Rogue Valley Metropolitan Planning Organization

Alternative Measures Update Draft Report

June 2015

Rogue Valley Metropolitan Planning Organization

The RVMPO is staffed by the Rogue Valley Council of Governments

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Introduction

The Transportation Planning Rule (TPR) (OAR 660-012) requires that cities and counties prepare and adopt transportation system plans (TSPs). These plans identify transportation facilities and services to support future planned land uses. In metropolitan areas, TSPs are required to accomplish a significant reduction in reliance on automobiles. Local governments in Metropolitan Planning Organization (MPO) areas of less than 1 million population can meet this requirement by showing that per capita vehicle miles traveled (VMT) will be reduced by 5 percent over the 20-year planning period. The TPR also allows for local governments to propose "alternative standards" to be used in place of the VMT reduction requirement. The TPR established a five-part test for approval of such alternative standards. The purpose of this test is to assure that the alternative standard accomplishes the goal in the TPR for a significant reduction in reliance on the automobile.

1. Achieving the targets for the proposed alternative measures will result in a reduction in reliance on automobiles.

2. Achieving the targets for the proposed alternative measures will accomplish a significant increase in the availability and convenience of alternative modes of transportation.

3. Achieving the targets for the proposed 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 proposed alternative measures are reasonably related to achieving the goal of reduced reliance on the automobile as described in OAR 660-012-0000.

On April 3, 2002, the Land Conservation and Development Commission approved seven Alternative Measures adopted by the RVMPO in place of the Vehicle Miles Traveled (VMT) reduction standard contained in the state Transportation Planning Rule (TPR). The Alternative Measures meet requirements for an alternative measure of reduced reliance on the automobile as specified in OAR 660-012-0035(5).

The seven Alternative Measures include:

1. Measure 1 - Transit and Bike/Pedestrian (Ped) Mode Share
2. Measure 2 - % Dwelling Units (DUs) within ¼ mile walk to 30 minute Transit Service
3. Measure 3 - % Collectors/Arterials with Bike Facilities
4. Measure 4 - % Collectors/ Arterials in Transit Oriented Development (TOD) areas with Sidewalks
5. Measure 5 - % Mixed-Use Dwelling Units (DUs) in New Development
6. Measure 6 - % Mixed-Use Employment in New Development
7. Measure 7 - Alternative Transportation Funding

Table 1 below depicts the RVMPO Alternative Measures, five-year benchmarks and 2020 target.

Table 1 – RVMPO Alternative Measures, Benchmarks and 20-Year Target

Measure	*Current 2000*	*Benchmark 2005*	*Benchmark 2010*	*Benchmark 2015*	*Target 2020*
Measure 1: Transit and bicycle/pedestrian mode share	*% 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: 8.8	*% daily trips* transit: 2.2 bike/ped: 9.8	*% daily trips* transit: 3.0 bike/ped: 11
Measure 2: % Dwelling Units (DU's) w/in ¼ mile walk to 30-min. transit service	12%	20%	30%	40%	50%
Measure 3: % Collectors and arterials w/ bicycle facilities	21%	28%	37%	48%	60%
Measure 4: % Collectors and arterials in TOD areas w/ sidewalks	47%	50%	56%	64%	75%
Measure 5: % Mixed-use DUs in new development	0%	9%	26%	41%	49%
Measure 6: % Mixed-use employment in new development	0%	9%	23%	36%	44%
Measure 7: Alternative Transportation Funding	N/A	$950,000	$2.5 Million	$4.3 Million	$6.4 Million

Background

The RVMPO completed a 2005 Alternative Measures benchmark analysis as part of the 2009 – 2034 RVMPO Regional Transportation Plan (RTP) update. The 2013 – 2038 RTP update did not include a 2010 benchmark analysis due to a misunderstanding on behalf of the RVMPO that the Transportation Planning Rule (TPR) had been amended to remove the Alternative Measures requirement. The Department of Land Conservation and Development (DLCD) provided a letter to the RVMPO Policy Committee during the 2013-38 RTP adoption hearing that clarified the Alternative Measures TPR requirements. Below is an excerpt of that letter.

"Until such a time as Alternative Measures are amended by the Land Conservation and Development Commission (LCDC), the Department of Land Conservation and Development (DLCD) assumes that the benchmarks and targets of the acknowledged Alternative Measures will be extended on subsequent updates of the Regional Transportation Plan (RTP) and Regional Transportation System Plan to correspond with the timeframe of each update, unless the RVCOG can show that there will be a 5% decline in Vehicle Miles Traveled per capita over the planning period. Additionally, it is assumed that an analysis of the RVCOG's performance regarding each of the Alternative Measures be conducted during subsequent RTP updates. The current RTP does not comply with this requirement."

The RVMPO Policy Committee accepted DLCD's comments and recommended that staff identify funding to conduct an analysis of the seven (7) adopted Alternative Measures. In 2013, RVCOG applied for a Transportation Growth Management (TGM) grant to complete the work. RVCOG was awarded a TGM grant in January 2014 to analyze Alternative Measure performance and, if necessary, modify existing or develop new Alternative Measures that comply with the TPR, meet local needs, and are consistent with local objectives.

Staff prepared a series of technical memoranda for the Alternative Measures update that included;

1. Alternative Measures Analysis Methodologies,
2. Data Collection, and
3. Alternative Measures Analysis.

The RVMPO Technical Advisory Committee (TAC) reviewed and commented on each of the technical memos, which were revised by staff. ODOT's Transportation Planning Analysis Unit (TPAU) provided technical assistance and comment throughout the process. The technical memoranda are included in Appendix A. The Findings & Conclusions section of the final report includes a description of the measure, results of the analysis, observations, and recommendations for changing specific elements of each Alternative Measure.

