366 \$20,862 \$99,345 \$89,000 \$181,801 \$89,000 \$209,415 \$2,302 \$2029 \$ - \$ 167,501.90 \$9,119 \$21,334 \$89,000 \$181,801 \$89,000 \$214,651 \$23,000 \$203,000 \$181,801 \$89,000 \$214,651 \$23,000 \$203,000 \$181,801 \$89,000 \$214,651 \$23,000 \$203,000 \$190,000 \$200,675 \$89,000 \$225,517 \$2032 \$ - \$ 165,001.91 \$9,820 \$22,328 \$89,000 \$200,675 \$89,000 \$225,517 \$2032 \$ - \$ 164,176.90 \$10,006 \$23,004 \$89,000 \$206,675 \$89,000 \$225,517 \$2033 \$ - \$ 164,176.90 \$10,006 \$23,004 \$89,000 \$206,675 \$89,000 \$225,517 \$2033 \$ - \$ 163,356.02 \$10,317 \$24,194 \$89,000 \$206,675 \$89,000 \$236,934 \$2035 \$ - \$ 162,539.24 \$10,317 \$24,194 \$89,000 \$218,105 \$89,000 \$24,858 \$22,005 \$ - \$ 162,539.24 \$10,575 \$24,798 \$339,000 \$216,105 \$89,000 \$24,858 \$24,929 \$2036 \$ - \$ 160,917.91 \$11,111 \$26,054 \$24,198 \$339,000 \$216,105 \$89,000 \$24,858 \$24,929 \$2036 \$ - \$ 160,917.91 \$11,111 \$26,054 \$27,373 \$22,000 \$221,507 \$0 \$255,152 \$2037 \$ - \$ 160,917.91 \$11,111 \$26,054 \$22,054 \$22,054 \$0 \$227,045 \$0 \$261,531 \$2038 \$ - \$ 159,312.75 \$311,899 \$102,165 \$26,054 \$23,569 \$31,123,000 \$232,721 \$0 \$268,069 \$5,11 \$2039 \$ - \$ 159,312.75 \$311,899 \$102,165 \$26,054 \$28,959 \$250,000 \$233,539 \$0 \$274,771 \$2040 \$ - \$ 156,934.99 \$11,965 \$22,373 \$250,000 \$233,539 \$0 \$274,771 \$2040 \$ - \$ 156,934.99 \$11,965 \$28,057 \$229,478 \$250,000 \$238,539 \$0 \$274,771 \$2040 \$ - \$ 156,934.99 \$11,265 \$26,054 \$28,057 \$229,478 \$250,000 \$238,539 \$0 \$274,771 \$2040 \$ - \$ 156,934.99 \$11,265 \$26,056 \$28,057 \$229,478 \$250,000 \$238,539 \$0 \$274,771 \$2040 \$ - \$ 156,934.99 \$11,266 \$26,050 \$28,057 \$229,478 \$250,000 \$238,539 \$0 \$274,771 \$2040 \$ - \$ 156,934.99 \$11,265 \$26,056 \$26,050 \$26,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000 \$266,000	2026	\$ -		\$	170,039.76		\$8,468		\$19,857		\$89,000		\$173,041	\$89,000	\$199,325	
2029 \$ - \$ 167,501.90 \$ 9,119 \$ 21,384 \$ 89,000 \$ 186,346 \$ 89,000 \$ 214,651 \$ 2030 \$ - \$ 166,664.39 \$ 9,347 \$ 21,918 \$ 89,000 \$ 191,005 \$ 89,000 \$ 220,017 \$ 2031 \$ - \$ 166,831.07 \$ 99,581 \$ 522,466 \$ 339,000 \$ 195,780 \$ 89,000 \$ 225,517 \$ 2032 \$ - \$ 165,001.91 \$ 99,820 \$ 23,028 \$ 89,000 \$ 206,675 \$ 89,000 \$ 225,517 \$ 2033 \$ - \$ 164,176.90 \$ 510,666 \$ 523,604 \$ 899,000 \$ 205,691 \$ 899,000 \$ 236,934 \$ 2034 \$ - \$ 162,539.24 \$ 10,317 \$ 224,194 \$ 89,000 \$ 220,875 \$ 899,000 \$ 236,934 \$ 2035 \$ - \$ 162,539.24 \$ 10,575 \$ 524,798 \$ 339,000 \$ 210,834 \$ 89,000 \$ 242,858 \$ 2035 \$ - \$ 166,765.4 \$ 10,840 \$ 25,418 \$ \$ 227,045 \$ 0 \$ 261,531 \$ 220,37 \$ - \$ 160,113.32 \$ 1,637,829.20 \$ 11,389 \$ 102,165 \$ 26,705 \$ 239,569 \$ 11,123,000 \$ 232,721 \$ 0 \$ 268,069 \$ 51,123,000 \$ 237,771 \$ 2040 \$ - \$ 159,312.75 \$ 11,965 \$ 227,373 \$ 250,000 \$ 238,539 \$ 0 \$ 274,771 \$ 2040 \$ - \$ 155,516.19 \$ 11,965 \$ 228,057 \$ 224,788 \$ 250,000 \$ 238,539 \$ 0 \$ 274,771 \$ 2040 \$ - \$ 155,516.19 \$ 11,965 \$ 228,057 \$ 224,788 \$ 250,000 \$ 233,539 \$ 0 \$ 274,771 \$ 2040 \$ - \$ 155,516.19 \$ 11,965 \$ 228,057 \$ 224,800 \$ 225,645 \$ 0 \$ 261,531 \$ 2034 \$ - \$ 155,516.19 \$ 11,965 \$ 228,057 \$ 224,800 \$ 225,645 \$ 0 \$ 226,615 \$ 0 \$ 226,617 \$ 0 \$ 225,898 \$ 2043 \$ - \$ 156,150.32 \$ 155,260.30 \$ 12,865 \$ 30,214 \$ 250,000 \$ 263,302 \$ 0 \$ 303,296 \$ 2044 \$ - \$ 155,566,56 \$ 132,007 \$ 30,970 \$ 268,885 \$ 0 \$ 310,878 \$ 2044 \$ - \$ 155,566,56 \$ 132,007 \$ 30,970 \$ 268,885 \$ 0 \$ 310,878 \$ 2044 \$ - \$ 155,566,56 \$ 132,007 \$ 30,970 \$ 268,885 \$ 0 \$ 310,878 \$ 2044 \$ - \$ 155,566,56 \$ 132,007 \$ 30,970 \$ 268,885 \$ 0 \$ 310,878 \$ 2044 \$ - \$ 155,566,56 \$ 132,007 \$ 30,970 \$ 268,885 \$ 0 \$ 334,161 \$ 2049 \$ - \$ 155,285,40 \$ 156,285,40 \$ 13,357 \$ 331,744 \$ 250,000 \$ 226,371 \$ 0 \$ 334,161 \$ 2049 \$ - \$ 155,285,40 \$ 156,390,79 \$ 250,687 \$ 2046 \$ - \$ 155,305,65 \$ 133,377 \$ 331,744 \$ 250,000 \$ 226,837 \$ 0 \$ 334,161 \$ 2049 \$ - \$ 155,285,40 \$ 156,285,40 \$ 156,390,79 \$ 250,687 \$ 0 \$ 334,161 \$ 2049 \$ - \$ 155,285,40 \$ 156,285,40 \$ 156,285,40 \$ 250,000 \$ 250,837 \$ 0 \$ 334,161 \$ 2049 \$ - \$ 155,285,40 \$ 156,285,40 \$ 250,0	2027	\$ -		\$	169,189.57		\$8,680		\$20,353		\$339,000		\$177,367	\$89,000	\$204,308	
2030 \$ - \$ 166,664.39 \$9,347 \$21,918 \$89,000 \$191,005 \$89,000 \$220,017 \$ 2031 \$ - \$ 165,831,07 \$9,581 \$22,466 \$339,000 \$195,780 \$89,000 \$225,517 \$ 2032 \$ - \$ 165,001.91 \$9,820 \$23,028 \$89,000 \$200,675 \$89,000 \$225,517 \$ 2033 \$ - \$ 164,176.90 \$10,066 \$23,604 \$89,000 \$205,691 \$89,000 \$236,934 \$ 2034 \$ - \$ 163,356.02 \$10,317 \$24,194 \$89,000 \$210,834 \$89,000 \$242,858 \$ 2035 \$ - \$ 162,539.24 \$10,575 \$24,194 \$89,000 \$210,834 \$89,000 \$242,858 \$ 2036 \$ - \$ 161,726.54 \$10,840 \$254,188 \$339,000 \$216,105 \$89,000 \$248,929 \$ 2036 \$ - \$ 160,917.91 \$11,111 \$26,054 \$0,000 \$227,045 \$0 \$226,151 \$ 2037 \$ - \$ 160,917.91 \$11,111 \$26,054 \$0,000 \$227,045 \$0 \$226,151 \$ 2038 \$ - \$ - \$ 160,113.32 \$1,637,829.20 \$11,389 \$102,165 \$26,705 \$239,569 \$1,123,000 \$232,721 \$0 \$268,069 \$5,11 \$ 2039 \$ - \$ 156,513.92 \$11,637 \$27,373 \$27,373 \$250,000 \$238,539 \$0 \$274,771 \$ 2040 \$ - \$ 156,516.19 \$11,965 \$28,057 \$224,458 \$224,450 \$0 \$284,500 \$0 \$281,640 \$0 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,000 \$0,0	2028	\$ -	\$ -	\$	168,343.62	\$ 850,220.18	\$8,897	\$42,366	\$20,862	\$99,345	\$89,000	\$695,000	\$181,801	\$89,000	\$209,415	\$2,308,894
2031 \$ - \$ 165,831.07 \$ 95,581 \$ \$22,466 \$ \$339,000 \$ \$195,780 \$ \$89,000 \$ \$225,517 \$ \$ 2032 \$ - \$ 164,176.90 \$ \$10,066 \$ \$23,604 \$ \$89,000 \$ \$205,691 \$ 89,000 \$ \$236,934 \$ \$ 2034 \$ - \$ 163,356.02 \$ \$10,317 \$ \$24,194 \$ \$89,000 \$ \$216,105 \$ 89,000 \$ \$24,858 \$ \$ 2035 \$ - \$ 162,2592 4 \$ 10,575 \$ \$24,798 \$ \$339,000 \$ \$216,105 \$ 89,000 \$ \$24,858 \$ \$ 2035 \$ - \$ 161,726,54 \$ \$10,840 \$ \$25,418 \$ \$221,507 \$ \$0 \$ \$255,152 \$ \$ 2037 \$ - \$ 160,917.91 \$ \$11,111 \$ \$26,054 \$ \$ \$26,054 \$ \$ \$227,045 \$ \$ \$ \$221,507 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2029	\$ -		\$	167,501.90		\$9,119		\$21,384		\$89,000		\$186,346	\$89,000	\$214,651	
