

AGENDA

Middle Rogue Metropolitan Planning Organization

Policy Committee

Date: Thursday, September 21, 2017

Time: 2:30 p.m.

Location: Courtyard Conference Room, Grants Pass City Hall

101 NW "A" Street, Grants Pass, OR

Contact: Stephanie Thune, RVCOG: 541-423-1368

MRMPO website: www.mrmpo.org

| 1 | Call to Order / Introductions / Review Agenda | Darin Fowler, Chair | | | |
|---------------------|---|---|--|--|--|
| 2 | Review / Approve Minutes | Chair | | | |
| Attachment | #1 MRMPO Policy Committee Draft Minutes 170817 | | | | |
| Action Items | | | | | |
| 3 | VMT Benchmarks | Dan Moore | | | |
| Background | Travel demand model runs performed by Oregon Departmet (ODOT) Transportation Planning Analysis Unit (TPAU) for the Rogue Metropolitan Planning Organization's (MRMPO) Replan (RTP) show that the MPO can achieve a 5.45% reductive reveled (VMT) per capita over the 25-year planning horizon. The MRMPO will provide findings to the Land Conservation at Commission (LCDC) demonstrating that the MRMPO's 2015 Transportation Plan (RTP) is likely to achieve a five percent (5 vehicle miles traveled (VMT) in compliance with the Oregon Taule (TPR) requirements of Oregon Administrative Rule (OAF (3)(e), (4) and (5). At their September 7 meeting, the TAC recommended approvation Committee of forwarding the VMT Benchmark memos to LCD. | ne 2015 – 2040 Middle egional Transportation ction in vehicle miles and Development – 2040 Regional %) reduction in Transportation Planning R) 660-012-0035 | | | |
| Attachments | #2 Demonstration of MRMPO 5% Reduction in VMT per Capita Memo #3 Proposed VMT Benchmarks Memo | | | | |
| Action Requested | Approve the memos being forwarded to LCDC for consideration | on. | | | |

| Discussion Items | | | | | | |
|------------------|---|-----------------|--|--|--|--|
| 5 | Public Comment *Limited to one comment per person, five minute maximum time limit. | Chair | | | | |
| Regular Updates | | | | | | |
| 7 | Planning Update | Karl Welzenbach | | | | |
| | | | | | | |
| 8 | Other Business / Local Business Opportunity for MRMPO member jurisdictions to talk about transportation planning projects. | Chair | | | | |

- The next MRMPO Policy Committee meeting will be **October 19 at 2:30 p.m.** in the Courtyard Conference Room at Grants Pass City Hall.
- The next MRMPO Technical Advisory Committee (TAC) meeting will be **Thursday**, **October 5**, at 1:30 p.m. in the Courtyard Conference Room at Grants Pass City Hall.

IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, IF YOU NEED SPECIAL ASSISTANCE TO PARTICIPATE IN THIS MEETING, PLEASE CONTACT ANDREA NAPOLI, 541-423-1369. REASONABLE ADVANCE NOTICE OF THE NEED FOR ACCOMMODATION PRIOR TO THE MEETING (48 HOURS ADVANCE NOTICE IS PREFERABLE) WILL ENABLE US TO MAKE REASONABLE ARRANGEMENTS TO ENSURE ACCESSIBILITY TO THIS MEETING.



Summary Minutes Middle Rogue MPO Policy Committee August 17, 2017

The following attended:

| Voting Members | Organization | Phone Number | | |
|----------------------------|------------------|--------------|--|--|
| Bob Strosser | Jackson County | 774-6119 | | |
| Mike Baker | ODOT | 957-3658 | | |
| Pam VanArsdale, Vice Chair | Rogue River | 660-4414 | | |
| Rick Riker | Grants Pass | 479-7333 | | |
| Rob Brandes | Josephine County | 474-5460 | | |
| Staff | Organization | Phone Number | | |
| Karl Welzenbach | RVCOG | 423-1360 | | |
| Dan Moore | RVCOG | 423-1361 | | |
| Ryan MacLaren | RVCOG | 423-1338 | | |
| Stephanie Thune | RVCOG | 423-1368 | | |
| Interested Parties | Organization | Phone Number | | |
| Jason Canady | Grants Pass | 450-6110 | | |
| John Vial | Jackson County | 774-6238 | | |

<u>NOTE</u>: In the interest of best utilizing staff time, minutes will now be truncated to show action items/outcomes only. Hyperlinks to the full meeting and to each of the public hearing, action and presentation items will be incorporated into the abbreviated written minutes, which will themselves continue to be posted on the MRMPO website. *Firefox is recommended as a browser* as the audio files will not play consistently using Internet Explorer.

Specific agenda items can be accessed via the links below, while the full recording of this meeting can be accessed here: 170817 MRMPO Policy Committee Meeting Audio

1. Call to Order / Introductions/ Review Agenda 00:00 – 00:46

1:32 | Quorum: Grants Pass, Rogue River, Jackson County, Josephine County, ODOT

2. Review / Approve Minutes 00:47 – 02:54

The Vice Chair asked if there were any changes or additions to the July 20 meeting minutes.

00:55 | On a motion by Mike Baker, seconded by Bob Strosser, the Committee recommended approval of the July 20 MRMPO Policy Committee meeting minutes as submitted.

The motion carried unanimously by voice vote.

Public Hearing

3. 2015-2040 Regional Transportation Plan (RTP) and 2015-2018 Transportation Improvement Program (TIP) Amendments 02:55 – 10:58

The Vice Chair read the procedure for the public hearing.