Executive Summary

The Executive Summary focuses on the findings and recommendations from the 2010 benchmark analysis conducted in 2014. More details on each measure are included in the Findings, Conclusions and Recommendations section of the report. Table 2 below depicts the 2007 & 2014 Alternative Measures benchmark analysis results. The 2005 benchmark was measured in 2007 and the 2010 benchmark was measured in 2014.

Table 2 – Alternative Measures 2007 & 2014 Benchmark Analysis Results

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 1: Transit and Bicycle/Pedestrian Mode Share	The percent of total daily trips taken by transit and combination of bicycle and walking (non-motorized) modes. Determined from best available data (e.g., model output and/or transportation survey data).	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips
		Transit: 1.0 Bike/Ped: 8.2	Transit: 1.0 Bike/Ped: 8.2	**Transit: 0.9 Bike/Ped: 7.3**	Transit: 1.6 Bike/Ped: 8.4	**Transit: 1.45 Bike/Ped: 8.20**	Transit: 2.2 Bike/Ped: 9.8	Transit: 3.0 Bike/Ped: 11
Measure 2: % Dwelling Units (DU's) w/in 1/4 Mile Walk to 30-Min. Transit Service	Determined through GIS mapping.	12%	20%	**34%**	30%	**36%**	40%	50%
Measure 3: % Collectors and arterials w/bicycle facilities	Determined through GIS mapping.	21%	28%	**37%**	37%	**54%**	48%	60%
Measure 4: % Collectors and Arterials in TOD Areas w/Sidewalks	Determined through GIS mapping.	47%	50%	**55%**	56%	**30%**	64%	75%
Measure 5: % Mixed-Use DUs in new development	Determined by tracking building permits - the ratio between new DUs in TODs and total new DUs in the region.	0%	9%	**10%**	26%	**22%**	41%	49%
Measure 6: % Mixed-use employment in new development	Estimated from annual employment files from State - represents the ratio of new development in TODs over total regional employment	0%	9%	**17%**	23%	**12%**	36%	44%
Measure 7: Alternative Transportation Funding	Funding Committed to transit or bicycle/pedestrian/TOD projects. Amounts shown represent 1/2 of the MPO's estimated accumulation of discretionary funding (STP).	NA	$950,000	**$1.4 Million**	$2.5 Million	**$3.1 Million**	$4.3 Million	$6.4 Million

Findings - Measure 1 – Mode Share 2010 Benchmark Analysis

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. 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 shows 8.20% mode share which is 0.20 percentage points below the 8.4% benchmark.

Recommendations – Mode Share 2010 Benchmark Analysis

The TAC determined that the model used to estimate mode share may not be the best tool to use, and recommend that "observed data" be used to measure mode share. Observed data is regional data such as bicycle and pedestrian counts and transit ridership numbers. This type of analysis would not provide mode share data, but actual numbers that could be tracked over time to demonstrate increases (or decreases) in transit ridership, biking and walking. This would achieve the policy outcome of tracking increases/decreases in transit, biking and walking

Findings - Measure 2 – Transit Accessibility 2010 Benchmark Analysis

Based on the GIS analysis, thirty-six percent (36%) of dwelling units in the RVMPO are located within ¼ mile walking distance of 30-minute RVTD bus routes, which is 6 percentage points above the 2010 benchmark of 30%.

Recommendations – Transit Accessibility 2010 Benchmark Analysis

Continue using the methodology approved by the TAC to measure transit accessibility

Findings – Measure 3 - Bicycle Facilities 2010 Benchmark Analysis

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%.

Recommendations – Bicycle Facilities 2010 Benchmark Analysis

Continue to use the methodology approved by the TAC.

Findings – Measure 4 - Sidewalks 2010 Benchmark Analysis

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.

Recommendations – Sidewalks 2010 Benchmark Analysis

The TAC recommends changing the name of Measure 4 to, "Measure 4 - Percentage of Collectors and Arterials in ***Activity Centers*** with Sidewalks." The TAC also recommends revising the benchmarks and target to reflect the larger geographic Activity Center areas.

Findings – Measure 5 - Dwelling Unit 2010 Benchmark Analysis

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.

Recommendations – Dwelling Unit 2010 Benchmark Analysis

The TAC recommends changing the measure description to, "Measure 5 – Percentage of New Dwelling Units in *Activity Centers*." Another recommendation is to revise the "How Measured" description to read, "Determined by reviewing assessor's data to determine the ratio between new DUs in Activity Centers and total new DUs in the region." The evaluation criteria for this measure needs to be revised to avoid confusion on what dwelling units should count towards the benchmarks and target. In addition, a new way of measuring density may need to be developed in order to ensure that proper credit is given to new development within Activity Centers. Another suggested option is to establish the existing density for residential development in all identified activity centers and then document the increase in density from one benchmark to the next.

Because some of the newly identified activity centers to do not have commercial uses at their hub, consideration should be given to amending or eliminating the requirement that the dwellings be within ¼ mile of a commercial center having a minimum of 20,000 square feet.

Findings – Measure 6 - Mixed-Use Employment 2010 Benchmark Analysis

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.

Recommendations – Mixed-Use Employment 2010 Benchmark Analysis

The TAC recommends changing the measure description to, "Measure 6 – Percentage of New Employment in *Activity Centers*." Another recommendation is to revise the "How Measured" description to read, "Determined by reviewing assessor's data to determine the number of jobs per square footage of new commercial/industrial development in Activity Center to number of jobs per square footage of new commercial/industrial development in the region." The evaluation criteria for this measure needs to be revised to remove obstacles to counting new employment, particularly regarding building entrances and parking between the building and the street.

