



FINANCING REPORT

**OREGON SUSTAINABLE TRANSPORTATION INITIATIVE
RESPONDING TO SENATE BILL 1059 SECTION 8**

JANUARY 27, 2011

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EXECUTIVE SUMMARY

Chapter 85 Oregon Laws 2010 Special Session (Senate Bill 1059) anticipates that Oregon's metropolitan areas¹ will conduct scenario planning to assess land use and transportation planning alternatives for reducing greenhouse gas (GHG) emissions from light vehicles (10,000 pounds or less). Section 8 of Senate Bill 1059 directs the Oregon Department of Transportation (ODOT) and the Oregon Department of Land Conservation and Development (DLCD), in cooperation and consultation with local governments within metropolitan areas, to estimate the funding needed to prepare and evaluate land use and transportation scenarios and to identify potential funding sources for this work.

Major Findings

Through the compilation of this report, in consultation and cooperation with counties and cities within Metropolitan Planning Organization (MPO) boundaries, Oregon's six MPOs, and the Oregon MPO Consortium, four key conclusions have become evident:

- **It is too early to accurately estimate costs to conduct land use and transportation scenario planning.** The definition and scope of scenario planning will depend on other efforts called for in Senate Bill 1059, which are currently incomplete. Efforts are underway to develop a Statewide Transportation Strategy for GHG emission reduction, compile a Toolkit with analysis tools and reduction strategies, and define and develop Scenario Planning Guidelines. Most importantly, metropolitan area GHG reduction Targets have yet to be set. Each of these work products will help to better define jurisdictional responsibilities, scope, and components of scenario planning. Without these products, costs can only be estimated in ranges, and compared as orders of magnitude.
- **Existing governance structures require that scenario planning be a collaborative effort between MPOs, counties, and cities.** While each metropolitan area has a MPO to conduct and coordinate regional transportation planning, scenario planning involves evaluation of land use choices that are the province of counties and cities.² A collaborative planning and decision-making model allows agreement to be reached by each of the jurisdictions within a metropolitan area.
- **Existing MPO, county, and city staff are fully subscribed with current planning responsibilities.** These responsibilities vary in complexity and scope across jurisdictions. There also exist differences within each area relative to

¹ Metropolitan areas are defined as locations within the boundaries of a Metropolitan Planning Organization (MPO). In Oregon there are six MPOs: Portland Metro, Central Lane (Eugene-Springfield), Salem-Keizer, Rogue Valley (Medford), Bend, and Corvallis. Portland Metro is covered under the 2009 Jobs and Transportation Act (House Bill 2001), Sections 37 and 38, not Senate Bill 1059. While covered under separate legislation, Metro is referenced throughout the report for comparison purposes.

² Portland Metro relies on a collaborative process; however, Metro has independent land use authority.

planning tools and resources. Staff and financial resources will have to be augmented to do scenario planning for GHG emission reduction.

- **MPOs, counties, and cities will need significant support from the state (e.g., leadership, funding and technical assistance) to be successful.** Tools and resources have not kept pace with planning needs and expectations. It will be important to integrate scenario planning with existing MPO, county and city planning processes, and have sufficient funding provided.

This report provides a best estimate of some of the early funding needs associated with scenario planning. It does not address the process or the need for doing scenario planning for GHG emission reduction.

The focus of Senate Bill 1059 is on reducing GHG emissions from the transportation sector, specifically light vehicles (10,000 pounds or less). Light-duty vehicles are only one contributor to transportation-related emissions. Furthermore, transportation is only one of many sectors emitting greenhouse gases. Local governments in metropolitan areas are interested in considering multiple policies, programs and techniques to reduce GHG. Section 3 of Senate Bill 1059 encourages and allows local government flexibility to meet their needs and to take into account the full range of transportation and land use actions.

Scenario Planning

Scenario planning is not explicitly defined in Senate Bill 1059, but is referred to as a process for developing and evaluating several possible land use and transportation alternatives for a metropolitan area that may reduce GHG emissions. Guidelines for scenario planning are being developed as specified in the legislation, but are not yet complete and details have not been fully defined. Thus, assumptions were made in this report as to the general components of scenario planning in Oregon. These are likely to include:

- Agreement on a scenario planning process.
- Development of a baseline scenario.
- Development of multiple scenarios.
- Public and stakeholder involvement.
- Selection of a preferred scenario.

Agreeing on a scenario planning process is a critical component of scenario planning development. Differences in governing authorities require that scenario planning be a collaborative effort between MPOs, counties, and cities in the metropolitan area. Reaching agreement may be a challenging process, likely requiring moderate to extensive negotiation.

Once agreement is reached, scenarios need to be developed and evaluated through a process that provides public involvement and review and support by local officials. Computer-based “sketch planning tools” could be used to help the public and

local officials visualize and compare different land use and transportation scenarios and their effects. Those scenarios will need to be evaluated for the amount of GHG emissions projected from the change in land use and transportation patterns, and compared to the Targets set by the Land Conservation and Development Commission (LCDC) as prescribed in Senate Bill 1059. Due to uncertainty in the scale of needed reductions and potential for controversy, there will be a need for extensive engagement with the public and decision-makers to discuss and evaluate options.

The result of scenario planning is “cooperative selection” by the affected local governments of a preferred future land use and transportation scenario for the year 2035. Implementation of the preferred scenario has not been specified or defined by current legislation. It has been suggested that the preferred scenario will be used to guide subsequent land use and transportation plan updates, which could have impacts and costs that are not directly addressed in this report.

While scenario planning is similar to existing land use and transportation planning efforts, it is also different in several important ways. In some respects, scenario planning is similar to existing metropolitan planning efforts that include county and city comprehensive plan updates and MPO Regional Transportation Plan updates. In both cases, alternatives are evaluated and a preferred future alternative is selected. However, scenario planning is different in that it involves consideration of longer-term or more dramatic changes to land use patterns and transportation investments. Scenarios developed to meet GHG emissions reduction Targets are likely to differ from current long-range land use and transportation visions of a metropolitan area. Scenario planning also differs from current processes because it requires more detailed evaluation of impacts including estimating GHG emissions reductions, which are not part of the current planning process. Consequently, conducting scenario planning involves much more extensive stakeholder and public involvement than typical plan updates.

Scenario Planning Funding Needs

Section 8 of Senate Bill 1059 specifies that the financing report provide information regarding the amount of funding necessary “to cover the costs of local governments in preparing and cooperatively selecting land use and transportation scenarios.” Providing precise estimates of the costs of scenario planning is not possible at this time because many of the details of scenario planning are yet to be defined. These details will affect the extent and costs of technical work that is needed to develop and evaluate scenarios, and the extent of public involvement and local dialogue needed to cooperatively select a preferred scenario. Costs were estimated for scenario planning through selection of a preferred scenario, but not through implementation in MPO, county, or city plans. Where estimates are included in the report, they are shown as ranges.

Major uncertainties in predicting cost include:

- GHG reduction targets are not scheduled to be set by LCDC until June 2011.
- The process for scenario planning in Oregon has yet to be defined and key tools to aid in conducting scenario planning are still under development. These

uncertainties impact overall cost estimates and make it impossible to predict staffing needs (e.g. additional personnel and/or technical expertise).

- MPOs, counties, and cities need to agree on a scenario planning process. The ease of reaching agreement among jurisdictions is likely to vary. Additionally, each metropolitan area may come to a different agreement, impacting scope, responsibilities, and associated costs.

While these uncertainties affect the accuracy of estimates in this report, best efforts were made to define cost ranges of financing needed to conduct scenario planning. Assumed components of scenario planning were compared to current planning processes and activities considered to be in excess of current efforts were highlighted. Monetary estimates for scenario planning were primarily based on similar efforts in Oregon and efforts in similar sized locations nationally. Estimates shown are for scenario planning through selection of a preferred scenario for the metropolitan area but do not include additional processes and costs associated with implementation. The extent of implementation has yet to be defined but is likely to occur through MPO Regional Transportation Plans and county and city Comprehensive Plans, including Transportation System Plans.

This report estimates that scenario planning, through selection of a preferred scenario, could cost from *\$200,000 to \$1.5 million* for each of the five metropolitan areas covered by Senate Bill 1059: Central Lane (Eugene-Springfield), Salem-Keizer, Rogue Valley (Medford), Bend, and Corvallis. Oregon's sixth metropolitan area, Portland Metro, is covered under separate legislation: the 2009 Jobs and Transportation Act (House Bill 2001).³

Available and Potential Funding Sources for Scenario Planning

Activities that MPOs, counties, and cities would be required to do for scenario planning go beyond current transportation and land use planning responsibilities and therefore current funding. Some funds have been set aside for this work.

The Oregon Transportation Commission has allocated approximately \$8 million per biennium to support planning work mandated by the 2009 Jobs and Transportation Act (House Bill 2001) and Senate Bill 1059. This funding is meant to cover both least cost planning and greenhouse gas reduction planning. For the GHG portion, the money is intended to fund the scenario planning work for all of the state's metropolitan areas, and for ODOT and DLCD work. It is recognized that at this level of funding it will take a couple of biennia to complete initial work.

In addition to money specifically set aside for Senate Bill 1059, MPOs, counties, and cities can compete for funding through sources including:

- The Oregon Transportation Growth Management (TGM) program, which provides grant money for a range of local planning efforts.

³ Funding support for Portland Metro's scenario planning work has been negotiated with the Oregon Department of Transportation, and augmented with federal planning resources for regional transportation planning, implementation and model development.

- The federal government may provide funds to support scenario planning *where the work is closely tied to the development of an updated Regional Transportation Plan*. Other sources of federal funding for scenario planning may possibly be available in the future, depending on federal action. Federal agencies including Housing and Urban Development (HUD), U.S. Department of Transportation (DOT), and the Environmental Protection Agency (EPA) have formed a Sustainable Communities Partnership that provides limited and competitive grant funding to metropolitan areas to conduct planning.

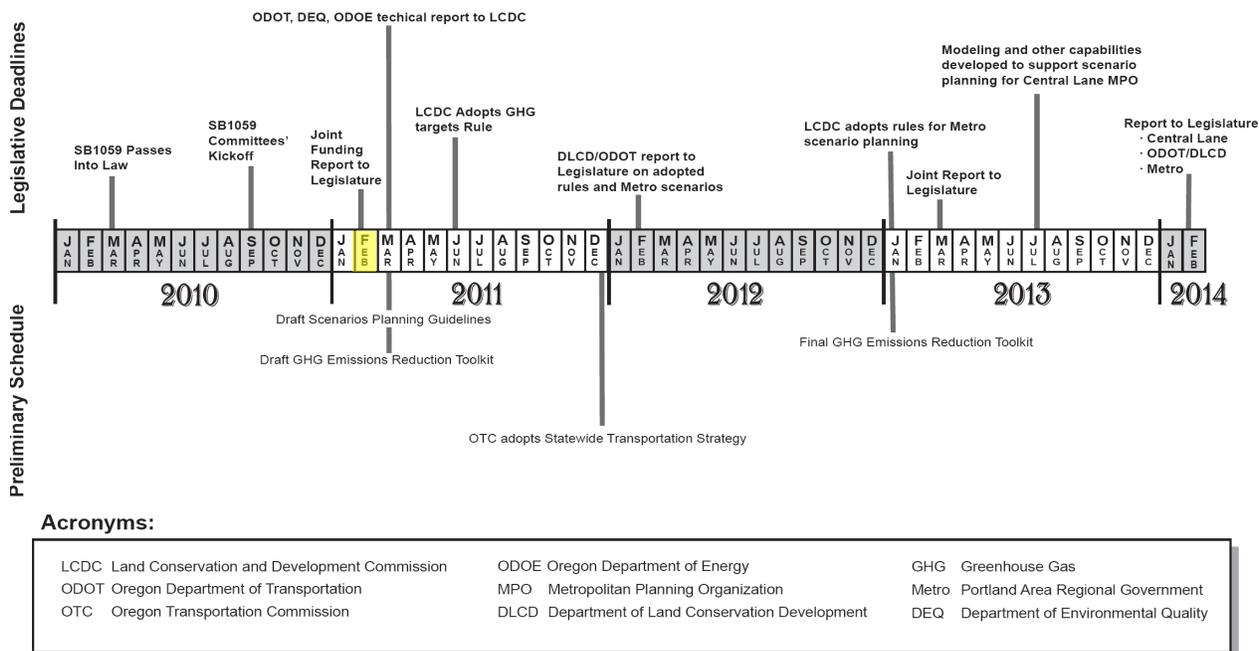
Looking Forward

Although Senate Bill 1059 anticipates that Oregon's five smaller metropolitan areas will conduct scenario planning, it does not require local governments to implement a preferred scenario. At this time, scenario planning is intended to provide information for the larger statewide discussion about the benefits and costs of different approaches for reducing GHG emissions.

Section 9 of Senate Bill 1059 requires ODOT and DLCDC to report to the Legislative Assembly by February 2013 on (1) the progress made in developing: a) the Statewide Transportation Strategy for reducing GHG emissions, b) guidelines for conducting scenario planning, and c) a Toolkit to assist in implementing selected scenarios; (2) recommendations on how to best meet the GHG reductions targets for metropolitan areas; and (3) whether additional or different actions are needed to achieve Oregon's GHG reduction goals.

1.0 INTRODUCTION

Chapter 85 Oregon Laws 2010 Special Session (Senate Bill 1059) and Chapter 865 Oregon Laws 2009 (House Bill 2001), collectively referred to as Oregon Sustainable Transportation Initiative (OSTI), provide legislative direction to begin work to reduce greenhouse gas (GHG) emissions from the transportation sector in Oregon, particularly light duty vehicles (gross vehicle weight of 10,000 pounds or less). Work required in Senate Bill (SB) 1059 includes: developing a Statewide Transportation Strategy to reduce GHG emissions, establishing GHG reduction targets for emissions from light vehicles in the larger metropolitan areas, developing a Toolkit to assist local governments and Metropolitan Planning Organizations (MPOs) in reducing GHG emissions, developing guidelines for Scenario Planning to examine how targets might be met, and public outreach and education. Each of the work areas is to be completed by the Oregon Department of Transportation (ODOT) and Department of Land Conservation and Development (DLCD) in consultation and cooperation with MPOs, other state agencies, local governments and stakeholders, within the boundaries of metropolitan planning organizations. Legislation does not specify implementation of scenario planning to meet targets, except in the Portland Metro area. A general timeline for the Oregon Sustainable Transportation Initiative work is shown below.



The focus of this report is Section 8 of Senate Bill 1059, which reads:

The Department of Transportation and the Department of Land Conservation and Development, after consultation with and in cooperation with local governments within the boundaries of a metropolitan planning organization, shall make a joint report to the Seventy-sixth Legislative Assembly in the

manner provided in ORS 192.245. The report must provide information regarding the amount of financing that is necessary to cover the costs of local governments in preparing and cooperatively selecting land use and transportation scenarios and the potential sources of funding for this preparation and cooperative selection.

Scenario planning – as set forth in SB 1059 – involves the development and evaluation of different possible options for future land use patterns and transportation systems in metropolitan areas. Scenarios illustrate different ways that metropolitan areas could accommodate expected population and employment growth, together with transportation needs. Local officials, the public and stakeholders would help develop and evaluate scenarios. Evaluation would likely use a combination of tools (such as brainstorming, qualitative comparison, sketch planning tools, or travel demand models) to help visualize alternatives and assess their effectiveness in reducing greenhouse gas emissions, and other costs and benefits.

Generally, preparing and selecting land use and transportation scenarios will involve the following steps:

- Agreement on a scenario planning process.
- Development of a baseline reference case.
- Development and evaluation of alternative scenarios.
- Public and stakeholder involvement.
- Selection of a preferred scenario.

While the primary components are known, the details of scenario planning are not currently developed. Although work is underway on the Scenario Planning Guidelines it is not complete and thus direction for scenario planning in Oregon is yet to be defined. The lack of definition and details leads to uncertainties in predicting costs and affects estimates associated with technical and outreach components of scenario planning. In an effort to provide more tangible information, this report focuses on major steps involved in scenario planning. The steps have been identified and evaluated in terms of the cost of similar land use and transportation planning efforts in Oregon and scenario planning efforts from around the country. Once greater direction and guidance is developed from efforts like the SB 1059 Statewide Transportation Strategy, the Toolkit, the Scenario Planning Guidelines, and Target rulemaking it should be possible to provide more detailed cost estimates for scenario planning.

