



**AGENDA**

*Middle Rogue Metropolitan Planning Organization*  
**Technical Advisory Committee (TAC)**

*Date:* Thursday, March 5, 2015  
*Time:* 1:30 p.m.  
*Location:* Courtyard Conference Room, Grants Pass City Hall, 101 NW 'A' Street,  
Grants Pass, Oregon  
*Phone :* Sue Casavan, RVCOG, 541-423-1360  
*MRMPO website :* [www.mrmppo.org](http://www.mrmppo.org)

- 1. Call to Order/Introductions/Review Agenda .....Chair**
- 2. Review/Approve Minutes (Attachment #1) .....Chair**

**Action Items:**

- 3. 2015 – 2040 Draft Regional Transportation Plan (RTP) Project List .....Andrea Napoli**

*Background:* To maintain the schedule for developing the draft RTP, the MPO must develop an RTP project list that is fiscally constrained. From TAC direction at the February meeting, revised draft project lists have been obtained from MPO jurisdictions and incorporated into the attached memo. Funding scenarios have been provided.

*Attachment:* #2 – Memo, Project lists

*Action Requested:* Review/adjust, approve draft RTP project list

- 4. RTP Progress Report and Draft Chapter Review ..... Dan Moore/Andrea Napoli**

*Background:* Staff will provide an overview of progress to date on the MRMPO RTP development, and completed draft RTP chapters.

*Attachment:* #3 – RTP Progress Report, Memo, Draft RTP Chapters 1, 2, 3, & 5 (chapters attached separately as one document)

*Action Requested:* Discuss RTP Progress Report. Review and comment on Draft RTP Chapters

**Discussion Items:**

**5. Enhance and Fix-it Proposal Coordination..... Dan Moore**

*Background:* The Enhance process is underway. The focus will be more on improving the state system or local projects that will improve the state system. Staff will provide members with background information about ODOT’s Enhance program and initiate discussions about possibilities of teaming up and coordinating Enhance projects.

*Attachment:* #4 – Memo

**6. Target Rule Review.....Dan Moore**

*Background:* In May 2011, the Land Conservation and Development Commission (LCDC) set greenhouse gas (GHG) reduction targets to guide metropolitan areas as they conduct land use and transportation scenario planning to help meet state goals to significantly reduce GHG emissions from light vehicle travel. The target rule (OAR 660-044) requires that the commission conduct an evaluation of the rule and decide by June 2015 whether revisions to the targets are warranted. It is unknown at this time whether revisions to the rule will affect the MRMPO.

*Attachment:* #5 – Memo, Summary, and Report (report attached as separate document)

**7. ODOT Middle Rogue MPO Update .....Ian Horlacher**

**8. MRMPO Update ..... Dan Moore**

**9. Public Comment\* .....Chair**

\*(Limited to one comment per person, five minute maximum time limit)\*

**10. Other Business / Local Business .....Chair**

Opportunity for MRMPO member jurisdictions to talk about transportation planning projects.

**11. Adjournment .....Chair**

- The next Middle Rogue MPO TAC meeting will be **Thursday, April 2, at 1:30 p.m. in the Courtyard Conference Room at Grants Pass City Hall.**
- The next Middle Rogue MPO Policy Committee meeting will be **March 19, at 2:30 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 SUE CASAVAN, 541-423-1360. 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 Metropolitan Planning Organization  
Technical Advisory Committee (TAC)*

**February 5, 2014**

*The following people were in attendance:*

**MRMPO Technical Advisory Committee**

*Voting Members in Attendance:*

Chuck DeJanvier	Josephine County
John Krawczyk, Vice Chairman	Rogue River
Josh LeBombard	DLCD
Kelli Sparkman	ODOT
Lora Glover	Grants Pass
Mike Kuntz (for John Vial)	Jackson County
Rick Hohnbaum	Gold Hill
Scott Chancey, Chairman	Josephine County Transit
Terry Haugen	Grants Pass

*Voting Members Absent:*

*Others Present:*

Fred Saunders	Grants Pass
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*By Phone:*

Nick Fortey	Federal Highways
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**RVCOG Staff**

Andrea Napoli, Dan Moore, Bunny Lincoln

**1. Call to Order / Introductions / Review Agenda**

Scott Chancey called the meeting to order at 9:35 a.m. Members introduced themselves.

**2. Review / Approve Minutes**

The Chairman asked if there were any changes or additions to the December meeting minutes.

**On a motion by Rick Hohnbaum, seconded by Lora Glover, the Committee unanimously approved the minutes as submitted. Kelli Sparkman, Mike Baker and Josh LeBombard abstained.**

### 3. Elect Chair & Vice Chair

**On a motion by Terry Haugen, seconded by Rick Hohnbaum, Scott Chancey was nominated to serve as TAC Chairman for the coming year. Unanimously approved.**

**On a motion by Terry Haugen, seconded by Lora Glover, John Krawczyk was nominated to serve as TAC Vice Chairman for the coming year. Unanimously approved.**

### 4. Amend MPO/ODOT/Transit Provider Agreement –

Dan Moore presented an overview of the proposed amendment for MPOs to seek additional planning funds in collaboration with ODOT. Region #3 is agreeable to amending the existing Agreement to add language to implement this concept, thereby providing more funding for MPO planning efforts.

The main (proposed) addition to the document states:

“For any regionally significant planning project (area/concept or facility) within the MRMPO boundary for which ODOT is the Lead AGENCY < THE MRMPO, as a party of interest, will be considered a potential consultant for the provision of services. The nature and scope of the services the MRMPO is logistically and technically to provide will be mutually agreed upon by ODOT Region 3 and the MRMPO on an annual basis as part of the UPWP process.”

In response to queries from Mike Kuntz and Josh Le Bombard, Mr. Moore further elaborated on how the COG Staff would work together with ODOT, and discussed the mechanics of having the project in the Work Plan. The funds are coming from the ODOT Region 3 planning budget. The COG would fill the function of a consultant, and could potentially provide some services for the Grants Pass RTP. Terry Haugen asked if Grants Pass would be obligated to use the COG for its TSP updates. Mr. Moore said it would be at the discretion of the jurisdictions to select the COG to do the work. The proposed amendment came from the Statewide MPO funding group. It was unclear how many other MPOs are looking at this mechanism. The IGA is felt to be the best vehicle for

Scott Chancy and Kelli Sparkman questioned the need for the document, as opposed to the COG dealing directly with ODOT.

Mike Kuntz stated that he was struggling with understanding why the MPO needed to have a role in the process. He expressed his opinion that the issue should just be resolved between the COG and ODOT, exclusive of MPO involvement.

After continued discussion amongst the Committee members, including a question about the RVMPO’s opinion on the whole concept (not yet determined), and Nick Fortey’s concern about the annual budgeting process and long term funding prospects, the recommendation was made to return this group feedback to Mike Cavallero for his reactions and further input.

### 5. Proposed MPO Dues Recommendations/Review Draft Work Plan 2015-16

Dan Moore presented the Fiscal 2016 Dues Recommendation and Draft Work Program memo from The Policy Committee’s approved formula (\$.16/capita) is proposed to be carried through, with \$8,145 the expected dues revenue. The current PSU certified population was used for calculations. The dues funds will be used for general operations, staff support, travel and memberships/conferences. The proposed, preliminary FY budget includes more dollars going into the RTP update. Transit shows \$5000 each fiscal year for a total of \$15,000 (\$10,000 carryover) for

the Grants Pass-Medford Transit Line Survey.

**On a motion by Rick Hohnbaum, seconded John Krawczyk, the dues schedule was recommended to the Policy Committee for approval as submitted. Terry Haugen opposed the motion. The motion was approved by a majority voice vote.**

**6. Annual Listing of Federally Obligated Projects 2014 –**

Andrea Napoli presented an overview of the obligated funding process and the actual obligated projects. ODOT provided the federal funding list. The program line items come from the adopted TIP. The listing includes several pie charts showing fund distributions. Any agency/affected jurisdiction corrections/comments are needed by Feb. 13<sup>th</sup>. A recommendation from the TAC will go onto the Policy Committee.

Nick Fortey said that the purpose of the Listing is to provide process transparency and track funding obligations Vs anticipated commitments, and to show that programmed projects are advancing.

**On a motion by Rick Hohnbaum, seconded Mike Kuntz, the Obligated Projects List was recommended to the Policy Committee for approval. The motion was approved by a unanimous voice vote.**

**7. 2015-2040 Draft RTP Project List Review –**

Andrea Napoli Draft shared the annual, Draft RTP Project List, outlining current lists from the member jurisdictions.

Four illustrative tables (short, medium and long range) are included in the List Review:

- 1..Total Project Costs by Phase (Jurisdictional)
- 2. Expected Revenue by Phase (Jurisdictional)
- 3. Cost/Revenue Differences (Jurisdictional)
- 4. Current/Future Discretionary Funds for Shortfall
  - Anticipated CMAQ (Grants Pass only)
  - Anticipated STP
  - Anticipated Enhance-It

Jurisdictional –

Grants Pass  
Jackson Co.  
Josephine Co.  
Rogue River

Table 5 illustrates RTP Chapter 9, Financial Plan, Table 9.2 – Street and transit System Revenue/Non-Capital Needs by jurisdictions and agencies:

Street Systems -

- Gold Hill
- Grants Pass
- Rogue River
- Josephine Co.
- Jackson Co.

- ODOT

**Transit –**

- JCT

Staff and the membership discussed how projects could be adjusted to reconcile the shortfalls. Terry Haugen clarified that Grants Pass utility fees could only be used for maintenance and operation. SDCs could be used only for capital projects, thus reducing Grants Pass revenues. Dan Moore talked about the Staff doing some project “number crunching”, and perhaps changing the short range goals to 2021, the next TIP/STIP cycles. Enhance-It funding is coming up within the short range funding time frames. Terry Haugen suggested that the solution might be to adjust the short, medium and long range project lists’ timing to coincide with the revenues because actual project prioritization is a Council function. Rick Hohnbaum asked about scheduling, and Dan Moore responded that it was on schedule to be completed in March.

**On a motion by Rick Hohnbaum, seconded by Lora Glover, the Committee voted unanimously to table 2015-2040 Draft RTP Project List Review, while directing Staff to meet with the individual jurisdictions to do go over their individual projects and bring an accurate list back to the Committee in March.**

Dan Moore requested face to face meetings with the jurisdictions.

**8. ODOT MRMPO Update –**

Kelli Sparkman distributed a printed report (from Gary Leaming) covering:

- US 199:6<sup>th</sup> St. Bridge Rehab (Grants Pass)
- US 199:Slate Creek – Cave Junction paving (mile post 14.2-29.3)
- I-5 – Merlin Interchange (Exit 61)
- I-5 Exit 58 – 6<sup>th</sup> and Morgan Intersection Realignment

Kelli will provide information on where the Caveman Bridge funding was spent, and provide it to the membership by email.

**9. MRMPO Planning Update –**

Dan Moore presented an update on current COG activities:

- Staff is focusing on RTP updates. There was a brief Committee discussion on issues associated with getting the Travel Demand Model updated.
- Enhance It information has been disbursed. Jurisdictions are encouraged to meet soon with ODOT to discuss their specific issues/concerns.

**10. Public Comment -**

None received.

**11. Other Business / Local Business -**

None.

**12. Adjournment -**

The meeting was adjourned at 2:53 PM.



**Middle Rogue  
Metropolitan Planning Organization  
Regional Transportation Planning**

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

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**DATE:** February 25, 2015  
**TO:** MRMPO Technical Advisory Committee  
**FROM:** Andrea Napoli, Associate Planner  
**SUBJECT:** 2015-2040 RTP Projects, Draft Project List Review

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The TAC is being asked to review recommended projects for the 2015-2040 Regional Transportation Plan (RTP). The TAC had reviewed the initial draft RTP Project List at their February 2015 meeting. At that time, TAC members had directed staff to meet with jurisdictions to revise project lists to work towards fiscal constraint. Based on revised project lists received, staff has developed two project list scenarios.

Just to review, the attached draft project lists have been compiled from the following sources:

1. The 2015-2018 MRMPO Interim Metropolitan Transportation Improvement Program (MTIP), and are represented under “Short Range” projects.
2. Project lists provided by jurisdiction staff based on revisions to existing TSP project lists.
3. Revised project lists from Grants Pass, Rogue River, and Josephine County, per initial TAC review at February TAC meeting.

*The RTP addresses regionally significant and federally funded projects. Generally, due to air quality conformity requirements any new collector, arterial and projects that add travel lanes (not turn lanes) to collectors or arterials need to be included in the RTP.*

### **Fiscal Constraint**

Federal regulations require long-range transportation plans to be financially realistic. Proposed project costs must balance with reasonably expected revenues available over the planning period.

**Scenario #1:** Grants Pass, Rogue River, and Josephine County have provided revised project lists that shift projects to other timeframes or to Tier 2 (unfunded) in an effort to reduce funding shortfalls. Scenario #1 incorporates these revised lists, unchanged.

**Scenario #2:** This scenario uses the information provided in the revised project lists (Scenario #1), but shifts projects as funding allows. Some projects are moved back to their originally proposed timeframes, and from Tier 2 (unfunded) back to Tier 1 (funded).  
*Note: Both CMAQ and STP funds have been applied to Grants Pass projects. For Josephine County and Rogue River costs, a lesser amount of STP has been applied.*

Scenarios are provided on the following pages to begin TAC discussion on demonstrating fiscal constraint.

## **Discretionary Funds**

The MPO may choose to constrain projects by using discretionary funds. Medium and long range projects may draw on discretionary funds identified in the financial forecast as they are “reasonably anticipated,” (breakdown shown on the following page). These include CMAQ, STP, and state Enhance-It program funds that are not currently available or committed, but successful past experience in obtaining the funds can be demonstrated.

### **Discretionary Funds in Reserve**

A significant amount of money in the medium and long-range years of the plan is not allocated to projects, as shown on the following page. The plan has to account for these un-allocated funds and provide some indication of how they might be used. After reviewing other MPO plans, and in consideration of the MRMPO being newly established, staff proposes allocating these funds to Long-Range Reserves, as described below. Reserves would allow jurisdictions to consider these funds in planning, and seek approval to plan specific projects in future years, while still acknowledging the uncertainty and risk involved in making such forecasts.

RTP Reserves are:

1. **Identified Need** would fund implementation of TSP projects. These are projects identified as needed in the future by the TSP process, and would be reviewed by the MRMPO for their capacity to further regional transportation goals, or impact on air quality conformity. This reserve would give a jurisdiction ability to advance a new project. It would provide funds to allow strategies, or high-level project concepts to be developed into projects that would be competitive for construction funds. This fund could constrain planning and right-of-way acquisition, and would signal the region’s commitment to seeing a project through to completion.
2. **Immediate Need** would help to ensure that unexpected needs such as an emerging safety concern or unforeseen expenses on a constrained project can be addressed. These funds could be phased in to replace revenues in current (interim MTIP) projects, if necessary.



**Scenario #1, RTP Project List** – Revised project lists inserted unchanged.

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Gold Hill - None</b>					

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Grants Pass</b>					
	G Street: Lincoln Road to Leonard Street	Full reconstruction of arterial to include TWLTL, bike lanes, sidewalks, parking one side.	Short	\$1,124,643	
	Fruitdale Drive: Parkdale Drive to Overland Drive	Full reconstruction of collector. 42' wide, bike lanes, sidewalk, parking one side.	Short	\$3,213,256	
	G Street: Leonard Road to 3rd Street	Stripe for TWLTL	Short	\$903,013	
	Fruitdale Drive: Overland Drive to Rogue River Hwy	Full reconstruction of collector. 42' wide, bike lanes, sidewalk, parking one side.	Short	\$4,498,558	
	Vine Street: Highland Ave to Hawthorne Ave	Full reconstruction of arterial to include bike lanes and sidewalks.	Short	\$2,448,182	
<b>Short Range Total</b>				<b>\$12,187,652</b>	
	Willow Lane: Redwood Hwy to Redwood Ave	Full reconstruction of arterial to include bike lanes and sidewalks. Provide 60-ft ROW.	Medium	\$1,756,580	
	Fruitdale Drive: Jacksonville Hwy to Parkdale Drive	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Medium	\$2,570,604	
	Leonard Road: Willow Lane to Redwood School (UGB)	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Medium	\$3,213,256	
	West Harbeck Road: Grandview Ave to Williams Hwy	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Medium	\$2,399,232	
	Dimmick Street: C Street to Railroad Crossing	Full reconstruction of arterial with TWLTL	Medium	\$324,493	
	Foothill Blvd: City Limits to Ament Road	Full reconstruction of collector. 42' wide, bike lanes, no parking and sidewalks.	Medium	\$1,799,430	
	Hillcrest Drive: Ninth Street to Tenth Street	Full reconstruction of collector to include bike lanes, sidewalks, no parking.	Medium	\$1,214,615	
	Hillcrest Drive: Tenth Street to Beacon Drive	Full reconstruction of collector to include bike lanes, sidewalks, no parking.	Medium	\$1,124,643	
	B Street/Crescent Drive: Olmar to New Local Collector	New local collector	Medium	\$82,373	
<b>Medium Range Total</b>				<b>\$14,485,226</b>	
	Cloverlawn Drive: Eastview Place to Hamilton Lane	Full reconstruction of collector to provide bike lanes and sidewalks. Provide 60-ft ROW.	Long	\$4,284,341	
	Highland Ave: South Line Section 6 to N.W. UGB	Full reconstruction of arterial. 40' wide, bike lanes and sidewalk.	Long	\$3,643,844	
	Leonard Road: Dowell Road to Willow Lane	Full reconstruction of local collector. 36' wide and sidewalks.	Long	\$3,213,256	
	Scoville Road: Greenfield Road to Scenic Drive	Full reconstruction of collector to include bike lanes and sidewalks.	Long	\$376,642	
	East Park Street: Clara Ave to Hamilton Lane	Full reconstruction local collector. 36' wide and sidewalk.	Long	\$1,259,600	
	Scenic Drive, West: Granite Hill Road to Scoville Road	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Long	\$1,313,619	
	Hamilton Lane: Park Street, East to Rogue River Hwy	Full reconstruction local collector to include sidewalks.	Long	\$269,941	
	West Park Street: Rignquette Street to Pansy Lane	Construct/reconstruction to local collector. 36' wide, bike lanes, no parking and sidewalks.	Long	\$3,045,712	
	Nebraska Ave: McCarter Drive to S. Union Ave	Reconstruction east half of street to local collector. 36' wide and sidewalk.	Long	\$325,631	
	Beacon Drive: Madrone to Hillcrest	Full reconstruction of collector. Bike lanes and sidewalk.	Long	\$3,868,774	
	Pansy Lane: Redwood Ave to North End	Full reconstruction of local collector. 36' wide and sidewalk.	Long	\$428,435	
<b>Long Range Total</b>				<b>\$22,029,795</b>	
<b>TOTAL:</b>				<b>\$48,702,673</b>	
<b>Tier 2 Projects - Unfunded Needs</b>					
	Hamilton Lane: Overland Drive to Cloverlawn Drive	Full reconstruction local collector to include sidewalks.		\$5,128,375	
	East Park Street: Gold River Lane to Clara Ave	Full reconstruction local collector to include sidewalks.		\$1,079,657	
	Havilland Drive: Grandview Ave to Highline Canal	Full reconstruction local collector to include sidewalks.		\$1,456,676	
	Portola Drive: 450-Foot West of Gladiola Ave	Full reconstruction of local collector. 36' wide and sidewalk.		\$382,175	
	Portola Drive: Gladiola Ave to Shannon Lane	Full reconstruction of local collector. 36' wide and sidewalk.		\$885,396	
	Shannon Lane: Portola Drive to North Railroad (ROW)	Full reconstruction of local collector. 36' wide and sidewalk.		\$636,957	

**Scenario #2, RTP Project List** - Uses revised project lists, but moves some projects back to original timeframes as funding allows.

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Gold Hill - None</b>					

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Grants Pass</b>					
	G Street: Lincoln Road to Leonard Street	Full reconstruction of arterial to include TWLTL, bike lanes, sidewalks, parking one side.	Short	\$1,124,643	
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	G Street: Leonard Road to 3rd Street	Stripe for TWLTL	Short	\$903,013	
	Fruitdale Drive: Overland Drive to Rogue River Hwy	Full reconstruction of collector. 42' wide, bike lanes, sidewalk, parking one side.	Short	\$4,498,558	
	Vine Street: Highland Ave to Hawthorne Ave	Full reconstruction of arterial to include bike lanes and sidewalks.	Short	\$2,448,182	
	Willow Lane: Redwood Hwy to Redwood Ave	Full reconstruction of arterial to include bike lanes and sidewalks. Provide 60-ft ROW.	Short	\$1,756,580	
	Fruitdale Drive: Jacksonville Hwy to Parkdale Drive	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Short	\$2,570,604	
<b>Short Range Total</b>				<b>\$16,514,836</b>	
	Leonard Road: Willow Lane to Redwood School (UGB)	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Medium	\$3,213,256	
	West Harbeck Road: Grandview Ave to Williams Hwy	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Medium	\$2,399,232	
	Dimmick Street: C Street to Railroad Crossing	Full reconstruction of arterial with TWLTL	Medium	\$324,493	
	Foothill Blvd: City Limits to Ament Road	Full reconstruction of collector. 42' wide, bike lanes, no parking and sidewalks.	Medium	\$1,799,430	
	Hillcrest Drive: Ninth Street to Tenth Street	Full reconstruction of collector to include bike lanes, sidewalks, no parking.	Medium	\$1,214,615	
	Hillcrest Drive: Tenth Street to Beacon Drive	Full reconstruction of collector to include bike lanes, sidewalks, no parking.	Medium	\$1,124,643	
	B Street/Crescent Drive: Olmar to New Local Collector	New local collector	Medium	\$82,373	
	Cloverlawn Drive: Eastview Place to Hamilton Lane	Full reconstruction of collector to provide bike lanes and sidewalks. Provide 60-ft ROW.	Medium	\$4,284,341	
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	Scoville Road: Greenfield Road to Scenic Drive	Full reconstruction of collector to include bike lanes and sidewalks.	Medium	\$376,642	
	East Park Street: Clara Ave to Hamilton Lane	Full reconstruction local collector. 36' wide and sidewalk.	Medium	\$1,259,600	
<b>Medium Range Total</b>				<b>\$22,935,725</b>	
	Scenic Drive, West: Granite Hill Road to Scoville Road	Full reconstruction of collector. 42' wide, bike lanes and sidewalk.	Long	\$1,313,619	
	Hamilton Lane: Park Street, East to Rogue River Hwy	Full reconstruction local collector to include sidewalks.	Long	\$269,941	
	West Park Street: Rignquette Street to Pansy Lane	Construct/reconstruction to local collector. 36' wide, bike lanes, no parking and sidewalks.	Long	\$3,045,712	
	Nebraska Ave: McCarter Drive to S. Union Ave	Reconstruction east half of street to local collector. 36' wide and sidewalk.	Long	\$325,631	
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	Pansy Lane: Redwood Ave to North End	Full reconstruction of local collector. 36' wide and sidewalk.	Long	\$428,435	
	Hamilton Lane: Overland Drive to Cloverlawn Drive	Full reconstruction local collector to include sidewalks.	Long	\$5,128,375	
	East Park Street: Gold River Lane to Clara Ave	Full reconstruction local collector to include sidewalks.	Long	\$1,079,657	
	Havilland Drive: Grandview Ave to Highline Canal	Full reconstruction local collector to include sidewalks.	Long	\$1,456,676	
	Portola Drive: 450-Foot West of Gladiola Ave	Full reconstruction of local collector. 36' wide and sidewalk.	Long	\$382,175	
	Portola Drive: Gladiola Ave to Shannon Lane	Full reconstruction of local collector. 36' wide and sidewalk.	Long	\$885,396	
	Shannon Lane: Portola Drive to North Railroad (ROW)	Full reconstruction of local collector. 36' wide and sidewalk.	Long	\$636,957	
<b>Long Range Total</b>				<b>\$18,821,348</b>	
<b>TOTAL:</b>				<b>\$58,271,909</b>	

Scenario #1, Cont.

PROJECT TYPE	Project Name	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Josephine Community Transit</b>					
Transit	Josephine County - 5311	Rural Operations	Short	\$133,541	
Transit	JCT - 5307 Transit Operations	Transit Operating Assistance	Short	\$1,433,036	
Transit	JCT - 5309	Capital Purchase - Replacement Vehicle	Short	\$560,000	
Transit	Commuter Service	Transit service between Grants Pass and Medford.	Short	\$499,926	
Transit	Vehicle Replacement - 2016	Capital Purchase - Replacement Vehicle	Short	\$350,000	
Transit	Vehicle Replacement - 2017	Capital Purchase - Replacement Vehicle	Short	\$350,000	
Transit	Vehicle Replacement - 2018	Capital Purchase - Replacement Vehicle	Short	\$350,000	
Transit	Vehicle Replacement - 2019	Capital Purchase - Replacement Vehicle	Short	\$350,000	
Transit	Vehicle Replacement - 2020	Capital Purchase - Replacement Vehicle	Short	\$350,000	
				<b>Short Range Total</b>	<b>\$4,376,503</b>
Transit	Vehicle Replacement - 2021	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2022	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2023	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2024	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2025	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2026	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2027	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2028	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2029	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2030	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
				<b>Medium Range Total</b>	<b>\$3,800,000</b>
Transit	Vehicle Replacement - 2031	Capital Purchase - Replacement Vehicle	Long	\$410,000	
Transit	Vehicle Replacement - 2032	Capital Purchase - Replacement Vehicle	Long	\$410,000	
Transit	Vehicle Replacement - 2033	Capital Purchase - Replacement Vehicle	Long	\$410,000	
Transit	Vehicle Replacement - 2034	Capital Purchase - Replacement Vehicle	Long	\$410,000	
				<b>Long Range Total</b>	<b>\$1,640,000</b>
					<b>TOTAL: \$9,816,503</b>

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Jackson County</b>					
Bike/Ped	N. River Road, Twin Bridges Rd: Rock Point	Add bicycle/pedestrian path	Short	\$3,000,000	
				<b>Short Range Total</b>	<b>\$3,000,000</b>
				<b>Medium Range Total</b>	<b>\$0</b>
				<b>Long Range Total</b>	<b>\$0</b>
					<b>TOTAL: \$3,000,000</b>
<b>Tier 2 Projects - Unfunded Needs</b>					
Bike/Ped	East Evans Creek Rd: Rogue River - Pleasant Cr.	Upgrade to rural major collector		\$ 3,890,000	
Bike/Ped	Old Stage Road, Blackwell Road: Winterbrook Ln	Improve to rural two-lane with shoulder bikeways		\$ 2,500,000	
Bike/Ped	Hwy 234: Antioch to 4th Av (GH)	Upgrade to rural arterial		\$ 7,750,000	
Bike/Ped	Hwy 99: County Line to Gold Hill	Widen shoulders		\$ 5,460,000	
Bike/Ped	N. River Road: Rogue River - Gold Hill	Upgrade to collector		\$ 4,750,000	

Scenario #2, Cont.