Ryan MacLaren reported that the MRMPO RTP and TIP need to be amended to remove the following project:

• Region-wide Rumble Strips (KN 18880) Description: "Region-wide rumble strips."

The Vice Chair opened the discussion to public comment, both in support and in opposition. None voiced.

The Vice Chair closed the public testimony.

08:19 | Rob Brandes moved to approve the proposed amendment to the 2015-2040 MRMPO RTP and 2015-2018 MRMPO TIP. Mike Baker seconded.

There was no further discussion.

The motion carried unanimously by voice vote.

Action Items

4. MRMPO TAC Bylaw Revision Review 10:59 – 17:45

Changes were proposed to classify DLCD and DEQ as ex officio members in *Article III*, *Section I*, and to clarify the quorum-related language of *Article IV*, *Section 3(b)*.

13:59 | Mike Baker moved to approve the proposed amendments to the MRMPO TAC's Bylaws. Rick Riker seconded.

Discussion resulted in a determination that ex officio members of the MRMPO TAC neither have voting rights nor count towards a quorum.

The motion carried unanimously by voice vote.

Discussion Items

- 5. STIP Presentation to Stakeholder Groups | 2021-2024 STIP Development Process 17:46 40:19
- **6. Public Comment** (Item skipped)

Regular Updates

- 7. Planning Update 40:20 59:37
- 8. Other Business / Local Business 59:38 01:00:30
- **9. Adjournment** 01:00:31 01:00:41 3:41 p.m.

Meeting Schedule:

MRMPO TAC | Thursday, September 7, 2017 | 1:30 pm MRMPO Policy Committee | Thursday, September 21, 2017 | 2:30 pm



Middle Rogue Metropolitan Planning Organization

Regional Transportation Planning

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

DATE: September 13, 2017

TO: MRMPO Policy Committee

FROM: Dan Moore, MPO Coordinator

SUBJECT: Demonstration of MRMPO 5% Reduction in VMT per Capita

Travel demand model runs performed by Oregon Department of Transportation's (ODOT) Transportation Planning Analysis Unit (TPAU) for the 2015 – 2040 Middle Rogue Metropolitan Planning Organization's (MRMPO) Regional Transportation Plan (RTP) show that the MPO can achieve a 5.45% reduction in vehicle miles traveled (VMT) per capita over the 25 year planning horizon.

The purpose of this memo is to provide findings to the Land Conservation and Development Commission (LCDC) demonstrating that the MRMPO's 2015 – 2040 Regional Transportation Plan (RTP) is likely to achieve a five percent (5%) reduction in vehicle miles traveled (VMT) in compliance with the Oregon Transportation Planning Rule (TPR) requirements of Oregon Administrative Rule (OAR) 660-012-0035 (3)(e), (4) and (5).

Background

The TPR (OAR 660-012-0035) requires MPOs to avoid principal reliance on any one mode of transportation by increasing transportation choices to reduce principal reliance on the automobile. This can be accomplished by the MPO adopting a Regional Transportation System Plan (RTSP) that shows a 5% reduction in vehicle miles traveled (VMT) per capita for the RTP planning period.

On November 12, 2015, MRMPO staff sent the Oregon Department of Transportation (ODOT), Transportation Planning Analysis Unit (TPAU) a model run request to determine the VMT per capita for the MRMPO using the recently updated Grants Pass model being used for the 2015-2040 MRMPO RTP. The VMT per capita results would be used to determine whether or not the MRMPO was able to meet the 5% VMT per capita reduction requirement. On December 2, 2015, TPAU responded by memo (Appendix A) with the results of the model run which are shown in Table 1 below.

Table 1 lists both Base Year 2010 and Future Year 2040 RTP Scenario daily VMT and VMT per Capita, as well as the percentage change between the Base Year 2010 and Future Year 2040 Scenario. The VMT per capita reduction is 5.45% between 2010 and 2040. The results of the model run conclude that the Grants Pass model area meets the TPR 5% VMT per capita reduction requirement.

Table 1

| Scenario Year | Daily VMT (Miles) | Total Population | VMT per Capita (Miles) | VMT per Capita % Reduction | |
|-----------------|-------------------|-------------------------|---------------------------|----------------------------|--|
| Base Year 2010 | 760,271 | 68,973 | 11.0 | 5 450/ | |
| FutureYear 2040 | 925,791 | 89,004 | 10.4 | -5.45% | |

Factors Affecting the Grants Pass 2010-2040 Model VMT/Capita Reduction

Many factors play a role in the travel demand forecasting model. Below is an overview of what factors might affect the Grants Pass 2010-2040 model VMT per capita reduction:

Internal-Internal VMT vs Externally-related VMT

Table 2 – Internal-Internal Daily VMT

| Grants Pass Model Average Daily I-I Trip Length = Daily II-VMT / Daily II-Trips (Miles) | | | | | | |
|---|-----------------|-------------------|---|----------------------------|--|--|
| Scenario | Daily II VMT | Daily II Trips | Average Daily II Trip Length (mi) | Daily External Trips | | |
| 2010 Base Year | 760,271 | 165,315 | 4.60 | 49,992 | | |
| 2040 RTP Scenario | 925,791 | 206,902 | 4.47 | 77,500 | | |
| Delta 2010-2040 RTP | 165,520 | 41,587 | -0.12 | 27,508 | | |
| % Changes 2010-2040 RTP | 22% | 25% | -3% | 55% | | |