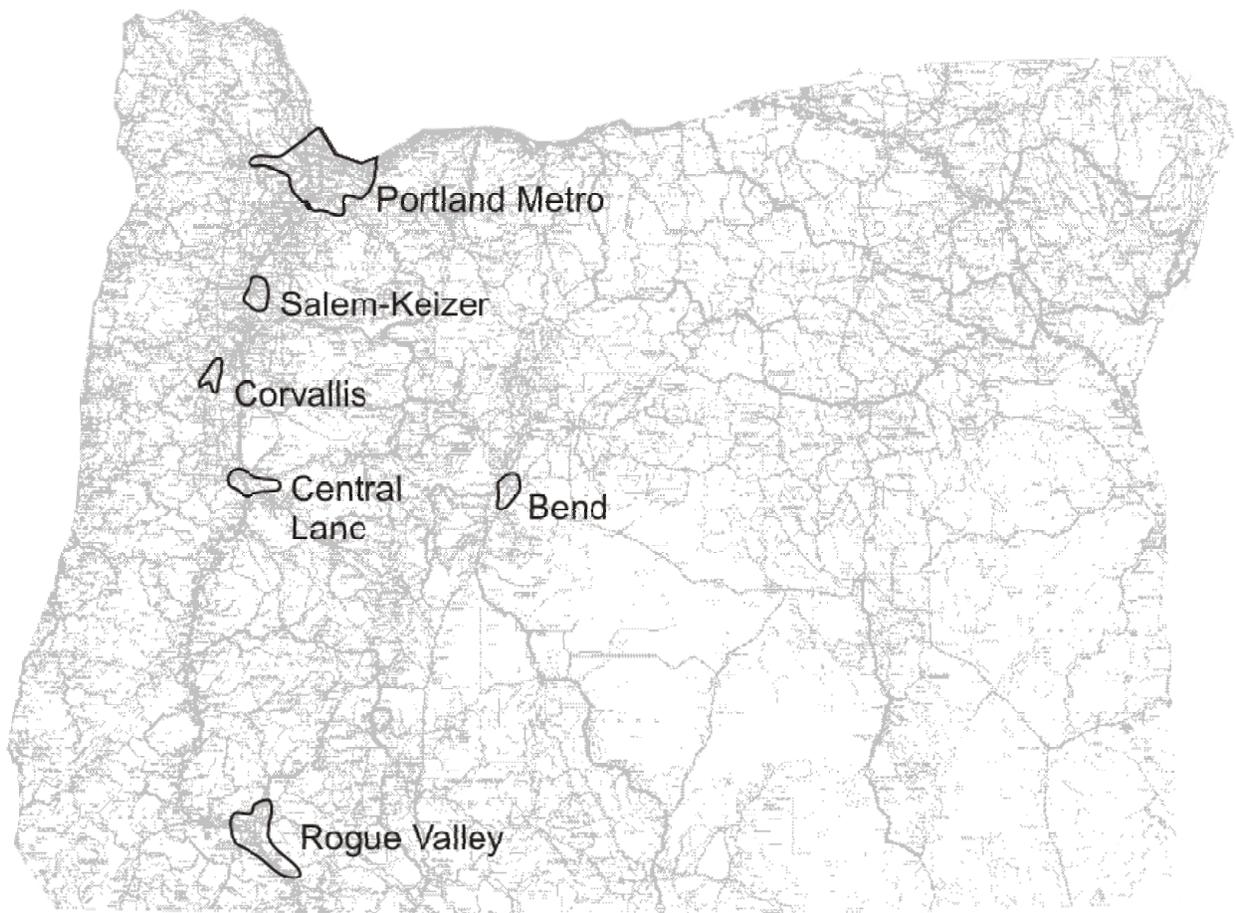
This report, however, focuses on major steps involved in scenario planning as it is understood at this time. The focus is on the regional level, where scenario planning would occur among MPOs, counties, and cities in each metropolitan area. Information is provided on the geography of the metropolitan areas in Oregon along with a discussion of current county and city, and MPO planning responsibilities (Section 3). This information is intended to provide a foundation for understanding some of the operations, capabilities and needs of each area relative to scenario planning. With that understanding, Section 4 then includes a discussion of the components of scenario

planning, how it would work and could be integrated with other planning work. The final section of the report discusses current county and city and MPO planning responsibilities, and the addition of scenario planning. Costs are provided in some parts of the report, but are typically shown as ranges and should be considered general and preliminary estimates of the likely costs.

2.0 PROFILE OF OREGON METROPOLITAN AREAS

SB 1059 and HB 2001 focus on exploring how changes to land use and transportation in metropolitan areas may help achieve state goals to reduce greenhouse gas (GHG) emissions. This chapter provides information about Oregon's six metropolitan areas, and current arrangements and responsibilities for conducting land use and transportation planning.

As illustrated below, Oregon has six metropolitan areas: Portland Metro, Salem-Keizer, Corvallis Area, Central Lane, Rogue Valley, and Bend.



The Legislation specifically identifies metropolitan areas as locations designated as Metropolitan Planning Organizations (MPOs). MPOs are federally-created regional decision making bodies required to carry out various transportation planning and coordination responsibilities. There are currently six MPOs in Oregon, which have been created in the state's "urbanized areas," as defined by the US Census Bureau (population size of 50,000 or more).

While the six metropolitan areas comprise a small geographic area, they include 42 cities and approximately 60% of the state's population. The size (population and area) of each area varies, as does the number of cities and counties (see table below).

	Bend MPO	Corvallis Area MPO	Rogue Valley MPO	Salem- Keizer MPO	Central Lane MPO	Portland Metro
Population (2000 US Census)	57,525	65,700	145,162	237,000	237,262	1,583,138
Area	35 sq. mi.	39.27 sq. mi.	263 sq. mi	135 sq. mi	123 sq. mi.	463 sq. mi.
# of Cities in MPO	1	3	7	3	3	25
# of Counties in MPO	1	1	1	2	1	3

Both the geographic area of a metropolitan region and the population size feed into the amount of light vehicle travel. Estimates for the proportion of vehicle miles traveled (VMT) per MPO area have been produced from Highway Performance Monitoring System (HPMS) data for the year 2005. The estimates represent the VMT on the roads within the metropolitan area. Overall, it is estimated that VMT within MPO boundaries account for 45 percent of all light vehicle VMT in Oregon (see table below).

	Bend MPO	Corvallis Area MPO	Rogue Valley MPO	Salem- Keizer MPO	Central Lane MPO	Portland Metro
Estimated MPO VMT (Proportion of State Total)	2%	1%	3%	4%	5%	30%

In relation to VMT, trips may originate within an MPO but be destined outside its boundary. Similarly, trips may come from outside the boundary and pass through or end inside of an MPO. Jurisdictional (MPO, county or city) boundaries and authority do not necessarily align with travel sheds⁴. Coordination is required for planning that extends beyond a jurisdiction's boundary. These travelshed issues become significant considerations in a jurisdiction's planning efforts. In the Willamette Valley, for example, the travelshed for the Salem-Keizer MPO area has been projected, by the Oregon MPO Consortium, to extend north into Portland Metro, south to Corvallis MPO, west to cities

⁴ A key concern is whether the boundaries of MPOs are inclusive of commuting and other travel patterns often referred to as a travel shed. Automobile and truck trips that originate outside of MPO boundaries clearly have an impact on transportation within those boundaries and do not always coincide with commuting and travel patterns. The boundary issue is especially significant for MPOs because they cannot plan outside their boundaries and therefore cannot effectively address some of the land use and transportation issues that influence commuting trips.

including Dallas, and east to cities including Stayton. Past U.S. Census data has shown that a quarter of the workforce inside Salem-Keizer's boundaries commutes from homes outside the MPO boundary. Because of known travelshed issues, planning strategies implemented by a single area within a travelshed are likely to be less effective than strategies agreed to by multiple jurisdictions within the area.

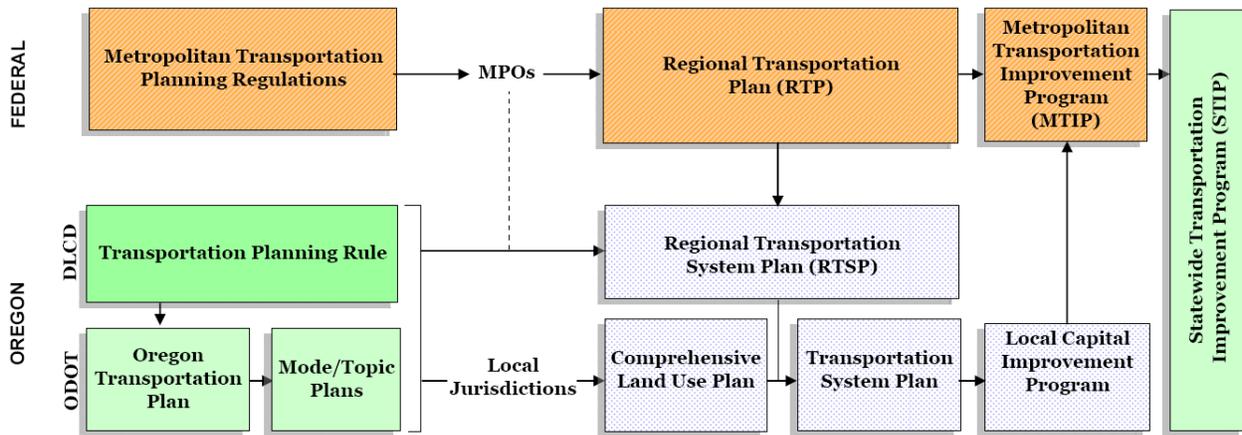
Aside from differences in geographic makeup, emissions and travel, there exist differences within each metropolitan area relative to MPO, county, and city activities, authority, and resources. Current land use and transportation planning responsibilities of counties and cities are described below, followed by a parallel description of existing MPO responsibilities.

2.1 COUNTIES AND CITIES

Counties and cities have a broad range of responsibilities that extend beyond transportation and land use planning. They are not bound by the same federal regulations as MPOs, as they are not federal bodies. Unlike MPOs (except Portland Metro), counties and cities have land use authority and thus have ability to impose land use requirements. Planning conducted at the local level in Oregon is guided by the Land Conservation and Development Commission's statewide planning goals and implementing rules.

Counties and cities can implement strategies and projects, and have regulatory authority to decide what land uses are allowed in particular areas. Cities and counties also manage urban growth boundaries that direct where urban levels of development may occur.

County and city transportation and land use planning efforts (Comprehensive Plans and Transportation System Plans) must be consistent with the Land Conservation and Development Commission's Statewide Planning Goals (OAR 660-015-0000). One of those goals, Statewide Planning Goal 12: Transportation, specifies that transportation studies and plans must be consistent with local and regional comprehensive plans. Plans should be coordinated so that a city Transportation Systems Plan (TSP) is consistent with the corresponding county TSP, which is consistent with the Regional TSP (RTSP). In turn, these plans must be consistent with federally required regional transportation plans (RTP), and the State TSP (Oregon Transportation Plan and Modal/Topic Plans) and Transportation Planning Rule (see diagram below).



Both Comprehensive Plans and Transportation System Plans are described in greater detail on the following page.

Comprehensive Plan

State law requires each city and county to have a Comprehensive Plan and the zoning and land-division ordinances needed to put the plan into effect. The development of a Comprehensive Plan is the primary planning activity for counties and cities, for which the Transportation System Plan is one of the key and most frequently updated components. TSPs are required by the Transportation Planning Rule. The Rule applies to all counties and cities. Smaller areas (counties with a population smaller than 25,000 and cities with a population smaller than 10,000) are eligible to request a whole or partial exemption.

Transportation System Plan (TSP)

TSPs are long-range (typically 20 year) plans designed to serve as the transportation element of county or city Comprehensive Plans. They outline transportation needs and plan for roadway, transit, bicycle, pedestrian, air, rail, water, and pipeline facilities.

All counties and cities in Oregon have adopted a TSP (Appendix A). The TSPs are updated on an as-needed basis and respond to transportation, land use, environmental, population growth, economic and social changes that have occurred in the community since the TSP was last prepared. Updates should also attempt to anticipate emerging issues and upcoming policy initiatives. Development of a TSP update may include the following activities:

- Public and stakeholder involvement throughout the process (outreach).
- Evaluation of the existing transportation system (data analysis).
- Projection of demand for transportation services for the next 20 years (modeling). [Note: cities/counties vary on their use of models – some do not have or use models for their TSP updates]

- Assessment of implications for projected demand and other potential future issues (problem identification).
- Development of plan goals and objectives.
- Evaluation of alternatives — strategies and projects — looking at impacts from each the goals and objectives and to the ability to address projected/forecasted problems identified (analysis or modeling).
- Update of original strategies, and projects (updated TSP).
- Develop/adopt local and county ordinances that:
 - enable plan implementation and project development,
 - protect transportation facilities/corridor function, and
 - encourage and support alternative modes (transit, ridesharing, bicycling and walking).
- Develop a transportation improvement program (package of facility/service projects) that implements the plan.
- Develop a transportation finance program that will fund the projects identified in the transportation improvement program.

Where modeling is referenced above, it refers to models used as tools for estimating future demand for infrastructure. The modeling done by counties and cities is similar to that of MPOs, in that the Travel Demand Model is the essential tool. The counties and cities within MPO boundaries typically do not have their own models and instead rely on the staff for which the model is housed (i.e. their MPO or ODOT). This is both more cost-effective and leads to more consistent use of data and forecasts across similar geographies.

A TSP is finalized when it is adopted by the county or city and then acknowledged by the Oregon Department of Land Conservation and Development (DLCD) as complying with state requirements.

The staffing levels of counties and cities vary depending on differences in geographic size and make-up, as well as differences in roles and responsibilities. Counties and cities rely heavily on state and federal assistance, and staff or consultant resources. For planning efforts such as updating Transportation System Plans, costs are mostly covered by locals, the area's MPO, support from ODOT, through Transportation Growth Management (TGM) grants, or a combination of these sources. Locals compete for TGM money, which is funded through federal Surface Transportation Program (STP) funds allocated by ODOT. On average, the program provides around \$4.5 million in financial support for transportation and land use plans per biennium. In addition to the TGM funds, ODOT also supports TSP updates through the State Planning and Research (SPR) program. For TSP analysis and modeling activities, many local governments rely on their MPO or Council of Government for staff support.

2.2 METROPOLITAN PLANNING ORGANIZATIONS (MPOs)

Metropolitan Planning Organizations are federally-designated entities formed by intergovernmental agreement (except for Portland Metro – which has its own charter authority). These organizations have different planning responsibilities than counties and cities. Distinctions between responsibilities are primarily drawn from geographic scale and acknowledgement that scope of visions and needs will differ within those areas. Additionally, because they are federally-designated organizations, they have set federal requirements. MPOs operate according to the following six core functions:

1. *Establish a cooperative setting.* Establish and manage a fair and impartial setting for effective regional decision-making in the metropolitan area.
2. Evaluate transportation alternatives, scaled to the size and complexity of the region; to the nature of its transportation issues, and within realistically achievable options.
3. *Develop and update a long-range transportation plan (Regional Transportation Plan) for the metropolitan area.* This plan must use the latest planning assumptions, have a planning horizon of at least 25 years and include a set of transportation projects and programs that are financially constrained to reasonably forecasted revenue estimates for the region.
4. *Develop a short-range capital improvement program (Transportation Improvement Program).* The TIP should be based on the long-range transportation plan and be designed to achieve the region's goals.
5. *Involve the public and other transportation stakeholders.* Foster transparent, timely, and meaningful involvement by all users of the transportation system in the four essential functions listed above. This includes the public, stakeholders and affected special interest groups⁵.
6. *Prepare an annual work program of federally-funded transportation activities.* Develop an annual Unified Planning Work Program (UPWP) that outlines the above tasks, federally funded planning studies and its associated budget for each fiscal year.

Other unique responsibilities include that of Portland Metro for conducting and coordinating the development of a regional household and employment forecast that is used for the MPO's long-range planning functions, a task that counties are responsible for in other metropolitan areas in Oregon. Also unique is Portland Metro's and Rogue Valley's responsibility for coordinating transportation and air quality planning in non-attainment or maintenance areas. Metropolitan areas with populations greater than 200,000 (Portland Metro, Central Lane, and Salem-Keizer) are designated transportation management areas (TMAs) and must have a congestion management

⁵ The Federal definition of "interested parties" includes 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 (23 U.S.C. 134 and 135, and 49 U.S.C. 5304)

process (CMP) that identifies actions and strategies to reduce congestion and increase mobility. The CMP process includes an ongoing transportation system monitoring and reporting requirement.

The MPOs public involvement and outreach process is designed to foster engagement by all interested parties, such as business communities, freight stakeholders, environmental organizations, and the general public. Involvement is initiated through a proactive public participation process conducted by the MPO in coordination with ODOT, DLCDC, transit operators, and other agencies. This cooperation promotes the sharing of information and the development of coordinated solutions. Aside from stakeholder and public involvement, MPOs must also foster cooperation, as no single agency or jurisdiction has responsibility for the construction, operation, or maintenance of the entire transportation system within the region.