2032 \$ - \$ 165,001.91 \$9,820 \$23,028 \$89,000 \$200,675 \$89,000 \$231,155 \$ 2033 \$ - \$ 164,176.90 \$10,066 \$23,604 \$89,000 \$205,691 \$89,000 \$236,934 \$ 2034 \$ - \$ 163,356.02 \$10,317 \$24,194 \$89,000 \$210,834 \$89,000 \$242,858 \$ 2035 \$ - \$ 162,539.24 \$10,575 \$24,798 \$339,000 \$210,834 \$89,000 \$248,829 \$ 2036 \$ - \$ 161,726.54 \$10,840 \$25,418 \$221,507 \$0 \$255,152 \$ 2037 \$ - \$ 160,917.91 \$11,111 \$26,054 \$227,045 \$0 \$227,045 \$0 \$261,531 \$ 2038 \$ - \$ - \$ 160,113.32 \$1,637,829.20 \$11,389 \$102,165 \$26,705 \$239,569 \$11,23,000 \$232,721 \$0 \$268,669 \$5,11 \$ 2039 \$ - \$ 159,312.75 \$311,673 \$27,373 \$250,000 \$238,539 \$0 \$274,771 \$ 2040 \$ - \$ 158,516.19 \$11,965 \$28,057 \$28,057 \$224,503 \$0 \$281,640 \$2041 \$ - \$ 157,723.61 \$12,264 \$28,759 \$28,057 \$250,615 \$0 \$288,681 \$ 2042 \$ - \$ 156,934.99 \$12,571 \$29,478 \$250,000 \$263,302 \$0 \$303,296 \$ 2044 \$ - \$ 155,693.69 \$13,207 \$30,970 \$256,880 \$0 \$225,888 \$0 \$30,296 \$ 2044 \$ - \$ 155,695.66 \$13,207 \$30,970 \$266,885 \$0 \$318,660 \$2047 \$ - \$ 153,819,75 \$13,876 \$32,538 \$250,000 \$239,537 \$0 \$334,782 \$2047 \$ - \$ 153,050.66 \$14,223 \$333,351 \$250,000 \$290,637 \$0 \$334,782 \$2048 \$ - \$ 153,050.66 \$14,223 \$333,351 \$250,000 \$290,637 \$0 \$334,782 \$2048 \$ - \$ 153,050.66 \$14,223 \$333,351 \$250,000 \$290,637 \$0 \$334,782 \$259,903 \$0 \$343,151 \$2046 \$ - \$ 153,050.66 \$14,223 \$333,351 \$250,000 \$259,637 \$0 \$334,782 \$259,903 \$0 \$343,151 \$2046 \$ - \$ 153,050.66 \$14,223 \$333,351 \$250,000 \$259,637 \$0 \$343,151 \$2047 \$ - \$ 154,592.72 \$13,537 \$31,744 \$250,000 \$259,637 \$0 \$334,782 \$250,000 \$259,637 \$0 \$334,782 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$343,151 \$250,000 \$259,637 \$0 \$3	2030	\$ -		\$	166,664.39		\$9,347		\$21,918		\$89,000		\$191,005	\$89,000	\$220,017	
2033 \$. \$ 164,176,90 \$10,066 \$23,604 \$89,000 \$205,691 \$89,000 \$236,934 \$2034 \$. \$ 163,356,02 \$10,317 \$24,194 \$89,000 \$210,834 \$89,000 \$242,858 \$2035 \$. \$ 162,539,24 \$10,575 \$24,798 \$339,000 \$216,105 \$89,000 \$248,929 \$2036 \$. \$ 161,726,54 \$10,840 \$25,418 \$221,507 \$0 \$255,152 \$2037 \$. \$ 160,917,91 \$11,111 \$26,054 \$227,045 \$0 \$221,507 \$0 \$255,152 \$2037 \$. \$ 160,113,32 \$1,637,829,20 \$11,898 \$102,165 \$26,705 \$239,569 \$11,123,000 \$232,721 \$0 \$268,669 \$5,11 \$2039 \$. \$ 159,312,75 \$11,673 \$27,373 \$250,000 \$238,539 \$0 \$274,771 \$2040 \$. \$ 158,516,19 \$11,965 \$28,057 \$28,057 \$224,503 \$0 \$281,640 \$2041 \$. \$ 157,723,61 \$12,264 \$28,759 \$29,478 \$256,615 \$0 \$286,681 \$2042 \$. \$ 156,150,32 \$12,264 \$28,759 \$29,478 \$256,615 \$0 \$286,681 \$2042 \$. \$ 156,6150,32 \$12,264 \$28,759 \$29,478 \$256,600 \$263,302 \$0 \$303,296 \$2044 \$. \$ 156,569,56 \$13,207 \$30,970 \$269,885 \$0 \$291,878 \$2046 \$. \$ 155,369,56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 \$2046 \$. \$ 153,819,75 \$13,837 \$31,744 \$250,000 \$228,348 \$0 \$326,617 \$2047 \$. \$ 153,819,75 \$13,837 \$31,744 \$250,000 \$228,348 \$0 \$326,617 \$2047 \$. \$ 153,819,75 \$13,837 \$31,744 \$250,000 \$290,637 \$0 \$334,185 \$2048 \$. \$ 151,523,97 \$1,709,279,92 \$14,943 \$134,050 \$34,185 \$256,000 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$2049 \$. \$ 151,523,97 \$1,709,279,92 \$14,943 \$134,050 \$256,000 \$2,568,000 \$2,568,000 \$5,931,236 \$10,068,000 \$6,833,071 \$13,81 \$2049 \$. \$ 151,523,97 \$1,709,279,92 \$14,943 \$134,050 \$256,000 \$2,568,000 \$2,568,000 \$2,568,000 \$6,833,071 \$13,81 \$2049 \$. \$ 151,523,97 \$1,709,279,92 \$14,943 \$134,050 \$256,000 \$2,568,000 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$256,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,568,000 \$2,5	2031	\$ -		\$	165,831.07		\$9,581		\$22,466		\$339,000		\$195,780	\$89,000	\$225,517	
2034 \$ - \$ 163,356.02 \$10,317 \$24,194 \$89,000 \$210,834 \$89,000 \$242,858 \$2035 \$ - \$ 162,539.24 \$10,575 \$24,798 \$339,000 \$216,105 \$89,000 \$248,929 \$2036 \$ - \$ 161,726.54 \$10,840 \$25,418 \$221,507 \$0 \$255,152 \$2037 \$ - \$ 160,917.91 \$11,111 \$26,054 \$25,418 \$227,045 \$0 \$261,531 \$2038 \$ - \$ 160,113.32 \$1,637,829.20 \$11,389 \$102,165 \$26,054 \$239,569 \$1,123,000 \$232,721 \$0 \$268,069 \$5,11 \$2039 \$ - \$ 159,312.75 \$11,673 \$27,373 \$227,373 \$250,000 \$238,539 \$0 \$274,771 \$2040 \$ - \$ 158,516.19 \$11,965 \$28,057 \$224,503 \$0 \$281,640 \$244,503 \$0 \$281,640 \$2041 \$ - \$ 157,723.61 \$12,264 \$28,057 \$229,478 \$250,000 \$263,302 \$0 \$303,296 \$2043 \$ - \$ 156,934.99 \$12,571 \$29,478 \$29,478 \$250,000 \$263,302 \$0 \$303,296 \$2043 \$ - \$ 155,369,56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 \$2045 \$ - \$ 155,369,56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 \$2045 \$ - \$ 155,369,56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 \$2045 \$ - \$ 153,539,566 \$13,207 \$331,744 \$250,000 \$228,354 \$0 \$316,650 \$2045 \$ - \$ 153,539,566 \$13,207 \$331,744 \$250,000 \$228,354 \$0 \$316,650 \$2045 \$ - \$ 153,695,66 \$13,207 \$331,744 \$250,000 \$228,354 \$0 \$316,650 \$2045 \$ - \$ 153,695,66 \$13,207 \$331,744 \$250,000 \$228,354 \$0 \$316,650 \$2045 \$ - \$ 153,695,66 \$13,207 \$333,351 \$250,000 \$229,637 \$0 \$334,151 \$2049 \$ - \$ 153,050,66 \$14,223 \$333,351 \$250,000 \$290,637 \$0 \$334,151 \$2049 \$ - \$ 153,050,66 \$14,223 \$333,351 \$250,000 \$290,637 \$0 \$335,730 \$6,40 \$2049 \$ - \$ 153,050,66 \$14,223 \$333,351 \$250,000 \$290,637 \$0 \$335,730 \$6,40 \$2049 \$ - \$ 153,050,66 \$14,223 \$333,351 \$250,000 \$290,637 \$0 \$335,730 \$6,40 \$250,000 \$290,637 \$0 \$335,730 \$6,40 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,0	2032	\$ -		\$	165,001.91		\$9,820		\$23,028		\$89,000		\$200,675	\$89,000	\$231,155	
2035 \$ - \$ 162,539.24 \$10,575 \$24,798 \$339,000 \$216,105 \$89,000 \$248,929 \$ 2036 \$ - \$ 161,726.54 \$10,840 \$25,418 \$221,507 \$0 \$255,152 \$ 2037 \$ - \$ 160,917.91 \$11,111 \$26,054 \$26,054 \$227,045 \$0 \$261,531 \$ 2038 \$ - \$ - \$ 160,113.32 \$1,637,829.20 \$11,389 \$102,165 \$26,705 \$239,569 \$11,23,000 \$232,721 \$0 \$268,069 \$5,11 \$ 2039 \$ - \$ 159,312.75 \$11,673 \$27,373 \$250,000 \$238,539 \$0 \$274,771 \$ 2040 \$ - \$ 158,516.19 \$11,965 \$28,057 \$28,057 \$224,503 \$0 \$281,640 \$2041 \$ - \$ 157,723.61 \$12,264 \$28,759 \$29,478 \$226,615 \$0 \$288,681 \$ 2042 \$ - \$ 156,934.99 \$12,571 \$29,478 \$250,000 \$263,302 \$0 \$303,296 \$ 2043 \$ - \$ 156,150.32 \$12,885 \$30,214 \$250,000 \$263,302 \$0 \$303,296 \$ 2044 \$ - \$ 155,369.56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 \$ 2045 \$ - \$ 154,592.72 \$13,537 \$31,744 \$250,000 \$229,637 \$0 \$334,782 \$ 2047 \$ - \$ 153,819.75 \$13,876 \$32,538 \$250,000 \$290,637 \$0 \$334,782 \$ 2049 \$ - \$ 152,285.40 \$14,278 \$334,185 \$250,000 \$290,637 \$0 \$334,782 \$ 2049 \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2049 \$ - \$ \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2056 \$20,000 \$20,037 \$0 \$343,151 \$2.5% \$20,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000 \$25,680,000	2033	\$ -		\$	164,176.90		\$10,066		\$23,604		\$89,000		\$205,691	\$89,000	\$236,934	