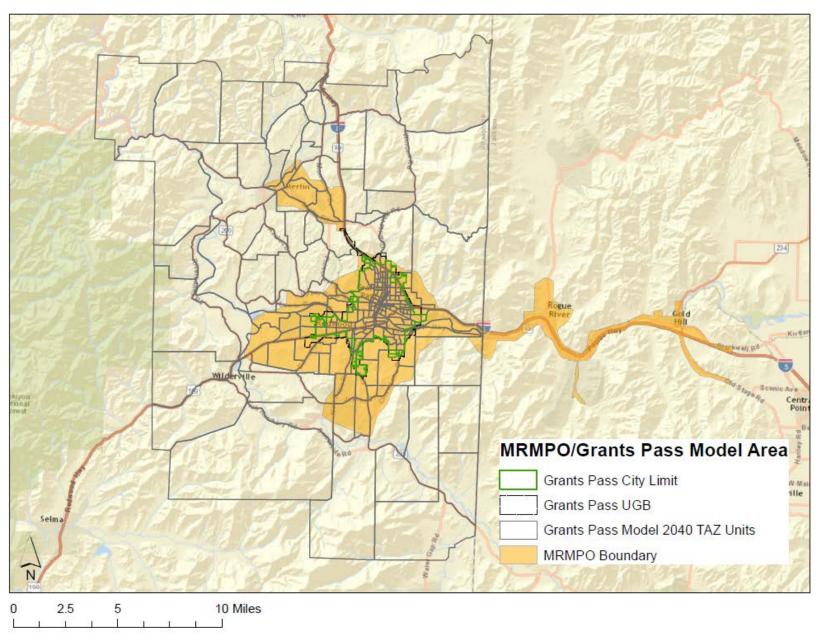
Table 2 above shows that the average daily trip length is reduced from 4.60 miles in the 2010 base year to 4.47 miles in the 2040 RTP scenario, which is a 3% reduction. Given that the population is increased in future year 2040 RTP scenario from 2010 base year, an average daily 3% travel length reduction explains why the VMT per Capita is reduced by -5.7% although both VMT and trips would increase by 22% and 25%, respectively. Daily external trip growth rate is 55%, which indicates that over half of the trips generated within the model area are traveling to other destinations outside of the MPO.

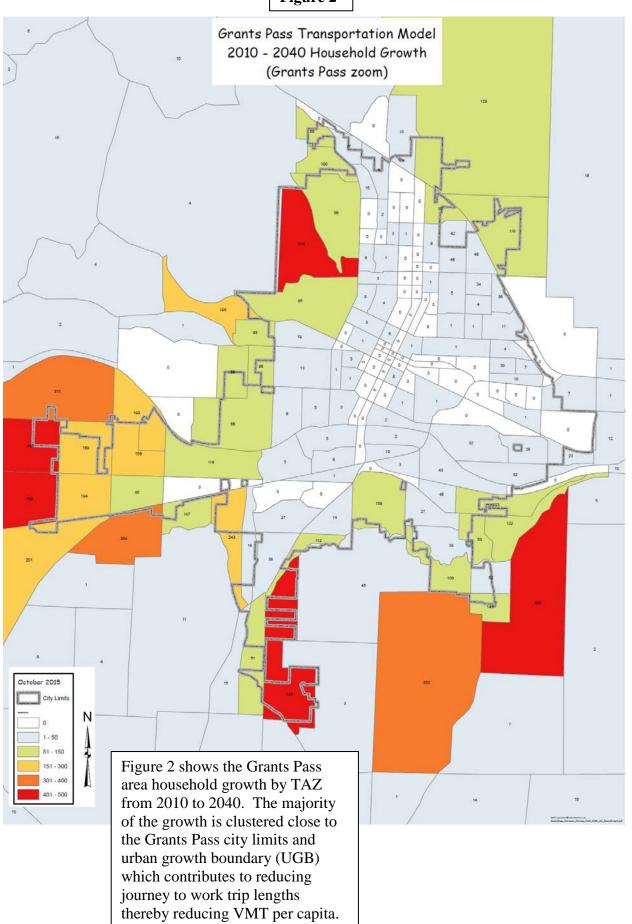
Future 2040 Land Use Scenario Focusing on Grants Pass UGB Area

Figures 2, 3, 4 & 5, prepared by TPAU, show that the majority of the MRMPO's 2010-2040 household growth will primarily occur in the vicinity of the Grants Pass central city area while employment growth is also within the city limits or inside the Grants Pass urban growth boundary (UGB). These land use patterns help contribute to reducing VMT per capita.

Figure 1 shows the Grants Pass model area by transportation analysis zone (TAZ) in relation to MRMPO Planning Area boundary.