Findings - Measure 7 - Alternative Transportation Funding 2010 Benchmark Analysis

The analysis showed 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.

Recommendations – Alternative Transportation Funding 2010 Benchmark Analysis

The TAC did not have any recommendations for Measure 7.

Findings, Conclusions & Recommendations

Measure 1 – Transit and Pedestrian/Bicycle Mode Share

1.1 - Measure Description

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 1.1 below. 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.

Table 1.1 below depicts the 2006, 2010 & 2015 home-based and non-home-based trip purpose mode share percentages derived from the RVMPO v3.1 travel demand model. The model is calibrated to the 1995/1996 Oregon Household Travel Survey, and 2010 is interpolated between 2006 and 2015.

Table 1.1 – 2006, 2010 & 2015 Home-Based & Non-Home-Based Trips Mode Share Percentages – RVMPO v3.1

2006, 2010 & 2015 Home-Based & Non-Home-Based Trip Purpose Mode Share - RVMPO v3.1 Model			
2006	Auto	Transit	Bike/Walk
	90.04%	1.52%	8.45%
2010	Auto	Transit	Bike/Walk
	90.35%	1.45%	8.20%
2015	Auto	Transit	Bike/Walk
	90.68%	1.38%	7.94%

1.2 – Findings - Measure 1 – Mode Share 2010 Benchmark Analysis

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.

Table 1.2 – Measure 1: Transit & Bike/Ped Mode Share 2010 Benchmark Analysis

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 1: Transit and Bicycle/Pedestrian Mode Share	The percent of total daily trips taken by transit and combination of bicycle and walking (non-motorized) modes. Determined from best available data (e.g., model output and/or transportation survey data).	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips	% Daily Trips
		Transit: 1.0 Bike/Ped: 8.2	Transit: 1.0 Bike/Ped: 8.2	**Transit: 0.9 Bike/Ped: 7.3**	Transit: 1.6 Bike/Ped: 8.4	**Transit: 1.45 Bike/Ped: 8.20**	Transit: 2.2 Bike/Ped: 9.8	Transit: 3.0 Bike/Ped: 11

1.3 - Conclusions - Measure 1 – Mode Share 2010 Benchmark Analysis
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.

Transit mode share would likely increase if RVTD is able to pass a levy, which takes voter approval (so there is no guarantee). Another possible action could be that the RVMPO develop a bicycle plan that would identify gaps in the system to improve biking conditions in the region. A regional sidewalk plan could also be developed to achieve the same goal.

1.4 – Recommendation – Mode Share 2010 Benchmark Analysis
The TAC determined that the model used to estimate mode share may not be the best tool to use, and recommend that "observed data" be used to measure mode share. Observed data includes, but is not limited to, regional data such as bicycle and pedestrian counts and transit ridership numbers. This type of analysis would not provide mode share data, but actual numbers that could be tracked over time to demonstrate increases (or decreases) in transit ridership, biking and walking. This would achieve the policy outcome of tracking increases/decreases in transit, biking and walking.

Measure 2 – Percent Dwelling Units within ¼ Mile Walk to 30 Minute Transit Service

2.1 - Measure Description
This measure is intended to demonstrate improvements in transit accessibility. Unlike Measure 1 which considers mode share and tracks overall transit system usage regardless of service levels; this measure considers distance to a transit route, the routes service levels, and improving density around transit routes. For this measure to be successful, it requires development of dwellings within ¼ mile of transit routes and RVTD improving service levels system wide. 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 or better headway will be counted towards meeting the benchmarks and target shown in Table 2.1. Progress on this measure is tracked through GIS.

2.2 – Findings - Measure 2 – Transit Accessibility 2010 Benchmark Analysis
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.

