

Air Quality Conformity Determination

For the

2021-2045 Regional Transportation Plan

Adopted DATE, 2021



Rogue Valley Metropolitan Planning Organization

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2021-2045 Regional Transportation Plan

Adopted DATE, 2021

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Synopsis

An Air Quality Conformity Determination (AQCD) for a plan and program is a finding that the plan and program conform to appropriate air quality requirements.

This AQCD shows that with the implementation of the Rogue Valley Metropolitan Planning Organization (RVMPO) 2021-2045 Regional Transportation Plan, current federal and state on-road air quality requirements will continue to be met in the Medford carbon monoxide (CO) and Medford-Ashland particulate matter (PM₁₀₎ Air Quality Maintenance Areas.

The CO and PM₁₀ Air Quality Maintenance Areas (AQMA) are two distinct maintenance areas with different boundaries. The CO AQMA encompasses the City of Medford's Urban Growth Boundary (UGB). The Medford-Ashland PM₁₀ AQMA covers about 228 square miles and approximates the Bear Creek Basin. The area is generally described as the Rogue Valley.

On December 15, 2015, the Oregon Department of Environmental Quality (ODEQ) submitted a Carbon Monoxide Limited Maintenance Plan (LMP) for the Medford area to EPA for approval. ODEQ submitted a supplemental plan to EPA on December 30, 2015. To be eligible for a CO LMP, an area has to have a design value at or below 7.65 ppm. Based on ODEQ's review of available data for Medford, the area met the requirements for an LMP. The CO LMP went into effect on September 19, 2016.

With the approval of the CO LMP, the area is exempt from performing a regional emissions analysis for CO and there is no "budget" test. The CO Maintenance area, however, must meet project level conformity analyses, and must respond to transportation conformity criteria in 40 CFR 93 Subpart A.

Conformity Criteria

On September 19, 2016, US-EPA approved a CO maintenance plan, known as a "limited maintenance plan" (LMP) for the Medford area. This limited maintenance plan has a 2025 horizon year. Because of the approved LMP, the Rogue Valley MPO no longer has to complete a regional emissions analysis for the Medford area for CO pursuant to 40 CFR 93.109(e).

However, all other transportation conformity requirements under 40 CFR 93.109(b) continue to apply. This RTP conformity determination meets all applicable requirements under the conformity rule as described below.

40 CFR 93.104 Frequency of conformity determinations.

Conformity of transportation plans and TIPS must be determined no less frequently than every four years. Conformity of plan and TIP amendments, except for those that add or delete exempt projects, must be demonstrated prior to approval of the action. All FHWA/FTA projects must be found to conform or must be re-conformed following any significant status or scope change, before they are adopted, accepted, approved or funded.

This conformity determination is for the RVMPO 2021 - 2045 Regional Transportation Plan (RTP). The next RTP update will occur in four years (March 2025).

40 CFR 93.105 Consultation

Interagency consultation procedures must be carried out in accord with OAR 340-252-0060 and the MPO's public involvement policies developed under 23 CFR Part 450.

A Pre-Analysis Consensus Plan and a draft of this document along with the project list (Appendix B) was circulated by the MPO to ODOT, US-EPA, and USDOT (FHWA and FTA) during interagency consultation. The air quality implications of each project were reviewed to determine which projects had the potential for hot spot requirements.

Public notice was provided on the MPO's web site and through emails to interested parties in the region. A public hearing was held at the policy committee review meeting, and the 30 day public comment period required by the MPO's Public Participation Plan was held.

The RVMPO Technical Advisory Committee (TAC), the standing committee for interagency consultation, reviewed the project list and subsequently reviewed the results of the public comment period and the interagency consultation. No comments were provided at the public hearing or were submitted during the public comment period.

The *project sponsor* is responsible for assuring the conformity of FHWA/FTA projects and regionally significant projects in the RTP or TIP for which hot spot analysis is required. The project sponsor is also responsible for distributing draft and final project environmental documents prepared by the project sponsor to other agencies. It is the responsibility of the project sponsor to consult with the affected transportation and air quality agencies prior to making a project level conformity determination. These activities occur during the project design planning phase.

40 CFR 93.108 *Transportation plans and TIPs must be fiscally constrained.* Fiscal constraint is described and affirmed in the 2042 RTP.

For the Medford PM_{10} maintenance area, all non-exempt projects in the 2021-45 RTP within the Medford-Ashland Air Quality Maintenance Area were reviewed under the interagency consultation process.

Analysis of future travel conditions shows that estimates of emissions of particulate matter (PM_{10}) within the Air Quality Maintenance Area are lower than permitted in corresponding state maintenance plans, which set emissions budgets. The table below show emissions budgets and summarizes estimated particulate matter emissions. As shown, RTP emissions in all applicable

analysis years under both transit cases are well below the established motor vehicle PM_{10} emission budgets. Across all analysis scenarios, total motor vehicle PM_{10} emissions are less than 48% of the budgets.

Table of Particulate Emissions*

Analysis Year	2017	2025	2035	2045
PM_{10} Budget	3,754 tons/year	3,754 tons/year	3,754 tons/year	3,754 tons/year
Estimated PM ₁₀ Emissions With Transit Service	1,401 tons/year	1,482 tons/year	1,616 tons/year	1,748 tons/year
Estimated PM ₁₀ Emissions <u>Withou</u> t Transit Service	1,413 tons/year	1,497 tons/year	1,634 tons/year	1,786 tons/year

^{*}Emissions estimates from 2021-45 RTP adopted DATE, 2021

The purpose of this document

An AQCD is required whenever the Regional Transportation Plan (RTP) or Transportation Improvement Program (TIP) is updated, or every four years, whichever comes first. The U.S. Department of Transportation (USDOT) conformed the current RTP in September of 2017. USDOT must make the conformity determination before the plan and program can go into effect.

In the Rogue Valley Metropolitan Planning Organization area, the conformity document must show that through the horizon of the plan and program air quality requirements for CO and PM_{10} will be met. Specifically:

Carbon Monoxide—The area encompassed by the Medford urban growth boundary (UGB) was re-designated from nonattainment to attainment by the U.S. Environmental Protection Agency (EPA) in 2002. A CO LMP was approved by EPA on September 19, 2017. As summarized above, the RVMPO is no longer required to complete an emissions analysis for CO, but must still comply with other conformity requirements under 40 CFR 93.109(b).

PM₁₀—The area within the Medford-Ashland Air Quality Maintenance Area, which is entirely within the RVMPO planning area, was re-designated from nonattainment to attainment by EPA in 2006, and the emissions budget shown above for PM₁₀ from transportation (mobile) sources was approved to maintain air quality.

Analysis by the RVMPO found that through the horizon of the RTP (2045) and in intervening years, PM₁₀ emissions from transportation will not exceed emission budgets, as shown in the table above.

Actions to be taken

The RVMPO Policy Committee, as the policy board for the federally designated Metropolitan Planning Organization in the urbanized area that includes the cities of Ashland, Talent, Phoenix, Jacksonville, Medford, Central Point, Eagle Point, Jackson County, Rogue Valley Transportation District (RVTD) and the Oregon Department of Transportation (ODOT), must formally adopt the findings described in this report. Then USDOT and the federal Environmental Protection Agency confer on the analysis. Ultimately, USDOT will make a conformity determination based on this document. At that time, the RVMPO's 2021-2045 RTP will go into effect.

Basis of the analysis

The analysis uses computer models to project the amounts of PM₁₀ anticipated in the respective planning area from on-road transportation. The region's travel demand model, developed jointly by RVMPO and ODOT, estimates the amount of vehicle travel anticipated, expressed as vehicle miles traveled (VMT). Emission factors are generated using an EPA-approved model. From these calculations, future emissions are estimated. The models takes into account several key factors that can change over time including population and employment growth, land-use changes, changes to the transportation system and motor vehicle technology.

Details of the Air Quality Conformity Determination

This report shows that with the implementation of the 2045 RTP, all current federal and state requirements for on-road transportation emissions within the planning area will be met. For the entire Medford-Ashland Air Quality Maintenance Area, an area within the RVMPO planning area, PM_{10} emissions from on-road transportation will not exceed the budget set by ODEQ and approved by EPA in 2006. This means that transportation projects will not impede the area in continuing to meet air quality requirements.

The report also describes the finding that since the EPA approved a CO LMP for the Medford CO Maintenance Area, the RVMPO is no longer required to complete a regional emissions analysis for CO.

In addition to the analysis itself, this report details how required consultation among appropriate agencies and organizations and the public occurred.

Resolution Number 2021 – 0X Rogue Valley Metropolitan Planning Organization - Policy Committee Adoption of Air Quality Conformity Determination for the RVMPO 2021-2045 Regional Transportation Plan

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

Whereas, the RVCOG has delegated responsibility for MPO policy functions to the RVMPO Policy Committee, a committee of elected officials from Ashland, Eagle Point, Central Point, Jacksonville, Medford, Phoenix, Talent, White City, Jackson County, the Rogue Valley Transportation District and the Oregon Department of Transportation; and

Whereas, a project identification and selection process was carried out through the development of the 2021-2045 Regional Transportation Plan (RTP); and

Whereas, a public involvement process was developed and implemented consistent with the RVMPO Public Participation Plan throughout the development of the RTP, TIP, and Air Quality Conformity Determination (AQCD); and

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

Whereas, the 2021-2045 RTP has been shown through this document to meet state and federal air quality requirements; and

Whereas, the demonstration of air quality conformity was based on inputs that produced conservative (high) emissions estimates including:

- Using annual average travel estimates rather than permitted lower winter estimates,
- Counting travel beyond air quality area boundaries in emission estimates,
- Using a constant length for unpaved roads through 2045 rather than assuming a continuation of the historic decline in unpaved-road miles,
- Not taking certain allowable emissions credits derived from transportation projects that improve air quality,
- Not assuming a transit mode share increase despite historic trend increases and planned projects and land use assumptions intended and expected to increase transit mode share, and
- Developing emissions estimates without transit service because the continuation of existing services is not fully constrained;

Whereas, the improvements contained in the 2021-2045 RTP demonstrates fiscal constraint;

NOW THEREFORE, the Metropolitan Planning Organization Policy Committee approves and adopts the attached Air Quality Conformity Determination for the Regional Transportation Plan and the Transportation Improvement Program.

Adopted by the Rogue	Valley Metropolitan Planning Orga	anization Policy Committee or	n this XX day of
DATE, 2021.			

Jim Lewis,	
MPO Policy Committee Chair	

(USDOT Conformity Determination to be inserted)



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1.0 OVERVIEW

This document is prepared by the Rogue Valley Metropolitan Planning Organization to demonstrate conformity of the 2021-2045 Rogue Valley Regional Transportation Plan (RTP) with the Clean Air Act, as required by federal and state requirements as set forth in 40 CFR 93.102(a)(1) and OAR 340-252-0010.

Federal air quality conformity requirements are described in 40 CFR Part 93. Oregon's Conformity State Implementation Plan (SIP), adopted by the Oregon Environmental Quality Commission (EQC) and approved by EPA, establishes rules and standards for determining air quality conformity of transportation plans, programs and projects within Oregon (OAR 340 Division 252). This conformity determination meets all federal and state conformity requirements.

1.1 Document Organizational Structure

This document is organized into three main sections. Section 1 provides a general overview of the document purpose. Section 2 lists the critical legislative requirements that must be met through this conformity determination, and shows how the RVMPO emissions analysis process meets requirements. This section includes details about analysis results. Section 3 summarizes the analysis demonstrating that the 2045 RTP is within emission budgets for area pollutants.

1.2 Changes Since Last Conformity Determination

USDOT approved the conformity for the RVMPO 2042 plan in September of 2017 (notification in Appendix B). A new conformity determination is necessary for adoption of the 2045 RTP. This conformity includes updates to the travel demand model network and other travel data and updating inputs to EPA's MOVES3 emissions model.

In the Medford-Ashland PM₁₀ maintenance area, the 2045 RTP adds new, financially constrained arterial and collector streets in some jurisdictions and these have been represented in an update to the travel demand model. As is typical for the RVMPO, most projects are exempt from conformity because they do not add network capacity, rather they add turn lanes, bicycle lanes and sidewalks. The largest source of funding that is under RVMPO discretion continues to be the Congestion Mitigation and Air Quality Program (CMAQ).

1.3 Status of Air Pollutants

The U.S. Environmental Protection Agency (EPA) has established health-based National Ambient Air Quality Standards (NAAQS) for six air pollutants: carbon monoxide (CO), particulate matter (PM₁₀ and PM_{2.5}), ozone (O3), sulfur dioxide (SO2), nitrogen dioxide (NO2) and lead (Pb). Areas that fail to meet the standards are designated "non-attainment" and are required to develop plans to come into compliance with the standards. Once compliance is achieved, a maintenance plan is developed to ensure that air quality will not be compromised in the future. Plans are approved by EPA and then included in the State Implementation Plan (SIP).

The SIPs also include measures to regulate emissions from non-mobile, or non-transportation related area sources and point sources. EPA defines an area source as a stationary source that emits less than 10 tons per year of a single hazardous air pollutant (HAP) or 25 tons per year of all HAPs combined. EPA defines a point source as stack, vent, duct, pipe or other confined air stream from which chemicals may be released to the air. Area and point sources are not addressed in this AQCD; this document demonstrates transportation conformity only.

The Medford Urban Growth Boundary (UGB) is a maintenance area for carbon monoxide (Medford CO maintenance area) and the Medford-Ashland Air Quality Maintenance Area is a maintenance area for particulate matter of less than 10 microns (PM_{10}). See Figure 1 on page 4 for more detail. Air quality for all other criteria pollutants meets the NAAQS and demonstration of conformity for these pollutants is not required. Rogue Valley Council of Governments (RVCOG) is the responsible agency for CO and PM_{10} conformity for state purposes.

Status of CO

EPA approved the Medford CO maintenance plan (State Implementation Plan or SIP), with a daily transportation emissions budget effective Sept. 23, 2002. Formal notice of approval is in Appendix A. The boundary of the Medford CO maintenance area is the Medford Urban Growth Boundary, as shown on Figure 1. The CO SIP also mandates a motor vehicle Inspection and Maintenance (I&M) program covering the entire Medford-Ashland Air Quality Maintenance Area (AQMA). All gasoline-powered motor vehicles registered to owners living within the Medford-Ashland AQMA must have vehicle emissions and on-board diagnostic systems tested biennially. Credits for this program are taken in the emissions factor calculation process described in section 2.3. There has not been a violation of the CO NAAQS in the maintenance area since 1991. While these data show that CO levels are in compliance with the NAAQS, demonstration of conformity relies upon compliance with the federal and state conformity regulations.

In December, 2015, the Oregon Department of Environmental Quality (ODEQ) submitted a Carbon Monoxide Limited Maintenance Plan (LMP) for the Medford area to EPA for approval. To be eligible for a CO LMP, an area has to have a design value at or below 7.65 ppm. Based on ODEQ's review of available CO emissions data for Medford, the area met the requirements for an LMP. The CO LMP went into effect on September 19, 2016.

With the approval of the CO LMP, the area is exempt from performing a regional emissions analysis for CO and there is no "budget" test. The CO Maintenance area, however, must meet project level conformity analyses, and must respond to transportation conformity criteria in 40 CFR 93 Subpart A.

The following links are the proposed and direct final rule.

https://www.federalregister.gov/articles/2016/07/20/2016-17060/air-plan-approval-oregonmedford-area-carbon-monoxide-second-10-year-maintenance-plan

https://www.federalregister.gov/articles/2016/07/20/2016-17058/approval-of-medford-oregoncarbon-monoxide-second-10-year-limited-maintenance-plan

Status of PM₁₀

EPA approved the PM₁₀ maintenance plan (State Implementation Plan or SIP) for the Medford-Ashland AQMA effective Aug. 18, 2006. Formal notice of approval is in Appendix A. The plan establishes an annual transportation emissions budget. The Medford-Ashland PM₁₀ AQMA is shown on Figure 1.

There have been no violations of the NAAQS for PM₁₀ since 1993. As with CO conformity, demonstration of PM₁₀ conformity relies on compliance with federal and state conformity regulations.

1.4 Purpose of this Determination

The RVMPO 2021-2045 RTP serves as the federally-required long range transportation plan for the Medford Urbanized Area. Federal and state regulations require these plans to demonstrate conformity to the State Implementation Plan. These regulations provide the basis for the RVMPO's issuance of a determination that projects in the 2045 RTP comply with the SIP as required by the Clean Air Act Amendments of 1990, codified in federal statute under 40 CFR Part 93, as amended January 2008, and state statute under OAR 340 Division 252.