PROJECT TYPE	Project Name	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Josephine Community Transit</b>					
Transit	Josephine County - 5311	Rural Operations	Short	\$133,541	
Transit	JCT - 5307 Transit Operations	Transit Operating Assistance	Short	\$1,433,036	
Transit	JCT - 5309	Capital Purchase - Replacement Vehicle	Short	\$560,000	
Transit	Commuter Service	Transit service between Grants Pass and Medford.	Short	\$499,926	
Transit	Vehicle Replacement - 2016	Capital Purchase - Replacement Vehicle	Short	\$350,000	
Transit	Vehicle Replacement - 2017	Capital Purchase - Replacement Vehicle	Short	\$350,000	
Transit	Vehicle Replacement - 2018	Capital Purchase - Replacement Vehicle	Short	\$350,000	
Transit	Vehicle Replacement - 2019	Capital Purchase - Replacement Vehicle	Short	\$350,000	
Transit	Vehicle Replacement - 2020	Capital Purchase - Replacement Vehicle	Short	\$350,000	
				<b>Short Range Total</b>	<b>\$4,376,503</b>
Transit	Vehicle Replacement - 2021	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2022	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2023	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2024	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2025	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2026	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2027	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2028	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2029	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
Transit	Vehicle Replacement - 2030	Capital Purchase - Replacement Vehicle	Medium	\$380,000	
				<b>Medium Range Total</b>	<b>\$3,800,000</b>
Transit	Vehicle Replacement - 2031	Capital Purchase - Replacement Vehicle	Long	\$410,000	
Transit	Vehicle Replacement - 2032	Capital Purchase - Replacement Vehicle	Long	\$410,000	
Transit	Vehicle Replacement - 2033	Capital Purchase - Replacement Vehicle	Long	\$410,000	
Transit	Vehicle Replacement - 2034	Capital Purchase - Replacement Vehicle	Long	\$410,000	
				<b>Long Range Total</b>	<b>\$1,640,000</b>
					<b>TOTAL: \$9,816,503</b>

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Jackson County</b>					
Bike/Ped	N. River Road, Twin Bridges Rd: Rock Point	Add bicycle/pedestrian path	Short	\$3,000,000	
				<b>Short Range Total</b>	<b>\$3,000,000</b>
				<b>Medium Range Total</b>	<b>\$0</b>
				<b>Long Range Total</b>	<b>\$0</b>
					<b>TOTAL: \$3,000,000</b>
<b>Tier 2 Projects - Unfunded Needs</b>					
Bike/Ped	East Evans Creek Rd: Rogue River - Pleasant Cr.	Upgrade to rural major collector		\$ 3,890,000	
Bike/Ped	Old Stage Road, Blackwell Road: Winterbrook Lane	Improve to rural two-lane with shoulder bikeways		\$ 2,500,000	
Bike/Ped	Hwy 234: Antioch to 4th Av (GH)	Upgrade to rural arterial		\$ 7,750,000	
Bike/Ped	Hwy 99: County Line to Gold Hill	Widen shoulders		\$ 5,460,000	
Bike/Ped	N. River Road: Rogue River - Gold Hill	Upgrade to collector		\$ 4,750,000	

Scenario #1, Cont.

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Josephine County</b>					
<b>Short Range Total</b>					<b>\$0</b>
<b>Medium Range Total</b>					<b>\$0</b>
Bike/Ped	Monument Drive: North Valley High School to Hugo Road	Install bike lanes	Long	\$1,095,500	
Street	Monument Drive: Merlin Road to Timber Lane	Install left turn lanes at intersections	Long	\$2,932,500	
<b>Long Range Total</b>					<b>\$4,028,000</b>
<b>TOTAL:</b>					<b>\$4,028,000</b>
<b>Tier 2 Projects - Unfunded Needs</b>					
Street	Dowell Road at Wolf Lane	Improve intersection		\$1,000,000	
Street, Bike/Ped	Cloverlawn Drive (MP .5 - 3.6)	Widen shoulders to min. 4-foot, resurface, improve intersection with Summit Loop Road		\$2,500,000	
Bike/Ped	Rogue River Loop Highway / Lower River Road	Widen shoulders		\$17,037,500	
Bike/Ped	OR 238: Grants Pass UGB to Jackson county Line	Widen shoulders		\$7,219,750	
Bike/Ped	OR 99: Grants Pass UGB to Jackson County Line	Widen shoulders		\$9,051,500	

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Oregon Dept. of Transportation</b>					
Bridge	US199: Rogue River (6th St. Cavemen)	Bridge repair. Seismic, deck overlay, joints, bearings, concrete repairs, br#01418	Short	\$4,844,000	
Street	I-5: N. Grants Pass - Evans Creek Paving	Paving. Grid/Inlay.	Short	\$7,644,000	
Street	I-5 Exit 58 6th & Morgan	Reconfig Intersection, Reconfig & Lengthen SB Offramp	Short	\$5,967,861	
Street	FFO-I5: Exit 61 (Louse Creek)	Interchange improvements. Right Turn Lane on Merlin WB, Signals Placed on Merlin NB, Left Turn Lane on Merlin-I-5	Short	\$2,550,000	
<b>Short Range Total</b>					<b>\$21,005,861</b>
<b>Medium Range Total</b>					<b>\$0</b>
<b>Long Range Total</b>					<b>\$0</b>
<b>TOTAL:</b>					<b>\$21,005,861</b>

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Rogue River</b>					
Street	Cassick Drive Bridge	Structural repair.	Short	\$50,000	
<b>Short Range Total</b>					<b>\$50,000</b>
Street	E. Main Street Bridge	Bridge replacement at Wards Creek, widen or replace to arterial standard.	Medium	\$570,000	
Street	Main Street at Pine Street	Intersection Improvements. Install traffic signal.	Medium	\$230,000	
Street	Pine Street and E. Evans Creek Road	Improve to arterial standards and evaluate speed limits.	Medium	\$300,000	
Street	North River Road	Widen shoulder and bicycle lanes.	Medium	\$480,000	
<b>Medium Range Total</b>					<b>\$1,580,000</b>
Street	Main Street at Broadway Street	Intersection Improvements. Install traffic signal.	Long	\$230,000	
Street	Main Street	Realign Main Street so that E. Main and W. Main align at the Pine Street intersection.	Long	\$1,500,000	
Street	Classick Drive at Pine Street	Revise permitted movements. Prohibit through movements from Classick onto Pine, and from Pine and Depot to Classick.	Long	\$15,000	
Street	Various intersections throughout city: E. Main/Broadway, E. Main/Cedar, E. Main/Oak, 1st St/Pine	Improve visibility at intersections	Long	\$49,000	
Street	Evans Creek	Construct new bridge over Evans Creek at north end of UGB.	Long	\$770,000	
<b>Long Range Total</b>					<b>\$2,564,000</b>
<b>TOTAL:</b>					<b>\$4,194,000</b>
<b>Tier 2 Projects - Unfunded Needs</b>					
Bike/Ped	Rogue River	Provide multi-use pathway along both sides of the river. Create a multi-use pathway loop at N side of river connecting to a bike lane/path at N. River Road. Connect City pathways with a regional system.		per design	
Bike/Ped	Evans Creek	Provide a pathway following Pine St. and E. Evans Creek Rd. to the High School.		per design	
Street	Various Arterials and Collectors	Provide access improvements, such as curbs.			
Bike/Ped	Wards Creek	Provide pathway along Wards Creek.			

Scenario #2, Cont.

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Josephine County</b>					
<b>Short Range Total</b>					<b>\$0</b>
Bike/Ped	Monument Drive: North Valley High School to Hugo Road	Install bike lanes	Medium	\$1,095,500	
<b>Medium Range Total</b>					<b>\$1,095,500</b>
Street	Monument Drive: Merlin Road to Timber Lane	Install left turn lanes at intersections	Long	\$2,932,500	
<b>Long Range Total</b>					<b>\$2,932,500</b>
<b>TOTAL:</b>					<b>\$4,028,000</b>
<b>Tier 2 Projects - Unfunded Needs</b>					
Street	Dowell Road at Wolf Lane	Improve intersection		\$1,000,000	
Street, Bike/Ped	Cloverlawn Drive (MP .5 - 3.6)	Widen shoulders to min. 4-foot, resurface, improve intersection with Summit Loop Road		\$2,500,000	
Bike/Ped	Rogue River Loop Highway / Lower River Road	Widen shoulders		\$17,037,500	
Bike/Ped	OR 238: Grants Pass UGB to Jackson county Line	Widen shoulders		\$7,219,750	
Bike/Ped	OR 99: Grants Pass UGB to Jackson County Line	Widen shoulders		\$9,051,500	

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Oregon Dept. of Transportation</b>					
Bridge	US199: Rogue River (6th St. Cavemen)	Bridge repair. Seismic, deck overlay, joints, bearings, concrete repairs, br#01418	Short	\$4,844,000	
Street	I-5: N. Grants Pass - Evans Creek Paving	Paving. Grid/Inlay.	Short	\$7,644,000	
Street	I-5 Exit 58 6th & Morgan	Reconfig Intersection, Reconfig & Lengthen SB Offramp	Short	\$5,967,861	
Street	FFO-I5: Exit 61 (Louse Creek)	Interchange improvements. Right Turn Lane on Merlin WB, Signals Placed on Merlin NB, Left Turn Lane on Merlin-I-5	Short	\$2,550,000	
<b>Short Range Total</b>					<b>\$21,005,861</b>
<b>Medium Range Total</b>					<b>\$0</b>
<b>Long Range Total</b>					<b>\$0</b>
<b>TOTAL:</b>					<b>\$21,005,861</b>

PROJECT TYPE	LOCATION	DESCRIPTION	TIMING	COST	Cost by Phase
<b>Rogue River</b>					
Street	Cassick Drive Bridge	Structural repair.	Short	\$50,000	
Street	E. Main Street Bridge	Bridge replacement at Wards Creek, widen or replace to arterial standard.	Short	\$570,000	
<b>Short Range Total</b>					<b>\$620,000</b>
Street	Main Street at Pine Street	Intersection Improvements. Install traffic signal.	Medium	\$230,000	
Street	Pine Street and E. Evans Creek Road	Improve to arterial standards and evaluate speed limits.	Medium	\$300,000	
Street	North River Road	Widen shoulder and bicycle lanes.	Medium	\$480,000	
<b>Medium Range Total</b>					<b>\$1,010,000</b>
Street	Main Street at Broadway Street	Intersection Improvements. Install traffic signal.	Long	\$230,000	
Street	Main Street	Realign Main Street so that E. Main and W. Main align at the Pine Street intersection.	Long	\$1,500,000	
Street	Classick Drive at Pine Street	Revise permitted movements. Prohibit through movements from Classick onto Pine, and from Pine and Depot to Classick.	Long	\$15,000	
Street	Various intersections throughout city: E. Main/Broadway, E. Main/Cedar, E. Main/Oak, 1st St/Pine	Improve visibility at intersections	Long	\$49,000	
Street	Evans Creek	Construct new bridge over Evans Creek at north end of UGB.	Long	\$770,000	
<b>Long Range Total</b>					<b>\$2,564,000</b>
<b>TOTAL:</b>					<b>\$4,194,000</b>
<b>Tier 2 Projects - Unfunded Needs</b>					
Bike/Ped	Rogue River	Provide multi-use pathway along both sides of the river. Create a multi-use pathway loop at N side of river connecting to a bike lane/path at N. River Road. Connect City pathways with a regional system.		per design	
Bike/Ped	Evans Creek	Provide a pathway following Pine St. and E. Evans Creek Rd. to the High School.		per design	
Street	Various Arterials and Collectors	Provide access improvements, such as curbs.			
Bike/Ped	Wards Creek	Provide pathway along Wards Creek.			

**For Reference: RTP Chapter 9, Financial Plan, Table 9.2 - Street and Transit System Revenue and Non-Capital Needs**

Jurisdiction	Time Frame	Street System Revenues					Non-Capital Needs	Capital Funds Avail.	Tier 1 Regional & Federally Funded	
		Federal	State	Local						Total
				SDC's	Fees	Other				
Gold Hill*	short	\$0	\$522,057	\$0	\$0	\$50,000	\$572,057	\$572,057	\$0	\$0
	medium		\$1,147,677	\$0	\$0	\$100,000	\$1,247,677	\$1,247,677	\$0	\$0
	long		\$1,606,078	\$0	\$0	\$100,000	\$1,706,078	\$1,706,078	\$0	\$0
Grants Pass	short	\$5,092,877	\$14,917,560	\$1,127,325	\$5,584,042	\$123,000	\$26,844,804	\$14,764,844	\$6,987,083	\$5,092,877
	medium		\$32,794,413	\$2,913,172	\$10,747,367	\$205,000	\$46,659,952	\$30,069,143	\$16,590,810	\$0
	long		\$45,893,009	\$3,482,121	\$12,846,354	\$205,000	\$62,426,484	\$38,491,045	\$23,935,439	\$0
Rogue River	short	\$0	\$918,540	\$63,877	\$102,204	\$584,000	\$1,668,621	\$1,236,651	\$431,970	\$0
	medium		\$2,019,297	\$129,925	\$207,880	\$990,000	\$3,347,102	\$2,319,174	\$1,027,928	\$0
	long		\$2,825,835	\$166,315	\$266,104	\$545,000	\$3,803,254	\$2,274,463	\$1,528,790	\$0
Josephine Co. (MRMPO Area)	short	\$1,658,214	\$4,916,386	\$0	\$0	\$0	\$6,574,600	\$4,916,386	\$0	\$1,658,214
	medium		\$10,772,763	\$0	\$0	\$0	\$10,772,763	\$10,772,763	\$0	\$0
	long		\$15,026,718	\$0	\$0	\$0	\$15,026,718	\$15,026,718	\$0	\$0
Jackson Co. (MRMPO Area)	short	\$0	\$724,726	\$0	\$0	\$0	\$724,726	\$724,726	\$0	\$0
	medium		\$1,588,016	\$0	\$0	\$0	\$1,588,016	\$1,588,016	\$0	\$0
	long		\$2,215,093	\$0	\$0	\$0	\$2,215,093	\$2,215,093	\$0	\$0
ODOT (MRMPO Area)	short	These figures are not applicable to the MPO area - see assumptions table.							\$21,155,861	\$21,155,861
	medium	These figures are not applicable to the MPO area - see assumptions table.							\$0	\$0
	long	These figures are not applicable to the MPO area - see assumptions table.							\$0	\$0
<b>Street System Totals</b>		<b>\$6,751,091</b>	<b>\$137,888,168</b>	<b>\$7,882,736</b>	<b>\$29,753,950</b>	<b>\$2,902,000</b>	<b>\$185,177,945</b>	<b>\$127,924,834</b>	<b>\$71,657,882</b>	<b>\$27,906,952</b>

*Note regarding County and ODOT revenue:*

Because the MRMPO comprises only a portion of the Josephine County, Jackson County and Oregon Department of Transportation (ODOT) jurisdictional boundaries, revenue estimates have not been similarly identified for these agencies. Rather, projections of capital funding availability for Josephine & Jackson County MRMPO projects funded by these agencies have been made based on estimated State Highway Funds (SHF) prorated for the percent of rural population within the MRMPO boundary and any federally-funded projects located in the MPO area. Capital funding availability for Josephine and Jackson County and ODOT assumes that non-capital (operation and maintenance) needs are fully funded, consistent with Josephine and Jackson County and ODOT policies.



*Middle Rogue*  
*Metropolitan Planning Organization*  
**Regional Transportation Planning**

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

**DATE:** February 26, 2015  
**TO:** MRMPO Technical Advisory Committee  
**FROM:** Dan Moore, Planning Coordinator  
**SUBJECT:** MRMPO RTP Progress Report #1

The purpose of this memo is to provide a progress report on work being completed for the 2015–2040 Middle Rogue Metropolitan Planning Organization (MRMPO) Regional Transportation Plan (RTP). Table 1 below shows the status of the RTP chapter development and estimated completion dates. Table 2 on Page 2 depicts the status of major tasks and subtasks and estimated completion dates. Page 3 includes an updated RTP task and timeline chart.

**Table 1 – RTP Chapter Progress**

<b>MRMPO 2015 - 2040 RTP Chapter Development</b>			
<b>TAC Progress Report #1 - February 2015</b>			
<b>Chapter</b>	<b>Percent Complete</b>	<b>Comments</b>	<b>Estimated Completion Date</b>
Chapter 1 - Introduction	100%	Completed	NA
Chapter 2 - Regulatory Framework	100%	Completed	NA
Chapter 3 - Vision and Goals	100%	Completed	NA
Chapter 4 - Public Involvement	90%	The chapter needs to be updated to include public outreach event info, dates, etc.	Nov-15
Chapter 5 - Planning Area Characteristics	100%	Completed	NA
Chapter 6 - Existing Transportation System	80%	Some sections of the chapter need to be completed.	Mar-15
Chapter 7 - Transportation System Alternatives	70%	Need project lists and modeling results to complete chapter	Nov-15
Chapter 8 - Transportation Sustainability	80%	Need to develop sustainability strategies	May-15
Chapter 9 - Financial Plan	100%	Completed	NA
Chapter 10 - Air Quality	85%	Some sections of the chapter need to be completed.	Jun-15
Chapter 11 - Environmental Considerations	5%	Natural Resources Department, RVCOG is working on chapter	Feb-15
Chapter 12 - Performance Measures	50%	The chapter will be completed when modeling is done (TPAU)	Jun-15
Chapter 13 - Recommended System	0%	Need final project list and modeling completed	Jun-15
Chapter 14 - Safety & Security	50%	Need to complete crash analysis	Jun-15
Chapter 15 - Plan Implementation	50%	Some sections of the chapter need to be completed.	May-15
Table of Contents	0%	Section to be updated.	May-15
<b>% RTP Chapters Complete - February 2015</b>	<b>66%</b>	<b>Draft RTP - Ready for Adoption</b>	<b>Dec-15</b>

**Table 2 – RTP Task & Subtasks Progress**

<b>Middle Rogue Metropolitan Planning Organization 2015 - 2040 Regional Transportation Plan TAC Work Task Progress Report #1 - February 2015</b>				
<b>Tasks</b>	<b>Subtasks</b>	<b>Percent Completed</b>	<b>Comments</b>	<b>Estimated Completion Date</b>
<b>RTP / TIP Public Involvement</b>	<b>1.1 - RTP Fact Sheets</b>	0%	To be prepared before first public outreach event	Jun-15
	<b>1.2 - Compile Elements, Chapters</b>	63%	See Chapter Progress Report	Dec-15
	<b>1.3 - RTP Public Outreach Event #1</b>	0%	Will schedule event in August 2015	Aug-15
	<b>1.4 - RTP Public Outreach Event #2</b>	0%	Will schedule event in November 2015	Nov-15
	<b>1.5 - RTP Public Hearing</b>	0%	December 2014 or January 2016	Dec-15
<b>Develop RTP Guiding Principles</b>	<b>2.1 - MRMPO Goals &amp; Policies Workshop</b>	100%	Reviewed by TAC - Approved by Policy Committee	Completed
	<b>2.2 - Compile Goals/ Policies from TSPs/RTPs</b>	100%		
	<b>2.3 - Tech Memo #1 - Proposed RTP Goals &amp; Policies</b>	100%		
	<b>2.4 - Develop Performance Measures</b>	100%		
	<b>2.5 - Tech Memo #2 - Proposed Performance Measures</b>	100%		
	<b>2.6 - Approved Goals, Objectives &amp; Performance Measures</b>	100%		
<b>Alternative Measures Development (TPR Compliance)</b>	<b>3.1 - Inventory Possible Alternative Measures</b>	0%	Will coordinate with TPAU to determine VMT per capita	Mar-15
	<b>3.2 - Select Measures</b>	0%	Need to coordinate with MPO TAC and Policy Committee on pursuing Alternative Measures if the MPO does not meet the TPR 5% reduction in VMT per capita.	TBD
	<b>3.3 - Approved Measures</b>	0%		
<b>Develop RTP Tier 1 &amp; 2 Project Lists and Financial Plan</b>	<b>4.1 - Create RTP Project Lists (2016 - 2040)</b>	90%	Have project lists from the jurisdictions that need to be merged into one Excel spreadsheet.	Jan-15
	<b>4.2 - Identify and Forecast Funding</b>	100%	Draft financial plan completed and reviewed by TAC and Policy Committee	Completed
	<b>4.3 - Match Funding to Lists</b>	0%	To be completed when project list is done.	Feb-15
	<b>4.4 - Create Network Shapefiles</b>	20%	Have a partial GIS shapefile that will be updated when project list is complete.	Feb-15
	<b>4.5 - Create RTP Project List Chapter &amp; Tables</b>	0%	To be completed when subtasks 4.1 - 4.4 are completed.	Mar-15
<b>Travel Demand Model Review / Update</b>	<b>5.1 - 2010 Base Year Preparation</b>	100%	Grants Pass completed review and update.	Jan-15
	<b>5.2 - 2040 Future Land Use (pop/emp) and iterim years</b>	0%	Work in progress	Feb-15
	<b>5.3 - Future Roadway Networks</b>	0%	Work in progress	Feb-15
	<b>5.4 - School enrollement, special generators, etc.</b>	100%	Done	Oct-15
	<b>5.5 - Run model / validate</b>	0%	Work in progress	Mar-15
	<b>5.6 - Run model, input data per AQCD (If needed)</b>	0%	Work in progress	Apr-15
<b>TIP Development</b>	<b>6.1 - MRMPO 2015-18 TIP Project List</b>	100%	Done	May-15
<b>TIP Development</b>	<b>6.2 - Develop 2015-18 TIP</b>	100%	Done	May-15
<b>TIP Development</b>	<b>6.3 - Adopted 2015-18 TIP</b>	0%	Adopt with RTP in December 2015 or January 2016.	Jan-16
<b>Air Quality Conformity Determination</b>	<b>7.1 - MOVES Modeling</b>	0%	Will not need to do MOVES modeling. CO & PM10 LMPs will be approved by EPA in July-August 2015 (Adequacy Finding).	NA
	<b>7.2 - Develop Consensus Plan for TIP AQCD</b>	20%	Draft document prepared.	Jul-15
	<b>7.3 - Develop Consensus Plan for RTP AQCD</b>	20%	Draft document prepared.	Jul-15
	<b>7.4 - Develop AQCD for TIP</b>	20%	Draft document prepared.	May-15
	<b>7.5 - Develop AQCD for RTP</b>	20%	Draft document prepared.	May-15
	<b>7.6 - Interagency Consultations</b>	10%	Begin in June 2015	Dec-15
<b>Local Adoption</b>	<b>8.0 - Coordinate Jurisdictions Adoption of RTP</b>	0%	Begin in March 2016	Mar-16

MRMPO 2015 – 2040 RTP Tasks & Timeline

TASKS	SUBTASKS	Lead Staff	Support Staff	FY 2014			FY 2015												FY 2016										
				2014												2015						2016							
				Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
	<b>GRANTS PASS CO &amp; PM10 LIMITED MAINTENANCE PLANS</b>	Jonathan	TBD	▶																									
RTP / TIP Public Involvement	1.1 - RTP Fact Sheets	Dan	Sue																										
	1.2 - Compile Elements, Chapters	Dan	Andrea	▶																									
	1.3 - RTP Public Outreach Event #1	Jonathan	TBD																										
	1.4 - RTP Public Outreach Event #2	Jonathan	TBD																										
	1.5 - RTP Public Hearing	Jonathan	Staff																										
Develop RTP Guiding Principles	2.1 - MRMPO Goals & Policies Workshop	Jonathan	Sue																										
	2.2 - Compile Goals/ Policies from TSPs/RTPs	Jonathan	Dan, Sue	▶																									
	2.3 - Tech Memo #1 - Proposed RTP Goals & Policies	Jonathan	Dan, Sue																										
	2.4 - Develop Performance Measures	Jonathan	Dan, Sue																										
	2.5 - Tech Memo #2 - Proposed Performance Measures	Jonathan	Dan, Sue																										
	2.6 - Approved Goals, Objectives & Performance Measures	Jonathan	Staff																										
Alternative Measures Development (TPR Compliance)	3.1 - Inventory Possible Alternative Measures	Dan	Andrea																										
	3.2 - Select Measures	Jonathan	Staff																										
	3.3 - Approved Measures	Jonathan	Staff																										
Develop RTP Tier 1 & 2 Project Lists and Financial Plan	4.1 - Create RTP Project Lists (2016 - 2040)	Andrea	Sue																										
	4.2 - Identify and Forecast Funding	Dan																											
	4.3 - Match Funding to Lists	Dan																											
	4.4 - Create Network Shapefiles	Sue																											
	4.5 - Create RTP Project List Chapter & Tables	Dan	Andrea																										
Travel Demand Model Review / Update	5.1 - 2010 Base Year Preparation	Dan, Dick, Sue	TPAU																										
	5.2 - 2040 Future Land Use (pop/emp) and iterim years	Dick	TPAU																										
	5.3 - Future Roadway Networks	Sue	TPAU																										
	5.4 - School enrollement, special generators, etc.	Dan	Dick, Sue																										
	5.5 - Run model / validate	TPAU																											
	5.6 - Run model, input data per AQCD (If needed)	TPAU	MOVES Consultant																										
TIP Development	6.1 - MRMPO 2015-18 TIP Project List	Jonathan	Dan, Andrea	▶																									
TIP Development	6.2 - Develop 2015-18 TIP	Jonathan	Dan, Andrea																										
TIP Development	6.3 - Adopted 2015-18 TIP	Jonathan	Dan, Andrea																										
Air Quality Conformity Determination	7.1 - MOVES Modeling	Jonathan	MOVES Consultant																										
	7.2 - Develop Consensus Plan for TIP AQCD	Jonathan	MOVES Consultant																										
	7.3 - Develop Consensus Plan for RTP AQCD	Jonathan	MOVES Consultant																										
	7.4 - Develop AQCD for TIP	Jonathan	Dan, Andrea																										
	7.5 - Develop AQCD for RTP	Jonathan	Dan, Andrea																										
	7.6 - Interagency Consultations	Jonathan	Consultant, Dan, Andrea																										
Local Adoption	8.0 - Coordinate Jurisdictions Adoption of RTP	Jonathan	Dan, Andrea																										



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Metropolitan Planning Organization  
Regional Transportation Planning**

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

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**DATE:** February 26, 2015  
**TO:** MRMPO Technical Advisory Committee  
**FROM:** Andrea Napoli, Associate Planner  
**SUBJECT:** RTP Chapter Review – Chapter 5, Planning Area Characteristics

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The purpose of Chapter 5 is to provide information on the characteristics of the MPO area related to transportation planning. Currently, the following subjects are covered in this chapter for your review:

- Political and Physical Characteristics (*source: School districts and cities/counties*)
  - Land Use and Zoning (by each city/jurisdiction)
  - Schools and Parks
- Demographics (*source: 2010 Census & American Community Survey 2008-2012*)
  - Population
  - Households
  - Senior Population & Median Age
  - White Alone and Hispanic/Latino Populations
  - Pop. Living Below Poverty Level
  - Education Level
  - Households w/ a Child Less Than 18-yrs
  - Housing Vacancy
  - Owner Occupied/Renter Occupied Housing Units
  - Age of Housing Stock
- Employment Characteristics (*source: American Community Survey & Oregon Employment Dept.*)
  - Employed/Unemployed
  - Median Household Income
  - Major Employment Sectors
  - Sector Growth/Decline
- Commute Patterns (*source: American Community Survey & Josephine Co. Chamber of Commerce*)
  - Households w/ Vehicle
  - Workers Who Work w/in Their County of Residence
  - Commute Times (leave home/leave work)
  - Commuters by Mode (Drive Alone/Carpool/Transit/Walk/ect.)
  - Location of Major Employers

# Chapter 1 – Introduction

## A. Purpose

Regional transportation systems have significant and long-term impacts on economic well-being and quality of life. Not only does the transportation system provide for the mobility of people and goods, it also influences patterns of growth and economic activity through accessibility to land. Furthermore, the performance of the transportation system affects such public policy concerns as air quality, environmental resource consumption, social equity, economic development, safety and security.

Regional transportation planning recognizes the critical links between transportation and other societal goals. The planning process is more than merely listing highway and transit capital investments. It requires developing strategies for operating, managing, maintaining and financing the regional transportation system in such a way as to advance long-term goals.

The Middle Rogue Regional Transportation Plan (RTP) is a multi-modal transportation plan designed to meet the anticipated 25-year transportation needs within the Middle Rogue Metropolitan Planning Organization (MRMPO) planning area boundary.