Table 2.1 – Measure 2: Transit Accessibility 2010 Benchmark Analysis

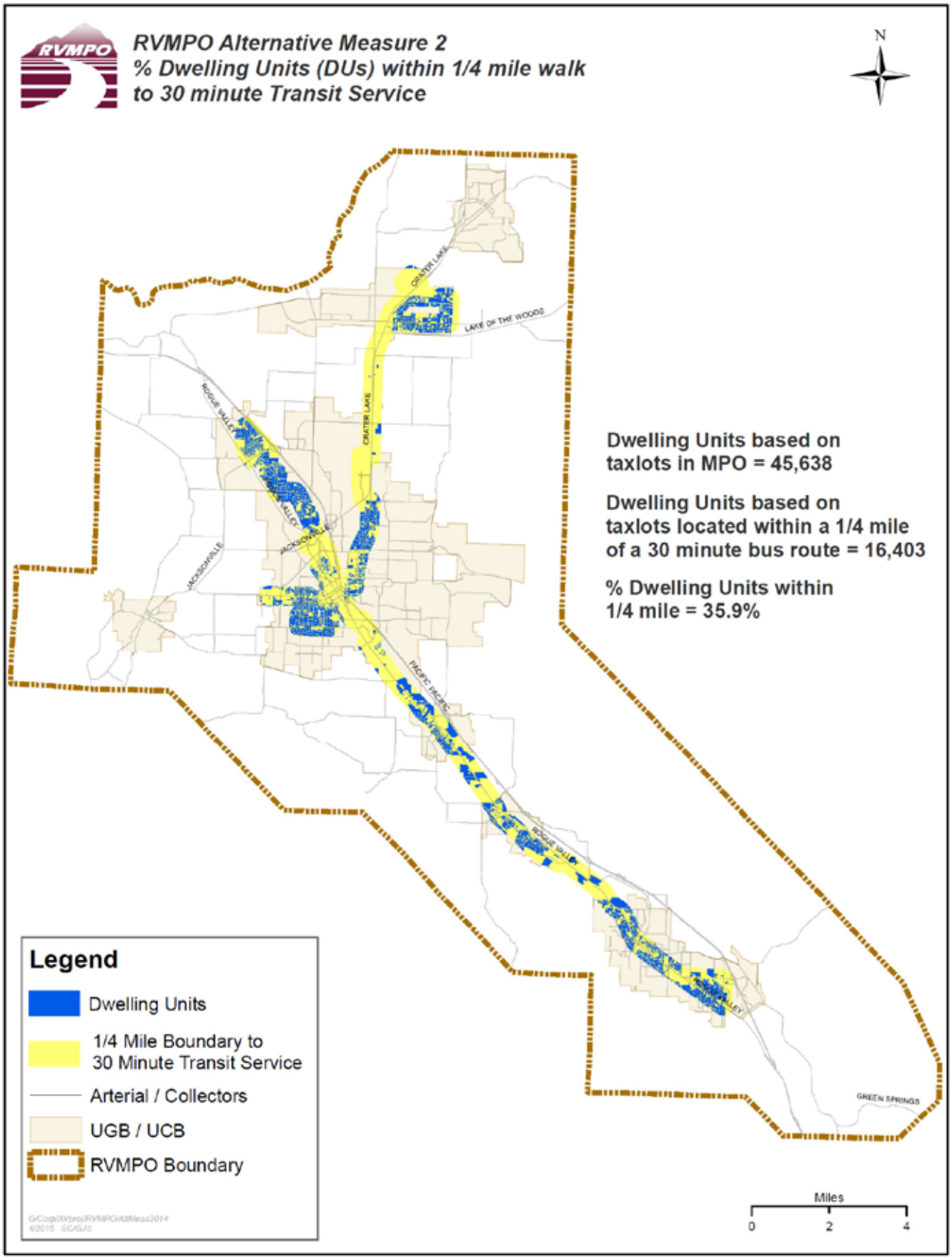
Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 2: % Dwelling Units (DU's) w/in 1/4 Mile Walk to 30-Min. Transit Service	Determined through GIS mapping.	12%	20%	**34%**	30%	**36%**	40%	50%

2.3 – Conclusions - Measure 2 – Transit Accessibility 2010 Benchmark Analysis

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.

2.4 – Recommendations – Transit Accessibility 2010 Benchmark Analysis

The TAC concurred with the methodology and the results of the analysis. The TAC recommends using the methodology as outlined in the Methodology memo in Appendix to measure transit accessibility.


RVMPO Alternative Measure 2
% Dwelling Units (DUs) within 1/4 mile walk to 30 minute Transit Service
N
Dwelling Units based on taxlots in MPO = 45,638
Dwelling Units based on taxlots located within a 1/4 mile of a 30 minute bus route = 16,403
% Dwelling Units within 1/4 mile = 35.9%
Legend
Dwelling Units
1/4 Mile Boundary to 30 Minute Transit Service
Arterial / Collectors
UGB / UCB
RVMPO Boundary
Miles
0
2
4
CRATER LAKE
LAKE OF THE WOODS
ROGUE VALLEY
JACKSONVILLE
PACIFIC PACIFIC
GREEN SPRINGS

Measure 3 - Percentage of Collectors/Arterials with Bicycle Facilities

3.1 - Measure Description

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. This measure is intended to track the progress of including these facilities on the MPO's street network and as a way to demonstrate improved accessibility for bicyclists.

3.2 – Findings - Bicycle Facilities 2010 Benchmark Analysis

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%.

Table 3.1 below depicts the results of the 2005 & 2010 benchmark analyses completed in 2007 and 2014.

Table 3.1 – Measure 3: Percentage of Arterials/Collectors with Bicycle Facilities 2010 Benchmark Analysis

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 3: % Collectors and arterials w/bicycle facilities	Determined through GIS mapping.	21%	28%	**37%**	37%	**54%**	48%	60%