1.5 Structure and Authority of the RVMPO and RVCOG

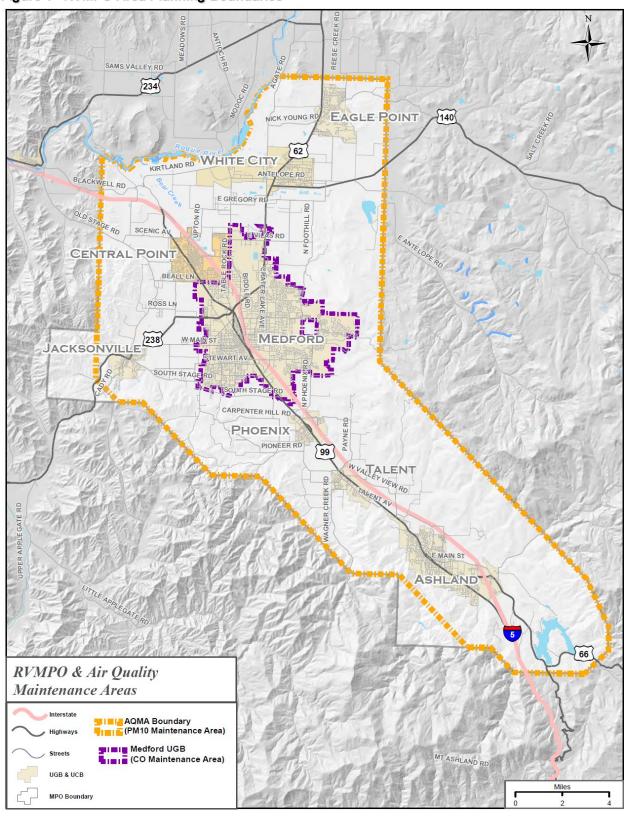
The Governor of Oregon designated the Rogue Valley Council of Governments (RVCOG) as the Rogue Valley Metropolitan Planning Organization (RVMPO) on July 27, 1982. The RVCOG Board of Directors delegated responsibility for RVMPO policy functions to the RVMPO Policy Committee, a committee of elected and appointed officials from Ashland, Talent, Jacksonville, Central Point, Medford, Phoenix, Eagle Point, Jackson County, the Oregon Department of Transportation (ODOT), and the Rogue Valley Transportation District (RVTD). As such, the RVMPO Policy Committee is responsible for ensuring that the region's transportation planning process is conducted in accordance with federal transportation planning regulations (23 CFR 450). In addition, transportation planning must be consistent with the Oregon Transportation Planning Rule (OAR 660, Division 12), the Oregon Transportation Plan and local plans. The RVMPO is responsible for preparing the regional long range transportation plan, the RTP, (23 CFR 450-322) and the short-range improvement program, the TIP, (23 CFR 450-322), and for making conformity determinations for those documents. RVCOG provides staffing to the RVMPO to fulfill RVMPO obligations. RVCOG provides opportunities for public participation in all RVMPO functions, prepares plans and programs, air quality conformity analysis and

documents and partners with ODOT's Transportation Planning and Analysis Unit (TPAU) to develop and maintain the region's travel demand model, which is used to estimate vehicle miles traveled (VMT) for air quality conformity.

In addition to the Policy Committee, which is the decision making body for the RVMPO, there are two RVMPO advisory committees: the Technical Advisory Committee (TAC), made up of planning and public work staff of all RVMPO members, U.S. Department of Transportation (USDOT), Oregon Department of Land Conservation and Development (DLCD), Oregon Department of Environmental Quality (ODEQ) and the Oregon Department of Transportation (ODOT); and the Public Advisory Council (PAC) made up of citizens from all of the RVMPO geographic areas and interest areas (transit, and minority and low-income communities). Committees meet monthly and bimonthly respectively to review and make recommendations on matters going before the Policy Committee. The TAC is specifically designated under OAR 340-252-0060(2)(b)(A)(iv) as the standing committee for purposes of consultation for air quality planning.



Figure 1 RVMPO Area Planning Boundaries



2.0 DEMONSTRATION OF CONFORMITY FOR CO & PM₁₀

This section addresses state and federal requirements for both the Medford CO conformity determination and the Medford-Ashland AQMA PM₁₀ conformity determination, and describes how those requirements have been fulfilled. The analysis for determining conformity is described in this section.

State rules on transportation conformity are contained in Oregon Administrative Rules (OAR), section 340-252; Federal rules are contained in section 40 Code of Federal Regulations (CFR) section 93.

2.1 General Requirements

Frequency of Conformity Determinations 40 CFR 93.104

The most recent conformity determination on the Rogue Valley RVMPO's RTP was in September of 2017 and for the TIP was October 30, 2020 (see Appendix B). Conformity of the RTP and TIP must be determined no less frequently than every four years or when there is an amendment (40 CFR 93.104). Because there is an updated RTP and new TIP, they must be shown to conform with the SIP before they can be adopted by the RVMPO. On DATE, 2021, the RVMPO Policy Committee adopted both the 2021-45 RTP and this conformity determination.

Consultation
OAR 340-252-0060
40 CFR 93.105

Federal, state and local interagency consultation is required before making a conformity determination. Additionally, activities described in the RVMPO Public Participation Plan must be followed, as specified in 40 CFR 93.105, 40 CFR 93.112 and 23 CFR Part 450.

The RVMPO is the lead agency responsible for making the conformity determination for the RTP and TIP. The RVMPO Technical Advisory Committee (TAC), described in section 1.5, is the standing committee for the purposes of consultation on air quality under OAR 340-252-0060(2)(b)(A)(iv). TAC meetings are open to the public and are advertised by both e-mails to interested parties and web postings.

The RVMPO initiated interagency consultation on September 8, 2016 by publishing the RVMPO Pre-Analysis Consensus Plan and distributing it among interagency partners. Consistent with Part 93.110, which requires that conformity determinations be based on the most recent planning assumptions in force at the time conformity analysis begins, and EPA guidance on latest planning assumption (December 2008) directing that "The time analysis begins is to be defined through interagency consultation," RVMPO confirmed formally beginning analysis in November of 2020, by taking the following actions:

- 1. Coordinated with ODOT (Transportation Planning Analysis Unit) to provide shape files of proposed projects for the updating the network of the Southern Oregon Activity Based Model.
- 2. Obtained from ODEQ 2019 vehicle registration data for Jackson County for the air quality conformity analysis (as agreed to by the inter-agency consultation of February 19, 2021).

A new regional emissions analysis was conducted for the Medford-Ashland PM₁₀ maintenance area because regionally-significant projects have been added to the TIP and RTP. The RVMPO used the MOVES3 emissions model for the PM₁₀ emissions analysis.

Opportunities for public review and comment began in May with publication of draft AQCD on RVMPO web site, www.rvmpo.org, and discussion at the MONTH 2021 RVMPO TAC meeting. Other opportunities included advertised public meetings of RVMPO committees. The formal public comment period, from Month 2021 to 30 days later, and a RVMPO Policy Committee public hearing on MONTH 2021, were advertised at committee meetings, newspaper ads, and public presentations. All meetings and hearings were held at RVCOG offices in Central Point, and were accessible by public transportation. The process concluded with the public hearing held during the MONTH, 2021 Policy Committee Meeting.



Table 1: Interagency Consultation Group Roster

<u>Agency</u>	Contact	<u>Phone</u>	<u>Email</u>
<u>FHWA</u>	Jasmine Harris	503.316.2561	jasmine.harris@dot.gov
	Rachael Tupica	503.316.2549	rachael.tupica@dot.gov
	Emily Cline	503.316.2547	emily.cline@dot.gov
	Benjamin Haines	503.316.2555	benjamin.haines@dot.gov
<u>FTA</u>	Jeremy Borego	206.220.7956	jeremy.borego@dot.gov
	Ned Conroy		ned.conroy@dot.gov
<u>USEPA</u>	Karl Pepple	206.553.1778	pepple.karl@epa.gov
	Adam Clark	206-553-1495	clark.adam@epa.gov
ODEQ	Morgan Schafer	503.229.5506	Morgan.Schafer@state.or.us
<u>ODOT</u>	Natalie Liljenwall	503.986.3456	natalie.liljenwall@state.or.us
	Jin Ren (TPAU)	(503) 986-4120	Jin Ren (Jinxiang.REN@odot.state.or.us)
	Alex Bettinardi (TPAU)	(503) 986-4104	Alexander.O.BETTINARDI@odot.state.or.us
	Mike Baker	(541) 957-3658	michael.baker@odot.state.or.us

Table 2: Summary Schedule of Public Outreach and Consultation (To be updated)

Date	Activity	
11-Sep-20	Inter-Agency Consultation	
16-Dec-20	Inter-Agency Consultation	
19-Feb-21	Inter-Agency Consultation	
	AQCD Posted on RVMPO Website And Press Release Issued	
	RVMPO Technical Advisory Committee Meeting	
	RVMPO Public Advisory Council Meeting	
	RVMPO Policy Committee meeting & Public Hearing	

Content of Transportation Plans 40 CFR 93.106

The 2021-2045 RTP, adopted by the RVMPO Policy Committee in MONTH 2021, contains updated forecasts for employment, population and land use projections. All assumptions are based on the acknowledged comprehensive plans of RVMPO member jurisdictions, including the region's very-long-range (50+ years) Regional Problem Solving Plan, which identifies areas of urban expansion beyond existing Comprehensive Plans. Land use designations in these plans were assumed to be in place through the forecast period. (However, under OAR 660-012-0016(1), adoption of a regional transportation plan by an MPO is not a land use decision under Oregon law. Additionally, an air quality determination does not trigger a need for a finding that the RTP is consistent with comprehensive plans.)

The highway and transit projects described the RTP are divided into "financially constrained" and "illustrative" implementation categories. Financially constrained projects are organized by phases of short (2021-25), medium (2026-35) and long (2036-45). All projects are sufficiently identified by design concept, scope, and location to ensure adequate modeling for conformity purposes. For the purposes of the conformity determination, the 2045 transportation network is composed of the 2017 base transportation network modified by projects completed through 2018, projects now under construction, projects programmed in the 2021-2024 TIP, and the medium- and long-range projects in the RTP financially constrained project list.

The project list for the 2045 RTP is included in Appendix E.

Fiscal Constraint for Transportation Plans and TIPs 40 CFR 93.108

Transportation plans and TIPs must be fiscally constrained consistent with metropolitan planning regulations at 23 CFR Part 450 in order to be found in conformity. Table 2 provides a summary of the RTP financial analyses and demonstrates financial constraint. Appendix E contains the list of the financially constrained projects in the 2021-45 RTP, and a map illustrating project locations. Consistent with 28 CFR Part 450, all cost and revenue estimates in the plan and program are based on year of expenditure dollars, reflecting estimated inflation rates developed by RVMPO and ODOT. Transit cost calculations were developed in consultation with RVTD.

Statement of Financial Constraint: Each project included in the financially constrained list of the RVMPO 2021-45 RTP has an identified funding source or combination of sources reasonably expected to be available over the planning period. Project costs are adjusted for inflation to the year of implementation.

Table 3 Financial Constraint Assessment

Description	2021-2045 RTP
Total Expenditures	\$238,724,766
Total Revenue	\$348,385,097
Difference Between Revenues & Expenditures	\$109,660,331

Additional detail on the financial projections used to constrain the projects in the RTP is shown in the Financial Plan chapter of the 2021-45 RTP, www.rvmpo.org.

2.2 Criteria and Procedures for Determining Conformity

General

OAR 340-252-0010 40 CFR 93.109

To demonstrate conformity of a transportation plan and TIP, specific criteria listed in OAR 340 Division 252 and 40 CFR 93.110 through 93.118 must be addressed. These criteria include using the latest planning assumptions and the latest emissions model, and undertaking interagency consultation and public involvement. Responses to these specific criteria are in the following sections.

The RVMPO area includes two maintenance areas. The CO and PM₁₀ Air Quality Maintenance Areas (AQMA) are two distinct maintenance areas with different boundaries. The CO AQMA encompasses the City of Medford's Urban Growth Boundary (UGB). The Medford-Ashland PM₁₀ AQMA covers about 228 square miles and approximates the Bear Creek Basin. The area is generally described as the Rogue Valley. CO and PM₁₀ maintenance plans (State Implementation Plans, SIPs) were approved by EPA on Sept. 23, 2002, and Aug. 18, 2006, respectively. EPA approved a CO LMP for the Medford area that went into effect on September

19, 2016. With the approval of the CO LMP, the area is exempt from performing a regional emissions analysis for CO and there is no "budget" test. The CO Maintenance area, however, must meet project level conformity analyses, and must respond to transportation conformity criteria in 40 CFR 93 Subpart A. The conformity test for PM_{10} is the motor vehicle budget test as specified in 40 CFR 93.118.

The RVMPO travel demand model – the Southern Oregon Activity Based Model (SOABM) was used to determine traffic volumes for the required analysis years. The transportation network modeled in each of the analysis years was based on project implementation in the TIP, and the RTP constrained projects list (Appendix E).

Latest Planning Assumptions 40 CFR 93.110

The conformity determination must be based on the most recent planning assumptions in force at the time the conformity analysis begins under EPA Guidance for the Use of Latest Planning Assumptions in Transportation Conformity Determinations, issued December 2008. For plans and TIPs, analysis begins at the point at which the MPO begins to model the impact of the proposed plan or program on travel and emissions. Further, the guidance directs: "The time analysis begins is to be defined through interagency consultation." RVMPO confirmed through interagency consultation that consistent with Part 93.110 analysis for this conformity began in March of 2021 when RVMPO:

- 1. Coordinated with ODOT Transportation Planning Analysis Unit (TPAU) to begin running the update travel demand model to generate VMT estimates. Model updates are based on changes to the network, and
- 2. Obtained from ODEQ 2019 vehicle registration data for Jackson County for the air quality conformity analysis.

Key assumptions are based on population and employment forecasts for the modeled area's 852 Traffic Analysis Zones (TAZs) which are broken into 1,592 micro-analysis zones (MAZs) and with 7 external stations over which the transportation network is defined. MAZs are a matrix of small areas with the planning area that allow close examination of the transportation system. The transportation network of the 2045 RTP is defined as shown in Appendix E. The MAZs cover the entire RVMPO planning area, which contains both the Medford-Ashland PM₁₀ maintenance area and the Medford CO maintenance area. Therefore, all travel estimates are based on modeled forecasts.

Population and employment assumptions used in the travel demand model are described in detail below. Generally, the forecast estimates were refined to the MAZ level by RVMPO through consultation with each jurisdiction individually and jointly through the RVMPO TAC and Policy Committee. Population and employment forecasts used for this conformity determination are shown in Table 4 below.

Population

The population projections are based on Portland State University Population Research Center (PRC) forecasts. The RVMPO travel demand model is consistent with the PRC population estimates.

Employment

The forecast of employment growth rate in the RVMPO for 2017 to 2045 is based on projections from within the SOABM which was validated against the Oregon Employment Department's most recent forecasts for growth for the Rogue Valley Region (which includes Jackson and Josephine Counties). This forecast showed the Region growing at an average annual growth rate of about ??% Future employment was distributed to the TAZ level based on current land use and employment data, in consultation with each jurisdiction.

Table 4: RVMPO Population, Employment

Analysis Year -	2017	2025	2035	2045
Population	177,481	194,749	217,006	237,839
Employment	82,407	89,486	90,603	107,847

Land Use

Both future year employment and population were allocated to MAZs based on existing local land uses, with consideration to available vacant and buildable land, projects currently in the planning process, redevelopment and infill potential. Allocations are consistent with all existing comprehensive land use plans, and made in consultation with each jurisdiction. All urban area growth was assigned to MAZs within Urban Growth Boundaries.

Transit

Non-auto travel was estimated through a mode choice model, which takes into account current transit route and headway information. Transit policies and funding are assumed to be unchanged through the analysis period. In consultation with RVTD it was determined that no change in transit service is planned through the RTP planning horizon.

Further, the RTP financial analysis finds a deficit of about \$94 million through 2042 for maintaining current service. This indicates that additional revenue needs to be identified or service will have to be reduced.

In 2016, RVTD pursued a local property tax to sustain and add a modest service increase and was successful with a 61% vote in favor. The levy maintains current service levels and also helps meet increasing demand on public transportation. This tax levy was for a 5-year period and was renewed in 2021.

Oregon HB2017 passed and signed into law in 2017 provided additional state funding to transit agencies. The State Transportation Infrastructure Fund is separated into two sources: one is divided among the transit agencies by agreed upon formulaic distribution and the other is discretionary and operates as a grant program. Since 2017, RVTD has received \$7,712,905 in distributed STIF funding and has been awarded \$1,042,524 through the discretionary fund.

Latest Emissions Model 40 CFR 93.111

PM₁₀

The PM₁₀ emissions calculations for this conformity determination were performed using factors derived from the U.S. Environmental Protection Agency's (EPA's) approved model, MOVES3. MOVES3 was officially released¹ by EPA in January 2021, replacing its predecessor, MOVES2014b. The interagency consultation (IAC) group including ODEQ, ODOT, FHWA, FTA and EPA reviewed and agreed to all critical assumptions used in running MOVES3. MOVES 3.0.1 (released in March 2021) was the version used for the conformity determination.

RVMPO began this analysis September, 2020 and with the release of MOVES3 in January 2021, chose to proceed with MOVES3-based estimates for PM₁₀ under the following provision of the conformity rule:

§ 93.111 Criteria and procedures: Latest emissions model.

(c) Transportation plan and TIP conformity analyses for which the emissions analysis was begun during the grace period or before the Federal Register notice of availability of the latest emission model may continue to use the previous version of the model.

Inputs for running MOVES3 are summarized on Table 5 below.

Table 5: : RVMPO inputs to MOVES3

Summary of 2021-2045 RTP Conformity Modeling Elements					
Parameter	Value	Consistent with SIP?	Source/Notes		
Vehicle Emission Model	MOVES3.0.1	n/a	Latest version of MOVES		
MOVES Input, California LEV Emission Rates	Alternative emission rate data table prepared by EPA/OTAQ replaces selected MOVES3 default emission rates to reflect Oregon's adoption of California light-duty vehicle emission standards starting with model year 2009	Yes, with updated factors	LEV program data tables published by EPA within MOVES3 ^a		
MOVES Input - Fleet VMT by HPMSVType	Developed from TPAU modeling network vehicle VMT, apportioned by current statewide HPMS travel splits to be provided by ODOT	Consistent approach, updated values	Will use PM ₁₀ Maintenance Area shapefile to extract VMT within planning area		
MOVES Input - Vehicle Populations by Source Type	Based on 2016 DMV data from ODEQ for passenger car, light truck, motorcycle and motorhome counts, with use of MOVES default splits for other SourceType categories	Consistent approach, different values	Satisfies "latest planning assumption" requirements as confirmed under IAC		
MOVES Input - Fleet Age Distributions	Based on latest 2019 DMV data from ODEQ for passenger cars and light-duty trucks, with MOVES defaults for other SourceType categories	Consistent approach, updated values	Satisfies "latest planning assumption" requirements as confirmed under IAC		
MOVES Input - Road Type VMT Distributions	Develop from link-level travel model vehicle VMT outputs from TPAU (Southern Oregon Activity Based Model, V2) with road type identified	Consistent approach, updated values	Confirmed under IAC		
MOVES Input - Vehicle Speed Distributions	Develop from link-level travel model vehicle VMT and speed outputs from TPAU (Southern Oregon Activity Based Model, V2) by time of	Consistent approach, updated	MOVES speed distributions are VHT, not VMT based		

¹ Federal Register, Vol. 86, No. 4, January 7, 2021.