Cooperation is also needed because MPOs lack authority over transportation facilities within their boundaries and do not have land use authority (with the exception of Portland Metro). Additionally, MPOs do not own any of the transportation facilities in their planning area and thus have no transportation authority. For example, roads that are part of the Interstate Highway System or the State Highway System are subject to certain standards and are maintained by ODOT. Other roads are designed, operated, and maintained by counties or local municipalities. Transit systems are sometimes built, operated and maintained by a separate entity, most being special districts. In Oregon and most other states, MPOs do not implement projects.

In regards to planning functions, MPOs focus on transportation and land use. However in non-attainment or maintenance areas for air quality, the MPO is responsible for coordinating transportation and air quality planning. The key documents produced through MPOs planning processes include the following: Unified Planning Work Program (UPWP), Regional Transportation Plan (RTP), and Transportation Improvement Program (TIP). The UPWP is essentially a one year work program for the MPO, listing transportation studies, tasks to be performed and identifying funding. The RTP is a major work product of the MPO, identifying regional goals and investment strategies over a 20 plus year horizon. The TIP identifies individual projects and programs and usually covers a four-year period. As the RTP and the TIP are action plans of the MPO, they are described further below.

Regional Transportation Plan .

The RTP is a federally required document. The document is the long term plan of a region's transportation system. The plan identifies and analyzes transportation needs of a metropolitan region and creates a framework for project priorities. It is multi-modal (highway, transit, rail, bicycle, pedestrian, marine, aviation and pipelines) and emphasizes links between these transportation modes. The RTP includes both long-range and short-range, financially constrained program strategies/actions that lead to the development of an integrated inter-modal transportation system that facilitates the efficient movement of people and goods.

RTPs must be updated every four or five years, depending on air quality status. Development of an RTP update may include the following activities:

- Public and stakeholder involvement throughout the process (outreach).
- Evaluation of the existing transportation system (data analysis).
- Projection of demand for transportation services for the next 20 years or longer (modeling).
- Assessment of implications for projected demand and other potential future issues (problem identification).
- Compilation of local comprehensive plans' future goals (development of a 20 year or longer regional vision).
- Evaluation of transportation system alternatives — policies, strategies, and suites of projects — looking at impacts from each to the 20 year or longer projection of transportation needs and to the ability to address projected/forecasted problems identified (modeling).
- Update of original policies, strategies, and suites of projects (updated RTP).

While some MPOs may perform all of the activities listed above in the development of their RTP update, the level of engagement varies by update and/or by MPO. For example, the evaluation of transportation system alternatives can range from a revision of existing policies, strategies, and suites of projects or evaluating entirely new sets of policies, strategies, and significantly modified project suites.

Each of Oregon's MPOs use modeling tools at different levels and different intensities as part of their RTP update process. Currently the three largest MPOs (Metro, Salem-Keizer, and Central Lane) have resources and staff to develop, maintain, and operate their area's Travel Demand Model. This may sometimes include use of consultants and/or Metro or ODOT staff for more specialized enhancements to the model. The regional travel models are used for long-range planning activities linked to the development of RTPs and more in-depth corridor and project development studies at a subarea level. The smaller MPOs rely on ODOT staff to fill this role and provide the modeling needed to complete their RTPs. This function of ODOT is funded with federal dollars through the Federal Highway Administration (FHWA). MPO model forecasts are often used by counties and cities for other infrastructure planning (water, sewer, parks, etc.).

In addition to modeling, public and stakeholder involvement is also important. All MPOs report on their public involvement through Title VI of the Civil Rights Act requirements (reporting requirements for federally assisted programs that assure nondiscrimination/environmental justice) and most have an adopted public participation plan. Updating an RTP is a cooperative planning process. Once drafted, the RTP is reviewed and approved by the MPO Policy Board, which includes representatives from the counties and cities within the MPO, as well as an ODOT representative.

Regional Transportation System Plan (RTSP).

The RTSP is a state required planning document that is developed to show compliance with the Transportation Planning Rule. This work is in addition to the federal requirements of an RTP. Under the Rule, MPOs are responsible for developing Regional Transportation System Plans that reduce vehicle miles traveled. As part of the requirement, MPOs must adopt standards to demonstrate progress towards increasing transportation choices and reducing automobile reliance. Several, but not all, of the MPOs have completed RTSP requirement. However, the approach to development varies by MPO. As MPOs outside of Metro do not have land use authority, many of the MPOs look to the locally developed and approved Comprehensive Plans and Transportation System Plans to provide that input to the RTSP. (Comprehensive Plans and Transportation System Plans are described under county and city responsibilities.)

Transportation Improvement Program (TIP).

The Transportation Improvement Program is designed to promote the area's transportation goals by programming projects that address capacity needs, congestion reduction, transit service needs, air quality improvements and transportation enhancements.

The TIP is a financially constrained four-year program covering the most immediate implementation priorities for transportation projects and strategies from the RTP. It is the region's way of allocating its limited transportation resources among the various capital and operating needs of the area, based on a clear set of short-term transportation priorities. Under federal law, the TIP must include the following:

- Cover a minimum four-year period of investment;
- Be updated at least every four years (updated every two years in Oregon);
- Be realistic in terms of available funding — “financially constrained”;
- Conform with the State Implementation Plan (SIP) if the region is designated an air quality nonattainment or maintenance area;
- Be approved by the MPO and the governor and U.S. Department of Transportation for air quality conformity (as applicable); and
- Be incorporated into the Statewide Transportation Improvement Program (STIP).

The MPO Policy Board approves the TIP, which is submitted to the governor and is incorporated into the STIP by ODOT.

The staffing levels of MPOs vary by area, reflecting differences in roles and responsibilities. For example Portland Metro has a staff size of around 30 planners and modelers; where as the Bend MPO has two. While these differences may seem extreme, it should be acknowledged that the population size within each MPO varies and those with larger populations tend to have more responsibilities that require more staff and

higher funding levels. The primary funding sources are federal, which are passed through the state. These include PL (Metropolitan Planning) funds, STP (Surface Transportation Program) funds, and FTA (Federal Transit Authority) 5303 funds. PL funds and 5303 funds come to the state in one bucket each. The MPOs develop a formula (every 10 years based on the U.S. Census) that is used to distribute each bucket among the MPOs based on federal guidance. The PL funding levels have remained relatively static while federally-required planning responsibilities and personnel costs have continued to grow. This trend has created resource issues for MPOs in Oregon and throughout the U.S.

STP funds are distributed to Transportation Management Areas (TMAs) – urban area with population over 200,000 as measured by the U.S. Census – according to a formula established in federal transportation legislation. The amount of STP funds allocated to the smaller MPOs is determined by agreement between ODOT, the Association of Oregon Counties (AOC), and the League of Oregon Cities (LOC). The STP funds can be used for highway and transit, research and development, technology transfer programs, surface transportation planning programs, or development or establishment of management systems. Generally, the funds cannot be used for transit operations but there are exceptions, such as purchased services.

While most of the smaller MPOs commit STP funds almost exclusively for local infrastructure, larger TMAs tend to apply the funds to a wider variety of uses (e.g. planning, bus purchases, regional traffic control center operation, park and ride, etc.).

Given the amount of planning responsibilities spelled out by federal requirements, many MPOs have found that these sources of funds alone do not cover their planning costs and, therefore, a proportion of STP funds have shifted away from other local investments to planning.

In addition to the funding sources listed above, some limited duration funds are available for special projects through grants, dues, etc. Because these sources are not stable, they are not described in this report.

For the state fiscal year (FY) 2008-2009, funding sources and amounts are shown for each MPO in Oregon.

	Bend MPO	Corvallis Area MPO	Rogue Valley MPO	Salem- Keizer MPO	Central Lane MPO	Portland Metro
Metropolitan Planning (PL) Funding	\$183,000	\$183,000	\$335,927	\$418,363	\$430,135	\$2,023,852
Surface Transportation Program (STP) Planning Funding	\$0	\$0	\$0	\$454,725	\$450,000	\$1,134,633
Federal Transit Authority (FTA) 5303 Funding	\$42,840	\$53,000	\$68,040	\$20,000	\$96,280	\$648,261

TOTAL FY 2008-09 Planning Budget	\$225,840	\$342,000 ⁶	\$403,967	\$893,088	\$976,415	\$3,806,746
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Planned allocation of the various funding sources listed above is included in the MPOs work plan – Unified Planning Work Program (UPWP). The work plan may identify individual planning efforts like the MPO Regional Transportation Plan (RTP) and Regional Transportation System Plan (RTSP), but often the costs overlap. For example some MPOs have a separate budget for modeling and costs for model enhancements for the RTP are not shown as part of the RTP expected expenditures.

2.3 SUMMARY OF METROPOLITAN AREAS

There are six metropolitan areas (Metropolitan Planning Organizations –MPOs) in the state, four of which are located in the Willamette Valley, one in southern Oregon, and one in central Oregon. A description of each metropolitan area is provided in APPENDIX A.

According to the 2000 U.S. Census, the largest of the metropolitan areas by population is Portland Metro, and the smallest is Bend. Portland Metro is the only MPO in the state which includes two metropolitan areas, Portland, Oregon and Vancouver, Washington. Within the boundaries of each MPO there is at least one county and one city, and the majority of MPOs include multiple counties and cities.

Planning responsibilities between the MPO, and the counties and cities within its boundary differ. The Regional Transportation Plan (RTP) is the primary transportation planning document produced by MPOs, and Transportation System Plans (TSPs) are the primary transportation planning documents produced by counties and cities. The RTP establishes the broad vision, goals, and objectives for the metropolitan region. Future forecasts of population and employment, and sometimes other variables, are predicted and strategies are developed to accommodate future travel demand and meet the region’s vision over the forecasted period (20 years), although growth in travel demand has far outpaced the ability to fund remedies. Development of the RTP includes involvement by counties and cities (through representation on the MPO policy board) and by the public. Oregon’s planning system requires consistency from the top down, so that all RTPs are consistent with ODOTs transportation and modal plans. In turn, county and city TSPs are to be consistent with the metropolitan area’s RTP.

RTPs are to be updated every four to five years, and TSPs are updated as needed. All MPOs in Oregon have adopted an RTP, and most have adopted a Regional Transportation System Plan (RTSP). The RTP update schedule for Salem-Keizer, Corvallis, Central Lane, and MPO are the same, with the next update due in 2011 for the planning horizon 2035. Portland Metro and Bend have their next updates due in 2014 and 2013, respectively for the planning horizons of 2040 and 2037, respectively. Within

⁶ Corvallis total includes funds that were carried over from the previous fiscal year.

Oregon MPO boundaries all counties have adopted a TSP, as have all cities with a population over 10,000. TSPs are updated when the community decides it is warranted, there is no set update cycle. Some TSPs in Oregon have been updated within the last five years, others are 15 years old. The date of the most recent TSP has relevance to the Regional Transportation Plan (RTP), as the local TSPs and their larger comprehensive plans roll-up as inputs to the regional vision and forecasted future.

The age and current relevance of the information feeding into an RTP is a challenge in the plan's development. Overall there are other challenges in developing RTPs and TSPs. For example, in considering strategies the jurisdiction may only have full or partial control over influencing a desired outcome. For example, Oregonians, similar to residents in other states, do not always live in the city, county, or MPO in which they work. This commuter behavior creates challenges for planning within an individual jurisdiction, as travel often extends beyond geographic boundaries. These travelshed issues present challenges in developing effective strategies to influence travel behavior. Another acute challenge is that authorities differ between jurisdictions. For example, Portland Metro is the only MPO in Oregon with land use authority. All other MPOs do not have direct influence over local land use decisions, such as zoning.

Distinctions in authority require that planning processes within metropolitan areas rely on collaboration and coordination. This collaboration, in addition to technical components of plan development, contribute to the overall cost of updating RTPs and TSPs. Further, many jurisdictions have limited staff (in quantity and expertise) and are either at capacity in their ability to perform the technical components of developing a plan, or require outside assistance (e.g. ODOT, Council of Government, consultant, etc.).

Based on data from various MPOs, it is estimated that an RTP takes about 2-5 years to update and costs \$200 thousand to \$3.5 million, with most averaging about \$350 thousand. Variability in cost is primarily based on the size of the jurisdiction, level of analysis for the update, and extent of stakeholder and public involvement. The same variability can apply for the cost associated with developing TSPs, but generally most TSP are estimated at \$100-\$250 thousand. Outliers to the estimated average are TSP updates for smaller cities at about \$50 thousand and extensive TSP updates for larger cities and counties at about \$400 thousand.

3.0 SCENARIO PLANNING

Scenario planning for greenhouse gas (GHG) emissions reduction is a strategic planning process to establish a transportation and land use vision, with goals and approaches for reducing greenhouse gas emissions. Future conditions are forecasted and different options for accommodating growth and meeting transportation needs are evaluated to identify a preferred option that best meets a range of objectives.

The Oregon Legislature has set a goal of reducing total GHG emissions to 75 percent below 1990 levels by 2050. Through SB 1059 (2010), the Legislature directed ODOT and DLCDC to work cooperatively with local governments and metropolitan planning organizations to estimate the costs of preparing and cooperatively selecting land use and transportation scenarios that illustrate how GHG reduction targets for particular metropolitan areas might be met.

While the intent of scenario planning is inferred in SB 1059, its components are not specifically defined. Development of the Scenario Planning Guidelines will help to clarify the scenario planning process in Oregon. Draft Scenario Guidelines are expected in March 2011. In-lieu of the guidelines, the following section of this report generally outlines the likely components of scenario planning.

3.1 COMPONENTS OF SCENARIO PLANNING IN OREGON

SB 1059 (2010) and SB 2001 (2009) anticipate that Oregon's metropolitan areas will conduct scenario planning to assess options for changing land use and transportation plans to help achieve state goals to significantly reduce greenhouse gas emissions from light vehicle travel. As called for in Section 3 of SB 1059, work is currently underway on the development of Scenario Planning Guidelines. In compliance with the bill, the guidelines will:

- Establish a process for developing alternative land use and transportation scenarios;
- Take into account the full range of actions local governments may take concerning land use and transportation planning;
- Allow sufficient flexibility for different local governments to meet the needs of their individual communities;
- Provide for coordination between state agencies and local governments;
- Encourage local innovation to reduce greenhouse gas emissions; and
- Provide examples of alternative land use and transportation scenarios.

As currently being developed, the guidelines could be used by local governments within metropolitan areas to develop, evaluate, and cooperatively select a preferred land use

and transportation scenario. The general components of scenario planning will likely include: agreement on a scenario planning process, development of a baseline reference case, development of multiple scenarios, public and stakeholder involvement, modeling and analysis, and selection of a preferred scenario. Implementation of the preferred scenario is not required, outside of Portland Metro, at this time.

3.1.1 Agreement on a Scenario Planning Process

The first, and critical, step in scenario planning will be agreement among MPOs, counties, and cities within each metropolitan area on a process to conduct scenario planning. While each metropolitan area has a MPO to conduct and coordinate regional transportation planning, scenario planning involves evaluation of land use choices that are the responsibility of counties and cities. Arriving at a preferred scenario will require agreement between the MPO, counties and cities in each area. This can be done by intergovernmental agreement or other mechanisms, but it will require a high level of cooperation among local governments in each metropolitan area.

During the preparation of this report several MPOs, counties, and cities, voiced concern about the value of conducting scenario planning. This variance in opinion makes agreement on a scenario planning process a critical first step. The objective of this first step is to find common ground among state agencies, MPOs, counties, and cities and form consensus on the process. Reaching consensus among the parties is critical for cooperatively doing scenario planning. Negotiating and coming to agreement may be a lengthy process for some areas.

To lay the groundwork for scenario planning, outreach and education needs to begin as soon as possible. Although the focus should be on transportation, there should be acknowledgement that other sectors contribute to GHG emissions and that actions taken to reduce transportation-related GHG emissions will help reduce emissions in the other sectors. Beyond the scope of scenario planning, other efforts will need to look at the most cost-effective opportunities within and across all sectors.

Once the groundwork has been laid, and support has been achieved in terms of the need and benefits of scenario planning, local governments in each metropolitan area will need to agree on a process for developing, evaluating and cooperatively selecting a preferred land use and transportation scenario. Agreement can be formalized through an intergovernmental agreement or through other formalized mechanisms. The agreement should establish roles and responsibilities for the state (ODOT and DLCDC), Metropolitan Planning Organizations, counties and cities. It also should define key steps in the process for developing and selecting a preferred land use and transportation scenario for the year 2035 (as specified in SB 1059 and HB 2001). Roles for individual jurisdictions may vary if a particular locality has little growth or change potential over the planning period. Decisions as to who will lead the scenario planning effort for their jurisdiction should be made as early as possible.

While scenario planning is focused on metropolitan areas (i.e. the area within MPO boundaries) scenario planning should also be coordinated with nearby communities.

