

#### PROJECT PARTNERS

Cities of Lake Oswego and Portland  
Clackamas and Multnomah counties  
Oregon Department of Transportation  
Portland Streetcar Inc.  
TriMet  
Metro



# Comment on the benefits and trade-offs

**P**roject partners are working to develop a transit project that meets future travel demand between Lake Oswego and Portland, supports local and regional land use plans, and garners community support.

Highway 43 faces historic and projected increases in traffic congestion due to increases in regional and corridor population and employment. There are limited options for transportation improvements in the corridor due to topographic, geographic and built environment constraints that limit the ability to expand the highway and other roads. More efficient and reliable transit service would offer residents another option to meet expanding travel needs.

Improving transit in the Highway 43 corridor is an investment in the region's long-term future. Transit investments direct growth and redevelopment where we want it to be – in downtowns and along main streets – and often encourage neighborhood redevelopment that helps build vibrant, active communities – places where seniors can age-in-place and areas with essential services and cultural opportunities close by. Transit, particularly rail, is known to have a positive impact on development and property values. For instance, more than \$3.5 billion in development has occurred near streetcar since 1997 and more than \$8 billion in light rail stations areas since 1986.

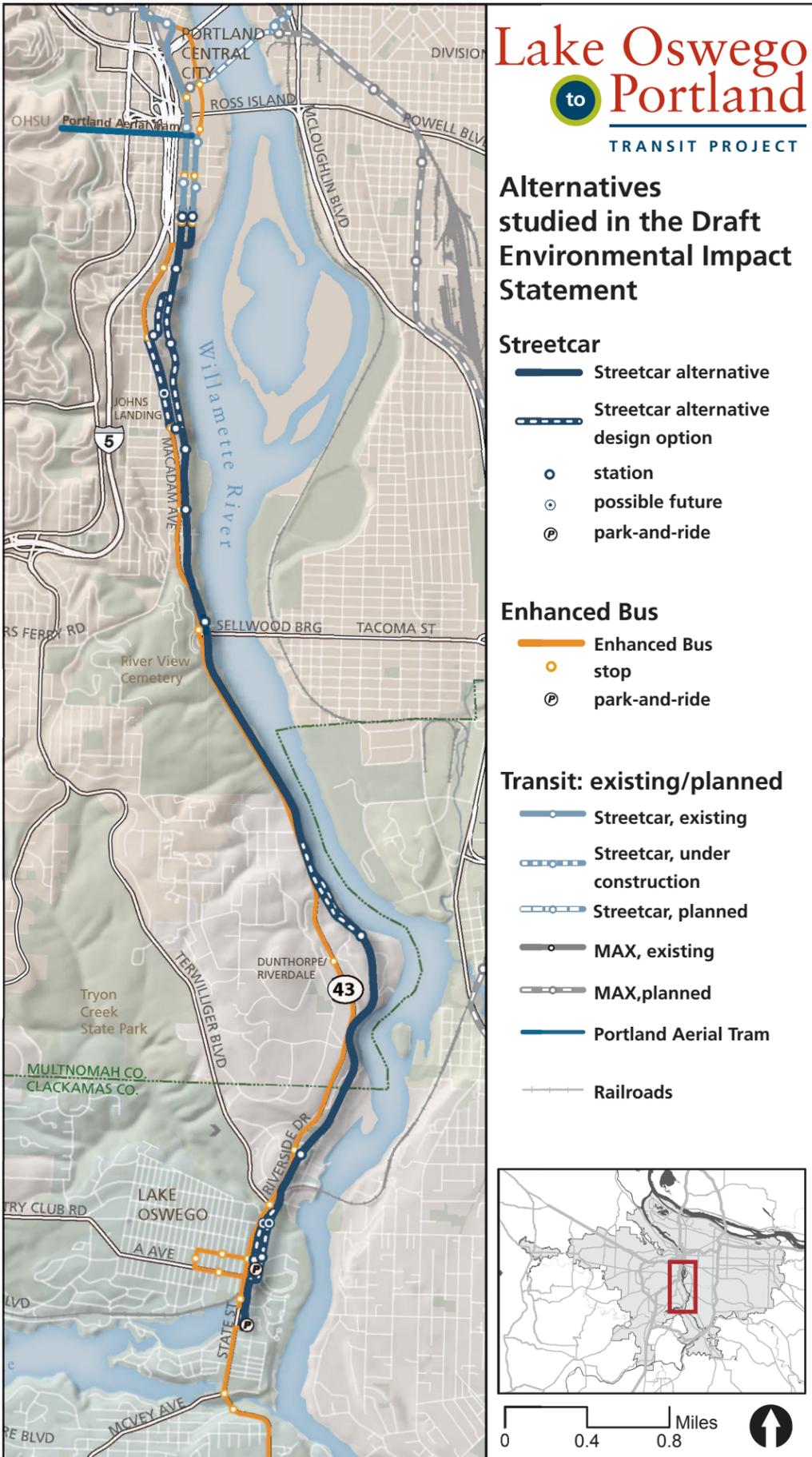
Improved transit will provide people with choices about how they get around – to work, when travelling, to the symphony, to shop or visiting friends. By expanding the current transit system, we leverage past investments and make the most of what we have.