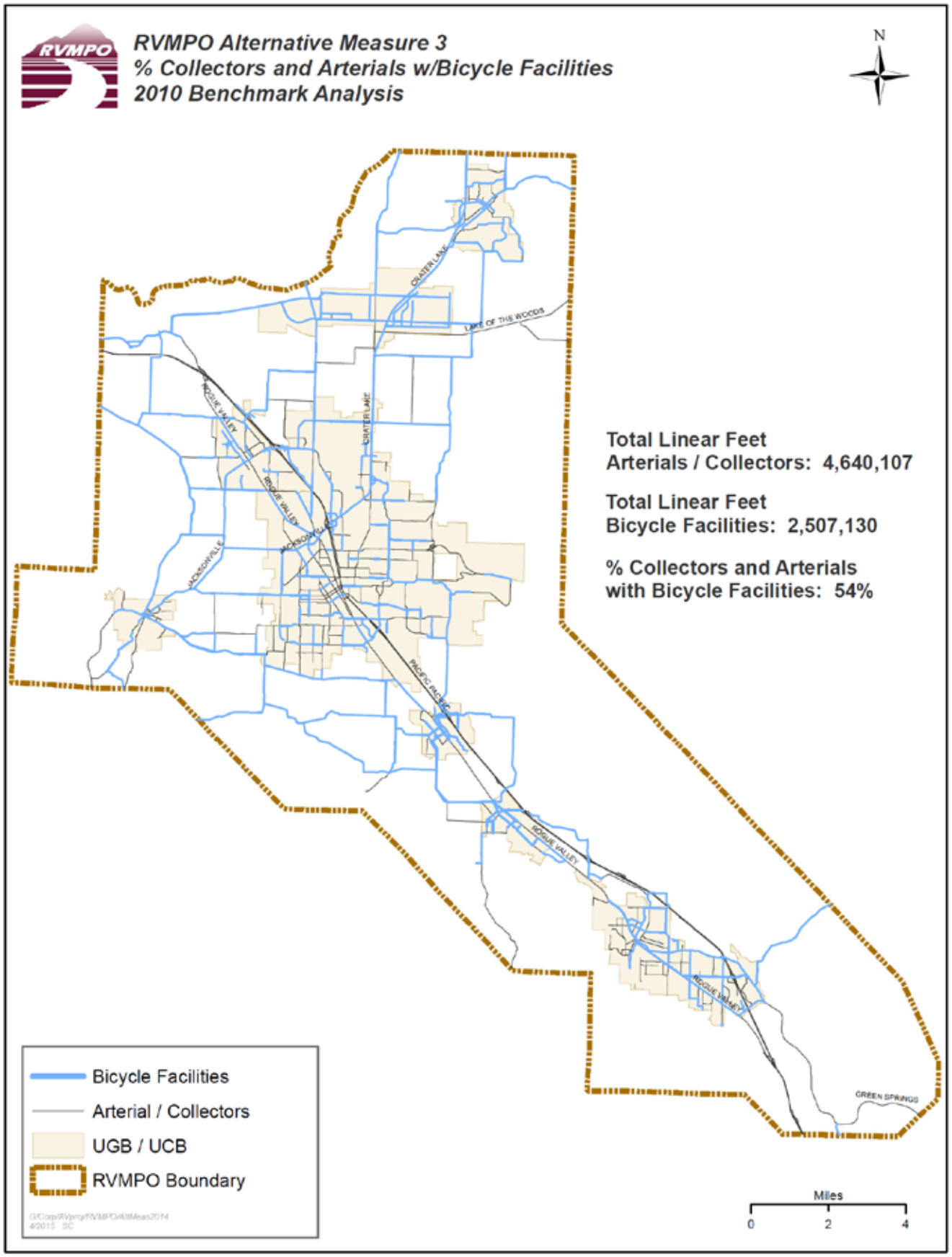
3.3 – Conclusions - Bicycle Facilities 2010 Benchmark Analysis

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.

The TAC concurred with the results of the analysis. The analysis did not include multi-use paths. Including the paths would result in 59% of arterials/collectors with bicycle facilities. The City of Medford considers the Larson Creek Multi-Use Path (21,090 linear feet, both directions) as bicycle facilities for sections of Barnett Road that are not able to accommodate bike facilities due to inadequate right-of-way width.

3.4 – Recommendations – Bicycle Facilities 2010 Benchmark Analysis

Continue to use the methodology approved by the TAC (see methodology memo in Appendix A). The TAC discussed refining this measure to focus on a set of priority bikeways that are most likely to result in making cycling to destinations within the MPO more convenient.


RVMPO Alternative Measure 3
% Collectors and Arterials w/Bicycle Facilities
2010 Benchmark Analysis
N
Total Linear Feet
Arterials / Collectors: 4,640,107
Total Linear Feet
Bicycle Facilities: 2,507,130
% Collectors and Arterials
with Bicycle Facilities: 54%
Bicycle Facilities
Arterial / Collectors
UGB / UCB
RVMPO Boundary
Miles
0
2
4
CRATER LAKE
LAKE OF THE WOODS
ROGUE VALLEY
JACKSONVILLE
PACIFIC PACIFIC
GREEN SPRINGS

Measure 4 - Percentage of Collectors and Arterials in TOD Areas with Sidewalks

4.1 - Measure Description

The RVMPO has areas that are currently planned for mixed-use, pedestrian friendly development or are in downtown areas. These areas are considered "Activity Centers." To be consistent with Measures 5 and 6, "Activity Centers" were used in this measure instead of the more restrictive "TOD Areas". This measure is intended to demonstrate improvements in pedestrian accessibility in these portions of the MPO area - where pedestrian access is most critical. Proposed 5-year benchmarks and 20-year targets are shown below in Table 4.1.

4.2 – Findings - Sidewalks 2010 Benchmark Analysis

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.

Table 4.1: Measure 4 - Percentage of Arterials/Collectors with Sidewalks 2010 Benchmark Analysis

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 4: % Collectors and Arterials in TOD Areas w/Sidewalks	Determined through GIS mapping.	47%	50%	**55%**	56%	**30%**	64%	75%

