

Appendices

*2017-2042
Regional Transportation Plan*

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TRANSPORTATION PLANNING ACRONYMS AND TERMS

ACT:	Area Commission on Transportation
ADA:	Americans with Disabilities Act
ADT:	Average Daily Traffic
AQMA:	Air Quality Maintenance Area
CAAA:	Clean Air Act Amendments
CBD:	Central Business District
CMAQ:	Congestion Mitigation & Air Quality
CO:	Carbon Monoxide
COATS:	California Oregon Advanced Transportation Systems
DLCD:	Department of Land Conservation and Development
EMME/2:	Computerized Transportation Modeling Software
EPA:	Environmental Protection Agency
FFY:	Federal Fiscal Year: from October 1 to September 31.
FHWA:	Federal Highway Administration
FTA:	Federal Transit Administration
FTZ:	Foreign Trade Zone
FY:	Fiscal Year: (Oregon state fiscal year from July 1 to June 30)
GCP:	General Corridor Planning
GIS:	Geographic Information Systems
HOT:	High Occupancy Toll lane with extra charge for single occupants
HOV:	High Occupancy Vehicle lane for vehicles with more than one occupant
HPMS:	Highway Performance Monitoring System
I/M or I & M:	Inspection and Maintenance Program for emissions control
ISTEA:	Intermodal Surface Transportation Efficiency Act (1991), replaced by TEA-21, the Transportation Equity Act for the 21 st century, expired in 2003
ITS:	Intelligent Transportation Systems
JJTC:	Jackson-Josephine Transportation Committee
LOS:	Level of Service, a measure of traffic congestion from A (free-flow) to F (grid-lock)
LRT:	Light Rail Transit, self-propelled rail cars such as Portland's MAX

MAP-21	Moving Ahead for Progress in the 21 st Century; 2013 transportation act.
MIS:	Major Investment Study
MOU:	Memorandum of Understanding
MPO:	Metropolitan Planning Organization, a planning body in an urbanized area over 50,000 population which has responsibility for developing transportation plans for that area
MTIP:	Metropolitan Transportation Improvement Program (same as TIP)
NAAQS:	National Ambient Air Quality Standards
NARC:	National Association of Regional Councils
NHS:	National Highway System
NPTS:	Nationwide Personal Transportation Survey
NTI:	National Transit Institute
OAR:	Oregon Administrative Rules
ODFW:	Oregon Department of Fish and Wildlife
ODOT:	Oregon Department of Transportation
ORS:	Oregon Revised Statutes
OTC:	Oregon Transportation Commission, ODOT's governing body
OTP:	Oregon Transportation Plan
PC:	MPO Policy Committee
PAC	RVMPPO Public Advisory Council
PL Funds:	Public Law 112, Federal Planning Funds
PM ₁₀ :	Particulate Matter of less than 10 Micrometers
PM _{2.5} :	Particulate Matter of less than 2.5 Micrometers
RPS	Regional Problem Solving, long range regional land use plan, 2013
RTP:	Regional Transportation Plan
RVACT:	Rogue Valley Area Commission on Transportation
RVCOG:	Rogue Valley Council of Governments
RVIA:	Rogue Valley International Airport
RVTD:	Rogue Valley Transportation District
SAFETEA-LU	Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users, a 6-year surface transportation act that expired Sept. 2009
SIP:	State Implementation Plan
SOV:	Single Occupancy Vehicle
STA:	Special Transportation Area
STIP:	Statewide Transportation Improvement Program
STP:	Surface Transportation Program

TAC:	RVMPO Technical Advisory Committee
TAZ:	Transportation Analysis Zones
TCM:	Traffic Control Measures
TDM:	Transportation Demand Management
TIP:	Transportation Improvement Program
TOD:	Transit Oriented Development
TPAU:	Transportation Planning Analysis Unit
TPR:	Transportation Planning Rule
TRADCO:	Transportation Advisory Committee
TSM:	Transportation Systems Management
TSP:	Transportation System Plan
UGB:	Urban Growth Boundary
UPWP:	Unified Planning Work Program
US DOT:	U.S. Department of Transportation
VMT:	Vehicle Miles of Travel

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

RVMPO ALTERNATIVE MEASURES

Appendix B addresses state requirements for Alternative Measures and gives a brief overview of the program. Additional information and specifics regarding Alternative Measures can be provided upon request.

ALTERNATIVE MEASURES

In April 2002 the Land Conservation and Development Commission (LCDC) approved Alternative Measures to bring the RVMPO's 2000 Regional Transportation Plan interim update into compliance with the state's Transportation Planning Rule (TPR). The RVMPO developed these measures because modeling of the 2000 RTP showed that the region could expect a 2.5% per capita VMT reduction over the 20-year planning period, falling short of the TPR's 5% per capita VMT reduction requirement. The Alternative Measures meet requirements for an alternative measure of reduced reliance on the automobile, as specified in section 660-012-0035(5). LCDC's approval, however, was conditioned on completion of certain tasks to clarify the manner in which compliance would be measured. The RVMPO completed that work in 2004.

This appendix contains:

1. Alternative Measures Development
2. Selection of Measures
3. Alternative Measures Summary (table)
4. RVMPO Findings
5. LCDC Findings Regarding Alternative Measures
6. RVMPO Alternative Measures Implementation
7. Technical Memorandum: Refine Tracking Criteria, Alternative Measures
8. Technical Memorandum: Determination of Development that Satisfies Tracking Criteria

ALTERNATIVE MEASURES DEVELOPMENT

In April 2000, the RVMPO adopted an "Interim Update" of the Rogue Valley Regional Transportation Plan (RTP). The updated RTP contained a financially constrained project list, including projects identified in local TSPs from the cities of Medford (draft version), Central Point (draft version), and Phoenix (final version). Projects from Jackson County and ODOT, as well as a financially constrained transit plan from the Rogue Valley Transportation District (RVTD) were also included in the updated RTP.