Figure 1 – Grants Pass Model Area – MRMPO Planning Area Boundary





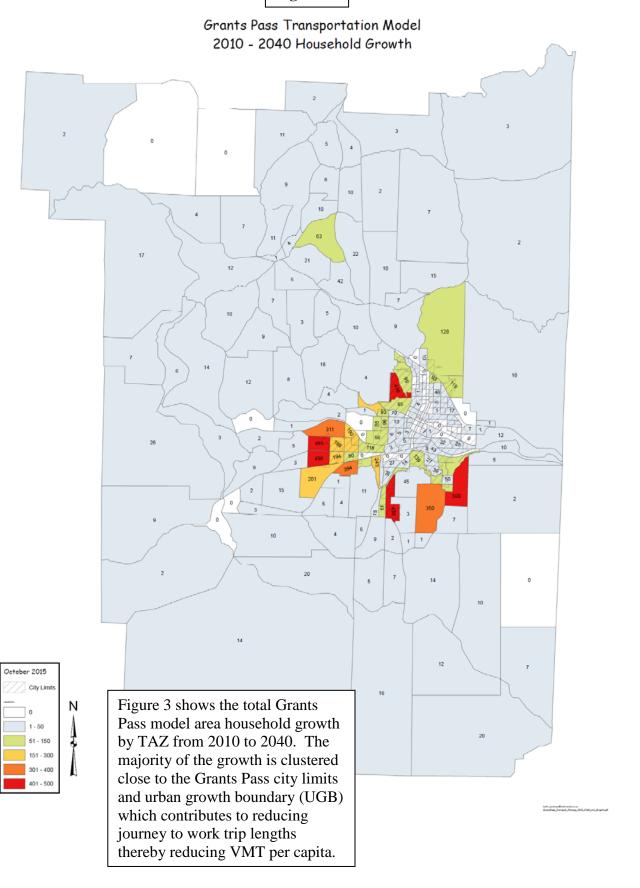


Figure 4

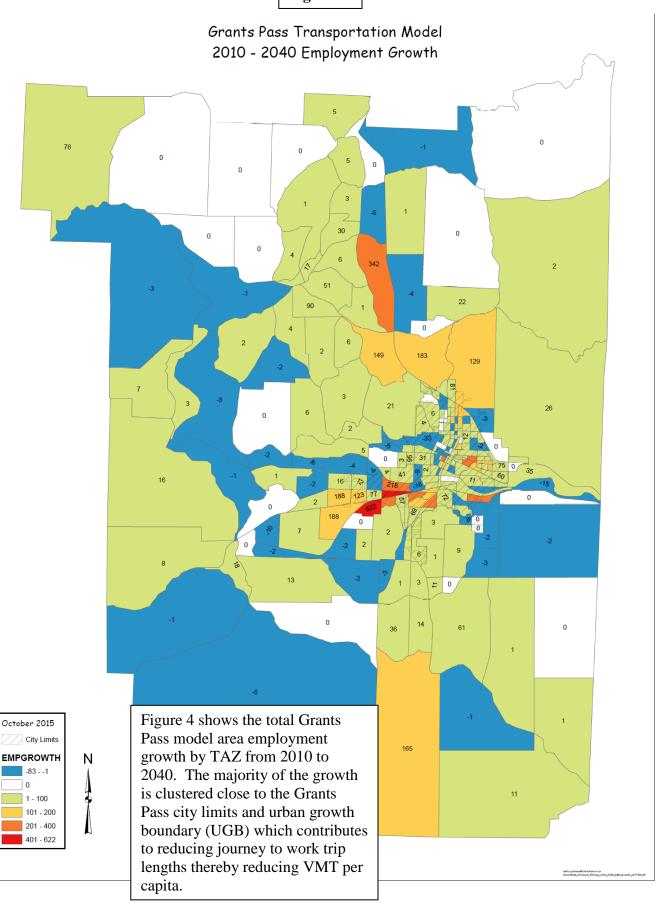
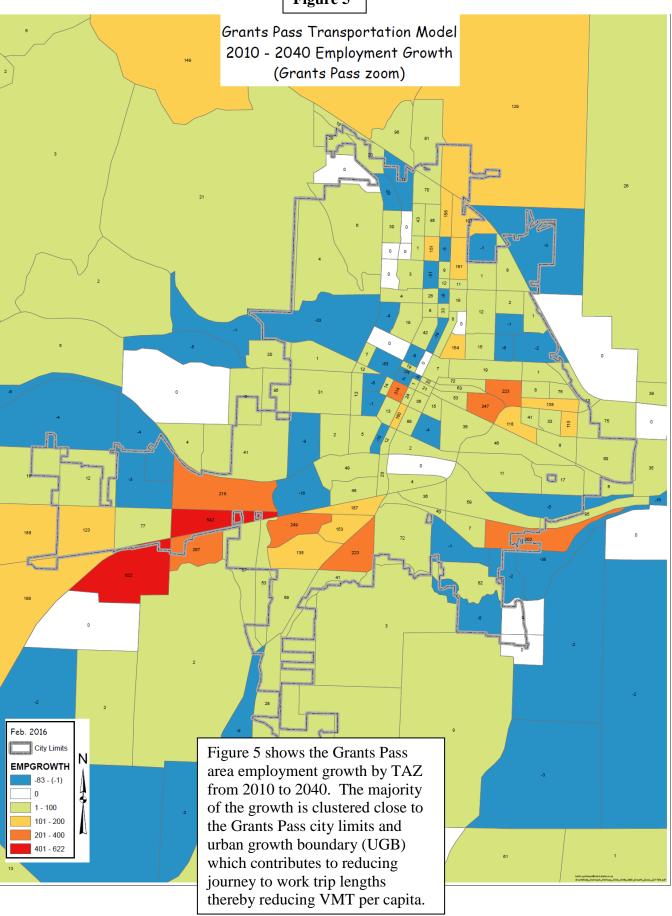


Figure 5



In addition to the TPAU household and employment growth projections shown in Figures 2, 3, 4 & 5, RVCOG conducted a similar analysis using 2010-2040 Grants Pass travel demand model TAZ data.

The original intent of the analysis was to use the Place Types methodology to describe the parts of the MRMPO where population or employment may be located, as well as the corresponding neighborhood character of those locations. Due to map formatting and confidentiality of employment data issues, the only map using Place Type development type symbology is shown on Figures 10 & 11.

Figure 6 depicts residential growth rates for the Grants Pass model area. The greatest increase in residential growth occurs within the Grants Pass urban core area. Lower residential growth rates are in the rural areas as expected.

Figure 7 shows the percent change of employment from 2010 to 2040. Employment increases are close to the city core area and along OR 199.

