

PROJECT PURPOSE

Optimize the regional transit system by improving transit within the Corridor;

Develop transit that

- support regional and local land use goals;
- maximizes regional resources;
- is environmentally sensitive;
- is fiscally responsible;
- garners public support;
- maximizes economic development potential.



PROJECT NEED

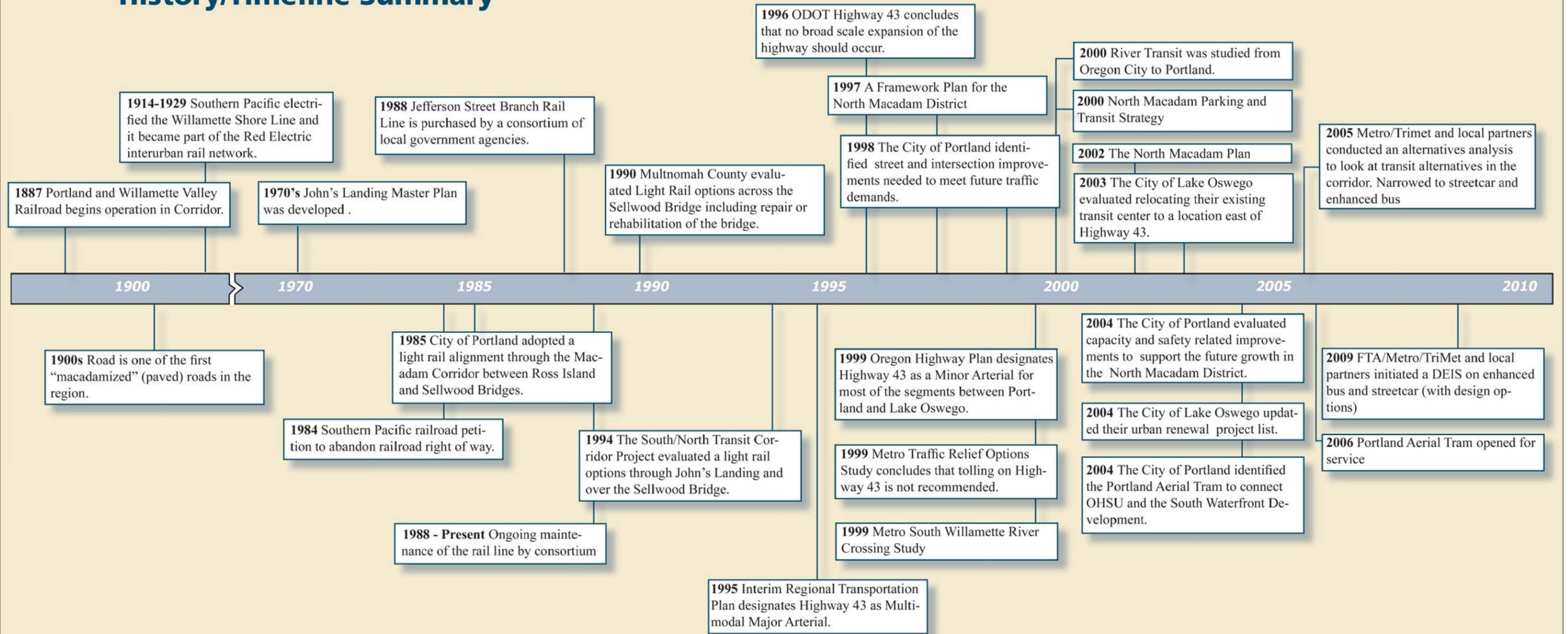
The Lake Oswego to Portland Transit Project is needed because of:

- 1) increases in traffic congestion;
- 2) increasing transit travel times;
- 3) increasing transit operating expenses;
- 4) local and regional land use and development plans;
- 5) previous corridor transit studies, analyses and conclusions;
- 6) the region's growing reliance on public transportation to meet future growth in travel demand in the corridor;
- 7) the topographic, geographic and built environment constraints;
- 8) limited options for transportation improvements in the corridor.