Although the update of the RTP brought the region into compliance with federal planning requirements, the RTP's compliance with the State of Oregon Transportation Planning Rule (TPR) remained an outstanding issue.

The RVMPO's development of alternative measures began with an inventory of possible measures. Early in the development process, the RVMPO chose to select a set of measures as an alternative to the TPR's per capita VMT measure. Table B-1 lists the measures and the source from which six of the seven alternative measures were selected (the measure of alternative transportation funding was developed later in the process).

Table B-1 Potential Alternative Measures Used in Selection Process

Type	Measure	Source
Alt. Modes	Mode share (alternative modes & SOV)	TPR 0035 (5)(d)
	Percent non-SOV commuter during peak-hour	Oregon Benchmark #73/ TPR 0035 (5)(d)
	Percent non-auto trips	Lane Council of Governments
Transit	Transit service hours per capita	RVTD
	Percent of population with access to public transit	RVRTP Evaluation Criteria/TPR 0035 (5)(d)
	Transit ridership, service hours, and frequency	RVRTP Evaluation Criteria
	Percent transit mode share on congested corridors	Lane Council of Governments
TDM	Percent employees participating in a trip-reduction program	Staff
	Percent employees participating in Trans. Mgmt. Assoc. (TMAs)	Staff
Automobile	Per capita vehicle trips	TPR 0035 (5)(d)
	Per capita vehicle occupancy	2000-2020 Interim RVRTP, Appendix G
	Per capita vehicle miles of travel (VMT)	RVRTP Evaluation Criteria/TPR 0035 (4)(a)
	Per capita vehicle-hours traveled (VHT)	RVRTP Evaluation Criteria/TPR 0035 (5)(d)
Infrastructure	Proportion of collectors and arterials w/ wide curb/bike lanes	RVRTP Evaluation Criteria/TPR 0035 (5)(d)
	Priority bikeway miles	Lane Council of Governments
	Proportion of collectors and arterials w/ sidewalks	RVRTP Evaluation Criteria/TPR 0035 (5)(d)
	Priority sidewalk miles	Staff
	Acres of zoned Transit-Oriented Development (TOD)	Lane Council of Governments
	Percent of dwelling units built in TODs	Lane Council of Governments
	Percent of new "total" employment in TODs	Lane Council of Governments

Throughout the development of the RVMPO's alternative measures, extensive meetings were held to solicit input from the public and RVMPO member jurisdictions. Table B-2 below summarizes the public participation and agency coordination effort that accompanied the development and approval of the RVMPO's alternative measures.

Table B-2 RVMPO Alternative Measures Public Participation Meetings

Entity	Date of Meeting	Purpose of Meeting/Outcome
Public Advisory Council	March 20, 2001	Update/Discussion
	May 15, 2001	Discussion/Recommendation to Policy Committee for approval
	July 24, 2001	
RVMPO Technical Advisory Committee	February 14, 2001	Update/Discussion
	March 14, 2001	
	April 11, 2001	
	May 2, 2001	
	June 20, 2001	
	August 8, 2001	Discussion/Recommendation to Policy Committee for approval
RVMPO Policy Committee	February 27, 2001	Update/Discussion
	March 27, 2001	
	April 24, 2001	
	May 22, 2001	
	June 26, 2001	
	September 6, 2001	Discussion/Approval/Forward Alternative Measures proposal to LCDC
Jackson County Bicycle Advisory Committee	March 28, 2001	Update/Discussion
Transportation Advocacy Committee (TRADCO)	April 16, 2001	Update/Discussion
	May 15, 2001	
	June 12, 2001	
	July 10, 2001	
RVTD	May 29, 2001	Discussion of use of Surface Transportation Program (STP) funds for increased transit service (with RVTD Staff)
Phoenix	May 30, 2001	Discussion of use of Surface Transportation Program (STP) funds for increased transit service (with RVMPO representatives)
Jackson County	May 31, 2001	
Central Point	June 5, 2001	
Medford	June 5, 2001	
Jackson County Board of Commissioners	June 12, 2001	Discussion of use of Surface Transportation Program (STP) funds for increased transit service

SELECTION OF MEASURES

Based on the input received from RVMPO member jurisdictions, the public, DLCDC staff and other state and federal agencies that participated in the development process, seven measures of reduced automobile reliance were adopted as an alternative to the TPR's per capita VMT reduction measure. Each of the seven measures is discussed below in detail. Adopted 5-year benchmarks and 20-year targets for each of the measures are summarized at the beginning of the measure descriptions and again at the end of this appendix in Table B-13.

Measure 1: Transit, Bicycle and Walking Mode Share

As with the per capita VMT reduction measure, this measure is intended to demonstrate a shift in travel behavior away from the automobile. This shift is anticipated to result from the region's planned improvements in the transit, bicycle and pedestrian infrastructure, as well as from the implementation of planned Transit-Oriented Developments (TODs). The benchmarks and target for this measure are shown in Table B-3. A three-fold increase in transit mode share (from 1% to 3%) and a 35% increase in bicycle and walking (non-motorized) mode share (from 8.2% to 11%) have been set as 20-year targets for this measure.