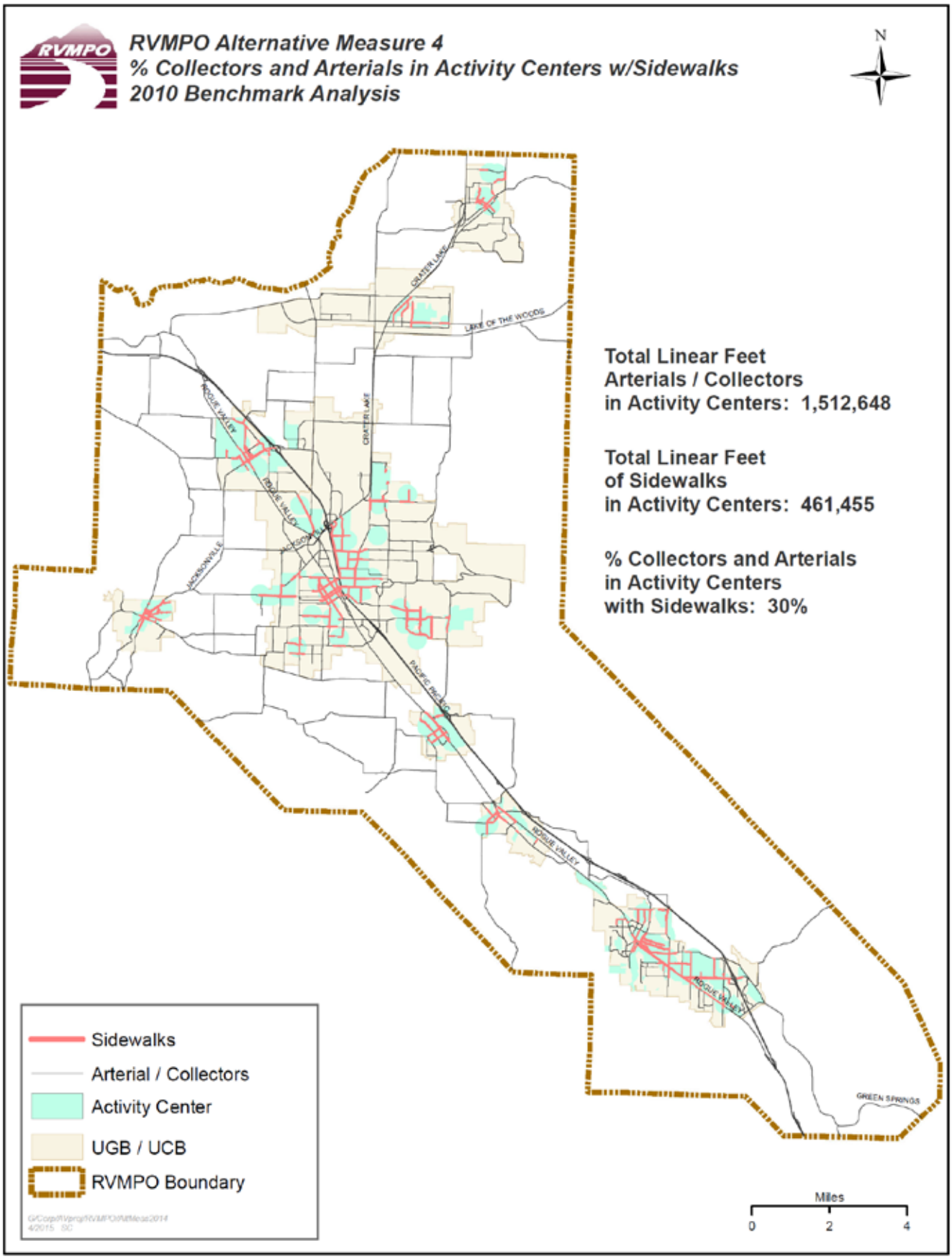
4.3 – Conclusions - Sidewalks 2010 Benchmark Analysis

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.

4.4 – Recommendations – Sidewalks 2010 Benchmark Analysis

The TAC recommends changing the name of Measure 4 to, "Measure 4 - Percentage of Collectors and Arterials in ***Activity Centers*** with Sidewalks." The TAC also recommends revising the benchmarks and target to reflect the larger geographic Activity Center areas.


RVMPO Alternative Measure 4
% Collectors and Arterials in Activity Centers w/Sidewalks
2010 Benchmark Analysis
N
Total Linear Feet
Arterials / Collectors
in Activity Centers: 1,512,648
Total Linear Feet
of Sidewalks
in Activity Centers: 461,455
% Collectors and Arterials
in Activity Centers
with Sidewalks: 30%
CRATER LAKE
LAKE OF THE WOODS
ROGUE VALLEY
JACKSONVILLE
PACIFIC HIGHWAY
GREEN SPRINGS
Sidewalks
Arterial / Collectors
Activity Center
UGB / UCB
RVMPO Boundary
Miles
0
2
4

Measure 5 - Percentage of New Dwelling Units in Mixed-Use/Pedestrian-Friendly Areas

5.1 - Measure Description

The objective of Measure 5 is to demonstrate progress towards creating mixed use, pedestrian-friendly developments in the MPO. Progress towards meeting the benchmarks and target for this measure is 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 Ashland, Talent, Phoenix, Jacksonville, Medford, Central Point, White City and Eagle Point, as well as within Activity Centers (TOD sites), will count towards meeting the benchmark and target figures shown below in Table 5.1. The benchmarks and target shown in the table represent the projected mixed-use development for 2000 to 2020.

5.2 – Findings - Dwelling Unit 2010 Benchmark Analysis

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.

Table 5.1: Measure 5 - New Dwelling Units in Mix-Used Pedestrian-Friendly Areas 2010 Benchmark Analysis

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 5: % Mixed-Use DUs in new development	Determined by tracking building permits - the ratio between new DUs in TODs and total new DUs in the region.	0%	9%	**10%**	26%	**22%**	41%	49%

5.3 – Conclusions – Dwelling Unit 2010 Benchmark Analysis

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.