The RTP is required to ensure that the area remains eligible to receive state and federal transportation funding. Federal and state rules requiring completion and adoption of the Plan include the federal transportation act Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), the U.S. Clean Air Act amendments of 1990, and Oregon's Transportation Planning Rule (TPR). The RTP serves as the Regional Transportation System Plan required by the TPR.

As a product of multi-jurisdiction collaboration, the RTP reflects local jurisdiction policy and planning. While it is consistent with local plans, the RTP horizon extends beyond the horizon of most other adopted plans to fulfill federal requirements. Many of the long-range analysis and conditions described here are not within the scope of existing local plans and, therefore, should not be interpreted as the conditions planned or anticipated by the local jurisdictions. Within the region, transportation policy and planning is directed at the jurisdiction level, and as timeframes for local plans advance, the RTP will be amended accordingly.

As a regional plan, this document does not provide designs for individual projects. Nor does it identify the smaller, local projects that MRMPO jurisdictions build with local funds. Such details are not within the scope of a regional plan. Project design is completed on a project-by-project basis, typically with close involvement of the jurisdictions within the immediate project areas.

The RTP uses projections for future growth and development that are based on current trends and approved land uses, policies and ordinances. It identifies the basic land-use assumptions through the year 2040, including forecasts of future population and employment, and the resulting demand on the regional arterial and collector street system(s). Future travel conditions were developed through travel demand modeling, using a peer-reviewed model developed in collaboration with ODOT's Transportation Planning and Analysis Unit (TPAU).

The Plan looks at different types of transportation opportunities that are available and potentially beneficial, and considers how these various elements could fit together to foster a coordinated system by improving system management and operation. The RTP serves as a guide for the management of existing transportation facilities and for the design and implementation of future transportation facilities through 2040. The Plan provides the framework and foundation for the region's transportation future. Policies and project descriptions are provided to enable agencies and the public to understand and track projects that will be needed over the next 25-years.

Although the RTP focuses on intra-regional (within the region) travel, it also addresses inter-regional (through-region) travel. Ultimately, the Plan reflects the balance the region strikes between competing demands for funding and competing views as to the best course for development across the region. The funding resources identified in the Plan Implementation section are only those upon which the region can rely, so the projects identified may be reasonably anticipated to occur with known funding.

The 2040 RTP also meets federal Clean Air Act requirements. Analysis shows that through the horizon of the Plan, under land-use conditions described and projects and policies that can be implemented within the current funding forecast, the region will meet standards for emissions of carbon monoxide within the Grants Pass area, and particulates less than 10 microns in size (PM<sub>10</sub>) within the entire planning area. Information about this analysis and details about the process for meeting air quality requirements is contained in the Air Quality Conformity Determination developed for this Plan.

## **B. The Middle Rogue Planning Area**

The Middle Rogue Metropolitan Planning Organization (MRMPO) includes the cities of Gold Hill, Grants Pass, Rogue River, adjacent parts of Josephine and Jackson Counties which are anticipated to become urbanized over the 20 year planning horizon, and the Oregon Department of Transportation (ODOT). In addition, the Oregon Department of Environmental Quality (ODEQ), Oregon Department of Land Conservation and Development (DLCD), Federal Highway Administration (FHWA), Federal Transit Administration (FTA) and U.S. Environmental Protection Agency (EPA) participate in the MRMPO process, including development of this Plan.

Congress requires that metropolitan areas of at least 50,000 in population establish a metropolitan planning process that is continuing, collaborative and comprehensive, in order for the region to continue receiving federal transportation funds. Currently there are over 400 metropolitan planning organizations in the nation. This Plan fulfills federal requirements that metropolitan areas develop and maintain long-range transportation plans.

The Grants Pass area reached the population threshold and was designated a Metropolitan Statistical Area after the 2010 Census. As a result, the Rogue Valley Council of Governments (RVCOG) was designated by the Governor of Oregon to staff the Middle Rogue MPO (MRMPO) on March 20, 2013. The RVCOG Board of Directors subsequently delegated responsibility for MRMPO policy functions to a Policy Committee of elected and appointed officials from all member jurisdictions.

Ultimately, MPOs provide the forum for the many jurisdictions and agencies within a particular metropolitan region to come together to address the transportation issues that confront them.

## **C. Regional Planning and Quality of Life**

Taking a regional approach to transportation planning gives communities the opportunity to look at projected future development and resulting travel demands and make decisions to avoid some of unwelcome consequences of growth: sprawl development, traffic congestion and deteriorating air quality.

Thorough planning has become more significant as the cost of expanding roads to meet traffic demand has grown and the land on which to build has become scarcer and more valuable to the region for uses other than transportation. At the regional level, links between land use and roadway congestion may be more clearly seen and addressed. Through this Plan the public can see future transportation needs and take necessary steps now to address them efficiently and effectively.

The State and Federal regulatory framework that guides RTP development embodies many of the goals routinely brought forward by citizens when they talk about the region's future. None of the jurisdictions within the MRMPO exists in isolation: residents live in one jurisdiction, work in another, shop and recreate in others. Significant development in one jurisdiction is bound to affect conditions in other jurisdictions.

The RTP, like the regional transportation system, links the region's jurisdictions. It identifies a transportation need they all hold in common and offers a foundation for addressing that need as the region grows.

## **D. Keeping the RTP Current**

This is the initial Regional Transportation Plan for the MRMPO. Because of the air quality conditions in the Grants Pass area, the MRMPO must be able to show consistently that the region is in conformity with air quality standards for at least 20 years into the future. That conformity demonstration must be made at least every four years, and triggers an update of the RTP. The next such update will be required in spring 2020.

These updates give the MRMPO the opportunity to evaluate past projections for growth and anticipated use of the system. During the plan update process, the MRMPO compares the existing land use, recent development trends, and the use of the different modal components of the transportation system. This new perspective permits the MRMPO to refine growth projections and their implications for travel.

While such updates are infrequent, the RTP is routinely amended. Most commonly it is amended to include local projects that are newly nominated to receive federal funding. If a local project were set to receive such funding, the MRMPO would consider amending the RTP to include that project.

For a local project to receive federal funding it must be in this Plan and in the MRMPO short-range funding programming document, the Metropolitan Transportation Improvement Program (MTIP). The RTP is intended to be regularly updated to reflect such changes.

## **E. Development Process**

The MRMPO 2040 RTP was developed through a collaboration of local governments, the Oregon Department of Transportation (ODOT), citizens, stakeholders and special interest groups in the Grants Pass Urbanized Area. The Plan was adopted in January 2016.

The first step in the plan process was establishing a vision and goals for the future transportation system of the Planning Area. Next, the existing conditions of the Middle Rogue MPO area transportation system were inventoried. The lists of projects and policies recommended in this Plan are within the framework of the Preferred Alternative.

The development of the Plan involved three cohesive and integrated tracks: a public participation and input process, technical analyses, and directives from the MRMPO Policy Committee.

The role of the public and the agency's efforts to engage the public in the development of the Plan are described in Chapter 4 - Public Involvement.

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

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

Finally, the MRMPO Policy Committee steered the development of the Plan at the policy level. According to federal rules, the adoption of the Plan by the MRMPO Policy Committee constitutes the approval of a Transportation Plan for the Grants Pass Urbanized Area.

## **F. Planning Area**

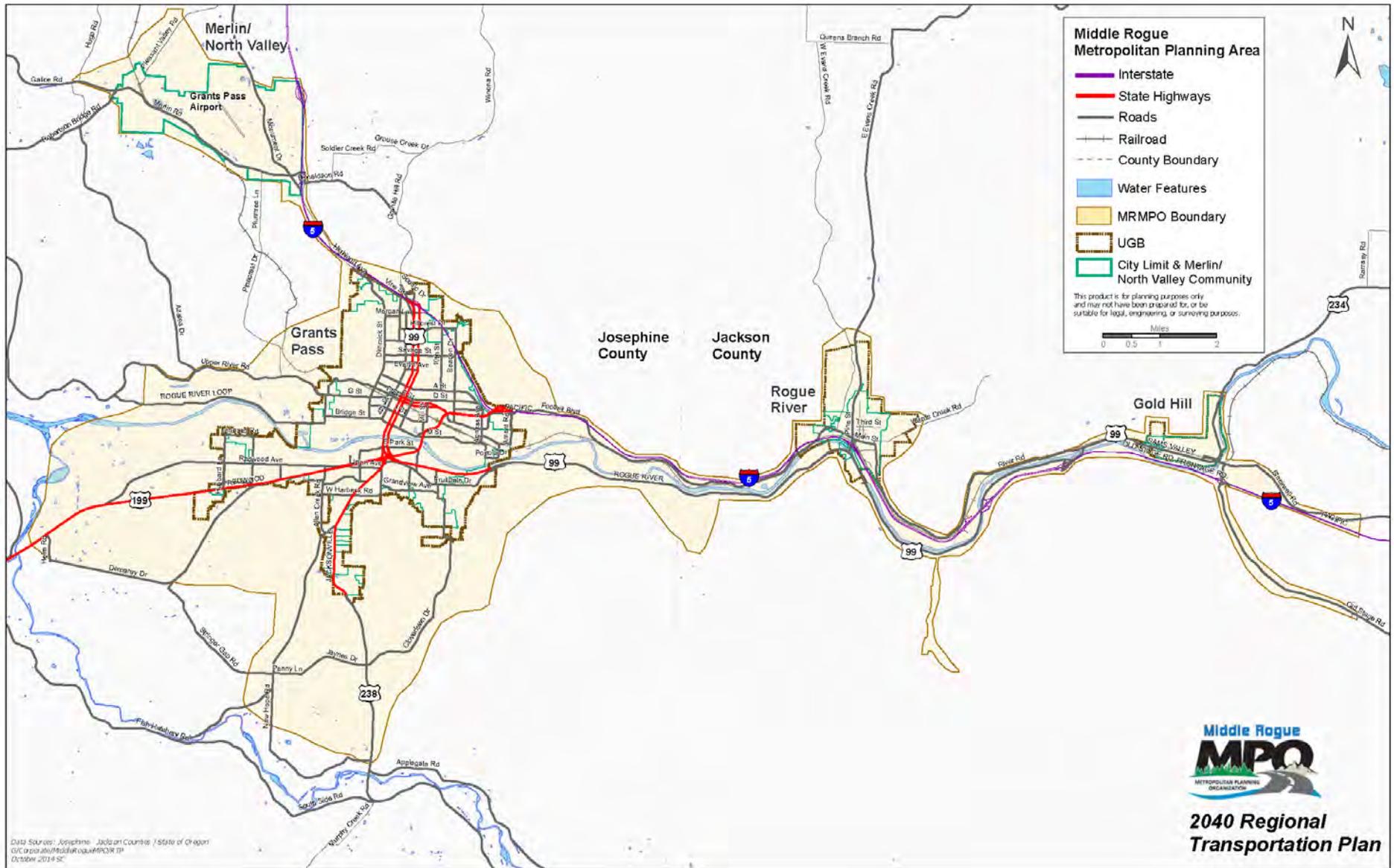
The MRMPO's Planning Area is depicted in Figure 1.1. The Planning Area includes the entire cities of Gold Hill, Grants Pass and Rogue River and their Urban Growth Boundaries, as well as the parts of adjacent parts of Josephine and Jackson Counties which are anticipated to become urbanized over the 20-year planning horizon.

## **G. Document Structure**

This introduction forms Chapter 1 of the document. Chapter 2 describes the Federal and State regulatory framework within which the Plan was developed and Chapter 3 states the Plan's Vision and Goals. Chapter 4 provides detail on the public involvement process. Chapters 5 & 6 describe the Planning Area and the elements of the existing transportation system in the area. Chapter 7 presents the alternatives considered for meeting the goals of the Plan. Chapter 8 considers sustainability within the transportation sector, and Chapter 10 includes the recommendations of the Plan.

A glossary of acronyms and the appendices of the Plan follow the main body of the document. The maps have been collated at the end of the document.

**Figure 1.1 – MRMPO Planning Area**



## Chapter 2 - Regulatory Framework

This Transportation Plan is intended to meet both federal and state requirements for regional transportation plans as described in the federal transportation act Moving Ahead for Progress in the 21<sup>st</sup> Century (MAP-21), the U.S. Clean Air Act amendments of 1990, and Oregon's Transportation Planning Rule (TPR). This chapter describes the federal and state rules, regulations and policies that influence the content of this document.

### A. Federal Regulation

According to the 23 CFR, §450.322:

*“(a) The metropolitan transportation planning process shall include the development of a transportation plan addressing no less than a 20-year planning horizon as of the effective date. .... In attainment areas, the effective date of the transportation plan shall be its date of adoption by the MPO.*

*(b) The transportation plan shall include both long-range and short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.*

*(c) The MPO shall review and update the transportation plan at least every four years in air quality nonattainment and maintenance areas and at least every five years in attainment areas to confirm the transportation plan's validity and consistency with current and forecasted transportation and land use conditions and trends and to extend the forecast period to at least a 20-year planning horizon. In addition, the MPO may revise the transportation plan at any time using the procedures in this section without a requirement to extend the horizon year. The transportation plan (and any revisions) shall be approved by the MPO and submitted for information purposes to the Governor. Copies of any updated or revised transportation plans must be provided to the FHWA and the FTA.*

*(d) In metropolitan areas that are in nonattainment for ozone or carbon monoxide, the MPO shall coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP);*

*(e) The MPO, the State(s), and the public transportation operator(s) shall validate data utilized in preparing other existing modal plans for providing input to the transportation plan. In updating the transportation plan, the MPO shall base the update on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity. The MPO shall approve transportation plan contents and supporting analyses produced by a transportation plan update.*

*(f) The metropolitan transportation plan shall, at a minimum, include:*

*(1) The projected transportation demand of persons and goods in the metropolitan planning area over the period of the transportation plan;*

(2) Existing and proposed transportation facilities (including major roadways, transit, multimodal and intermodal facilities, pedestrian walkways and bicycle facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan. In addition, the locally preferred alternative selected from an Alternatives Analysis under the FTA's Capital Investment Grant program (49 U.S.C. 5309 and 49 CFR part 611) needs to be adopted as part of the metropolitan transportation plan as a condition for funding under 49 U.S.C. 5309;

(3) Operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods;

(4) Consideration of the results of the congestion management process in TMAs that meet the requirements of this subpart, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide; [Not Applicable to this Area];

(5) Assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure and provide for multimodal capacity increases based on regional priorities and needs. The metropolitan transportation plan may consider projects and strategies that address areas or corridors where current or projected congestion threatens the efficient functioning of key elements of the metropolitan area's transportation system;

(6) ...In all areas (regardless of air quality designation), all proposed improvements shall be described in sufficient detail to develop cost estimates;

(7) A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The discussion shall be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation;

(8) Pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C. 217(g);

(9) Transportation and transit enhancement activities, as appropriate; and

(10) A financial plan that demonstrates how the adopted transportation plan can be implemented.

(i) For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways (as defined by 23 U.S.C.

*101(a)(5)) and public transportation (as defined by title 49 U.S.C. Chapter 53).*

*(ii) For the purpose of developing the metropolitan transportation plan, the MPO, public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under §450.314(a). All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified.*

*(iii) The financial plan shall include recommendations on any additional financing strategies to fund projects and programs included in the metropolitan transportation plan. In the case of new funding sources, strategies for ensuring their availability shall be identified.*

*(iv) In developing the financial plan, the MPO shall take into account all projects and strategies proposed for funding under title 23 U.S.C., title 49 U.S.C. Chapter 53 or with other Federal funds; State assistance; local sources; and private participation. Starting December 11, 2007, revenue and cost estimates that support the metropolitan transportation plan must use an inflation rate(s) to reflect “year of expenditure dollars,” based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s).*

*(v) For the outer years of the metropolitan transportation plan ( i.e. , beyond the first 10 years), the financial plan may reflect aggregate cost ranges/cost bands, as long as the future funding source(s) is reasonably expected to be available to support the projected cost ranges/cost bands.*

*(vi) For nonattainment and maintenance areas, the financial plan shall address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP. [Not Applicable to this Area].*

*(vii) For illustrative purposes, the financial plan may (but is not required to) include additional projects that would be included in the adopted transportation plan if additional resources beyond those identified in the financial plan were to become available.*

*(viii) In cases that the FHWA and the FTA find a metropolitan transportation plan to be fiscally constrained and a revenue source is subsequently removed or substantially reduced ( i.e. , by legislative or administrative actions), the FHWA and the FTA will not withdraw the original determination of fiscal constraint; however, in such cases, the FHWA and the FTA will not act on an updated or amended metropolitan transportation plan that does not reflect the changed revenue situation.*

*(g) The MPO shall consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation concerning the development of the transportation plan. The consultation shall involve, as appropriate:*

*(1) Comparison of transportation plans with State conservation plans or maps, if available; or*

*(2) Comparison of transportation plans to inventories of natural or historic resources, if*

available.

*(h) The metropolitan transportation plan should include a safety element that incorporates or summarizes the priorities, goals, countermeasures, or projects for the MPA contained in the Strategic Highway Safety Plan required under 23 U.S.C. 148, as well as (as appropriate) emergency relief and disaster preparedness plans and strategies and policies that support homeland security (as appropriate) and safeguard the personal security of all motorized and non-motorized users.*

*(i) The MPO shall provide citizens, affected public agencies, representatives of public transportation employees, freight shippers, providers of freight transportation services, private providers of transportation, representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan using the participation plan developed under §450.316(a).*

*(j) The metropolitan transportation plan shall be published or otherwise made readily available by the MPO for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web.*

*(k) A State or MPO shall not be required to select any project from the illustrative list of additional projects included in the financial plan under paragraph (f)(10) of this section.*

*(l) In nonattainment and maintenance areas for transportation-related pollutants, the MPO, as well as the FHWA and the FTA, must make a conformity determination on any updated or amended transportation plan in accordance with the Clean Air Act and the EPA transportation conformity regulations (40 CFR part 93). During a conformity lapse, MPOs can prepare an interim metropolitan transportation plan as a basis for advancing projects that are eligible to proceed under a conformity lapse. An interim metropolitan transportation plan consisting of eligible projects from, or consistent with, the most recent conforming transportation plan and TIP may proceed immediately without revisiting the requirements of this section, subject to interagency consultation defined in 40 CFR part 93. An interim metropolitan transportation plan containing eligible projects that are not from, or consistent with, the most recent conforming transportation plan and TIP must meet all the requirements of this section.*

## **A. Oregon's Transportation Planning Rule (TPR)**

The Transportation Planning Rule (TPR) (OAR660-012) requires MPOs to develop a Transportation System Plan (TSP) for a coordinated network of transportation facilities and services of regional significance. The TSP is to provide for a safe, convenient and economic transportation system that reduces reliance on the automobile so that air pollution, traffic and other livability problems typically faced by urban areas might be avoided.

As a TSP, this document must address:

*(1) A TSP shall establish a coordinated network of transportation facilities adequate to serve state, regional and local transportation needs.*

*(2) The TSP shall include the following elements:*

*(a) A determination of transportation needs as provided in OAR 660-012-0030;*

*(b) A road plan for a system of arterials and collectors and standards for the layout of local streets and other important non-collector street connections. Functional classifications of roads in regional and local TSP's shall be consistent with functional classifications of roads in state and regional TSP's and shall provide for continuity between adjacent jurisdictions. The standards for the layout of local streets shall provide for safe and convenient bike and pedestrian circulation necessary to carry out OAR 660-0120045(3)(b). New connections to arterials and state highways shall be consistent with designated access management categories. The intent of this requirement is to provide guidance on the spacing of future extensions and connections along existing and future streets which are needed to provide reasonably direct routes for bicycle and pedestrian travel. The standards for the layout of local streets shall address:*

*(A) Extensions of existing streets;*

*(B) Connections to existing or planned streets, including arterials and collectors; and*

*(C) Connections to neighborhood destinations.*

*(c) A public transportation plan which:*

*(A) Describes public transportation services for the transportation disadvantaged and identifies service inadequacies;*

*(B) Describes intercity bus and passenger rail service and identifies the location of terminals;*

*(C) For areas within an urban growth boundary which have public transit service, identifies existing and planned transit trunk routes, exclusive transit ways, terminals and major transfer stations, major transit stops, and park-and-ride stations. Designation of stop or station locations may allow for minor adjustments in the location of stops to provide for efficient transit or traffic operation or to provide convenient pedestrian access to adjacent or nearby uses.*

*(D) For areas within an urban area containing a population greater than 25,000 persons, not currently served by transit, evaluates the feasibility of developing a public transit system at buildout. Where a transit system is determined to be feasible, the plan shall meet the requirements of paragraph (2)(c)(C) of this rule.*

*(d) A bicycle and pedestrian plan for a network of bicycle and pedestrian routes throughout the planning area. The network and list of facility improvements shall be consistent with the requirements of ORS 366.514;*

*(e) An air, rail, water and pipeline transportation plan which identifies where public use airports, mainline and branch line railroads and railroad facilities, port facilities, and major regional pipelines and terminals are located or planned within the planning area. For airports, the planning area shall include all areas within airport imaginary surfaces and other areas*

*covered by state or federal regulations;*

*(f) For areas within an urban area containing a population greater than 25,000 persons a plan for transportation system management and demand management;*

*(g) A parking plan in MPO areas as provided in OAR 660-012-0045(5) (c);*

*(h) Policies and land use regulations for implementing the TSP as provided in OAR 660-012-0045;*

*(i) For areas within an urban growth boundary containing a population greater than 2500 persons, a transportation financing program as provided in OAR 660-012-0040.*

*(3) Each element identified in subsections (2)(b)-(d) of this rule shall contain:*

*(a) An inventory and general assessment of existing and committed transportation facilities and services by function, type, capacity and condition:*

*(A) The transportation capacity analysis shall include information on:*

*(i) The capacities of existing and committed facilities;*

*(ii) The degree to which those capacities have been reached or surpassed on existing facilities;  
and*

# Chapter 3 - Vision and Goals

## A. Vision

The Vision of the Transportation Plan was developed based on the most common elements of the visions described in the area’s transportation and land use plans. The draft vision was reviewed and modified by the general public, the Technical Advisory Committee, and the Policy Committee. Through these processes the Policy Committee adopted the following Vision for the Transportation Plan.

*“An intermodal transportation system that provides for safe, efficient, and convenient movement of people and goods to support a robust and burgeoning regional economy”*

The vision and goals chapter of the Regional Transportation Plan (RTP) provide the policy framework that guides development of the plan itself as well as subsequent decisions about system management, and project selection and implementation. The goals provide a measuring stick to judge how well the plan reflects the values expressed by the community. The 2040 RTP includes the goals, objectives, strategies and performance measures established to address national and state requirements, and regional/local issues as outlined below.

- The goals are intended to guide future transportation decisions in the region.
- The objectives are established to help the region move closer to the intended goals.
- The strategies state how the MPO will achieve the objectives, and
- The performance measures are established to evaluate how the MPO is achieving its stated goals.

## B. Goals

The Goals of the Transportation Plan were developed based on a review of the goals found in the area’s transportation plans and in conformance with the above vision and the regulations set out in the Middle Rogue MPO’s adopted Title VI Plan. The Technical Advisory Committee reviewed and commented on the Goals. In accordance with the recommendations of the TAC, the Policy Committee adopted the following Goals for the Transportation Plan:

Table 1 - MRMPO RTP Goals	
Number	
1	Cultivate, Maintain, and Enhance the Region's Economic Vitality
2	Increase the Safety and Security of the Region's Transportation System
3	Increase Accessibility and Mobility Choices in the Region
4	Protect, Preserve, and Enhance the Social, Historical, and Natural Environments of the Region
5	The MRMPO will use the best available technology to maximize system effectiveness
6	Enhance Integration and Connectivity of the Transportation System Across and Between Modes
7	Emphasize Maintenance and Preservation of the Existing Transportation System

### C. MAP-21

Moving Ahead for Progress in the 21st Century Act (MAP-21) is the current national transportation law that provides the guiding principles for transportation decision-making in metropolitan areas throughout the United States. MAP-21 sets forth seven planning factors to guide transportation decisions. These are as follows:

<b>Table 2 - MAP-21 Planning Factors</b>	
<b>Number</b>	
<b>1</b>	<b>Safety</b> - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
<b>2</b>	<b>Infrastructure Condition</b> - To maintain the highway infrastructure asset system in a state of good repair.
<b>3</b>	<b>Congestion Reduction</b> - To achieve a significant reduction in congestion on the National Highway System.
<b>4</b>	<b>System Reliability</b> - To improve the efficiency of the surface transportation system.
<b>5</b>	<b>Freight Movement and Economic Vitality</b> - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
<b>6</b>	<b>Environmental Sustainability</b> - To enhance the performance of the transportation system while protecting and enhancing the natural environment.
<b>7</b>	<b>Reduced Project Delivery Delays</b> - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.

The table below correlates the plan goals with the MAP-21 planning factors. The following provides a summary of how the Regional Transportation Plan (RTP) goals address the seven federal planning factors. The draft goals adequately address the seven Map-21 planning factors.

<b>Table 3 - MAP 21 Planning Factor Correlation</b>	<b>Correlates with Goal Number</b>
<b>Safety</b> - To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.	2
<b>Infrastructure Condition</b> - To maintain the highway infrastructure asset system in a state of good repair.	7
<b>Congestion Reduction</b> - To achieve a significant reduction in congestion on the National Highway System	3, 5
<b>System Reliability</b> - To improve the efficiency of the surface transportation system.	5, 6
<b>Freight Movement and Economic Vitality</b> - To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.	1
<b>Environmental Sustainability</b> - To enhance the performance of the transportation system while protecting and enhancing the natural environment.	4
<b>Reduced Project Delivery Delays</b> - To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.	5

The following pages include the RTP goals, objectives, strategies and performance measures adopted by MRMPO Policy Committee.

## **GOAL 1: Cultivate, Maintain, and Enhance the Region's Economic Vitality**

### **Objectives:**

- G1 - O1** Encourage the coordination of land use and transportation planning to ensure that developments are adequately connected by the region's transportation system and appropriately located to preserve the quality of life in surrounding areas.
- G1 - O2** Encourage transportation investments and policies that facilitate sustainable business growth and tourism growth in the region which are consistent with local and regional comprehensive plans.
- G1 - O3** Encourage investment and reinvestment of transportation resources into and within the MRMPO as a critical component to the overall economic health of the region.
- G1 - O4** Encourage economically strong regional activity centers with a mix of job, housing, services and recreation in an intermodal environment.
- G1 - O5** Encourage transportation investments and policies that facilitate the movement of freight.

### **Strategies:**

- G1 - S1** Work with the economic development community to identify current and potential deficiencies and threats to the economic vitality of the MRMPO area that relate to transportation, and work to mitigate those threats.
- G1 - S2** Target transportation improvements that:
  - (a)** Support downtowns as primary economic development generators.
  - (b)** Support locations with ready and available industrial properties
  - (c)** Support the reinforcement of investments in existing neighborhoods within the MRMPO
- G1 - S3** Give high priority to regional planning and funding for transportation facilities that serve the regional core and regional activity centers where individuals can switch easily from one transportation mode to another.
- G1 - S4** Intercept automotive traffic at key locations, encourage “park once” and provide alternatives to driving in regional activity centers.
- G1 - S5** Seek various and innovative funding sources, tools, and strategies to meet freight needs.
  - a) Nurture public private partnerships to leverage public funds

- b) Support local, regional, and state bond measures to improve freight infrastructure
- c) Ensure that economic benefits are considered for all viable freight modes when evaluating projects for transportation investments

**Performance Measures:**

**G1 - P1** Employment change in vicinity of projects.

**G1 - P2** Mode share.

**GOAL 2: Increase the Safety and Security of the Region's Transportation System**

**Objectives:**

**G2 - O1** Reduce transportation related crashes, injuries, and fatalities using current design standards, advanced technologies, and education.