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Summary of 2021-2045 RTP Conformity Modeling Elements					
Parameter	Consistent with SIP?	Source/Notes			
	day	values			
MOVES Input - Temporal VMT Allocations (Monthly, Daily, Hourly)	MOVES defaults	n/a	Confirmed under IAC		
MOVES Input - Fuels/Properties	Latest Jackson County MOVES fuel properties data used by ODEQ	Consistent approach, updated values	Confirmed under IAC		
MOVES Input - Meteorology	MOVES default meteorology values by month and hour for Jackson County as used by ODEQ	Uncertain ^b	Confirmed under IAC		
MOVES Input - I/M	Not applicable	Yes	Although I/M Program in Medford, MOVES assumes no I/M benefits for PM		
MOVES Input - Ramp Fractions	MOVES defaults as required under EPA's MOVES3 guidance	n/a	Confirmed under IAC		
PM ₁₀ Fugitive Dust, Paved Roads	EPA AP-42, Latest Paved Road Dust Methodology (Jan. 2011)	Yes, with updated factors	Link-level travel activity combined with area- specific silt loadings from SIP/MP		
PM ₁₀ Fugitive Dust, Unpaved Roads	EPA AP-42, Latest Unpaved Road Dust Methodology (Nov. 2006)	Yes, with updated factors	Unpaved road travel activity estimates from ODEQ combined with emission factors from SIP/MP		
Pollutants Reported	PM_{10}	n/a	Budgets from ODEQ/EPA Medford-Ashland SIP/MP		
Analysis Years	2017, 2025, 2035, 2045	n/a	Confirmed under IAC		
Nonattainment Season	Annual, based on SIP conformity budget for PM ₁₀	Yes	Per SIP/MP, as confirmed under IAC		
Analysis/Planning Areas	PM ₁₀ : Medford/Ashland Air Quality Maintenance Area	Yes	Spatially apportion countywide or travel model network data to the smaller planning area		

^a "Instructions for using LEV and NLEV Inputs with MOVES3," EPA, November 6, 2020.

With respect to the use alternative vehicle emission rates listed in Table 5, the conformity analysis reflected credits for adopted controls based on 40 CFR 93.122(a)(3)(i-iv). The state has adopted the California light-duty vehicle emission certification standards (beginning in model year 2009). Although not specifically listed in the SIP, 93.122 allows RVMPO to take credit for these measures due to state adoption. Thus, the conformity modeling used alternative emission rate tables developed by EPA/OTAQ to account for Oregon's adoption of California light-duty vehicle standards.

CO

On September 19, 2016, US-EPA approved a CO maintenance plan, known as a "limited maintenance plan" (LMP) for the Medford area. This limited maintenance plan has a 2025 horizon year. Because of the approved LMP, the Rogue Valley MPO no longer has to complete a regional emissions analysis for the Medford area for CO pursuant to 40 CFR 93.109(e).

^b Hourly meteorology inputs for PM₁₀ emissions in SIP not fully documented.

However, all other transportation conformity requirements under 40 CFR 93.109(b) continue to apply. This RTP and TIP conformity determination meets all applicable requirements under the conformity rule as described below.

40 CFR 93.104 Frequency of conformity determinations.

Conformity of transportation plans and TIPS must be determined no less frequently than every four years. Conformity of plan and TIP amendments, except for those that add or delete exempt projects, must be demonstrated prior to approval of the action. All FHWA/FTA projects must be found to conform or must be re-conformed following any significant status or scope change, before they are adopted, accepted, approved or funded.

This conformity determination is for the RVMPO 2017 - 2042 Regional Transportation Plan (RTP) and the 2018-2021 Transportation Improvement Program (TIP). The next RTP update will occur in four years (March 2021).

40 CFR 93.105 Consultation

Interagency consultation procedures must be carried out in accord with OAR 340-252-0060 and the MPO's public involvement policies developed under 23 CFR Part 450.

A Pre-Analysis Consensus Plan and a draft of this document along with the project list (Appendix B) was circulated by the MPO to ODOT, US-EPA, and USDOT (FHWA and FTA) during interagency consultation. The air quality implications of each project were reviewed to determine which projects had the potential for hot spot requirements.

Public notice was provided on the MPO's web site and through emails to interested parties in the region. A public hearing was held at the policy committee review meeting, and the 30 day public comment period required by the MPO's Public Participation Plan was held.

The RVMPO Technical Advisory Committee (TAC), the standing committee for interagency consultation, reviewed the project list and subsequently reviewed the results of the public comment period and the interagency consultation. No comments were provided at the public hearing or were submitted during the public comment period.

The *project sponsor* is responsible for assuring the conformity of FHWA/FTA projects and regionally significant projects in the RTP or TIP for which hot spot analysis is required. The project sponsor is also responsible for distributing draft and final project environmental documents prepared by the project sponsor to other agencies. It is the responsibility of the project sponsor to consult with the affected transportation and air quality agencies prior to making a project level conformity determination. These activities occur during the project design planning phase.

40 CFR 93.108 Transportation plans and TIPs must be fiscally constrained.

Fiscal constraint is described and affirmed in the 2042 RTP and the 2018-2021 TIP.

Consultation

OAR 340-252-0060 40 CFR 93.112

See responses to OAR 340-252-0060 and 40 CFR 93.105 above.

Timely Implementation of Transportation Control Measures (TCMs) 40 CFR 93.113

The PM_{10} maintenance plan list street cleaning programs for the City of Medford, White City and the connecting transportation corridor (Hwy. 62). This street cleaning program is considered by ODEQ to be a Transportation Control Measure (TCM) for reducing particulate pollution. At a minimum, the cleaning program must use high-efficiency, vacuum street sweeper(s) or the equivalent over a geographic area that includes Medford, White City and the section of Hwy. 62, at a frequency of at least two times a month.

The regional emissions analysis for this conformity determination reflects what is actually being done for street sweeping rather than what is described in the TCM above. The current street sweeping efforts being undertaken by Jackson County, Medford and ODOT are different than what is in the TCM. Below is a description of the current street sweeping efforts.

City of Medford Street Sweeping

- 1. The city owns 5 Sweepers broken down as follows:
 - 4 Schwartz A-7000 Diesel Sweepers
 - 1 Schwartz A-7000 CNG Sweeper
- 2. Medford runs 3 sweepers full time year round and 2-3 months out of the year the city runs an additional sweeper for leaves.
- 3. Medford sweeps State highways within Medford's city limits for ODOT.
- 4. Schedule
 - Central Business District (CBD) once per week
 - Lower Order (Residential) Streets every 30 days
 - State Highways once per week
 - Higher Order Streets twice a month
 - At times the city can run 5 sweepers at once (typically after a snow event when the city is trying to get the rock picked up).

Jackson County Street Sweeping

Since the last report from Jackson County, which was done in 2003, Jackson County lost approximately 1/3 of their road maintenance budget due to the loss of federal timber harvest funds in 2007. Due to this budget reduction all of the County's maintenance activities have been significantly impacted. The Schwartz A-700 sweeper previously used was aged out of our fleet and has been replaced with a sweeper which is similar in performance. However, the County's frequency of sweeping has diminished significantly. Within the White City Urban Containment boundary arterials and collectors are swept monthly and local streets are swept as required, typically 2-4 times per year.

ODOT Hwy 62 Sweeping

ODOT sweeps from Vilas Road north to White City on Hwy 62 a minimum of four times a year.

The City of Medford sweeps the CBD and state highways within the city limits once a week (4-5 times a month), which exceeds the TCM requirement of sweeping twice a month. The RVMPO will request a modification to the street sweeping TCM through the substitution process or by developing a PM₁₀ Limited Maintenance Plan (LMP).

Currently Conforming Transportation Plan and TIP 40 CFR 93.114

The current 2017-42 RTP was adopted on March 28, 2017 and conformed on September 29, 2017 (see Appendix B).

Motor Vehicle Emissions Budget 40 CFR 93.118

The motor vehicle budgets established in the PM_{10} maintenance plan was used to demonstrate conformity. (As explained earlier, regional emissions analysis for CO is not required due to LMP status).

Analysis Years

Consistency with the respective budget must be demonstrated for the last year of the transportation plan's forecast period (2045), for every year for which the respective maintenance plan has established a budget, and for any intermediate years as necessary so that the demonstrations of consistency are no more than 10 years apart. Four analysis years -- 2017, 2025, 2035 and 2045 -- were identified through interagency consultation as being required for the PM_{10} conformity determinations. The analysis years and their purpose are shown on the Table 6 below.

Table 6: Conformity Analysis Years

Pollutant	2017	2025	2035	2045	
PM ₁₀	Budget Year	Intermediate Year	Intermediate Year	RTP Horizon	

In each of these years, population, employment and travel network conditions were identified and used to create a travel demand model for purposes of estimating VMT in each of these years. All regionally significant projects contained in the RTP (financially constrained list) and TIP that can be represented in the travel demand model were included in the analysis.

Details regarding conformity analysis for PM₁₀ are described below.

Particulates (PM₁₀)

EPA approved the PM_{10} maintenance plan for the Medford-Ashland AQMA effective August 18, 2006. Formal notice of approval is in Appendix A. The plan establishes an annual transportation emissions budget. The AQMA is shown on Figure 1. The budget is shown in the Table 7 below.

Table 7: Particulates Budget for Medford Air Quality Maintenance Area

Year	2015 and after
Budget	3,754 tons/year

There has not been a violation of the PM₁₀ NAAQS in the maintenance area since 1993. While data show that PM₁₀ levels are in compliance with the NAAQS, demonstration of conformity relies upon compliance with the federal and state conformity regulations. Annual emissions of PM₁₀ across the entire AQMA must be shown to be less than the budget amounts shown above.

Procedures for Determining Regional Transportation-Related Emissions OAR 340-252-0060 40 CFR 93.122

As required under 40 CFR 93.122(a)(1), the regional emissions analysis for a regional transportation plan or TIP must include all regionally significant projects expected in the nonattainment or maintenance area. In accordance with 40 CFR 93.105(c)(1)(ii), each of the new non-exempt projects in the 2021-2045 RTP and were reviewed by the Interagency Consultation Group.

2.3 Regional Emissions Analysis & Methodology

This section provides details about how state and federally required procedures for conducting a conformity determination were carried out in this analysis.

Procedures for determining regional transportation-related emissions 40 CFR 93.122

VMT Estimates

Nearly all estimates of travel volume in this analysis, expressed as vehicle miles traveled (VMT), were produced by the RVMPO travel demand model produced jointly by RVMPO and ODOT's Transportation Planning and Analysis Unit (TPAU). The only exceptions were the adjustments made for local street travel, which were estimated consistent with ODEQ guidance and the PM₁₀ SIP and added to the outputs of the regional travel demand model. Also, unpaved road travel is estimated separately, as described below and consistent with the SIP. The regional travel model used was TPAUs latest Southern Oregon Activity Based Model (SOABM), Version 2.

The SOABM model accounts for the multi-step process of pre-generation (organizing household characteristics matching demographic data), trip generation (calculating person trips by purpose and household), trip distribution (estimating trips between transportation analysis zones [TAZs], matching trip origins and destinations), mode choice (auto, transit, walking or bicycling) and traffic assignment (identifying specific routes taken). The SOABM differs from the traditional "trip based" models by simulating the choices and travel behaviors of individual people and considers their full set of daily activities

Specific data obtained from the model for this analysis included volumes and Vehicle Miles Traveled by area and facility type. A link-by-link analysis was carried out. Since roadway capacity and speed are included in the model, the effects of congestion are also included.

Roads included in the model are those of regional significance, generally arterials and collectors in addition to Interstate 5. Because all travel must be accounted for in the conformity analysis, off-network or off-model travel – the local street travel – had to be estimated separately and added to model VMT. To be consistent with the PM₁₀ maintenance plan and previous RVMPO air quality conformity determinations, modeled travel on arterial roads was increased by 10 percent to account for off-network travel. The local travel adjustment is a standard used in Oregon based on modeling by Metro (the Portland area MPO) and used by RVMPO in previous conformity determinations, and agreed upon in interagency consultation. In addition, unpaved road travel was estimated for PM10 emissions only; and that estimation is explained in the PM₁₀ Fugitive Dust Calculations section beginning on page 23.

Transportation Network

All regionally significant and non-regionally-significant projects expected in the PM_{10} maintenance area were included in the regional analysis, as required by the conformity test. Projects include all FHWA and FTA-funded transportation projects proposed in the fiscally constrained RTP and TIP. State and locally funded projects of regional significance also are included. The project lists and map are in Appendix E. All of these projects have identified funding and costs adjusted for inflation.

All projects in Appendix E were considered in this analysis in accordance with 40 CFR 93.126, and 40 CFR 93.127. Air quality exempt status is shown for each project. As a usual and continuing practice, all roadway projects that affect capacity or speed of existing facilities, and any new facilities, are included in the project list according to implementation schedule. For each analysis year, the 2017 base year travel network was augmented by projects expected to be completed by the analysis year.

Transit route and scheduling information was provided by transit provider Rogue Valley Transportation District.

Emissions Factors

Total On-Road Emissions – Carbon Monoxide (Not applicable due to LMP status)

Total On-Road Emissions – PM₁₀

As required by 40 CFR 93.111, the EPA-approved MOVES3 model was used to produce local PM₁₀ tailpipe, tire and break wear emission factors for each analysis year. Additionally for PM₁₀, the January 2011 revised AP-42 method was used to determine emission factors for paved road dust. The method's silt loading factors (sL) were obtained from the Medford-Ashland PM₁₀ maintenance plan, for each area identified in the maintenance plan as shown on Table 10 on page 18. The factor for dust from unpaved roads was set in the maintenance plan, and was used in this analysis. Environmental and program parameter values for MOVES were provided to RVMPO by ODEQ. These factors were used to compute emissions per vehicle mile traveled (VMT) by facility type.

In producing emission factors for PM_{10} , locally representative data were used where they were available. For example, local (Jackson County) vehicle registration data was used to generate the

most accurate emissions estimates possible. RVMPO consulted with ODEQ, and developed and used the most recent available county level vehicle registration data (2019 calendar year). Where local data was not available, MOVES national defaults were used. Details about the development of MOVES inputs, MOVES modeling workflow and fugitive dust calculations (for PM_{10}) are described in the following sub-sections.

Summary of Input Data Sources

Local data was used where available for the MOVES modeling inputs and the fugitive dust calculations. The primary sources of data were provided by ODEQ, the Oregon Department of Motor Vehicles (DMV) and the Oregon Department of Transportation (ODOT) Transportation Planning and Analysis Unit (TPAU). Key inputs and sources are listed in Table 8. Where applicable the use of model default values is stated.

Table 8: Ove	Table 8: Overview of MOVES Inputs and Fugitive Dust Parameters								
Model Parameter	Data Source and Description								
PM ₁₀ Fugitive Dust, Paved Roads	ODOT & ODEQ: - Link-level travel activity used - Silt loadings provided by ODEQ - Calculation formula EPA AP-42, Latest Paved Road Dust Methodology (Jan. 2011)								
PM ₁₀ Fugitive Dust, Unpaved Roads	ODEQ: - Activity data provided by ODEQ and confirmed by RVCOG, June 2021 - Emission factors from ODEQ 2013 AQCP - Calculation formula EPA AP-42, Latest Unpaved Road Dust Methodology (Nov. 2006)								
Analysis/Planning Area	ODEQ: - PM ₁₀ : Medford/Ashland Air Quality Maintenance Area - ArcGIS shape files provided by ODEQ to apportion link-level outputs to PM ₁₀ planning areas								
MOVES Input, California LEV Emission Rates ^a	EPA: - Utilized alternative emission rate data contained in EPA's MOVES3 model to replace default emission rates to reflect Oregon's adoption of California LEV vehicle emission certification standards for model year 2009 and later light-duty vehicles								
MOVES Input - Fleet VMT by HPMSVType	ODOT: - Annual VMT calculated from link-level travel activity separately for each analysis year and transit scenario - Shapefiles provided by ODEQ to extract PM ₁₀ planning area data - Source-specific VMT calculated from statewide fractions provided by ODOT (latest year 2019)								
MOVES Input - Vehicle Populations by Source Type	ODEQ/DMV: - Passenger vehicle populations were developed from DMV registrations, circa 2019, provided by ODEQ - All other vehicle source types were generated using MOVES3 default splits - DMV data provided by ODEQ were spatially filtered by ZIP code to the PM10 planning area								
MOVES Input - Fleet Age Distributions	ODEQ: - Vehicle age distributions were developed for passenger car and light-duty truck source types (21, 31, 32) from 2019 DMV registrations provided by ODEQ - MOVES defaults were used for other vehicle source types - MOVES3 Age Distribution Project Tool ^a was used to project age distributions to future analysis years								

Table 8: Ove	Table 8: Overview of MOVES Inputs and Fugitive Dust Parameters								
Model Parameter	Data Source and Description								
MOVES Input - Road Type VMT Distributions	ODOT: - Link-level vehicle VMT was used to develop year-specific and transit scenario-specific road type distributions for PM ₁₀ area								
MOVES Input - Vehicle Speed Distributions	ODOT: - Link-level hourly average vehicle speeds and vehicle hours traveled (VHT) were used to develop road type specific speed distributions by analysis year and transit scenario - Link-level peak hour distributions for 5:00 to 6:00 PM were used.								
MOVES Input - Temporal VMT Allocations (Monthly, Daily, Hourly)	MOVES Defaults: - MOVES default monthly, daily and hourly VMT temporal allocations used								
MOVES Input - Fuels/Properties	MOVES Defaults: - MOVES default fuel supply and formulation confirmed to match data from ODEQ and used								
MOVES Input - Meteorology	MOVES Defaults: - MOVES default meteorology values for Jackson County								
MOVES Input - I/M	ODEQ: - Although I/M Program in Medford, MOVES assumes no I/M benefits for PM10								
MOVES Input - Ramp Fractions	MOVES Defaults: - Used MOVES3 default ramp fractions per EPA's MOVES3 guidance								

^a https://www.epa.gov/moves/tools-develop-or-convert-moves-inputs

Preparation of MOVES Inputs

The local data received from ODEQ and ODOT was processed to conform to MOVES model input requirements. These data and their processing are described in this sub-section.