The process began with a wide range of alternatives that included bus, rail and river transit as well as widening or using reversible auto lanes on Highway 43. After review with the community-based project advisory committee and the public, in addition to technical analysis, the list of ideas was narrowed to three alternatives: no-build, enhanced bus and streetcar. For the past few months, project partners have been completing a detailed analysis of the benefits and trade-offs of the three alternatives as well as different design options for the streetcar alternative. This analysis is published by the Federal Transit Administration, Metro and TriMet for review and comment as the Draft Environmental Impact Statement.

## Public comment period Dec. 3, 2010, to Jan. 31, 2011

Which of the alternatives offers the best mix of benefits and trade-offs that meet the transportation needs for the corridor? Your comments will help decision-makers select a Locally Preferred Alternative to advance for further study.

Visit [www.oregonmetro.gov/lakeoswego](http://www.oregonmetro.gov/lakeoswego) to review the DEIS. Attend an open house, testify before the project steering committee at the public hearing, mail, e-mail or submit online comments.



**Advantages, disadvantages and comparison of build-project alternatives**

	<p><b>Enhanced bus</b> would enhance the existing TriMet Line 35 with a bus line with fewer stops and more frequent service between Portland and Lake Oswego and would include a park and ride lot near Albertsons in Lake Oswego.</p>	<p><b>Streetcar</b> would extend service from the southern end of the existing streetcar, connecting downtown Lake Oswego to downtown and Northwest Portland. The streetcar would include mostly double and some single track operation and include park and ride lots in the Foothills area and near Albertsons in Lake Oswego. For most of the route, the streetcar would operate within the existing Willamette Shore Line right of way (<i>see streetcar alternative design options</i>).</p>
<b>Ridership and travel time</b>	<p><b>Advantages:</b> 730,550 more new transit trips annually in 2035 than no-build</p> <p>A savings of three minutes* in transit travel time from Lake Oswego to Portland State University compared to the no-build; total travel time: 39 minutes</p>	<p><b>Advantages:</b> 1.18 to 1.28 million more new transit trips annually in 2035 than the no-build, 450,00 to 547,350 more than enhanced bus</p> <p>A savings of 9 to 13 minutes* in transit travel time from Lake Oswego to Portland State University compared to the no-build, eight to nine minute savings compared to the enhanced bus; total travel time: 29 to 33 minutes*</p>
<b>Costs and financing</b>	<p><b>Advantage:</b> Capital investment (in 2017 dollars) of \$51.1 million, \$328.5 to \$407.2 million less than streetcar; local funding responsibility: \$20.4 million</p> <p><b>Disadvantages:</b> Annual operating cost (in 2010 dollars) of \$2.79 million more than the no-build alternative in 2035, \$1.54 million more than streetcar</p> <p>Does not use the value of the Willamette Shore Line right of way for local share of project funding</p>	<p><b>Advantages:</b> Annual operating cost (in 2010 dollars) of \$1.25 million more than the no-build alternative in 2035, \$1.54 million less than enhanced bus</p> <p>Uses the value of the Willamette Shore Line right of way to contribute to local share of project funding (between \$94.5 and \$97 million in 2017 dollars for the high and low streetcar cost range), reducing other local funding responsibility to \$57.3 to \$86.3 million, depending on selected design options</p> <p><b>Disadvantage:</b> Capital investment (in 2017 dollars) between \$379.6 and \$458.3 million, \$328.5 to \$407.2 million more than enhanced bus, depending on selected design options</p>
<b>Traffic</b>	<p><b>Advantages:</b> Savings of 200 hours of "vehicle hours of delay" per day in 2035 compared to the no-build</p> <p><b>Disadvantages:</b> No reduction of vehicles on Highway 43 at the peak hour (rush hour) in 2035 compared to the no-build</p> <p>Continues to operate transit on Highway 43 where buses will, at times, get stuck in traffic</p> <p>Three new congested intersections</p>	<p><b>Advantages:</b> Savings of 400 "vehicle hours of delay" per day in 2035 compared to the no-build, 200 more than enhanced bus</p> <p>Reduction of 100 vehicles on Highway 43 at the peak hour (rush hour) in 2035 compared to the no-build and enhanced bus alternatives</p> <p>Transit travel would be in all or mostly exclusive right of way that would be significantly less affected by traffic congestion on Highway 43</p> <p><b>Disadvantage:</b> Two to four new congested intersections, depending on selected design options</p> <p>Zero to 175 parking spaces removed in Johns Landing, depending on selected design option</p>
<b>Redevelopment and economy</b>	<p><b>Advantage:</b> Creation of 240 construction jobs and 28 long-term jobs</p> <p><b>Disadvantage:</b> Would not encourage development or redevelopment to occur sooner than the no-build alternative</p>	<p><b>Advantages:</b> Creation of 1,430 to 1,500 construction jobs and 13 long-term jobs*</p> <p>Expected to encourage development and redevelopment in Johns Landing and Lake Oswego sooner than the no-build alternative (up to 25 million square feet* of allowed new floor area for retail or offices in the station areas)</p>
<b>Community environment</b>	<p><b>Advantages:</b> No impacts to historic resources beyond potential indirect effects to the Red Electric Eastside Rail Line (generally, the Willamette Shore Line right of way)</p> <p>No impacts to parks or recreation facilities</p> <p>No noise and vibration impacts</p> <p>No potential displacements</p>	<p><b>Advantage:</b> No impacts to historic resources beyond effects to the Red Electric Eastside Rail Line (generally, the Willamette Shore Line right of way)</p> <p><b>Disadvantages:</b> Between 0.7 and 1 acre of parkland used for streetcar, depending on selected design options</p> <p>23 to 28 vibration impacts that would require mitigation</p> <p>One possible severe noise impact that would require mitigation, depending on the selected design option</p> <p>Up to one residential and six business displacements, depending on selected design options</p>
<b>Natural environment</b>	<p><b>Advantages:</b> A daily reduction of 25 tons of carbon dioxide released by vehicles compared to the no-build alternative</p> <p>No wetlands filled</p> <p><b>Disadvantages:</b> 1.3 acres of flood plain filled</p> <p>Less than 1 acre of new paved surface</p>	<p><b>Advantages:</b> A daily reduction of between 41 and 42 tons of carbon dioxide released by vehicles compared to no-build, 16 to 17 tons more than the enhanced bus alternative</p> <p><b>Disadvantages:</b> Less than 0.1 acre of wetland filled, depending on selected design options</p> <p>6.5 to 10.1 acres* of flood plain filled, depending on selected design options</p> <p>7 to 18 acres of new paved surface</p>