**G2 - O2** Collaborate with first responders, transportation, and health agencies as they develop emergency and disaster plans and other security related plans for the region.

**G2 - O3** Encourage transportation investments and policies that result in a higher level of personal security for pedestrians, cyclists, motorists, and users of transit.

**Strategies:**

**G2 - S1** Identify high severity crash locations within the Metropolitan Planning Area and program projects for these locations as soon as possible.

**G2 - S2** Consider intersection improvements that provide safety benefits.

**G2 - S3** Develop a regional safety plan, in cooperation with safety partners that supports the Oregon Strategic Highway Safety Plan.

**G2 - S4** Assist in developing incident management plans for major routes in the region, as appropriate.

**G2 - S5** Establish a plan of action to improve security measures and safety awareness for pedestrians, cyclists, motorists, and transit users within the Metropolitan Planning Area.

**G2 - S6** Support the implementation of effective safety measures, such as red light camera enforcement, skid-resistant pavement, elimination of roadside hazards and better intersection controls.

**Performance Measures:**

**G2 - P1** Track injury and fatal crashes.

**G2 - P2** Track non-injury crashes.

**G2 - P3** Measure the participation in safety education programs.

**G2 - P4** Track the number of projects built to improve safety.

**G2 - P5** Track the percent of dollars dedicated to safety improvements.

**G2 - P6** Track the reduction of Vehicle Miles Traveled (VMT).

**GOAL 3: Increase Accessibility and Mobility Choices in the Region**

**Objectives:**

**G3 - O1** Improve transit effectiveness so that people can reach job sites and return home conveniently, so that employers can hire workers to work when needed (e.g., increase transit frequency).

**G3 - O2** Support a complete streets policy that promotes the use of alternative transportation modes including pedestrians, bicyclists, and transit users. Improvements could include new or improved sidewalks, bicycle routes or other accommodations, bus pullouts, and other facilities/improvements) as part of future roadway construction/reconstruction and private development projects.

**G3 - O3** Support local incentives to encourage employers to encourage employees to consider transit as a commuting option, and to encourage Transit Oriented Development (TOD).

**G3 - O4** Encourage public transportation services – such as commuter services, park and ride lots, ridesharing, and carpooling programs – which help reduce the number of single occupancy vehicle trips within the region.

**Strategies:**

**G3 - S1** Implement a regional bicycle/trail/pedestrian plan and include bicycle and pedestrian facilities in new transportation projects and improvements.

**G3 - S2** Factor life-cycle costs into the transportation system planning and decision making process.

**G3 - S3** Develop a Transportation Options program.

**Performance Measures:**

**G3 - P1** Revenue Miles/Hours per capita.

**G3 - P2** Track funding for bicycle, pedestrian and transit projects.

**G3 - P3** Implement Transportation Options self-evaluation and reporting process for local jurisdictions.

**GOAL 4: Protect, Preserve, and Enhance the Social, Historical, and Natural Environments of the Region**

**Objectives:**

**G4 - O1** Coordinate roadway and infrastructure projects with guidelines established by federal, state, and local historic preservation planning agencies and the principles of context sensitive solutions (CSS) treatments.

**G4 - O2** Pursue transportation projects and other transportation related technologies that result in positive benefits to improved air quality and energy efficiency.

**G4 - O3** Encourage transportation investments that reduce greenhouse gases, and other emissions, and support the reduction of single occupancy vehicle trips.

**G4 - O4** Ensure that transportation decisions in the region are made with full consideration of the requirements of Title VI and Environmental Justice provisions.

**G4 - O5** Encourage transportation investments that support sustainable development, enhance quality of life and promote healthy communities.

**Strategies:**

**G4 - S1** When evaluating transportation projects, recognize the connections between transportation efficiency and land uses and densities.

**G4 - S2** Promote street and pathway connectivity, including off-road corridors for non-motorized vehicles.

**G4 - S3** Provide environmentally-sensitive transportation options.

**G4 – S4** Consider potential environmental impacts and mitigation to maintain and restore affected environmental functions in consultation with appropriate federal, state and local agencies.

**G4 – S5** Plan and implement transportation and related facilities that are aesthetically pleasing.

**Performance Measures:**

**G4 - P1** Change in mixed-use and downtown development.

**G4 - P2** Impacts on identified resource areas using most up-to-date data.

**G4 - P3** Expansion of off-network paths. Improve air quality through projects that reduce carbon monoxide, particulates (PM<sub>10</sub>) and greenhouse gases.

**G4 - P4** Measure percent of funding by project dedicated to “streetscapes” (benches, trees, planters, traffic calming).

**GOAL 5: The MRMPO will use the best available technology to maximize system effectiveness:**

**Objectives:**

**G5 - O1** Encourage the use of Transportation Demand Management (TDM) principles to mitigate capacity deficiencies on congested roadways and at intersections.

**G5 - O2** Consider installing Park & Ride facilities where appropriate.

**G5 – O3** Utilize Traffic Calming Techniques. Traffic Calming refers to various design features and strategies intended to reduce vehicle traffic speeds and volumes on a particular roadway.

**G5 – O4** Consider the use of transportation technology in all projects to maximize effectiveness and safety.

**G5 – O5** Encourage greater use and acceptance of access management policies and devices (e.g. medians, turn restrictions, combined entrances) to maintain adequate transportation system capacity coordination between roadway design and land use and to enhance safety for the traveling public.

**G5 – O6** Develop a regional Intelligent Transportation System (ITS) Architecture as a means of achieving better management and support deployment of appropriate ITS investments.

## Strategies:

- G5 - S1** Develop a list of high priority projects that are designed to improve the regional transportation system by addressing problem locations having capacity, safety and/or modal connection problems; and program.
- G5 - S2** Support projects that upgrade traffic signals, improve signal timing, and improve signal coordination.
- G5 - S3** Identify future Park & Ride locations.
- G5 - S4** Deploy technologically advanced systems to monitor and manage traffic and to control and coordinate traffic control devices including providing priority to transit vehicles where appropriate.
- G5 - S5** Review the following six core ITS strategies which address regional issues and needs.
- (a) **Incident Management** – Relates to the management of recurring and non-recurring disruptions to traffic due to crashes, weather or other natural causes.
  - (b) **Traveler Information** – Refers to the collection and dissemination of road condition data so that travelers can make choices regarding the time, route and mode for their travel.
  - (c) **Freeway Traffic Management** – Involves the active management of traffic flow on the freeway mainline and ramps to ensure efficient use of capacity during normal operations and during traffic disruptions.
  - (d) **Arterial Traffic Management** – Involves the management of traffic on arterial roadways to improve the efficiency of the system for all users.
  - (e) **Safety Management** – Refers to the several strategies used to reduce the number and severity of crashes. A major focus should be on reducing the response time for emergency services.
  - (f) **Communications and Connectivity** – Integrated transportation systems are dependent on communications to collect and transmit sensor data from the field to management centers where it can be processed to transmit information between various centers. Providing high-speed communication between centers and along key corridors is essential for the effective operation of ITS.

**Performance Measures:**

- G5 – P1** Percentage of high priority projects constructed.
- G5 – P2** Track the number of projects that upgrade traffic signals, improve signal timing, and improve signal coordination.
- G5 – P3** Track the number of newly identified park and ride locations.

**GOAL 6: Enhance Integration and Connectivity of the Transportation System Across and Between Modes**

**Objectives:**

- G6 - O1** Integrate land use planning and transportation project planning for new development and redevelopment.
- G6 - O2** Retrofit existing transportation facilities, where possible, to accommodate pedestrians, bicyclists, and transit users to enhance connectivity between modes.
- G6 - O3** Improve capacity, pavement maintenance, and design of roadways and bridges that connect significant origins and destinations within the MRMPO to accommodate higher traffic flows where it is necessary and needed, especially for freight.

**Strategies:**

- G6 - S1** Design future roadways and bridges to accommodate the anticipated level of freight traffic – both in terms of volume and in cargo weight.
- 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 - P1** Percent of regional corridors that have facilities for at least three modes (ex: motor vehicles, pedestrians, transit or motor vehicles, pedestrians, bicyclists).
- G6 - P2** Measure the increase in intermodal activity.
- G6 - P3** Number of new mixed use development which include residential dwelling units.

## **Goal 7: Emphasize Maintenance and Preservation of the Existing Transportation System**

### **Objectives:**

- G7 - O1** Develop innovative and sound funding practices to implement the Regional Transportation Plan.
- G7 - O2** Prioritize investment to preserve the existing transportation system including all modes.
- G7 - O3** Encourage the efficient and safe movement of people, goods, and information with minimal adverse impacts on residents and the environment.

### **Strategies:**

- G7 - S1** Public-Private partnerships and other innovative approaches can maximize resources.
- G7 - S2** Give priority to projects that do not expand the existing road system.
- G7 - S3** Identify and secure reliable sources of funding to ensure adequate maintenance, preservation and rehabilitation of the region's transportation system
- G7 - S4** Encourage local funding mechanisms.

### **Performance Measures:**

- G7 - P1** Track funding obligations, funding availability.
- G7 - P2** Review and update MRMPO project funding criteria using quantitative methodologies to the extent practicable.

# Chapter 5 - Planning Area Characteristics

This section provides a review of existing transportation facilities and conditions in the Planning Area.

## A. Political and Physical Characteristics

The Middle Rogue Planning Area is located in the Rogue Valley of southwestern Oregon, within 10 miles of Medford at its most eastern point. The Planning Area covers just under 65 square miles (41,398 acres) extending from Grants Pass eastward to Gold Hill. The cities of Gold Hill, Grants Pass, and Rogue River are wholly within the Planning Area, as well the parts of Jackson and Josephine counties that are anticipated to urbanize over the next 20 years.

The arterial and collector roadways subject to this plan are under the jurisdiction of Jackson and Josephine counties, the three cities, and the Oregon Department of Transportation (ODOT). Major state highway facilities located within the Planning Area include Interstate 5 (I-5), Sams Valley Highway (OR 234), Redwood Highway (OR199), and Rogue River Highway (OR 99). In Chapter 1, Figure 1-1 depicts the Planning Area.

Topography varies from predominantly level areas near the Rogue River and the Merlin area to rolling foothills surrounding the valley. The Rogue River is the most prominent water feature in the area. Floodplains and numerous wetlands are located near the river and its tributaries.

### 1. Land Use and Zoning

The understanding of interactions between land use and transportation is critical to transportation and land use planning. Location of human activities and lay of land determine travel patterns, traffic volumes and the need for transportation facilities, while transportation infrastructure influences land use patterns. **Map X-X** shows land use designations within the Planning Area.

The central areas of Grants Pass, Gold Hill and Rogue River are characterized by compact grid street patterns, while much of the remainder of the Planning Area is less dense and features a more random street pattern, adapting to terrain. Land designated for industrial use in Grants Pass is concentrated in the eastern part of town along the railroad corridor. Other areas of industrial land are between Interstate 5 and Merlin, an unincorporated rural community.

Commercial zones in the area follow major roadway corridors in addition to concentrations in downtown Grants Pass, Gold Hill and Rogue River. Public land includes parks and surrounding Bureau of Land Management (BLM) and Forest Service lands. Much of the Planning Area is zoned as residential with farm and forest zones at the fringe.

### City of Grants Pass

The City of Grants Pass is the primary commercial center of the Planning Area, and contains more than two-thirds of the population. The most notable commercial areas of the city include the downtown central business district (CBD), 6<sup>th</sup> and 7<sup>th</sup> Streets, Hwy 99, Hwy 199, and Redwood

Avenue. Development in the Grants Pass CBD is relatively compact and includes a mixture of uses, such as restaurants, retail shops, and banks. The roadway system in the downtown area includes a series of one-way streets with pedestrian and bicycle facilities. The Grants Pass Comprehensive Plan identifies neighborhood centers, which are located throughout the city, primarily along major arterials and collectors.

Much of the industrial land in Grants Pass is located in the eastern portion of the city. Higher-density residential areas are generally east of the CBD north of the river, and in portions of the Fruitdale and Redwood districts. Lower-density residential areas are in the northern and western parts of the city.

Riverside Park and the Rinehart Volunteer Park are heavily used parks with a regional draw. Many other parks are located throughout the city

### **City of Rogue River**

The City of Rogue River is approximately seven miles east of Grants Pass and is bisected by Interstate 5 and the Rogue River. The city center immediately north of the freeway includes a mix of retail and service commercial uses. Other commercial and employment uses are south of the river, with the largest industrial area at the southern edge of the city, located between the freeway and North River Road. Multiple family housing surrounds the downtown with single-family dwellings filling the remaining areas.

### **City of Gold Hill**

Gold Hill is located near the eastern boundary of the Planning Area. Except for small pockets of multi-family housing, it is primarily a single-family residential community. Most commercial and employment uses are concentrated along Second Avenue, which is also a state highway.

A private rail crossing provides access to the largest industrially zoned area, located near the west edge of the city. This access reduces options for use of the property. The railroad runs the width of the city; two public crossings at Gustav Street and Highway 234 provide the only public street connections between the northern and southern portions of the city.

The Rogue River forms the southern and eastern boundaries of the city. Bridges at the east edge and farther to the west connect to Interstate 5.

### **Unincorporated Josephine County**

The unincorporated portions of Josephine County include a mix of residential, farming, and forest uses with rural residential uses dominating the non-urban areas south of the river. Most of the agricultural land in the Planning Area is west of Grants Pass and the largest farms are north of the river. The higher elevations surrounding the valley are zoned for forest use.

Merlin-North Valley Unincorporated Rural Community connects to the Planning Area via Interstate 5. It includes the North Valley Industrial Park, the Grants Pass Airport, the Rendatta Industrial area and the Merlin townsite.

## **Unincorporated Jackson County**

The unincorporated portions of Jackson County represent a relatively small portion of the Planning Area. These areas are dominated by small residential lots along the river and small farms at the upland, open areas. At the intersection of Rogue River Highway and Footh Creek Road is a small cluster of commercial structures that comprise the Footh Creek Rural Service Center.

### **2. Schools and Parks**

Community focal points, such as schools and parks, are important to understanding travel patterns. These facilities attract pedestrians, bicyclists, transit users, and drivers and have specific transportation needs (e.g., pedestrian safety around schools). Awareness of the location of these facilities is important to planning for an effective regional transportation system.

#### **Schools**

Trips to and from school by students and teachers – via bus, walking, bicycling, or driving – affect transportation patterns and transportation infrastructure planning and design. Schools also attract people outside of school hours for sports, extracurricular events, and community events held at school facilities.

There are 28 public and private schools, including Rogue Community College, within the study area. Thirteen of the schools are inside the Grants Pass city limits, including nine elementary schools, two middle schools, and one high school, in addition to a K-12 private school. Other schools in Josephine County outside of the Grants Pass city limits include four elementary schools, two middle schools, two high schools, and one K-12 private school. One elementary school, a middle school, and a high school are in Rogue River; one elementary school and one middle school are in Gold Hill.

**Table 5-1: Public Schools by Jurisdiction**

<b>Jurisdiction within Planning Area</b>	<b>Elementary Schools</b>	<b>Middle Schools</b>	<b>High Schools</b>
City of Grants Pass	9	2	1
City of Rogue River	1	1	1
City of Gold Hill	1	1	0
Unincorporated Josephine County	4	2	2

#### **Rogue Community College (RCC)**

Grants Pass is home to the Rogue Community College Redwood campus, which is located just west of downtown along Hwy 199. The campus encompasses approximately 84 acres, including 30 campus buildings with over 200,000 square feet of building space. The campus provides parking for approximately 846 vehicles and has three designated bicycle parking areas.

#### **Parks and Recreational Areas**

Parks are important to the transportation system because they are popular destinations for residents and visitors. Parks sometimes need special transportation attention to serve particular park users, such as children.

Not counting sites set aside for future park use, there are 37 existing parks and open space areas in the Planning Area that cover more than 1,246 acres. Most parks are managed by the cities where they are located, with several exceptions. The Josephine County Fairgrounds in Grants Pass are managed by Josephine County. Cathedral Hills Park is adjacent to Grants Pass, listed as a park by Josephine County, but is managed by the Bureau of Land Management. Valley of the Rogue Park is the only state park in the Planning Area. Map XX located on page XX displays parks within the MPO region.

## B. Demographics

Below and the following pages contain general demographic characteristics for the Planning Area based on the 2010 US Census and the most recent American Community Survey (ACS) data. Where appropriate, the characteristics are compared to statewide or countywide data.

*Note: Beginning with the 2010 U.S. Census, the decadal census no longer collects socio-economic information. The American Community Survey now does. For those tables containing ACS data, it is important to note that estimates are based on a sample of the population over a five year period rather than the full population at one point in time, such as the decadal census.*

**Table 5-2: Population**

Jurisdiction	2000 U.S. Census	2010 U.S. Census
Grants Pass Urbanized Area (MRMPO Planning Area)	43,811	50,520
Josephine County	75,726	82,713
Jackson County	181,269	203,206
City of Grants Pass	23,003	34,533
City of Rogue River	1,847	2,131
City of Gold Hill	1,073	1,220
<b>Unincorporated, Populated Places</b>		
Merlin	Not Available	1,615
Foots Creek	Not Available	799

*Source: 2000 & 2010 U.S. Census, Table DP-1*

In the 2010 US Census, the population of the Grants Pass Urban Cluster surpassed 50,000, changing the areas geographical classification to a designated Urbanized Area (UA). As shown in Table 5-1, results of the 2010 US Census when compared to 2000 US Census data demonstrate a rise in population within the cities and counties that make up the Middle Rogue MPO Planning Area.

On the following page, Table 5-3 shows the estimated number of households for the MPO Planning Area and each MPO jurisdiction and unincorporated place based on numbers from the 2010 U.S. Census.

**Table 5-3: Households**

Jurisdiction	Number of Households	Average Household Size
Grants Pass Urbanized Area (MRMPO Planning Area)	21,276*	2.31*
City of Grants Pass	14,313	2.34
City of Rogue River	1,054	2.02
City of Gold Hill	509	2.40
<b>Unincorporated, Populated Places</b>		
Merlin	686	2.35
Foots Creek	344	2.32

Source: 2010 U.S. Census, DP-1 Table; \*2010-2012 ACS, Table DP02

The **median age** of 42.9 for residents of the Planning Area is higher than the statewide median of 38.4 years. The City of Grants Pass has the lowest median age in the Planning Area at 39.3, while the rural community of Foots Creek is highest at 53.7.

The Planning Area has a relatively high percentage of **senior residents (age 65+)** compared to the statewide average of 12.9%. A large degree of variation exists in the area, however. For example, in Rogue River 29.6% of the population is age 65 years or older while the estimate for neighboring Gold Hill is less than half of that, at 14.4%.

**Table 5-4: Median Age and Senior Population**

Jurisdiction	Median Age	Population Age 65+
State of Oregon	38.4	12.9%
Grants Pass Urbanized Area (MRMPO Planning Area)	42.9	20.9%*
Josephine County	47.3	22.3%
Jackson County	42.1	17.6%
City of Grants Pass	39.3	18.6%
City of Rogue River	49.3	29.6%
City of Gold Hill	43.9	14.4%
<b>Unincorporated, Populated Places</b>		
Merlin	51.8	24.5%
Foots Creek	53.7	25.7%

Source: Median Age – 2010 U.S. Census, Table P13; Senior Population - 2010 U.S. Census, Table P12 and \*Table QT-P1

In the Planning Area, 87.6% of residents identified themselves as **“White alone”** in their choice of race and ethnicity during the 2010 U.S. Census. In choice of ethnicity, 7.4% of the Planning Area population identified as **“Hispanic or Latino”**. For a statewide comparison, 78.5% of Oregon residents identified themselves as White alone, with 11.7% of the state’s population identifying as Hispanic or Latino.

**Table 5-5: White Alone and Hispanic/Latino Populations**

Jurisdiction	White Alone Population <i>(not Hispanic or Latino)</i>	Those Who Identify as Hispanic or Latino
State of Oregon	78.5%	11.7%
Grants Pass Urbanized Area (MRMPO Planning Area)	87.6%	7.4%
Josephine County	88.6%	6.3%
Jackson County	83.6%	10.7%
City of Grants Pass	86.0%	8.5%
City of Rogue River	91.2%	5.3%
City of Gold Hill	92.0%	2.7%
<b>Unincorporated, Populated Places</b>		
Merlin	90.0%	5.2%
Foots Creek	93.6%	2.1%

Source: 2010 U.S. Census, Table P121 and Table P12H

Approximately 20% of Grants Pass and Josephine County residents reported living below the **poverty level** in the past 12 months, according to ACS data for 2008-2012. While those numbers are higher than the statewide average of 15.5%, the smaller communities within the Planning Area reported smaller estimates with Merlin at 14% and Foots Creek at 12.2%.

The current percentage of the population living in poverty within the Planning Area is 19.4%, with Rogue River and Gold Hill at 17.6% and 19.1%, respectively.

**Table 5-6: Poverty**

Jurisdiction	Population Living Below the Poverty Level (w/in past 12 months)
State of Oregon	15.5%
Grants Pass Urbanized Area (MRMPO Planning Area)	19.4%
Josephine County	20.0%
Jackson County	16.6%
City of Grants Pass	20.7%
City of Rogue River	17.6%
City of Gold Hill	19.1%
<b>Unincorporated, Populated Places</b>	
Merlin	14.0%
Foots Creek	12.2%

Source: 2008-2012 ACS, Table DP-03

Approximately 87.8% of Grants Pass UA residents aged 25 years or older are **high school graduates**, with 13% having obtained a **bachelor's degree or higher**. These numbers are quite similar for the City of Grants Pass and Josephine County. Statewide, the percent of high school graduates is just slightly higher at 88.3%, with those that hold a bachelor's degree or higher being greater at 30.2%.

**Table 5-7: Education Level (ages 25+)**

Jurisdiction	High School Graduate Or Higher	Bachelor's Degree or Higher
State of Oregon	88.3%	30.2%
Grants Pass Urbanized Area (MRMPO Planning Area)	87.8%	13.0%
Josephine County	87.9%	12.0%
Jackson County	84.9%	20.2%
City of Grants Pass	87.8%	13.4%
City of Rogue River	80.2%	7.8%
City of Gold Hill	90.0%	6.0%
<b>Unincorporated, Populated Places</b>		
Merlin	95.4%	6.4%
Foots Creek	91.3%	16.1%

Source: 2008-2012 ACS, Table S1501

The City of Grants Pass had the highest percentage (30.7%) of **households with a child less than 18 years old**. In Gold Hill, 27.3% of the households had a child younger than 18, compared to 21.9% of households in Rogue River, and 28.0% of all Planning Area households. The statewide percentage was 30.1%.

**Table 5-8: Households with a Child (less than 18 years)**

Jurisdiction	Households with a Child
State of Oregon	30.1%
Grants Pass Urbanized Area (MRMPO Planning Area)	28.0%
Josephine County	25.5%
Jackson County	28.7%
City of Grants Pass	30.7%
City of Rogue River	21.9%
City of Gold Hill	27.3%
<b>Unincorporated, Populated Places</b>	
Merlin	22.2%
Foots Creek	18.6%

Source: 2010 U.S. Census, Table P20

**Housing vacancy** is quite varied throughout the MRMPO planning area. The City of Grants Pass had a vacancy rate of 7.7%, with Rogue River and Gold Hill at 11.9% and 11.5%, respectively. The lowest vacancy rate was seen in Merlin at 0%, while the highest was in Foots Creek at 13.3%.

In the state of Oregon, **owner-occupied housing units** outnumber **renter-occupied housing units** 62.5% to 37.5%. In the MRMPO area, owner-occupied units also outnumber renter-occupied units, but to a lesser degree at 55.5% to 44.5%. The communities of Foots Creek and Gold Hill have the highest percentage of owner-occupied units at 75.8% and 70.4%, respectively. Within the City of Grants Pass, however, half of all housing units (49.8%) are renter-occupied.

**Table 5-9: Housing Occupancy**

Jurisdiction	Owner-Occupied	Renter-Occupied	Vacancy Rate
State of Oregon	62.5%	37.5%	9.6%
Grants Pass Urbanized Area (MRMPO Planning Area)	55.5%	44.5%	7.8%
Josephine County	66.5%	33.5%	9.4%
Jackson County	61.9%	38.1%	8.2%
City of Grants Pass	50.2%	49.8%	7.7%
City of Rogue River	56.9%	43.1%	11.9%
City of Gold Hill	70.4%	29.6%	11.5%
<b>Unincorporated, Populated Places</b>			
Merlin	59.6%	40.4%	0%
Foots Creek	75.8%	24.2%	13.3%

Source: 2008-2012 ACS, Table DP04

**Age of the housing stock** varies throughout the MRMPO Planning Area. Keep in mind that the ACS data used in this analysis is reflective of survey feedback collected between 2008 - 2012.

**Table 5-10: Age of Housing Stock**

Built before 1950	14%
1950 – 1969	16.9%
1970 – 1989	33.0%
1990 – 2009	36.1%
2010 and later	<1%

Source: 2008-2012 ACS, Table DP04

## C. Employment Characteristics

Employment characteristics are important to the understanding of travel patterns and particularly work trips. Peak hour periods are used for travel forecasting and determination of needed transportation improvements, facilities, programs and strategies; and employment numbers and locations have a significant effect on transportation planning outcomes. The following 2008-2012 ACS Census data represents the most current data available for each of the jurisdictions.

Because the 2008-2012 ACS data is aggregated over a five-year time period, it does not necessarily reflect current economic conditions or dramatic shifts in trends. The most current information can be found in monthly data from the Oregon Employment Department, which for example, reported a seasonally-adjusted unemployment rate of 9.8% for Josephine County for August 2013, as compared to 14.2% for August 2009. Table 5-10 illustrates estimated **employment levels** by jurisdictions between 2009 and 2012.

**Median household incomes** of jurisdictions within the MPO Planning Area are lower than the statewide median household income. The 2008-2012 ACS data estimates statewide median household income to be \$50,036, and \$33,634 for the MPO Planning Area. The median household income was \$32,426 in Rogue River, \$37,375 in Gold Hill, and \$32,991 in Grants Pass.

American Community Survey data (2008–2012) indicates that **major employment sectors** throughout the MRMPO Planning Area included educational services and health care (23%); retail trade (17%); manufacturing (10%); and arts, entertainment, and recreation (10%).

In looking at **sector growth and decline** in Josephine County over time, Oregon Employment Department data from 2001 to 2013 shows professional and business services having grown by 48%, followed by education and health services having increased by 35%. The greatest declines were seen in the mining and logging sector, which saw a 52% decline in employment from 2001-2013, and in the information sector where employment declined by 38%.

## D. Commute Patterns

Commute characteristics and patterns help determine where transportation system needs exist. Many of the MRMPO Planning Area residents commute to the Medford area for employment, with Interstate 5, Hwy 99 and Hwy 199 being important north-south commuter routes. Residents in the MRMPO Planning Area also travel to Medford for shopping and services.

In the MRMPO Planning Area, 1.3% of **households did not have access to a vehicle**, with 1.6% of households in Grants Pass, 0.8% in Gold Hill and 0.0% of households in Rogue River not having a vehicle available.

According to the 2009-2012 American Community Survey, 85% of residents over the age of 16 in the MRMPO Planning Area **worked within their county of residence**, with 14% working outside of their county of residence. Commute times by all modes for MRMPO Planning Area residents were much less than for statewide residents, with a commute time of 19 minutes or less for 71.5% of MRMPO residents as compared to 50.6% of statewide residents.