Figures 8 & 9 depict Place Types Mixed-Use Development Type growth percent increases from 2010 to 2040. The Place Types mixed-use development type includes medium to high densities of residential and commercial uses, and a high diversity of land use mix, with both jobs and housing. This type of development contributes to reducing VMT per capita.

Figures 10 & 11 show the growth from 2010 to 2040 by Place Type Development Types. Table 3 includes a description of each Place Type Development Type. Figure 11 shows the areas of intensifying land uses which are predominately located within the Grants Pass UGB. There are 263 TAZs within the 2010-2040 Grants Pass travel demand model area. The increase in the number of households within the model area between 2010 and 2040 is 8,641. The percentage of household growth within the model area by 2040 Development Type:

Employment: 10.9%
 Mixed High: .06%
 Mixed: .95%
 Residential: 71.6%
 Low Density/Rural: 16.3%

Table 3 - Place Type Development Type Categories

Mixed Use

- Medium to high densities of residential and commercial uses
- High diversity of land use mix, with both jobs and housing
- Multimodal transportation network supported by peak period transit service

Employment

- Land use is dominated by commercial or industrial activities
- Low diversity of land uses
- Jobs/Housing balance: mostly jobs
- Missing either the density or street design required of mixed use

Residential

- Land use is dominated by housing
- Low diversity of land uses
- Jobs/Housing balance: mostly housing
- Missing either the density or street design required of mixed use

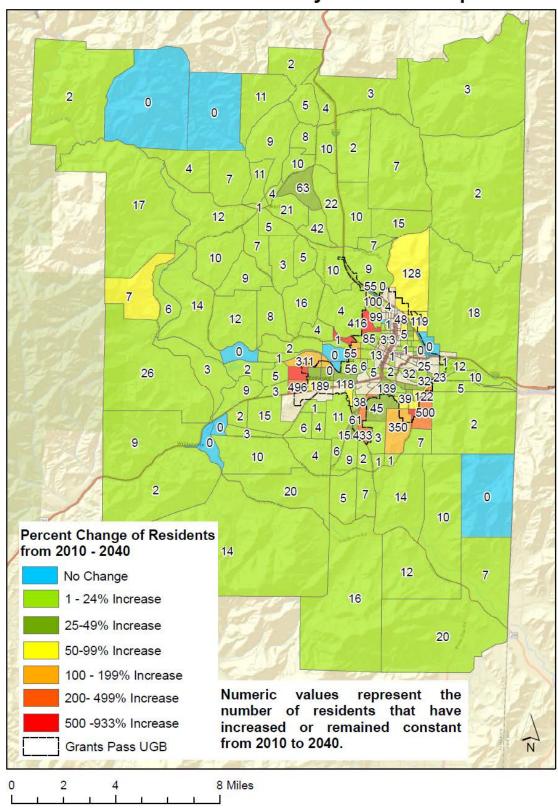
Rural/Low Density

- Very low densities of housing and jobs
- Very low accessibility to jobs and services
- Generally outside of UGB, or undeveloped areas within UGB
- Auto dependent transportation, due to low activity

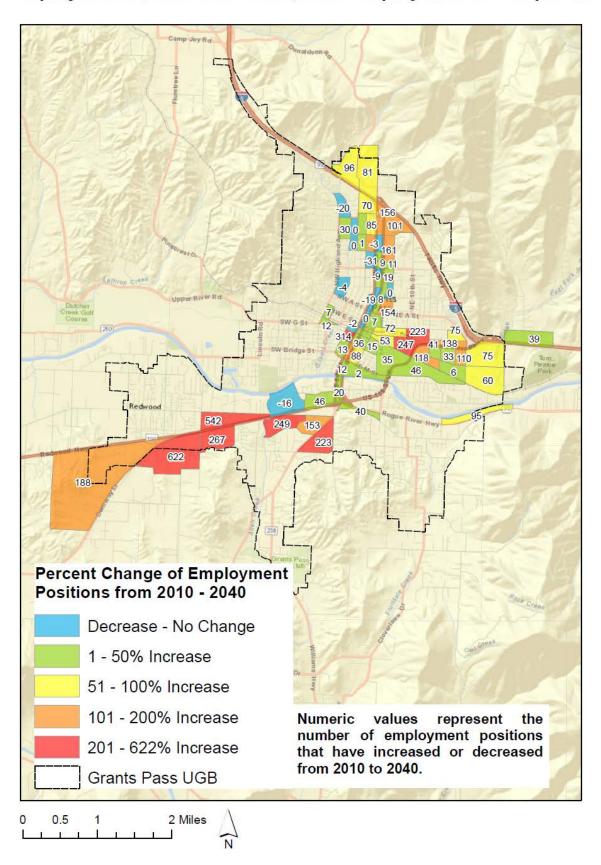
Overall, both the TPAU and RVCOG Grants Pass model TAZ analyses depicted in Figures 2 through 11 shows that future residential and employment growth is chiefly concentrated in the City of Grants Pass city limits and UGB, which supports the modeling analysis conducted by TPAU that resulted in a 5.45% reduction in VMT per capita for the 2015-2040 MRMPO RTP.