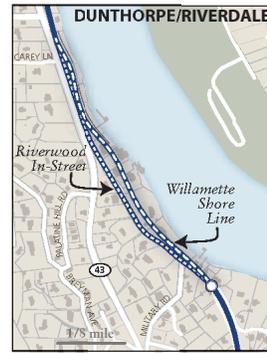
\* corrected, Jan. 24, 2011

## Streetcar alternative design options

In three areas of the corridor, the streetcar alternative has two or more design options.



**Lake Oswego** In both design options, the streetcar would be configured to cross under the freight tracks north of Stampher Road. The Union Pacific Railroad right of way option would then follow the railroad right of way past the Foothills area. Under the Foothills option, the streetcar would run on a future Foothills Road extension. If the streetcar alternative and the Foothills option are decided on, final design for this area would depend on coordination with the City of Lake Oswego’s development plans for the Foothills area.



**Dunthorpe/Riverdale** Under the Willamette Shore Line option, the streetcar would continue in the existing right of way through this area. Under the Riverwood in-street option, the streetcar would run with auto traffic on Riverwood Road beginning at the northern end of Riverwood Road and returning to the Willamette Shore Line right of way where it meets and crosses Riverwood Road south of Military Road.



**Johns Landing** The Willamette Shore Line option would continue through Johns Landing via the existing right of way. There are two Southwest Macadam Avenue options (in-street and additional lane), wherein the streetcar would leave the right of way south of Hamilton Court to run on Landing Drive to Boundary Street, where it would connect to and run on Macadam Avenue/Highway 43 before returning to the Willamette Shore Line via Carolina Street. The streetcar would run with auto traffic on Landing Drive and Boundary and Carolina streets. Under the Macadam in-street option, the streetcar would run with auto traffic on Macadam Avenue both southbound and northbound. Under the Macadam additional lane option, the streetcar would run on Macadam Avenue southbound, but a new lane would be added northbound for streetcar and right-turn-only access for autos.

In addition to the design options, there are phasing options in South Waterfront, at the west end of the Sellwood Bridge and in the Lake Oswego Foothills District. The phasing options would depend on, and coordinate with, the timing of other capital projects in those areas.