Transportation Model Data – Travel model link-level activity was provided by ODOT/TPAU using the Southern Oregon Activity Based Model, SOABM, for 2017, 2025, 2035, and 2045 for one scenario with existing transit services and a second scenario without existing transit services. Average daily activity and peak hour activity outputs were included. Separate activity totals were extracted for links within the PM₁₀ planning area. ArcGIS boundary files supplied by ODEQ were used to determine the links within each of the planning areas (including both the Medford-Ashland PM₁₀ Maintenance Area and the sub-areas for which separate road dust emission factors are applied). Activity data for the PM₁₀ area was used in both the fugitive dust calculations and creation of MOVES inputs.

MOVES Local Inputs Processing – The local data received from sources in Table 8 were translated into MOVES model compatible inputs over all modeling years, scenarios and planning areas. The transportation model outputs were processed into annual vehicle type VMT, road type VMT distributions, ramp fractions, and average speed distributions. DMV registration data formed the basis for the vehicle source type populations and age distribution inputs for five different vehicle classes: motorcycle, passenger car, passenger truck, school bus, and motor home. MOVES default vehicle source type splits were used to calculate the source type population of all other vehicle types and to scale vehicle types to future years.

Alternative base emission rates reflecting Oregon's adoption of the California light-duty vehicle emission standards were applied per EPA's MOVES3 guidance which involved modifying a

script generated by MOVES3 to reflect application of LEV adjusted rates for model year 2009 and later light-duty vehicles.

Inspection maintenance program inputs were adapted from data received from ODEQ although MOVES assumed no I/M benefits for PM₁₀ as noted in Table 8.

All other MOVES inputs were set to default values.

MOVES Modeling Run Configuration

Across the PM₁₀ modeling area, the MOVES model "RunSpec" command file options were configured following EPA's guidance² for the use of MOVES3 in modeling of emissions inventories for Statewide Implementation Plan or regional transportation conformity modeling. This included selection of the County-Scale inventory calculation option.

MOVES3 was executed in the "Inventory" calculation mode to develop estimates of on-road vehicle fleet PM_{10} exhaust (plus brake and tire wear) emissions (in tons/year) within the Medford-Ashland PM_{10} AQMA planning area. A total of eight model runs will be generated (4 calendar years \times 2 transit scenarios).

Time aggregation was set to "Hour" with all months selected for PM_{10} runs. Both weekend and weekdays were simulated for all hours of the day. In the Geographic Bounds panel, "Oregon - Jackson County" was selected. (The Medford/Ashland Air Quality Maintenance Area planning area is a subset of Jackson County). Customized input databases were created for each modeled year for PM_{10} for both the "transit" and "no transit" scenarios. All gasoline and diesel vehicle categories were selected as well as all road types. For the PM_{10} RunSpecs, the following pollutants were selected for all processes listed below:

- Primary Exhaust PM_{2.5} Total;
- Primary Exhaust PM_{2.5} Species;
 - o Aluminum;
 - o Ammonium (NH4);
 - o Calcium;
 - o Chloride;
 - o CMAQ5.0 Unspeciated (PMOTHR);
 - Composite NonECPM;
 - o Elemental Carbon;
 - o H₂O (aerosol);
 - o Iron;
 - o Magnesium;
 - o Nitrate (NO₃);
 - o Non-carbon Organic Matter (NCOM);
 - o Organic Carbon;
 - o Potassium;
 - o Silicon;
 - o Sodium;

² "Policy Guidance on the Use of MOVES3 for State Implementation Plan Development, Transportation Conformity, General Conformity, and Other Purposes," U.S. Environmental Protection Agency, Report No. EPA-420-B-20-044, November 2020.

- o Sulfate Particulate; and
- Titanium
- Primary PM_{2.5} Brakewear Particulate;
- Primary PM_{2.5} Tirewear Particulate; and
- Primary Exhaust PM₁₀ Total;
- Primary PM₁₀ Brakewear Particulate;
- Primary PM₁₀ Tirewear Particulate;
- Total Energy Consumption.

(MOVES3 requires the modeling of $PM_{2.5}$ emissions from various processes when PM_{10} is modeled because of the way it performs internal calculations. However, the $PM_{2.5}$ outputs were not used for this analysis.)

MOVES output units were set to grams, joules, and miles for mass, energy, and distance, respectively. Distance traveled, source hours, population, and starts were chosen for activity outputs. Emissions were aggregated by "Year" at the county level and split into road type, source use type, fuel type, and emission process. All other model options were left at default values.

MOVES Emissions Outputs

The MOVES calculations were executed in the county-scale inventory mode as described in the "Modeling Run Configuration" subsection. Model outputs were exported to spreadsheets, processed, and reviewed. On-road vehicle PM_{10} exhaust, brakewear and tirewear emissions are summarized in Table 9 by transit scenario and analysis year.

Table 9: MOVES3 On-Road PM ₁₀ Emissions by Transit Scenario and Analysis Year (tons/year)										
Transit Scenario and Emission Type 2017 2025 2035 204										
Total PM ₁₀ with Transit	135.50	108.58	105.70	112.05						
Exhaust (running, starting & idling)	60.84	93.19	92.08	98.56						
Brakewear	58.13	63.86	73.08	80.17						
Tirewear	16.52	17.95	19.91	21.63						
Total PM10 without Transit	137.32	110.98	107.37	115.41						
Exhaust (running, starting & idling)	61.51	27.12	12.82	10.37						
Brakewear	59.05	65.63	74.31	82.87						
Tirewear	16.76	18.23	20.24	22.17						

As explained in greater detail under the "PM₁₀ Fugitive Road Dust Calculations" sub-section, MOVES outputs for arterial roads (road types 3 and 5) were adjusted upward by 10% to account for intrazonal travel on local roads not explicitly represented in the ODOT SOABM model. The emission results summarized in Table 9 reflect this local roads VMT adjustment.

Detailed MOVES input and output files are available via secure electronic download upon request.

PM₁₀ Fugitive Road Dust Calculations

The most current AP-42-based methods were used to calculate fugitive dust emissions on unpaved and paved roads within the PM_{10} planning area and are described separately below.

<u>Unpaved Road Dust</u> - Details on unpaved dust mileage, ADT and emission factors were provided by ODEQ. The emission factors were calculated from the November 2006 version of AP-42 unpaved road dust methodology³. The aggregate length of unpaved roads within the planning area estimated at a constant 85 miles over the entire analysis horizon based on estimates provided by ODEQ in 2017. RVMPO reviewed this estimate of 85 unpaved road miles and believes it it is still representative of the planning area. The average daily traffic was from the traffic estimated on unpaved roads developed by RVMPO. Unpaved road dust emission calculations are shown in Table 10. Note that unpaved road activity and fugitive dust emissions are the same for both the Transit and No Transit scenarios.

Table 10: Unpaved Fugitive Dust PM ₁₀ Emissions									
Parameter	2017	2025	2035	2045					
Miles	85	85	85	85					
ADT	26.0	28.8	32.3	35.8					
VMT	2213.9	2451.4	2748.2	3045.0					
Emission Factor (g/mi)	521.6	521.6	521.6	521.6					
Days in Year	365	365	365	365					
PM ₁₀ Emissions (tons/year)	464.7	514.5	576.8	639.1					

<u>Paved Road Dust</u> - Fugitive dust calculations used the January, 2011 publication⁴ of AP-42's paved road dust methodology:

$$EF = k * (sL)^{(0.91)} * (W)^{1.02};$$

where

EF is the emission factor (g/mi),

k is the particle size multiplier (g/mi)

sL is the road surface silt loading (g/m²), and

W is the average vehicle weight (tons).

The size multiplier k was set to 1.00 g/mi for PM_{10} per Table 13.2.1-1 of AP-42. RVCOG supplied average vehicle weight information for Interstate 5, White City, and remaining roads at 3.18 tons, 2.26 tons and 2.02 tons respectively. Silt loading values were applied from the RVMPO 2042 RTP AQCD⁵ as listed in Table 11.

³ US EPA, Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Vol. I: Stationary, Point and Area Sources. Section 13.2.2: Unpaved Roads, November 2006.

⁴ US EPA, Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Vol. I: Stationary, Point and Area Sources. Section 13.2.1: Paved Roads, January 2011.

⁵ "Air Quality Conformity Determination for the 2017-2042 Regional Transportation Plan and 2018-2021 Transportation Improvement Program," Rogue Valley Metropolitan Planning Organization, revised June 27, 2017.

Table 11: Paved Roadway Silt Loading Factors								
Location	Silt Loading (g/m²)							
Interstate 5	0.015							
White City High ADT	1.350							
White City Low ADT	3.400							
White City Industrial Ave G	11.000							
Remaining High ADT	0.190							
Remaining Low ADT	0.540							

Vehicle activity was extracted from the link-level travel model outputs for each of the six silt loading-specific locations. The model provides a forecast of average daily travel on defined roadway links. The daily traffic volume forecast for each link is multiplied by the link's length to yield VMT for each link. VMT is multiplied by PM₁₀ emission factors for re-suspended road dust to estimate paved and unpaved road dust emissions. Emissions estimates were subsequently adjusted to tons annually. VMT reported here represents modeled vehicle miles traveled within the PM₁₀ AQMA area, increased by 10 percent to include off-model local travel. Table 12 through Table 19 present calculated of road dust emissions by location for each combination of calendar year (2017, 2025, 2035 and 2045) and transit scenario analyzed.

Table 12: 2017 Fugitive Dust Emissions for Paved and Unpaved Roads Without Transit										
Location	Silt Loading (g/m²)	Average Weight (tons)	Emission Factor (g/mi)	VMT 2017	Adjusted VMT +10%	Emissions (g/day)	Emissions (lbs/day)	Emissions (tons/year)		
Interstate 5	0.015	3.18	0.07	1,008,374	n/a	71,836	158	29		
White City High ADT	1.350	2.26	3.02	126,239	138,863	419,160	924	169		
White City Low ADT	3.400	2.26	7.00	20,716	22,787	159,415	351	64		
White City Industrial Ave G	11.000	2.26	20.36	5,955	n/a	121,267	267	49		
Remaining High ADT	0.190	2.02	0.45	1,727,090	1,899,799	858,681	1893	345		
Remaining Low ADT	0.540	2.02	1.17	299,641	329,605	385,416	850	155		
Unpaved			521.63	2,214	n/a	1,154,862	2546	465		
Total Fugitive Dust				3,190,228	3,407,597	3,170,636	6,990	1,276		

n/a - not applicable

Table 13: 2025	Table 13: 2025 Fugitive Dust Emissions for Paved and Unpaved Roads Without Transit									
Location	Silt Loading (g/m²)	Average Weight (tons)	Emission Factor (g/mi)	VMT 2025	Adjusted VMT +10%	Emissions (g/day)	Emissions (lbs/day)	Emissions (tons/year)		
Interstate	0.015	3.18	0.07	1,099,192	n/a	78,305	173	32		
White City High ADT	1.350	2.26	3.02	148,356	163,192	492,598	1086	198		
White City Low ADT	3.400	2.26	7.00	17,985	19,784	138,404	305	56		
White City Industrial Ave G	11.000	2.26	20.36	6,282	n/a	127,929	282	51		
Remaining High ADT	0.190	2.02	0.45	1,897,964	2,087,760	943,636	2080	380		
Remaining Low ADT	0.540	2.02	1.17	300,395	330,434	386,386	852	155		
Unpaved			521.63	2,451	n/a	1,278,726	2819	514		
Total Fugitive Dust				3,472,625	3,709,095	3,445,984	7,597	1,386		

n/a – not applicable

Table 14: 2035	Table 14: 2035 Fugitive Dust Emissions for Paved and Unpaved Roads Without Transit									
Location	Silt Loading (g/m²)	Average Weight (tons)	Emission Factor (g/mi)	VMT 2035	Adjusted VMT +10%	Emissions (g/day)	Emissions (lbs/day)	Emissions (tons/year)		
Interstate	0.015	3.18	0.07	1,196,368	n/a	85,228	188	34		
White City High ADT	1.350	2.26	3.02	163,255	179,580	542,067	1195	218		
White City Low ADT	3.400	2.26	7.00	18,089	19,898	139,200	307	56		
White City Industrial Ave G	11.000	2.26	20.36	6,885	n/a	140,203	309	56		
Remaining High ADT	0.190	2.02	0.45	2,147,855	2,362,641	1,067,879	2354	430		
Remaining Low ADT	0.540	2.02	1.17	299,829	329,812	385,659	850	155		
Unpaved			521.63	2,748	n/a	1,433,557	3160	577		
Total Fugitive Dust				3,835,030	4,097,933	3,793,792	8,364	1,526		

n/a – not applicable

Table 15: 2045 Fugitive Dust Emissions for Paved and Unpaved Roads Without Transit										
Location	Silt Loading (g/m²)	Average Weight (tons)	Emission Factor (g/mi)	VMT 2045	Adjusted VMT +10%	Emissions (g/day)	Emissions (lbs/day)	Emissions (tons/year)		
Interstate	0.015	3.18	0.07	1,284,035	n/a	91,474	202	37		
White City High ADT	1.350	2.26	3.02	183,114	201,426	608,008	1340	245		
White City Low ADT	3.400	2.26	7.00	15,824	17,406	121,768	268	49		
White City Industrial Ave G	11.000	2.26	20.36	8,172	n/a	166,421	367	67		
Remaining High ADT	0.190	2.02	0.45	2,394,396	2,633,836	1,190,455	2625	479		
Remaining Low ADT	0.540	2.02	1.17	298,995	328,895	384,586	848	155		
Unpaved			521.63	3,045	n/a	1,588,387	3502	639		
Total Fugitive Dust				4,187,581	4,476,814	4,151,098	9,152	1,670		

n/a – not applicable

Table 16: 20 1	17 Fugitiv	ve Dust E	missions	for Paved	l and Unpar	ved Roads	With Tra	nsit
Location	Loading Weight Fac		Emission Factor (g/mi)	VMT 2017	Adjusted VMT +10%	Emissions (g/day)	Emissions (lbs/day)	Emissions (tons/year)
Interstate	0.015	3.18	0.07	1,003,401	n/a	71,481	158	29
White City High ADT	1.350	2.26	3.02	124,431	136,874	413,156	911	166
White City Low ADT	3.400	2.26	7.00	20,626	22,688	158,722	350	64
White City Industrial Ave G	11.000	2.26	20.36	5,926	n/a	120,681	266	49
Remaining High ADT	0.190	2.02	0.45	1,689,760	1,858,736	840,121	1852	338
Remaining Low ADT	0.540	2.02	1.17	300,511	330,562	386,536	852	156
Unpaved			521.63	2,214	n/a	1,154,862	2546	465
Total Fugitive Dust				3,146,869	3,360,401	3,145,560	6,935	1,266

n/a – not applicable

Table 17: 202	25 Fugitiv	ve Dust E	missions	for Paved	d and Unpa	ved Roads	With Tra	nsit
Location	Silt Loading (g/m²)	Average Weight (tons)	Emission Factor (g/mi)	VMT 2025	Adjusted VMT +10%	Emissions (g/day)	Emissions (lbs/day)	Emissions (tons/year)
Interstate	0.015	3.18	0.07	1,092,938	n/a	77,860	172	31
White City High ADT	1.350	2.26	3.02	146,442	161,086	486,243	1072	196
White City Low ADT	3.400	2.26	7.00	17,668	19,434	135,958	300	55
White City Industrial Ave G	11.000	2.26	20.36	6,202	n/a	126,303	278	51
Remaining High ADT	0.190	2.02	0.45	1,859,942	2,045,936	924,733	2039	372
Remaining Low ADT	0.540	2.02	1.17	297,807	327,588	383,058	844	154
Unpaved			521.63	2,451	n/a	1,278,726	2819	514
Total Fugitive Dust				3,423,451	3,655,637	3,412,881	7,524	1,373

n/a – not applicable

Table 18: 203	35 Fugitiv	ve Dust E	missions	for Paveo	d and Unpar	ved Roads	With Tra	nsit
Loading		Average Weight (tons)	Emission Factor (g/mi)	VMT 2035	Adjusted VMT +10%	Emissions (g/day)	Emissions (lbs/day)	Emissions (tons/year)
Interstate	0.015	3.18	0.07	1,188,961	n/a	84,701	187	34
White City High ADT	1.350	2.26	3.02	161,314	177,445	535,622	1181	216
White City Low ADT	3.400	2.26	7.00	17,294	19,023	133,083	293	54
White City Industrial Ave G	11.000	2.26	20.36	6,812	n/a	138,726	306	56
Remaining High ADT	0.190	2.02	0.45	2,092,592	2,301,852	1,040,403	2294	419
Remaining Low ADT	0.540	2.02	1.17	301,320	331,452	387,577	854	156
Unpaved			521.63	2,748	n/a	1,433,557	3160	577
Total Fugitive Dust				3,771,043	4,028,295	3,753,668	8,275	1,510

n/a – not applicable

Table 19: 20	45 Fugiti	ve Dust I	Emissions	for Pave	d and Unpa	ved roads	With Trai	nsit		
Location	Silt Loading (g/m²)	Average Weight (tons)	Emission Factor (g/mi)	VMT 2045	Adjusted VMT +10%	Emissions (g/day)	Emissions (lbs/day)	Emissions (tons/year)		
Interstate	0.015	3.18	0.07	1,271,631	n/a	90,590	200	36		
White City High ADT	1.350	2.26	3.02	180,456	198,502	599,182	1321	241		
White City Low ADT	3.400	2.26	7.00	14,985	16,483	115,313	254	46		
White City Industrial Ave G	11.000	2.26	20.36	8,056	n/a	164,055	362	66		
Remaining High ADT	0.190	2.02	0.45	2,315,946	2,547,540	1,151,450	2539	463		
Remaining Low ADT	0.540	2.02	1.17	295,990	325,589	380,720	839	153		
Unpaved			521.63	3,045	n/a	1,588,387	3502	639		
Total Fugitive Dust 4,090,108 4,370,846 4,089,698 9,016 1,645										

 $n/a - not \ app\overline{licable}$

Total Emissions and Budget Comparisons

Table 20 presents comparison of motor vehicle PM_{10} emissions under the two TIP transit scenarios analyzed to applicable motor vehicle emission budgets in calendar years 2017, 2025 2035 and 2045. The PM_{10} budgets are annual and emissions are reported in tons per year units. Table 20 also provides a breakdown of the PM_{10} emission components from on-road exhaust and paved and unpaved road dust.