3.1.2 Development of a Baseline or Reference Case

Each metropolitan area will develop a base case scenario which reflects implementation of existing adopted land use and transportation plans and assumptions and guidance set forth in the Statewide Transportation Strategy and Scenario Planning Guidelines. Statewide Strategy assumptions will likely cover changes to state, national, and international policies, transportation infrastructure, technology, and housing and employment.

3.1.3 Development of Multiple Scenarios

The major element of scenario planning is the development and evaluation of several possible alternative land use and transportation scenarios. Each land use and transportation scenario represents a vision of the future configuration of land use and supporting transportation systems, and goals for how those systems are managed.

Local staff and or consultants will use “sketch planning tools”, with input from the public, to develop and evaluate prospective land use and transportation system configurations for a community. A “strategic planning model” such as **Greenhouse Gas State Transportation Emission Planning** model (GreenSTEP) will be used to evaluate the effectiveness of each configuration for reducing GHG emissions and to evaluate other effects of the scenario. These type of tools will be highlighted in the Toolkit that is being developed as part of the SB 1059 work.

Instead of concentrating on one aspect of planning for the future, many tools used in scenario planning estimate the impacts of people's decisions today on land use, transportation, the economy and the environment. Additionally, these tools take into account the interconnections between these three aspects of planning. For example, if a change to the transportation system is proposed for an area, models can estimate its land use and economic impacts. Powerful tools provide for more comprehensive geographic analysis and visualization using interactive analysis tools and a decision-making framework. Scenario planning tools can be used to view, analyze, and understand land use alternatives and their impacts for informed decision-making.

3.1.4 Public and Stakeholder Involvement

The scenario planning process will require extensive outreach to stakeholders, including the public, local businesses, property owners, neighborhood groups and other public agencies. The Scenario Planning Guidelines are likely to outline public involvement processes and the Toolkit will highlight possible approaches. There is likely to be an emphasis on the development of web-based information that would allow broad public access to review and comment on proposed scenarios. Public meetings would also be needed. To complement and help facilitate interactions with the public, sketch-planning and other visualization tools would be useful.

Visualization tools would likely be used to present proposed options in the form of maps, pictures and graphics which allow the public to easily understand different

options and their costs, benefits and effects. The preferred scenarios scoped with this process will then be further assessed by utilizing the area's travel demand model and emissions model, which capture the impacts of land use futures on potential transportation networks and GHG emissions. Strategic tools may also be used for this analysis.

3.1.5 Selection of a Preferred Scenario

Selection of a preferred land use and transportation scenario will need to be a cooperative process involving local officials from affected counties and cities within each metropolitan area. Efforts will need to be made to engage the public. The specific nature of the decision and information used to document it will be addressed in the Scenario Planning Guidelines. The preferred scenario would include a conceptual land use and transportation map and goals for how land use and transportation will be managed to meet GHG emissions reduction targets.

3.2 IMPLEMENTATION OF SCENARIO PLANNING IN OREGON

The components described above outline the major steps likely to be involved in metropolitan area scenario planning, leading to the selection of a preferred land use and transportation scenario by the affected local governments. Implementation or action beyond selection of a preferred scenario is not required by SB 1059. However, it is most likely that the preferred scenario would be used to guide other planning efforts, and be implemented through specific policies and actions developed for a Metropolitan Planning Organization's (MPOs) Regional Transportation Plan (RTP) and for county and city Comprehensive Plans, including Transportation System Plans (TSPs).

HB 2001 (the Jobs and Transportation Act) requires implementation of the preferred scenario in the Portland metropolitan area. HB 2001 states that local governments will implement the selected preferred land use and transportation scenario through subsequent amendments to local comprehensive plans and land use regulations. Metro anticipates that the preferred scenario will be incorporated into their next RTP update, and through other plans and policies. Implementation has not been prescribed for the other metropolitan areas. If implementation occurs through policies and actions in RTPs and TSPs, adding such an element likely would require more extensive analysis and public participation than typical updates and increased public outreach.

4.0 SCENARIO PLANNING EFFORTS IN OREGON

It is likely that the general components of scenario planning for reducing greenhouse gas (GHG) in Oregon will include the following: agreement on a scenario planning process, development of a baseline case, development of multiple scenarios to illustrate options for achieving desired outcomes, public and stakeholder involvement, and selection of a preferred scenario. Again, at this point in time, implementation of a preferred scenario through land use and transportation plans is not mandated by state law except in the Portland Metro area.

Some jurisdictions in Oregon have conducted scenario planning visioning efforts, but none have focused on GHG emissions reduction. Nevertheless these examples of completed or nearly completed scenario planning efforts are provided below for the City of Salem, Rogue Valley MPO, and Central Lane MPO as a means of illustrating what elements scenario planning for GHG reduction is likely to encompass. These efforts tended to focus on broad goals and a general vision. Scenario planning for GHG emissions reduction will involve a distinct process where hard choices must be made in order to meet specific targets.

A description of Portland Metro's work in GHG reduction planning, as required by the Jobs and Transportation Act (HB 2001) is also provided below. The Metro example is included because it is the first jurisdiction to scope work for doing GHG reduction scenario planning. Portland Metro is the largest of Oregon's metropolitan areas in terms of geographic size, number of jurisdictions, and population. In addition, work and costs scoped by Metro are unique to that MPO for several reasons including: sophistication of data management and models, staffing levels and capabilities, status of current planning efforts, etc.

For all examples of scenario planning efforts presented in this section, no single one can be used to estimate the costs of scenario planning for GHG reduction in other metropolitan areas in Oregon. Instead, they serve as comparisons to help to better understand level of effort and timeframe.

4.1 SALEM FUTURES

Salem Futures is a planning effort that was completed in 2002 by the City of Salem, within the boundaries of the Salem-Keizer MPO. The project was to engage the community in a discussion about how to manage growth while also maintaining the city's quality of life over the next 50 years. It was also motivated by Oregon Transportation Planning Rule for reducing reliance on the automobile.

Scenarios were developed and evaluated out to 2050, using the MPO's transportation model and geographic information system (GIS) staff. Broad stakeholder groups helped to develop goals and objectives, develop a 2050 baseline and two alternative scenarios.

The city undertook an extensive public outreach process and created a Salem Future Task Force. A preferred scenario never was adopted by the city; instead, the city adopted land use and transportation strategies that had four components: 1) more compact urban form and community design to support the needs of walkers, bicyclists, and transit users; 2) physical changes to the transportation system to emphasize a balanced, multimodal system; 3) promoting transportation options (carpool, vanpool transit, etc); and 4) public awareness efforts. Salem Futures took approximately 4-5 years to complete and cost \$650 thousand, not including City of Salem and MPO staff time.

4.2 ROGUE VALLEY REGIONAL PROBLEM SOLVING

In Rogue Valley's current RTP update they are working to incorporate the near final results of the area's Regional Problem Solving efforts. Rogue Valley Regional Problem Solving began in early 2000 and is now in its last phase, the public hearings process for comprehensive plan amendments for Jackson County as well as for other participating jurisdictions (Medford, Eagle Point, Central Point, Phoenix, Talent, and Ashland). The effort started out of a recognition that cities will have to expand their footprints in the future to accommodate population growth, but that significant benefits would accrue to the region if that development could be coordinated regionally, if the protection of farmland could be a major goal, and if the planning process could be afforded some flexibility from the most rigid aspects of the state's land use system. The project was funded primarily through the Department of Land Conservation and Development's Regional Problem Solving program, technical assistance grants, and the participating jurisdictions' own funds. To date, approximately \$950 thousand has been spent. Additional funding needs were covered by significant amounts of donated time by jurisdictions and the Rogue Valley Council of Governments.

4.3 CENTRAL LANE REGION 2050

In 1999 Central Lane MPO undertook a regional planning effort known as Region 2050. The effort involved scenario development, analysis, and selection, and was completed in 2006. The intent of the effort was to develop a regional growth concept for the area. Ten cities and Lane County volunteered to participate in the endeavor. Two scenarios were developed based on the current state and future local visions. Regional goals for quality of life were developed and alternatives (e.g. compact growth, satellite community growth, and rural growth) were evaluated. A strategy addressing all goals was selected and adopted in 2006. However, it was not fully adopted by all jurisdictions. Not counting staff time, the project cost approximately \$800 thousand.

4.4 PORTLAND METRO –CLIMATE SMART COMMUNITIES SCENARIO PLANNING

In 2009, the Oregon Legislature passed the Jobs and Transportation Act (HB 2001). In Section 37 and 38 of HB 2001 Portland Metro is required, contingent on funding, to

develop two or more land use and transportation scenarios designed to reduce greenhouse gas emissions from light-duty vehicles. Metro has the additional requirement of adopting one scenario after public review and consultation with local government. It also requires the counties and cities in Metro to amend their comprehensive plans and land use regulations to implement the adopted scenario.

To date, Metro has developed a scope of work and efforts are currently underway. The work is divided into three phases, which are described below:

Phase I: Scenario Development

This Phase will focus on developing plausible transportation/land use scenarios that can reduce greenhouse gas (GHG) emission from the light-duty vehicle sector (less than 10,000 lbs. gross vehicle weight) to the year 2035. The work in this Phase will help to inform Land Conservation and Development Commission (LCDC) rulemaking on the setting of metropolitan area targets. Phase I will include the development of scenario planning and evaluation tools that will inform the Statewide Transportation Strategy and the target setting process, identification of the most promising land use and transportation policies, and advance efforts to develop the analysis tools and models necessary to adopt and implement a scenario in Phase III.

Phase II: Scenario Evaluation and Reporting

This Phase will focus on developing criteria and evaluating the plausible scenarios produced in Phase I and developing findings and a report to the Oregon Legislature by February 2012. Other work will include developing and testing analytical tools necessary to adopt a scenario in Phase III.

Phase III: Scenario Refinement and Adoption

This Phase will focus on analyzing, recommending, and adopting a transportation/land use scenario that will meet the established GHG emission reduction target. The adopted scenario will identify a set of transportation objectives and actions, a commensurate land use strategy with implementation actions, and a funding strategy to guide future development. Analysis of the recommended alternative will be conducted in order to develop legal findings necessary to support such decisions.

The Portland Metro MPO scope of work recognizes that work conducted may help inform other efforts by Metro, ODOT and DLCD, including development of Scenario Planning Guidelines, the Statewide Transportation Strategy and GHG emissions reduction Targets. The Metro work also has an additional step - implementation. This step goes beyond requirements for Central Lane MPO, who was also identified in HB 2001. The scope of work anticipates implementation through the next RTP update (due by 2014 under federal law) and other plans and policies.

Both Metro and Central Lane are required to develop modeling and other capabilities to perform scenario planning and select transportation scenarios that achieve greenhouse

gas emissions reduction targets. Central Lane’s requirement to do modeling is contingent on funding to do the work. The local governments inside these MPOs must cooperatively select, after public review and comment on the scenarios, one scenario. Unlike Portland Metro, HB 2001 (Section 38a) does not require the counties and cities inside the Central Lane MPO to amend their local comprehensive plans or transportation plans to implement GHG reduction scenarios.

Because of Metro’s existing modeling capabilities and their goal of building the analytical tools to not only meet HB 2001 mandates but also to support the next Regional Transportation Plan update, local implementation and other planning studies in the region, Metro’s work will require more extensive modeling beyond sketch-level planning tools. The tasks identified and a general description of each is provided below:

- **Develop tools and enhance regional models.** The objective for developing or enhancing tools and models is to establish baseline data, develop appropriate tools to allow for comparison of key scenario assumptions, and provide adequate detail to develop findings necessary to adopt a preferred scenario. The tools developed should enhance regional land use and transportation models to evaluate the costs, benefits, and impacts of land use and transportation choices on GHG emissions and other regional desired outcomes (e.g. transportation choices, economic prosperity, equity, clean air and water and vibrant communities). The tools may also be used by counties and cities in the Metro region and other Oregon MPOs.
- **Sketch-Level Scenario Planning and Analysis.** Scenario planning during the first two Phases of the project is defined as a sketch-level planning process to meet a future emission reduction target for the light-duty vehicle sector. Sketch-level planning is often used as a less expensive and less data intensive alternative to developing complex models and procedures for assessing future travel demand and transportation performance at the facility and system levels. This component of the work will focus on data collection and enhancements to Metro’s GIS and sketch-level tools.
- **Travel Demand Forecasting and MetroScope.** Metro is required to take an additional step through implementation of a preferred alternative scenario. Implementation actions will likely result in direct land use actions by local governments, and on selecting the preferred scenario. The costs and benefits of that scenario must be forecasted with reasonably available analysis tools. Thus, this component of the work will focus on enhancements to Metro’s travel forecasting, emissions forecasting (MOVES) and land use/economic forecasting (MetroScope) tools.
- **Scenario Framing and Research.** Research to frame and focus scenario choices and to identify and define appropriate policy options for later testing. A series of policy briefs will be compiled into a report to help frame the work, synthesizing existing empirical research on selected policies. Topics to be addressed in the report potentially include:

- Scenario Planning, Modeling and Decision Support Tools
- Regional Planning Context and Regulatory Framework
- Co-Benefits of Land Use and Transportation Greenhouse Gas Reduction Strategies
- Impact of Land Use, Transit and Parking Strategies on Greenhouse Gas Emissions
- Impact of Transportation System Management and Operations Strategies on Greenhouse Gas Emissions
- Impact of Pricing and other Fees on Greenhouse Gas Emissions
- Impact of Fuel and Technology-based Strategies on Greenhouse Gas Emissions
- **Outcome based evaluation criteria.** Develop outcome-based evaluation criteria and methodologies to assess the reference case and alternative land use and transportation scenarios relative to the region's adopted six desired outcomes. Metro took on the financial responsibility for this effort, as it is not required by HB 2001 but the importance of understanding the full range of benefits and impacts of transportation-related GHG emissions reduction strategies on transportation system performance, the economy, the environment, and housing/transportation costs was recognized. Evaluation criteria developed through the most recent Regional Transportation Plan update, the Portland-Vancouver Regional Indicators project and the Statewide Transportation Strategy will serve as a starting point for this work.
- **Land Use and Transportation Scenario Development and Evaluation.** Use the sketch-level planning tool(s) to develop and evaluate a reference case (baseline) scenario and three land use and transportation scenarios that meet state GHG emission reduction targets for cars and light trucks.

The MPO will conduct an assessment of the recommended alternative using the evaluation criteria developed earlier in the planning process and consistent with criteria used by state agencies for Statewide Transportation Strategy. This work will require documentation of the assumptions, methods and additional analysis, including:

- Economic analysis
- Equity/environmental justice analyses
- Health analysis
- Environmental analysis
- Land use and transportation analysis
- **Education and Outreach.** Develop and conduct a stakeholder engagement and public outreach program to improve community awareness and understanding of climate change and emissions reduction contributions from land use and

- **Report to the Seventy-seventh Legislative Assembly.** Required of Metro but not the other MPOs.

Overall, the Metro-ODOT Inter-Governmental Agreement (IGA) spans several years and the total amount is just over \$4.5 million, with ODOT providing just over half of all funds. During the funding agreement discussion it was recognized that Metro wanted to further develop its modeling capabilities in ways beyond what was called for in the GHG emission reduction planning work in order to support the next Regional Transportation Plan update, local implementation and other planning studies in the region. The total agreement amount reflects three phases of work: scenario development (\$2,569,873), scenario evaluation and reporting (\$795,383), and scenario refinement and adoption (\$1,173,759).

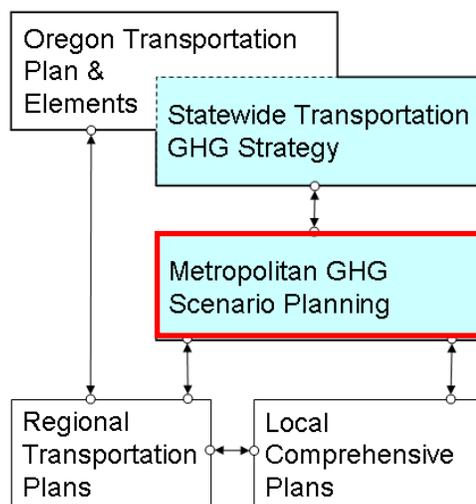
The funds contributed by Metro were primarily from its federal Metropolitan Planning (PL) funding. Additional matching funds were also provided by Portland Metro from other agency funding sources. The current IGA does not include funding for county and city participation in the scenario planning process or implementation following adoption of the preferred scenario.

Portland Metro is the largest of Oregon's MPOs in terms of geographic scale, number of jurisdictions within its boundaries, and staff size. Pre-existing modeling capabilities are more advanced than those of the other MPOs.

5.0 SUMMARY AND CONCLUSION

Section 8 of SB 1059 directs the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development, in consultation and cooperation with local governments within Metropolitan Planning Organization boundaries, to report to the Legislature on the amount of financing necessary to cover costs of local governments in preparing and cooperatively selecting transportation scenarios.