Progress on this measure would be determined at 5-year intervals using the best available information at that time. The RVMCOG travel demand model has been used to predict mode share over the 20-year planning period and for the 2005 and 2010 benchmarks. Current modeling of the financially constrained RTP indicates that, in 20 years, transit mode share will remain about the same (increase to 1.2%) and bicycling and walking mode share will decrease from 8.2% to 7.7%. This modeling effort assumed that transit service levels will be reduced and that only three of the seven proposed TOD sites will be developed. Conservative assumptions concerning bicycling and walking were also implemented in the model.

Given the mode share levels predicted by the RVMCOG travel demand model, the benchmarks and target identified for the mode share measure represent significant increases in alternative mode use. It is believed that changes in the urban environment to which the model currently lacks a high degree of sensitivity, such as the development of mixed-use, pedestrian friendly areas, (as described later in this proposal) will result in the higher figures shown in Table B-3. The thought is that due to the timing of construction of the mixed-use, pedestrian friendly areas, changes in travel behavior will proceed more slowly in the first 10 years of the planning period than in the final 10 years.

Table B-3: 20-Year Target for Mode Share

Measure	How Measured	2000 Base Year	Benchmark 2005	Benchmark 2010	Benchmark 2015	Target 2020
Measure 1: Transit and bicycle/pedestrian mode share	The percent of total daily trips taken by transit and the combination of bicycle and walking (non-motorized) modes. Determined from best available data (e.g., model output and/or transportation survey data).	% daily trips transit: 1.0 bike/ped: 8.2	% daily trips transit: 1.2 bike/ped: 8.4	% daily trips transit: 1.6 bike/ped: 8.4	% daily trips transit: .2 bike/ped: 9.8	% daily trips transit: 3.0 bike/ped: 11

Measure 2: Percentage of Dwelling Units within ¼-Mile Walking Distance of 30-Minute Transit

This measure is intended to demonstrate improvements in transit accessibility. A walking distance of ¼ mile from a dwelling is assumed to provide reasonable pedestrian access to a transit line. Only those transit lines that provide at least 30-minute service will be counted towards meeting the benchmarks and target shown in Table B-4. Progress on this measure would be tracked through GIS using current tax lot, street, geographic and transit data to determine the percentage of dwelling units in the MPO that are within ¼ mile walking distance to RVTD transit lines with 30-minute service.

Table B-4: 20-Year Target for Transit Accessibility

Measure	How Measured	2000 Base Year	Benchmark 2005	Benchmark 2010	Benchmark 2015	Target 2020
Measure 2: % Dwelling Units (DUs) w/in ¼ mile walk to 30-min. transit service	Determined through GIS mapping.	12%	20%	30%	40%	50%

Measure 3: Percentage of Collectors and Arterials with Bicycle Facilities

The RVMPO programs projects along collector and arterial streets within the MPO boundaries. Consistent with the TPR, the RVMPO’s policy is for these facilities to include bicycle lanes or, in rural areas, shoulders with a width greater than four feet. The measure is intended as a way to track the progress of including these facilities on the MPO’s street network and as a way to demonstrate improved accessibility for bicyclists. Progress on this measure would be determined through GIS analysis.

Table B-5: 20-Year Target for Bicycle Facilities

Measure	How Measured	2000 Base Year	Benchmark 2005	Benchmark 2010	Benchmark 2015	Target 2020
Measure 3: % Collectors and arterials w/ bicycle facilities	Determined through GIS mapping.	21%	28%	37%	48%	60%

Measure 4: Percentage of Collectors and Arterials in Activity Centers with Sidewalks

It is important to note that the definition of “Activity Centers” has changed significantly over the years since the adoption of Alternative Measures. The intent of the measure is to demonstrate improvements in pedestrian accessibility in downtown/mixed use/pedestrian friendly areas of the MPO - where pedestrian access is most critical. Proposed 5-year benchmarks and 20-year targets are shown below in Table B-6.

Table B-6 Adopted 20-Year Target for Pedestrian Facilities

Measure	How Measured	2000 Base Year	Benchmark 2005	Benchmark 2010	Benchmark 2015	Target 2020
Measure 4: % Collectors and arterials in TOD areas w/ sidewalks	Determined through GIS mapping.	47%	50%	56%	64%	75%

Measure 5: Percent of New Dwelling Units in Activity Centers

Measure 6: Percent of New Employment in Activity Centers

The objective of these measures is to demonstrate progress towards creating mixed use, pedestrian-friendly developments in the MPO. Progress towards meeting the benchmarks and targets for these measures would be determined by monitoring development after the appropriate land use and development regulations have been adopted. Mixed use, pedestrian-friendly development occurring within downtown areas in Medford, Central Point, and Phoenix, as well as within proposed TOD sites, would count towards meeting the benchmark and target figures shown below in Table B-7.

Table B-7: 20-Year Targets for Mixed-Use Pedestrian Friendly Development

Measure	How Measured	2000 Base Year	Benchmark 2005	Benchmark 2010	Benchmark 2015	Target 2020
Measure 5: % New DUs in Activity Centers	Determined by tracking building permits - the ratio between new DUs in Activity Centers and total new DUs in the region.	0%	9%	26%	41%	49%
Measure 6: % New Employment in Activity Centers	Estimated from annual employment files from State – represents the ratio of new employment in Activity Centers over total regional employment.	0%	9%	23%	36%	44%

Tables B-8 and B-9 show housing and employment projections from RVMPO jurisdictions in 2001. Numbers shown in the tables represent the accumulated increase from year 2000 “base year” conditions. The unincorporated portion of Jackson County is not anticipated to include any mixed-use development during the planning period. Detailed population, employment, and housing information from the 2000-2020 RVMPO travel demand model was used to estimate the figures shown in these tables. Downtown and future TOD areas for the original MPO area in 2001 were analyzed for new dwelling units and employment – as this was prior to “activity centers” being used. Agricultural and industrial employment was not included in the calculations due to the unlikelihood of these uses locating in either a downtown or a TOD.