5.4 – Recommendations – Dwelling Unit 2010 Benchmark Analysis

The TAC recommends changing the measure description to, "Measure 5 – Percentage of New Dwelling Units in *Activity Centers*." Another recommendation is to revise the "How Measured" description to read, "Determined by reviewing assessor's data to determine the ratio between new DUs in Activity Centers and total new DUs in the region." The evaluation criteria for this measure needs to be revised to

avoid confusion on what dwelling units should count towards the benchmarks and target. In addition, a new way of measuring density may need to be developed in order to ensure that proper credit is given to new development within Activity Centers. Another suggested option is to establish the existing density for residential development in all identified activity centers and then document the increase in density from one benchmark to the next.

Because some of the newly identified activity centers to do not have commercial uses at their hub, consideration should be given to amending or eliminating the requirement that the dwellings be within ¼ mile of a commercial center having a minimum of 20,000 square feet.

Measure 6 - Percentage of New Employment in Mixed-Use/Pedestrian-Friendly Areas

6.1 - Measure Description

The objective of Measure 6 is to demonstrate progress towards creating mixed use, pedestrian-friendly developments in the MPO. Progress towards meeting the benchmarks and target for this measure is 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 Ashland, Talent, Phoenix, Jacksonville, Medford, Central Point and Eagle Point, as well as within Activity Centers (TOD sites), will count towards meeting the benchmark and target figures shown below in Table 6.1. The benchmarks and target shown in the table represent the projected mixed-use employment for 2000 to 2020.

6.2 – Findings - Mixed-Use Employment 2010 Benchmark Analysis

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.

Table 6.1: Measure 6 - New Employment in Mix-Used Pedestrian-Friendly Areas 2010 Benchmark Analysis

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 6: % Mixed-use employment in new development	Estimated from annual employment files from State - represents the ratio of new development in TODs over total regional employment	0%	9%	**17%**	23%	**12%**	36%	44%

6.3 – Conclusions - Mixed-Use Employment 2010 Benchmark Analysis

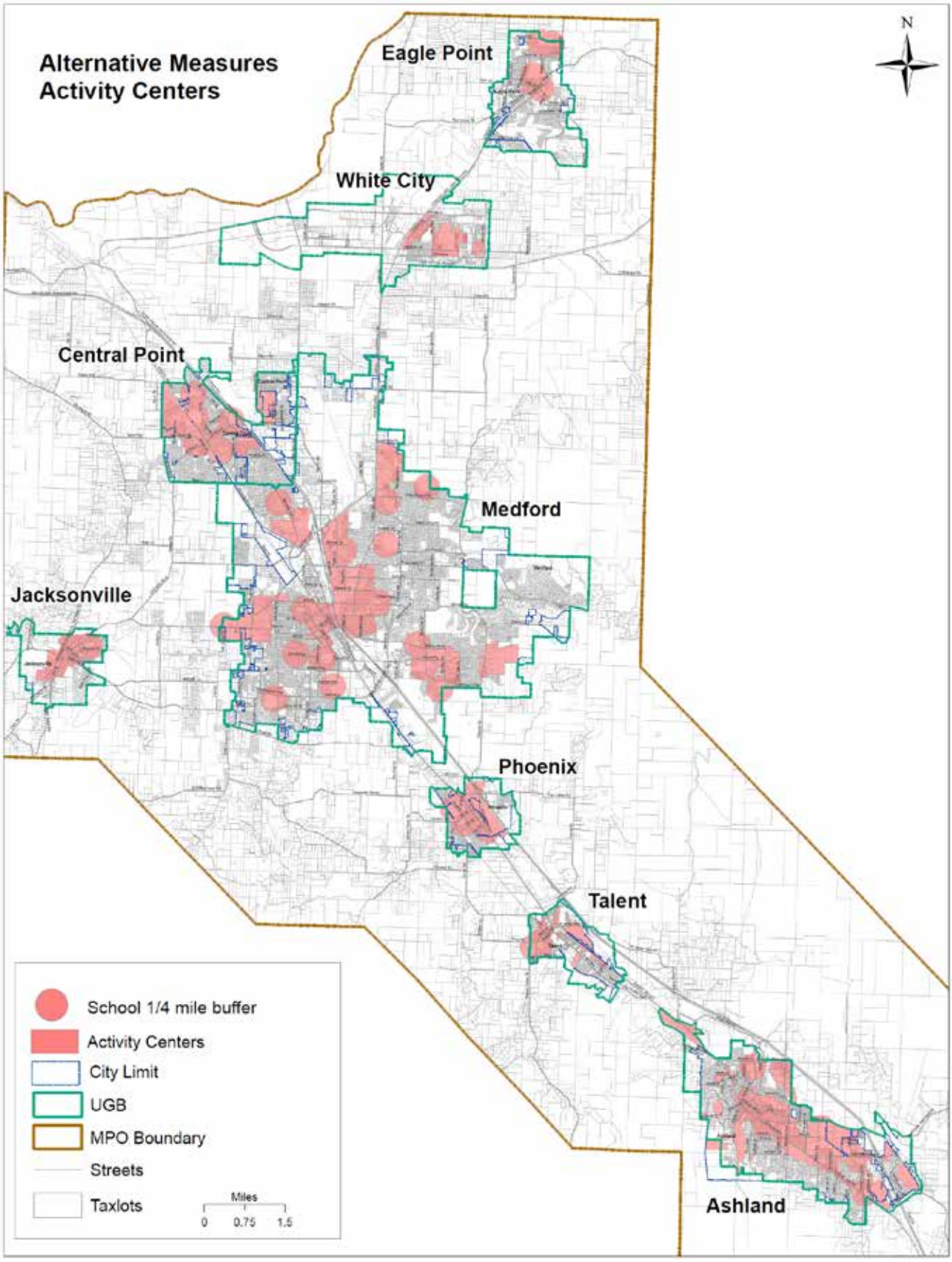
The 2010 benchmark for new employment in Activity Centers is 23%. The analysis shows that only 12% of new employment is within Activity Centers, which is 11 percentage points lower than the benchmark and 5 percentage points below the 2007 results of 17%.