Scenario planning for a metropolitan region is intended to be a strategic planning process, involving development of multiple scenarios of the future configuration of land use and supporting transportation systems, and goals for how those systems are managed to meet targets (to be established by the Land Conservation and Development Commission). Currently, jurisdictions within Oregon’s metropolitan areas do not conduct scenario planning for greenhouse gas emissions reduction from transportation. Such an effort would need to be integrated into Oregon’s current planning program. The figure below illustrates the relationship between scenario planning and other existing transportation plans, along with another major product of the SB 1059 work, the Statewide Transportation Strategy (see shaded boxes).



This report focuses on “Metropolitan GHG Scenario Planning” (box shown in the center of the figure above) which involves selection of a preferred scenario for the metropolitan area. This report does not address subsequent implementation (i.e. through changes to Regional Transportation Plans or Comprehensive Plans). It is envisioned that Metropolitan GHG Scenario Planning will feed into the Regional Transportation System Plans and Local Comprehensive Plans in a manner similar to Oregon Transportation Plan goals. The regional and local plans would likely look at specific policies and actions to meet the goals established in the metropolitan area strategic scenario plan. Because of this connection, both Metropolitan Planning Organizations (MPOs) and local jurisdictions within the MPO boundary have important roles to play in the scenario

planning process. Thus, while the legislation points to local governments within the MPO boundary, there will likely be a need to do scenario planning for greenhouse gas (GHG) in a coordinated manner within the metropolitan region. In accordance, this report focuses on the regional level, where work would occur among MPOs, counties, and cities. Consequently, metropolitan scenario planning will require agreement on the roles and responsibilities of the MPO and the local agencies. Before scenario planning begins, there must be clear agreement and understanding between and among the state and the local governments (similar to the 2010 Intergovernmental Agreement between ODOT and Portland Metro described in Section 4) within each metropolitan area on the process and objectives of scenario planning. With the resources and capabilities of the MPOs, they are well suited to either lead the scenario planning effort for their region or be a major supportive player.

As previously mentioned, jurisdictions do not currently conduct scenario planning for GHG reduction. Such a process would result in increased workload and associated costs. Although additional work will be needed, not all components of scenario planning (agreement on a scenario planning process, development of a baseline case, development of multiple scenarios, public and stakeholder involvement, and selection of a preferred scenario) would be new. Scenario planning is not required when MPOs update their RTPs every 4-5 years, but it has been done by areas like Portland Metro, the Puget Sound Regional Council (the Seattle, Washington area MPO) and most of the larger California MPOs. Most similar to scenario planning components are other “visioning” efforts that have involved MPOs, counties, and cities in the past, including Central Lane 2050, Rogue Valley Regional Problem Solving, and Salem Futures (see Section 4).

A portion of the current planning work done by Metropolitan Planning Organizations (MPOs), counties, and cities may overlap with planning activities associated with GHG emissions reduction. Relevant to transportation and land use planning, the principal long-range transportation planning effort that the MPO is responsible for is their Regional Transportation Plan (RTP) while the counties and cities are responsible for development of Transportation System Plans (TSPs).

The activities involved in updating an RTP are the most similar to, but not the same as, the scenario planning components outlined in this report. The greatest difference is that RTPs use a single forecast of future land use patterns (based on existing local comprehensive plans) while scenario planning involves consideration of several different possible land use arrangements. The level of analysis varies by MPO and only some efforts include scenario analysis where different scenarios are developed. Costs and staff resources associated with scenario planning make it difficult for most MPOs most of the time. A majority of RTP updates are limited to forecasting a single future and assessing small transportation system alternatives that are needed. An example of a more extensive RTP update process is Portland Metro’s last RTP update (approved in June 2010), which included development and evaluation of transportation and land use scenarios, broad stakeholder and public involvement and selection of a scenario. According to information provided by the MPOs (excluding Metro), it is estimated that an RTP takes about 2-5 years to update and costs around \$350 thousand. Some have

cost less and some substantially more (e.g. Salem-Keizer estimated that their last RTP update cost around \$2 million).

While RTP updates can involve elements that are similar to envisioned scenario planning components, there are a few examples nationally of note, where scenario planning was conducted as part of a jurisdiction's Long Range Transportation Plan (APPENDIX B). Locations including Gainesville, Florida and Cheyenne, Wyoming have created their long-range plans using a visioning and goal setting process similar to what Oregon has outlined for scenario planning. Gainesville's effort was estimated to cost around \$250 thousand and Cheyenne's was about \$335 thousand.

Locally, there has been other regional planning or problem solving efforts in Oregon which have included scenario planning and/or an extensive amount of public involvement. An example of a scenario planning effort is the City of Salem's *Salem Futures* project, completed in 1999. The entire process took approximately 4-5 years to complete and cost just over \$600 thousand, not counting staff time. Also noteworthy is Rogue Valley's *Regional Problem Solving*. The effort started approximately 10 years ago with the goal of developing a regional vision for land use, with input from individual cities and the county on how they want to develop. To date, progress has been made but the effort is incomplete. Just under \$1 million has been spent on the project, not counting staff time. These and other similar long-range regional planning efforts are illustrative of the fact that regional visioning and long-range analysis can be a long and expensive process. One of the primary components of both duration and cost is public and stakeholder involvement and cooperation. Cooperative decision making and consensus support have proved to be significant cost and time components of regional planning in Oregon. Though localities faced challenges in regional planning, many have learned from these efforts and are better positioned for regional problem solving because of them.

Nonetheless, stakeholder and public involvement are major components of any planning process and costs tend to vary across jurisdictions. One primary factor is the variability in size (population) and makeup (cities and counties) of the metropolitan areas. These cost differences are seen for current MPO planning efforts, such as for outreach of a Regional Transportation Plan (RTP) update. While other factors may contribute to cost differences, outreach costs for Portland Metro are greater than those for Bend MPO. While increased costs would be expected for scenario planning-related outreach, the difference between metropolitan areas will likely be relational and may be most impacted by the tools used in the process.

In line with outreach costs, and as referenced in the scenario planning components of this report, there are travelshed issues which extend beyond jurisdictional boundaries, and therefore will likely require cross-jurisdictional collaboration. While costs for cross-jurisdictional collaboration may be included in the expenses referenced above for stakeholder involvement, they need to be explicitly considered.

Related to stakeholder involvement, there will be costs associated with the first identified component of scenario planning, Agreement on a Scenario Planning Process. Because of the governance structure of MPOs, counties, and cities, this will be a critical

step in identifying responsibilities. Similarly, because of hierarchal consistency of Oregon's planning process it is important for each jurisdiction to support the scenario planning process at the start. Each jurisdiction may have its own view of the costs and benefits of scenario planning and goals. Reaching consensus may involve multiple rounds of negotiation but is essential. Some of the regional planning efforts mentioned in this report (e.g. Central Lane Region 2050) involved developing formal or informal negotiated agreements among jurisdictions. Costs associated with negotiation could not be extracted but were part of the total amount expended for each effort.

In addition to increased outreach that scenario planning may require, it would also involve development and enhancements of models. In general, Oregon and the state's MPOs are well positioned with modeling tools that support the current planning process. Scenario planning (as defined in this report) will further enhance and inform Oregon's planning process adding a "risk assessment" element to land use development that is currently not addressed.

At the metropolitan level, most models are housed at the MPO or at ODOT. While Oregon MPOs have an advanced set of modeling tools accessible to them (as compared to the other MPO's across the nation⁷), most are currently not equipped to meet the needs of scenario planning for greenhouse gas reduction. The level of sophistication of models varies, with Portland Metro being the most sophisticated and complex. There are many policy variables and factors that would require additional resources and development in order for the current models to correctly account for them, and there are a handful of variables and factors that the current models can simply not address. The largest efforts in model development and enhancement that would be needed for scenario planning include:

- Bringing all MPOs to the same modeling platform (one of the MPO models is not built on the same framework as the other five, making transferability of tools and processes difficult).
- Creating a metropolitan level version of **Greenhouse Gas State Transportation Emission Planning** model (GreenSTEP).
- Developing Sketch Planning Tools (e.g. Envision, Criterion Index). This would also involve creating tools and processes to assure that the land uses developed in this "sketch" environment conform to 2035 population, household, and employment projections, as well as can be incorporated into strategic modeling tools (ultimately into the area's Travel Demand Model) for further scenario evaluation.
- Developing a connection between the State Wide Integrated Model (SWIM) and the MPO models. SWIM represents the cutting-edge in land use and transportation modeling and has the ability to account for transportation and land use interactions between metropolitan areas and surrounding communities. Since land use and transportation policies within a metropolitan area can affect

⁷ "Metropolitan Travel Forecasting", TRB Special Report 288

the amount of growth in surrounding communities and the net amount of light vehicle travel, it is important to consider those effects when evaluating scenarios. Building a connection between SWIM and MPO models would facilitate that analysis.

Once needed model enhancements are made there will likely be added operation and maintenance time and costs. For the models housed at ODOT, additional staff time would be needed to provide modeling services and support. Costs estimated in this report are for metropolitan area scenario planning and do not include costs associated with model enhancements.

In addition to modeling and other technical components of scenario planning, there are other factors likely to influence cost between metropolitan areas, such as staff size and expertise. For MPOs, except Portland Metro, planning/modeling staff is minimal (2-6 people). In addition, expertise and ability vary. For example, not all MPOs have their own modeling programs, let alone people with the ability to run the models.

In general, MPOs, counties, and cities are at or near capacity in terms of covering their responsibilities with available staffing. For both Regional Transportation Plan (RTP) updates and Transportation System Plan (TSP) updates localities often rely on staff assistance from organizations such as Councils of Governments and ODOT, and from consultants. Increased staffing, and funding available for technical assistance, would need to be considered for work activities that would be in addition to current planning responsibilities, such as some components of scenario planning.

As illustrated in the planning relationships diagram of this chapter, scenario planning outcomes would feed into RTPs and TSPs, where the higher level strategic planning effort would set goals and more in-depth planning and analysis would occur for regional and local plans where policies and strategies would be evaluated. For the implementation phase of this work (RTPs and TSPs), the timeline for the next RTP and TSP updates are important. The MPOs are required to update their RTP every four to five years, depending on the area. TSPs are updated as changes in population or traveling characteristics warrant. The difference in timelines for the update cycles would allow for a staggered approach in scenario planning across the metropolitan areas and thus spread the demand for funding in that phase of work.

5.1 FUNDING NEEDS

At this time, only high-level ranges of costs can be estimated for local jurisdictions to conduct scenario planning in Oregon. The full extent of scenario planning and process that will be needed is unknown, as the GHG reduction targets are not yet set, and the range of land use and transportation changes that might be required to achieve them are not yet defined. Assumptions were made in this report as to the general components of scenario planning in Oregon, which are likely to include: agreement on a scenario planning process, development of a baseline case, development of multiple scenarios, public and stakeholder involvement, and selection of a preferred scenario. Components were compared to current planning processes and activities considered to be in excess of

current efforts were highlighted. Cost estimates for scenario planning were primarily based on a review of similar efforts in Oregon and nationally. Estimates are for scenario planning through selection of a preferred scenario for the metropolitan area but do not include additional processes and costs associated with implementation. Extent of implementation has yet to be defined but is likely to occur through Metropolitan Planning Organization (MPO) Regional Transportation Plans (RTPs) and city and county Comprehensive Plans, including Transportation System Plans (TSPs).

Through consultation with jurisdictions within Oregon's metropolitan areas and based on current planning responsibilities, MPOs are well positioned to take on a coordinating role, or at least be a major player for the scenario planning work. Separate and discrete process, such as work plans, would need to be developed for each metropolitan area which determines how it may or may not be able to fold scenario planning into existing planning processes. It is assumed that there is a willingness of the local governments within each of the metropolitan areas to develop an agreement around roles, responsibilities and associated costs, as well as desired outcomes for the scenario planning efforts.

Based on best available information for the cost of RTP elements similar to scenario planning for GHG reduction in Oregon, and based on local and national efforts involving scenario planning, it is estimated that scenario planning, through selection of a preferred scenario, could cost from \$200 thousand to \$1.5 million for each of the five metropolitan areas covered by SB 1059: Salem-Keizer, Corvallis, Central Lane, Rogue Valley, and Bend. Estimated costs do not necessarily take into account the unique aspects, needs, or relationships between each Metropolitan Planning Organization (MPO) and associated counties and cities. Some costs may be more and some may be less because of these differences.

Additional costs would be associated with implementing scenario planning (i.e. amending land use and transportation plans to carry out each area's preferred land use and transportation scenario). Metro has estimated costs for scenario planning including implementation (through development of an updated RTP), with a total estimate (for all work) around \$4.5 million. Portland Metro has tied development and implementation to the next Regional Transportation Plan (RTP) update and, as a result, the MPO is contributing resources primarily from its federal Metropolitan Planning (PL) funding and other agency funding sources.

For the other MPOs, implementation has not been defined. Metro went through a negotiation process to define scenario planning components, including implementation into their RTP. Only through these details were they able to estimate the amount of financing needed. Without this detail for the other metropolitan areas, any estimation of costs is difficult. Outside of Portland, other current RTP updates, without scenario planning for GHG reduction, have been estimated to average about \$350 thousand. Based on RTP update costs and expenditures for long-range transportation plans, added costs associated with scenario planning implementation could be around \$100 thousand to \$670 thousand per metropolitan area. While this estimate captures a wide range, it may change (higher or lower) based on how implementation is prescribed.

Costs for counties and cities to implement an area's preferred land use and transportation scenario through amendments to comprehensive plans or Transportation System Plans (TSPs) have not been estimated in this report. For counties and cities, a similar order of magnitude change in cost would be expected, and could perhaps be greater depending on extent of land use and other analysis as well as public outreach. Geography and make-up of the local jurisdictions will impact cost. Additional costs would need to be supported as existing finance sources are committed to covering current planning responsibilities.

5.2 POTENTIAL FUNDING SOURCES

There exists \$5.9 million for the current biennium and \$8 million for the next biennium which has been allocated by the Oregon Transportation Commission to support greenhouse gas (GHG) emissions reduction planning mandated in House Bill 2001 (Jobs and Transportation Act) and SB 1059, as well as least cost planning work identified in HB 2001. The portion of funds for GHG emissions reduction planning is intended to support scenario planning in the state's metropolitan areas and efforts of the Oregon Department of Transportation (ODOT) and Department of Land Conservation and Development (DLCD). The \$5.9 million for the current biennium has been fully committed. A portion of the next biennium of funding (\$8 million) will need to be used to support continuing work on statewide efforts including the Toolkit and Statewide Strategy, and scenario planning work for Portland Metro and Central Lane MPO. It is recognized that at the current level of funding, it will take a couple of biennia to support this work.

Apart from the funds set aside by the Oregon Transportation Commission, no other funds have been specifically set aside for GHG emissions reduction planning. There are, however, a few grant programs for which a jurisdiction may compete for funding. At the federal level, grant money is available through the Sustainable Communities Regional Planning Grant program, which is supported by the Sustainable Communities Partnership (Housing and Urban Development, U.S. Department of Transportation, and the Environmental Protection Agency). Central Lane MPO successfully competed for this grant and was awarded \$1.5 million in late 2010 to, in part, help with their GHG reduction planning work outlined in Jobs and Transportation Act (HB 2001). Additional matching funds were provided as a condition of the grant from a consortium of contributors including the City of Eugene and the Oregon Department of Transportation.

Other potential federal grant sources for scenario planning could not be specifically identified. However, as part of federal efforts to address climate change or implement a national energy policy, expanded or new funds may become available which could be used for scenario planning. For implementation, local jurisdictions may be eligible to apply for federal funds associated with the Livable Communities Act (the Office of Sustainable Housing and Communities), which are set aside for local communities to develop or adopt "green" development practices. Another source which could be used to support implementation are funds associated with the Clean Energy Bill, Section 113,

which could be used to support the development and update of transportation GHG reduction targets and strategies; and implementation of a scenario.

At the state level, jurisdictions would likely be eligible to compete for Transportation Growth Management (TGM) program funds to conduct scenario planning. The TGM program allocates funds to a broad range of planning efforts. Many regional and local Transportation System Plans have received TGM funding. In addition, the *Salem Futures* effort, discussed earlier in this report, was primarily funded through the TGM program.

Also mentioned in this report is the Rogue Valley Regional Problem Solving effort, which was primarily supported through the Department of Land Conservation and Development (DLCD) Regional Problem Solving program. Given some of the similarities between the Rogue Valley effort and components of scenario planning for GHG reduction, as outlined in this report, there is a likelihood that jurisdictions would be eligible to apply and compete for DLCD Regional Problem Solving funds.