Figure 6

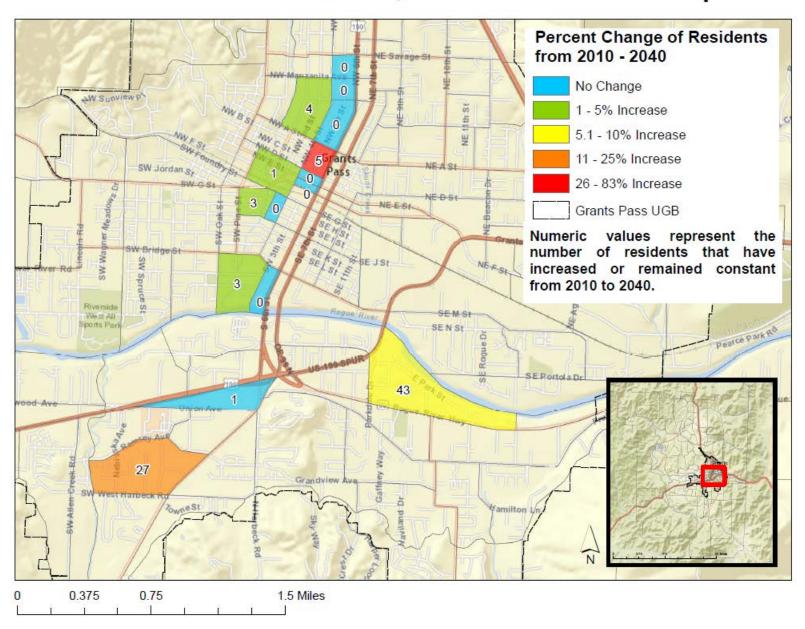
Residential Growth Rate 2010,2040: Residential and Low Density Rural Development



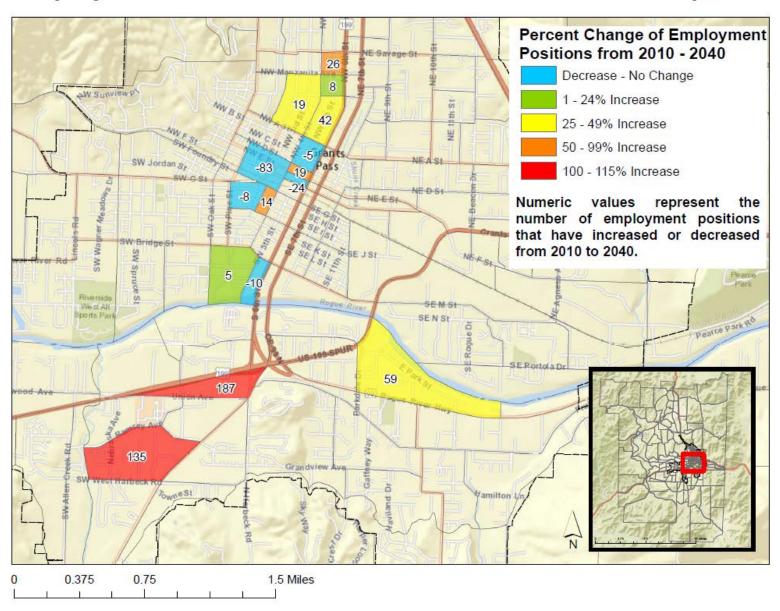
Employment Growth Rate 2010,2040: Employment Development

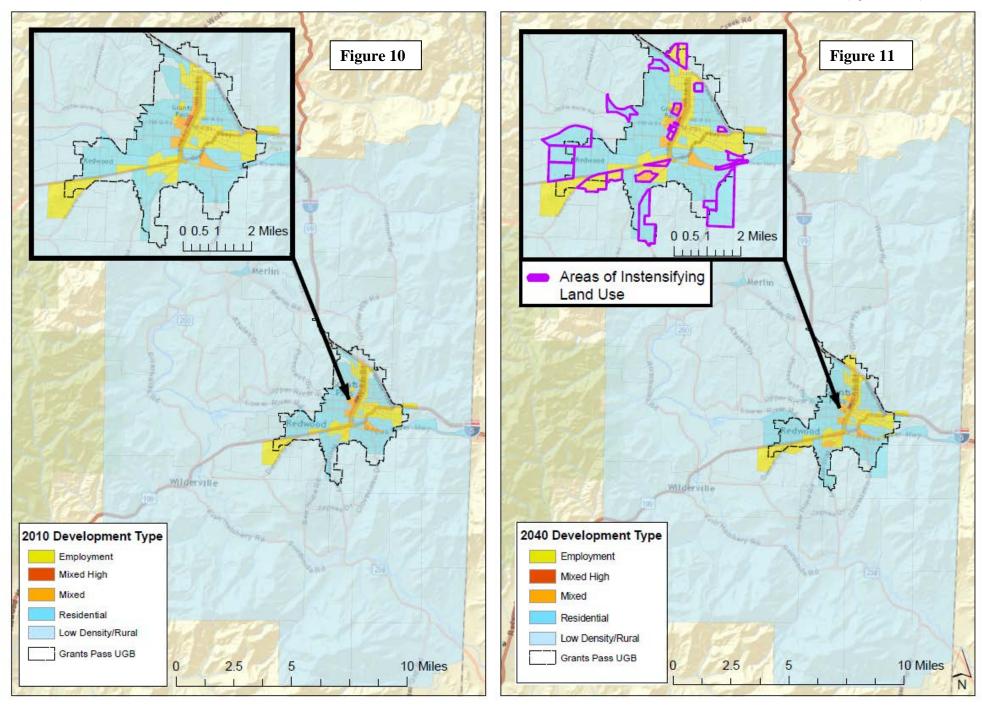


Residential Growth Rate 2010,2040: Mixed Use Development



Employment Growth Rate 2010,2040: Mixed Use Development





Appendix A



Department of Transportation

Transportation Development Division Transportation Planning Analysis Unit (TPAU) Mill Creek Office Park 555 13th Street NE Suite 2 Salem, Oregon, 97301-4178

> Phone: (503) 986-4120 Fax: (503) 986-4174

Date: December 2, 2015

To: Dan Moore, RVMPO Planning Program Manager

From: Jin Ren, P.E., Senior Transportation Modeler/Analyst ODOT Transportation Planning Analysis Unit (TPAU)