Table 20: Comparison of Total Mo	tor Vehicle	PM ₁₀ Emis	sions to	
Applicable Emission B	udgets (ton	s/year)		
	2017	2025	2035	2045
With Transit PM ₁₀ Total Emissions	1,401	1,482	1,616	1,758
Exhaust, Brakewear, Tirewear	135	109	106	112
Paved Road Dust	801	859	933	1,006
Unpaved Road Dust	465	514	577	639
Without Transit PM ₁₀ Total Emissions	1,413	1,497	1,634	1,786
Exhaust, Brakewear, Tirewear	137	111	107	115
Paved Road Dust	811	872	950	1,031
Unpaved Road Dust	465	514	577	639
PM ₁₀ Vehicle Emission Budget	3,754	3,754	3,754	3,754
% of Emission Budget, With Transit	37.3%	39.5%	43.0%	46.8%
% of Emission Budget, Without Transit	37.6%	39.9%	43.5%	47.6%

As shown at the bottom of Table 20, regional transportation plan emissions for all analysis years and both transit scenarios are well below the applicable PM_{10} emission budget.

Exempt Projects 40 CFR 93.126-127

Certain financially constrained transportation projects are exempt from the conformity process because they do not measurably impair air quality. For example, a project to install medians on a highway to improve safety is exempt for conformity purposes. Often, an exempt project provides a benefit to air quality by reducing emissions, particularly particulate emissions. For example, a project common in the RVMPO area is an urban upgrade – installing curbs, gutters, bike lanes and sidewalks. By expanding the paved area, vehicles track-out of dirt from driveways and shoulders is reduced, and streets can be cleaned more effectively. A description of the projects included in the 2045 RTP and their exempt status is in Appendix C. The status of these projects has been determined through interagency consultation. Details on federal project exemption rules are in Appendix D.



3.0 Summary

The finding of this conformity determination is that the projects programmed in the 2021-2045 RTP will result in PM₁₀ emissions lower than respective maintenance plan on-road emissions budgets. With an approved Limited Maintenance Plan for CO, the area is exempt from performing a regional emissions analysis for the Medford area for CO pursuant to 40 CFR 93.109(e) although all other transportation conformity requirements under 40 CFR 93.109(b) continue to apply.

Therefore, the RTP complies with specific requirements of the federal Clean Air Act and Oregon State Conformity Rule, OAR 340-252-0010, and the federal rule 40 CFR 93.118.

The estimates illustrate the impact that travel, expressed as total vehicle miles traveled (VMT), has on air quality, and ultimately the region's ability to maintain transportation conformity. PM₁₀ in the Medford-Ashland PM₁₀ maintenance area is anticipated to increase as a result of increasing VMT. By the 2045 horizon year of the RTP the region can expect to be using slightly less than half of its PM₁₀ emissions budget. Transportation projects that will have the greatest benefit to PM₁₀ emissions will be those that address road dust. Paving projects – especially widening shoulders to accommodate bikes, curbs, gutters and sidewalks – will continue to be among the most beneficial. By reviewing the lists of planned and programmed projects, Appendix E, projects that reduce particulate emissions can be identified. They include urban upgrade projects that add curbs, gutters and sidewalks. Credits for air-quality-improving projects, often funded with federal Congestion Mitigation and Air Quality (CMAQ) funds could theoretically have been used as offsets against the future year emissions estimates, however, offset calculations were not required to meet the PM₁₀ budget tests and were not taken.

In addition to not taking emission credits, RVMPO might have estimated a reduction in unpaved roads based on history, existing policies and planned and programmed projects, however, no reduction of road miles was anticipated in the VMT estimate for unpaved roads.

Finally, this demonstration also doesn't assume major changes in travel behavior. For instance, the transit district, RVMPO and the member jurisdictions are working toward expanding transit service, but because funds and projects haven't been identified, shift to transit travel – or other alternatives such as bicycling and walking – is not anticipated.

Appendices



Appendix A

Federal Register Promulgation of CO Budget

Federal Register Promulgation of PM_{10} & CO Budgets CO Limited Maintenance Plan

https://rvmpo.org/images/plans-and-programs/AQCD/updated-March-2013/medfordsip.pdf



Appendix B

Supporting Correspondence

USDOT Conformity Determination





U.S. DEPARTMENT OF TRANSPORTATION

Federal Highway Administration Oregon Division 530 Center Street, Suite 420 Salem, Oregon 97301 573-390-5740 Federal Transit Administration Region 10 915 Second Avenue, Room 3142 Seattle, Washington 98174-1002 206-220-7954

June 12, 2017

HAD-OR/ FTA-TRO-10 File Code: 724.441

Mr. Karl D. Welzenbach Planning Program Manager Rogue Valley Council of Governments 155 N. 1st St., P.O. Box 3275 Central Point. OR 97502

RE: USDOT Air Quality Conformity Determination of Rogue Valley Metropolitan Planning Organization, 2017-2042 Regional Transportation Plan

Dear Mr. Welzenbach:

The Clean Air Act Amendments of 1990 (CAAA) require that transportation plans, programs, and projects cannot create new National Ambient Air Quality Standards (NAAQS) violations, increase the frequency or severity of existing NAAQS violations or delay the attainment of the NAAQS. The U.S. Department of Transportation (Federal Highway Administration, FHWA and Federal Transit Administration, FTA) is required to make a transportation conformity determination in non-attainment and maintenance areas as outlined in 40 CFR 93.104 (Frequency of Conformity Determinations) and 23 CFR Part 450 (FHWA and FTA Planning Rule). The CAAA requires States and Metropolitan Planning Organizations (MPOs) to demonstrate, through the conformity process, that the transportation program, as a whole, is consistent with the State Implementation Plan (SIP). Transportation conformity ensures that federal funding and approval are given to those transportation activities that are consistent with air quality goals and do not worsen air quality or interfere with the purpose of the SIP.

The United States Environmental Protection Agency (EPA) approved a carbon monoxide (CO) limited maintenance plan (LMP), effective September 19, 2016 (see 81 FR 47029; July 20, 2016) and a PM₁₀ maintenance plan, effective August 18, 2006, (see 71 FR 35163; June 19, 2006) for the Medford area. With the approved CO LMP, the Rogue Valley Metropolitan Planning Organization (RVMPO) is no longer required to complete regional emissions analysis for the Medford area for CO; however, emissions analysis is required for the Medford-Ashland area for PM₁₀. All other transportation conformity requirements still apply to both pollutants (see 40 CFR 93.109(b)).

This letter constitutes the joint FHWA and FTA air quality conformity determination (AQCD) for the RVMPO 2017-2042 Regional Transportation Plan (RTP), adopted by the RVMPO Policy Committee March 28, 2017. The conformity analysis provided by RVMPO indicated that the air quality conformity requirements have been met. Based on our review of the RVMPO air quality conformity determination, analysis, and documentation submitted to our offices on April 3, 2017,

we find the 2017-2042 RTP conforms to the SIP, in accordance with the Transportation Conformity Rule and the Oregon Conformity SIP. This federal conformity determination was made after interagency consultation with EPA Region 10, Oregon Department of Environmental Quality, and Oregon Department of Transportation, pursuant to the Transportation Conformity Rule.

Your letter also included a request for an AQCD for the 2018-2021 Metropolitan Transportation Improvement Program (TIP), adopted by RVMPO Policy Committee March 28, 2017. However, RVMPO is readopting the 2018-2021 TIP to include additional projects. The USDOT will make an AQCD for the MPO TIP at a later date.

Please contact Mr. Chris Bucher of FHWA at 503-316-2555 or Mr. Jeremy Borrego of FTA at 206-220-7956 if you have any questions.

Sincerely,

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Phillip A. Ditzler Division Administrator Federal Highway Administration KENNETH A PROBLEM OF THE STANDARD AND TH

for Linda M. Gehrke Regional Administrator Federal Transit Administration

cc:

FHWA Rachael Tupica, Senior Transportation Planner
FTA Jeremy Borrego, Transportation Program Specialist
Ned Conroy, Community Planner
EPA Karl Pepple, Environmental Protection Specialist
Claudia Vaupel, Air Quality Planner
ODEQ Dave Nordberg, Transportation Planning Coordinator
ODOT Natalie Liljenwal, Environmental Engineer
Mike Baker, Region 3 Planning Manager
Erik Havig, Planning Section Manager

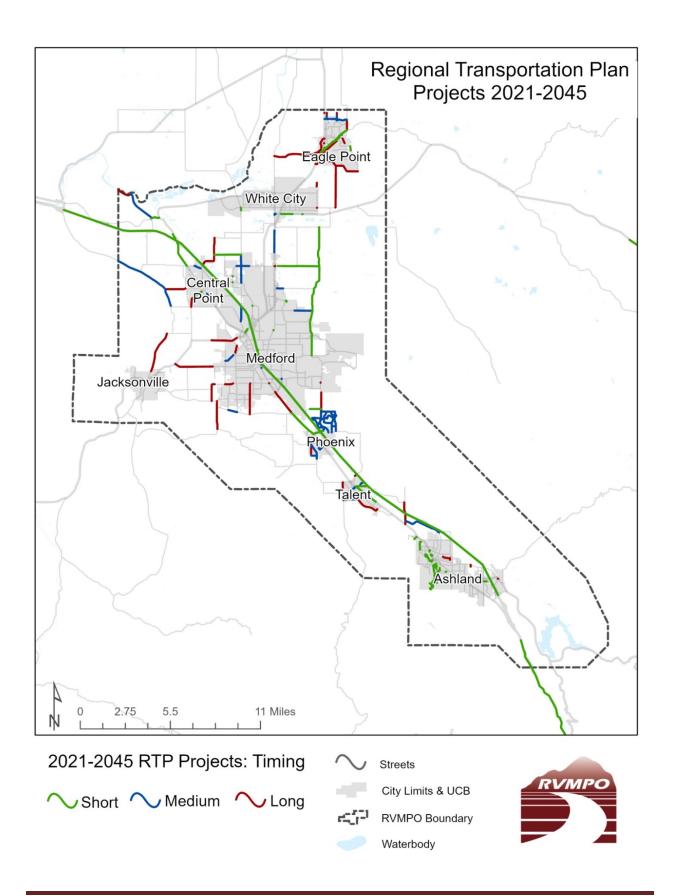
Jeff Flowers, Program and Funding Services Manager

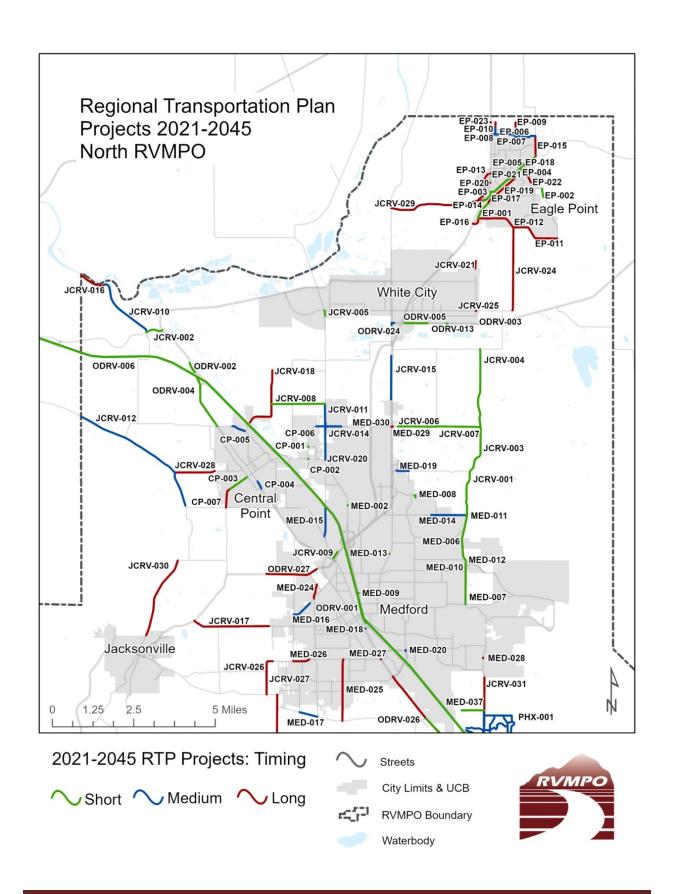
Appendix C

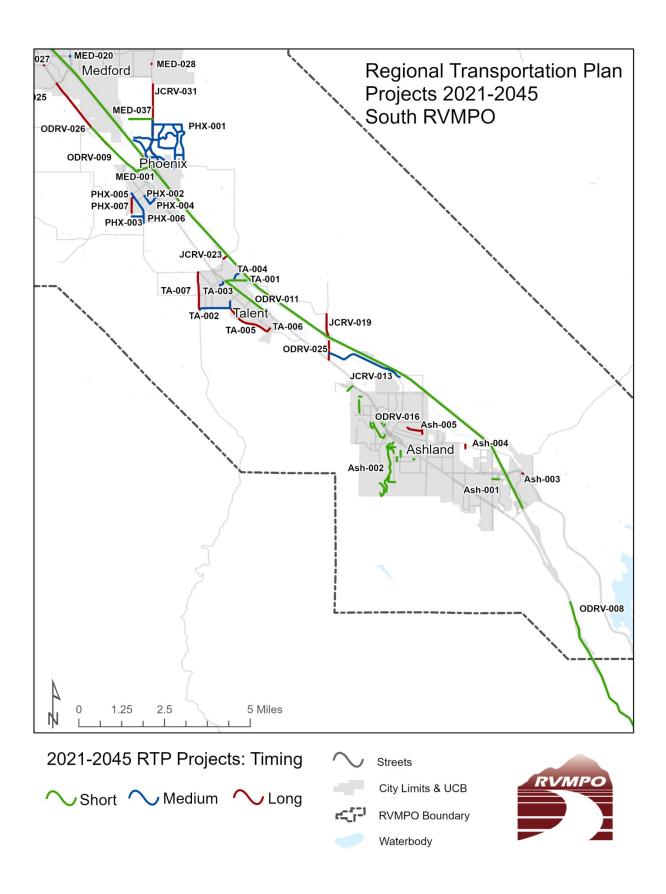
Project Lists and Maps

2021-45 Regional Transportation Plan









Project List by Jurisdiction

PROJECT NUMBER	LOCATION	DESCRIPTION			соѕт	Cost by Range	Federal Funds Needed/ Programmed	Conformity Status	Within PM10/CO Maintenance Areas
Ashland									
Ash-001	Independent Way	Extend street from Washington St to Tolman Creek Rd; sidewalks, bicycle lanes (715-ft, 0.13 Miles)	short	\$	1,055,000			Non-Exempt	PM10
Ash-002	Chip Seal	project entails grading, prepping and installing a double chip seal on approximately 44,903 square yards of existing dirt roads within the Ashland City limits. (approx. 5.3 miles)	short	\$	561,648		\$ 561,648	Exempt-93.126 Table 2 - Pavement resurfacing and/or rehabilitation	PM10
	•	Si	ort Range	e (20	21-2025) Total	\$ 1,616,648			
		NO MID-RANGE PROJECTS							
		Long Range Projects					\$ -		
Ash-003	Intersection Improvements: Ashland-Oak Knoll-E. Main	Realign intersection, install speed-reduction treatments (950-ft, 0.18 Miles)	long	\$	1,184,195			Exempt-93.127 - Table 3: Intersection Channelization	PM10
Ash-004	Normal Avenue Extension	Extend roadway to East Main; sidewalks, bicycle lanes (2,250-ft, 0.43 Miles)	long	\$	5,916,032			Non-Exempt	PM10
Ash-005	Clear Creek Drive Extension	Extend road to connect with N. Mountain Ave. (2,000-ft, 0.38 Miles)	long	\$	4,601,359			Non-Exempt	PM10
		Long Range (2036-2045) Total		\$	11,701,586		\$ -		
		TIER TWO PROJECT LIST (UNFUNDED)							
Ash-006	E. Nevada Street Extension	Extend street over Bear Creek to link roadway at Kestrell; sidewalks, bicycle lanes (675-ft, 0.13 Miles)	TIER II	\$	5,055,500			Non-Exempt	PM10