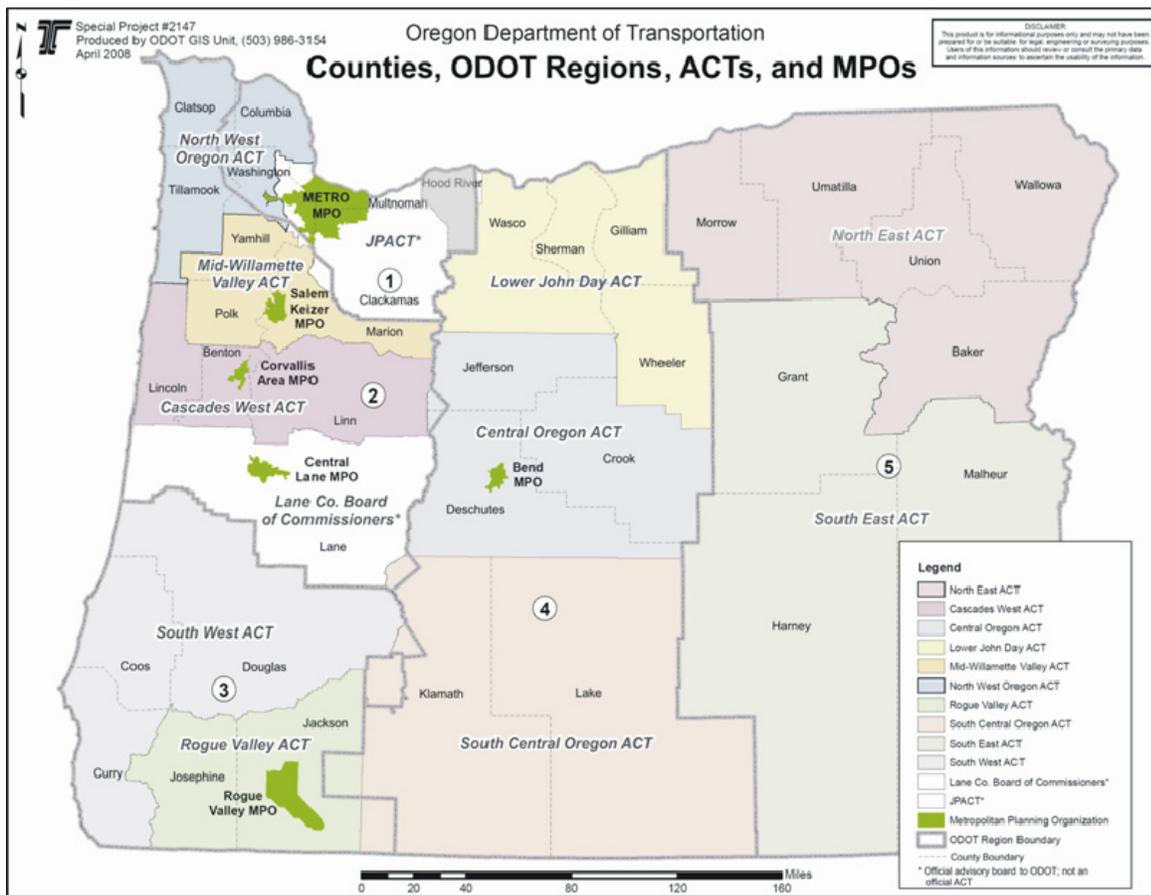
**APPENDIX A:
METROPOLITAN AREA DESCRIPTIONS**

Appendix A: Metropolitan Area Descriptions

The greenhouse gas (GHG) reduction planning components of HB 2001 (The Jobs and Transportation Act) and SB 1059 (Chapter 85 Oregon Laws 2010 Special Session) specified that reduction targets be set for all metropolitan areas in Oregon, and anticipated that scenario planning will be required. The Jobs and Transportation Act singled out Portland Metro and the Central Lane MPO for scenario planning. SB 1059 focuses on anticipated scenario planning for local governments within MPO boundaries. While Portland Metro is exempted from parts of SB 1059, which is the focus of this report, a description of Portland Metro is provided for comparison purposes.

The following sub-sections are organized by Metropolitan Planning Organization (MPO). Descriptions are provided for the entire metropolitan area, including some specifics on the counties and cities within the MPO boundary.

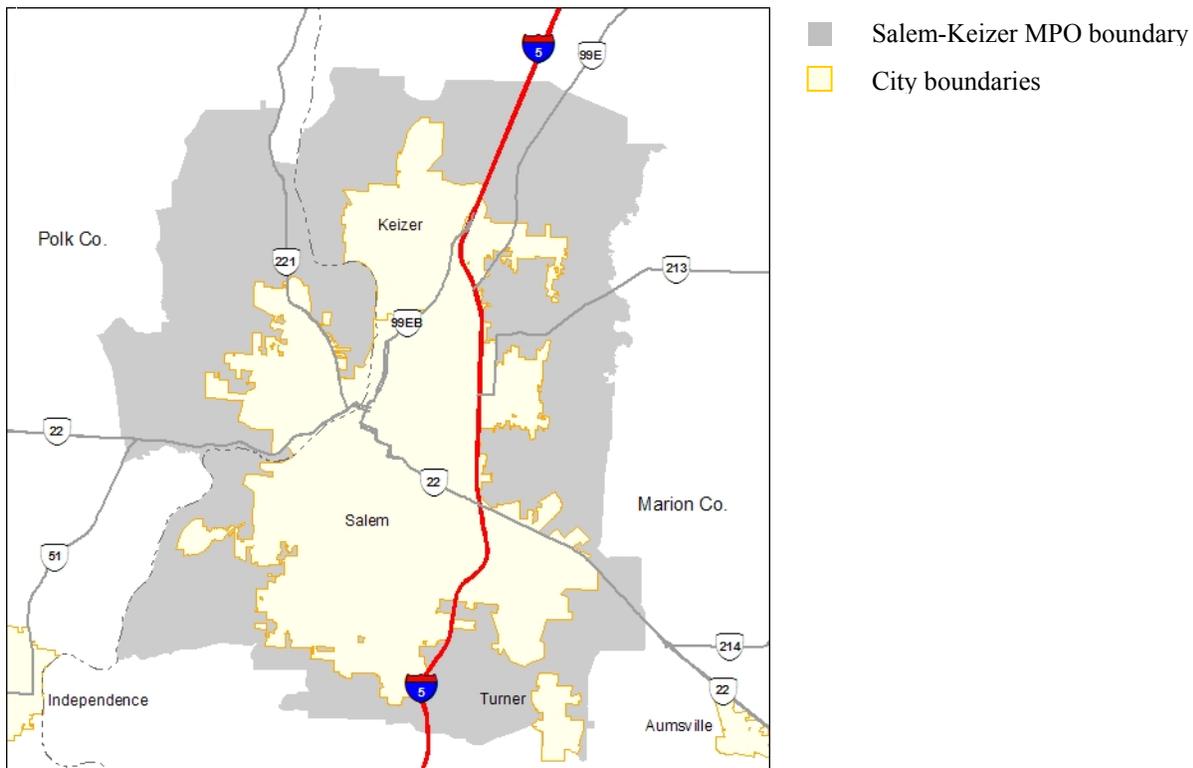
The boundaries of Oregon's six MPOs are shown on the map of Oregon below along with the names and locations of Oregon's counties and Area Commissions on Transportation (ACTs). (ACTs are regional transportation advisory bodies to the Oregon Transportation Commission that are primarily tasked with the development of the modernization component of the Statewide Transportation Improvement Program.)



Source: Brody and Margerum 2009

Salem-Keizer

The MPO for Salem-Keizer is referred to as the Salem-Keizer Area Transportation Study (SKATS) (see map below which shows the Urban Growth Boundary [UGB]). SKATS is located in the mid-Willamette Valley, along the Interstate-5 corridor. Its population size is smaller than that of Metro but similar in size to Central Lane MPO (about 237 thousand people). SKATS includes the cities of Salem, Keizer, and Turner and its boundaries encompass parts of Marion and Polk Counties (see table below). Within the boundaries of SKATS, there are 93 miles of state roads, 348 miles of county roads, and 655 miles of city roads. For transit, 2009 total ridership was 4,200,000, plus about 107,000 paratransit riders. The MPO area is covered by the Mid-Willamette Valley Area Commission on Transportation.



	Number	Description
Counties	2	Marion, Polk
Cities	3	Salem, Keizer, Turner
ACTs	1	Mid-Willamette ACT

SKATS is governed by a Policy Committee, which has eight voting members, including representatives from each county and city, as well as from the local transit district, school district, and ODOT (see table below). Most members are also representatives on the Mid-Willamette Valley ACT. The Policy Committee is advised by the Technical Advisory Committee, which is comprised of 16 members, staffed by the Mid-Willamette Council of Governments.

	Number	Description
SKATS Policy Committee Voting Members	8	Marion County, Polk County, Salem, Keizer, Turner, Salem-Keizer Transit, School District, and ODOT.

Status of Planning Efforts

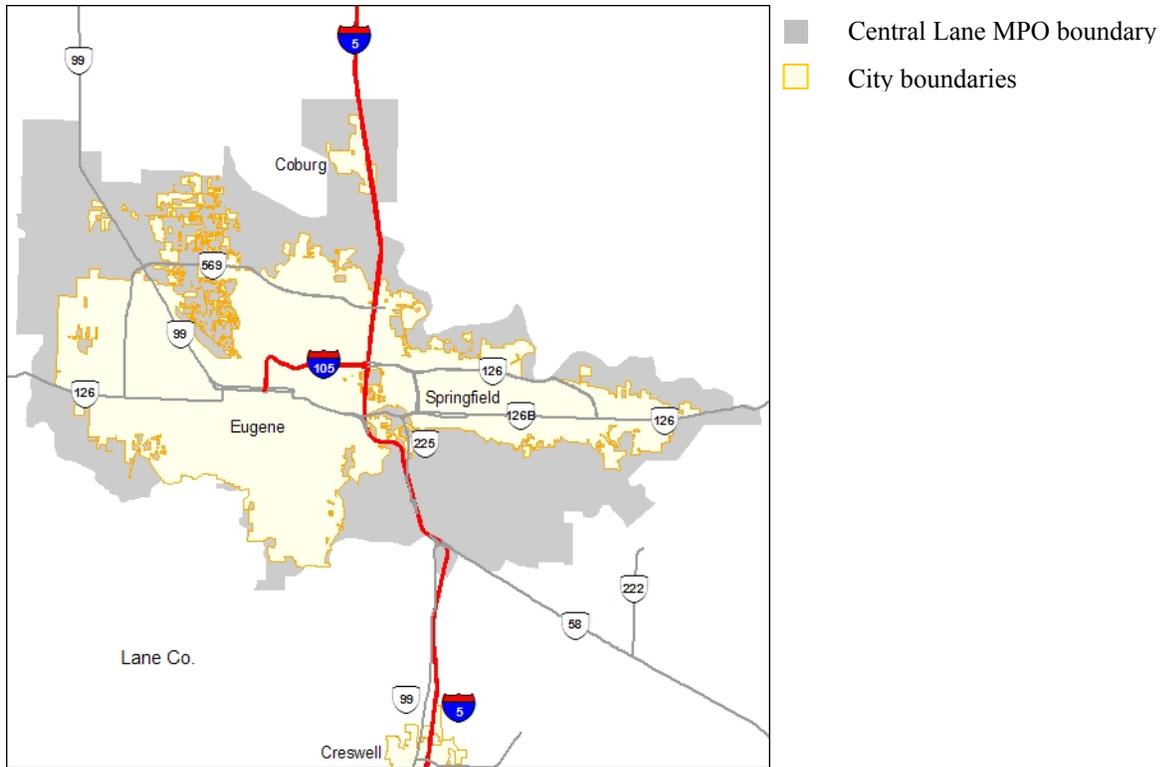
SKATS planning update cycle is every four years, with the most recent update adopted in 2007. Its next update is due in May 2011. Its current RTP horizon is 2031, and the update will be for 2035. SKATS reports that its most recent RTP update took four years to complete from start to finish and cost approximately \$2.26 million.

All counties and cities within SKATS’s boundaries have adopted a TSP. Most TSPs were adopted within the last 10 years and several have been updated recently.

Plan	Jurisdiction	Last Update	
RTP	MPO	Salem-Keizer	2007
TSP	County	Marion	2005
		Polk	2009
	City	Keizer	2009
		Salem	2007
		Turner	1999

Central Lane

Central Lane is the MPO for the Eugene-Springfield metropolitan area (see map below). It is located in the southern Willamette Valley, along the Interstate-5 corridor. The MPO area is similar in population size to Salem-Keizer MPO and smaller than Metro. Central Lane includes the cities of Eugene, Springfield, and Coburg, and a portion of Lane County (see table below). Within the boundaries of Central Lane, there are 143 miles of state roads, 378 miles of county roads, and 775 miles of city roads. The Oregon Transportation Commission approved the formation of a Lane Area Commission on Transportation in late 2010, and a charter has been developed.



	Number	Description
Counties	1	Lane
Cities	3	Eugene, Springfield, Coburg
ACTs	0	N/A

Central Lane is staffed by the Lane Council of Governments. The MPO is governed by an appointed eight-member Metropolitan Policy Committee, which includes representatives from Lane County, Eugene, Springfield, Coburg, and ODOT (see table below). Occasionally two other members, Lane Transit District and Willamette Park District, are allowed to vote (only for issues specific to those jurisdictions). The MPO includes a Transportation Planning Committee which is comprised of staff-level participation (e.g. planners and engineers) from local governments. The Transportation Planning Committee does the majority of the technical planning work for Lane Council of Governments, including the Metropolitan Policy Committee. A subcommittee to the Transportation Planning Committee is the Citizen Advisory Committee, which includes local citizens representing broad geographical, social, and economic interests. The Citizen Advisory Committee generates a private sector perspective on MPO issues and facilitates public involvement.

	Number	Description
Central Lane Policy Committee Voting Members	8	Lane County (2), Eugene (2), Springfield (2), Coburg, and ODOT

Status of Planning Efforts

Central Lane’s planning update cycle is every four years, with the last update completed in 2007. The next update is due in November 2011. Their current RTP horizon is 2031, and the update will be for 2035.

All of cities and the county within Central Lane’s boundaries have adopted a TSP. Most TSPs were adopted within the last 10 years and several have been updated recently.

Plan	Jurisdiction		Last Update
RTP	MPO	Central Lane MPO	2007
TSP	County	Lane	2004
	City	Eugene	2002
		Springfield	2002
		Coburg	1999

Central Lane’s Scenario Planning as Required by the Jobs and Transportation Act (HB 2001)

Similar to Portland Metro, Central Lane was called out specifically in the Jobs and Transportation Act (HB 2001). Section 38a requires Central Lane to develop transportation scenarios designed to reduce greenhouse gas emissions from light vehicles if sufficient funding is received by the MPO and local governments to develop transportation scenarios. . Local governments within the MPO boundary are then required to cooperatively select a single scenario. The bill specifies that Central Lane’s modeling and other capabilities need to be developed by January 2013 in order to initiate the scenario planning process described above. Different from the requirement for Metro, the bill does not specify that local governments need to adopt comprehensive plans and land use regulations consistent with the adopted scenario.