Table B -8 Housing Projections, 2001 – RVMPO Jurisdictions

Jurisdiction	Category	2005	2010	2015	2020	2020%
Medford	New DU (total)	1578	4126	5667	7581	61%
	Mixed-Use DU	158	1238	2834	4604	
Central Point	New DU (total)	555	1098	1715	2423	39%
	Mixed-Use DU	55	274	600	945	
Phoenix	New DU (total)	179	345	514	738	41%
	Mixed-Use DU	18	103	180	302	
Jackson County	New DU (total)	386	638	930	1225	0%
	Mixed-Use DU	0	0	0	0	
MPO Total	New DU (total)	2697	6206	8827	11967	49%
	Mixed-Use DU	231	1616	3614	5851	

Table B -9 Mixed Use Employment Projections, 2001 – RVMPO Jurisdictions

Jurisdiction	Category	2005	2010	2015	2020	2020%
Medford	New Emp (total)	3078	6156	9234	12312	48%
	Mixed-Use Emp	308	1539	3694	5956	
Central Point	New Emp (total)	405	811	1216	1622	48%
	Mixed-Use Emp	41	243	486	778	
Phoenix	New Emp (total)	165	330	495	660	26%
	Mixed-Use Emp	8	50	99	173	
Jackson County	New Emp (total)	273	546	820	1093	0%
	Mixed-Use Emp	0	0	0	0	
MPO Total	New Emp (total)	3922	7843	11765	15686	44%
	Mixed-Use Emp	357	1832	4279	6907	

Measure 7: Alternative Transportation Funding

This measure was developed to demonstrate the RVMPO’s commitment to implementing the alternative transportation projects upon which many of the proposed measures rely. Funds made available to the RVMPO through the Surface Transportation Program (renamed *Surface Transportation Block Grant* in 2016) are the only funds over which the RVMPO has complete discretion. RVMPO jurisdictions had agreed to direct 50% of this revenue stream, historically used for vehicular capacity expansion projects, towards alternative transportation projects. STP funds would be used to expand transit service, or, if RVTD is successful with a local funding package, to fund bicycle/pedestrian and TOD-development supportive projects. Table B-10 shows adopted 5-year benchmarks and 20-year targets for this measure.

Table B-10 – Adopted 20-Year Target for Alternative Transportation Funding

Measure	How Measured	2000 Base Year	Benchmark 2005	Benchmark 2010	Benchmark 2015	Target 2020
Measure 7: Alternative Transportation Funding	Funding committed to transit or bicycle/pedestrian/TOD projects. Amounts shown represent ½ of the MPO’s estimated accumulation of discretionary funding (STP).	N/A	\$950,000	\$2.5 Million	\$4.3 Million	\$6.4 Million

*STP revenue estimates developed by Oregon Department of Transportation.

ALTERNATIVE MEASURES SUMMARY (TABLE)

Table B-11 summarizes the seven adopted alternative measures along with 5-year benchmarks and 20-year targets. Five findings based on the requirements of the Transportation Planning Rule's section 660-012-0035(5) concluded the RVMPO's alternative measures proposal in 2001.

Table B-11 - RVMPO Adopted Alternative Measures for TPR Compliance

Measure	How Measured	2000 Base Year	Benchmark 2005	Benchmark 2010	Benchmark 2015	Target 2020
Measure 1: Transit and bicycle/pedestrian mode share	The percent of total daily trips taken by transit and the combination of bicycle and walking (non-motorized) modes. Determined from best available data (e.g., model output and/or transportation survey data).	% daily trips transit: 1.0 bike/ped: 8.2	% daily trips transit: 1.2 bike/ped: 8.4	% daily trips transit: 1.6 bike/ped: 8.4	% daily trips transit: .2 bike/ped: 9.8	% daily trips transit: 3.0 bike/ped: 11
Measure 2: % Dwelling Units (DUs) w/in ¼ mile walk to 30-min. transit service	Determined through GIS mapping.	12%	20%	30%	40%	50%
Measure 3: % Collectors and arterials w/ bicycle facilities	Determined through GIS mapping.	21%	28%	37%	48%	60%
Measure 4: % Collectors and arterials in TOD areas w/ sidewalks	Determined through GIS mapping.	47%	50%	56%	64%	75%
Measure 5: % New DUs in Activity Centers	Determined by tracking building permits - the ratio between new DUs in Activity Centers and total new DUs in the region.	0%	9%	26%	41%	49%
Measure 6: % New employment in Activity Centers	Estimated from annual employment files from State - represents the ratio of new employment in Activity Centers over total regional employment.	0%	9%	23%	36%	44%
Measure 7: Alternative Transportation Funding	Funding committed to transit or bicycle/pedestrian/TOD projects. Amounts shown represent ½ of the MPO's estimated accumulation of discretionary funding (STP).	N/A	\$950,000	\$2.5 Million	\$4.3 Million	\$6.4 Million

RVMPO FINDINGS, 2001

1. Achieving the targets for the adopted alternative measures will result in a reduction in reliance on automobiles.
2. Achieving the targets for the adopted alternative measures will accomplish a significant increase in the availability and convenience of alternative modes of transportation.
3. Achieving the targets for the adopted alternative measures is likely to result in a significant increase in the share of trips made by alternative modes, including walking, bicycling, and transit.
4. VMT per capita is unlikely to increase by more than 5%.
5. The adopted alternative measures are reasonably related to achieving the goal of reduced reliance on the automobile as described in OAR 660-012-0000.