Cc: Brian Dunn, P.E., Transportation Planning Analysis Manager, ODOT TPAU Peter Schuytema, P.E., Senior Transportation Engineer, ODOT TPAU Ian Horlacher, MPO Senior Planner, ODOT Regional 3, District 8

RE: VMT Per Capita for the Grants Pass Model Area

- Base Year 2010 and Future Year 2040 RTP Scenario Grants Pass Travel Demand Models

Brief Description

A model request was submitted by RVMPO to utilize the Grants Pass Travel Demand Models¹ to output Base Year 2010 and Future Year 2040 RTP scenario daily vehicle miles traveled (VMT) per capita. The model data will be used to determine whether the Middle Rogue MPO meets the Oregon Transportation Planning Rule (TPR) 5% VMT per capita reduction requirement.

Land Use & Network Assumptions

The decision was made to use the Grants Pass OSUM (Oregon Small Urban Models) models for Base Year 2010 and Future Year 2040 RTP (Regional Transportation Plan) scenario.

The Base Year 2010 GP Model is based on the 2010 census block household data and the 2010 employment data from the Oregon employment department. The based model is well calibrated by the 2010 Oregon Household Activity Survey (OHAS) data and is validated against the base traffic counts.

The Grants Pass 2040 future year RTP Scenario OSUM model was based on the 2040 local jurisdictional population and employment forecasts by referring to the Portland State University population forecasts and Oregon State economic analysis and forecasts. The RTP roadway capacity improvement projects are built in the 2040 future year RTP Scenario model network.

¹ Note that travel models provide only generalized travel forecasts because they are based on generalized land use patterns and transportation networks. Since models do not represent individual land uses, driveways or neighborhood-scale streets, the forecasts produced are not sensitive to these specific land use and transportation characteristics.

It is inappropriate to use raw model outputs as the basis for transportation and land use decisions that require consideration of detailed transportation and land use characteristics. Therefore, post-processing of model outputs to account for the influence of specific transportation and land use characteristics is mandatory. Methods used for post-processing must conform to specifications provided within the ODOT Analysis Procedures Manual (http://www.oregon.gov/ODOT/TD/TP/pages/APM.aspx).

Modeling Methods and Assumptions

The daily multi-class vehicle trip assignment procedure can separate the internal-internal and externally-related vehicle trips on the model network so that the daily internal-internal VMT can be summarized, and the daily VMT per Capita can be figured out by dividing the daily VMT by the total population in the Grants Pass model area (as shown in Figure 1 below).

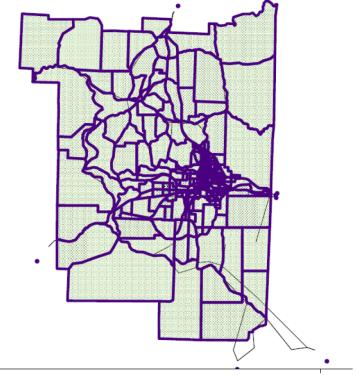


Figure 1: Grants Pass model area with Traffic Analysis Zones (TAZ) and model network.

Requested Output

Table 1 lists both Base Year 2010 and Future Year 2040 RTP Scenario daily VMT and VMT per Capita, as well as their percentage changes between Base Year 2010 and Future Year 2040 Scenario.

| Scenario Year | Daily VMT (Miles) | Total Population | VMT Per Capita (Miles) | VMT Per Capita % Reduction |
|------------------|-------------------|------------------|---------------------------|-------------------------------|
| Base Year 2010 | 760,271 | 68,973 | 11.0 | (10.4-11.0)/11.0 = |
| Future Year 2040 | 925,791 | 89,004 | 10.4 | -5.6% |

In conclusion, the Grants Pass model area meets the Oregon Transportation Planning Rule 5% VMT per capita reduction requirement.

Please feel free to contact Jin Ren at 503-986-4120 <u>Jinxiang.ren@odot.state.or.us</u> if you have any questions or comments.



Middle Rogue Metropolitan Planning Organization

Regional Transportation Planning

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

DATE: September 13, 2017

TO: MRMPO Policy Committee

FROM: Dan Moore, MPO Coordinator

SUBJECT: Proposed VMT Benchmarks

Travel demand model runs performed by Oregon Department of Transportation's (ODOT) Transportation Planning Analysis Unit (TPAU) for the 2015 – 2040 Middle Rogue Metropolitan Planning Organization's (MRMPO) Regional Transportation Plan (RTP) show that the MRMPO can achieve a 5.45% reduction in vehicle miles traveled (VMT) per capita over the 25 year planning period. The results of the VMT per capita analysis performed by TPAU and the Rogue Valley Council of Governments (RVCOG) are documented in, the Demonstration of MRMPO 5% Reduction in VMT per Capita memo, dated August 31, 2017.

The purpose of this memo is to present proposed VMT benchmarks to the Land Conservation and Development Commission (LCDC) in compliance with the Oregon Transportation Planning Rule (TPR) requirements of Oregon Administrative Rule (OAR) 660-012-0035 (3)(e), (4) and (5). The memo also includes proposed methodologies to evaluate progress towards meeting the 2040 VMT per capita reduction target of -5.45%.

The MRMPO utilized data from the travel demand model to set the VMT benchmarks. The benchmarks are represented as percentages. This matches well with the VMT per capita requirement which is also percentage based.