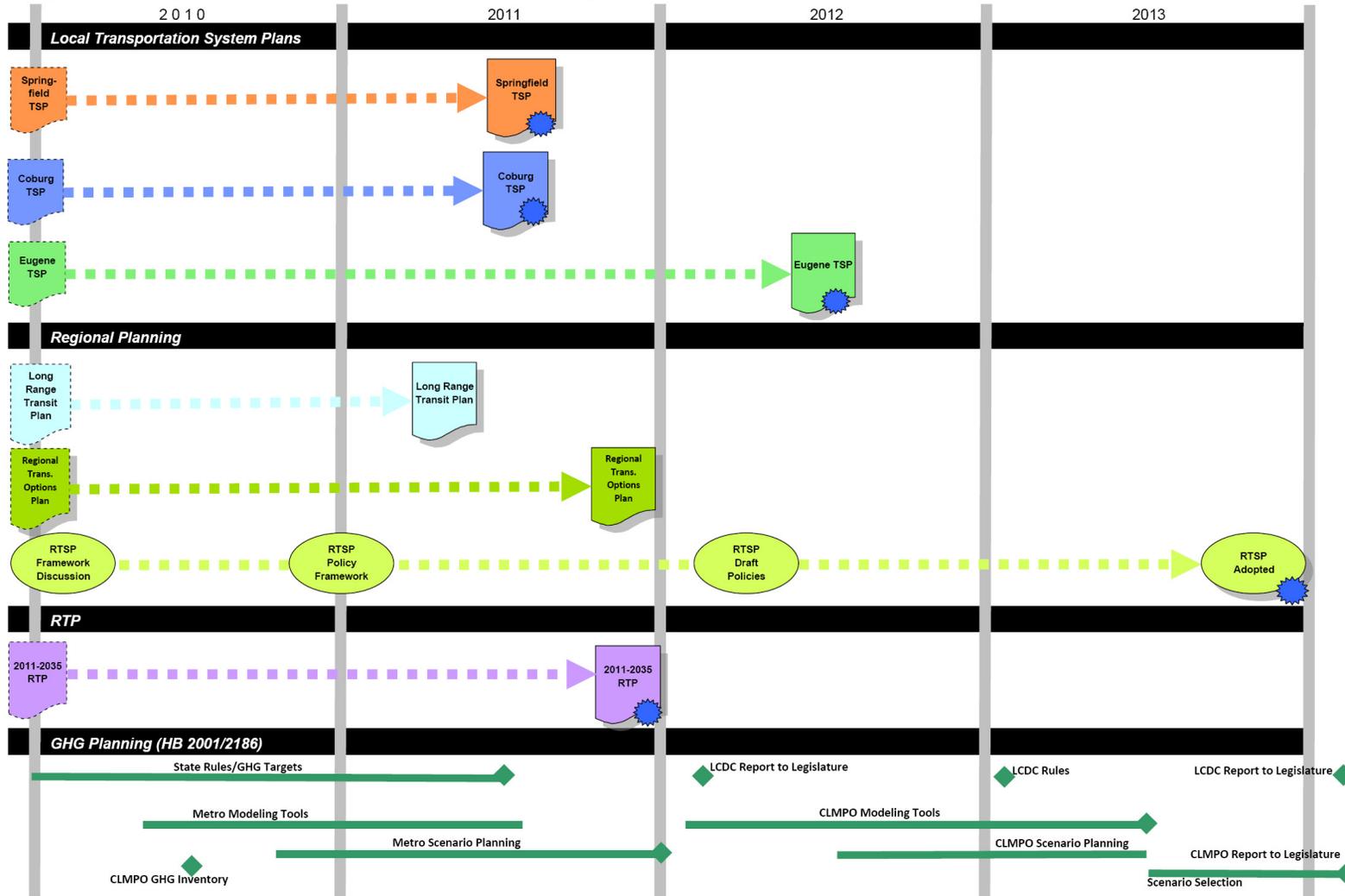
To help support some of the work required of Central Lane in HB 2001, the MPO applied for a Sustainable Communities Regional Planning Grant, through the Sustainable Communities Partnership (Housing and Urban Development, U.S. Department of Transportation, and the Environmental Protection Agency). Central Lane MPO was successful in their application and was awarded \$1.5 million. The amount awarded was slightly less than the amount requested in the application, which was \$1.8 million. In the original application, a consortium of other agencies pledged match, with a total match of \$1.2 million. This consortium included: Central Lane MPO, Lane Council of Governments, Lane Transit District, City of Eugene, City of Springfield, Lane County, St. Vincent de Paul, Oregon Department of Transportation, University of Oregon Sustainable Cities Initiative, and the Housing and Community Services Agency. Of those contributors, the largest share of match listed on the application (37 percent) was from ODOT.

Central Lane has developed a timeline for their work that is required by HB 2001, which is shown on the following page. The diagram also shows the primary planning work within the MPO.

Regional Transportation Work Plan and GHG Planning

ATTACHMENT 3

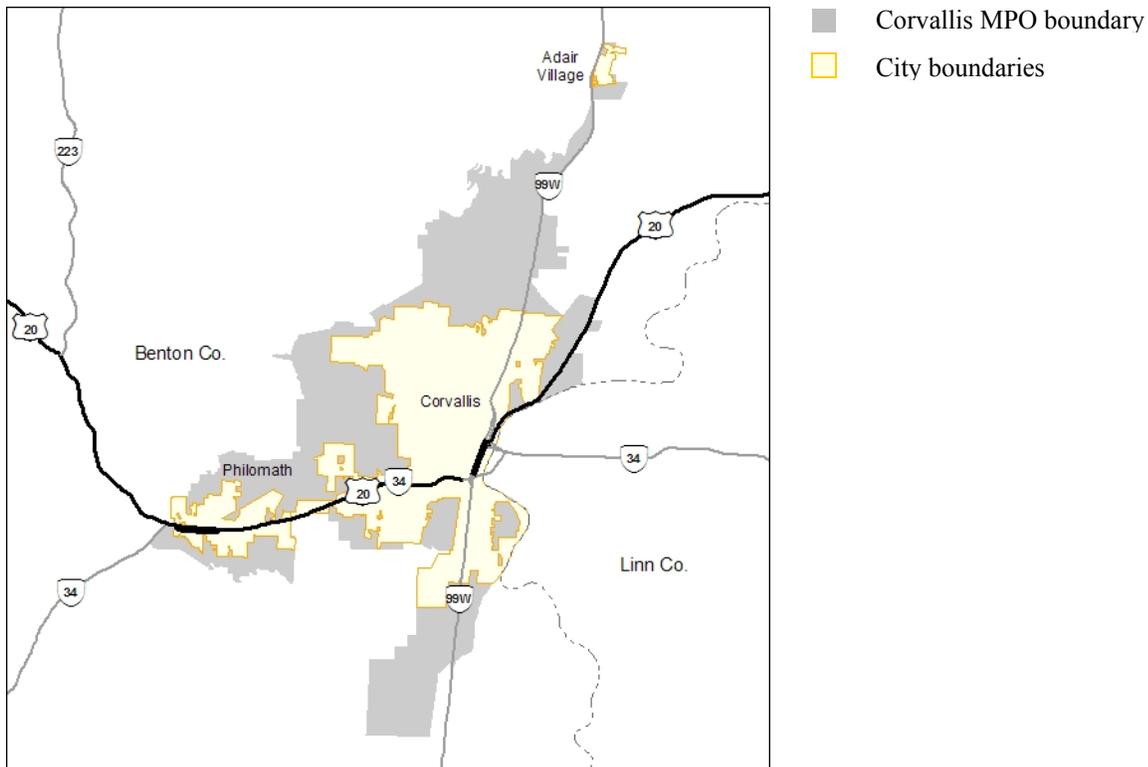
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Corvallis

The Corvallis Area MPO is located in the Willamette Valley, along the Highway 99 corridor (see map below). In terms of population size, Corvallis is the second smallest MPO in Oregon. The Corvallis Area MPO was formed a few years following the 2000 U.S. Census. Included within its boundaries are the cities of Corvallis, Philomath, and Adair Village, as well as a portion of Benton County (see table below). Within the Corvallis Area MPO, there are 29 miles of state roads, 62 miles of county roads, 232 miles of city roads and 122 miles of transit facilities. The MPO area is covered by the Cascades West Area Commission on Transportation.



	Number	Description
Counties	1	Benton
Cities	3	Adair Village, Corvallis, Philomath
ACTs	1	Cascades West ACT

The Corvallis Area MPO is governed by a five-member Policy Board, comprised of a representative from the county, each of the cities, and ODOT (see table below). All members are also representatives on the Cascades West ACT. The Policy Board is advised by the Technical Advisory Committee, which is comprised of eight members including federal transit and highway representatives as well as individuals from the county, city, and ODOT. Staffing is provided by Oregon Cascades West Council of Governments (OCWCOG).

	Number	Description
Corvallis Area MPO Policy Board Voting Members	5	Benton County, Adair Village, Corvallis, Philomath, and ODOT.

Status of Planning Efforts

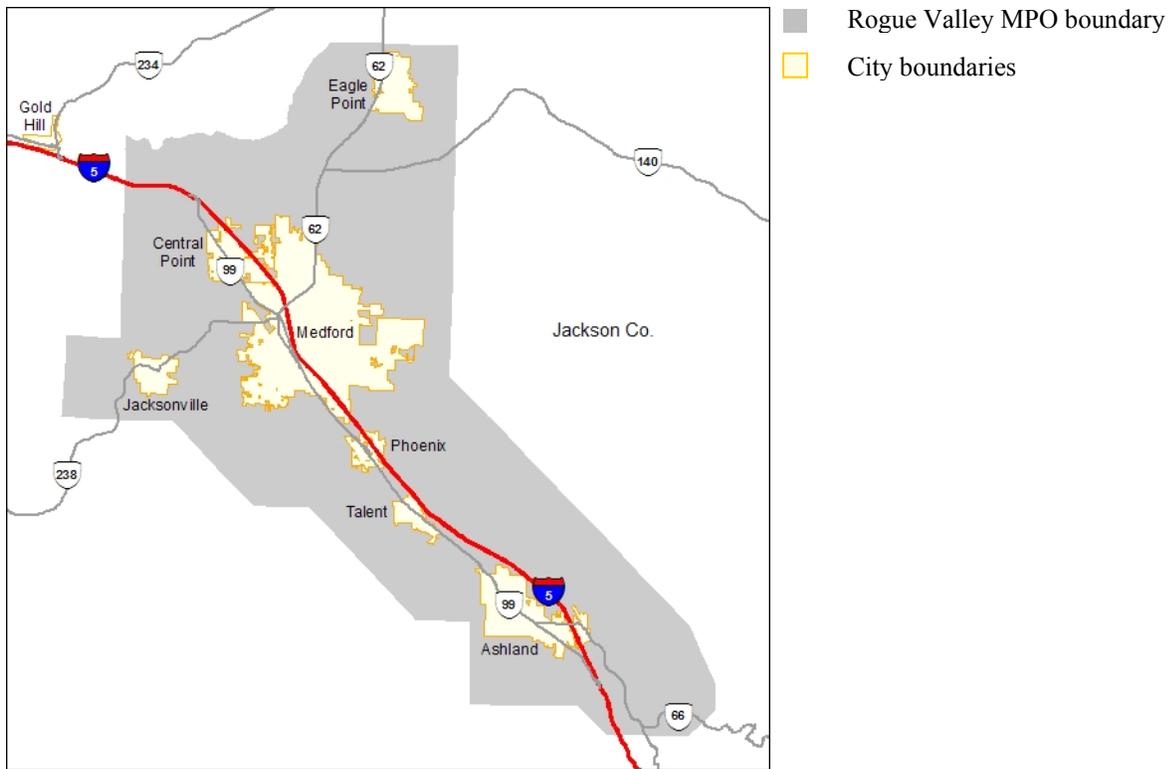
The Corvallis Area MPO planning update cycle is every five years, with the latest update adopted in 2006. The next RTP update is due in September 2011. Their current RTP horizon is 2030, and the update will be for 2035. According to the Corvallis Area MPO Unified Planning Work Program (UPWP) their current RTP update will cost approximately \$180 thousand.

The county and most of the cities within Corvallis Area’s boundaries have adopted a TSP. Dates for the most recent TSP range as long ago 15 years, and as recent as five years.

Plan	Jurisdiction	Last Update
RTP MPO	Corvallis Area MPO	2006
TSP County	Benton	2001
TSP City	Adair Village	N/A
	Corvallis	1996
	Philomath	1999

Rogue Valley

The Rogue Valley MPO includes the urbanized areas of Jackson County (see map below). It is located in the southwest Oregon along the Interstate-5 corridor. While the Rogue Valley MPO is the second largest in terms of area (square miles), it is fourth (middle) in terms of population size. Included within its boundaries are the cities of Medford, Ashland, Jacksonville, Central Point, Phoenix, Talent, Eagle Point, and the unincorporated area of White City. Within the Rogue Valley MPO, there are 149 miles of state roads, 400 miles of county roads, and 556 miles of city roads. For transit, 2008 total ridership was 792,696, plus about 50,000 paratransit riders. The MPO area is covered by the Rogue Valley Area Commission on Transportation.



	Number	Description
Counties	1	Jackson County
Cities	8	Ashland, Central Point, Eagle Point, Jacksonville, Medford, Phoenix, Talent, White City
ACTs	1	Rogue Valley (RVACT)

The Rogue Valley MPO is staffed by the Rogue Valley Council of Governments. It is governed by a ten-member Policy Board, comprised of representatives from the county, cities, transit district, and ODOT (see table below). A few of the members are also representatives on the Rogue Valley ACT. The Policy Board is advised by the Technical Advisory Committee, and the Public Advisory Council. The Technical Advisory Committee has a total of 20 members representing the cities, county, ODOT, Oregon Department of Environmental Quality, Department of Land Conservation and Development and Rogue Valley Transit District. The Technical Advisory Committee reviews and approves transportation planning related policies and programs prior to formal adoption by the Policy Committee. There is also a Public Advisory Council that consists of eleven appointed citizens who make recommendations to the MPO from the public's perspective on proposed long-range transportation plans, project plans, priorities for state and federal funding and other transportation issues.

	Number	Description
Rogue Valley MPO Policy Board Voting Members	10	Jackson County, Ashland, Central Point, Eagle Point, Jacksonville, Medford, Phoenix, Talent, Rogue Valley Transportation District, and ODOT.

Status of Planning Efforts

The Rogue Valley MPO planning update cycle is every four years, with an update due in April 2013. Its current RTP horizon is 2034, and the update will be for 2038. Rogue Valley reports that its most recent RTP update took two and a half years to complete from start to finish and cost approximately \$350 thousand, excluding developing and running the travel demand model provided by ODOT. In Rogue Valley’s current RTP update it is working to incorporate the area’s Regional Problem Solving efforts.

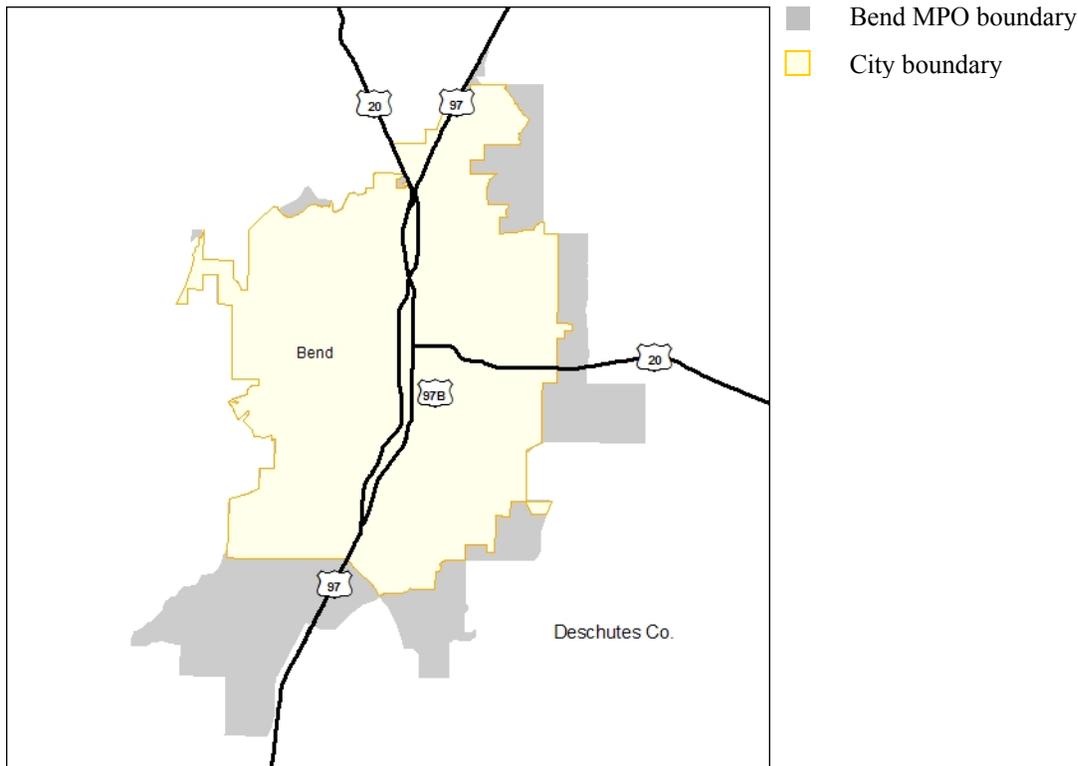
All counties and incorporated cities within Rogue Valley’s boundaries have adopted a TSP. Most of the TSPs have been updated within the past 10 years.

Plan	Jurisdiction		Last Update
RTP	MPO	Rogue Valley MPO	2009
TSP	County	Jackson	2005
	City	Ashland	1998
		Central Point	2008
		Eagle Point	2005
		Jacksonville	2009
		Medford	2003
		Phoenix	1999
		Talent	2007
		White City	2005

In addition to the RTP update and local TSP, Rogue Valley has been working on other transportation related planning projects including: the North-South Travel Study (a transit-oriented travel study of the Hwy. 99 corridor—Ashland to Central Point); transit planning for city circulator routes; and the 2012-2015 MTIP, expected summer/fall 2011.

Bend

The Bend MPO is located in central Oregon, along the Highway 97 corridor (see map below). Bend is the smallest MPO in Oregon in terms of both geographic coverage and population size. The Bend MPO was formed a few years following the 2000 U.S. Census. The MPO is located in Deschutes County and its boundaries are slightly larger than the urban growth boundary of the MPOs only city, Bend (see table below). Within the Bend MPO, there are 34 miles of state roads, 80 miles of county roads, and 468 miles of city roads. For transit, 2009 total ridership was 327,607, plus about 49,426 paratransit riders. The MPO area is covered by the Central Oregon Area Commission on Transportation.