2036 \$ - \$ 161,726.54 \$10,840 \$25,418 \$221,507 \$0 \$255,152 \$ 2037 \$ - \$ 160,917.91 \$11,111 \$26,054 \$25,418 \$227,045 \$0 \$261,531 \$ 2038 \$ - \$ - \$ 160,113.32 \$1,637,829.20 \$11,389 \$102,165 \$26,705 \$239,569 \$11,23,000 \$232,721 \$0 \$268,069 \$5,11 \$ 2039 \$ - \$ 159,312.75 \$11,673 \$27,373 \$250,000 \$238,539 \$0 \$274,771 \$ 2040 \$ - \$ 158,516.19 \$11,965 \$28,057 \$244,503 \$0 \$281,640 \$ 2041 \$ - \$ 157,723.61 \$12,264 \$28,759 \$250,000 \$238,539 \$0 \$281,640 \$ 2042 \$ - \$ 156,934.99 \$12,571 \$29,478 \$250,000 \$263,302 \$0 \$295,898 \$ 2043 \$ - \$ 156,150.32 \$12,885 \$30,214 \$250,000 \$263,302 \$0 \$303,296 \$ 2044 \$ - \$ 155,369.56 \$13,207 \$30,970 \$269,885 \$0 \$318,650 \$2046 \$ - \$ 154,592.72 \$13,537 \$31,744 \$250,000 \$226,885 \$0 \$318,650 \$2046 \$ - \$ 153,819.75 \$13,876 \$32,538 \$250,000 \$290,637 \$0 \$334,782 \$ 2048 \$ - \$ 153,050.65 \$14,223 \$33,351 \$250,000 \$290,637 \$0 \$334,782 \$ 2049 \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,85 \$ 2049 \$ - \$ \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,85 \$ 2049 \$ - \$ \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$25,680,00 \$5,931,236 \$1,068,000 \$6,833,071 \$13,85 \$ 2049 \$ - \$ \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$25,680,00 \$5,931,236 \$1,068,000 \$6,833,071 \$13,85 \$ 2049 \$ - \$ \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$25,680,00 \$5,931,236 \$1,068,000 \$6,833,071 \$13,85 \$ 2049 \$ - \$ \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$25,680,00 \$5,931,236 \$1,068,000 \$6,833,071 \$13,85 \$ 2049 \$ - \$ \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$25,680,00 \$5,931,236 \$1,068,000 \$6,833,071 \$13,85 \$ 2049 \$ - \$ \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$25,680,00 \$5,931,236 \$1,068,000 \$6,833,071 \$13,85 \$ 2049 \$ - \$ \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000 \$250,000	2034	\$ -		\$	163,356.02		\$10,317		\$24,194		\$89,000		\$210,834	\$89,000	\$242,858	
2037 \$ - \$ 160,917,91 \$11,111 \$26,054 \$239,569 \$1,123,000 \$232,721 \$0 \$268,069 \$5,11 2038 \$ - \$ - \$ 160,113.32 \$1,637,829.20 \$11,389 \$102,165 \$26,705 \$239,569 \$1,123,000 \$232,721 \$0 \$268,069 \$5,11 2039 \$ - \$ 159,312.75 \$11,673 \$27,373 \$250,000 \$238,539 \$0 \$274,771 2040 \$ - \$ 158,516.19 \$11,965 \$28,057 \$244,503 \$0 \$281,640 \$2041 \$ - \$ 157,723.61 \$12,264 \$28,759 \$250,000 \$238,539 \$0 \$281,640 \$2041 \$ - \$ 157,723.61 \$12,264 \$28,759 \$250,015 \$0 \$288,681 \$2042 \$ - \$ 156,934.99 \$12,571 \$29,478 \$250,000 \$263,302 \$0 \$295,898 \$2043 \$ - \$ 156,150.32 \$12,885 \$30,214 \$250,000 \$263,302 \$0 \$303,296 \$2044 \$ - \$ 155,369.56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 \$2045 \$ - \$ 154,592.72 \$13,537 \$31,744 \$276,632 \$0 \$318,650 \$2046 \$ - \$ 153,819.75 \$13,876 \$32,538 \$250,000 \$290,637 \$0 \$334,782 \$2047 \$ - \$ 153,050.65 \$14,223 \$33,351 \$250,000 \$290,637 \$0 \$334,782 \$2048 \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$305,350 \$0 \$343,151 \$2.5% annual gas tax decrease \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000 \$10,000	2035	\$ -		\$	162,539.24		\$10,575		\$24,798		\$339,000		\$216,105	\$89,000	\$248,929	
2038 \$ - \$ - \$ 160,113.32 \$ 1,637,829.20 \$11,389 \$102,165 \$ 26,705 \$239,569 \$ \$1,123,000 \$232,721 \$ 0 \$268,069 \$5,11 \$2039 \$ - \$ 159,312.75 \$ 11,673 \$27,373 \$250,000 \$238,539 \$ 0 \$274,771 \$ 2040 \$ - \$ 158,516.19 \$11,965 \$28,057 \$ \$244,503 \$ 0 \$281,640 \$ 2041 \$ - \$ 157,723.61 \$12,264 \$28,759 \$ \$250,615 \$ 0 \$288,681 \$ 2042 \$ - \$ 156,934.99 \$12,571 \$29,478 \$ 226,880 \$ 0 \$256,880 \$ 0 \$295,898 \$ 2043 \$ - \$ 156,150.32 \$12,885 \$30,214 \$250,000 \$263,302 \$ 0 \$303,296 \$ 2044 \$ - \$ 155,369.56 \$13,207 \$30,970 \$ \$269,885 \$ 0 \$310,878 \$ 2045 \$ - \$ 154,592.72 \$13,537 \$31,744 \$ 2276,632 \$0 \$318,650 \$ 2046 \$ - \$ 153,819.75 \$13,876 \$32,538 \$250,000 \$228,548 \$0 \$326,617 \$ 2047 \$ - \$ 153,050.65 \$14,223 \$33,351 \$250,000 \$229,637 \$0 \$334,782 \$ 2048 \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$5,331,268 \$0 \$343,151 \$ 2049 \$ - \$ \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$256,800 \$5,331,268 \$10,000 \$6,833,071 \$13,850 \$ 256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$256,000 \$2566,000 \$2566,000 \$2566,000 \$2566,000 \$2566,000 \$2566,000 \$2566,000 \$2566,000 \$2566,000 \$2566,000 \$2566,000 \$2566,000 \$2566,0	2036	\$ -		\$	161,726.54		\$10,840		\$25,418				\$221,507	\$0	\$255,152	
2039 \$ - \$ 159,312.75 \$ \$11,673 \$ \$27,373 \$ \$250,000 \$ \$238,539 \$ \$0 \$ \$274,771 \$ \$2040 \$ - \$ \$ 158,516.19 \$ \$11,965 \$ \$28,057 \$ \$244,503 \$ \$0 \$ \$281,640 \$ \$2041 \$ - \$ \$ 157,723.61 \$ \$12,264 \$ \$28,759 \$ \$250,615 \$ \$0 \$ \$288,681 \$ \$2042 \$ - \$ \$ 156,934.99 \$ \$12,571 \$ \$29,478 \$ \$250,000 \$ \$256,880 \$ 0 \$295,898 \$ \$2043 \$ - \$ \$ 156,150.32 \$ \$12,885 \$ \$30,214 \$ \$250,000 \$ \$263,302 \$ \$0 \$303,296 \$ \$2044 \$ - \$ \$ 155,369.56 \$ \$13,207 \$ \$30,970 \$ \$269,885 \$ \$0 \$310,878 \$ \$ \$ \$ 155,369.56 \$ \$13,207 \$ \$30,970 \$ \$269,885 \$ \$0 \$310,878 \$ \$ \$ \$ \$ 154,592.72 \$ \$13,537 \$ \$31,744 \$ \$ \$276,632 \$ \$0 \$318,650 \$ \$ \$ \$ 154,592.72 \$ \$13,537 \$ \$31,744 \$ \$250,000 \$ \$283,548 \$ \$0 \$326,617 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	2037	\$ -		\$	160,917.91		\$11,111		\$26,054				\$227,045	\$0	\$261,531	
2040 \$ - \$ 158,516.19 \$11,965 \$28,057 \$2244,503 \$0 \$281,640 \$ 2041 \$ - \$ 157,723.61 \$12,264 \$28,759 \$250,615 \$0 \$288,681 \$ 2042 \$ - \$ 156,934.99 \$12,571 \$29,478 \$250,000 \$256,880 \$0 \$295,898 \$ 2043 \$ - \$ 156,150.32 \$12,885 \$30,214 \$250,000 \$263,302 \$0 \$303,296 \$ 2044 \$ - \$ 155,369.56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 \$ 2045 \$ - \$ 154,592.72 \$13,537 \$31,744 \$250,000 \$269,885 \$0 \$310,878 \$ 2046 \$ - \$ 153,819.75 \$13,876 \$32,538 \$256,830 \$283,548 \$0 \$326,617 \$ 2047 \$ - \$ 153,050.65 \$14,223 \$33,351 \$250,000 \$2283,548 \$0 \$326,617 \$ 2048 \$ - \$ 152,285.40 \$14,578 \$341,85 \$250,000 \$229,637 \$0 \$334,782 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$256,800 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$256,800 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$256,800 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$256,800 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$256,800 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$256,000 \$2,568,000 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13,81 \$13	2038	\$ -	\$ -	\$	160,113.32	\$ 1,637,829.20	\$11,389	\$102,165	\$26,705	\$239,569		\$1,123,000	\$232,721	\$0	\$268,069	\$5,115,524
