

September 8, 2014

CENTRAL LANE SCENARIO PLANNING

Scenario Development and Evaluation

Overview

In 2009, the Oregon Legislature passed the Jobs and Transportation Act. This legislation directs the Central Lane Metropolitan Planning Organization (MPO) to undertake scenario planning and for the local governments in central Lane County to cooperatively select a preferred land use and transportation scenario. The state set a greenhouse gas (GHG) emissions reduction target of 20% for the MPO; while this target must be considered in the scenario planning process, the final selected scenario is not required to meet this target.

A project management team (PMT) consisting of representatives of all the partner governments is providing oversight for the process. LCOG and consultant staff are providing technical support for the project.

What is scenario planning?

Over the next twenty years, our communities are likely to welcome more than 64,000 new residents. Plans like those currently being developed in the region – Envision Eugene, Springfield 2030, and Coburg Crossroads – establish a local vision for how our communities will accommodate new residents and jobs.

Scenario planning is a process for considering a range of plausible futures and allows us to examine how different choices would affect our region. Scenario planning also lets us compare these various futures based on a wide range of community goals, from how much each of us will drive, walk, bike, and take transit, to how clean our air will be, to how much our households will spend on housing and transportation.

Participants

The cities of Coburg, Eugene, Springfield, Lane County, the Lane Council of Governments, and the Lane Transit District are all participating in the process.

Schedule

Steps 1 and 2 of the process shown in figure 1 are complete. Step 3 will be complete in 2015.



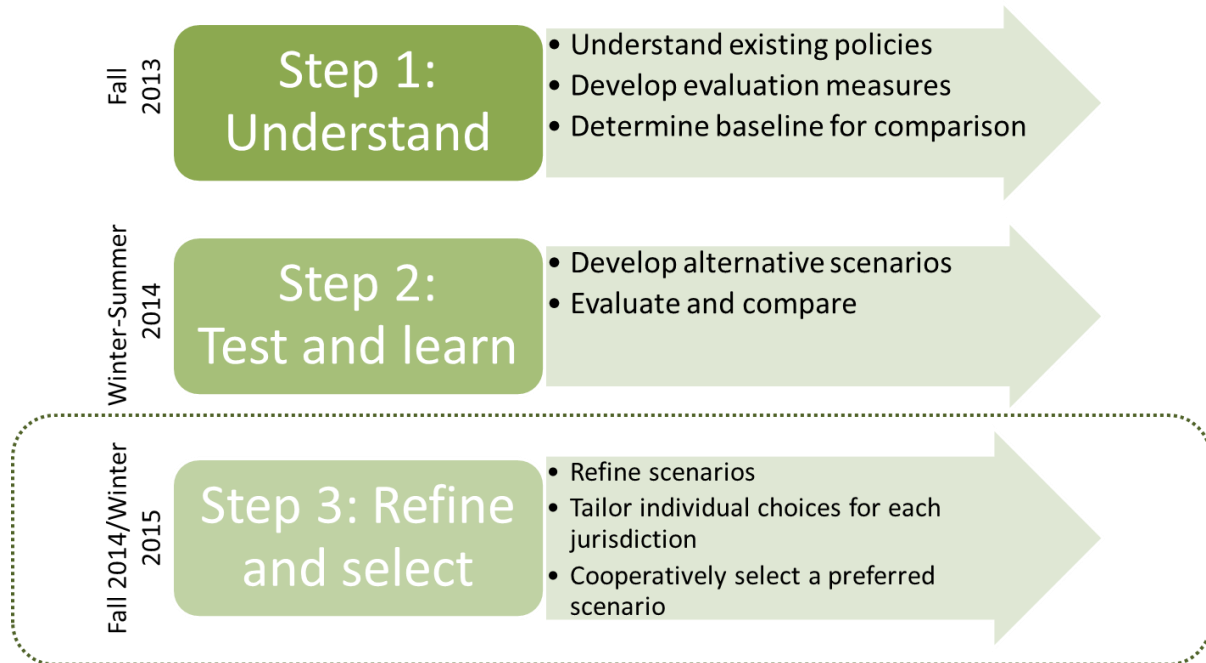


Figure 1. Scenario planning steps

Scenario planning outcomes

At the end of the process, the local government partners will cooperatively select a preferred transportation and land use scenario. The preferred scenario will likely contain a range of policies and strategies that reduce GHG emissions and also produce a range of “co-benefits” – benefits like improved public health and greater economic prosperity – that would result from the preferred scenario policies. *The local government partners are not required to implement the preferred scenario.*

Public outreach approach

The public involvement process centers on public workshops. The team has hosted two public workshops to date. The public reviewed the reference case and provided input on potential scenarios at the first workshop. At the second workshop, the public reviewed the results of the scenario evaluation and provided input on which policies and strategies were most important to explore going forward.

