

OVERVIEW OF PHASE 2 SCENARIO ASSUMPTIONS

January 21, 2014



INTRODUCTION

The Portland metropolitan region is an extraordinary place to live. Our region has vibrant communities with inviting neighborhoods. We have a diverse economy and a world-class transit system. The region features beautiful scenery, parks, trails and wild places close to home.

Over the years, the communities of the Portland metropolitan area have taken a collaborative approach to planning that has helped make our region one of the most livable in the country. Because of our dedication to planning and working together to make those plans a reality, we have set our region on a wise course for managing growth – but times are changing. An increasingly diverse and growing population, a changing climate, rising energy costs, aging infrastructure, and other social and economic challenges demand new kinds of leadership and thoughtful deliberation and action.

PROJECT BACKGROUND

The 2009 Oregon Legislature required the Portland metropolitan region to develop an approach to reduce per capita greenhouse gas emissions from cars and small trucks by 20 percent by 2035 while at the same time the region expects to welcome nearly 490,000 new residents and more than 365,000 new jobs within the region’s urban growth boundary.

The Climate Smart Communities Scenarios Project will illustrate how different investments and policies can protect farms, forestland and natural areas, create healthy, livable neighborhoods, and grow the regional economy while reducing greenhouse gas emissions from cars and small trucks. Building toward a future that reflects what is important to us means making priority investments that drive a strong economy, support the unique character of our

communities and ensure everyone has access to the opportunities that create the quality of life for which our region is known.

We know that investing in quality infrastructure is essential to a functioning, vibrant economy and healthy, livable communities. Past experience and analysis indicate that investments in centers, corridors and employment areas are an effective means of attracting growth to these areas in support of community visions and values. Investments can take the form of urban renewal, expanding transit service, building new sidewalks, bikeways or street connections, managing parking, travel option programs, and other tools. Removing barriers to more efficient use of land and existing infrastructure can also help local governments achieve their desired community visions.

Yet the Portland metropolitan region is not making the investments necessary to support our growing population or achieve community visions. The cost of building the needed public and private facilities is estimated to be \$27 to \$41 billion. Traditional funding sources are expected to cover only half that amount. The existing transportation system is overburdened and underfunded, and cannot not meet current or future needs of the region.

As the region’s economy, labor and housing markets begin to recover in the aftermath of the Great Recession, lack of investment over the last 20 years in the systems that support our communities is undermining our region’s ability to take advantage of opportunity. We’re investing less in infrastructure today than at any time in our history. Infrastructure, such as roads, highways, sewer and stormwater networks, and school facilities, is not being maintained or replaced as it ages. We also need to complete gaps in our region’s transit, walking and biking networks. At a time when state and federal resources needed to address our aging infrastructure are scarce, we have a unique opportunity to find a better way to support our communities, attract new business, and grow the economy. The same kinds of investments that can help address these needs

can also help achieve our greenhouse gas emissions reduction goals.

To better understand the possibilities and challenges facing the region, the Climate Smart Communities Scenarios Project evaluated three scenarios in Summer, 2013. Each scenario reflects choices about how and where the region invests to implement locally adopted plans and visions. They illustrate how different levels of leadership and investment could impact how the region grows over the next 25 years and how those investments might affect different aspects of livability for the region – creation of living-wage jobs, access to transit and jobs, housing, air quality, public health and greenhouse gas emissions.

The results of the analysis will be used to frame a regional discussion about which investments and actions should be included in a preferred approach. Working together, cities, counties and regional partners will decide which elements from each of the three scenarios evaluated should go forward into a preferred approach for the region to adopt in December 2014. Through this collaborative effort, we can identify how the region should work together to implement the approach that is adopted and develop new kinds of leadership and the local, regional, state and federal partnerships needed to invest in communities to make local and regional plans a reality.

WHAT WE TESTED

While most assumptions are tailored to each scenario, several assumptions were the same for all three scenarios:

- Comprehensive plans and zoning as adopted by cities and counties across the region.
- Vehicle and fuel assumptions that were developed by three state agencies (ODOT, ODEQ and ODOE), and assumed by the Land Conservation and Development Commission when setting the region's per capita GHG emissions reduction target in 2011. The assumptions were developed based on the best available information and current estimates about improvements in technologies and fuels.
- Federal gas tax at 18 cents per gallon (2012 level).