ALTERNATIVE MEASURES IMPLEMENTATION

Since LCDC's approval of the Alternative Measures, the RVMPO and member jurisdictions have undertaken the following efforts to implement the measures:

- Development of an Integrated Land Use Plan (ILUTP) and analyses, 2005
- Integration of measures into project funding criteria, 2002-current
- Site plan review and comment for all RVMPO cities, 2016-current

BENCHMARK ANALYSES

Contained in the 2001 LCDC Order approving the measures, conclusion 6.c. states that: "The alternative measures shall be used to measure progress towards achieving reduced automobile reliance unless the adopted MPO plan achieves a 5 percent reduction in VMT per capita within 20 years of the adoption of the plan." Benchmark analyses have been completed for the 2005 and 2010 benchmarks; and at the time of this plan update the 2015 benchmark analyses was in process.

It is very important to note that at the time the Alternative Measures were developed by the MPO and approved by LCDC, the RVMPO was made up of Phoenix, Medford, Central Point, and Jackson County. This has raised questions concerning the base year (2000) percentages - from which the 5-year benchmarks were established (approximately 10% increase every 5 years) and how this relates to the present-day RVMPO planning area. The RVMPO expanded in 2002 to include Ashland, Talent, and Jacksonville, and in 2012 to include Eagle Point.

Moreover, the definition of "activity centers" has changed with each benchmark analyses, making the results of the 2005 and 2010 benchmark analysis for Measures 4, 5, & 6 incomparable over time. With these inconsistencies in mind, refer to Table B-12 on the following page that shows the degree to which the RVMPO is or is not meeting goals established in the Alternative Measures.

Table B-12: RVMPO Benchmark Analyses

Measure	Baseline 2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Measured 2017	Target 2020
Measure 1: Transit and Bicycle/Pedestrian Mode Share	% daily trips Transit: 1.0 Bike/Ped: 8.2	% daily trips Transit: 1.0 Bike/Ped: 8.2	% daily trips Transit: 0.9 Bike/Ped: 7.3	% daily trips Transit: 1.6 Bike/Ped: 8.4	% daily trips Transit: 1.45 Bike/Ped: 8.2	% daily trips Transit: 2.2 Bike/Ped: 9.8	% daily trips Transit: tbd Bike/Ped: tbd	% daily trips Transit: 3.0 Bike/Ped: 11
Measure 2: % Dwelling Units w/in ¼ mile walk to 30-min Transit Service	12%	20%	34%	30%	36%	40%	TBD	50%
Measure 3: % Collectors / Arterials w/ Bicycle Facilities	21%	28%	37%	37%	54%	48%	TBD	60%
Measure 4: % Collectors / Arterials in Activity Centers w/ Sidewalks	47%	50%	55%	56%	30%	64%	TBD	75%
Measure 5: % New Dwelling Units in Activity Centers	0%	9%	10%	26%	22%	41%	TBD	49%
Measure 6: % New Employment in Activity Centers	0%	9%	17%	23%	12%	36%	TBD	44%
Measure 7: Alternative Transportation Funding	N/A	\$950,000	\$1.4 Million	\$2.5 Million	\$3.2 Million	\$4.3 Million	TBD	\$6.4 Million

As the requirements have grown more demanding, adoption of provisions in local land use codes may be necessary.

2005 BENCHMARK ANALYSIS

The results of this analysis, completed in 2007, are available in the 2013-2038 RVMPO Regional Transportation Plan. This plan can be found at www.rvmppo.org.

2010 BENCHMARK ANALYSIS

The following section contains a description of each measure and how the benchmark analysis was performed for the 2010 Benchmark Analysis completed in 2014/2015. Note that the 2015 Benchmark Analysis is currently underway and is expected to be completed by late summer 2017.

Measure 1: Transit and Bicycle/Pedestrian Mode Share

Findings: Using the RVMPO v3.1 interpolated 2010 home-based and non-home-based trip purpose data shows that transit makes up 1.45% of the mode share, which is 0.15 percentage points below the 2010 benchmark of 1.6%. The 2010 Bike/Walk data from the model shows 8.20% mode share which is 0.20 percentage points below the 8.4% benchmark.

Conclusions: The analysis shows that the transit, bike and pedestrian mode share percent of daily trips decreased from 2006 to 2010, and fell short of the 2010 benchmarks.

It is difficult to speculate on why the transit, bike and pedestrian mode share is declining, especially when transit ridership is increasing and evening and Saturday service on some routes has been added. One thought is that the model may not be the best tool to use for the mode share analysis, and that more accurate results may be derived from collecting bike and pedestrian counts and transit ridership numbers.

Some actions are in place that can improve the likelihood of achieving the benchmarks. The RVMPO provides funding to RVTD that supports transit operations, and bike lanes and sidewalks are being built as jurisdictions construct new roadways and upgrade existing facilities.

Update: In 2016 RVTD was successful with a property tax levy that maintains current service levels and will also help meet increasing demand. This may increase transit mode share. Additionally, development of an Active Transportation Plan (ATP) has been funded using MPO federal funds. The ATP, once completed, is expected to identify and prioritize gaps in the bike/pedestrian system to improve walking and biking conditions in the region.

Measure 2: Percent of Dwelling Units within ¼ Mile Walk of 30-Minute Transit Service

Findings: Based on the GIS analysis described above, thirty-six percent (36%) of dwelling units in the RVMPO are located within ¼ mile walking distance (“as the crow flies”) of 30-minute RVTD bus routes, which is 6 percentage points above the 2010 benchmark of 30%. Table 2.2 below shows the results of the 2005 & 2010 benchmark analyses, completed in 2007 and 2014.