The team plans to hold two more workshops, conduct a telephone survey, and launch an online tool to gather input prior to the development of a preferred scenario. All presentation materials are available at www.clscenarioplanning.org.

Scenario development and evaluation

The project team evaluated the reference scenario – a scenario that assumes current policy direction and two alternative scenarios as shown in figure 2. The alternative scenarios include investment in policies and strategies that go beyond existing policy either by investing additional resources in achieving policies, enhancing the effectiveness of current actions or by implementing new policies or actions. The team evaluated the greenhouse gas emissions associated with each scenario as well as changes to the economic and public health outcomes. The team will continue to consider equity both in the evaluation of scenarios and implementation strategies and in the public outreach program. Tables 1 and 2, at the end of this document, provide details on the policy assumptions for each scenario as well as full evaluation results.

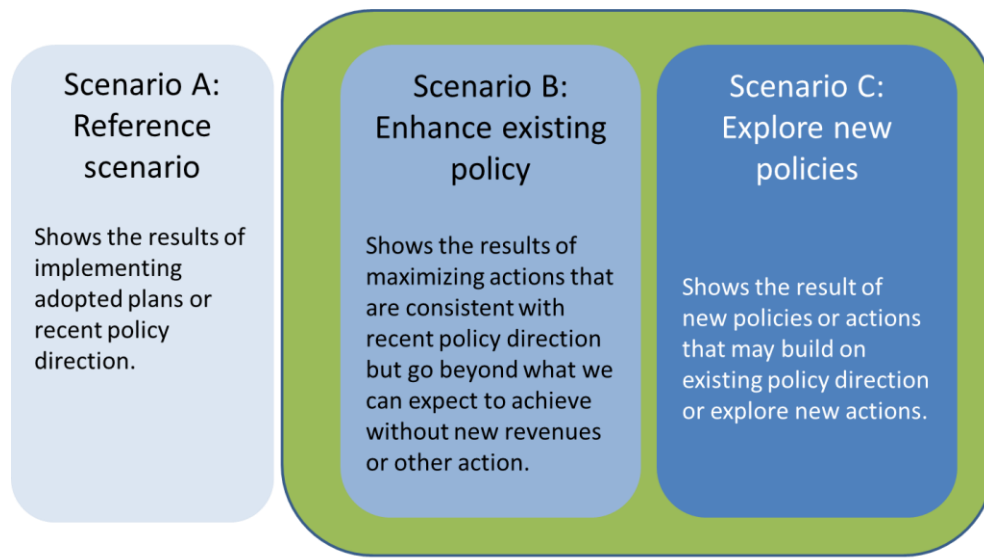


Figure 2. Reference and alternative scenarios

Scenario A: reference scenario results

The reference scenario assumes that current land use and transportation plans and policies or emerging policy direction— including Envision Eugene, Springfield 2030, and transportation system plans – are implemented without major changes. Results from the reference scenario show that the region makes significant improvements in many policy areas. The region would achieve more than a 60% reduction in per capita greenhouse gas emissions from light vehicles compared to 2005; much of the greenhouse gas emission reduction is due to technology changes in cars and trucks, including greater vehicle fuel efficiency and using different fuels. Implementing local plans and policies also helps reduce greenhouse gas emissions but fall short of reaching the reduction target set by the state.

In addition to greenhouse gas emission reductions, residents are also likely to walk or bike more by 2035. Because vehicles will be more efficient, fossil fuel consumption would decrease and air quality would improve. Residents would spend the same proportion of their income on driving as today. With more residents in the region, traffic congestion would worsen slightly.

Scenario B: enhance existing policy

This scenario maximizes investment in actions that are consistent with the current policy direction; it assumes additional investment in some policy areas above and beyond that of the reference scenario. With this scenario, the region invests more in cycling and walking infrastructure. Additional planned EmX lines are built and more transit lines are added to the frequent service network. The region would charge more for parking, and state and local gas taxes would increase. Carsharing programs expand and the region invests more in education and marketing programs designed to reduce vehicle travel.