THREE APPROACHES THAT WE EVALUATED IN 2013

Scenario A	RECENT TRENDS This scenario shows the results of implementing adopted plans to the extent possible with existing revenue.
Scenario B	ADOPTED PLANS This scenario shows the results of successfully implementing adopted land use and transportation plans and achieving the current RTP, which relies on increased revenue.
Scenario C	NEW PLANS & POLICIES This scenario shows the results of pursuing new policies, more investment and new revenue sources to more fully achieve adopted and emerging plans.

Scenario A

RECENT TRENDS

Given the uncertainties facing our region today, it is difficult to predict future trends and conditions. With that limitation in mind, the starting point for the scenarios analysis is the reference scenario. This scenario is a projection of how the region would grow if current local government transportation and land-use plans are followed through to 2035 with existing revenues and policies.

Land use and urban form

- Current zoning is maintained.
- Future Metro urban growth boundary expansions through the year 2035 add about 28,000 acres, in keeping with falling behind on the investments needed to attract growth in the region's centers, corridors and employment areas. This represents an accelerated schedule for making the region's adopted 50-year land supply available for development.
- Neighboring cities grow at rates that are similar to historic rates.

Public and private development incentives and fees

- Public incentives for housing decline from today limiting the ability of public agencies to partner with the private sector to build investments.
- Significant urban growth boundary expansion is coupled with higher developers fees in these areas to help urban reserves to be ready for development, recognizing limited public funding is available to fund needed infrastructure in these areas.
- Areas with paid parking in place today remain the same. This includes portions of the Portland Central City – Downtown Central Business District, Lloyd District, and

the River District/Northwest. No other parking strategies are implemented throughout the region.

Transportation revenues

Limited investment is made in the region's transportation system as funding levels stay the same as they are today for the period 2010 to 2035. Only projects with committed funding were included in the analysis.

Key road and highway investments

- The Sellwood Bridge replacement is completed.
- Interchanges in the I-84, OR 217 and US 26 corridors and at the junction of I-205/I-84 are improved.
- Auxiliary lanes are added on I-5 and I-205 at the junctions of I-5/I-205 and I-205/Powell/Washington and I-205/I-84, respectively.
- US 26 West is widened to six through lanes.
- Shute Road and 185th Avenue are widened to seven lanes to improve access from the Intel campus to US 26.
- The Sunrise project connection from I-205 to Southeast 122nd Avenue is built.
- Existing programs aimed at improving traffic operations and reducing delay continue at existing programmatic levels. Investments include timing traffic signals to be coordinated and implementing programs to clear breakdowns and accidents quickly on the region's highways.

Regional transit investments

- Portland-to-Milwaukie light-rail transit is constructed and Milwaukie light rail feeder bus service is provided.
- The Portland streetcar CL line loop is completed.
- 2010 levels of TriMet and South Metro Area Rapid Transit (SMART) service is maintained with small increases in TriMet service targeted to address overcrowding and delays due to congestion.

Complete streets and active transportation investments

- New street connections and widening of existing major streets are limited to projects with committed funding.
- Limited bicycle and pedestrian investments reflecting that existing revenues are largely dedicated to transit, road and highway investments.

Education and incentive programs

- Employer Outreach programs are funded at existing levels and focused on encouraging large employers (100 or more employees) to promote transit use, flexible work hours, carpooling, walking and bicycling in their workforce.
- Metro's Regional Travel Options (RTO) program continues to support operation of the Drive Less Connect program and provides technical assistance to Transportation Management Associations (TMAs) in the region, including the Lloyd District TMA, Westside Transportation Alliance and Swan Island TMA at existing program levels.
- Participation in carsharing programs grows.

Scenario
B

**ADOPTED
PLANS**
Reference case

This scenario is a projection of how the region would grow if current local transportation and land-use plans are followed through to 2035 with the revenues anticipated in the 2035 Regional Transportation Plan.

Land use and urban form

- Current local zoning is maintained.
- Future Metro UGB expansions through the year 2035 add nearly 12,000 acres, in keeping with the regional growth distribution adopted by the Metro Council in November 2012.
- Assumptions for neighboring cities are the same as Scenario A.