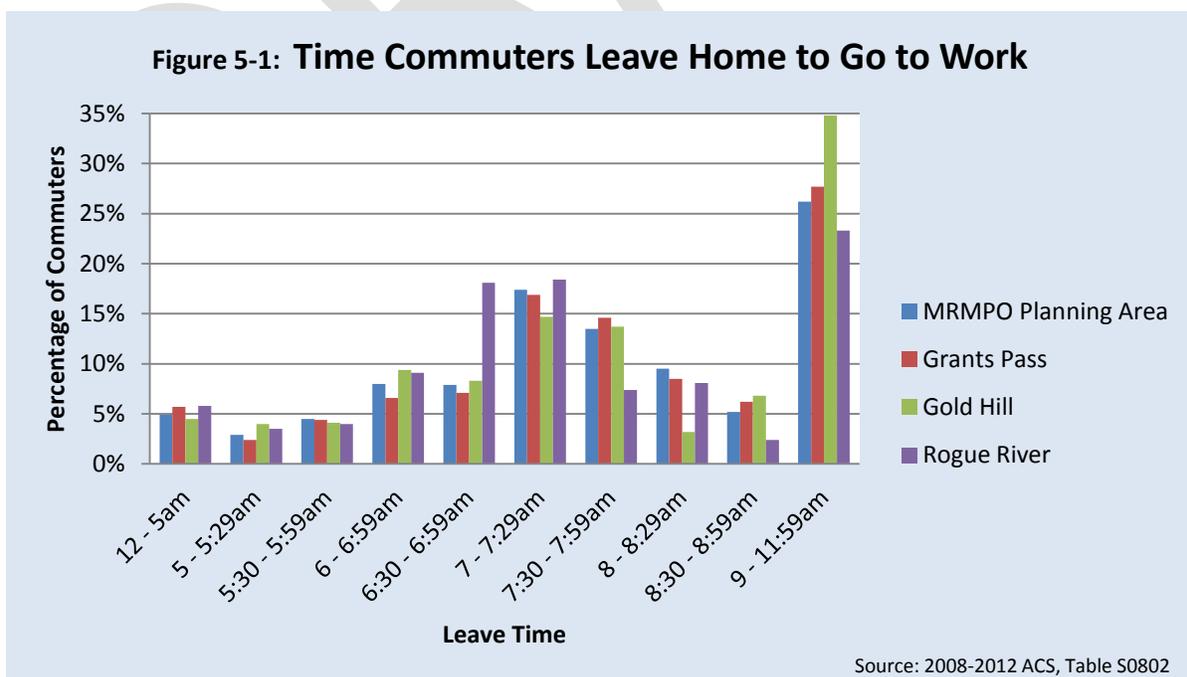
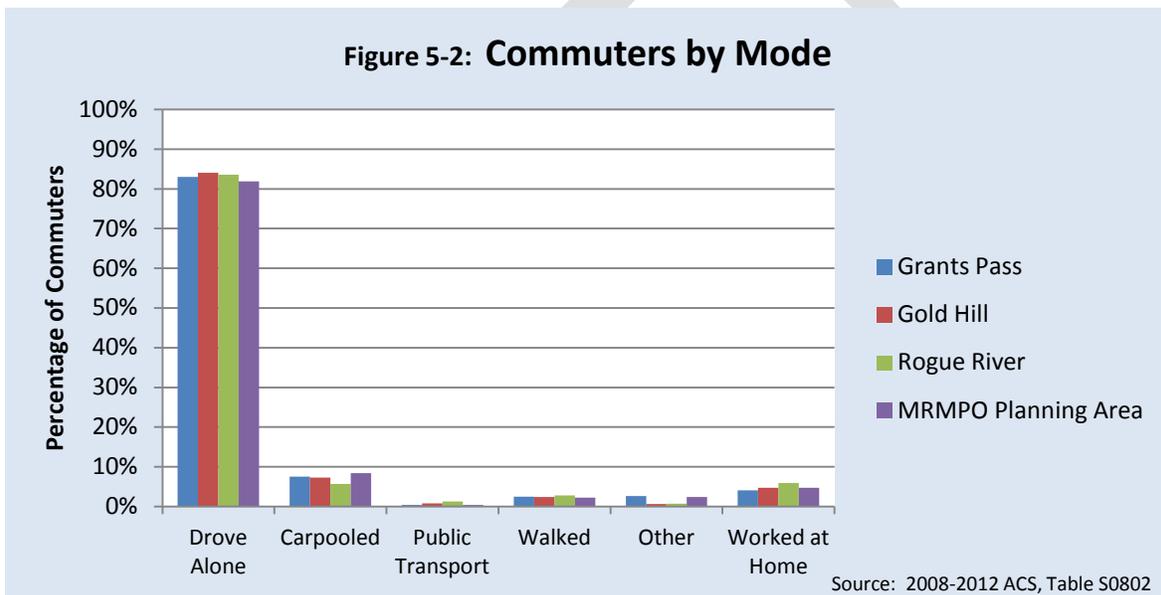


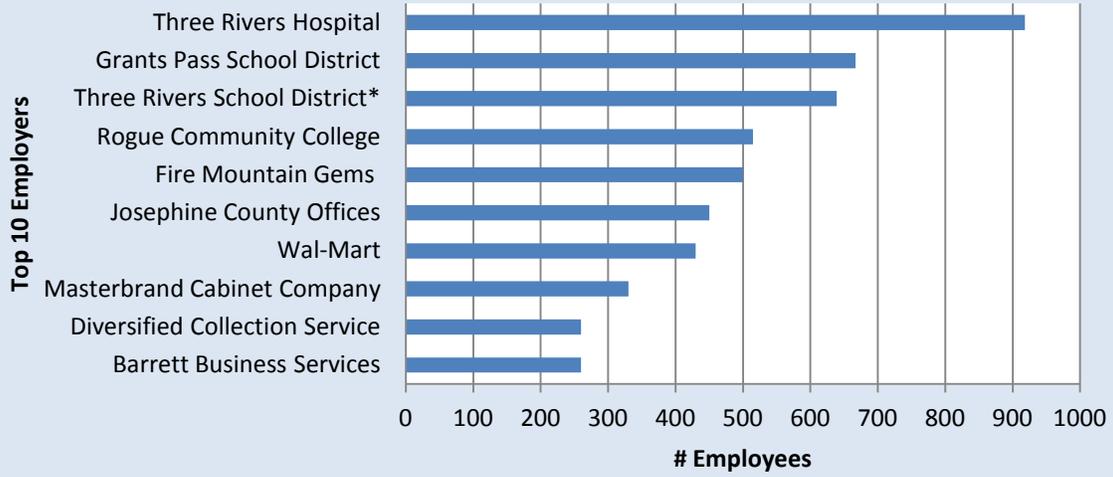
Figure 5-1 on the previous page illustrates when commuters in the MRMPO Planning Area **leave home to go to work** according to 2008-2012 ACS data. As seen in the graph, the highest percentages of all area commuters left home between 9:00 a.m. and 11:59 a.m., with the next highest leave time bracket being 7:00 a.m. to 7:29 a.m. It is important to note, however that the most time brackets are one half hour, while the 9:00 a.m. to 11:59 a.m. time bracket is three hours.

Throughout Oregon an estimated 71.7% of workers 16 years and older (not working at home) **drove alone while commuting to work**, according to 2008-2012 ACS data. In comparison, the following percentages reflect commuters in MRMPO jurisdictions who drove to work alone: 83.0% for Grants Pass, 83.6% in Rogue River, 84.1% in Gold Hill, and 81.9% throughout the MRMPO Planning Area. Of those in the Planning Area who did not drive to work alone, an estimated 8.4% carpooled, 0.4% used public transit, 2.2% walked and 2.4% used “other” means of transportation. An estimated 4.7% worked at home. Figure 5-2 illustrates the percentage of commuters by mode for jurisdictions over a five-year period from 2008-2012.



The location of **major employers** helps to identify commuter travel patterns, including heavily used corridors and peak-hour transportation needs. Major employers within the Planning Area are shown on the following page in Figure 5-3.

**Figure 5-3: Major Employers**



Source: Josephine County Chamber of Commerce, Major Employers 2011

\*School district office located within MRMPO boundary, but not all schools lie within boundary (6 of 15).

DRAFT



**Middle Rogue**  
**Metropolitan Planning Organization**  
**Regional Transportation Planning**

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

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**DATE:** February 26, 2015  
**TO:** Technical Advisory Committee  
**FROM:** Dan Moore, AICP, Planning Coordinator  
**SUBJECT:** MRMPO Enhance Project Coordination

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The purpose of this memo is to provide the Technical Advisory Committee with background information about ODOT's Enhance program, and to start discussions about the possibilities of teaming-up and coordinating Enhance projects where it makes sense.

### **Background**

At the January 15, 2015 Policy Committee meeting, Mike Baker, ODOT, informed members that the Enhance process is starting up. The focus will be more on improving the state system or local projects that will improve the state system. John Vial, Jackson County, emphasized the importance of coordinating with ODOT about projects as soon as possible to assure proposals will meet the requirements.

Documentation for the Enhance process for the 2018-2021 STIP is now available at the ODOT internet site: <http://www.oregon.gov/ODOT/TD/STIP/Pages/WhatsChanged.aspx>

Documents available on this site:

- Enhance Proposal Form
- Guide for Completing Enhance Proposal
- Enhance Proposal Review Process: An Overview
- Narrative Timeline

Due to the funding uncertainty at the state and federal levels, last spring the Oregon Transportation Commission delayed the 2017-2020 STIP cycle, therefore the next STIP will cover the period 2018-2021. It's important to note that an OTC decision on funding allocations for Enhance and for Fix-It won't be made until approximately June 2015, when it is anticipated that additional information on federal funding levels will be available.

The expectation of the OTC for Enhance is that projects selected move the state's multimodal transportation system forward. These projects can be state or local, but the emphasis should be on benefits to the state's multimodal transportation system. Additional information is contained in the documents referenced above.

### **Changes to this Round of Enhance**

After completion of the 2015-2018 STIP Update, ODOT conducted a survey to determine how the new Enhance process worked for STIP participants and reviewers. The department worked with a consultant to conduct an on-line survey and targeted interviews. Changes have been made to the process and documentation in response to the major recommendations from the evaluation.

Note that the first step in the process is pre-proposal consultations between ODOT staff and potential proposers and ACTs. Results of the survey indicated there was a need for more up-front discussions between ODOT and proposers to assist in identification of the best projects that meet statewide needs and prepare strong proposals that address these needs.

The report suggested some type of criteria, whether in the form of specific priorities or general guidance would ensure transparency and provide structure. Also, some survey respondents indicated a desire for a more structured review that includes evaluation criteria. Cross Modal Criteria were developed by the STIP Stakeholder Committee addressing: *Economic Development, Social Benefits, Environmental Stewardship, Safety, Leverage, Project Readiness*. Additionally, Modal Attributes for Transit, Bicycle/Pedestrian and Freight were developed by staff and the respective Statewide Advisory Committees addressing: *Connectivity and System Benefits; Safety and Public Health; Accessibility and Mobility*. You will find more information in the documents “Guide for Completing Enhance Proposal” and the “Enhance Proposal Review Process: An Overview”.

The evaluation results also suggested that reviewers may benefit from some additional time and/or guidance. A detailed guidance document for the review process was created, “Enhance Proposal Review Process: An Overview” and is available on the website noted above.

Final proposals are due by noon, Monday August 3, 2015.

Contact Art Anderson, ODOT at 541-774-6355, [Arthur.H.ANDERSON@odot.state.or.us](mailto:Arthur.H.ANDERSON@odot.state.or.us) for information specific to projects and Lisa Cortes, ODOT at 541-957-3634, [Lisa.CORTES@odot.state.or.us](mailto:Lisa.CORTES@odot.state.or.us) for proposal form questions.



**Middle Rogue**  
**Metropolitan Planning Organization**  
**Regional Transportation Planning**

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

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**DATE:** February 26, 2015  
**TO:** Technical Advisory Committee  
**FROM:** Dan Moore, AICP, Planning Coordinator  
**SUBJECT:** Target Rule Review

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In May 2011, the Land Conservation and Development Commission (LCDC) set greenhouse gas (GHG) reduction targets to guide metropolitan areas as they conduct land use and transportation scenario planning to help meet state goals to significantly reduce greenhouse gas emissions from light vehicle travel. The target rule (OAR 660-044) requires that the commission conduct an evaluation of the rule and decide – by June 2015 – whether revisions to the targets are warranted.

The Department of Land Conservation and Development (DLCD) has prepared the attached draft Target Rule Review Report to inform the commission’s review. (An executive summary and the full draft report are attached.) The draft report evaluates the results of scenario planning and summarizes other information that the commission is directed to consider in deciding whether or not amendments to the target rule are needed.

The department will brief LCDC on the draft report at its March 12 meeting in Salem. The department will present a final report and recommendation to the commission at its May 21 meeting. At the May meeting the commission will decide whether amendments to the target rule should be pursued. The department’s preliminary conclusion is that the target rules should be amended and updated to set targets for 2040 and to take into account new information about future vehicle technology, fleet and fuels. If the commission agrees that targets should be updated, the department would initiate the rulemaking process in Summer 2015.

The agenda for the March 12 LCDC meeting is available on the department’s website at: <http://www.oregon.gov/LCD/Pages/meetings.aspx> and the department’s staff report to the commission should be available tomorrow. Public testimony is welcome at both the March and May LCDC meetings. The department requests that written comments on the draft report be provided by April 17<sup>th</sup>. DLCD anticipates distributing a final report and recommendation to the commission in early May.

For further information about the target rule review please contact Bob Cortright by email at [bob.cortright@state.or.us](mailto:bob.cortright@state.or.us) or by phone at 503.934.0020.

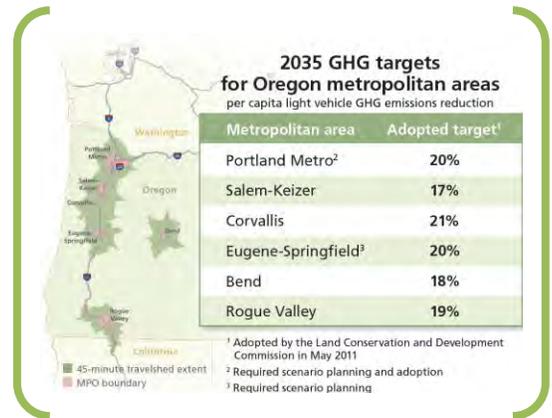


## Department of Land Conservation and Development

### Executive Summary

# DRAFT GHG TARGET RULE REVIEW REPORT

In 2011, the Land Conservation and Development Commission (LCDC) adopted greenhouse gas (GHG) emission reduction targets to guide **scenario planning by the state’s metropolitan areas**. The targets – and scenario planning – ask metropolitan areas to evaluate what changes to local and regional land use and transportation plans and programs would be needed to reduce GHG emissions from light vehicle travel by 20% per capita by 2035 – the planning horizon for most regional transportation plans. LCDC committed itself to review the targets in 2015 and decide whether amendments to the targets are warranted. The draft report summarized here is intended inform the **commission’s evaluation and decision**.

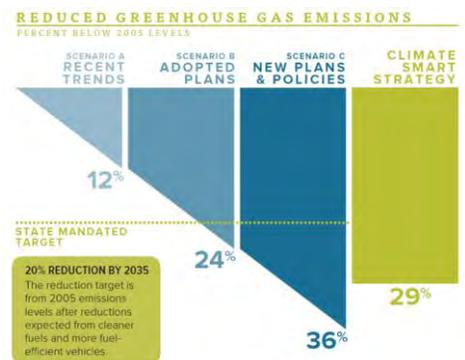


### SCENARIO PLANNING RESULTS

Over the last three years, three metropolitan areas (Portland Metro, Eugene-Springfield and Corvallis) and ODOT (through the Statewide Transportation Strategy) have conducted scenario planning projects. The four efforts reached consistent conclusions:

- Targets, which call for a 17-21% reduction in emissions per capita by 2035, are achievable.
- Meeting targets will require a comprehensive, coordinated strategy that includes a combination of complementary state, regional and local efforts that promote walkable communities and expand transportation options to reduce amount of driving people need to do.
- Substantial efforts and new funding to expand transportation options will be needed to:
  - Expand public transit
  - Provide incentives and price signals to promote options
  - Make walking and cycling more convenient
  - Promote compact, mixed use development
  - Better manage parking
- Policies and actions that reduce GHG emissions provide significant benefits to Oregon citizens, businesses, communities and the transportation system because they:
  - reduce household energy and transportation costs
  - improve air quality and public health, and
  - reduce congestion and improve operation of the transportation system
- Existing plans move us in the right direction but additional efforts - to expand transit and other transportation options, better manage parking and promote compact land use - will be needed to achieve targets.

Metro’s Climate Smart Strategy, adopted in December 2014, is expected to reduce GHG emissions by 29%. Metro found: “adopted local and regional plans can meet the state target if we make the investments and take the actions needed to implement those plans and make them a reality.



## NEW INFORMATION

Targets were set in 2011 based on direction from the Legislature and available forecasts about greenhouse gas emissions from light duty vehicles through the year 2035. Recent studies and new federal and state laws and programs provide an improved picture of future vehicle technology, fleet and fuels in 2035 and beyond. New information indicates:

- Fuel economy and per mile CO2 emissions are close to 2011 estimates
- Electric cars (EVs) and plug-in hybrids (PHEVs) are expected to come on line faster than previously forecast
- Fleet turnover will be slower than expected

Recalculating targets based on this new information would likely change the targets for 2035 but only slightly. However, metropolitan areas are now starting to look beyond 2035 as they conduct plan updates, with most looking out to 2040. Additional reductions will be needed to keep **the state “on track” to meet** 2050 goals.

## NEXT STEPS: AMENDING TARGETS?

LCDC is required to decide by June 1, 2015, whether the GHG reduction targets should be amended. The draft report identifies three factors that indicate changes to the targets are warranted:

- There is new information about vehicle technology, fleet and fuels that could lead to adjustments in metropolitan area targets
- **The state’s** metropolitan areas are – or soon will be - be updating long-range plans to accommodate growth beyond 2035. If targets and scenario planning are to be useful and relevant to these plans, then new targets for 2040 and potentially beyond will be needed.
- Two new metropolitan areas (MPOs) have been designated in the state (Albany and Grants Pass areas) and these areas do not currently have GHG targets.

This review also provides an opportunity to evaluate lessons learned from scenario planning and consider logical next steps to advance state, regional and local efforts to reduce GHG emissions. Scenario planning efforts are providing consistent answers about the set of programs and actions that are cost-effective in reducing emissions and that make Oregon communities more livable and Oregonians better off. These include expanding transit, using technology to better manage the transportation system, planning for more mixed use development, managing parking and adding incentives and pricing.

Moving forward the question will increasingly shift to figuring out how the broad strategies called for in scenario planning should be carried out. For example, scenario planning demonstrates the benefits of expanded transit service, but more detailed planning will be needed to decide where and how expanded transit service should be provided. At the same time, it is important to recognize that updating and refining plans is only part of what will be needed. Implementation will also require additional action by local, regional and state governments to expand transportation funding, especially for alternative modes, and put in place new programs to provide transportation options and incentives.

## REVIEW AND COMMENT ON THE DRAFT REPORT

The full draft report is available on the DLCD webpage: <http://www.oregon.gov/LCD/Pages/meetings.aspx> The department will brief LCDC on the draft report at its March 12, 2015 meeting in Salem. The department will present a final report and recommendation to the commission at its May 21 meeting. Public testimony is welcome at both the March and May LCDC meetings. The department requests that written comments on the draft report be provided by April 17<sup>th</sup>. For further information about the target rule review please contact Bob Cortright by email at [bob.cortright@state.or.us](mailto:bob.cortright@state.or.us) or by phone at 503.934.0020.

**DRAFT**

# Target Rule Review Report

Review of Metropolitan Greenhouse Gas Reduction  
Targets and Scenario Planning

**DRAFT REPORT**

*Please note that this is a **draft report** intended for public review and comment. Questions and comments on the report should be directed to Bob Cortright ([bob.cortright@state.or.us](mailto:bob.cortright@state.or.us) or 503.934.0020). LCDC will receive a briefing on the draft report at its March 12<sup>th</sup> meeting and is scheduled to decide whether amendments to the Target Rules are warranted at its May 21-22 meeting. The Department requests any written comments on the draft report be submitted by April 17<sup>th</sup>.*



Oregon Department of Land Conservation and Development

February 25, 2015

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## Executive Summary

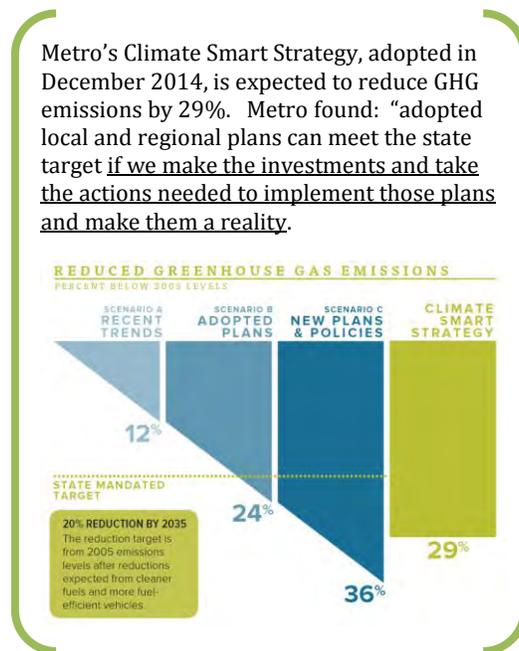
In 2011, the Land Conservation and Development Commission (LCDC) adopted greenhouse gas (GHG) emission reduction targets to guide **scenario planning by the state’s metropolitan areas**. The targets – and scenario planning – ask metropolitan areas to evaluate what changes to local and regional land use and transportation plans and programs would be needed to reduce GHG emissions from light vehicle travel by 20% per capita by 2035 – the planning horizon for most regional transportation plans. LCDC committed itself to review the targets in 2015 and decide whether amendments to the targets are warranted. This report is intended **inform the commission’s evaluation and decision**.



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Over the last three years, three metropolitan areas (Portland Metro, Eugene-Springfield and Corvallis) and ODOT (through the Statewide Transportation Strategy) have conducted scenario planning projects. The four efforts reached consistent conclusions:

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## NEW INFORMATION

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## NEXT STEPS: AMENDING TARGETS?

LCDC is required to decide by June 1, 2015, whether the GHG reduction targets should be amended. This report identifies three factors that indicate changes to the targets are warranted:

- There is new information about vehicle technology, fleet and fuels that could lead to adjustments in metropolitan area targets
- **The state’s** metropolitan areas are – or soon will be - be updating long-range plans to accommodate growth beyond 2035. If targets and scenario planning are to be useful and relevant to these plans, then new targets for 2040 and potentially beyond will be needed.
- Two new metropolitan areas (MPOs) have been designated in the state (Albany and Grants Pass areas) and these areas do not currently have GHG targets.

This review also provides an opportunity to evaluate lessons learned from scenario planning and consider logical next steps to advance state, regional and local efforts to reduce GHG emissions. Scenario planning efforts are providing consistent answers about the set of programs and actions that are cost-effective in reducing emissions and that make Oregon communities more livable and Oregonians better off. These include expanding transit, using technology to better manage the transportation system, planning for more mixed use development, managing parking and adding incentives and pricing.

Moving forward the question will increasingly shift to figuring out how the broad strategies called for in scenario planning should be carried out. For example, scenario planning demonstrates the benefits of expanded transit service, but more detailed planning will be needed to decide where and how expanded transit service should be provided. At the same time, it is important to recognize that updating and refining plans is only part of what will be needed. Implementation will also require additional action by local, regional and state governments to expand transportation funding, especially for alternative modes, and put in place new programs to provide transportation options and incentives.

# Background

House Bill (HB) 2001, adopted by the 2009 Legislature, and SB 1059 adopted by the 2010 Legislature, directed the Land Conservation and Development Commission (LCDC) to adopt greenhouse gas **emission reduction targets to guide the state’s metropolitan areas as they conduct land use and transportation scenario planning.**

## Target Rules

In May 2011, the Land Conservation and Development Commission (LCDC) adopted administrative rules, OAR 660 - 044<sup>1</sup>, **setting targets to guide long range planning by Oregon’s largest urban areas** to reduce greenhouse gas emissions from auto travel. The rule calls for metropolitan areas to explore ways to reduce emissions from auto and light truck travel by 17 percent to 21 percent per person by 2035.

The greenhouse gas reduction targets are intended to **help guide the state’s metropolitan areas;** Portland, Salem-Keizer, Corvallis, Eugene-Springfield, Rogue Valley and Bend as they update land use and transportation plans. Targets identify the level of reductions areas should seek to achieve. Except for the Portland metropolitan area planning to meet the targets is voluntary.

Targets and scenario planning are one part of state, regional and local efforts to **substantially shrink the state’s carbon footprint** over the next 40 years to meet the **state’s 2050 goal.** The Legislature directed LCDC to set targets to identify the amount of greenhouse gas reduction metropolitan areas need to achieve in order for the state to meet its overall reduction goal. **The state’s long term goal, established by Oregon lawmakers in 2007, is to reduce the state’s greenhouse gas emission to 75% below 1990 levels by 2050.** While the statewide goal is to reduce GHG emissions from all sources, targets are focused on emissions from light vehicle travel in metropolitan areas.



<sup>1</sup> OAR 660-044 [http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_660/660\\_044.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_660/660_044.html)

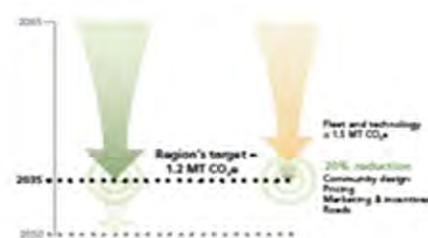
## Legislative Direction

The development and adoption of target rules by the commission in 2011 was guided by provisions of HB 2001 and SB 1059.<sup>2</sup> In determining whether amendments to the targets are warranted, the commission may also want to consider the legislature's direction for setting targets. In brief, the two statutes require that the metropolitan emission reduction targets:

- Must be consistent with achieving Oregon's greenhouse gas emissions reduction goals;
- Must be for 2035;
- Must be for light vehicle travel;
- May be different for each metropolitan area;
- Must equitably allocate responsibility for meeting targets considering differences in population growth rates;
- Must consider expected improvements in vehicle technologies and fuels; and
- Should be informed by the information and recommendations from the ODOT, DEQ and the Oregon Department of Energy.

## Targets

GHG reduction targets set the amount of GHG reduction that metropolitan plans should seek to achieve by the year 2035. Targets are for reductions in addition to reductions that are expected to occur from improvements in fuel efficiency, vehicle technology and changes in the vehicle fleet over the next 20 years. These fleet and technology changes are expected to significantly reduce emissions and get us close to meeting state goals.



<sup>2</sup> SB 1059 guided target setting for the state's metropolitan areas outside Portland Metro (Eugene-Springfield, Salem-Keizer, Rogue Valley, Bend and Corvallis):

".... on or before June 1, 2011, the Land Conservation and Development Commission, after consultation with and in cooperation with the Oregon Transportation Commission, local governments and metropolitan planning organizations, shall adopt rules identifying a reduction target for greenhouse gas emissions caused by motor vehicles with a gross vehicle weight rating of 10,000 pounds or less to be met by each region served by a metropolitan planning organization. The rules must reflect the greenhouse gas emissions reduction goals set forth in ORS 468A.205 and must take into consideration the reductions in vehicle emissions that are likely to result by 2035 from the use of improved vehicle technologies and fuels. The rules must also take into consideration methods of equitably allocating reductions among the metropolitan areas given differences in population growth rates. ... "(SB 1059, Section (5))

## **Agencies Technical Report (2011)**

In 2010-2011, ODOT, DEQ and the Oregon Department of Energy prepared the Agencies' Technical Report to fulfill their responsibilities under HB 2001 and SB 1059 to provide information and recommendations to support target setting. The full text of the report is available at: <http://www.oregon.gov/LCD/docs/rulemaking/2009-11/trac/techrpt.pdf>

## **Target Rulemaking Advisory Committee (TRAC) Report (2011)**

The Commission's work to develop targets was supported by the Target Rulemaking Advisory Committee (TRAC). TRAC reviewed the Agencies Technical Report and assisted the department in developing the Targets Rule (OAR 660-44). TRAC produced a report and recommendations to the Commission, including the recommendation that the commission conduct regular reviews of the target rule. [http://www.oregon.gov/LCD/docs/rulemaking/2009-11/trac/trac\\_report\\_to\\_lcdc.pdf](http://www.oregon.gov/LCD/docs/rulemaking/2009-11/trac/trac_report_to_lcdc.pdf)

The target rule includes assumptions developed in the 2011 Agencies Technical Report and recommended by the Target Rulemaking Advisory Committee (TRAC)<sup>3</sup>.