## Quick comparison of alternatives

	No-build	Enhanced bus	Streetcar
Ridership	○	◐	●
Travel time	○	◐	●
Capital cost	●	◐	○
Operation and Maintenance	●	○	◐
Reliability	○	○	●
Additional corridor capacity	○	◐	●

○=good | ◐=better | ●=best

## Estimated funding sources, 2017 dollars

Funding sources under either the streetcar or enhanced bus alternative would be confirmed in 2013. The local portion of capital funding is based on an anticipated 60 percent federal share of the budget. 2017 dollars are used based on the projected date of completed construction.

### Potential funding sources, streetcar alternative:



The cost of the streetcar alternative depends on the alignment options selected. The low to high range of streetcar funding is presented here.

### Potential funding sources, enhanced bus alternative:



### Willamette Shore Line right of way value

The value of the Willamette Shore Line right of way is both a cost and a funding source for the streetcar alternative. The rail line has been in service since 1887, as commuter trolley service, freight service or a combination of the two. In 1988, a consortium of local governments purchased the right of way for approximately \$2 million.

Under the streetcar alternative, the real estate value of the right of way can be used to meet part of the local funding needed to match federal funds. Current estimates of the local funding value are based on a 2008 appraisal, the current real estate market and economic trends. The value of the right of way would not apply to the enhanced bus alternative.

### Provide comment Dec. 3, 2010, to Jan. 31, 2011

#### Attend an open house

4 to 7 p.m. Thursday, Dec. 9, 2010 | PBS Conference Center, 4343 SW Corbett Ave., Portland

4 to 7 p.m. Thursday, Dec. 16, 2010 | Lakewood Center for the Arts, 368 S. State St., Lake Oswego

#### Give testimony before the project steering committee at the public hearing

5 to 8 p.m. Monday, Jan. 24, 2011 | Lakewood Center for the Arts, 368 S. State St., Lake Oswego

Comment online at [www.oregonmetro.gov/lakeoswego](http://www.oregonmetro.gov/lakeoswego).

E-mail comments to [trans@oregonmetro.gov](mailto:trans@oregonmetro.gov).

Send written comments to Lake Oswego to Portland Transit Project, 600 NE Grand Ave., Portland, OR 97232.

## Projected Locally Preferred Alternative decision-making timeline

December 2010	January 2011	February 2011	March 2011
DEIS publication Comment period begins Open houses	Steering committee public hearing Comment period ends	Community advisory committee recommendation Comment report published Steering committee recommendation Partner agency action on Locally Preferred Alternative recommendation	Partner agency action on Locally Preferred Alternative recommendation

## Potential project development timeline

New transit service could open by the end of 2017.

2010	2011	2012	2013	2014	2015	2016	2017
Publish DEIS Develop Locally Preferred Alternative	Adopt Locally Preferred Alternative Develop conceptual funding plan Apply for Small/New Starts grant	Begin preliminary engineering Begin Final Environmental Impact Statement	Publish Final Environmental Impact Statement Confirm funding plan ( <i>confirm funding sources</i> )	Final design Full Funding Grant Agreement Finalize funding plan ( <i>secure funding sources</i> )	Start construction	Construction	Begin transit service

## What's next?

The Draft Environmental Impact Statement is one phase of project development. The next phases are meant to refine the analysis in the DEIS, further developing community and environmental topics, including those below.

**Operation.** Portland Streetcar Inc. and TriMet would determine what responsibility each agency will have if the streetcar is selected as the Locally Preferred Alternative after selection. TriMet will be responsible if enhanced bus is selected.

**Station locations and design.** Proposals to add or remove stations for streetcar or stops for enhanced bus can be made during the Locally Preferred Alternative decision-making process. Final station design, and any changes suggested in the Locally Preferred Alternative, would be evaluated and planned during preliminary engineering and the Final Environmental Impact Statement.

**Safety and security.** Best practices for safe and secure public places would be integrated into streetcar station area design. Local jurisdictions would coordinate safety and security plans for on and around any new transit service. On average about three incidents are reported per day for the entire transit system, which carries about 12,000 streetcar rides per day and about 324,000 rides on TriMet bus, light rail and commuter rail.

**Rail crossings.** Thirty-five public and private roadway, railroad and pedestrian track crossings have been identified in the proposed streetcar alignment. Where there are private crossings, most typically a driveway or access road, appropriate private crossing treatments would be developed in conjunction with individual property owners. Safe crossing treatments could include closure or relocation, grade separation, stop signs, gates, traffic signals and pedestrian Z-crossings. Treatment selection criteria include sightlines, traffic volumes and speeds, transit vehicle speed, proximity and suitability of alternative routes, and convenience for pedestrians and transit patrons.

**Informal access to Willamette Park.** Current use of informal park access from Highway 43 would be addressed during preliminary engineering and further refined during final design under the streetcar alternative. The decision will be made in collaboration with project partners, including Portland Parks and Recreation.