Public and private development incentives and fees

- Public incentives for housing grow and are available in more areas than today.
- Developers pay similar fees as exist today, but less than Scenario A.
- Funding for public infrastructure (capital costs as well as costs of maintenance and upgrade) is available in all urban reserve areas added to the urban growth boundary to accommodate new jobs and housing.
- A market-based approach to parking management is implemented in all regional centers, station communities and town centers served by high capacity transit.

Transportation revenues

Significant investments are made to the transportation system reflecting the \$14 billion (2014\$) in funding assumed in the 2035 RTP financially constrained system for the period 2010 to 2035. Funding sources include:

- an increase of one cent per gallon per year in the statewide gas tax for system

- operations and maintenance.
- a \$15 increase of the state vehicle registration fee every eight years to pay for system expansion.
- continuation of past local and federal funding levels to pay for system expansion
- tolling on the I-5/Columbia River Bridge crossing to help pay for the I-5 Bridge Replacement project.
- An increase in the payroll tax to pay for reinvestment and expansion of transit service.

Key road and highway investments

- The I-5/Columbia River Bridge Replacement is constructed, and I-5 North is widened to six through lanes.
- Additional interchange investments are made in the I-5, I-205, I-84, OR 217 and US 26 corridors.
- Programs and investments aimed at improving traffic operations and reducing delay are also expanded, including the expansion of real-time traveler information on-line and through the growing Smartphone app industry.

Regional transit investments

- Columbia River Crossing light rail from Milwaukie to Clark College via downtown Vancouver is constructed.
- Portland to Lake Oswego streetcar, Burnside/Couch streetcar to Hollywood Transit Center and the Eastside streetcar loop (using the Milwaukie LRT bridge) are completed.
- Bus service routes and operations are adjusted to serve all new capital projects.

Complete streets and active transportation investments

- New street connections that further build out the regional street grid and arterial street expansion are constructed throughout system.
- Freight rail and street extensions and expansions focused on serving industrial areas are constructed.
- Major streets are widened or retrofitted with wider sidewalks, safer street crossings, improved bus stops, bikeways, transit signal priority at intersections and other multi-modal designs.
- On-street bicycle and pedestrian projects, such as bicycle lanes, cycle tracks, bicycle boulevards, sidewalks and crossing improvements are constructed.
- Off-street regional trail projects are constructed, such as the Lake Oswego to Portland trail, South waterfront Willamette Greenway trail, Fanno Creek (Red Electric) trail, Beaverton Creek Trail, Westside trail, Bronson Creek trail, Council Creek trail, Tonquin trail, Columbia Slough trail, Scouter's Mountain trail, the Sunrise Project trail and Springwater trail, Oregon City Loop trail, a segment of the E. Buttes Loop trail, and the Gresham-Fairview trail.

Education and incentive programs

- Car-sharing and Metro's Regional Travel Options (RTO) program is expanded throughout the region, particularly in areas served by high capacity transit.
- ODOT successfully launches a statewide EcoDrive Campaign, focusing on giving commercial drivers training in fuel-efficient driving practices. The campaign targets public agencies and private, commercial companies who maintain a fleet of cars and/or trucks, providing them with materials to teach their employees on ways to improve fuel efficiency through vehicle maintenance and driving techniques.

Scenario

C

NEW PLANS & POLICIES

Land use and urban form

- Current local zoning is maintained, but additional zoned capacity is assumed in keeping with the Southwest Corridor land use vision adopted by the Southwest Corridor Steering Committee in 2013. The vision identified additional residential and employment capacity to be added to areas of southwest Portland, Tigard, Tualatin and Sherwood.
- Future Metro UGB expansions through the year 2035 add nearly 12,000 acres, in keeping with the regional growth distribution adopted by the Metro Council in November 2012.
- Assumptions for neighboring cities are the same as Scenario A.