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.

6.4 – <u>Recommendations</u> – Mixed-Use Employment 2010 Benchmark Analysis

The TAC recommends changing the measure description to, "Measure 6 – Percentage of New Employment in *Activity Centers*." Another recommendation is to revise the "How Measured" description to read, "Determined by reviewing assessor's data to determine the number of jobs per square footage of new commercial/industrial development in Activity Center to number of jobs per square footage of new commercial/industrial development in the region." The evaluation criteria for this measure needs to be revised to remove obstacles to counting new employment, particularly regarding building entrances and parking between the building and the street.


Alternative Measures
Activity Centers
N
Eagle Point
White City
Central Point
Medford
Jacksonville
Phoenix
Talent
Ashland
School 1/4 mile buffer
Activity Centers
City Limit
UGB
MPO Boundary
Streets
Taxlots
Miles
0
0.75
1.5

Measure 7 - Alternative Transportation Funding

7.1 – Measure Description

This measure has been 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 (STP) are the only funds over which the RVMPO has complete discretion. RVMPO jurisdictions have 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 7.1 shows 5-year benchmarks and the 20-year target for this measure.

As part of Measure 7, priorities for STP–funded transit projects were developed in consultation with MPO jurisdictions. The list was intended as a starting point for determining how STP funds will be spent by RVTD. Table 7.1.1 below lists the transit projects by jurisdiction. Projects are not listed in any particular order.

Table 7.1.1 - STP Funding Priorities for Rogue Valley Transportation District (RVTD)

Measure 7 - STP-Funded Transit Projects	
Central Point	RVTD will increase service on Route 40 (Central Point) to 30 minute headways and provide service to the TOD site when feasible.
Medford	RVTD will serve the Southeast Plan Area (Medford TOD) when feasible.
Phoenix	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.
Jackson County	RVTD will increase transit service to White City (unincorporated Jackson County).

7.2 – Findings - Alternative Transportation Funding 2010 Benchmark Analysis

Table 7.2.2 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 7.2.2 – 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 7.2.3 – Measure 7: Alternative Transportation Funding Analysis

Measure	How Measured	2000	Benchmark 2005	Measured 2007	Benchmark 2010	Measured 2014	Benchmark 2015	Target 2020
Measure 7: Alternative Transportation Funding	Funding Committed to transit or bicycle/pedestrian/TOD projects. Amounts shown represent 1/2 of the MPO's estimated accumulation of discretionary funding (STP).	NA	$950,000	**$1.4 Million**	$2.5 Million	**$3.1 Million**	$4.3 Million	$6.4 Million

Table 7.2.3 above shows the results of the benchmark analyses for 2005 & 2010 that were completed in 2007 and 2014. Almost $1.2 million in STP funds has been committed to RVTD for transit projects from 2002 to 2004; $3.1 million from 2005 to 2009; and $3.9 million from 2010 to 2014. Table 7.2.4 below outlines the status of the Alternative Measures STP-funded transit projects.

Table 7.2.4 – Measure 7: Transit Project Status

Measure 7 - STP-Funded Transit Projects		2010 Status
Central Point	RVTD will increase service on Route 40 (Central Point) to 30 minute headways and provide service to the TOD site when feasible.	· Route 40 has 30 minute headways (~$315,000 investment annually) · Service to the TOD site is not feasible at this time
Medford	RVTD will serve the Southeast Plan Area (Medford TOD) when feasible.	· Service to the SE Plan Area is not feasible at this time
Phoenix	RVTD will improve transit stops within Phoenix. RVTD will explore ways to improve	· RVTD is working with Phoenix Urban Renewal on transit improvements

	Hwy 99 (Main Street) pedestrian crossing to a northbound transit stop, and in the interim, will provide shuttle service for this purpose.	
Jackson County	RVTD will increase transit service to White City (unincorporated Jackson County).	· Route 60 has 30 minute headways (~$578,000 investment annually)

Table 7.2.5 below shows the expenditures made by RVTD with STP funds from Federal Fiscal Year (FFY) 2002 to FFY 2012)

Table 7.2.5 – Measure 7: Transit STP Expenditures

Measure 7 – RVTD STP-Funded Transit Expenditures		
Federal Fiscal Year	**Project/Activity**	**Total Expenditure**
FFY 2002-2005	· Purchased seven (7) vehicles	$1,791,518
FFY 2006	· Preventive Maintenance · Installed bus wash equipment · Bus stop shelters and facilities	$1,251,972
FFY 2007	· Preventive maintenance · CNG facility (built in 2011)	$605,354
FFY 2008-2009	· Preventive maintenance · Purchase two (2) vehicles	$1,270,821
FFY 2010-2011	· Preventive maintenance · Purchased surveillance equipment · Bus route signage and shelter rehabilitation	$1,348,286
FFY 2012	· Preventive maintenance · Front Street Station renovation · Bus route shelters and rehabilitation · Shop equipment	$814,748

Table 7.2.6 on Page 24 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 7.2.6 – 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
RVMPO	TDM Plan	2007	$41,823	CMAQ
Medford	Mace Road Sidwalks	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**	

7.3 – Measure 7 – Alternative Transportation Funding Analysis 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 RVMPO also uses its CMAQ funds to augment RVTD's operations and support member jurisdictions' alternative transportation projects.