LOCATION	DESCRIPTION	TIMING	COST	Cost by Range	Funds Available	Federal Funds Needed	Conformity Status	Within PM10/CO Maintenance Areas
oint								
	Install new four way signal at Beebe and Hamrick Roads	short	\$ 350,000		\$ 350,000		Exempt 93.127 Table 3 - Signalization at individual intersections	PM10
Hamrick at East Pine	Signal Upgrade - Install new north bound protected left, south bound designated right turn lane	short	\$ 600,000		\$ 600,000		Exempt 93.127 Table 3 - Signalization at individual intersections; Intersection channelization	PM10
W. Pine Street Reconstruction: Glenn Way to	curb and gutter, & bike lanes; 2 paved travel lanes and 1 continuous left	short	\$ 4,549,000				Exempt 93.126 Table 2 - Bicycle and Pedestrian facilities, Shoulder improvements, widening narrow pavements (no additional travel lanes)	PM10
	SI	hort Range	(2021-2025) Total	\$ 5,499,000	\$ 14,143,000			
OR 99: Traffic Calming Unit 3	Traffic Calming (300 ft)	medium	\$ 259,043				Exempt 93.126 Table 2 - Projects that correct, imprve, or eliminate a hazardous location or feature.	PM10
Scenic Ave., Mary's Way to Scenic Middle School	Widen to add bike lanes and sidwalks (urban upgrade - no new travel lanes) (700 ft)	medium	\$ 865,078				Exempt 93.126 Table 2 - Bicycle and Pedestrian facilities	PM10
	Medi	ium Range	(2026-2035) Total	\$ 1,124,121	\$ 18,276,000	\$ -		
Table Rock Rd. & Vilas Rd Intersection	Widen to add turn lanes	long	\$ 1,751,803				Exempt 93.127 Table 3 - Intersection channelization projects	PM10
Hanley – Brandon to Beall Lane	(2,150 ft)	long	\$ 3,286,685	\$ 5,038,488	\$ 9,001,000		Exempt 93.126 Table 2 - Bicycle and Pedestrian facilities, Shoulder improvements, widening narrow pavements (no additional travel lanes)	PM10
	Beebe at Hamrick Road Signal Hamrick at East Pine W. Pine Street Reconstruction: Glenn Way to Brandon Ave OR 99: Traffic Calming Unit 3 Scenic Ave., Mary's Way to Scenic Middle School Table Rock Rd. & Vilas Rd Intersection	Doint Beebe at Hamrick Road Signal Install new four way signal at Beebe and Hamrick Roads Signal Upgrade - Install new north bound protected left, south bound designated right turn lane W. Pine Street Reconstruction: Glenn Way to Brandon Ave; add sidewalks, curb and gutter, & bike lanes; 2 paved travel lanes and 1 continuous left turn lane. Drainage will also be installed/upgraded (2,200 ft, 0.42 miles) OR 99: Traffic Calming Unit 3 Traffic Calming (300 ft) Scenic Ave., Mary's Way to Scenic Middle School Widen to add bike lanes and sidwalks (urban upgrade - no new travel lanes) (700 ft) Med Med Widen to add turn lanes Widen to add turn lanes Widen to add turn lanes	Beebe at Hamrick Road Signal Install new four way signal at Beebe and Hamrick Roads Signal Upgrade - Install new north bound protected left, south bound designated right turn lane W. Pine Street Reconstruction: Glenn Way to Curb and gutter, & bike lanes; 2 paved travel lanes and 1 continuous left turn lane. Drainage will also be installed/upgraded (2,200 ft, 0.42 miles) Short Range OR 99: Traffic Calming Unit 3 Traffic Calming (300 ft) medium Medium Range Table Rock Rd. & Vilas Rd Intersection Widen to add turn lanes Widen to add center turn lane, bike lanes, sidewalks (no new travel lanes) Widen to add center turn lane, bike lanes, sidewalks (no new travel lanes) Widen to add center turn lane, bike lanes, sidewalks (no new travel lanes)	Beebe at Hamrick Road Signal Install new four way signal at Beebe and Hamrick Roads short \$ 350,000 Hamrick at East Pine Signal Upgrade - Install new north bound protected left, south bound seignated right rum lane Signal Upgrade - Install new north bound protected left, south bound seignated right rum lane Widen W. Pine Street Reconstruction: Glenn Way to Brandon Ave: Add sidewalks, surb and gutter, & bike lanes; 2 pawed travel lanes and 1 continuous left rum lane. Drainage will also be installed/upgraded (2,200 ft, 0.42 miles) Short Range (2021-2025) Total OR 99: Traffic Calming Unit 3 Traffic Calming (300 ft) Redium Range (2026-2035) Total Widen to add bike lanes and sidwalks (urban upgrade - no new travel lanes) Medium Range (2026-2035) Total Table Rock Rd. & Vilas Rd Intersection Widen to add turn lanes Widen to add center turn lane, bike lanes, sidewalks (no new travel lanes) Union Secretary (no new travel lanes)	Beebe at Hamrick Road Signal Install new four way signal at Beebe and Hamrick Roads short \$ 350,000 Hamrick at East Pine Signal Upgrade - install new north bound protected left, south bound short \$ 600,000 W. Pine Street Reconstruction: Gleen Way to Wilden W. Pine St between Glern Way and Brandon Ave; add sidewalks, una and gatter, & like larnes; 2 pased travel lanes and is continuous left urn lane. Drainage will also be installed upgraded (2,200 ft, 0.42 miles) Short Range (2021-2025) Total \$ 5,499,000 OR 99: Traffic Calming Unit 3 Traffic Calming (300 ft) medium \$ 259,043 Scenic Ave., Mary's Way to Scenic Middle School Wilden to add bike lanes and sidwalks (urban upgrade - no new travel lanes) Medium Range (2026-2035) Total \$ 1,124,121 Table Rock Rd. & Vilas Rd Intersection Wilden to add turn lanes Wilden to add center turn lane, bike lanes , sidewalks (no new travel lanes) Wilden to add center turn lane, bike lanes , sidewalks (no new travel lanes)	Beebe at Hamrick Road Signal Install new four way signal at Beebe and Hamrick Roads short 5 350,000 \$ \$ 350,000 \$	Direct Coat by Range Punks Available Needed The Manufack Road Signal Install new four way signal at Beebe and Harnrick Roads short \$ 350,000 \$ 5 350,000 \$ Signal Upgrade - Install new north bound protected left, south bound designated right turn lane Signal Upgrade - Install new north bound protected left, south bound short \$ 600,000 \$ 5 600,000 \$ W. Pine Street Reconstruction: Glern Way to Brandon Ave and sidewalks and societies and sidewalks are the Carrings will also be installed upgraded (2,200 %, 0.42 miles) Short Range (221-2025) Total \$ 5,499,000 \$ 14,143,000 \$ OR 90: Traffic Cairning Unit 3 Traffic Cairning (300 %) \$ 14,143,000 \$ Seemic Ave., Mary's Way to Sciente Middle School Wilson to add bke laines and sidewalks (urban upgrade - no new travel lanes) (700 %) \$ 1,751,803 \$ 18,276,000 \$ 5 Medium Range (2026-2035) Total \$ 1,124,121 \$ 18,276,000 \$ 5 Medium Range (2026-2035) Total \$ 1,124,121 \$ 18,276,000 \$ 5 Wilson to add turn lanes \$ 1,751,803 \$ 1,751,803 \$ 1,751,803 \$ 1,751,803	DOLATION DESCRIPTION THAT COST COST PROMPS Purples Available Piceded Conforming Status Treated new four way agond at Beate and Harnrick Roads Signal Purples Available Prompt for the State Prine Sta

PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	COST	Cost by Range	Funds Available	Federal Funds Needed	Conformity Status	Within PM10/CO Maintenance Areas
Phoenix									
		SI	hort Range	e (2021-2025) Total		\$ 776,000			
PHX-001	Urban Reserve Areas PH-5, PH-10	Construct new street network (City Contribution) - length: approx. 5.841 miles	Medium	\$1,000,000				Non-Exempt	PM10
PHX-002	Rose St, Oak to 1st	Install sideawalks - length: .218 miles	Medium	\$346,500				Exempt-93.126 Table 2 - Bicycle and Pedestrian facilities	PM10
PHX-003	Camp Baker Road, Hilsinger to Colver	new or improved sidewalks on both sides - length: .258 miles	Medium	\$445,000				Exempt-93.126 Table 2 - Bicycle and Pedestrian facilities	PM10
PHX-004	Oak St. Rose to Main	Install sideawalks - length: .216 miles	Medium	\$363,000				Exempt-93.126 Table 2 - Bicycle and Pedestrian facilities	PM10
PHX-005	Colver Rd., First St. to 4th	Widen and construct sidewalks, bike lanes (no new travel lanes) .209 miles	Medium	\$ 595,000				Exempt-93.126 Table 2 - Bicycle and Pedestrian facilities	PM10
PHX-006	Colver Rd., First St. to Southern UGB Boundary	Construct multi-use path on east side - length: .410 miles	Medium	\$ 250,000				Exempt-93.126 Table 2 - Bicycle and Pedestrian facilities	PM10
•		Medi	ium Range	(2026-2035) Total	\$ 2,999,500	\$ 2,307,000			
PHX-007	Hilsinger, Colver Road to UGB Boundary	Total reconstruct with addition of bike lanes and sidewalks, stormwater management facilities (no new travel lanes) .450 miles	long	\$ 770,000				Exempt-93.126 Table 2 - Pavement resurfacing and/or rehabilitation, Bicycle and Pedestrian facilities	PM10
		Li Control Li	ong Range	(2036-2045) Total	\$ 770,000	\$ 3,236,000	\$ -		

DESCRIPTION	TIMING	COST	Cost by Phase	Funds Available	Federal Funds Needed	Conformity Status	Within PM10/CO Maintenance Areas
Talent							
Road diet on W. Valley View from Hwy 99 to aprox. 0.46 miles to east. Remove existing and repave and restripe bike and ped upgrades	short	\$ 1,400,000				Exempt-Table 2 - Safety improvements, pavement marking, bicycle and pedestrian facilities	PM10
SI	ort Range	(2021-2025) Total	\$ 1,400,000	\$ 1,793,000	\$ -		
Rebuild and upgrade to urban major collector standard (widen lanes, add bicyle lanes, sidewalks) - no new travel lanes, approximately 3,500 feet	medium	\$ 3,430,000				Exempt 93.126 Table 2 - Bicycle and Pedestrian facilities, Shoulder improvements, widening narrow pavements (no additional travel lanes)	PM10
Construct new collector street (50 feet), approximately 525 feet	medium	\$ 730,000				Non-Exempt	PM10
Construct new 10-foot-wide multimodal path near Wagner Creek connecting to Bear Creek Greenway (install new creek crossing), approximately 995 feet	medium	\$ 880,000				Exempt-Table 2 - bicycle and pedestrian facilities	PM10
Medi	um Range	(2026-2035) Total	\$ 5,040,000	\$ 2,607,000			
Construct new railroad district collector street, approximately 5,135 feet	long	\$ 5,200,000				Non-Exempt	PM10
Upgrade to collector standard and upgrade railroad crossing & restrict other crossings (Pleasant View, Hill Top) - no new travel lanes, approximately 400 feet	long	\$ 800,000				Exempt - Table 2 - Safety, widen narrow pavements (no additional travel lanes)	PM10
Construct new collector street west of city in Urban Reserve area TA-1, approximately 4,415 feet	long	\$ 2,730,000				Non-Exempt	PM10
Lo	ong Range	(2036-2045) Total	\$ 8,730,000	\$ 3,881,000			

EP-012	Alta Vista Road - S. Shasta Avenue to Robert Trent Jones	Urban Upgrade (Arterial) with Bike Lanes and Sidewalks (no new travel lanes) 6,050 ft	long	\$ 750,000	\$600,000	\$100,000	\$50,00	improvements, widening narrow pavements (no additional travel lanes)	PM10
EP-013	Hannon Road - West Linn Road to Nick Young Road	Urban Upgrade (Collector) with Bike Lanes and Sidewalks (no new travel lanes) 2,000 ft.	long	\$ 1,000,000	\$250,000	\$750,000		Table 2 - Bicycle and Pedestrian facilities,	PM10
EP-014	Nick Young Road - OR 62 to Hannon Road	Urban Upgrade (Collector) with Bike Lanes and Sidewalks (no new travel lanes) 600 ft.	long	\$ 375,000	\$25,000	\$350,000		Exempt 93.126 Table 2 - Bicycle and Pedestrian facilities, Shoulder improvements, widening narrow pavements (no additional travel lanes)	PM10
EP-015	Reese Creek Road - Royal Ave to Barton Rd	Urban Upgrade (Collector) with Bike Lanes and Sidewalks (no new travel lanes) 2,500 ft.	long	\$ 550,000				Exempt 93.126 Table 2 - Bicycle and Pedestrian facilities, Shoulder improvements, widening narrow pavements (no additional travel lanes)	PM10
EP-016	South Shasta Avenue - Highway 62 to Arrowhead Trail (Phase II)	Urban Upgrade (Collector) with Bike Lanes and Sidewalks (no new travel lanes) 3,020 ft.	long	\$ 750,000	\$450,000	\$300,000		Exempt 93.126 Table 2 - Bicycle and Pedestrian facilities, Shoulder improvements, widening narrow pavements (no additional travel lanes)	PM10

EP-017	Royal Ave/Old Highway 62 Intersection	Intersection Realignment	long	\$	550,000	\$250,000	\$300,000			Exempt 93.127 Table 3 - Intersection channelization projects	PM10
EP-018	Little Butte Park Pedestrian Bridge	New Pedestrian Bridge Near Teakwood	long	\$	2,500,000	\$450,000			\$2,050,000	Exempt-Table 2 - bicycle and pedestrian facilities	PM10
EP-019	S. Shasta Ave - Arrowhead Trail to Loto Street	Urban Upgrade (Collector) with Bike Lanes and Sidewalks (no new travel lanes) 4,500 ft.	long	\$	650,000	\$350,000			\$300,000	Exempt 93.126 Table 2 - Bicycle and Pedestrian facilities, Shoulder improvements, widening narrow pavements (no additional travel lanes)	PM10
EP-020	Cottonwood at Hwy 62	Realign Intersection	long	\$	50,000	\$50,000				Exempt 93.127 Table 3 - Intersection channelization projects	PM10
EP-021	Linn Rd at Hwy 62	Dual Left Turn Lanes	long	\$	200,000	\$200,000				Exempt 93.126 Table 2 - Projeccts that correct, improve, or eliminate a hazardous feature.	PM10
EP-022	Onyx St Extension	Extension Collector with Bike Lanes and Sidewalks 1,250 ft.	long	\$	325,000	\$225,000	\$100,000			Non-exempt	PM10
EP-023	Hwy 62 @ Rolling Hills Dr	Signalization	long	\$	500,000	\$500,000				Exempt 93.127 Table 3 - Intersection Signalization at individual intersections	PM10
		Long Range (2036-2045) Total		\$ 1	10,925,000	\$ 3,550,000	\$ 4,425,000	\$ -	\$ 2,400,000		
		TIER II									
EP-024	West Lin Road - OR 62 to Dahlia Terrace	Urban Upgrade (Collector) with Bike Lanes and Sidewalks (no new travel lanes) 2,880 ft.	TIER II	\$	1,800,000					Exempt-Table 2 - Safety	PM10

PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	COST	Cost by Range	Funds Available	Federal Funds Needed	Conformity Status	Within PM10/CO Maintenance Areas
Jackson (County								
JCRV-001	Foothill Rd., Delta Waters to Dry Creek Rd.	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 6,800 ft, 1.28 miles	short	\$ 3,300,000		BUILD Grant		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pawements with no additional travel lanes	PM10
JCRV-002	Kirtland to Gold Ray	Rogue River Greenway extension - 0.31 miles	short	\$ 500,000			\$ 500,000	Exempt 93.126 - Bicycle and pedestrian facilities	PM10
JCRV-003	Foothill Rd., Dry Creek Rd to Vilas Rd	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 1.1 miles	short	\$ 3,000,000				Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pawements with no additional travel lanes	PM10
JCRV-004	Foothill Rd., Vilas to Corey	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 1.7 miles	short	\$ 4,000,000				Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	PM10
JCRV-005		Add receiving lane southbound to allow dual left turns from Antelope Rd. Receiving lane tapers out at Mosquito Ln 0.15 mile	short	\$ 1,000,000		\$ 1,000,000		Exempt 93.127 table 3 - intersection channelization project	PM10
JCRV-006	E. Vilas Rd, Medford city limits to McLouglin	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 0.9 miles	short	\$ 2,500,000		\$ 2,500,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pawements with no additional travel lanes	PM10
JCRV-007		Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 1.0 miles	short	\$ 2,500,000		\$ 2,500,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	

JCRV-008	Wilson Rd, Upton to Table Rock	Improve (widen) to rural minor collector standards with turn lanes (no new travel lanes) - 1.25 miles	short	\$ 2,500,000		\$ 2,500,000	Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	PM10
JCRV-009	Crews Road	Pave Gravel Road	short	\$ 528,000			Exempt 93.126 Table 2 - Pavement resurfacing and/or rehabilitation	
		s	hort Range	(2021-2025) Total	\$ 19,828,000			
		MEDIUM RANGE						
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JCRV-010	Gold Ray Rd, Blackwell Rd to Upper River Rd.	Rogue River Greenway extension - 1.6 miles	medium	\$ 2,000,000			Exempt 93.126 Table 2 - bibycle and pedestrian facilities	PM10
JCRV-011	Table Rock Rd, Biddle to Wilson	Install enhanced bicycle facility - 1.25 miles	medium	\$ 1,000,000			Exempt 93.126 Table 2 - bibycle and pedestrian facilities	PM10
JCRV-012	Old Stage Rd., Winterbrook to MPO Boundary	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 3.3 miles	medium	\$ 9,000,000			Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	
JCRV-013	Eagle Mill Dr, S Valley View to Oak	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 1.75 miles	medium	\$ 4,000,000			Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	
JCRV-014	Table Rock Rd/Vilas Rd Intersection	Intersection widening adding turn lanes	medium	\$ 1,500,000			Exempt 93.127, table 3 - Intersection Channelization	
JCRV-015	Crater Lake Highway, Medford CL to Fowler	Install enhanced bicycle facility - 1.0 miles	medium	\$ 500,000			Exempt 93.126 Table 2 - bibycle and pedestrian facilities	
		Med	ium Range	(2026-2035) Total	\$ 18,000,000			