Public and private development incentives and fees

- Public incentives for housing grow and are available in more areas than Scenario B. New locations served by high capacity transit are assumed to provide incentives to attract more housing and jobs in these areas.
- Developers pay similar fees as exist today, the same as Scenario B.
- Funding for public infrastructure (capital costs as well as costs of maintenance and upgrade) is available in all urban reserve areas added to the urban growth boundary to accommodate new jobs and housing.
- In addition to the parking assumptions in Scenario B, a market-based approach to parking is also implemented in locations within .25-mile of where one or more frequent bus service routes intersect. Frequent bus lines have 15-minute or better service all day everyday.

Transportation revenues

Significant investments are made to the transportation system reflecting the \$20.8 billion (2014\$) in funding assumed in the 2035 RTP State System for the period 2010 to 2035. In addition to the financially constrained system funding sources, this includes:

- The equivalent of a \$2 per year increase in the state vehicle registration fee through 2035 to pay for system expansion.
- Creation of a local/regional vehicle registration fee equivalent to \$1 per year to pay for system expansion.
- Creation of local street utility fees where they do not currently exist to pay for system maintenance and operations.
- a \$.03 per mile road use fee in lieu of at statewide gas tax beginning in 2015 to pay for system maintenance and expansion.
- a \$50 per ton carbon fee beginning in 2015 to pay for system expansion.
- the equivalent of a .02 increase in the TriMet payroll tax to pay for additional expansion of transit service.

Key road and highway investments

- Investments assumed in Scenario B.
- The Sunrise project extension from Southeast 122nd to Southeast 172nd Avenue is built.
- Operational improvements are made in the I-5 South and I-205 corridors.
- Programs and investments aimed at improving traffic operations and reducing delay are also expanded to clear breakdowns and accidents quickly on the region's arterials.
- Additional interchange investments are made at the junctions of I-5/OR 217, I-5/72nd and US 26/185th Avenue.

Regional transit investments

- Investments assumed in Scenario B.
- An extension of light rail transit from Portland to Tigard via Barbur Boulevard is constructed.
- High capacity transit serving AmberGlen in Hillsboro and the Powell/Division, I-205,

McLoughlin Boulevard and Tualatin-Valley Highway corridors is provided.

- Other Portland Streetcar extensions are completed, including: Broadway/Weidler Streetcar, Northeast MLK Streetcar, linking Portland State University to the Oregon Museum of Science and Industry (OMSI) to Northeast Killingsworth, and Northwest 19th/20th Streetcar.
- Bus service routes and operations are adjusted to serve all new capital projects. In addition, all headways are 30-minute or better, either through overlapping service or straight frequency on a single line. Frequent service lines have a minimum of 10-minute headway or better.
- A locally-developed transit Service Enhancement Plan (SEP) for each part of the region is fully implemented building on the plan developed for the westside in 2012.
- Westside commuter rail operations are expanded to all-day service with 15-minute peak and 15 off-peak headways.

Complete streets and active transportation investments

- Additional new street connections that build out the regional street grid and arterial street expansion are constructed throughout system.
- Freight rail and street extensions and expansions focused on serving industrial areas are constructed.
- Major streets are widened or retrofitted with wider sidewalks, safer street crossings, improved bus stops, bikeways, transit signal priority at intersections and other multi-modal designs.
- On-street bicycle and pedestrian projects, such as bicycle lanes, cycle tracks, bicycle boulevards, sidewalks and crossing improvements are constructed.
- The draft regional Active Transportation Plan (August 2013) recommended pedestrian and bicycle networks are completed, including the spiderweb bicycle network. The spiderweb network encompasses diagonal bicycle parkways

radiating from the Portland central city that are connected by circular bicycle parkways that connect nearly all town centers.

- Off-street regional trails in Scenario B are constructed in addition to other trails, such as the Turf to Surf Rail with Trail, the Willamette River shared-use path in Oregon City, the Trolley Trail Bridge, completion of the St. John's segment of the Willamette Greenway, the northern railroad crossing segment of the Gresham-Fairview trail, and the East Buttes Loop Trail.

Education and incentive programs

- Car-sharing, employer outreach programs and Metro's Regional Travel Options (RTO) program are expanded throughout the region, particularly in new areas served by high capacity transit and frequent bus service.
- Real-time traveler information is provided on-line and through the growing Smartphone app industry.
- ODOT successfully expands its statewide EcoDrive Campaign to individual drivers, as evidenced by growth in participation in the region.