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<sup>3</sup> Target Rules, OAR 660-044-0010(2)(B) [http://arcweb.sos.state.or.us/pages/rules/oars\\_600/oar\\_660/660\\_044.html](http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_660/660_044.html)

## Target Rule Review Requirements

In developing the target rules, the department and commission recognized that the information relied upon to set targets was the commission was subject to change as additional studies are done and as new state and federal programs to reduce emissions from light vehicles are put in place. In addition, the department and commission anticipated that results of scenario planning efforts would provide valuable information about how targets might be adjusted to most effectively GHG reduction and other goals. For these reasons, the target rules require the commission to regularly review the targets to reflect new information and the results of various planning efforts to reduce greenhouse gas emissions.

Section 0035 of the target rules require the commission, by June 1, 2015, to review the target rules and determine whether or not amendments to the target rules are “warranted.” Section 2 of the rule lists a series of factors that the commission is to consider in its evaluation. The department is charged with preparing a report to assist the commission in conducting this review. The relevant rule requirements are as follows:

### **660-044-0035 Review and Evaluation of Greenhouse Gas Reduction Targets**

- (1) The commission shall by June 1, 2015, and at four year intervals thereafter, conduct a review of the greenhouse gas emissions reduction targets in OAR 660 044 0020 and OAR 660 044 0025.
- (2) The review by the commission shall evaluate whether revisions to the targets established in this division are warranted considering the following factors:
  - (a) Results of land use and transportation scenario planning conducted within metropolitan planning areas to reduce greenhouse gas emissions from light vehicles;
  - (b) New or revised federal and state laws or programs established to reduce greenhouse gas emissions from light vehicles;
  - (c) State plans or policies establishing or allocating greenhouse gas emissions reduction goals to specific sectors or subsectors;
  - (d) Policies and recommendations in the Statewide Transportation Strategy adopted by the Oregon Transportation Commission;
  - (e) Additional studies or analysis conducted by the Oregon Department of Transportation, the Department of Environmental Quality, the Oregon Department of Energy or other agencies regarding greenhouse gas emissions from light vehicle travel in metropolitan areas, including but not limited to changes to vehicle technologies, fuels and the vehicle fleet;
  - (f) Changes in population growth rates, metropolitan planning area boundaries, land use or development patterns in metropolitan planning areas that affect light vehicle travel in metropolitan areas;

- (g) Efforts by local governments in metropolitan areas to reduce greenhouse gas emissions from all sources;
- (h) Input from affected local governments and metropolitan planning organizations;
- (i) Land use feasibility and economic studies regarding land use densities;
- (j) State funding and support for scenario planning and public engagement; and
- (k) The share of light vehicle travel within a metropolitan area not attributable to residents of that area.

## Results of metropolitan scenario planning

### Review Factor

“The commission shall **consider** .... results of land use and transportation scenario planning conducted within metropolitan planning areas to reduce greenhouse gas emissions from light vehicles;” (OAR 660-044-0035(2)(a))

### Background

The purpose of targets is to guide metropolitan areas as they conduct scenario planning to evaluate what combination of policies, programs and actions would be need to achieve GHG reductions.

(3) Land use and transportation scenario planning is intended to be a means for local governments in metropolitan areas to explore ways that urban development patterns and transportation systems would need to be changed to achieve significant reductions in greenhouse gas emissions from light vehicle travel. Scenario planning is a means to address benefits and costs of different actions to accomplish reductions in ways that allow communities to assess how to meet other important needs, including accommodating economic development and housing needs, expanding transportation options and reducing transportation costs.

(4) The expected result of land use and transportation scenario planning is information on the extent of changes to land use patterns and transportation systems in metropolitan areas needed to significantly reduce greenhouse gas emissions from light vehicle travel in metropolitan areas, including information about the benefits and costs of achieving those reductions. The results of land use and transportation scenario planning are expected to inform local governments as they update their comprehensive plans, and to inform the legislature, state agencies and the public as the state develops and implements an overall strategy to meet state goals to reduce greenhouse gas emissions.

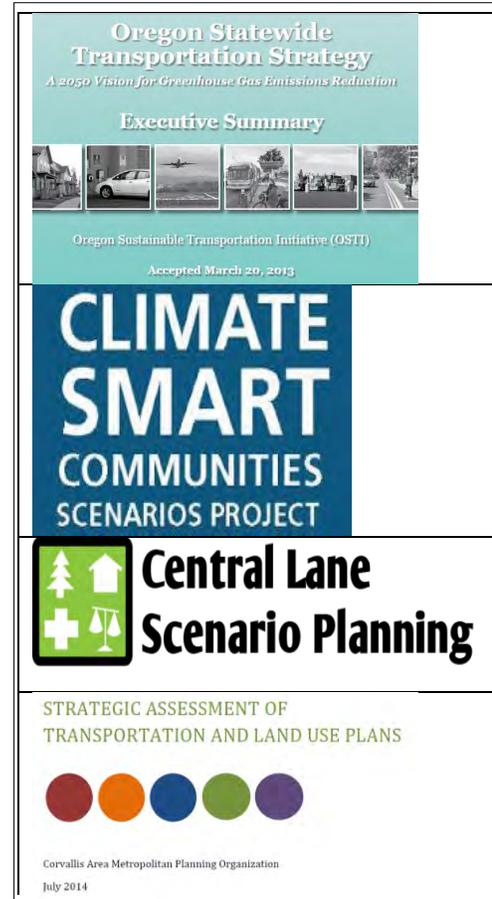
Targets were set for 2035 to correspond with the 20-25 year planning horizon of most metropolitan plans, with the expectation that metropolitan areas would conduct scenario planning in conjunction with updates of regional transportation plans. Because it was uncertain whether targets could reasonably be met or what combination of measures might be needed to meet targets, stakeholders asked that the commission consider how the results of scenario planning might inform targets.

## Analysis

### Scenario Planning Efforts

Over the last three years, four scenario planning efforts have been conducted to evaluate how land use and transportation plans can aid in reducing GHG emissions from light vehicle travel in metropolitan areas.

- In 2013, ODOT completed the Statewide Transportation Strategy (STS).
- Between 2011 and 2014, Metro conducted the Climate Smart Communities project which initially evaluated 144 scenarios and included extensive public outreach throughout the project. In December 2014, Metro adopted a preferred scenario that is expected to reduce GHG emissions by 29% per capita by 2035.
- Since 2012, the Central Lane MPO and jurisdictions within the Eugene-Springfield area have conducted the Central Lane Scenario Planning project.
- In 2014, the Corvallis Area MPO conducted a “strategic assessment”<sup>4</sup> of the region’s adopted plans – the first steps toward more detailed scenario planning.



### Results

Each of the scenario planning efforts conducted **reached similar conclusions** about “what it would take” to meet the **GHG reduction targets**. In general, each effort found:

- Targets are achievable. **Metro’s Climate Smart Communities Scenarios effort anticipates that** the region can reduce GHG emissions by 29% per capita by 2035, exceeding the 20% target set in the target rules.
- Meeting GHG targets will require increased public investment – especially in public transit and alternative modes – as well as new programs to provide options and incentives, to manage and price parking, and to realize mixed use development.
- New state policies and programs will be essential to achieving emission reductions. These include a shifting from the gas tax to a vehicle miles traveled (VMT) based road fee, pay-as-you-drive insurance, and new state and local programs to promote eco-driving and car-sharing. These state actions have a significant effect on reducing emissions and enhance the effectiveness of local and regional actions that expand transportation options.

<sup>4</sup> A “strategic assessment” is a first step in scenario planning. The strategic assessment uses the modeling tools developed for scenario planning (ODOT’s Regional Strategic Planning Model – RSPM) to forecast the likely outcomes from existing adopted regional land use and transportation plans. The results of a strategic assessment are intended to help a metropolitan area decide whether and how the region might conduct more involved scenario planning – or take other steps.

- Actions and programs that reduce GHG emissions result in significant benefits to Oregon citizens, businesses and communities. These include improving public health, reducing household energy and transportation costs, and improving performance of the transportation system. Adopted land use and transportation plans **have moved Oregon's metropolitan areas in** the right direction – by planning for a combination of increased transit, transportation options and compact, mixed use development.
- State and federal programs to improve vehicle fuel economy, promote the electrification of the vehicle fleet and reduce the carbon content of fuels are critical to meeting overall state goals to reduce GHG emissions from light vehicle travel. Without these efforts, much greater reductions in vehicle miles traveled (VMT) would be needed to meet GHG reduction goals.

Appendix A includes a summary of key assumptions and findings from the three metropolitan planning efforts.

<b>Scenario Planning Results Summary</b>			
Since 2011 four scenario planning efforts have been conducted to evaluate actions and programs that metropolitan areas can implement to meet state targets to reduce GHG emissions by about 20% per capita by 2035. The four efforts have reached similar conclusions about the combination of regional and local plans and policies that are effective in reducing GHG emissions. (A more complete summary of assumptions and analysis is provided in the Appendix to this report.)			
<b>ODOT Statewide Transportation Strategy</b>	<b>Portland Metro Climate Smart Strategy<sup>5</sup></b>	<b>Central Lane Scenario Planning</b>	<b>Corvallis Area Strategic Assessment</b>
<b>Expanded Transit Service</b>			
Percent increase in transit service from 2010-2035			
1.25x-6x	92%	38%	no change
<b>Compact Urban Growth</b>			
UGB expansion from 2010-2035 (Percent relative to population growth)			
UGB area expands at about 15% pop. growth rate	14% (+12,000 acres)	24% (+3,121 acres)	0% (+0 acres)
<b>Mixed Use Development</b>			
Percent of households living in mixed use neighborhoods			
2010	20%	26%	13%
2035	30%	37%	14%
<b>Increased Cycling and Walking Outcomes</b>			
Share of shorter trips (<10 miles) that shift from drive alone travel to bike travel 2010/2035			
2010	<10%	9%	6%
2035	15%-30%	17%	7%
Annual bike miles per capita			
2010	--	110	99
2035	110 (0.3/day)	174	193
Annual walk trips per capita			
2010	--	150	120
2035	142	196	123
<b>Transportation Options and Incentives</b>			
Percent of workers participating in employer-based commuter programs			
2010	5%-20%	20%	3%
2035	15%-40%	30%	3%
Percent of households participating in travel options programs (individualized marketing)			
2010	5%	9%	1%
2035	10%-70%	45%	2%
<b>Parking Management</b>			
Percent of workers that pay for workplace parking			
2010	0%-15%	13%	5%
2035	5%-30%	30%	5%
<b>GHG Target Reduction Outcome<sup>6</sup></b>			
Percent reduction in roadway GHG emissions per capita from 2005 to 2035			
--	-29%	-13%	-19%

<sup>5</sup> Values shown for Central Lane and Corvallis MPOs reflect their "Reference Case" analyses, while Metro values reflect the region's adopted "Preferred Scenario." The values shown are from the metropolitan versions of the GreenSTEP model.

<sup>6</sup> Each of the efforts listed assumed a set of state policies and actions would be implemented to reduce GHG emissions, such as: pay-as-you-drive insurance, programs to promote Eco-driving, a shift from the gas tax to a mileage-based road user charge, and other state-led actions.

Metropolitan Transportation Plan Updates

Targets were set for 2035 so they could be used by metropolitan areas for scenario planning conducted in conjunction with the update of long range regional transportation plans (RTPs). Metropolitan Planning Organizations (MPOs) report they are now anticipating plan updates that look beyond 2035. If targets are to be useful and relevant to metropolitan planning it would make sense to consider updated targets that correspond with MPO planning horizons.

<b>Metropolitan Transportation Plan Updates</b>		
<b>Metropolitan Area</b>	<b>Next RTP Update Due</b>	<b>Next RTP Planning Horizon</b>
Portland Metro	December 2018	2040
Salem-Keizer	May 2015	2035
Central Lane	December 2015	2040
Corvallis Area	March 2017	2041-2042
Rogue Valley	March 2017	2042
Bend	September 2015	2040
Middle Rogue (Grants Pass) <sup>7</sup>	March 2016	2040
Albany Area	March 2016	2040

**Implications for Target Update**

The scenario planning work that has been done indicates that programs and actions adopted as part of metropolitan land use and transportation plans are a feasible and effective way to achieve the **state's** GHG emission reduction goals. These efforts also show that policies and actions that reduce emissions also generate significant additional benefits or Oregon communities and citizens.

Since targets are intended to be used as metropolitan areas update their plans, it is important to recognize that metropolitan areas are starting to look beyond 2035. If targets are to be useful and relevant to metropolitan planning and to **achieving the state's GHG reduction goal, it would make sense to update targets to identify reductions needed by 2040 and potentially beyond.**

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<sup>7</sup> The Middle Rogue and Albany Area MPOs were designated as MPOs in 2013 and are currently preparing their first regional transportation plans.

## State and federal laws to reduce GHG emissions from light vehicles Additional studies by ODOT, DEQ, ODOE about light vehicle emissions

### Review Factors

“The commission shall consider ....

- New or revised federal and state laws or programs established to reduce greenhouse gas emissions from light vehicles; (OAR 660-044-0035(2)(b))
- Additional studies or analysis conducted by the Oregon Department of Transportation, the Department of Environmental Quality, the Oregon Department of Energy or other agencies regarding greenhouse gas emissions from light vehicle travel in metropolitan areas, including but not limited to changes to vehicle technologies, fuels and the vehicle fleet;” (OAR 660-044-0035(2)(e))

### Background

The Legislature, through HB 2001 and SB 1059, directed that targets identify the level of GHG reduction that each metropolitan area needs to achieve in order for the state to be on a trajectory to meet its 2050 goal of reducing emissions to 75% below 1990 levels. In addition, the Legislature directed that targets should identify the emission reduction needed above and beyond the reductions expected from improvements in vehicle technology and fuels and changes to the vehicle fleet. Accordingly, the target rules adopted in 2011 include detailed assumptions about the vehicle technology, fleets and fuels expected to be in place in 2035. State and federal laws and regulations set requirements that affect each of these factors. Targets were based on information and analysis available in 2011 as set forth in the Agencies’ Technical Report. The resulting baseline assumptions included in the rule are shown in Tables 1 and 2 from the target rules reproduced below:

**Table 1. Baseline Assumptions for Vehicle Technologies for Use in Land Use and Transportation Scenario Planning**

Vehicle Technologies			
Characteristic	1990 Model Year	2005 Model Year	2035 Model Year
Auto fuel economy—internal combustion engine	28 mpg	28 mpg	68 mpg
Light truck fuel economy—internal combustion engine	20 mpg	20 mpg	48 mpg
Auto fuel economy—plug-in hybrids in charge sustaining mode	—	—	81 mpg
Light truck fuel economy—plug-in hybrids in charge sustaining mode	—	—	56 mpg
% of autos that are plug-in hybrids or electric vehicles	—	—	8%
% of light trucks that are plug-in hybrids or electric vehicles	—	—	2%
Plug-in hybrids battery range	—	—	35 miles
Electric vehicles battery range	—	—	175 miles
Vehicle Fuels			
Characteristic	1990	2005	2035
% reduction in fuel carbon intensity from current levels	—	—	20%
Electric power sources compared to current Renewable Portfolio Standard	—	—	Meet
Vehicle Fleet			
Characteristic	1990	2005	2035
Average vehicle replacement rate	10 years	10 years	8 years

**Table 2. Additional Metropolitan Area Baseline Assumptions for Use in Land Use and Transportation Scenario Planning**

Metropolitan Area	% of Fleet that are Light Trucks			Light Vehicle Emission Rates (grams CO <sub>2</sub> e per mile)		
	1990	2005	2035	1990	2005	2035
Bend	37%	55%	36%	594	513	180
Corvallis	31%	45%	30%	596	494	174
Eugene-Springfield	32%	47%	31%	585	503	173
Portland Metro	30%	43%	29%	590	514	184
Rogue Valley	35%	50%	34%	605	507	181
Salem-Keizer	33%	47%	31%	592	510	177
Weighted Average	—	—	—	590	511	182

In adopting the target rules, the commission anticipated that forecasts of future vehicle technology, fuels and fleet mix would likely change, as new information became available and as new programs are adopted at the state and federal level. The results of this work can help refine or revise assumptions used to set targets.

(5) The greenhouse gas emissions reduction targets in this division are intended to guide an initial round of land use and transportation scenario planning over the next two to four years. The targets are based on available information and current estimates about key factors, including improvements in vehicle technologies and fuels. Pursuant to OAR 660-044-0035, the commission shall review the targets by June 1, 2015, based on the results of scenario planning, and updated information about expected changes in vehicle technologies and fuels, state policies and other factors. (OAR 660-044-0000)

## Analysis

In preparing this report, DLCD conferred with ODOT, DEQ and the Oregon Department of Energy to assess the effect of new laws, programs and regulations as well as additional studies conducted by the agencies – or other groups – regarding future forecasts for emissions from light vehicles. The results of this review are summarized and discussed below.

### New Information about Vehicle Technology, Fleet and Fuels

The Targets adopted in 2011 were based on detailed estimates about vehicle technology, fleet and fuels that will be in place by 2035. In 2012 and 2013, ODOT conducted additional analysis as it prepared the Statewide Transportation Strategy (STS) indicating that some assumptions have changed.

Change in outlook for 2035	Forecasts for 2035	
	Target Rule (2011)	Statewide Transportation Strategy (STS) (2013)
More Electrics (EVs) and Plug In Hybrids (PHEVs)	8% of new cars 2% of new trucks	23% of new cars 20% of new trucks
Slower fleet turnover	8 years	9 years
More pickups/ SUVs	~30% fleet	~33% of fleet
Fewer CO <sub>2</sub> per VMT	~180 grams per mile	~170 grams per mile

## Vehicle Technology/ Fuel Economy

New regulations that affect vehicle fuel economy have been put in place at both the state and federal level.

- In 2012 and 2013, Oregon DEQ, EPA and USDOT adopted closely harmonized greenhouse gas emission and fuel efficiency standards for automobiles and light trucks through the 2025 model year. At the end of that period, new vehicles are required to have a fleet average CO2 equivalent fuel efficiency of 54.5 mpg.
- In 2013, the Oregon Department of Environmental Quality (DEQ) joined eight other states by adopting **California's Zero** Emission Vehicle (ZEV) standards that require increasing percentages of new vehicle sales to be emission free vehicles.

These new regulations have allowed the agencies involved to make more detailed estimates of future trends in vehicle technology and likely emissions outcomes:

- In adopting the Low Emission Vehicle Rules, DEQ concluded that the new requirements would by 2025 result in a fleet average fuel efficiency for light-duty cars and trucks of more than 50 miles per gallon.<sup>8</sup> This improvement is consistent with estimates used in the 2011 Target Rulemaking.
- **DEQ anticipates that Oregon's decision to opt for California emission standards is likely to result in much more rapid adoption of battery electric vehicles (EVs) and plug-in hybrid vehicles (PHEV) than previously expected, which over time will produce corresponding reductions in emissions.**

The California Air Resources Board (CARB) publically projects that meeting AB32 by 2050, new light duty vehicle sales need to be 100% ZEVs. That means all **Battery Electric and Fuel Cell Vehicles. Oregon has adopted California's LEV and ZEV** programs and is required by the Clean Air Act to maintain requirements identical to **California's**. Therefore, **if Oregon continues to implement California's rules it's possible we may reach 100% ZEV sales by 2050. However, California's ZEV regulation often includes provisions that reduce the stringency of ZEV requirements in the states that "opt in" to the California program.** If that practice continues, we might expect the ZEV requirements to be about 15% less effective in Oregon.

While there is no guaranty Oregon will continue to implement the ZEV program, it is worth noticing that lifecycle ZEV costs are comparable to conventional vehicles with gasoline at \$4 per gallon. In addition ZEV performance is increasing and ZEV costs are **decreasing. The economics of ZEVs coupled with Oregon's strong environmental ethic** make this goal plausible.

The AB 32 Climate Change Scoping Plan Update issued May 2014 shows the fleet average GHG targets for the light duty fleet to be 125 g CO2/mi. in 2030 and 100 g

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<sup>8</sup> [http://www.oregon.gov/deq/EQC/Documents/2013AgendaDocs/December2013/P\\_LEV\\_StaffReport\\_final.pdf](http://www.oregon.gov/deq/EQC/Documents/2013AgendaDocs/December2013/P_LEV_StaffReport_final.pdf)

CO<sub>2</sub>/mi. in 2035. Those figures equate to new vehicle fleet average fuel efficiencies of 71 mpg in 2030 and 89 mpg in 2035.<sup>9</sup>

## Fuels

The target rules are based in part on estimates of the carbon content of the fuels by light vehicles. Forecasts for 2035 are based on assumptions about the mix of fuels that Oregon motorists are expected to use and estimates of carbon emissions associated with those fuel sources. Estimates include both tailpipe emissions, and emissions from production and transportation of energy (i.e. the **full “wells-to-wheels” estimate of carbon emissions.**) ODOE and DEQ monitor and forecast Oregon’s energy sources and their carbon footprint.

**ODOE advises that the sources of Oregon’s motor vehicle fuels are getting and expected to get “dirtier” as the state’s oil source shifts from cleaner Alaskan oil to other sources, including Bakken formation shale oil.** This shift in fuel source is expected to increase carbon emissions per mile in 2035.

The 2011 target rules assume that the carbon content of fuels will be reduced by 20% by 2035. The reduction in carbon content is expected largely to occur through **the state’s adoption and implementation of the Clean Fuels Program, which is Oregon’s version of California’s Low Carbon Fuel Standard (LCFS).**

On January 7, 2015, the Oregon Environmental Quality Commission approved the rules which lay out the next phase of the Oregon Clean Fuels Program. The rules took effect February 1, 2015. The approved rules:

- **Establish clean fuel standards to reduce greenhouse gas emissions from Oregon’s** transportation fuels by 10 percent over a 10-year period, implementing House Bill 2186, which the Oregon Legislature passed in 2009.
- Require importers of transportation fuels – owners of the fuel when it crosses into Oregon – to reduce the average carbon intensity of fuels they provide in Oregon to meet the annual clean fuel standards. To meet the standards, regulated parties can choose a variety of strategies, including incorporating more lower-carbon biofuels, natural gas, biogas, propane or electricity into their fuel mix, or purchase clean fuel credits from providers of clean fuels.
- Allow providers of clean fuels to generate and sell clean fuel credits for the fuels they provide in Oregon.
- **Establish fuel supply and fuel price deferrals to contain the program’s cost.**
- The Clean Fuels Program currently has a required sunset date of Dec. 31, 2015. The 2015 Oregon Legislature will consider whether or not to remove the sunset. If the Legislature removes the sunset, DEQ will continue to implement the program beyond 2015. If the Legislature does not remove the sunset, the program cannot be implemented.<sup>10</sup>

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<sup>9</sup> See page 47, paragraph 4. at: <http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm>

<sup>10</sup> DEQ, Oregon Clean Fuels Program, <http://www.deq.state.or.us/aq/cleanFuel/>

## Vehicle Fleet

No new state or federal programs have been adopted that guide composition of the vehicle fleet (i.e. percentage of automobiles v. light trucks (pickups and sport utility vehicles or the rate of fleet turnover (measured by the average age of light vehicles).

In preparing the STS, ODOT concluded that changes to the vehicle fleet were likely to be slower than those assumed in the target rules. Several factors contribute to this change:

- The eight-year fleet turnover forecast anticipated a shift from current trends in Oregon (of a 10-year turnover) to shorter turnover reflecting experience in the Northeastern US, where use of road salt causes vehicles to wear out more quickly.
- Since 2008, fleet turnover has been slow. The recent recession has caused people to hold on to vehicles longer. In addition, with households driving fewer miles per year, vehicles last longer and need to be replaced less often.
- The target rules also assumed a reduction in the share of the light vehicle fleet made up of light trucks. With a slowing of fleet turnover, the transition from light trucks to passenger cars has also slowed.

More recent analysis confirms that changes in the vehicle fleet are occurring more slowly than expected:

- In 2014, the federal Bureau of Labor Statistics (BLS) found that the average age of vehicles increased from 10.1 years in 2007 to 11.3 years in 2012.<sup>11</sup>
- Also in 2014, IHS Automotive forecast that this trend would continue with the average age of vehicles likely to remain at 11.4 years through 2015, then rise to 11.5 years by 2017 and 11.7 years by 2019.<sup>12</sup>

One encouraging trend, A growing share of light truck sales are made up of more fuel efficient “**crossovers**” or **crossover utility vehicles (CUVs)** – vehicles built on a car platform that include features of sport utility vehicle (SUV). Crossovers are generally smaller and get better mileage than other light trucks (i.e. pickup trucks, full size vans and sport utility vehicles.)

## Addressing Uncertainty

It is worth noting that detailed forecasts of future vehicle technology, fleet and fuels are based on a series of assumptions about how the future will unfold. While the assumptions that were used to develop the target rules and the STS are believed to be reasonable, a range of outcomes are possible that would affect the forecasts of VMT and GHG emissions. Here are several examples to illustrate how different assumptions might affect outcomes:

**Demographics:** Higher population could lead to more VMT, even at constant VMT per capita

**Economy:** Higher income could lead to higher VMT per capita, and affect ability to purchase new vehicles

**Fuel Price:** Low fuel prices could increase VMT per capita and reduce demand for high MPG

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<sup>11</sup> Bureau of Labor Statistics, America’s Aging Autos, Beyond the Numbers, May 2014, p. 1

<sup>12</sup> IHS Automotive, Average Age of Vehicles on the Road Remains Steady at 11.4 years, June 9, 2014.

vehicles

**Vehicle Technology:** EV efficiency and range or lack of supporting infrastructure might dampen market demand.

**Fleet mix:** Slower than expected reduction in share of light trucks given 10.5 year historical fleet turnover

**Liquid Fuels:** Delay in implementation of Oregon Low Carbon Fuel Standard would result in less reduction in carbon emissions per mile.

**Electric Power Generation Emissions:** Higher carbon intensity of electric generation would increase carbon emissions per mile.

**Land Use:** Low operating costs (fuel, improved MPG) might result in more dispersed development patterns and higher VMT

**Technology:** Adoption of autonomous/driverless vehicles might change travel behavior and land use patterns.

### **Implications for Target Rule Update**

Targets identify emission reductions that are needed above and beyond expected reductions from improvements to reduce vehicle emissions (i.e. improvements to vehicle technology, fleet and fuels).

The results of scenario planning confirm that state and federal programs to improve vehicle fuel economy, promote the electrification of the vehicle fleet and reduce the carbon content of fuels are critical to meeting overall state goals to reduce GHG emissions from light vehicle travel. Without these efforts, metropolitan targets would likely need to be much higher in order to meet **the state's** GHG reduction goals. Consequently, new or revised forecasts about vehicle technology, fleet and fuels are key factors to consider in assessing whether targets are adequate to keep the state **'on track'** to meeting its 2035 and 2050 goals.

Information provided by ODOT, DEQ and ODOE indicate a mix of positive and negative changes. Since 2011 the outlook for vehicle technology and fuel economy has improved, while expectations for changes to the vehicle fleet have become more conservative. More detailed analysis is needed to identify the net effect of these changes and to set targets for 2040 or beyond.