		LONG RANGE (2036-2045)					
JCRV-016	Upper River Rd., Gold Ray Rd to RVMPO Boundary	Rogue River Greenway extension - 0.4 miles	long	\$ 1,500,000		Exempt 93.126 Table 2 - bibycle and pedestrian facilities	PM10
JCRV-017	W Main St, Renault to Hanley	Improve (widen) to rural major collector standards with turn lanes and enhanced bike lanes (no new travel lanes) - 1.7 miles	long	\$ 3,000,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	
JCRV-018	Upton Rd, Penninger to Gibbon	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 1.6 miles	long	\$ 4,000,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	
JCRV-019	S. Valley View Rd, I-5 to W. Valley View	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 0.5 miles	long	\$ 1,500,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	
JCRV-020	Table Rock Rd/Biddle Rd Intersection	Intersection widening (capacity)- adding east bound left turn laned	long	\$ 2,000,000		Exempt - 93.127 Table 3 - channelization project	
JCRV-021	Atlantic Ave., Cole Dr to E Dutton	New 3-lane major collector	long	\$ 2,000,000		Non-exempt	
JCRV-022	Griffin Cr Rd, S Stage Rd to Pioneer Rd	Improve (widen) to rural major collector standards with turn lanes and sidepath (no new travel lanes) - 1.0 miles	long	\$ 3,000,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	
JCRV-023	Suncrest Rd, Bear Cr Greenway E to Bear Cr Greenway W	Install enhanced bike and ped facilities (does not include bridge widening)	long	\$ 500,000		Exempt 93.126 Table 2 - bibycle and pedestrian facilities	
JCRV-024	Bigham Brown Rd, Antelope to Alta Vista	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 1.9 miles	long	\$ 5,000,000		Exempt 93.126 Table 2 - Projects that correct, improve, or ellminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	

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JCRV-025	Antelope Rd/Atlantic Intersection	New Traffic Signal	long	\$ 500,000		Exempt 93.127 Table 3 - Intersection Signalization at individual intersections
JCRV-026	Stewart Ave, Oak Grove to Hull	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 0.15 miles	long	\$ 500,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes
JCRV-027	Hull Rd, Stewart to S. Stage	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 0.75 miles	long	\$ 2,000,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes
JCRV-028	Taylor Rd, Old Stage to Grant	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 1.0 miles	long	\$ 3,000,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pawments with no additional travel lanes
JCRV-029	Nick Young Rd, Agate to Eagle Point CL	Improve (widen) to rural major collector standards with turn lanes (no new travel lanes) - 2.0 miles	long	\$ 6,000,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes
JCRV-030	Old Stage Rd, Jacksonville CL to Ross	Widen shoulders to conform with Old Stage Road Corricor Plan - 1.9 mil	long	\$ 3,000,000		Exempt 93.126 Table 2 - Shoulder improvements
JCRV-031	N Phoenix Rd, Medford CL to Phoenix CL	Improve (widen) to rural arterial standards with turn lanes (no new travel lanes) - 1.6 miles	long	\$ 2,000,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes

PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	COST	Cost by Range	Funds Available	Federal Funds Needed	Conformity Status	Within PM10/CO Maintenance Areas
Medford									
	South Stage Road, South Pacific Highway to North Phoenix Road	Complete the environmental process and purchase right-of-way for a new minor arterial roadway (includes center turn-lane, bike facilities, and sidewalks) and overcrossing of I-5 (part of the N. Phoenix / Foothill and S Stage Corridor)	Short	\$3,000,000		\$3,000,000		Non-exempt	PM10/CO
MED-002	Biddle Road & Lawnsdale Road	Update signal phasing and install protected/permitted signal heads in northbound and southbound directions	Short	\$160,000		\$160,000		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature	PM10/CO
MED-003	Various sidewalk gap locations with focus on high-priority areas including schools, activity centers and essential destinations, transit routes, and transit oriented districts (TOD)	Construct sidewalks or other pedestrian facilities at high-priority locations (\$250,000 annually)	Short	\$1,250,000		\$1,250,000		Exempt 93.126 Table 2 - bicycle and pedestrian facilities	PM10/CO
MED-004	Various bicycle network gap locations with focus on high-priority areas including schools, activity centers and essential destinations, transit routes, and transit oriented development areas	Evaluate and construct potential roadway reconfigurations to accommodate bicycle facilities through re-striping and/or minor reconstruction at high-priority locations (\$100,000 annually)	Short	\$500,000		\$500,000		Exempt 93.126 Table 2 - bicycle and pedestrian facilities	PM10/CO
MED-005	Signal System Upgrades	Upgrade signal controllers to Advanced Traffic Controllers, upgrade communications to signals, and other signal technology upgrades	Short	\$1,000,000		\$1,000,000		Exempt - ITS systems for congestion reduction	PM10/CO
	Foothill Road, McAndrews Road to Delta Waters Road	Upgrade to regional arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks (part of the N. Phoenix / Foothill and S Stage Corridor)	Short	\$36,000,000		BUILD Grant		Non-exempt	PM10/CO
MED-007	Foothill Road, Hillcrest Road to McAndrews Road	Upgrade to regional arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks	Short	\$13,000,000		BUILD Grant		Non-exempt	PM10/CO
MED-008	Owen Drive, Springbrook Road to Torrent Street	Construct new minor arterial roadway (includes center turn-lane, bike facilities, and sidewalks)	Short	\$525,000		\$525,000		Non-exempt	PM10/CO
MED-009	Biddle Road & Stevens Street	Replace/upgrade traffic signal	Short	\$400,000		\$400,000		Exempt - 93.127, table 3 - Intersection signalization projects at individual intersections.	PM10/CO
MED-010	McAndrews Road at Foothill Road Ramps	Install traffic signals	Short	\$600,000		BUILD Grant		Exempt 93.127 Table 3 - Intersection signalization at individual intersections	PM10/CO
MED-011	Foothill Road & Delta Waters Road	Install turn lanes and traffic signal or roundabout when warranted (part of the N. Phoenix / Foothill and S Stage Corridor)	Short	\$2,200,000		BUILD Grant		Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	PM10/CO
MED-012	Foothill Road & Lone Pine Road	Intersection control improvements such as right-in/right-out only due to proximity to planned signal at McAndrews ramp - TBD by intersection further analysis and safety analysis (part of the N. Phoenix / Foothill and S Stage Corridor)	Short	\$400,000		BUILD Grant		Exempt 93.126 Table 2 - Safety - eliminate hazardous feature	PM10/CO
MED-013	Crater Lake Avenue & Brookhurst Street	Replace/upgrade traffic signal to increase vertical clearance and optimize signal timing/phasing	Short	\$400,000				Exempt 93.127 Table 3 - Intersection channelization	PM10/CO
MED-037	South Stage Road, North Phoenix Road to 1,000 feet West	New minor arterial standard including one lane in each direction, center- turn lane, bike facilities, and sidewalks (part of the N. Phoenix / Foothill and S Stage Corridor)	Short	\$2,000,000		BUILD Grant		Non-exempt	PM10/CO
		SI	hort Range	(2021-2025) Total	\$59,435,000		\$ -		

		MEDIUM RANGE (2026-2035)								
MED-014	Delta Waters Road, Nome Court to Foothill Road	Complete street improvements to Major Collector standard where one or both sides are not already completed	Medium	\$1,815,000				Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pawements with no additional travel lanes	PM10/CO	
MED-015	Table Rock Road, Merriman Road to Interstate 5	Upgrade to minor arterial standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	Medium	\$3,575,000				Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a harardous location or feature, widening narrow pavements with no additional travel lanes	PM10/CO	
MED-016	McAndrews Road, Ross Lane to Jackson Street	Upgrade to minor arterial standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks	Medium	\$2,045,000				Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	PM10/CO	
MED-017	South Stage Road, City Limits to Orchard Home Drive	Realign S Stage Rd and construct new minor arterial roadway (includes center turn-lane, bike facilities, and sidewalks)	Medium	\$4,345,000				Non-exempt	PM10/CO	
MED-018	12th Street & Riverside Avenue	Replace/upgrade traffic signal and increase vertical clearance	Medium	\$400,000				Exempt 93.127 Table 3 - Intersection signalization projects at individual intersections	PM10/CO	
MED-019	Coker Butte Road, Crater Lake Avenue to Springbrook Road	Realign and upgrade to major arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks.	Medium	\$3,400,000				non-exempt	PM10/CO	
MED-020	Highland Drive & Barnett Road	Intersection improvements such as second northbound right-turn lane (protected)	Medium	\$1,500,000				Exempt 93.127 Table 3 - Intersection channelization	PM10/CO	
MED-021	Various sidewalk gap locations with focus on high-priority areas including schools, activity centers and essential destinations, transit routes, and transit oriented districts (TOD)	Construct sidewalks or other pedestrian facilities at high-priority locations (\$250,000 annually)	Medium	\$2,500,000				Exempt 93.126 Table 2 - bicycle and pedestrian facilities	PM10/CO	
MED-022	Various bicycle network gap locations with focus on high-priority areas including schools, activity centers and essential destinations, transit routes, and transit oriented development areas	Evaluate and construct potential roadway reconfigurations to accommodate bicycle facilities through re-striping and/or minor reconstruction at high-priority locations (\$100,000 annually)	Medium	\$1,000,000				Exempt 93.126 Table 2 - bicycle and pedestrian facilities	PM10/CO	
MED-023	Signal System Upgrades	Upgrade signal controllers to Advanced Traffic Controllers, upgrade communications to signals, and other signal technology upgrades	Medium	\$984,000				Exempt - ITS systems for congestion reduction	PM10/CO	
	Medium Range (2026-2035) Total \$21,564,000 \$ -									

		LONG RANGE (2036-2045)						
MED-024		Realign, extend Columbus Avenue to Sage Rd, and widen to major arterial	Long	\$4,345,000			Non-exempt	PM10/CO
MED-025	Sage Road Kings Highway, South Stage Road to Stewart Avenue	standard including center-turn lane, bike facilities, and sidewalks	Long	\$8,495,000			Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow	PM10/CO
		Upgrade to minor arterial standard including one lane in each direction, center-turn lane, bike facilities, and sidewalks Upgrade to major arterial standard including two lanes in each direction,					pavements with no additional travel lanes	
MED-026	Stewart Avenue, Lozier Lane to Dixie Lane	center-turn lane, bike facilities, and sidewalks	Long	\$2,645,000			Non-exempt	PM10/CO
MED-027	South Pacific Highway & Stewart Avenue	Intersection improvements such as second southbound left and second eastbound left-turn lanes	Long	\$3,000,000			Exempt 93.127 Table 3 - Intersection channelization	PM10/CO
MED-028	Creek View Drive & North Phoenix Road	Install traffic signal when warranted. Remove traffic signal at Albertson's access and convert to right-in/right-out only (part of the N. Phoenix / Foothill and S Stage Corridor) (Also,	Long	\$400,000			Exempt 93.127 Table 3 - Intersection signalization at individual intersections	PM10/CO
MED-029	Crater Lake Avenue & East Vilas Road	Re-align Crater Lake Ave to the east and install traffic signal	Long	\$400,000			Exempt 93.127 Table 3 - Intersection signalization at individual intersections, intersection channelization	PM10/CO
MED-030	Crater Lake Highway & East Vilas Road	Monitor needs after construction of Crater Lake Highway Bypass	Long	\$5,000			N/A	PM10/CO
MED-031	Various sidewalk gap locations with focus on high-priority areas including schools, activity centers and essential destinations, transit routes, and transit oriented districts (TOD)	Construct sidewalks or other pedestrian facilities at high-priority locations (\$250,000 annually) - TSP Plan year ends in 2038	Long	\$1,250,000			Exempt 93.126 Table 2 - bicycle and pedestrian facilities	PM10/CO
MED-032	Various bicycle network gap locations with focus on high-priority areas including schools, activity centers and essential destinations, transit routes, and transit oriented development areas	Evaluate and construct potential roadway reconfigurations to accommodate bicycle facilities through re-striping and/or minor reconstruction at high-priority locations (\$100,000 annually) - TSP Plan year ends in 2038	Ü	\$500,000			Exempt 93.126 Table 2 - bicycle and pedestrian facilities	PM10/CO
			ong Range	(2036-2045) Total	\$21,040,000	\$		
		TIER II PROJECTS						
	Tier 2 List							
MED-033	Foothill Road, Delta Waters Road to North UGB	Upgrade to regional arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks (part of the N. Phoenix / Foothill and S Stage Corridor)	TIER II	\$4,555,000				PM10/CO
MED-034	N Phoenix Rd, Juanipero Way to South UGB	Upgrade to regional arterial standard including two lanes in each direction, center-turn lane, bike facilities, and sidewalks (part of the N. Phoenix / Foothill and S Stage Corridor)	TIER II	\$7,800,000				PM10/CO
MED-035	North Phoenix Road from Barnett Road to Juanipero Way	Widen to regional arterial standard including two lanes in each direction, center turn-lane, bike facilities, and sidewalks (part of the N. Phoenix / Foothill and S Stage Corridor)	TIER II	\$7,600,000				PM10/CO
MED-036	South Stage Road, South Pacific Highway to North Phoenix Road	Construct new minor arterial roadway (includes center turn-lane, bike facilities, and sidewalks) and overcrossing of I-5 (part of the N. Phoenix / Foothill and S Stage Corridor)	TIER II	\$47,000,000				PM10/CO

PROJECT NUMBER	LOCATION	DESCRIPTION	TIMING	COST	Cost by Range	Funds Available	Federal Funds Needed	Conformity Status	Within PM10/CO Maintenance Areas
ODOT									
ODRV-001	I-5 Medford Viaduct Deck Overlay	Overlay deck, 0.5 miles	short	\$ 1,650,000				Exempt 93.126 Table 2 - pavement resurfacing/ rehabilitation	PM10/CO
ODRV-002	OR140: Exit 35 Blackwell Rd	Add center turn lane, widen shoulders, add bike path	short	\$ 9,605,836				Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pawements with no additional travel lanes	PM10
ODRV-004	OR99: I-5 to Scenic Ave	Convert 4-Lane Roadway to 3-Lane Roadway with Center Turn Lane, Add Traffic Signal	short	\$ 3,262,000				Exempt 93.126 Table 2 - pavement resurfacing/ rehabilitation	PM10
ODRV-005	OR140: Bear Creek - Agate Rd	Grind out the existing pavement and replace with new asphalt between MP 6.70-1.16	short	\$ 4,922,000				Exempt 93.126 Table 2 - pavement resurfacing/ rehabilitation	PM10
ODRV-006	I-5: Ashland to Gold Hill	Repair or replace culverts, address scour and road embankment problems near culverts	short	\$ 4,884,153				Exempt 93.126 Table 2 - pavement resurfacing/ rehabilitation	PM10/CO
ODRV-007	OR62: Corridor Solutions Unit 2 Phase 3 (Medford)	Planting of vegetation for storm water treatment facilities	short	\$ 300,000				Exempt 93.126 Table 2 - Bicycle and pedestrian facilities	PM10/CO
ODRV-008	I-5 California State Line - Ashland Paving	Grind/Inlay; 11.45 miles	short	\$ 23,000,000				Exempt 93.126 Table 2 - Bicycle and pedestrian facilities	PM10
ODRV-009	OR99: Coleman Ck. (Phoenix)	Replace Culvert at Coleman Creek - Added sidewalk and Bike facilities at culvert	short	\$ 7,300,000				Exempt 93.126 Table 2 - Traffic control devices and opeating assistance other than signalization projects	PM10
	OR99: Creel to Bear Creek Greenway Connector (Talent)	Connecting Hwy 99 to the shared multi-use path.	short	\$ 625,000				Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pavements with no additional travel lanes	PM10
ODRV-012	I-5: Siskiyou Pass Variable Advisory Speed Signs	Install weather responsive variable speed system for I-5 Siskiyou mountain pass	short	\$ 6,586,000				Exempt 93.126 Table 2 - Traffic control devices and opeating assistance other than signalization projects	PM10
ODRV-013	OR140: Lakeview Dr. Left turn lane	Adding turn lane on OR140 to Laveview Drive	short	\$ 1,670,000					
ODRV-014	I-5 Region 3 Clear Zone Improvements	Install traffic safety barriers to protect drivers from roadside hazards that cannot be removed.	short	\$ 2,722,800				N/A	

							Exempt	93.126		
ODRV-015	I-4 Southern Oregon Wrong Way Driver Mitigation	Help improve signage onto I-5 from local roadways to help mitigate and stop wrong way entry onto I-5.	short	\$ 2,497,000			Table 2 - control dev opeal assistand than signa	Traffic ices and ing e other alization		
ODRV-016	OR99 at Laruel Street (Ashland)	Intersection improvemetents at OR 99 and Laurel Ave in Ashland.	short	\$ 1,444,000			Exempt Table 2 - I that co improv elimini hazardous or feature, narrow pa with no av travel I	Projects rrect, e, or ate a location widening wements dditional		
ODRV-017	I-5 North Ashland - South Ashland	**PE only - Design for a future construction project to remove existing pavement and replace with new asphalt to extend the service life of the pavement.	short	\$ 900,000			Exempt Table 2 - I that co improv elimini hazardous or feature, narrow pa with no av travel I	Projects rect, e, or ate a location widening wements dditional		
ODRV-018	OR62: Corridor Solutions Unit 2 Phase 4 (Medford)	ITS equipment installation	short	\$ 2,448,000			Exempt Table 2 - I that co improv elimin: hazardous or feature, narrow a with no ac travel I	Projects rrect, e, or ate a location widening wements dditional		
ODRV-019	Southern Oregon Seismic Slopes Stability	Seismic upgrades on 7 hillside slopes	short	\$14,775,000						
ODRV-020	Southern Oregon Seismic Bridge Retrofit (Phase 2)	Seismic upgrades on bridge and overpass structures	short	\$3,725,000						
ODRV-021	Souther Oregon Seismic Bridge Retrofit (Phase 3)	Seismic upgrades on bridge and overpass structures	short	\$7,500,000						
ODRV-022	OR140: Bear Creek - 5th Street	** PE only Develop plans for a future construction project to include deck overlay on bridge numbers 00406A and 08743. Grind out the existing pavement and replace with new asphalt	short	\$ 5,871,567			N/s	A		
ODRV-023	Foothil Rd. Corridor	Expand the current footpring of the Foothills Rd. Corridor to a 5-lane sectoin (4 travel lanes and a TWTL), bikelanes, curb, gutter, and sidewalks.	short	\$ 14,477,599			non-ex	empt		
	Short Range (2021-2025) Total \$ 120,165,955 \$ 120,165,955 \$ -									