2041 \$ - \$ 157,723.61 \$12,264 \$28,759 \$250,615 \$0 \$288,681 \$ 2042 \$ - \$ 156,934.99 \$12,571 \$29,478 \$250,000 \$256,880 \$0 \$295,898 \$ 2043 \$ - \$ 156,150.32 \$12,885 \$30,214 \$250,000 \$263,302 \$0 \$303,296 \$ 2044 \$ - \$ 155,369.56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 \$ 2045 \$ - \$ 154,592.72 \$13,537 \$31,744 \$250,000 \$267,632 \$0 \$318,650 \$ 2046 \$ - \$ 154,592.72 \$13,537 \$31,744 \$250,000 \$276,632 \$0 \$318,650 \$ 2047 \$ - \$ 153,050.65 \$14,223 \$33,351 \$250,000 \$290,637 \$0 \$334,782 \$ 2048 \$ - \$ 152,285.40 \$14,273 \$33,351 \$250,000 \$290,637 \$0 \$334,782 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$13,81 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$	2039	\$ -		\$	159,312.75		\$11,673		\$27,373		\$250,000		\$238,539	\$0	\$274,771	
2042 \$ - \$ 156,934,99 \$12,571 \$29,478 \$250,000 \$256,880 \$0 \$295,898 \$ 2043 \$ - \$ 156,150.32 \$12,885 \$30,214 \$250,000 \$263,302 \$0 \$303,296 \$ 2044 \$ - \$ 155,369,56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 \$ 2045 \$ - \$ 154,592,72 \$13,537 \$31,744 \$276,632 \$0 \$318,650 \$ 2046 \$ - \$ 153,819,75 \$13,876 \$32,538 \$256,800 \$283,548 \$0 \$326,617 \$ 2047 \$ - \$ 153,819,75 \$13,876 \$32,538 \$250,000 \$290,637 \$0 \$343,782 \$ 2048 \$ - \$ 152,285,40 \$14,273 \$33,351 \$250,000 \$290,637 \$0 \$343,782 \$ 2049 \$ - \$ - \$ 151,523,97 \$1,709,279,92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$305,350 \$0 \$351,730 \$6,40 \$ Totals \$ - \$ 4,197,329,30 \$290,254 \$278,581 \$680,621 \$653,248 \$2,568,000 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2.5% annual increase tax decrease \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,0	2040	\$ -		\$	158,516.19		\$11,965		\$28,057				\$244,503	\$0	\$281,640	
2043 \$ - \$ 156,150.32 \$12,885 \$30,214 \$250,000 \$263,302 \$0 \$303,296 2044 \$ - \$ 155,369.56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 2045 \$ - \$ 154,592.72 \$13,537 \$31,744 \$276,632 \$0 \$318,650 2046 \$ - \$ 153,819.75 \$13,876 \$32,538 \$283,548 \$0 \$326,617 2047 \$ - \$ 153,050.65 \$14,223 \$33,351 \$250,000 \$290,637 \$0 \$334,782 2048 \$ - \$ 152,285.40 \$14,578 \$34,185 \$297,903 \$0 \$343,151 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$305,350 \$0 \$351,730 \$6,40 Totals \$ - \$ 4,197,329.30 \$290,254 \$278,581 \$680,621 \$653,248 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,8 <t< td=""><td>2041</td><td>\$ -</td><td></td><td>\$</td><td>157,723.61</td><td></td><td>\$12,264</td><td></td><td>\$28,759</td><td></td><td></td><td></td><td>\$250,615</td><td>\$0</td><td>\$288,681</td><td></td></t<>	2041	\$ -		\$	157,723.61		\$12,264		\$28,759				\$250,615	\$0	\$288,681	
2044 \$ - \$ 155,369.56 \$13,207 \$30,970 \$269,885 \$0 \$310,878 \$ 2045 \$ - \$ 154,592.72 \$13,537 \$31,744 \$276,632 \$0 \$318,650 \$ 2046 \$ - \$ 153,819.75 \$13,876 \$32,538 \$250,000 \$290,637 \$0 \$343,4782 \$ 2047 \$ - \$ 153,050.65 \$14,223 \$33,351 \$250,000 \$290,637 \$0 \$334,782 \$ 2048 \$ - \$ 152,285.40 \$14,578 \$34,185 \$290,200 \$297,903 \$0 \$343,151 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$305,350 \$0 \$351,730 \$6,40 \$ Totals \$ - \$ 4,197,329.30 \$290,254 \$278,581 \$680,621 \$653,248 \$2,568,000 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,8 \$ 5% annual gas tax decrease \$2.5% annual increase \$2.5% annual	2042	\$ -		\$	156,934.99		\$12,571		\$29,478				\$256,880	\$0	\$295,898	
2045 \$ - \$ 154,592.72 \$13,537 \$31,744 \$276,632 \$0 \$318,650 \$ 2046 \$ - \$ 153,819.75 \$13,876 \$32,538 \$250,000 \$290,637 \$0 \$326,617 \$ 2047 \$ - \$ 153,050.65 \$14,223 \$33,351 \$250,000 \$290,637 \$0 \$334,782 \$ 2048 \$ - \$ 152,285.40 \$14,578 \$34,185 \$297,903 \$0 \$343,151 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$305,350 \$0 \$351,730 \$6,40 \$ Totals \$ - \$ 4,197,329.30 \$290,254 \$278,581 \$680,621 \$653,248 \$2,568,000 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2.5% annual increase tax decrease \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$10	2043	\$ -		\$	156,150.32		\$12,885		\$30,214		\$250,000		\$263,302	\$0	\$303,296	
2046 \$ - \$ 153,819.75 \$ 13,876 \$ 32,538 \$ \$ 250,000 \$ 290,637 \$ 0 \$ 334,782 \$ 2048 \$ - \$ 152,285.40 \$ 14,578 \$ 34,185 \$ 297,903 \$ 0 3343,151 \$ 2049 \$ - \$ - \$ 151,523.97 \$ 1,709,279.92 \$ 14,943 \$ 134,050 \$ 35,040 \$ 314,335 \$ 375,000 \$ 305,350 \$ 0 \$ 335,730 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,40 \$ 6,	2044	\$ -		\$	155,369.56		\$13,207		\$30,970				\$269,885	\$0	\$310,878	
2047 \$ - \$ 153,050.65 \$14,223 \$33,351 \$250,000 \$290,637 \$0 \$334,782 \$ 2048 \$ - \$ 152,285.40 \$14,578 \$34,185 \$297,903 \$0 \$343,151 \$ 2049 \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$305,350 \$0 \$351,730 \$6,40 \$ Totals \$ - \$ 4,197,329.30 \$290,254 \$278,581 \$680,621 \$653,248 \$2,568,000 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ 2	2045	\$ -		\$	154,592.72		\$13,537		\$31,744				\$276,632	\$0	\$318,650	
2048 \$ - \$ 152,285.40 \$14,578 \$34,185 \$297,903 \$0 \$343,151 \$ 2049 \$ - \$ - \$ 151,523.97 \$1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$305,350 \$0 \$351,730 \$6,40 \$ Totals \$ - \$ 4,197,329.30 \$290,254 \$278,581 \$680,621 \$653,248 \$2,568,000 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,81 \$ Solution \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000	2046	\$ -		\$	153,819.75		\$13,876		\$32,538				\$283,548	\$0	\$326,617	
2049 \$ - \$ - \$ 151,523.97 \$ 1,709,279.92 \$14,943 \$134,050 \$35,040 \$314,335 \$750,000 \$305,350 \$0 \$351,730 \$6,40 Totals \$ - \$ 4,197,329.30 \$290,254 \$278,581 \$680,621 \$653,248 \$2.568,000 \$2,568,000 \$5,931,236 \$1,068,000 \$6,833,071 \$13,80 2	2047	\$ -		\$	153,050.65		\$14,223		\$33,351		\$250,000		\$290,637	\$0	\$334,782	
Totals \$ - \$ 4,197,329.30	2048	\$ -		\$	152,285.40		\$14,578		\$34,185				\$297,903	\$0	\$343,151	
.5% annual gas tax decrease 2.5% annual increase	2049	\$ -	\$ -	\$	151,523.97	\$ 1,709,279.92	\$14,943	\$134,050	\$35,040	\$314,335		\$750,000	\$305,350	\$0	\$351,730	\$6,407,890
Second S		\$ -		\$ 4	4,197,329.30		\$290,254	\$278,581	\$680,621	\$653,248	\$2,568,000	\$2,568,000	\$5,931,236	\$1,068,000	\$6,833,071	\$13,832,308
every four years from "YOE" "YOE" "YOE" "YOE" "YOE"	sumptions										year from G to 2025 ar	eneral Fund d \$250,000	annual increase		annual increase	