Conclusions: The analysis completed in 2014, shows that the MPO exceeded the Measure 2 – Transit Accessibility 2010 benchmark of 30% by 6 percentage points. In 2007, the analysis showed that 34% of dwelling units were within ¼ mile of 30-minute transit, which surpassed the 2005 benchmark by 14 percentage points. Dwelling units within ¼ mile of 30-minute transit have increased by 2 percentage points since 2007. In order to meet the 2015 benchmark of 40% there will have to be a 4% increase in dwelling units, and/or RVTD adding more 30-minute transit routes in the MPO area.

Measure 3: Percentage of Collectors/Arterials with Bicycle Facilities

Findings: There is a total of 4,640,107 linear feet of arterials and collectors within the RVMPO planning area (both directions). The jurisdictions in the RVMPO reported a total of 2,507,130 linear feet of bicycle facilities on arterials and collectors. The

percentage of bike facilities is 54% within the RVMPO, which is 17 percentage points greater than the 2010 benchmark of 37%.

Conclusions: The results of the 2010 bike facility analysis shows that 54% of the region's arterial and collector roadways have provisions for bicyclists. This not only exceeds the 2010 benchmark of 37%, but also the 48% 2015 benchmark. At this time, the RVMPO is within 6% of the 2020 target of 60%. Additionally, the 262,045 linear feet of multi-use paths (Bear Creek Greenway, Ashland Multi-Use Path, and Larson Creek Multi-Use Path) were not counted as part of the 2010 benchmark analysis. However, it is important to note that these multi-use paths add more options for bicyclists and pedestrians, which is an overall benefit to the region.

Measure 4: Percentage of Collectors and Arterials in Activity Centers with Sidewalks

Findings: To be consistent with Measures 5 and 6, "Activity Centers" were used in this measure instead of the more restrictive "TOD Areas". There is a total of 1,512,648 lane feet of arterials and collectors (both directions) and 461,445 linear feet of sidewalks in Activity Centers located in the RVMPO. The 2014 analysis shows that 30% of arterials and collectors within RVMPO Activity Centers have sidewalks, which falls below the 2010 benchmark of 56% by 26 percentage points. Table 4.2 below shows the results of the 2005 & 2010 benchmark analyses completed in 2007 and 2014.

Conclusions: The sidewalk inventory accounted for the presence of a sidewalk on one or both sides of an arterial or collector street within the defined RVMPO Activity Centers. The total sidewalk inventory was compared to the total linear feet of Activity Center arterial/collector roadways in both travel directions. The result is 30% of the total linear feet of arterials/collectors in Activity Centers have sidewalks.

The original intent of Measure 4 was to count sidewalks in proposed TOD areas within the MPO. Subsequently, the definition of TOD areas changed to "Activity Centers" described as bicycle/pedestrian-friendly development around schools, downtowns and retail development areas. The conclusion is that the original benchmarks and target (including the 2007 benchmark analysis) were calculated using proposed TOD areas (smaller geographic areas). The 2010 benchmark analysis used Activity Centers, which is a much larger geographic area compared to the original TOD areas. This likely explains the lower (30%) 2014 benchmark analysis result. The original benchmarks and target need to be adjusted to reflect the larger geographic Activity Center areas in order to have a fair comparison of improvements.

Measure 5: Percentage of New Dwelling Units in Activity Centers

Findings: Staff found a total of 12,530 units constructed since 2000 throughout the MPO, of which 2,785 units met the benchmark requirements. This represents 22.2 percent of the total. The number of units built in activity centers since 2000 is significantly higher, but the methodology requires that only those developments

meeting the target density of ten units per acre may be counted. Table 5.2 below shows the results of the 2005 & 2010 benchmark analyses completed in 2007 and 2014.

Conclusions: The 2010 benchmark for new dwelling units in mixed-use, pedestrian-friendly areas is 26%. The 2014 analysis shows that 22% of the dwelling units – meeting the density requirements - constructed since 2000 are located within mixed-use, pedestrian-friendly areas (RVMPO Activity Centers), which is 4 percentage points lower than the benchmark.

This measure asks for a comparison of the number of new dwellings in Activity Centers (TOD's) versus region-wide dwelling units built. The evaluation procedures developed for the 2007 benchmark analysis – and used for the 2014 analysis - define qualifying dwellings as those that were on parcels the equivalent of .10 acre or smaller. Significant numbers of new dwellings in the Activity Centers did not qualify because they were built on larger parcels.

Measure 6: Percentage of New Employment in Activity Centers

Findings: Using formulas that calculate the number of employees based on the size of the structure, staff estimated that 209 employees work in the qualifying businesses, which is only 12 percent of the estimated total of 1,740 employed in businesses constructed since 2000. Table 6.1 below shows the results of the 2005 & 2010 benchmark analyses completed in 2007 and 2014.

Conclusions: The 2010 benchmark for new employment in Activity Centers is 23%. The analysis shows that only 12% of new employment is within Activity Centers, which is 11 percentage points lower than the benchmark and 5 percentage points below the 2007 results of 17%.

This measure asks for the percentage of new employment in Activity Centers over new employment region-wide. The evaluation procedures developed for the 2007 benchmark analysis – and used for the 2014 analysis – outline specific criteria for qualifying which commercial and industrial development count towards meeting benchmarks. Several commercial/industrial developments did not meet the eligibility requirements of entrance fronting sidewalk and parking in rear of building, even though the development was located in an Activity Center, and the structures were placed at the front property line.