		MEDIUM RANGE (2026-2035)							
ODRV-024	OR-140 @ Agate and @ Leigh Way	Improve intersections alignments and change thru movement to favor the highway alignment.	Medium	\$ 7,000,000				Exempt 93.127 Table 3 - intersection channelization projects	PM10
		Med	ium Range	(2026-2035) Total	\$ 7,000,000	\$ 20,000,000	\$ -		
	LONG RANGE (2036-2045)								
ODRV-025	South Valley View Bridge Replacement	Realign and widen the Bear Creek Bridge over South Valley View Rd, located off Exit 19 near Ashland. It will also widen and add turning lanes to South Valley View Rd from the Interstate to Hwy 99 and connect peds and bikes with the Bear Creek Greenway.;0.5 miles	Long	\$ 15,000,000				Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pawments with no additional travel lanes	PM10/CO
ODRV-026	OR-99: Birch Street to Garfield	Add sidewalks and bikelanes; Upgrade Storm Drain; 1.8 miles	Long	\$ 40,000,000				Exempt 93.126 Table 2 - Bicycle and pedestrian facilities	PM10
ODRV-027	OR-238: West Main to N. Ross Lane	Realign and widen highway; add adequate shoulders and/or bikelanes, add pedestrian improvements in urban areas; 2.8 miles no new travel lanes	Long	\$ 18,000,000			\$	Exempt 93.126 Table 2 - Projects that correct, improve, or eliminate a hazardous location or feature, widening narrow pawments with no additional travel lanes	
		L	ong Range	(2036-2045) Total	\$ 73,000,000	\$ 33,000,000			

SHORT			Total		Fed	deral
RVTD-001	Urban Operating Assistance, FFY2021	short	\$	5,666,438	\$	2,833,219.00
RVTD-002	Urban Operating Assistance, FFY2022	short	\$	5,779,768	\$	2,889,884.00
RVTD-003	Urban Operating Assistance, FFY2023	short	\$	5,895,362	\$	2,947,681.00
RVTD-004	Urban Operating Assistance, FFY2024	short	\$	5,895,362	\$	2,947,681.00
RVTD-005	Preventive Maintenance (MPO STBG Transfer, FFY2021)	short	\$	771,890	\$	700,000.00
RVTD-006	Preventive Maintenance (MPO STBG Transfer, FFY2022)	short	\$	771,890	\$	700,000.00
RVTD-007	Preventive Maintenance (MPO STBG Transfer, FFY2023)	short	\$	771,890	\$	700,000.00
RVTD-008	Preventive Maintenance (MPO STBG Transfer, FFY2024)	short	\$	771,890	\$	700,000.00
RVTD-009	RVTD - 5339 Bus & Facilities Program (Bus Expansion, FFY 2021) 2021)	short	\$	3,582,000	\$	2,687,000.00
RVTD-010	RVTD Rideshare and TDM (FFY 21-23)	short	\$	231,872	\$	210,277.00
RVTD-011	RVTD Rideshare and TDM (FFY 24-26)	short	\$	231,872	\$	210,277.00
RVTD-012	RVTD-5310 Enhanced Mobility Small Urban (2020-22)	short	\$	686,664	\$	572,220.00
RVTD-013	RVTD-5310 Enhanced Mobility Small Urban (2023-25)	short	_\$	700,397	\$	583,664.00
RVTD-014	RVTD - 5339 Bus & Facilities Program (Bus Replacement, FFY 2024)	short	\$	2,500,000	\$	2,000,000.00
RVTD-015	ODOT Mass Transit Capital Replacement (2021-2023)	short	\$	1,440,000	\$	1,200,000.00
RVTD-016	TDM Rideshare (2021)	short	\$	144,000	\$	129,211.20
RVTD-017	TDM Rideshare (2022)	short	\$	144,000	\$	129,211.20
RVTD-018	TDM Rideshare (2023)	short	\$	144,000	\$	129,211.20
RVTD-019	TDM Rideshare (2024)	short	\$	144,000	\$	129,211.20
RVTD-020	TDM Rideshare (2025)	short	\$	144,000	\$	129,211.20
RVTD-021	Urban Operating Assistance, FFY2025	medium	\$	6,000,000	\$	3,000,000.00
RVTD-022	Urban Operating Assistance, FFY2026	medium	\$	6,120,000	\$	3,060,000.00
RVTD-023	Urban Operating Assistance, FFY2027	medium	\$	6,242,400	\$	3,121,200.00
RVTD-024	Urban Operating Assistance, FFY2028	medium	\$	6,367,248	\$	3,183,624.00
RVTD-025	Urban Operating Assistance, FFY2029	medium	\$	6,494,593	\$	3,247,296.48
RVTD-026	Urban Operating Assistance, FFY2030	medium	\$	6,624,485	\$	3,312,242.41
RVTD-027	Urban Operating Assistance, FFY2031	medium	\$	6,756,975	\$	3,378,487.26
RVTD-028	Urban Operating Assistance, FFY2032	medium	\$	6,892,114	\$	3,446,057.00
RVTD-029	Urban Operating Assistance, FFY2033	medium	\$	7,029,956	\$	3,514,978.14
	Urban Operating Assistance, FFY2034	medium	\$	7,170,555	\$	3,585,277.71
	Preventive Maintenance (MPO STBG Transfer, FFY2025)	medium	\$	771,890	\$	700,000.00
	Preventive Maintenance (MPO STBG Transfer, FFY2026)	medium	\$	771,890	\$	700,000.00
RVTD-033	Preventive Maintenance (MPO STBG Transfer, FFY2027)	medium	\$	771,890	\$	700,000.00
RVTD-034	Preventive Maintenance (MPO STBG Transfer, FFY2028)	medium	\$	771,890	\$	700,000.00

RVTD-035 Preventive Maintenance (MPO STBG Transfer, FFY2029)	medium	\$ 771,890	\$ 700,000.00
RVTD-036 Preventive Maintenance (MPO STBG Transfer, FFY2030)	medium	\$ 771,890	\$ 700,000.00
RVTD-037 Preventive Maintenance (MPO STBG Transfer, FFY2031)	medium	\$ 771,890	\$ 700,000.00
RVTD-038 Preventive Maintenance (MPO STBG Transfer, FFY2032)	medium	\$,	\$ 700,000.00
RVTD-039 Preventive Maintenance (MPO STBG Transfer, FFY2033)	medium	\$,	\$ 700,000.00
RVTD-040 Preventive Maintenance (MPO STBG Transfer, FFY2034)	medium	\$,	\$ 700,000.00
RVTD-041 RVTD - 5339 Bus & Facilities Program (Bus Replacement, FFY 2027)	medium	\$ 2,500,000	\$ 2,000,000.00
RVTD-042 RVTD - 5339 Bus & Facilities Program (Bus Replacement, FFY 2030)	medium	\$ 2,500,000	\$ 2,000,000.00
RVTD-043 RVTD - 5339 Bus & Facilities Program (Bus Expansion, FFY 2033)	medium	\$ 2,500,000	\$ 2,000,000.00
RVTD-044 RVTD Rideshare and TDM (FFY 24-26)	medium	\$ 231,872	\$ 210,277.00
RVTD-045 RVTD Rideshare and TDM (FFY 27-29)	medium	\$ 231,872	\$ 210,277.00
RVTD-046 RVTD Rideshare and TDM (FFY 30-32)	medium	\$ 231,872	\$ 210,277.00
RVTD-047 RVTD Rideshare and TDM (FFY 32-34)	medium	\$ 231,872	\$ 210,277.00
RVTD-048 RVTD Rideshare and TDM (FFY 35-36)	medium	\$ 231,872	\$ 210,277.00
RVTD-049 RVTD-5310 Enhanced Mobility Small Urban (2026-27)	medium	\$ 257,379	\$ 214,482.54
RVTD-050 RVTD-5310 Enhanced Mobility Small Urban (2028-29)	medium	\$ 262,527	\$ 218,772.19
RVTD-051 RVTD-5310 Enhanced Mobility Small Urban (2030-32)	medium	\$ 267,777	\$ 223,147.63
RVTD-052 RVTD-5310 Enhanced Mobility Small Urban (2033-35)	medium	\$ 273,133	\$ 227,610.59
RVTD-053 ODOT Mass Transit Capital Replacement (2025-2027)	medium	\$ 1,440,000	\$ 1,200,000.00
RVTD-054 ODOT Mass Transit Capital Replacement (2030-2031)	medium	\$ 1,440,000	\$ 1,200,000.00
RVTD-055 ODOT Mass Transit Capital Replacement (2032-2034)	medium	\$ 1,440,000	\$ 1,200,000.00
RVTD-056 TDM Rideshare (2025)	medium	\$ 144,000	\$ 129,211.20
RVTD-057 TDM Rideshare (2026)	medium	\$ 144,000	\$ 129,211.20
RVTD-058 TDM Rideshare (2027)	medium	\$ 144,000	\$ 129,211.20
RVTD-059 TDM Rideshare (2028)	medium	\$ 144,000	\$ 129,211.20
RVTD-060 TDM Rideshare (2029)	medium	\$ 144,000	\$ 129,211.20
RVTD-061 TDM Rideshare (2030)	medium	\$ 144,000	\$ 129,211.20
RVTD-062 TDM Rideshare (2031)	medium	\$ 144,000	\$ 129,211.20
RVTD-063 TDM Rideshare (2032)	medium	\$ 144,000	\$ 129,211.20

RVTD-064	TDM Rideshare (2033)	medium	\$	144,000	\$ 129,211.20
RVTD-065	TDM Rideshare (2034)	medium	\$	144,000	\$ 129,211.20
RVTD-066	TDM Rideshare (2035)	medium	\$	144,000	\$ 129,211.20
RVTD-067	Urban Operating Assistance, FFY2035-2045	Long	\$	89,000,000	\$ 44,500,000.00
RVTD-068	Preventive Maintenance (MPO STBG Transfer, FFY2035-2045	Long	\$	8,490,790	\$ 7,700,000.00
RVTD-069	RVTD - 5339 Bus & Facilities Program (Bus Replacement, FFY2035-2045	Long	* \$	10,000,000	\$ 8,000,000.00
RVTD-070	RVTD Rideshare and TDM (FFY2035-2045)	Long	\$	2,370,805	\$ 2,150,000.00
RVTD-071	RVTD-5310 Enhanced Mobility Small Urban (FFY2035-2045)	Long	\$	6,138,000	\$ 5,115,000.00
RVTD-072	ODOT Mass Transit Capital Replacement (FFY2035-2045)	Long	\$	4,320,000	\$ 3,600,000.00
RVTD-073	TDM Rideshare (FFY2035-2045)	Long	\$	1,433,510	\$ 1,300,000.00
			\$	247,211,804	

Appendix D

Exempt Projects Under 40 CFR 93-126 and 93-127

(Text of federal regulations)



93.126 Exempt Projects

Notwithstanding the other requirements of this subpart, highway and transit projects of the types listed in table 2 of this section are exempt from the requirement to determine conformity. Such projects may proceed toward implementation even in the absence of a conforming transportation plan and TIP. A particular action of the type listed in table 2 of this section is not exempt if the MPO in consultation with other agencies (see §93.105(c)(1)(iii)), the EPA, and the FHWA (in the case of a highway project) or the FTA (in the case of a transit project) concur that it has potentially adverse emissions impacts for any reason. States and MPOs must ensure that exempt projects do not interfere with TCM implementation. Table 2 follows:

Table 2—Exempt Projects Safety

- Railroad/highway crossing.
- Projects that correct, improve, or eliminate a hazardous location or feature.
- Safer non-Federal-aid system roads.
- Shoulder improvements.
- Increasing sight distance.
- Highway Safety Improvement Program implementation.
- Traffic control devices and operating assistance other than signalization projects.
- Railroad/highway crossing warning devices.
- Guardrails, median barriers, crash cushions.
- Pavement resurfacing and/or rehabilitation.
- Pavement marking.
- Emergency relief (23 U.S.C. 125).
- Fencing.
- Skid treatments.
- Safety roadside rest areas.
- Adding medians.
- Truck climbing lanes outside the urbanized area.
- Lighting improvements.
- Widening narrow pavements or reconstructing bridges (no additional travel lanes).
- Emergency truck pullovers.
- Mass Transit
- Operating assistance to transit agencies.
- Purchase of support vehicles.
- Rehabilitation of transit vehicles₁.
- Purchase of office, shop, and operating equipment for existing facilities.
- Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.).
- Construction or renovation of power, signal, and communications systems.
- Construction of small passenger shelters and information kiosks.

- Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures).
- Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way.
- Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet₁.
- Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771.

Air Quality

- Continuation of ride-sharing and van-pooling promotion activities at current levels.
- Bicycle and pedestrian facilities.

Other

- Specific activities which do not involve or lead directly to construction, such as:
- Planning and technical studies.
- Grants for training and research programs.
- Planning activities conducted pursuant to titles 23 and 49 U.S.C.
- Federal-aid systems revisions.
- Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action.
- Noise attenuation.
- Emergency or hardship advance land acquisitions (23 CFR 710.503).
- Acquisition of scenic easements.
- Plantings, landscaping, etc.
- Sign removal.
- Directional and informational signs.
- Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities).
- Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational or capacity changes.

Note: 1 In PM_{10} and PM2.5nonattainment or maintenance areas, such projects are exempt only if they are in compliance with control measures in the applicable implementation plan.

93.127 Projects Exempt from Regional Emissions Analysis

Notwithstanding the other requirements of this subpart, highway and transit projects of the types listed in Table 3 of this section are exempt from regional emissions analysis requirements. The local effects of these projects with respect to CO concentrations must be considered to determine if a hot-spot analysis is required prior to making a project-level conformity determination. The local effects of projects with respect to PM₁₀ and PM2.5concentrations must be considered and a hot-spot analysis performed prior to making a project-level conformity determination, if a project in Table 3 also meets the criteria in §93.123(b)(1). These projects may then proceed to the project development process even in the absence of a conforming transportation plan and TIP. A particular action of the type listed in Table 3 of this section is not exempt from regional emissions analysis if the MPO in consultation with other agencies (see §93.105(c)(1)(iii)), the

EPA, and the FHWA (in the case of a highway project) or the FTA (in the case of a transit project) concur that it has potential regional impacts for any reason. Table 3 follows:

Table 3—Projects Exempt From Regional Emissions Analyses

- Intersection channelization projects.
- Intersection signalization projects at individual intersections.
- Interchange reconfiguration projects.
- Changes in vertical and horizontal alignment.
- Truck size and weight inspection stations.
- Bus terminals and transfer points.



Appendix E

Description of Public and Agency Participation



Opportunities for Public and Agency Participation

Overview

This section provides additional detail about how both the general public and key agencies participated in the development of this conformity determination, the 2021-2045 Regional Transportation Plan (RTP). It includes Mail Tribune newspaper notices (newspaper of record for Jackson County, Medford, RVMPO and RVCOG) regarding various outreach activities and the legal notice for the public hearing held by the RVMPO Policy Committee on adoption of this conformity determination and the plan and program.

RVMPO Public Participation Plan

The updated (2018) RVMPO Public Participation Plan was followed in development of this conformity determination and the corresponding RTP and TIP. The Public Participation Plan describes activities and procedures to be followed in the course of developing these documents as well as desired outcomes. The activities described below conducted for this conformity determination are consistent with the Public Participation Plan, which is consistent with 23 CFR 450.316, metropolitan planning, interested parties participation and consultation. Detailed records of all activities described below are maintained in RVCOG offices, 155 N. 1st St., Central Point.

RVMPO Committee Meetings

Throughout development of the 2021-2045 RTP and conformity determination -including project selection - three RVMPO standing committees meet regularly in publicly announced meetings. All meeting notices and background material are posted on the web.

- RVMPO Public Advisory Council met bimonthly. Membership is appointed by the RVMPO Policy Committee and includes representation from all RVMPO jurisdictions.
- RVMPO Policy Committee met monthly, with all meetings announced to the news media and to about 100 interested parties. Members are appointed by each RVMPO jurisdiction, including the public transportation provider and ODOT.
- RVMPO Technical Advisory Committee, the standing committee for consultation on air quality under OAR 340-252-0060, met monthly, with all meetings announced to the news media and about 90 interested parties. Membership includes staff from all member jurisdictions and FHWA, Oregon DEQ, ODOT and Department of Land Conservation and Development,

All meeting materials and summary meeting minutes are posted on the RVMPO web site, www.rvmpo.org.

Detailed records of consultation are on file with Rogue Valley Council of Governments, 115 N. First St., Central Point, OR.

Outreach

Outreach on the 2021-45 RTP began in the summer, 2020. RVMPO member jurisdictions were asked to update their projects for the 2021-45 RTP.

All comments received specific to this document are summarized with RVMPO responses in Appendix F.

Outreach efforts illustrated on the following pages are:

- 1. Press Release announcing comment period.
- 2. Notification on RVMPO website.

AQCD Interagency Consultation

Opportunities for agencies to participate in this analysis occurred throughout the development process. Agencies consulted were ODOT, ODEQ, FHWA and FTA. A summary is provided in section 2.1 of the main document. The RVMPO consulted with the Interagency Consultation Group (IACG) on the Pre-Analysis Consensus Plan which is provided in Appendix H. Meeting summaries are included below.



(Public Hearing Ads/Notices)



Appendix F

Public and Agency Comments Received and Responses During Public Comment Period



Comments Received During Comment Period

The RVMPO held a formal 30-day public comment period August XX, 2021 to September XX, 2021, and a public hearing on September XX, 2021. Activities during the comment period are described in Appendix F. Record of all activities during comment period are on file at RVCOG, Central Point, OR.

#	Comment Received	RVMPO Response
1		
2		
3		