Source: City of Rogue River

Jackson County

Jackson County owns and maintains a portion of the regional roadway network in the MRMPO. Therefore, the county's revenues and expenses shown in Table B-4 reflects the portion of the county's population and roadway network within the MRMPO planning area. A 2.5% annual "year of expenditure" (YOE) or inflation factor is used to estimate future maintenance and operations costs.

Table B-4

						Jacks	on County	,						
			Str	eet Systen	n Local Re	venues a	nd Non-C	apital Exp	enses (\$	x 1,000)				
			(County Re	venue Soι	ırces						Non-Capi	tal Expens	ses
		,					Loc	al						
Year	Federal	Subtotal Federal	State	Subtotal State	System Dev Charges	Subtotals SDC	Street Utility Fee	Subtotals SUF	Misc.	Subtotal Misc	Admin	Debt Service	Maint.	Subtotal Non Capital
2024	\$1,076		\$22,395		\$809		\$0		\$3,718		\$2,914	\$29	\$6,443	
2025	\$1,103		\$22,955		\$829		\$0		\$3,811		\$2,987	\$29	\$6,572	
2026	\$1,131		\$23,529		\$850		\$0		\$3,906		\$3,062	\$0	\$6,737	
2027	\$1,159		\$24,117		\$871		\$0		\$4,004		\$3,138	\$0	\$6,905	
2028	\$1,188	\$5,658	\$24,720	\$117,716	\$893	\$4,252	\$0	\$0	\$4,104	\$19,541	\$3,217	\$0	\$7,078	\$49,111
2029	\$1,218		\$25,338		\$915		\$0		\$4,206		\$3,297	\$0	\$7,255	
2030	\$1,248		\$25,971		\$938		\$0		\$4,311		\$3,380	\$0	\$7,436	
2031	\$1,279		\$26,621		\$962		\$0		\$4,419		\$3,464	\$0	\$7,622	
2032	\$1,311		\$27,286		\$986		\$0		\$4,530		\$3,551	\$0	\$7,812	
2033	\$1,344		\$27,968		\$1,010		\$0		\$4,643		\$3,640	\$0	\$8,008	
2034	\$1,378		\$28,668		\$1,036		\$0		\$4,759		\$3,731	\$0	\$8,208	
2035	\$1,412		\$29,384		\$1,061		\$0		\$4,878		\$3,824	\$0	\$8,413	
2036	\$1,448		\$30,119		\$1,088		\$0		\$5,000		\$3,919	\$0	\$8,623	
2037	\$1,484		\$30,872		\$1,115		\$0		\$5,125		\$4,017	\$0	\$8,839	
2038	\$1,521	\$13,644	\$31,644	\$283,870	\$1,143	\$10,254	\$0	\$0	\$5,253	\$47,124	\$4,118	\$0	\$9,060	\$118,216
2039	\$1,559		\$32,435		\$1,172		\$0		\$5,384		\$4,221	\$0	\$9,286	
2040	\$1,598		\$33,246		\$1,201		\$0		\$5,519		\$4,326	\$0	\$9,519	
2041	\$1,638		\$34,077		\$1,231		\$0		\$5,657		\$4,434	\$0	\$9,757	
2042	\$1,679		\$34,929		\$1,262		\$0		\$5,798		\$4,545	\$0	\$10,000	
2043	\$1,721		\$35,802		\$1,293		\$0		\$5,943		\$4,659	\$0	\$10,250	
2044	\$1,764		\$36,697		\$1,326		\$0		\$6,092		\$4,775	\$0	\$10,507	
2045	\$1,808		\$37,614		\$1,359		\$0		\$6,244		\$4,895	\$0	\$10,769	
2046	\$1,853		\$38,555		\$1,393		\$0		\$6,400		\$5,017	\$0	\$11,039	
2047	\$1,899		\$39,518		\$1,427		\$0		\$6,560		\$5,143	\$0	\$11,315	
2048	\$1,947		\$40,506		\$1,463		\$0		\$6,724		\$5,271	\$0	\$11,597	
2049	\$1,996	\$19,461	\$41,519	\$404,897	\$1,500	\$14,626	\$0	\$0	\$6,892	\$67,215	\$5,403	\$0	\$11,887	\$168,617
Totals	\$38,762		\$806,483		\$29,132	\$29,132	\$0	\$0	\$133,880	\$133,880	\$104,949	\$58	\$230,937	\$335,944
ssumptions	2.5% annual inc. "YOE"		2.5% annual incr "YOE"		2.5% annua "YC		2.5% annua "YC		2.5% an		2.5% annual increase "YOE"		2.5% annual incr "YOE"	

Source: Jackson County

Josephine County

Josephine County owns and maintains a portion of the regional roadway network in the MRMPO. Therefore, the county's revenues and expenses shown in Table B-5 reflects the portion of the county's population and roadway network within the MRMPO planning area. A 2.5% annual "year of expenditure" (YOE) or inflation factor is used to estimate future maintenance and operations costs.

Table B-5

							hine Cou							
				Street System	Local R	evenues	and Non	-Capital Ex	kpense	s (\$ x 1,0	00)			
				City Revenu	e Source	es						Non-Cap	ital Expenses	
Year	Federl	Subtotal Federl	State	Subtotal State	System Dev Charges	Subtotals SDC	Street Utility Fee	Subtotals SUF	Misc.	Subtotal Misc	Admin	Debt Service	Maint.	Subtotal Non Capital
2024	\$0		\$ 9,841,241		\$0		\$0		\$0		\$603,580	\$0	\$9,544,000	
2025	\$0		\$ 10,133,959		\$0		\$0		\$0		\$615,652	\$0	\$9,734,880	
2026	\$0		\$ 10,193,047		\$0		\$0		\$0		\$627,965	\$0	\$9,929,578	
2027	\$0		\$ 10,195,899		\$0		\$0		\$0		\$640,524	\$0	\$10,128,169	
2028	\$0	\$0	\$ 10,501,776	\$ 50,865,922	\$0	\$0	\$0	\$0	\$0	\$0	\$653,334	\$0	\$10,330,733	\$52,808,414
2029	\$0		\$ 10,816,829		\$0		\$0		\$0		\$666,401	\$0	\$10,537,347	
2030	\$0		\$ 11,141,334		\$0		\$0		\$0		\$679,729	\$0	\$10,748,094	
2031	\$0		\$ 11,475,574		\$0		\$0		\$0		\$693,324	\$0	\$10,963,056	
2032	\$0		\$ 11,819,841		\$0		\$0		\$0		\$707,190	\$0	\$11,182,317	
2033	\$0		\$ 12,174,437		\$0		\$0		\$0		\$721,334	\$0	\$11,405,963	
2034	\$0		\$ 12,539,670		\$0		\$0		\$0		\$735,761	\$0	\$11,634,083	
2035	\$0		\$ 12,915,860		\$0		\$0		\$0		\$750,476	\$0	\$11,866,764	
2036	\$0		\$ 13,303,336		\$0		\$0		\$0		\$765,485	\$0	\$12,104,100	
2037	\$0		\$ 13,702,436		\$0		\$0		\$0		\$780,795	\$0	\$12,346,182	
2038	\$0	\$0	\$ 14,113,509	\$124,002,825	\$0	\$0	\$0	\$0	\$0	\$0	\$796,411	\$0	\$12,593,105	\$122,677,918
2039	\$0		\$ 14,536,914		\$0		\$0		\$0		\$812,339	\$0	\$12,844,967	
2040	\$0		\$ 14,973,021		\$0		\$0		\$0		\$828,586	\$0	\$13,101,867	
2041	\$0		\$ 15,422,212		\$0		\$0		\$0		\$845,158	\$0	\$13,363,904	
2042	\$0		\$ 15,884,878		\$0		\$0		\$0		\$862,061	\$0	\$13,631,182	
2043	\$0		\$ 16,361,425		\$0		\$0		\$0		\$879,302	\$0	\$13,903,806	
2044	\$0		\$ 16,852,268		\$0		\$0		\$0		\$896,888	\$0	\$14,181,882	
2045	\$0		\$ 17,357,836		\$0		\$0		\$0		\$914,826	\$0	\$14,465,520	
2046	\$0		\$ 17,878,571		\$0		\$0		\$0		\$933,122	\$0	\$14,754,830	
2047	\$0		\$ 18,414,928		\$0		\$0		\$0		\$951,785	\$0	\$15,049,927	
2048	\$0		\$ 18,967,376		\$0		\$0		\$0		\$970,821	\$0	\$15,350,925	
2049	\$0	\$0	\$ 19,536,397	\$186,185,824	\$0	\$0	\$0	\$0	\$0	\$0	\$990,237	\$0	\$15,657,944	\$166,191,878
Totals			\$ 361,054,572		\$0	\$0	\$0	\$0	\$0	\$0	\$20,323,085	\$0	\$321,355,124	\$341,678,209
Assumptions			3% annual increase "YOE"		% annua	increase	% annua	l increase			2% annual increase "YOE"		2% annual increase "YOE"	