Measure 7: Alternative Measures Transportation Funding

Findings: Table B.1 below shows a total of \$1,184,079 for 2002 – 2004 (\$234,079 more than the 2005 benchmark of \$950,000); \$3,128,147 for 2005 – 2009 (\$628,147 more than the 2010 benchmark of \$2.5M); and \$3,889,112 for 2010 – 2014 (\$410,888 less than the 2015 benchmark of \$4.3M). The net difference between the 3 benchmarks is \$451,338 additional funds.

Table B.1 – 50% RVMPO STP Funds to RVTD 2002 – 2014

50% RVMPO STP Funds to RVTD 2002 - 2014			
Federal Fiscal	Federal		Sub-Total
	\$	Source	
2002	\$252,622	MPO STP	\$1,184,079
2003	\$368,077	MPO STP	
2004	\$563,380	MPO STP	
2005	\$607,439	MPO STP	\$3,128,147
2006	\$644,533	MPO STP	
2007	\$605,354	MPO STP	
2008	\$625,354	MPO STP	
2009	\$645,467	MPO STP	
2010	\$660,049	MPO STP	\$3,889,112
2011	\$688,237	MPO STP	
2012	\$814,368	MPO STP	
2013	\$838,505	MPO STP	
2014	\$887,953	MPO STP	
Total	\$8,201,338		\$8,201,338

Table B.3, below, outlines the status of the Alternative Measures STP-funded transit projects.

Table B.3 – Measure 7: Transit Project Status

Measure 7 - STP-Funded Transit Projects		2010 Status
<i>Central Point</i>	RVTD will increase service on Route 40 (Central Point) to 30 minute headways and provide service to the TOD site when feasible.	<ul style="list-style-type: none"> Route 40 has 30 minute headways (~\$315,000 investment annually) Service to the TOD site is not feasible at this time
<i>Medford</i>	RVTD will serve the Southeast Plan Area (Medford TOD) when feasible.	<ul style="list-style-type: none"> Service to the SE Plan Area is not feasible at this time
<i>Phoenix</i>	RVTD will improve transit stops within Phoenix. RVTD will explore ways to improve Hwy 99 (Main Street) pedestrian crossing to a northbound transit stop, and in the interim, will provide shuttle service for this purpose.	<ul style="list-style-type: none"> RVTD is working with Phoenix Urban Renewal on transit improvements
<i>Jackson County</i>	RVTD will increase transit service to White City (unincorporated Jackson County).	<ul style="list-style-type: none"> Route 60 has 30 minute headways (~\$578,000 investment annually)

Table B.4, below, shows the expenditures made by RVTD with STP funds from Federal Fiscal Year (FFY) 2002 to FFY 2012.

Table B.4 – Measure 7: Transit STP Expenditures

Measure 7 – RVTD STP-Funded Transit Expenditures		
Federal Fiscal Year	Project/Activity	Total Expenditure
FFY 2002-2005	<ul style="list-style-type: none"> • Purchased seven (7) vehicles 	\$1,791,518
FFY 2006	<ul style="list-style-type: none"> • Preventive Maintenance 	\$1,251,972
	<ul style="list-style-type: none"> • Installed bus wash equipment 	
	<ul style="list-style-type: none"> • Bus stop shelters and facilities 	
FFY 2007	<ul style="list-style-type: none"> • Preventive maintenance 	\$605,354
	<ul style="list-style-type: none"> • CNG facility (built in 2011) 	
FFY 2008-2009	<ul style="list-style-type: none"> • Preventive maintenance 	\$1,270,821
	<ul style="list-style-type: none"> • Purchase two (2) vehicles 	
FFY 2010-2011	<ul style="list-style-type: none"> • Preventive maintenance 	\$1,348,286
	<ul style="list-style-type: none"> • Purchased surveillance equipment 	
	<ul style="list-style-type: none"> • Bus route signage and shelter rehabilitation 	
FFY 2012	<ul style="list-style-type: none"> • Preventive maintenance 	\$814,748
	<ul style="list-style-type: none"> • Front Street Station renovation 	
	<ul style="list-style-type: none"> • Bus route shelters and rehabilitation 	
	<ul style="list-style-type: none"> • Shop equipment 	

Table B.5 lists the CMAQ-funded alternative transportation projects (bike/ped & transit) from 2000 to 2010. A total of \$7,675,236 in CMAQ funds was committed to alternative transportation projects during the 2000 to 2010 timeframe. These funds are over and above the RVMPO's commitment of ½ of its STP funds that go to RVTD to support the region's transit system.

Table B.5 – Measure 7: CMAQ Funds Committed to Alternative Transportation Projects

CMAQ Funding Committed to Alternative Transportation Projects 2000 to 2010				
Jurisdiction	Project	Federal Fiscal Year	Federal	
			\$	Source
Jackson County	Bear Creek Greenway	2000	\$1,775,000	CMAQ
Phoenix	N. Rose & South C Street; Sidewalks & Bike Lanes	2004	\$170,000	CMAQ
Central Point	N. 9th & Laurel; Sidewalks & Bike Lanes	2006	\$993,138	CMAQ
RVTD	Employer Trip Reduction	2006	\$59,222	CMAQ
RVTD	Rogue Valley TMA Programs	2006	\$109,471	CMAQ
RVTD	Multi-model Enhancements	2006	\$21,535	CMAQ
RVTD	Diesel Bus Replacement	2006	\$940,000	CMAQ
RVTD	Passenger Information Systems	2006	\$325,720	CMAQ
RVTD	On-Board Diagnostics	2006	\$98,703	CMAQ
Medford	Oak St - McAndrews to Taft; Sidewalks & Bike Lanes	2007	\$481,000	CMAQ
RVMPPO	TDM Plan	2007	\$41,823	CMAQ
Medford	Mace Road Sidewalks	2008	\$457,624	CMAQ
Talent	Talent Ave: Rogue River Parkway to Creel Rd. - Sidewalks & Bike Lanes	2008	\$202,000	CMAQ
Medford	Barnett Bike/Ped Bridge	2010	\$500,000	CMAQ
Medford	Garfield Ave: Columbus to Lillian - Sidewalks & Bike Lanes	2010	\$1,500,000	CMAQ
Total			\$ 7,675,236	