VMT Benchmarks

MRMPO proposes interim benchmarks for reducing vehicle miles travelled (VMT) based on the incremental annual growth method depicted in Table 1 that calculates the VMT per capita reduction targets for future RTP update years ¹ using base year 2010 and future year 2040 population and daily VMT data from the Grants Pass travel demand model. This method is a linear interpolation of VMT per capita that shows a reduction of:

- -1.80% by 2019
- -2.60% by 2023
- -3.34% by 2027
- -4.03% by 2031
- -4.68% by 2035
- -5.44% by 2040.

¹ The RTP is updated every 4 years.

Table 1 – MRMPO VMT Benchmarks

| Scenario Year | Daily VMT Miles | Total Population | VMT Per Capita (Miles) | VMT Per Capita % Reduction | | | | |
|--------------------------------------|---------------------------------|---------------------|------------------------------|----------------------------------|--------|--------|--------|---------|
| Base Year 2010 | 760,271 | 68,973 | 11.0 | -5.45% | | | | |
| Future Year 2040 | 925,791 | 89,004 | 10.4 | -3.43% | | | | |
| Increase in Daily VMT Miles | 165,520 | 20,031 | | | | | | |
| % increase in VMT Miles 2010 to 2040 | 21.8% | 29.0% | | | | | | |
| Per Year % Incremental Increase | 0.73% | 0.97% | | | | | | |
| Per Year % Compounding Increase | 0.7% | 0.9% | | | | | | |
| | RTP Update Years | 2019 | 2023 | 2027 | 2031 | 2035 | 2040 | Sum |
| | % increase in VMT Miles 2010 to | 6.5% | 2.9% | 2.9% | 2.9% | 2.9% | 3.6% | 22% |
| ANNUAL INCREMENTAL GROWTH | Daily VMT Increases | 49,656 | 22,069 | 22,069 | 22,069 | 22,069 | 27,587 | 165,520 |
| | % increase in Pops 2010 to 2040 | 9% | 4% | 4% | 4% | 4% | 5% | 29% |
| METHOD | Pop Increases | 6,009 | 2,671 | 2,671 | 2,671 | 2,671 | 3,339 | 20,031 |
| | VMT Per Capita | 10.80 | 10.71 | 10.63 | 10.56 | 10.49 | 10.40 | 10.40 |
| | % Changes from 2010 | -1.80% | -2.60% | -3.34% | -4.03% | -4.68% | -5.44% | -5.44% |

VMT Benchmark Monitoring

The MRMPO proposes to monitor progress on the VMT benchmarks by using the travel demand model and evaluating of RTP goals and policies. Sections 1 & 2 below describe the monitoring methodologies.

1. Travel Demand Model

The MRMPO will be updating the 2020 - 2045 RTP beginning in FY2019. TPAU is currently developing an activity based model (ABM) for Southern Oregon. The model will include both the MRMPO and the Rogue Valley Metropolitan Planning Organization (RVMPO) planning areas. The ABM model will be used to measure progress in meeting the VMT benchmarks. The new ABM model will have a 2010 base year and include the entire MRMPO planning area.

- a. The model will be updated with new population and employment data.
- b. A model run will be conducted to estimate the % changes in VMT per capita from 2010 to the benchmark year being analyzed (i.e., 2019, 2023, 2027, 2031, 2035, & 2040).
- c. The model results will be compared to the VMT benchmark for the year being analyzed. If the % reduction in VMT per capita is not achieved, the MPO will test VMT reduction scenarios (revised population and employment TAZ data, increased transit, transportation options (TO), etc.).
- d. Results of the test scenarios will be presented to the MRMPO Technical Advisory Committee for review and recommendations to the Policy Committee on possible actions.

2. RTP Performance Measures Evaluation

The MPO will evaluate specific RTP goals and policies relevant to reducing VMT per capita. Performance measures for each of the goals and policies identified will be used to conduct the evaluation. The specific MRMPO RTP goals, polices and performance measures proposed to be evaluated for each benchmark year are listed below.

GOAL 4: Develop and implement policies and plans to protect, preserve, and enhance the social, historical, and natural environments of the region.

Policies

- G4 P3 Analyze and implement transportation investments which will help reduce greenhouse gases, and other emissions, and support the reduction of single occupancy vehicle trips.
- G4 S2 Promote street and pathway connectivity, including off-road corridors for non-motorized vehicles.

Performance Measures:

G4 - PM1 Change in mixed-use and downtown development.

- G4 PM3 Expansion of off-network paths. Improve air quality through projects that reduce carbon monoxide (CO), particulates (PM10) and greenhouse gases.
- GOAL 5: Identify, develop and implement the best available technology for the MRMPO to utilize for maximize system effectiveness.

Policies:

- G5 P1 Develop and implement the use of Transportation Demand Management (TDM) principles to mitigate capacity deficiencies on congested roadways and intersections.
- G5 S3 Identify future Park & Ride locations.

Performance Measures:

- G5 PM3 Track the number of newly identified Park & Ride locations.
- GOAL 6: Improve and enhance integration and connectivity of the transportation system across and between modes.

Policies:

- G6 P1 Develop and integrate land use and transportation project planning for new development and redevelopment.
- G6 P2 Identify and develop projects for existing transportation facilities to retrofit, where possible, and to accommodate pedestrians, bicyclists, and transit users to enhance connectivity between modes.
- G6 S2 Inventory the existing sidewalk system and identify areas where new sidewalks and sidewalk ramp improvements are needed within the MRMPO.

Performance Measures:

- G6 PM1 Percent of regional corridors that have facilities for at least three modes (e.g.: pedestrians, transit or motor vehicles, and bicyclists).
- G6 PM2 Measure the increase in intermodal activity.
- G6 PM3 Number of new mixed use development which include residential dwelling units.