Source: Josephine County

Table B-6 shows the estimated revenue projection for Josephine Community Transit (JCT) for 2024 to 2049. Assumptions are included at the bottom of the chart.

Table B-6: JCT Revenue Projections, FYE 2024 to 2049

					Revenues		•	•	
,	Year	5307 (FTA)	STIF	FTA (ODOT)	Grants Pass	Contract	Farebox	5309 Capital	TOTALS
		` '		` ,		Services		·	
	2024	\$ 1,073,500	\$ 1,378,995	\$ 661,854	\$ 137,500	\$ 62,000	\$ 98,500	\$ 628,000	\$ 4,040,349
Ę	2025	\$ 1,100,338	\$ 1,413,470	\$ 678,400	\$ 140,938	\$ 63,550	\$ 100,963	\$ 628,000	\$ 4,125,658
Short	2026	\$ 1,127,846	\$ 1,448,807	\$ 695,360	\$ 144,461	\$ 65,139	\$ 103,487	\$ 628,000	\$ 4,213,099
0,	2027	\$ 1,156,042	\$ 1,485,027	\$ 712,744	\$ 148,072	\$ 66,767	\$ 106,074	\$ 673,000	\$ 4,347,727
	2028	\$ 1,184,943	\$ 1,522,152	\$ 730,563	\$ 151,774	\$ 68,436	\$ 108,726	\$ 673,000	\$ 4,439,595
	2029	\$ 1,214,567	\$ 1,560,206	\$ 748,827	\$ 155,569	\$ 70,147	\$ 111,444	\$ 727,000	\$ 4,587,760
	2030	\$ 1,244,931	\$ 1,599,211	\$ 767,548	\$ 159,458	\$ 71,901	\$ 114,230	\$ 727,000	\$ 4,684,279
	2031	\$ 1,276,054	\$ 1,639,192	\$ 786,736	\$ 163,444	\$ 73,699	\$ 117,086	\$ 727,000	\$ 4,783,211
	2032	\$ 1,307,956	\$ 1,680,172	\$ 806,405	\$ 167,530	\$ 75,541	\$ 120,013	\$ 727,000	\$ 4,884,616
ן ⊑	2033	\$ 1,340,654	\$ 1,722,176	\$ 826,565	\$ 171,719	\$ 77,430	\$ 123,013	\$ 727,000	\$ 4,988,556
Medium	2034	\$ 1,374,171	\$ 1,765,230	\$ 847,229	\$ 176,012	\$ 79,365	\$ 126,088	\$ 727,000	\$ 5,095,095
₽	2035	\$ 1,408,525	\$ 1,809,361	\$ 868,410	\$ 180,412	\$ 81,349	\$ 129,241	\$ 750,000	\$ 5,227,298
	2036	\$ 1,443,738	\$ 1,854,595	\$ 890,120	\$ 184,922	\$ 83,383	\$ 132,472	\$ 750,000	\$ 5,339,230
	2037	\$ 1,479,832	\$ 1,900,960	\$ 912,373	\$ 189,545	\$ 85,468	\$ 135,783	\$ 750,000	\$ 5,453,961
	2038	\$ 1,516,827	\$ 1,948,484	\$ 935,182	\$ 194,284	\$ 87,604	\$ 139,178	\$ 750,000	\$ 5,571,560
	2039	\$ 1,554,748	\$ 1,997,196	\$ 958,562	\$ 199,141	\$ 89,794	\$ 142,657	\$ 772,000	\$ 5,714,099
	2040	\$ 1,593,617	\$ 2,047,126	\$ 982,526	\$ 204,120	\$ 92,039	\$ 146,224	\$ 772,000	\$ 5,837,651
	2041	\$ 1,633,457	\$ 2,098,304	\$ 1,007,089	\$ 209,223	\$ 94,340	\$ 149,879	\$ 772,000	\$ 5,964,293
	2042	\$ 1,674,294	\$ 2,150,762	\$ 1,032,266	\$ 214,453	\$ 96,699	\$ 153,626	\$ 772,000	\$ 6,094,100
	2043	\$ 1,716,151	\$ 2,204,531	\$ 1,058,073	\$ 219,814	\$ 99,116	\$ 157,467	\$ 772,000	\$ 6,227,152
Long	2044	\$ 1,759,055	\$ 2,259,644	\$ 1,084,525	\$ 225,310	\$ 101,594	\$ 161,404	\$ 772,000	\$ 6,363,531
임	2045	\$ 1,803,031	\$ 2,316,135	\$ 1,111,638	\$ 230,943	\$ 104,134	\$ 165,439	\$ 772,000	\$ 6,503,319
	2046	\$ 1,848,107	\$ 2,374,038	\$ 1,139,429	\$ 236,716	\$ 106,737	\$ 169,575	\$ 772,000	\$ 6,646,602
	2047	\$ 1,894,310	\$ 2,433,389	\$ 1,167,915	\$ 242,634	\$ 109,406	\$ 173,814	\$ 772,000	\$ 6,793,467
	2048	\$ 1,941,667	\$ 2,494,224	\$ 1,197,113	\$ 248,700	\$ 112,141	\$ 178,160	\$ 772,000	\$ 6,944,004
	2049	\$ 1,990,209	\$ 2,556,580	\$ 1,227,040	\$ 254,917	\$ 114,945	\$ 182,613	\$ 772,000	\$ 7,098,304
	Totals	\$38,658,569	\$49,659,965	\$23,834,493	\$ 4,951,610	\$2,232,726	\$3,547,153	\$ 19,084,000	\$141,968,516
	Assum	2.5% annual increase "YOE"	% annual increase "YOE"						

Source: Josephine Community Transit; RVCOG forecasting

Table B-7 shows the estimated expenses for Josephine Community Transit (JCT) for 2024 to 2049. Assumptions are included at the bottom of the chart.