	Number	Description
Counties	1	Deschutes
Cities	1	Bend
ACTs	1	COACT

The Bend MPO is governed by a five-member Policy Board, comprised of representatives from the city, one from the county, and one from ODOT (see table below). The Policy Board is advised by the Technical Advisory Committee, and the Citizen Advisory Committee. The Technical Advisory Committee includes representatives from the local ACT and individuals in the transportation and administrative fields. The Citizen Advisory Committee is comprised of community members from Bend.

	Number	Description
Bend MPO Policy Board Voting Members	5	Deschutes County Board of Commissioners, City of Bend, and ODOT.

Status of Planning Efforts

The Bend MPO planning update cycle is every five years, with an update due in June 2012. Its current RTP horizon is 2030, and the update will be for 2035. Bend MPO reports that development of its first RTP took approximately three years to complete from start to finish and cost approximately \$350 thousand. Bend has yet to adopt a Regional Transportation System Plan (RTSP).

Both the county and city within Bend’s boundaries have adopted a TSP.

Plan	Jurisdiction		Last Update
RTP	MPO	Bend MPO	2007
TSP	County	Deschutes	2003
	City	Bend	2006

In addition to the RTP update, Bend has been working on or involved in many other transportation related planning projects, including: US 97 North Corridor Environmental Impact Statement, US 97/Murphy Road project development (HB 2001 funded project), Juniper Ridge planning, preparation for household activity survey, and the City of Bend UGB Expansion.

The City of Bend’s expansion of its UGB, is one of the larger planning efforts within the Bend MPO. All cities in Oregon are required to have a 20-year supply of land for housing and employment in their UGB. Oregon planning law directs cities where to look first to expand, requires planning for public facilities at the same time, as well as extensive technical analyses to demonstrate that the land currently inside the UGB cannot reasonably accommodate the 20-year supply.

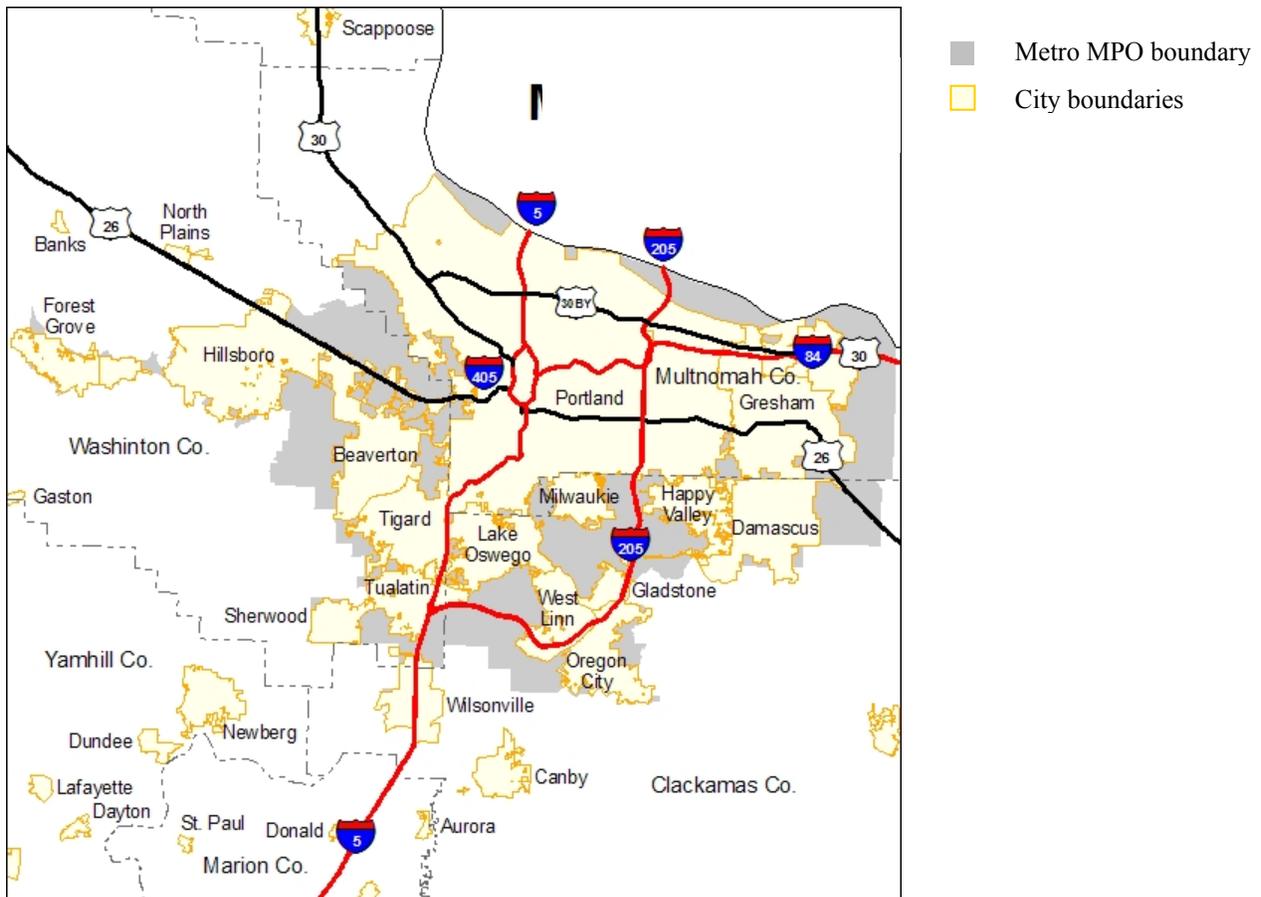
The City of Bend’s process for demonstrating a need included the development and adoption of a coordinated population forecast with Deschutes County, technical work on buildable lands inventories, housing needs analysis, economic opportunities analysis, forecasting additional residential and employment lands, and public facilities (water, sewer, transportation) planning. This effort also included evaluation of different

boundary alternatives. The city and county (either jointly or separately) conducted 66 public meetings on the UGB expansion.

Notice of an 8,943 acre Urban Growth Boundary expansion proposal was given to the Department of Land Conservation and Development in October 2008. The proposal included an UGB Comprehensive Plan Map, Transportation System Plan Map, Urban Holding Zones Map, UGB Zoning Map, ordinances, and amendments to its public facilities plan, comprehensive plan and development code. To date, the UGB has not been acknowledged. The City of Bend estimates that approximately \$5 million has been spent on the UGB expansion.

Portland Metro

Metro is the regional government for the Portland, Oregon metropolitan area (see map below). Its boundaries extend from the northern Willamette Valley, north to the Columbia River at the Washington border. Metro is the largest of Oregon's MPOs, containing the greatest proportion of the state's population and encompassing three counties and 25 cities (see table below). Within the boundaries of Metro, there are 2,857 miles of state roads, 1,602 miles of county roads, and 1,823 miles of city roads. The MPO area is not covered by an Area Commission on Transportation.



	Number	Description
Counties	3	Clackamas, Multnomah, Washington
Cities	25	Beaverton, Cornelius, Damascus, Durham, Fairview, Forest Grove, Gladstone, Gresham, Happy Valley, Hillsboro, Johnson City, King City, Lake Oswego, Maywood Park, Milwaukie, Oregon City, Portland, Rivergrove, Sherwood, Tigard, Troutdale, Tualatin, West Linn, Wilsonville, Wood Village
ACTs	0	N/A

Metro is unique from the other Metropolitan Planning Organizations in Oregon in several important ways. First, Metro is the only MPO in Oregon whose governing body is comprised of regionally elected officials. Secondly, Metro has land use authority. Lastly, the organization has taken on responsibilities beyond transportation planning, such as managing regional parks and open spaces,, operation of the Oregon Zoo, regional performing arts centers and other venues and garbage and recycling.

Portland Metro facilitates regional consultation, coordination and decision-making through four advisory committee bodies –the Joint Policy Advisory Committee on Transportation (JPACT), the Metro Policy Advisory Committee (MPAC), the Transportation Policy Alternatives Committee (TPAC) and the Metro Technical Advisory Committee (MTAC).

There are 17 voting members of JPACT who include state and local officials (see table below).

	Number	Description
JPACT Voting Members	17	Metro, Clackamas County, Multnomah County, Washington County, the City of Portland, Cities of Clackamas County, Cities of Multnomah County, TriMet, Oregon DOT, Oregon DEQ, Washington State DOT, Port of Portland, City of Vancouver, and Clark County.

All transportation-related actions (including federal MPO actions) are recommended by JPACT to the Metro Council. As a result, JPACT is primarily responsible for the Regional Transportation Plan and the Metropolitan Transportation Improvement plan. The Metro Council can approve the recommendations or refer them back to JPACT with a specific concern for reconsideration. Final approval of each item, therefore, requires the concurrence of both bodies. MPAC makes recommendations to the Metro Council on land use issues, including the Regional Transportation Plan. In addition, the Bi-State Coordination Committee advises the Southwest Washington Regional Transportation Commission (RTC), and JPACT/Metro on issues of bi-state significance.

Status of Planning Efforts

Metro's planning update cycle is every four years, with the last update completed in June 2010. Their current Regional Transportation Plan (RTP) horizon is through 2035. The most recent RTP update involved an extensive planning process including evaluation on multiple future scenarios, using MetroScope, the regional travel demand model and Mobile 6a emissions model, and extensive stakeholder involvement. This update was the first to specifically address climate change. While the focus was not on climate change, there was a focus on mutually developing beneficial strategies that address climate change. Metro reports that their RTP update cost approximately \$2 million.

Most (76 percent) of the counties and cities with the MPO boundary have an adopted Transportation System Plan (TSP) (see table below), and all who are not eligible for exemption have a TSP. The age of the most recent update ranges from 15 years ago to 2010.

Plan		Jurisdiction	Last Update	Jurisdiction	Last Update
RTP	MPO	Portland Metro	2010		
		County	Clackamas	2008	
TSP	County	Multnomah	2005		
		Washington	2002		
		City	Beaverton	2001	Maywood Park
	Cornelius	2005	Milwaukie	2008	
	Damascus	N/A	Oregon City	2001	
	Durham	N/A	Portland	2007	
	Fairview	1999	Rivergrove	N/A	
	Forest Grove	1999	Sherwood	2005	
	Gladstone	1995	Tigard	2010	
	Gresham	2002	Troutdale	2005	
	Happy Valley	2009	Tualatin	2001	
	Hillsboro	2004	West Linn	2008	
	Johnson City	N/A	Wilsonville	2010	
	King City	N/A	Wood Village	2001	
	Lake Oswego	1997			

Metro's Scenario Planning as Required by the Jobs and Transportation Act (HB 2001)

Prior to the development of SB 1059, the Oregon Legislature passed the Jobs and Transportation Act (HB 2001), which in Sections 37 and 38 required Metro, specifically, to develop transportation scenarios designed to reduce greenhouse gas emissions from light vehicles. Metro is required to consult with local governments and the public within the MPO boundary to cooperatively select a preferred scenario. Following adoption of the preferred scenario, local comprehensive plans and land use regulations are required to implement that scenario.

The target GHG emissions reduction for Metro will be adopted by the Oregon Land Conservation and Development Commission by 2011 for the year 2035. The selected scenario should demonstrate that it can meet the target.

In the development of Metro's scenario planning process, the Jobs and Transportation Act also specified that the Oregon Department of Transportation and the Department of Land Conservation and Development provide technical and financial assistance so that Metro and other local governments can meet the requirements. In accordance, an Intergovernmental Agreement was executed between Metro and ODOT in August 2010. The agreement spans several years and the total amount is just over \$4.5 million, with ODOT providing just over half of all funds. The total agreement amount reflects three phases of work: scenario development (\$2,569,873), scenario evaluation and reporting (\$795,383), and scenario refinement and adoption (\$1,173,759).

Portland Metro has tied development and implementation to the next Regional Transportation Plan (RTP) update and, as a result, the MPO is contributing resources primarily from its federal PL funding. Additional matching funds were also provided by Portland Metro from other agency funding sources. The IGA and costs are subject to further negotiation and refinement for future biennium. More details of the work plan and progress to date is included in Section 4 of this report.

**APPENDIX B:
EXAMPLES OF SCENARIO PLANNING NATIONALLY**

Appendix B: Examples of Scenario Planning Nationally

In Section 4 of this report, some examples of scenario planning efforts in Oregon were presented. For a more robust sample of scenario planning, a few examples of areas outside of Oregon are provided in this appendix. Included are Sacramento, California's Regional Blueprint, Gainesville, Florida's MTPO 2010, and Cheyenne, Wyoming's PlanCheyenne. These national efforts involved some or all of the general components of scenario planning identified in this report, but were not focused on scenario planning for greenhouse gas (GHG) reduction.

The summaries provide a general sense of scenario planning as developed elsewhere. None of the examples focused on scenario planning for GHG reduction. These efforts tended to focus on broad goals and a general vision. Scenario planning for GHG reduction will involve a distinct process where hard choices must be made in order to meet targets. Thus, because of this distinction in scenario planning for GHG reduction, and the fact that the locations are not comparable in size nor resources to Oregon metropolitan areas (which are smaller), any costs shown below cannot be directly used to assume costs for GHG reduction scenario planning in Oregon.

SACRAMENTO, CALIFORNIA – REGIONAL BLUEPRINT

The Sacramento Council of Governments (SACOG) Board of Directors adopted the Preferred Blueprint Scenario⁸ in December 2004, a vision for growth that promotes compact, mixed-use development and more transit choices as an alternative to low density development. The Blueprint is part of SACOG's Metropolitan Transportation Plan (MTP2035) for 2035. MTP2035 is the long-range transportation plan for the six-county region, and serves as a framework to guide local government in growth and transportation planning through 2050.

The development of the Blueprint Project was designed under the acknowledgment that SACOG did not have land use authority over local jurisdictions. Therefore, working with local jurisdictions throughout the process was vital to obtaining buy-in and support of the preferred scenario. There were six counties and 22 cities involved. Work was supported by a staff of 55 individuals. The scenario planning process started as a county-wide effort, leading to a region-wide effort which resulted in the selection of a final preferred scenario. The process included the use of visualization tools and regional land use modeling tools, as well as transportation demand modeling. In total, the project cost \$2.15 million.

The Sacramento effort was fairly comprehensive and complex in nature and would be difficult for most medium and small sized Metropolitan Planning Organizations (such as the five Oregon MPOs specified in SB 1059) to replicate. Some components of the work, such as visualization tools and outreach methods could be more feasible for smaller MPOs.

⁸ Federal Highway Administration. June 8, 2006. Accessed online November 2010 at: <http://www.fhwa.dot.gov/Planning/landuse/sacramentocs.htm>

GAINESVILLE, FLORIDA – MTPO 2020

In 2000, the Gainesville Metropolitan Transportation Planning Organization (MTPO) adopted a 2020 Long Range Transportation Plan (LRTP), which also is referred to as the Livable Community Reinvestment Plan⁹. During the development of this plan, Gainesville used a scenario planning approach, looking at transportation and growth challenges and land use strategies to address those needs in the Gainesville area.

The jurisdictions involved in updating the plan included the MPO, one county, one city, and surrounding urbanized and transitioning areas. The effort was led by the Gainesville MTPO, who provided an authoritative voice to land use decision-making, even without legal authority. Local consultation was facilitated through MTPO membership, which included all of the City of Gainesville Commission and the Alachua County Board of County Commissioners.

The primary tool used to support the LRTP update was the travel demand model for the Gainesville Urbanized Area Transportation Study (GUATS). This included standard GIS-based socioeconomic databases of population and employment and transportation demand modeling systems and networks. The total cost of the LRTP update was \$250 thousand.

CHEYENNE, WYOMING – PlanCheyenne

PlanCheyenne was adopted in 2006 as the official comprehensive development plan for Cheyenne, Wyoming and Laramie County. The plan provides a long-range vision and sets out a policy to guide future growth and development for the region. It is a multi-disciplinary integrated land use, transportation, and parks and recreation plan, with interdisciplinary goals, including land use, transportation, economic development, and recreation. The Transportation Master Plan component of PlanCheyenne is the current Long Range Transportation Plan for Cheyenne MPO.

The Transportation Master Plan was developed through an analysis of system efficiencies and potential alternative solutions using estimates of future travel demand. Various alternatives were tested using models. Stakeholders and the public (including all city departments, the county, the U.S. Air Force, local businesses, and the local community college) were extensively engaged. Funding support was provided by the MPO, county, city, and parks and recreation department. In total, the project cost \$335 thousand.

⁹ Gainesville MTPO 2020 Transportation Plan: The Livable Community Reinvestment Plan.