Conclusions: The MPO exceeded the 2010 benchmark for providing 50% of STP funds to RVTD, and the transit projects listed in Table 7.2.4 are moving forward. It is important to note that STP funds cannot be used for transit operations. Therefore, RVTD uses the funds to offset maintenance and capital costs, which frees up other RVTD funding sources for transit service.

The RVMPPO also uses its CMAQ funds to augment RVTD's operations and support member jurisdictions' alternative transportation projects.

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ENDANGERED SPECIES ACT OF 1973

FINDINGS.— The Congress finds and declares that:

Various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation;

Other species of fish, wildlife, and plants have been so depleted in numbers that they are in danger of or threatened with extinction;

These species of fish, wildlife, and plants are of esthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people;

The United States has pledged itself as a sovereign state in the international community (to conserve to the extent practicable the various species of fish or wildlife and plants facing extinction, pursuant to:

Migratory bird treaties with Canada and Mexico;

The Migratory and Endangered Bird Treaty with Japan;

The Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere;

The International Convention for the Northwest Atlantic Fisheries; The International Convention for the High Seas Fisheries of the North Pacific Ocean;

The Convention on International Trade in Endangered Species of Wild Fauna and Flora; and

Other international agreements; and

Encouraging the States and other interested parties, through Federal financial assistance and a system of incentives, to develop and maintain conservation programs which meet national and international standards is a key to meeting the Nation's international commitments and to better safeguarding, for the benefit of all citizens, the Nation's heritage in fish, wildlife, and plants.

PURPOSES.—The purposes of this Act are to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth in subsection (a) of this section.

POLICY.—(1) It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to conserve endangered species and threatened

species and shall utilize their authorities in furtherance of the purposes of this Act.
(2) It is further declared to be the policy of Congress that Federal agencies shall cooperate with State and local agencies to resolve water resource issues in concert with conservation of endangered species.

Federally listed Threatened, Endangered, Proposed, Candidate Species and Species of Concern under the jurisdiction of the Fish and Wildlife Service (FWS) which may occur within Jackson County, Oregon are listed below.

Listed Species

Birds: northern spotted owl

Crustaceans: vernal pool fairy shrimp

Plants: Gentner's fritillary, large-flowered woolly meadowfoam; Cook's lomatium; and Kincaid's lupine

Candidate Species

Mammals: fisher

Insects: Mardon skipper Plants Siskiyou mariposa lily

Species of Concern

Mammals: Pallid bat; Red tree vole; Townsend's western big-eared bat; California wolverine; silver-haired bat; long-eared myotis bat; fringed myotis bat; long-legged myotis bat; Yuma myotis bat

Birds: northern goshawk; tricolored blackbird; western burrowing owl; olive-sided flycatcher; yellow-breasted chat; acorn woodpecker; Lewis' woodpecker; mountain quail; band-tailed pigeon; white-headed woodpecker; Oregon vesper sparrow; purple martin

Reptiles and Amphibians: Northern Pacific pond turtle; coastal tailed frog; common king snake; California mountain king snake; Del Norte salamander; Siskiyou Mountains salamander; Northern red-legged frog; foothill yellow-legged frog; Cascades frog.

Fish: Jenny Creek sucker; Pacific lamprey; coastal cutthroat trout and coho. Chinook are not listed as threatened under the federal Endangered Species Act in the Rogue watershed. Several species are listed on Oregon's sensitive species list, including coho, summer steelhead, and Pacific lamprey.

Insects: Denning's agapetus caddisfly; Franklin's bumblebee; Siskiyou chloealtis grasshopper; Green Springs Mountain farulan caddisfly; Sagehen Creek goeracean caddisfly; Schuh's homoplectran caddisfly; Siskiyou carabid beetle.

Plants: Rogue canyon rock cress; Crater Lake rock-cress; Greene's mariposa lily; broad-fruit mariposa lily; Umpqua mariposa-lily; Howell's camassia; Baker's cypress; clustered lady's-slipper; Siskiyou willow-herb; wayside aster; Henderson's horkelia; Bellinger's meadowfoam; dwarf woolly meadowfoam; Mt. Ashland lupine.

Resolution Number 2017 - 1
Rogue Valley Metropolitan Planning Organization - Policy Committee
Adoption of the RVMPO 2017-2042 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 Urbanized Area; and

Whereas, the RVCOG has delegated responsibility for MPO policy functions to the RVMPO Policy Committee, a Committee of elected officials from Ashland, Central Point, Eagle 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 2017-2042 Regional Transportation Plan (RTP); and

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

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

Whereas, the 2017-2042 RTP has been shown to meet state and federal air quality requirements as demonstrated in the Air Quality Conformity Determination; and

Whereas, the projects contained in the 2017-2042 RTP demonstrate financial constraint;

NOW THEREFORE, the Metropolitan Planning Organization Policy Committee approves and adopts the 2017-2042 Regional Transportation Plan.

Adopted by the Rogue Valley Metropolitan Planning Organization Policy Committee on this 28th day of March 2017.


Michael G. Quilty
RVMPO Policy Committee Chair