Table B-7: JCT Estimated Expenses, FYE 2024 to 2049

				Expe	nse	s			
	Year	Ops		Maint		Admin	53	309 Capital	TOTALS
	2024	\$ 2,144,833	\$	567,000	\$	626,967	\$	700,000	\$ 4,038,800
t	2025	\$ 2,198,454	\$	581,175	\$	642,641	\$	700,000	\$ 4,122,270
Short	2026	\$ 2,253,415	\$	595,704	\$	658,707	\$	700,000	\$ 4,207,827
S	2027	\$ 2,309,751	\$	610,597	\$	675,175	\$	750,000	\$ 4,345,522
	2028	\$ 2,367,494	\$	625,862	\$	692,054	\$	750,000	\$ 4,435,410
	2029	\$ 2,426,682	\$	641,508	\$	709,356	\$	750,000	\$ 4,527,546
	2030	\$ 2,487,349	\$	657,546	\$	727,090	\$	810,000	\$ 4,681,984
	2031	\$ 2,549,532	\$	673,985	\$	745,267	\$	810,000	\$ 4,778,784
	2032	\$ 2,613,271	\$	690,834	\$	763,898	\$	810,000	\$ 4,878,004
٤	2033	\$ 2,678,603	\$	708,105	\$	782,996	\$	810,000	\$ 4,979,704
Medium	2034	\$ 2,745,568	\$	725,808	\$	802,571	\$	810,000	\$ 5,083,946
Me	2035	\$ 2,814,207	\$	743,953	\$	822,635	\$	835,000	\$ 5,215,795
	2036	\$ 2,884,562	\$	762,552	\$	843,201	\$	835,000	\$ 5,325,315
	2037	\$ 2,956,676	\$	781,616	\$	864,281	\$	835,000	\$ 5,437,573
	2038	\$ 3,030,593	\$	801,156	\$	885,888	\$	835,000	\$ 5,552,637
	2039	\$ 3,106,358	\$	821,185	\$	908,035	\$	860,000	\$ 5,695,578
	2040	\$ 3,184,017	\$	841,715	\$	930,736	\$	860,000	\$ 5,816,467
	2041	\$ 3,263,617	\$	862,758	\$	954,004	\$	860,000	\$ 5,940,379
	2042	\$ 3,345,207	\$	884,326	\$	977,855	\$	860,000	\$ 6,067,389
	2043	\$ 3,428,838	\$	906,435	\$	1,002,301	\$	860,000	\$ 6,197,573
ong.	2044	\$ 3,514,559	\$	929,096	\$	1,027,358	\$	860,000	\$ 6,331,013
۲	2045	\$ 3,602,423	\$	952,323	\$	1,053,042	\$	860,000	\$ 6,467,788
	2046	\$ 3,692,483	\$	976,131	\$	1,079,368	\$	860,000	\$ 6,607,983
	2047	\$ 3,784,795	\$	1,000,534	\$	1,106,353	\$	860,000	\$ 6,751,682
	2048	\$ 3,879,415	\$	1,025,548	\$	1,134,011	\$	860,000	\$ 6,898,974
	2049	\$ 3,976,400	\$	1,051,186	\$	1,162,362	\$	860,000	\$ 7,049,949
	Totals	\$ 77,239,100	\$2	20,418,638	\$	22,578,153	\$	21,200,000	\$ 141,435,891
	Assum	5% annual ease "YOE"		5% annual increase "YOE"	2.	5% annual increase "YOE"		% annual increase "YOE"	

Source: Josephine Community Transit; RVCOG forecasting

Table B-8 is a summary of revenues and expenses for JCT for 2024 to 2049. The analysis shows that transit revenues will exceed expenses through the planning horizon of 2049, based on carryover from the short-range timeframe of the plan.

Table B-8: JCT Revenue & Expense Summary, FYE 2024 to 2049

		СТ	Revenue Si	ım	mary				
Revenue Source	Fund	Time Frame							
			Short		Medium		Long		Totals
Federal	S5307	\$	5,642,669	\$	15,162,003	\$	17,853,897	\$	38,658,569
	NEMT	\$	-	\$	-	\$	-	\$	-
	5311	\$	-	\$	-	\$	-	\$	-
State	STIF	\$	7,248,451	\$	19,476,782	\$	22,934,732	\$	49,659,965
	FTA (ODOT)	\$	3,478,922	\$	9,347,957	\$	11,007,614	\$	23,834,493
Local	Contract Services	\$	325,892	\$	875,682	\$	1,031,152	\$	2,232,726
	Farebox Returns	\$	517,748	\$	1,391,204	\$	1,638,201	\$	3,547,153
	Grants Pass	\$	722,745	\$	1,942,036	\$	2,286,829	\$	4,951,610
Other Federal	CMAQ	\$	-	\$	-	\$	-	\$	-
	5309 Capital	\$	3,230,000	\$	8,134,000	\$	7,720,000	\$	19,084,000
	5310	\$	-	\$	-	\$	-	\$	-
Totals		\$	21,166,427	\$	56,329,663	\$	64,472,425	\$	141,968,516
JCT Expense Summary									
Expenses		Time Frame					Totals		
			Short	t Medium		Long			Totals
Operations		\$	11,273,947	\$	30,293,399	\$	35,671,754	\$	77,239,100
Maintenance		\$	2,980,338	\$	8,008,249	\$	9,430,051	\$	20,418,638
Administration		\$	3,295,545	\$	8,855,217	\$	10,427,391	\$	22,578,153
5309 Capital Grants		\$	3,600,000	\$	9,000,000	\$	8,600,000	\$	21,200,000
	Sub-total	\$	21,149,830	\$	56,156,865	\$	64,129,196	\$	141,435,891
Net Balance		\$	16,598	\$	189,396	\$	532,625	\$	532,625

Source: Josephine Community Transit; RVCOG forecasting

Appendix F

2021 Planning Emphasis Areas (PEAs)

Each fiscal year during the development of the Unified Planning Work Program (UPWP), the MPO reviews the current USDOT Planning Emphasis Areas to identify topics to address in the work program.

Tackling the Climate Crisis – Transition to a Clean Energy, Resilient Future

Federal Highway Administration (FHWA) divisions and Federal Transit Administration (FTA) regional offices should work with State departments of transportation (State DOT), metropolitan planning organizations (MPO), and providers of public transportation to ensure that our transportation plans and infrastructure investments help achieve the national greenhouse gas reduction goals of 50-52 percent below 2005 levels by 2030, and net-zero emissions by 2050, and increase resilience to extreme weather events and other disasters resulting from the increasing effects of climate change. Field offices should encourage State DOTs and MPOs to use the transportation planning process to accelerate the transition toward electric and other alternative fueled vehicles, plan for a sustainable infrastructure system that works for all users, and undertake actions to prepare for and adapt to the impacts of climate change. Appropriate Unified Planning Work Program work tasks could include identifying the barriers to and opportunities for deployment of fueling and charging infrastructure; evaluating opportunities to reduce greenhouse gas emissions by reducing single-occupancy vehicle trips and increasing access to public transportation, shift to lower emission modes of transportation; and identifying transportation system vulnerabilities to climate change impacts and evaluating potential solutions. We encourage you to visit FHWA's Sustainable Transportation or FTA's Transit and Sustainability Webpages for more information.

(See <u>EO 14008</u> on "Tackling the Climate Crisis at Home and Abroad," <u>EO 13990</u> on "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis." <u>EO 14030</u> on "Climate-Related Financial Risk," See also <u>FHWA Order 5520</u> "Transportation System Preparedness and Resilience to Extreme Weather Events," FTA's "Hazard Mitigation Cost Effectiveness Tool," FTA's "Emergency Relief Manual," and "TCRP Document 70: Improving the Resilience of Transit Systems Threatened by Natural Disasters")

Equity and Justice 40 in Transportation Planning

FHWA Division and FTA regional offices should work with State DOTs, MPOs, and providers of public transportation to advance racial equity and support for underserved and disadvantaged communities. This will help ensure public involvement in the planning process and that plans and strategies reflect various perspectives, concerns, and priorities from impacted areas. We encourage the use of strategies that:

- 1) improve infrastructure for non-motorized travel, public transportation access, and increased public transportation service in underserved communities;
- 2) plan for the safety of all road users, particularly those on arterials, through infrastructure improvements and advanced speed management;

- 3) reduce single-occupancy vehicle travel and associated air pollution in communities near high-volume corridors;
- 4) offer reduced public transportation fares as appropriate;
- 5) target demand-response service towards communities with higher concentrations of older adults and those with poor access to essential services; and
- 6) consider equitable and sustainable practices while developing transit-oriented development including affordable housing strategies and consideration of environmental justice populations.

Executive Order 13985 (Advancing Racial Equity and Support for Underserved Communities) defines the term "equity" as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. The term "underserved communities" refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of "equity." In addition, Executive Order 14008 and M-21-28 provides a whole-of-government approach to advancing environmental justice by stating that 40 percent of Federal investments flow to disadvantaged communities. FHWA Division and FTA regional offices should work with State DOTs, MPOs, and providers of public transportation to review current and new metropolitan transportation plans to advance Federal investments to disadvantaged communities.

To accomplish both initiatives, our joint planning processes should support State and MPO goals for economic opportunity in disadvantaged communities that have been historically marginalized and overburdened by pollution and underinvestment in housing, transportation, water and wastewater infrastructure, recreation, and health care.

Complete Streets

FHWA Division and FTA regional offices should work with State DOTs, MPOs and providers of public transportation to review current policies, rules, and procedures to determine their impact on safety for all road users. This effort should work to include provisions for safety in future transportation infrastructure, particularly those outside automobiles.

A complete street is safe, and feels safe, for everyone using the street. FHWA and FTA seek to help Federal aid recipients plan, develop, and operate streets and networks that prioritize safety, comfort, and access to destinations for people who use the street network, including pedestrians, bicyclists, transit riders, micro-mobility users, freight delivery services, and motorists. The goal is to provide an equitable and safe transportation network for travelers of all ages and abilities, including those from marginalized communities facing historic disinvestment. This vision is not achieved through a one-size-fits-all solution – each complete street is unique and developed to best serve its community context and its primary role in the network.

Per the National Highway Traffic Safety Administration's 2019 data, 62 percent of the motor vehicle crashes that resulted in pedestrian fatalities took place on arterials. Arterials tend to be designed for vehicle movement rather than mobility for non-motorized users and often lack convenient and safe crossing opportunities. They can function as barriers to a safe travel network for road users outside of vehicles.

To be considered complete, these roads should include safe pedestrian facilities, safe transit stops (if present), and safe crossing opportunities on an interval necessary for accessing destinations. A safe and complete network for bicycles can also be achieved through a safe and comfortable bicycle facility located on the roadway, adjacent to the road, or on a nearby parallel corridor. Jurisdictions will be encouraged to prioritize safety improvements and speed management on arterials that are essential to creating complete travel networks for those without access to single-occupancy vehicles.