## State plans setting GHG emission reduction goals

### Review Factor

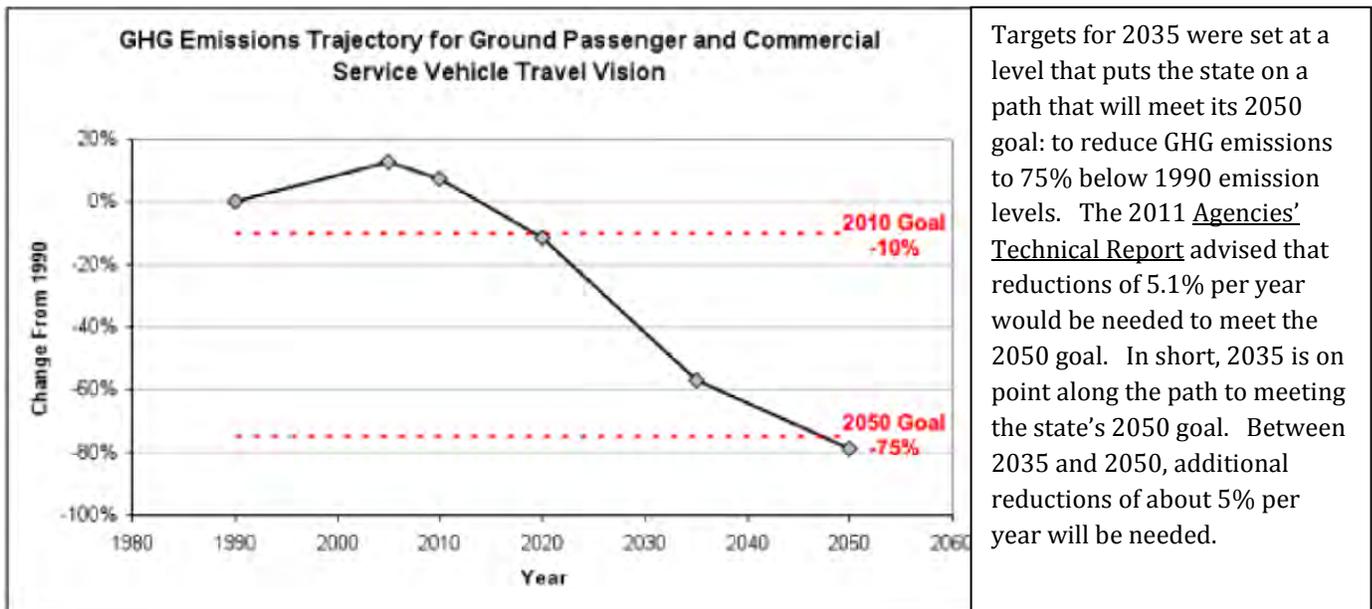
“The commission shall consider .... State plans or policies establishing or allocating greenhouse gas emissions reduction goals to specific sectors or subsectors;” (OAR 660-044-0035(2)(c))

### Background

Targets and scenario planning are viewed as part of a statewide effort to meet **the state’s adopted goal** of reducing greenhouse gas emissions to 75% below 1990 levels by 2050. State goals for GHG reduction are set forth in HB 3543 adopted by the 2007 Legislature.

The 2011 Targets were set at levels that assume that emissions from light vehicle travel in metropolitan areas will be reduced in proportion to the share of emissions generated by light vehicles in 1990. The commission agreed that this was a reasonable assumption absent any broader state policies or plans that set different goals for individual sectors or subsectors. The Commission anticipated that targets may need to be revised if statewide plans or policies set a different goal for either the transportation sector as a whole, or for light vehicles or metropolitan areas.

The 2035 GHG targets were also set at a level that would put the state on a path or trajectory that **would meet the state’s 2050 goal of reducing greenhouse gas emissions to 75% below 1990 levels.** In the 2011 Agencies’ Technical Report, ODOT, DEQ and ODOE recommended that targets assume a steady, year-by-year reduction in emissions to meet the target goal. They calculated that a 5.1% per year reduction in emissions would be needed for the state to reach the 2050 goal. The recommendation is reflected in the following chart:



### Analysis

While the state has not developed a formal plan or set of policies that allocate responsibility for meeting the statewide GHG reduction goal to specific sectors, several notable efforts have occurred over the last three years.

- In December 2012, Governor Kitzhaber released a 10-Year Energy Action Plan. The plan presents three core strategies in which the state can play a lead role in innovation, policy development and market transformation:
  1. Meeting 100 percent of new electric load growth through energy efficiency and conservation.
  2. Enhancing clean energy infrastructure development by removing finance and regulatory barriers to attract new investment and pursue promising new technologies.
  3. Accelerating the market transition to a more efficient, lower-cost and cleaner transportation system, including strategies for fleet vehicle conversion and access to cleaner-burning and more efficient vehicles.<sup>13</sup>

The transportation element of the plan endorses continuation of the OSTI program to support metropolitan scenario planning as an effective strategy to reduce GHG emissions from the transportation sector while creating healthier, more livable communities and greater economic opportunity. The relevant Action Item in the plan calls for:

The state, including DLCD, DEQ, and ODOT will continue to partner with MPOs to use scenario planning to quantify and forecast potential economic, environmental and equity impacts from different approaches as we look to reduce greenhouse gas emissions from the transportation sector.<sup>14</sup>

- In July 2012, the Oregon Department of Energy (ODOE) produced a detailed economic analysis of **alternative actions for reducing energy use and GHG emissions to support the Governor's 10-Year Energy Action Plan**.<sup>15</sup> The study evaluated the cost-effectiveness of a broad range of strategies in reducing GHG emissions and energy use. Findings from the study indicate that a number of the key actions called for in scenario planning and the Statewide Transportation Strategy are among the most cost effective means available to reduce greenhouse gas emissions on a \$/per ton abated. Key actions found to be highly cost effective include: carsharing, pay-as-you-drive insurance (PAYD), increasing walking and biking mode share; parking management, transportation demand management, eco-driving, and land use strategies supporting infill, mixed use and transit oriented development.
- In 2013, the Oregon Global Warming Commission (OGWC) submitted its most recent report to the legislature. The report summarizes state efforts and provides recommendations to the legislature.<sup>16</sup> Overall, the **OGWC finds that the state is “on track” to meet** its emissions goal in large part because the great recession has reduced economic activity. The GWC concludes that a recovering economy means Oregon will not be on track to meet its 2020 and 2050 goals.
- In March 2013, the Oregon Transportation Commission (OTC) accepted the Statewide Transportation Strategy (STS), which outlines a series of actions for further consideration to

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<sup>13</sup> Governor's Ten-Year Energy Action Plan, December 2012, [http://www.oregon.gov/energy/pages/ten\\_year/ten\\_year\\_energy\\_plan.aspx](http://www.oregon.gov/energy/pages/ten_year/ten_year_energy_plan.aspx)

<sup>14</sup> 10-Year Energy Action Plan, December 2012, page 35

<sup>15</sup> The Center for Climate Strategies, 10-Year Energy Action Plan Modeling, Greenhouse Gas Marginal Abatement Cost Curve Development and Macroeconomic Foundational Modeling for Oregon, July 2012.

<sup>16</sup> Oregon Global Warming Commission: Report to the Legislature 2013.

reduce GHG emissions. In preparing the STS, ODOT and OTC found that the passenger subsector **could meet the state's 75% reduction goal by 2050, but that other transportation subsectors** (i.e. air and freight movement) would likely be unable to meet the 75% goal. However, the STS did not recommend specific goals or targets for individual subsectors.

- In March 2014, ODOT developed an STS Short-Term Implementation Plan that calls for continued support of metropolitan scenario planning and related efforts as a key element of STS implementation.

### **Implications for Target Rule Update**

While the state has not yet adopted a statewide plan that formally allocates responsibility for meeting **GHG reduction goals, the state's commitment to** achieving the 2050 GHG reduction goal remains in place. **In addition, the state through the STS and the Governor's 10-Year Energy Action Plan** has reaffirmed the importance of metropolitan planning efforts to reducing emissions.

Without additional state-level policy direction about how responsibility for meeting GHG goals will be **met, it's unclear whether** the share of emissions reduction to be accomplished from light vehicle travel in metropolitan areas should be changed.

## Policies and recommendations in the Statewide Transportation Strategy

### Review Factor

“The commission shall consider ... **Policies and recommendations in the Statewide Transportation Strategy** adopted by the Oregon Transportation Commission;” (OAR 660-044-0035(2)(d))

### Background

SB 1059, which directed LCDC to adopt targets to guide scenario planning by metropolitan areas, also directed ODOT and the OTC to prepare a Statewide Transportation Strategy (STS), identifying a set of state level actions and policies to support state efforts to meet **the state’s greenhouse gas emissions** goals for the transportation sector.

In adopting the targets, the commission recognized that a combination of state and local efforts, including the Statewide Transportation Strategy, would be needed to reduce greenhouse gas emissions:

**(6) Success in meeting the targets will require a combination of local, regional and state actions. State actions include not only improvements in vehicle technology and fuels, but also other statewide efforts to reduce greenhouse gas emissions from light vehicle travel. These efforts—which are programs and actions to be implemented at the state level—are currently under review by the Oregon Department of Transportation as part of its Statewide Transportation Strategy to reduce greenhouse gas emissions. As metropolitan areas develop scenario plans to reduce greenhouse gas emissions and compare them to the targets in this division, it is incumbent that metropolitan areas and the state work as partners, with a shared responsibility of determining how local and statewide actions and programs can reach the targets. (OAR 660-044-000)**

Metropolitan areas use assumptions about statewide policies and programs, such as gas taxes, pay-as-you-drive insurance and eco-driving, as inputs to their analysis towards meeting GHG reduction targets.

### Analysis

In March 2013, the Oregon Transportation Commission accepted the Statewide Transportation Strategy (STS) developed by ODOT.<sup>17</sup> The STS identifies a range of policies, programs and actions that, if implemented, would result in significant reductions in GHG emissions from the transportation sector.

The STS looks out to 2050 and covers the entire transportation sector. The STS finds that the **“passenger” subsector**, which included metropolitan light vehicle travel, **is likely to meet state’s** reduction goal, but that air and freight sectors are not likely to reach 75% reduction by 2035.

The STS also confirms the need for a comprehensive and coordinated set of actions to reduce GHG emissions from light vehicle travel in metropolitan areas. The STS identifies a number of strategies that affect metropolitan areas, or that would be implemented in large part through metropolitan

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<sup>17</sup> <http://www.oregon.gov/ODOT/TD/OSTI/Pages/STS.aspx>

transportation and land use plans. The key strategies affecting metropolitan area planning are summarized in the following table.

<b>Trajectories for Key STS Strategies</b>			
The STS developed by ODOT identifies a range of land use and transportation strategies that would be effective in reducing greenhouse gas emissions from passenger travel. The STS includes “trajectories” that show the rate of implementation of key strategies that would be needed over the next 30-40 years to meet the state’s GHG reduction goal. While adopted metropolitan transportation and land use plans would make progress in carrying out each of these strategies, substantial new efforts would be needed in most areas, including funding public transit, and increasing bike and pedestrian travel.			
<i>STS Strategies</i>	<b>2010</b>	<b>2035</b>	<b>2050</b>
<b>Strategy 14 – Urban Growth Boundaries</b> Create full-service healthy urban areas to accommodate most expected population growth within existing Urban Growth Boundaries (UGB) through infill and redevelopment			
UGB expansion	UGBs expand at 15% rate of population growth		
<b>Strategy 9 – Intracity Transit Growth and Improvements</b> Investing in public transportation infrastructure and operations to provide more transportation options and help reduce single-occupancy vehicle travel.			
% increase in miles of service per capita over 2010	--	Metro – 100% Other MPOs – 125-600%	Metro -350% Other MPOs – 150% - 1000%
<b>Strategy 10 – Bicycle and Pedestrian Network Growth</b> Encourage local trips, totaling twenty miles or less round-trip, to shift from single-occupant vehicle (SOV) to bicycling, walking, or other zero emission modes.			
Share of short trips made by walking, cycling	Less than 10%	15-30%	30-40%
<b>Strategy 13 – Compact, Mixed-Use Development</b> Promote compact, mixed-use development to reduce travel distances, facilitate use of zero- or low-energy modes (e.g., bicycling and walking) and transit, and enhance transportation options.			
% of urban households living in compact, mixed use neighborhoods	20%	30%	More than 30%
<b>Strategy 7 – Transportation Demand Management</b> Support and implement technologies and programs that manage demand and make it easier for people to choose transportation options.			
% of urban area employees in TDM programs	5-20%	15-40%	25-50%
% of urban households in TDM programs	5%	10-70%	20-80%
<b>Strategy 5 – Parking Management</b> Promote better management and use of parking in urban areas to support compact, mixed-use development and use of other modes, including transit, walking and bicycling.			
% of workers in MPOs that pay for parking	0-15%	5-30%	15-50%
<b>Strategy 3 - Operations and Technology</b> Fully optimize the transportation system through operations and technology, including Intelligent Transportation System technology, including incident response, ramp-metering, and coordination of traffic signals.			
% of drivers practicing eco-driving	-	60%	70%
% arterial streets with coordinated traffic signals	-	-	95%

While the STS does not direct any specific actions or policies, the ODOT has developed a short-term implementation plan<sup>18</sup> to consider several of the actions identified in the STS over the next five years. One action element of the Short-Term Implementation Plan is a commitment to support scenario planning and strategic assessments by metropolitan areas:

Program #4: Strategic Assessments and Scenario Planning. Actions: Work with metropolitan planning organizations (MPOs) and associated jurisdictions on Strategic Assessments and scenario planning efforts, providing technical assistance and negotiating financial support.

ODOT will also be preparing a mid-range implementation plan, outlining additional actions to be considered between 2017 and 2032.

### **Implications for Target Rule Update**

Targets measure the combined effect of state and local policies to reduce greenhouse gas emissions from light vehicle travel in metropolitan areas. The results from the STS and metropolitan scenario planning indicate that state policies and actions have a significant effect in reducing emissions and are complementary to regional and local actions that encourage reduced driving and increased use of alternative modes.

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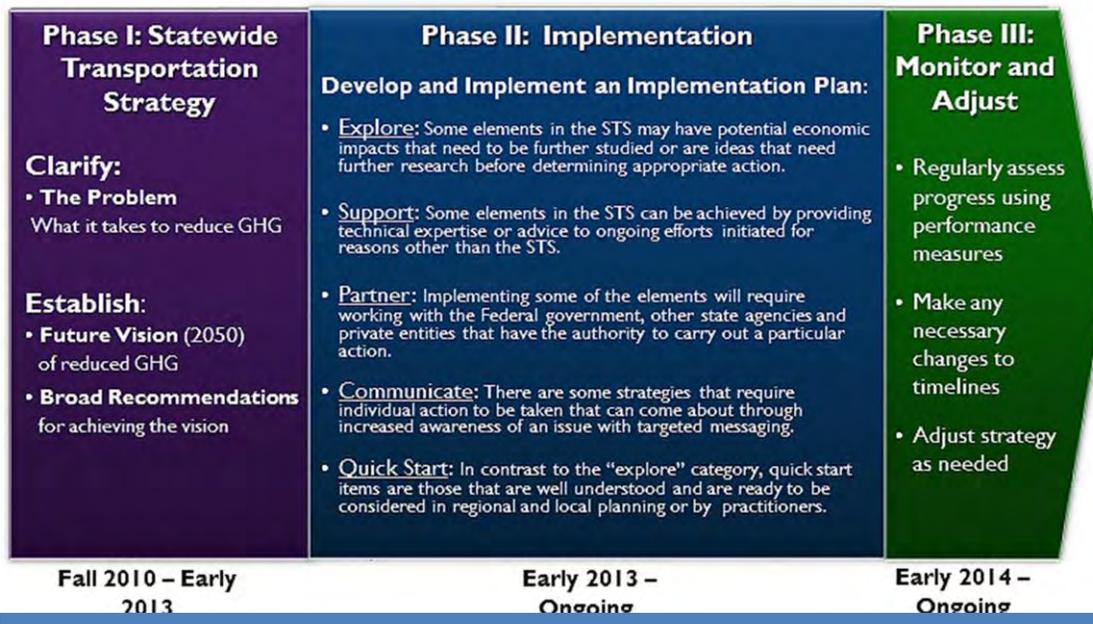
<sup>18</sup> [http://www.oregon.gov/ODOT/TD/OSTI/docs/STS/AttachA\\_STS%20Short-Term%20Implementation%20Plan\\_20140127.pdf](http://www.oregon.gov/ODOT/TD/OSTI/docs/STS/AttachA_STS%20Short-Term%20Implementation%20Plan_20140127.pdf)

## Statewide Transportation Strategy

The Oregon Statewide Transportation Strategy (STS): A 2050 Vision for Greenhouse Gas Emissions Reduction, was accepted by the Oregon Transportation Commission on March 20, 2013. It is a state-level scenario planning effort that examines all aspects of the transportation system, including the movement of people and goods, and identifies a combination of strategies to reduce greenhouse gas (GHG) emissions.

The STS identifies the most effective GHG emissions reduction strategies in transportation systems, vehicle and fuel technologies, and urban land use patterns. Beyond reducing GHG emissions, these strategies appear to lead to other benefits, including improved health, cleaner air, and a more efficient transportation system. These strategies will serve as the best tools available to help meet the state's GHG reduction goals while supporting other societal goals such as livable communities, economic vitality and public health. The STS is neither directive nor regulatory, but rather points to promising approaches that should be further considered by policymakers at the state, regional, and local levels. As summarized below and illustrated in the following graphic, the STS includes the following three phases:

- **Phase I** was the development of the STS document and public outreach. This phase concluded with the OTC's acceptance of the STS in March 2013.
- **Phase II** includes the development and execution of a series of implementation plans that define what STS strategies ODOT will pursue, how, and when. For activities outside the jurisdictional authority of ODOT, other agencies and organizations will need to determine their own course forward. Read additional information on [STS implementation](#).
- **Phase III** is the monitoring and adjustment phase which includes the tracking of progress over time and the periodic assessment and modification of the STS. Phase III is anticipated to be an on-going process.



## Changes in population, metropolitan boundaries, land use and development patterns

### Review Factor

“The commission shall consider .... Changes in population growth rates, metropolitan planning area boundaries, land use or development patterns in metropolitan planning areas that affect light vehicle travel in metropolitan areas;” (OAR 660-044-0035(2)(f))

### Background

Targets are based in part on expected population growth and are set on a *per capita* basis, representing the reduction needed to achieve a level of GHG emissions that is 75% below 1990 levels by 2050. Targets were based on forecasts of state and metropolitan population growth available in 2011. Changes to metropolitan area boundaries and development patterns might affect growth of emissions in individual metropolitan areas or the ability of metropolitan areas to achieve emissions reduction.

### Analysis

State population growth. The state population forecast for 2035 has been revised downward. The Agencies' Technical Report (prepared in 2011) assumed Oregon's population in 2035 would be 5.9 million. In December 2013, the Office of Economic Analysis (OEA) produced a new forecast, which indicates state population in 2035 will be 5.5 million, or 400,000 fewer residents than previously forecast.<sup>19</sup> OEA forecasts lower growth due to slowing of in-migration to Oregon. While official forecasts have been lowered, there is speculation that population will grow more rapidly than expected because Oregon will be less affected by climate change than other areas of the country.<sup>20</sup>

Metropolitan population growth. Change in metropolitan share of total growth / change in shares of individual metropolitan areas.

New metropolitan areas. In 2013, two new metropolitan areas were designated within Oregon: Albany Area, and Middle Rogue (Grants Pass area).

Changes to MPO boundaries. Minor changes in MPO boundaries have been made.

Metropolitan development patterns. Outside the Portland metropolitan area, there is limited information is available about changes in development patterns within metropolitan areas.

### Implications for Target Rule Update

Slightly lower population growth forecast for 2035 means slightly less reduction in emissions will be needed to meet state GHG reduction goals. At the same time, MPO transportation plans are now looking beyond 2035, many to 2040. Goals or targets for 2040 have not been set, but would need to reflect continued year by year reductions in emissions to keep the state on track to meet its 2050 goals. In addition, the commission should decide whether or not to set GHG reduction targets for the state's two new metropolitan areas.

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<sup>19</sup> [http://www.oregon.gov/DAS/OEA/docs/demographic/County\\_forecast\\_March\\_2013.xls](http://www.oregon.gov/DAS/OEA/docs/demographic/County_forecast_March_2013.xls)

<sup>20</sup> [http://www.oregonlive.com/opinion/index.ssf/2014/09/david\\_sarasohn\\_prepare\\_for\\_cli.html](http://www.oregonlive.com/opinion/index.ssf/2014/09/david_sarasohn_prepare_for_cli.html)

## Other efforts by metropolitan areas to reduce GHG emissions

### Review Factor

“The commission **shall consider** .... Efforts by local governments in metropolitan areas to reduce greenhouse gas emissions from all sources;” (OAR 660-044-0035(2)(g))

### Background

During the target rulemaking process, local governments and others expressed concern that targets for reducing emissions from light vehicle travel were overly prescriptive about reducing auto travel as a means to achieve GHG reduction. Several suggested that the state targets should give local governments more flexibility about how to achieve reductions in greenhouse gas emissions, for example, through improved energy conservation efforts or better home and building insulation. This factor asks that the commission evaluate whether other efforts by local governments are helping to achieve the state’s **overall goal to reduce GHG emissions**.

### Analysis

Several local governments have adopted local goals or programs to reduce greenhouse gas emissions.

- In 2009, the Portland and Multnomah County adopted a Climate Action Plan<sup>21</sup>. The plan sets a 40-year goal and roadmap for reducing community-wide GHG emissions by 80%. A 2012 progress report outlines specific actions that the city and county have taken and are considering to achieve this goal. The adopted plan includes objectives for 2030 to reduce VMT per capita by 30% from 2008 levels and create neighborhoods where 80-90% of city and county residents can walk or bicycle to meet daily needs. An update of the plan is currently in process.
- In July 2014, Eugene adopted a Climate Recovery Ordinance (CRO)<sup>22</sup>. The ordinance sets a city-wide 2030 goal of reducing fossil fuel use by 50% below 2010 levels. The ordinance directs the city council to adopt numerical two and five year targets and benchmarks for achieving the goal. In addition, city staff is directed to report on progress every two and five years, to assess progress and advise the council about the need for additional actions to achieve the benchmarks. A comparison **of Eugene’s CRO Goals with the** target rules indicates that the CRO goals, which call for a 50% reduction in fuel consumption by 2030, is somewhat more ambitious than the 20% GHG reduction target.<sup>23</sup>
- In Corvallis, a community group - the Corvallis Climate Action Plan Task Force – has developed and proposed a Climate Action Plan for adoption by the city. The draft plan is similar to the Eugene plan in that it proposes that the city adopt a goal to reduce fossil fuel use.
- Several cities have been worked with ODOT and state agencies to install electric vehicle charging stations.

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<sup>21</sup> The Portland and Multnomah County Climate Action Plan website: <https://www.portlandoregon.gov/bps/49989>

<sup>22</sup> <http://www.eugene-or.gov/archive.aspx?amid=&type=&adid=3237>

<sup>23</sup> Josh Roll, Central Lane MPO, “Relating the state GHG reduction target to Eugene Climate Recovery Ordinance”, September 10, 2014. Roll concludes meeting GHG targets will reduce fuel use by 43-45% by 2030, short of the city’s 50% reduction goal.

## **Implications for Target Rule Update**

While there have been some notable efforts by local governments in the last several years to acknowledge the problem of climate change and to take steps to reduce emissions, these efforts are not widespread. Local efforts like the Portland-Multnomah County Climate Action Plan and **Eugene's** Climate Recovery Ordinance are encouraging. For example, the planning and monitoring framework established by the CRO, if implemented, would be an effective approach to achieving emission reductions at the local level.

While there continue to be opportunities for local governments to reduce emissions from other **sectors, it's not clear at this time that such efforts would** replace or reduce the need to reduce emissions from the transportation sector. In addition, the economic analysis that has been done indicates that efforts to reduce vehicle emissions are feasible, cost effective and create other important benefits for Oregon communities and citizens.

## Input from local governments and MPOs

### Review Factor

“The commission shall consider .... input from affected local governments and metropolitan planning organizations;” (OAR 660-044-0035(2)(h))

### Background

Targets and the voluntary approach to scenario planning set forth in SB 1059 were developed in close coordination with local governments and metropolitan areas. SB 1059 was drafted in response to a 2010 report by the MPOGHG Task Force, **which included representatives from each of the state’s metropolitan areas.** Likewise, Target Rulemaking Advisory Committee (TRAC) included many of the same individuals. Both processes reflect an agreement that strong cooperation between local governments and the state is the most appropriate way to make progress:

**Success in meeting the targets will require a combination of local, regional and state actions. ....As metropolitan areas develop scenario plans to reduce greenhouse gas emissions and compare them to the targets in this division, it is incumbent that metropolitan areas and the state work as partners, with a shared responsibility of determining how local and statewide actions and programs can reach the targets.<sup>24</sup>**

### Analysis

In preparing this report, the department met with and interviewed metropolitan area planning staff, and met with the Oregon MPO Consortium. In addition, the department is providing a draft of this report to metropolitan local governments and MPOs to obtain their comments and suggestions about whether amendments to the target rules or other actions are warranted.

- Overall, local governments and MPOs have expressed support for continuation of the **state’s** current voluntary approach to scenario planning. There is also consensus that a Metro-like requirement to adopt and implement a preferred scenario that meets state targets is not appropriate. And, while they favor the voluntary approach metropolitan areas continue to express concern about the adequacy of resources provided and available to for metropolitan areas for land use and transportation planning. Some suggested that the state should, in addition to supporting voluntary efforts, add financial incentives to encourage metropolitan areas to engage in scenario planning and carry out other actions to reduce greenhouse gas emissions.
- There is broad agreement that scenario planning is most effective when it evaluates a broad range of outcomes, beyond GHG emissions, including public health, air quality, household transportation costs, energy use, etc. Metropolitan areas that have conducted scenario planning indicate that the public and decision-makers are much more supportive of efforts to reduce GHG emissions when they are able to understand the full range of outcomes and benefits to the community.

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<sup>24</sup> Target Rule, OAR 660-044-0000(6)

- The metropolitan areas that have conducted scenario planning indicate that additional work should be done to integrate efforts to reduce greenhouse gas emissions into the ongoing regional transportation process. **“Mainstreaming” GHG reduction into regional plan updates** would make efficient use of the limited resources available for metropolitan planning.
- Local governments observe that scenario planning shows that increased funding (especially for transit) as well as new and expanded state programs and incentives to promote transportation options are needed to achieve GHG emission reduction goals. MPOs and local governments are looking to ODOT and the state to provide leadership on providing needed funding and carry out state-level programs and actions that are identified in the State Transportation Strategy.
- The metropolitan areas that have conducted scenario planning indicate that there is a need for additional planning and state support to translate the high-level strategic recommendations from scenario planning, for actions like more transit service, or expanded employer transportation incentives, into specific local plans and actions.
- MPOs and local governments are also interested in developing modeling or analysis tools (or adapting existing travel or emissions models) to enable them to conduct a more precise analysis of GHG outcomes as they update metropolitan transportation plans. (GreenSTEP and RSPM, are *strategic* models, which have been helpful in identifying an overall approach for GHG reduction, but are operate too high a level to be useful for implementation of a preferred strategy through transportation system planning.)

### **Implications for Target Rule Update**

Because scenario planning is conducted by metropolitan local governments and MPOs, their views about various factors used to set targets and guide scenario planning are important.

Local decision-makers continue to be concerned about new state mandates and adequacy of funding to long range metropolitan planning efforts and needed improvements to the transportation system.