As a result, the project team found that greenhouse gas reductions would meet the state target, vehicle miles travelled per capita would be reduced over the reference scenario, and bicycle travel per capita would more than double. Congestion would decrease and air quality would improve by more than 15%. Significant reductions in premature death and improved health are achieved due to more regional use of active transport modes.

Scenario C: explore new policies

This scenario includes policies and actions that build on existing policy direction as well as new policies; it assumes investment above and beyond that of Scenario B. This scenario represents the highest level of regional investment.

In this scenario, the region invests even more in cycling and walking facilities, including new off-street paths and trails. More existing roadways space is dedicated to cycling and walking. Transit fares are reduced, some EmX lines are upgraded to a higher capacity mode, and people pay to park in more areas of the region. New taxes and fees related to driving are implemented, the revenue from which is used to support these new transportation investments. Carsharing, education and marketing, and transit pass programs expand even more.

Scenario C results in more overall benefits than Scenario A (reference case) or Scenario B. This scenario experiences the greatest reduction in premature deaths, the greatest improvement in public health, and greatest improvement in air quality. Greenhouse gas emissions under Scenario C surpass the state target. Cycling and transit use increase over Scenario B, and traffic congestion falls slightly compared to Scenario B.

Recommendations

At this point in the process, the scenario planning team has tested and evaluated many different policies and actions. As we move toward the preferred scenario described above, the PMT has developed preliminary recommendations for some policies that they suggest be carried forward in the preferred scenario. The recommendations are as follows:

Road system policies

- Continue to pursue existing policies (those in the reference scenario) to make more efficient use of roadways. Existing policies will result in the road system operating more efficiently than today.

Future vehicle fleet and fuel assumptions

- Use the state's assumptions which anticipate significant improvements in fuel economy and greater use of alternative fuel vehicles. Changes to the vehicle fleet and fuels are likely to occur independent of any action the region might take.

Pay as you drive insurance

- Assume that the state achieves near universal adoption. The government partners cannot implement this directly, but instead would support the state in its efforts to encourage adoption of pay as you drive insurance.

Education and marketing programs

- Increase support for and participation in education and marketing programs (like Smart Trips Springfield and Smart Trips Eugene). These programs are extremely cost effective and have a meaningful impact on travel behavior.

Adoption of these recommendations moves the region toward meeting the state greenhouse gas reduction target as well as goals related to the economy, equity and public health. The PMT recommends further discussion of how to address the following topics:

Cost of driving

- Gas tax or fee based on miles driven?
- Pursue other fees like a carbon tax?

Bicycle investment

- How much investment can we make? What mode shift is realistic in each city?

Transit investment

- How much investment can we make? What kind of investments should we make? What mode shift is realistic in each city?

Parking

- Is paid parking for work trips desirable and achievable in neighborhoods beyond UO, downtown Eugene and downtown Springfield?

- Is paid parking for non-work trips desirable beyond reference case levels?

The state greenhouse gas reduction target could be achieved through many combinations of actions related to the policy areas outlined above.

Scenario selection and next steps

With the results of Scenarios A, B, and C in hand, the scenario planning partners will move toward preparing a preferred scenario in early 2015; this will likely be a hybrid scenario (or a combination of elements of Scenarios A, B and C). The final preferred scenario will contain a suite of policies and a menu of implementation options for each policy (the government partners are not required to implement the preferred scenario). The structure of the final recommendations is shown in Table 1 below and will be similar to that of the Oregon Statewide Transportation Strategy (STS).

The local governments in the region will be asked to cooperatively select the preferred scenario which will be a series of high-level statements about the level of investment in different intervention areas; this is labeled as a strategy in Table 1. These can be elements that all local governments can agree to, or they can be written to address specific jurisdictions. In addition, the scenario planning report will include example implementation actions which jurisdictions may choose to indicate support for. Since implementation is not required, these implementation actions will inform future work by the project partners.

Table 1. Example strategies and implementation actions

<i>EXAMPLE Strategy</i>	<i>Implementation Actions</i>	Springfield	Coburg	Eugene	Lane County
Expand the incident response system to cover most of the region's highways	- Encourage ODOT to expand coverage of the incident response system to a greater share of the region's highway system	✓	✓	✓	✓
	- Provide supplemental funds to enhance incident response service if needed	✓		✓	✓

The strategies and implementation actions will be developed over the next six months and a proposed preferred scenario will be presented for approval by the Coburg, Eugene and Springfield City Councils, and Lane County Board of Commissioners in spring 2015.