Public Involvement

Early, effective, and continuous public involvement brings diverse viewpoints into the decision making process. FHWA Division and FTA regional offices should encourage MPOs, State DOTs, and providers of public transportation to increase meaningful public involvement in transportation planning by integrating Virtual Public Involvement (VPI) tools into the overall public involvement approach while ensuring continued public participation by individuals without access to computers and mobile devices. The use of VPI broadens the reach of information to the public and makes participation more convenient and affordable to greater numbers of people. Virtual tools provide increased transparency and access to transportation planning activities and decision making processes. Many virtual tools also provide information in visual and interactive formats that enhance public and stakeholder understanding of proposed plans, programs, and projects. Increasing participation earlier in the process can reduce project delays and lower staff time and costs. More information on VPI is available here.

<u>Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DOD) Coordination</u>

FHWA Division and FTA regional offices should encourage MPOs and State DOTs to coordinate with representatives from DOD in the transportation planning and project programming process on infrastructure and connectivity needs for STRAHNET routes and other public roads that connect to DOD facilities. According to the Declaration of Policy in 23 U.S.C. 101(b)(1), it is in the national interest to accelerate construction of the Federal-aid highway system, including the Dwight D. Eisenhower National System of Interstate and Defense Highways, because many of the highways (or portions of the highways) are inadequate to meet the needs of national and civil defense. The DOD's facilities include military bases, ports, and depots. The road networks that provide access and connections to these facilities are essential to national security. The 64,200-mile STRAHNET system consists of public highways that provide access, continuity, and emergency transportation of personnel and equipment in times of peace and war. It includes the entire 48,482 miles of the Dwight D. Eisenhower National System of Interstate and Defense Highways and 14,000 miles of other non-Interstate public highways on the National Highway System. The STRAHNET also contains approximately 1,800 miles of

connector routes linking more than 200 military installations and ports to the primary highway system. The DOD's facilities are also often major employers in a region, generating substantial volumes of commuter and freight traffic on the transportation network and around entry points to the military facilities. Stakeholders are encouraged to review the STRAHNET maps and recent Power Project Platform (PPP) <u>studies</u>. These can be a useful resource in the State and MPO areas covered by these route analyses.

Federal Land Management Agency (FLMA) Coordination

FHWA Division and FTA regional offices should encourage MPOs and State DOTs to coordinate with FLMAs in the transportation planning and project programming process on infrastructure and connectivity needs related to access routes and other public roads and transportation services that connect to Federal lands. Through joint coordination, the State DOTs, MPOs, Tribal Governments, FLMAs, and local agencies should focus on integration of their transportation planning activities and develop cross-cutting State and MPO long range transportation plans, programs, and corridor studies, as well as the Office of Federal Lands

Highway's developed transportation plans and programs. Agencies should explore opportunities to leverage transportation funding to support access and transportation needs of FLMAs before transportation projects are programmed in the Transportation Improvement Program (TIP) and Statewide Transportation Improvement Program (STIP). Each State must consider the concerns of FLMAs that have jurisdiction over land within the boundaries of the State (23 CFR 450.208(a)(3)). MPOs must appropriately involve FLMAs in the development of the metropolitan transportation plan and the TIP (23 CFR 450.316(d)). Additionally, the Tribal Transportation Program, Federal Lands Transportation Program, and the Federal Lands Access Program TIPs must be included in the STIP, directly or by reference, after FHWA approval in accordance with 23 U.S.C. 201(c) (23 CFR 450.218(e)).

Planning and Environment Linkages (PEL)

FHWA Division and FTA regional offices should encourage State DOTs, MPOs and Public Transportation Agencies to implement PEL as part of the transportation planning and environmental review processes. The use of PEL is a collaborative and integrated approach to transportation decision making that considers environmental, community, and economic goals early in the transportation planning process, and uses the information, analysis, and products developed during planning to inform the environmental review process. PEL leads to interagency relationship building among planning, resource, and regulatory agencies in the early stages of planning to inform and improve project delivery timeframes, including minimizing duplication and creating one cohesive flow of information. This results in transportation programs and projects that serve the community's transportation needs more effectively while avoiding and minimizing the impacts on human and natural resources. More information on PEL is available here.

Data in Transportation Planning

To address the emerging topic areas of data sharing, needs, and analytics, FHWA Division and FTA regional offices should encourage State DOTs, MPOs, and providers of public transportation to incorporate data sharing and consideration into the transportation planning process, because data assets have value across multiple programs. Data sharing principles and data management can be used for a variety of issues, such as freight, bike and pedestrian planning, equity analyses, managing curb space, performance management, travel time reliability, connected and autonomous vehicles, mobility services, and safety. Developing and advancing data sharing principles allows for efficient use of resources and improved policy and decision making at the State, MPO, regional, and local levels for all parties.



Office of the Administrator

1200 New Jersey Ave., SE Washington, D.C. 20590

Federal Transit Administration

December 30, 2021

Attention: FHWA Division Administrators

FTA Regional Administrators

Subject: 2021 Planning Emphasis Areas for use in the development of Metropolitan and

Statewide Planning and Research Work programs.

With continued focus on transportation planning the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) Offices of Planning are jointly issuing updated Planning Emphasis Areas (PEAs). The PEAs are areas that FHWA and FTA field offices should emphasize when meeting with the metropolitan planning organizations, State departments of transportation, Public Transportation Agencies, and Federal Land Management Agency counterparts to identify and develop tasks associated with the Unified Planning Work Program and the Statewide Planning and Research Program. We recognize the variability of work program development and update cycles, so we encourage field offices to incorporate these PEAs as programs are updated.

Please note that this letter is intended only to provide clarity regarding existing requirements. It is not binding and does not have the force and effect of law. All relevant statutes and regulations still apply.

Sincerely,

Enclosure

Nuria Fernandez Administrator

Federal Transit Administration

Stephanie Pollack Deputy Administrator

Federal Highway Administration

Herdry Pallack

Appendix G

End of Transportation Conformity Requirements Following 20 years of Maintenance for the Grants Pass PM_{10} Maintenance Area

Attached below is the Environmental Protection Agency (EPA) letter documenting the end of transportation conformity requirement for Grants Pass PM10 area, which has reached attainment.



January 24, 2024

Mr. Karl Welzenbach Planning Program Director Rogue Valley Council of Governments/Middle Rogue MPO 155 North 1st Street Central Point, Oregon 97502

Re: End of Transportation Conformity Requirements Following 20 years of Maintenance for the Grants Pass PM₁₀ Maintenance Area

Dear Mr. Welzenbach:

Our records indicate that the Grants Pass PM₁₀ area has reached the end of the 20-year maintenance period for the PM₁₀ National Ambient Air Quality Standard (NAAQS). Congratulations on reaching this milestone which is the culmination of efforts to reduce PM₁₀ in the Grants Pass area to healthy levels and maintain those levels for more than 20 years. The purpose of this letter is to provide information regarding transportation conformity requirements for a maintenance area that has achieved 20 years of maintenance.

Once the total of 20 years of maintenance has been achieved, the requirements for a transportation conformity determination as provided in CAA section 176(c) and 40 CFR part 93 no longer apply to the maintenance area unless the applicable implementation plan specifies otherwise. *See* 40 CFR 93.102(b)(4).

Additional information regarding the end of 20 years of maintenance is also presented in our Office of Transportation and Air Quality's guidance document titled "Transportation Conformity Guidance for Areas Reaching the End of the Maintenance Period; EPA-420-B-14-093, October 2014." available at http://nepis.epa.gov/Exe/ZyPDF.cgi/P100KPP0.PDF?Dockey=P100KPP0.PDF.

The EPA approved the first 10-year maintenance plan on October 27, 2003 (68 FR 61111) with an effective date of December 26, 2003. We approved the second 10-year Limited Maintenance Plan on July 30, 2015 (80 FR 45431) with an effective date of September 28, 2015. The Grants Pass PM₁₀ maintenance period spanned from December 26, 2003, through December 26, 2023. Therefore, as of December 27, 2023, Rogue Valley Council of Governments/Middle Rogue MPO is no longer required to address the transportation conformity requirements of 40 CFR part 93 for PM₁₀. As such, a conformity

determination is no longer required for the Rogue Valley Council of Governments/Middle Rogue MPO Regional Transportation Plan and Transportation Improvement Program.

Finally, we note that the other provisions of the second 10-year maintenance plan continue to remain in effect and all measures and requirements contained in the plan must be complied with until the state submits, and the EPA approves, a revision to the State Implementation Plan consistent with the anti-backsliding requirements of CAA section 110(I) and CAA section 193, if applicable. Furthermore, the maintenance requirement in CAA section 110(a)(1) remains in place for all areas, including attainment areas.

If there are any questions regarding transportation conformity or the Grants Pass PM₁₀ maintenance plan, please have your staff contact Tess Bloom, of my staff, at (206) 553-6362 or bloom.tess@epa.gov.

Sincerely,

KRISHNASWAMY
VISWANATHAN
Date: 2004.01.24 12-46.24 -06.00

Krishna Viswanathan Director Air and Radiation Division

cc: Ms. Ashley Bryers Federal Highway Administration

> Ms. Jasmine Harris Federal Highway Administration

Mr. Ned Conroy Federal Transit Administration

Ms. Natalie Liljenwall
Oregon Department of Transportation

Mr. Jeffrey Stocum
Oregon Department of Environmental Quality

Mr. Michael Orman
Oregon Department of Environmental Quality

Ms. Ann Marie Alfrey Mr. Rogue Valley Council of Governments

Mr. Ryan MacLaren Rogue Valley Metropolitan Planning Organization