## Land use feasibility and economic studies

### Review Factor

“The commission shall consider .... Land use feasibility and economic studies regarding land use densities;” (OAR 660-044-0035(2)(i))

### Background

During development of the target rules, several stakeholders expressed concern that the higher density land use patterns that might be needed to accomplish emission reductions would not be **economically feasible or practicable, especially in Oregon’s smaller metropolitan areas.**

### Analysis

#### National Studies

An increasing number of national studies indicate changing demographics and consumer preferences are leading to increased demand for multifamily housing and a preference for more walkable, compact mixed use development patterns.

In 2013, a Federal Reserve report indicated that long-term demographic changes are causing a fundamental shift in housing demand in favor of multifamily housing:

The longer term outlook is especially positive for multifamily construction, reflecting the aging of the baby boomers and an associated shift in demand from single-family to multifamily housing. By the end of the decade, multifamily construction is likely to peak at a level nearly two-thirds higher than its highest annual level during the 1990s and 2000s. Notwithstanding renewed growth, the level of single-family construction is likely to remain moderate. By the end of the decade, it is likely to peak at a level comparable to what prevailed just prior to the housing boom. Thereafter, single-family construction is projected to contract at a moderate rate.<sup>25</sup>

A National Association of Realtors Survey in 2013 found that:

Most Americans now want to live in a walkable neighborhood where they can walk to shops and restaurants and parks, and many are willing to give up a large yard to do so. There is also a strong interest in having access to public transportation.

What is most revealing as an indicator of the current state of the real estate market is that the walkable community was preferred by recent movers (those who moved in the past three years) by 20 points (58% to 38%); and for those who plan to move in the next three years, the walkable neighborhood was preferred by an 18 point margin (57% to 39%).<sup>26</sup>

In 2014, the Environmental Protection Agency (EPA) reached similar conclusions:

Several trends point to a sustained increase in demand for infill development and a market opportunity for developers. Consumer preferences for the amenities that infill locations offer are likely to grow as changing demographics affect the housing market. In the next 20 years,

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<sup>25</sup> Jordan Rappaport, *The Demographic Shift from Single-Family to Multifamily Housing*, Federal Reserve Bank of Kansas City, Economic Review, 2013.

<sup>26</sup> Joseph Molinaro, *National Association of Realtors 2013 Community Preference Survey*. <http://www.realtor.org/reports/nar-2013-community-preference-survey>

the needs and preferences of aging baby boomers, new households, and one-person households will drive real estate market trends— and infill locations are likely to attract many of these people. As more people choose to live in infill neighborhoods, employers are following, and vice versa. Many corporations are moving to infill locations, in part because they recognize the competitive advantages of being closer to the central city.<sup>27</sup>

## Oregon Studies

Studies of changes in development trends and the outlook in Oregon's **metropolitan areas** are limited. The most detailed work has been done for the Portland metropolitan area by Metro.

- In September 2014, Metro released its most recent Urban Growth Report<sup>28</sup>. The report indicates that development over the last six years (from 2007-2012) showed a shift toward more infill, multifamily development and higher densities. Metro reports:
  - 58 percent of the net new residential units built inside the UGB were through redevelopment (46 percent) or infill (12 percent) and 42 percent were on vacant land.
  - new residential development was evenly split between multifamily and single-family units with a total of 12,398 single-family and 12,133 multifamily residences built
  - The average density of new single-family development was 7.6 units per acre (5,766 square foot average lot size) and multifamily development was 41.8 units per acre.
- State Office of Economic Analysis agrees housing demand will shift increasingly in favor of **multifamily housing**: “Economists and real estate experts agree that a larger share of multifamily is to be expected, certainly relative to the single family boom of the 1990s and 2000s. With credit availability still tight and a changed perspective on ownership following the bubble, expectations are that **the higher share of the population in rental units will continue.**”<sup>29</sup>
- The Department of Land Conservation and Development has commissioned an analysis of **historical land use efficiency in Oregon's cities in conjunction with the preparation of** administrative rules to implement the new urban growth boundary amendment process set forth in ORS 197A.300 through ORS 197A.320, adopted by the Oregon Legislature in 2013. The analysis has been prepared by the University of Oregon Community Service Center. Preliminary results of the analysis show that residential densities for single-family residential development in Oregon outside of the Portland Metropolitan Region have shown steady increase since 1990. This trend is apparent throughout the state, and is especially pronounced in larger cities. Additional research conducted by DLCD staff using decennial census data and building permit information from larger cities within the state shows that the percentage of multi-family development within these cities has been increasing as a result of development approved and built during the 2000 to 2013 period. One of the goals of the rules to be adopted to implement the new urban growth laws codified at ORS 197A.300 through ORS 197A.320 is to continue these trends toward greater efficiency of new residential development within the state.

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<sup>27</sup> Smart Growth and Economic Success, EPA Office of Sustainable Communities, February 2014, p i.

<sup>28</sup> Metro, 2014 Urban Growth Report, Revised Draft, September 2014, <http://www.oregonmetro.gov/sites/default/files/2014-urban-growth-report-Revised-Draft-FINAL.pdf>

<sup>29</sup> Josh Lerner, Office of Economic Analysis, “Portland Housing Outlook”, Oregon Economic News, November 6, 2014. <http://oregoneconomicanalysis.com/2014/11/06/portland-housing-pt-4-outlook/>

## **Implications for Target Rule Update**

The STS and scenario planning work done by Metro and Central Lane show that compact, mixed use development patterns are an important element of an overall strategy to reduce emissions. National studies indicate that market trends are supportive of increased densities and walkable mixed use development. Detailed study in Oregon is limited to the Portland metropolitan area, but that result is positive, indicating that higher density, mixed use development is increasingly economically feasible. Much less data is available for **Oregon's** other metropolitan areas, although each area can point to individual mixed use developments in downtowns and town centers.

# State support for scenario planning and public engagement

## Review Factor

“The commission shall consider .... State funding and support for scenario planning and public engagement;” (OAR 660-044-0035(2)(j))

## Background

In developing the target rules, the commission recognized that without additional state funding from metropolitan areas would lack resources needed to conduct scenario planning. HB 2001 and SB 1059 committed the state to provide funding to support scenario planning work by the Portland and Eugene-Springfield metropolitan areas, and to support voluntary efforts by other metropolitan areas.

## Analysis

ODOT and DLCDC through the Oregon Sustainable Transportation Initiative (OSTI), have provided financial and technical assistance to metropolitan areas to support scenario planning.

### Technical Support

ODOT has developed modeling tools to help metropolitan areas estimate greenhouse gas emission reductions and other important outcomes, such as transportation and energy costs for households and public health impacts. This includes the state-level GreenSTEP model, and a newer version, the Regional Strategic Planning Model (RSPM)<sup>30</sup> designed for use by metropolitan areas. Both models are designed to evaluate high level combinations of policies and actions aimed at reducing greenhouse gas emissions.

### Support for Public Engagement

ODOT has provided funds to Metro and Central Lane to conduct public outreach as part their scenario **planning work. Metro’s work included a broad range of public involvement** efforts over a four year period, including polling, on-line surveys, workshops and focus groups as well as more than 70 public **meetings to develop and review its proposed scenario. Central Lane’s two-year** public outreach process has included public meetings, a telephone survey, stakeholder workshops and development of **an online scenario feedback tool called “Future Builder.”**

In addition, ODOT has prepared a GHG Communications Best Practices guide<sup>31</sup> to help local jurisdictions and MPOs frame conversations about GHG reduction in ways that resonate with people.

### Support for Scenario Planning and Strategic Assessments

- As provided in HB 2001, ODOT – **has provided substantial funding support for Metro’s Climate Smart Communities Scenario project and Central Lane’s scenario planning. ODOT has also provided funding for a “strategic assessments” in Corvallis (completed in July 2014) and in the Rogue Valley (now getting underway.)**

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<sup>30</sup> Regional Strategic Planning Model,

[http://www.oregon.gov/ODOT/TD/OSTI/Pages/tools.aspx#Regional\\_Strategic\\_Planning\\_Model](http://www.oregon.gov/ODOT/TD/OSTI/Pages/tools.aspx#Regional_Strategic_Planning_Model)

<sup>31</sup> <http://www.oregon.gov/ODOT/TD/OSTI/docs/Media/Primer6.pdf>

- In 2012, ODOT and DLCD, working together through the Oregon Sustainable Transportation Initiative (OSTI) produced Scenario Planning Guidelines<sup>32</sup> and an online GHG Emissions Reduction toolkit<sup>33</sup>.
- In reports to the 2013 and 2014 Legislatures, ODOT has expressed its continued commitment to provide funding to metropolitan areas to support voluntary scenario planning. In February 2014, through the Short-Term Implementation Plan for the STS, ODOT committed to provide continued support for strategic assessments and scenario planning over the next five years (2014-2019). The Short-Term Implementation Plan commits ODOT to work with metropolitan areas and negotiate financial support on a case by case basis.

<b>Program #4: Strategic Assessments and Scenario Planning</b> <b>ODOT STS, Short Term Implementation Plan, February 2014</b>	
Actions	Work with metropolitan planning organizations (MPOs) and associated jurisdictions on Strategic Assessments and scenario planning efforts, providing technical assistance and negotiating financial support.
Level of Effort	<p>Moderate to High. Although the level of technical expertise of each MPO varies, the amount of support needed from ODOT for individual assessments is generally low. If all four MPOs (Corvallis, Bend, Salem-Keizer, and Rogue Valley) simultaneously request to engage in this process, the level of effort increases.</p> <p>ODOT evaluates requests for funding on a case-by-case basis and must consider available resources at the time of the request and will negotiate funding levels with each MPO. Funds support MPO data gathering and reporting.</p> <p>ODOT commits technical staff resources (as available) to run the analysis and produce results (approximately one-quarter of one position for a six month period for each Strategic Assessment). DLCD helps with data collection and reporting from their budget.</p> <p>If an area is interested in full-scale scenario planning ODOT will evaluate the amount of support available and negotiate accordingly. The level of effort for ODOT would be high with any full-scale scenario planning project, including significant staff and financial resources.</p>

### Implications for Target Rule Update

State funding and support have been and continue to be essential to enabling metropolitan areas to conduct scenario planning. Metropolitan areas are fully subscribed with work needed to meet other federal and state planning requirements. Since scenario planning is voluntary, without state support, local efforts to engage in or pursue scenario planning are likely to be limited.

<sup>32</sup> Scenario Planning Guidelines, <http://www.oregon.gov/ODOT/TD/OSTI/Pages/Scenarios.aspx>

<sup>33</sup> GHG Reduction Toolkit, <http://www.oregon.gov/ODOT/TD/OSTI/Pages/Scenarios.aspx>

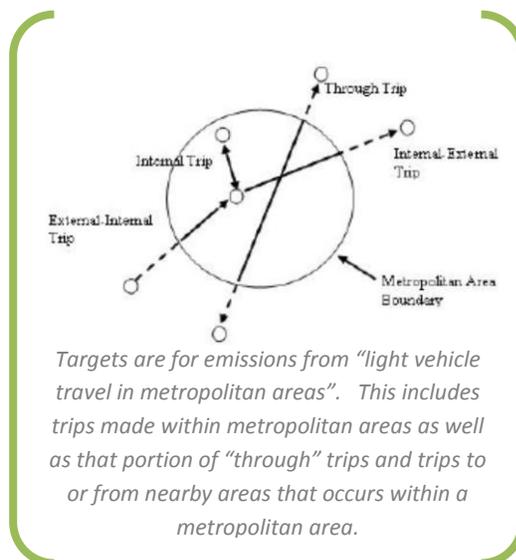
## Light vehicle travel from outside metropolitan areas

### Review Factor

“The commission shall consider .... The share of light vehicle travel within a metropolitan area not attributable to residents of that area;” (OAR 660-044-0035(2)(k))

### Background

HB 2001 and SB 1059 directed that targets address emissions from “light vehicle travel in metropolitan areas”. This includes travel that begins and ends within metropolitan areas, as well as “external trips” (i.e. trips that either pass through the metropolitan area or begin or end outside of the metropolitan area). Metropolitan areas have expressed concern that they have little ability to affect external trips, and asked that the commission consider this issue further as it evaluates the target rules. Detailed information about external travel was not available at the time targets were set, but the issue was expected to be evaluated in subsequent efforts, including by ODOT as part of the Statewide Transportation Strategy.



### Analysis

There is little new information available about external travel patterns near metropolitan areas.

ODOT reports that it did not conduct additional study of external travel as part of its modeling for the Statewide Transportation Strategy.

**Metro Urban Growth Report estimates that Metro’s “capture rate”** – the percentage of housing in the seven county area that includes Metro will occur within Metro’s UGB – will decline slightly for single family homes and increase slightly for multi-family homes. “The forecast distribution indicates 4% decrease in the total number of single-family units captured by local governments inside the UGB (from 68% in 2010 to 64% in 2035, and a slight (1%) increase in the number of multifamily units captured by local governments inside the UGB (from 83% in 2010 to 84% in 2035.”<sup>34</sup>

Scenario planning has not produced more detailed information. Models developed by ODOT to support metropolitan planning (GreenSTEP, RSPM) estimate travel by metropolitan area households. Non-metropolitan travel is **estimated “off model” by factoring growth of non-metropolitan households** based on current trends using traffic count information.

ODOT has suggested that the commission may want to consider changing the targets to apply to what its models are designed to measure – travel by metropolitan households. In addition, metropolitan areas with high levels of external trips – such as the Salem-Keizer area – remain concerned that targets that include external trips will make it more difficult for them to meet targets than areas with lower rates of external travel.

<sup>34</sup> Metro, Staff Report to Ordinance 12-1292, November 2012, p.5

## **Implications for Target Rule Update**

Estimating the amount of metropolitan GHG emissions that come from external travel remains a perplexing but important issue.

Emissions from external travel are important because metropolitan travel patterns clearly extend beyond metropolitan area boundaries. While metropolitan areas have limited ability to affect external travel, metropolitan area policies do have some effect. For example, it is important to understand whether metropolitan efforts to reduce GHG emissions might push development to outlying areas or increase travel to and from outlying areas.

The factoring approach used to estimating travel by non-metropolitan households appears to work reasonably well. Nonetheless, the scenario planning work that has been done to date has provided little new information about the effect of external travel on metropolitan area GHG emissions. Without better information, it is unclear how the targets should be changed.

Additional studies or analysis to evaluate how GHG emission outcomes differ for external and internal travel would be helpful.

Appendix A: Summary of Metropolitan Scenario Planning Analysis

Scenario Planning Summary: METRO MPO & Statewide Transportation Strategy				
Variable - Input/Output Factor	PORTLAND METRO			STS
	2010 Base	2035 SCENARIO A (Recent Trends)	DRAFT 2035 PREFERRED SCENARIO	2035 Trajectory Statewide Transportation Strategy
<b>Greenhouse Gas (GHG) Emission Levels</b>				
Target Rule GHG Reduction - Percent Per Capita By 2035	—	20%	20%	N/A
Local MPO Target Reduction Level	—	1.2	1.2	N/A
All Light Duty GHG Vehicle Emissions - Metric Tons CO2e Per Capita Per Year	3.7	1.3	1	1.33
GHG Reduction Percent in Addition to Reduction from Fleet & Technology (below 2005 levels)	—	12%	29%	N/A
GHG Reduction from Local Actions	—	N/A	N/A	N/A
GHG Reduction Percent Per Capita from Local PLUS State/Fed Actions	—	N/A	N/A	N/A
<b>Miles Traveled &amp; Fuel Consumption</b>				
Gasoline Fuel Price Per Gallon	\$ 2.43	\$ 6.43	\$ 5.53	\$ 5.53
Household VMT Per Day Per Capita	20	17	16	N/A
Percent Increase/Decrease in VMT Per Capita	—	-15%	-20%	N/A
Annual Vehicle Delay Per Capita (Hours)	N/A	N/A	N/A	N/A
Annual Vehicle Delay - Percent Travel Time Spent in Congestion	15%	21%	14%	N/A
Annual Fuel Consumption Per Capita (gallons)	760	310	250	N/A
Annual Vehicle Operating Cost Per Household Per Year	\$ 2,600	\$ 2,700	\$ 2,790	N/A
Total Annual Vehicle Ownership Cost Per Household Per Year	\$ 3,400	\$ 3,500	\$ 4,910	N/A
<b>Community Design &amp; Land Use</b>				
Percent Households (HH) Living in Mixed Use Areas <sup>†</sup>	26%	36%	37%	30%
Workers Participating in Employer-Based Commuter Programs	20%	20%	30%	N/A
UGB Expansion Acres	—	28,000 acres	12,000 acres	15% of the rate of metro area population growth
<b>Alternative Modes</b>				
Daily Transit Revenue Miles Per Capita	1.0 (Base)	0.8X	1.4X	1.25 - 6 times current levels
Daily Transit Revenue Hours	4,900	5,600	9,400	N/A
SOV to Bike Trips Shift (<10 Miles one way)	9%	10%	17%	15% - 30%
Annual Walk Trips Per Capita	150	180	196	142
Annual Bike Miles Per Capita	110	110	174	110
Bicycle Mode Share	N/A	N/A	N/A	N/A
<b>Pricing, Marketing and Fleet</b>				
State Gas Taxes Per Gallon	\$0.42	\$0.48	\$0.48	\$0.55
Average Parking Costs Per Day (2005)	\$5.00	\$5.00	\$4.00	\$9.00
Percent Employees Paying to Park	13%	13%	30%	5%
Percent Non-Work Trips Paying to Park	8%	8%	30%	N/A
Household Pay As You Drive Insurance (\$0.06/mile & \$0.05/mile in preferred scenario)	0%	20%	40%	≤ 100%
Percent Households Participating in Targeted Marketing Programs	9%	30%	45%	10%-70%
Car Sharing (# of Vehicles)	1%	1%	2%	2%-4%
Share of Light Trucks	43%	29%	29%	14% Decrease
Fuel Efficiency (mpg) New Cars + Light Trucks by Model Year Average	29.2A/20.9LT	68.5A/47.7LT	68.5A/47.7LT	53
Electric/Hybrid Vehicles Market Share (autos)	1%	8%	8%	8%

Model Inputs in ITALICS; Model Outputs in REGULAR type.

<sup>†</sup>Mixed Use Area Households is both an input, and an output sensitive to assumed district densities.

SOURCES:

- 1 - METRO data: Phase 1 Metro GreenSTEP Scenarios Technical Documentation, January 2012; CSC Scenarios First Look At Results, November 13, 2013; Shaping the Preferred Approach, April 2014; Phase 3 draft approach modeling input, June 16, 2014; Update from Metro staff, Jan. 2015
- 2 - STS data: Oregon STS, Vol. 2, Technical Appendices; OAR 660 Div. 044, Table 1

NOTE: The Regional Strategic Planning Model (RSPM) was formerly known as GreenSTEP. The name change reflects expanded capabilities for metropolitan area planning applications, while addressing a more general set of transportation and land use considerations in addition to greenhouse gas emissions.

Scenario Planning Summary: CLSP & Statewide Transportation Strategy				
Variable - Input/Output Factor	CENTRAL LANE			STS
	2010 Base	2035 REFERENCE CASE	2035 Preferred Scenario <sup>1</sup>	2035 Trajectory Statewide Transportation Strategy
<b>Greenhouse Gas (GHG) Emission Levels</b>				
Target Rule GHG Reduction - Percent Per Capita By 2035	—	20%	20%	—
Local MPO Target Reduction Level*	—	1.05	?	—
Households Only GHG Vehicle Emissions - Metric Tons CO <sub>2</sub> e Per Capita Per Year	3.49	1.28	?	1.33
All Light Duty GHG Vehicle Emissions - Metric Tons CO <sub>2</sub> e Per Capita Per Year	not provided	2.5%	?	—
GHG Reduction from Local Actions	—	2.3%	?	—
GHG Reduction Percent Per Capita from Local PLUS State/Fed Actions**	—	12%	?	—
<b>Miles Traveled &amp; Fuel Consumption</b>				
Gasoline Fuel Price Per Gallon	\$2.43	\$ 5.53	\$ 5.53	\$ 5.53
Household VMT Per Day Per Capita	21.7	22.2	?	—
Percent Increase/Decrease in VMT Per Capita	—	2.3%	?	—
Annual Vehicle Delay Per Capita (Hours)	30.0	41.0	?	—
Annual Fuel Consumption Per Capita (gallons)	340	150	?	—
Annual Vehicle Operating Cost Per Household Per Year	\$ 2,388	\$ 2,218	?	—
Total Annual Vehicle Ownership Cost Per Household Per Year	\$ 5,529	\$ 6,489	?	—
<b>Community Design &amp; Land Use</b>				
Percent Households (HH) Living in Mixed Use Areas***	12.9%	14.4%	7%	30%
Workers Participating in Employer-Based Commuter Programs	2.5%	3.0%	?	—
UGB Expansion Acres	—	3,121 acres	3,121 acres	15% of the rate of metropolitan area population growth
<b>Alternative Modes</b>				
Daily Transit Revenue Miles Per Capita	13	18	?	1.25-8 times current levels
SOV to Bike Trips Shift (<10 Miles one way)	6%	7%	?	15-30%
Coburg	0.00%	0.01%	?	—
Eugene	7.70%	15.00%	?	—
Springfield	2.20%	6.00%	?	—
Annual Walk Trips Per Capita	120	123	?	142
Daily Bike Miles Per Capita	0.27	0.53	?	0.3
<b>Pricing, Marketing and Fleet</b>				
Federal, State and Local Gas Taxes Per Gallon	\$0.46	\$0.54	\$0.55	\$0.55
Average Parking Costs Per Day (fee payers only)	\$3.19	\$2.74	?	\$5.00
Percent Employees Paying to Park	not provided: 2005 #	5%	7%	5%
Coburg	4.0%	4%	7%	—
Eugene	8.0%	7%	7%	—
Springfield	5.0%	4%	7%	—
Percent Non-Work Trips Paying to Park	not provided: 2005 #	2%	7%	—
Coburg	0.0%	0%	7%	—
Eugene	4.0%	4%	7%	—
Springfield	1.0%	1%	7%	—
Household Pay As You Drive Insurance (\$0.05/mile)	0%	0%	7%	≤ 100%
Percent Households Participating in Targeted Marketing Programs	1%	2%	7%	10%-70%
Car Sharing # of Vehicles	3	3	?	2%-4% of all
Share of Light Trucks	49%	31%	?	14% Decrease
Fuel Efficiency (mpg) Cars + Light Trucks Average	24	54	53	53
Electric Vehicles Share of All Autos	1%	8%	7%	8% (Target Rule)

Model Inputs in ITALICS; Model Outputs in REGULAR type.

1 - Central Lane Preferred Scenario currently under development. Preferred Scenario selection expected mid-2015.

\*See Central Lane Scenario Planning documentation, July 2014

\*\*Includes state-led policies: pay-as-you-drive insurance, road user fee, social cost recover, electricity renewables, eco-drive, low roll tires, household MPG optimization

\*\*\*Mixed Use Area Households is both an input, and an output sensitive to assumed district densities.

**SOURCES:**

1 - CLMPO data: Central Lane Scenario Planning (CLSP), Greenhouse Gas Reduction Policies, January 21, 2014;

2 - CLSP Reference Case Results and Assumptions, March 11, 2014

3 - STS data: Oregon STS, Vol. 2, Technical Appendices; OAR 660 Div. 044, Table 1

NOTE: The Regional Strategic Planning Model (RSPM) was formerly known as GreenSTEP. The name change reflects expanded capabilities for metropolitan area planning applications, while addressing a more general set of transportation and land use considerations in addition to greenhouse gas emissions.

Strategic Assessment Summary: CAMPO & Statewide Transportation Strategy				
Variable - Input/Output Factor	CORVALLIS			STS
	2010 Base	2035 REFERENCE CASE	2035 Preferred Scenario <sup>2</sup>	2035 Trajectory Statewide Transportation Strategy
<b>Greenhouse Gas (GHG) Emission Levels</b>				
Target Rule GHG Reduction - Percent Per Capita By 2035	--	21%	21%	--
Local MPO Target Reduction Level*	--	0.7	0.7	--
Households Only GHG Vehicle Emissions - Metric Tons CO <sub>2</sub> e Per Capita Per Year	3.6	1.37	--	1.33
All Light Duty GHG Vehicle Emissions - Metric Tons CO <sub>2</sub> e Per Capita Per Year	2.2	0.90	--	--
GHG Reduction from Local Actions	--	2.1%	--	--
GHG Reduction Percent Per Capita from Local PLUS State/Fed Actions**	--	18.50%	--	--
<b>Miles Traveled &amp; Fuel Consumption</b>				
Gasoline Fuel Price Per Gallon	\$ 2.43	\$ 5.53	\$ 5.53	\$ 5.53
Household VMT Per Day Per Capita	22.0	22.7	--	--
Percent Increase/Decrease in VMT Per Capita	--	3%	--	--
Annual Vehicle Delay Per Capita (Hours)	20.2	23.0	--	--
Annual Fuel Consumption Per Capita (gallons)	374	173	--	--
Annual Combined Vehicle Operating & Ownership Costs Per Household Per Year	\$ 8,344	\$ 9,882	--	--
<b>Community Design &amp; Land Use</b>				
Percent Households (HH) Living in Mixed Use Areas***	14.4%	14.7%	30%	30%
Workers Participating in Employer-Based Commuter Programs	2.1%	2.2%	--	--
UGB Expansion Acres	--	No Expansion 21% Pop. Growth 2010-2035	--	15% of the rate of metropolitan area population growth
<b>Alternative Modes</b>				
Daily Transit Service Miles Per Capita	6.24	6.24	--	1.25-6 times current levels
SOV to Bike Trips Sh/ft (<10 Miles one way)	9%	12%	--	15-30%
Annual Walk Trips Per Capita	131	134	--	142
Daily Bike Miles Per Capita	0.4	0.5	--	0.3
Bicycle Mode Share (RTP)	9.00%	12%	12%	--
<b>Pricing, Marketing and Fleet</b>				
Federal, State and Local Gas Taxes Per Gallon	\$0.42	\$0.48	\$0.48	\$0.55
Average Parking Costs Per Day (fee payers only)	\$3.30	\$3.35	\$3.35	\$5.00
Percent Employees Paying to Park	1.5%	16.0%	16.0%	5%
Percent Non-Work Trips Paying to Park	6.5%	13.7%	13.7%	--
Household Pay As You Drive Insurance (\$0.05/mile)	0%	0%	0%	≤ 100%
Percent Households Participating in Targeted Marketing Programs	1%	5%	5%	10%-70%
Car Sharing # of Vehicles	2	50	50	2%-4% of all
Share of Light Trucks	37%	30%	30%	14% Decrease
Fuel Efficiency (mpg) Cars + Light Trucks Average	24	54	54	53
Electric Vehicles Share of All	2%	8%	8%	[8% Target Rule]

Model Inputs in ITALICS; Model Outputs in REGULAR type.

\* See Corvallis Strategic Assessment, Table 2, Pg. 16

\*\*Includes state-led policies: pay-as-you-drive insurance, road user fee, social cost recovery, electricity renewables, ecoderive, low roll tires, household MPG optimization

\*\*\*Mixed Use Area Households is both an input, and an output sensitive to assumed district densities

**SOURCES:**

- 1 - CAMPO data: Strategic Assessment (July 2014) and appendices; Strategic Assessment Presentation to Policy Committee, July 9 2014
- 2 - CAMPO Scenario Planning now underway. Results expected late 2015.
- 3 - STS data: Oregon STS, Vol. 2, Technical Appendices; OAR 660 Div. 044, Table 1

**NOTE:** The Regional Strategic Planning Model (RSPM) was formerly known as GreenSTEP. The name change reflects expanded capabilities for metropolitan area planning applications, while addressing a more general set of transportation and land use considerations in addition to greenhouse gas emissions.