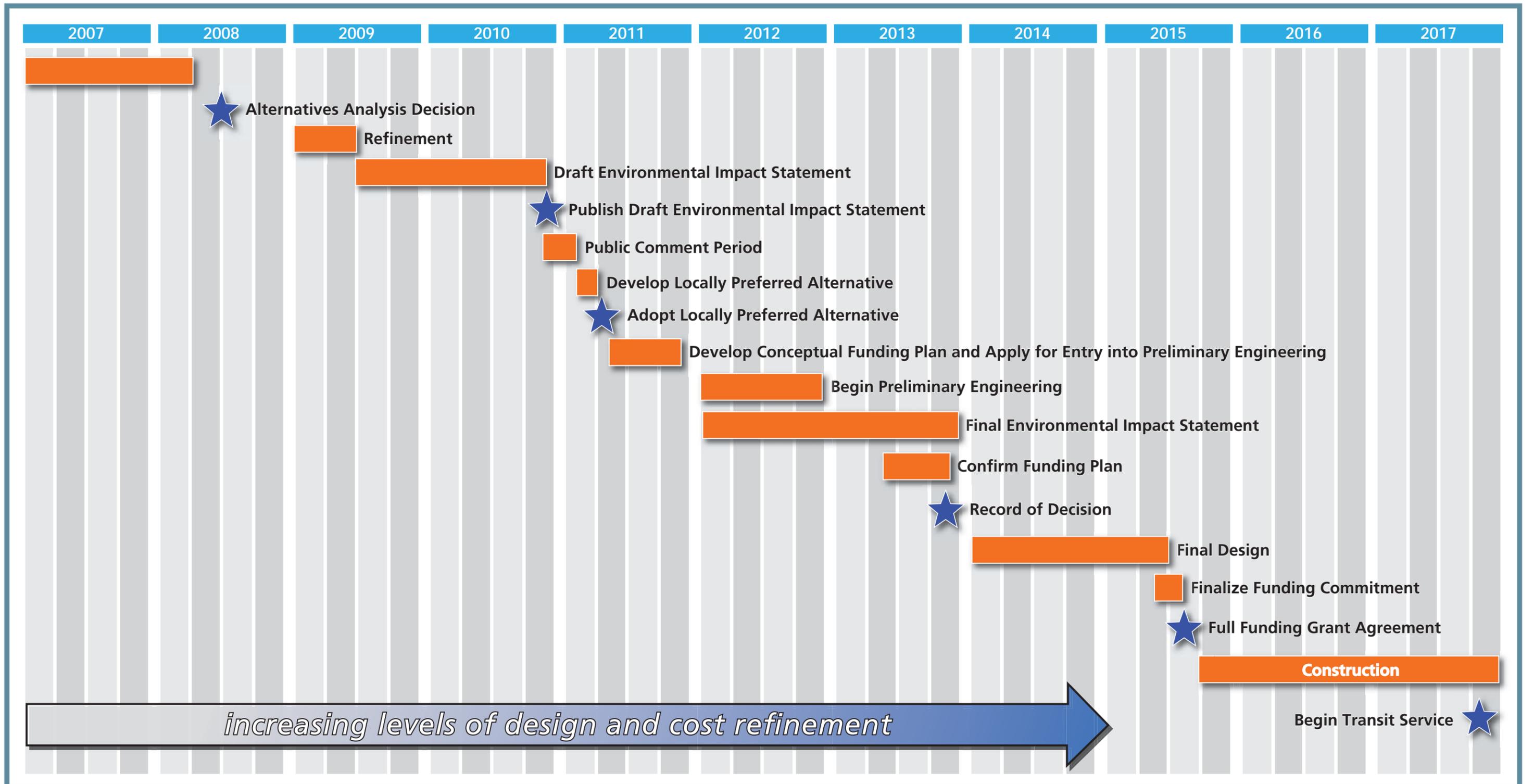
Lake Oswego to Portland Transit Project

History/Timeline Summary



Timeline is Not To Scale

Lake Oswego to Portland Transit Schedule



Environmental Impact Statement Overview

An Environmental Impact Statement, or EIS, is a document that describes the impacts on the environment as a result of a proposed action. It also describes impacts of alternatives as well as plans to mitigate the impacts.

Fall
2009

Refinement
Work

Steering Committee Decision on
Advancing a Draft Environmental
Impact Statement (DEIS)

Spring
2010

Draft Environmental
Impact Statement

Definition of Alternatives

Purpose and Need

Methodologies

Financial Analysis

- Capital Costs
- Operational and Maintenance Costs
- Cost Effectiveness

Environmental
Analysis

- | | |
|------------------------------|-----------------------------------|
| <i>Land Use and Planning</i> | <i>Noise and Vibration</i> |
| <i>Economic Activity</i> | <i>Air Quality</i> |
| <i>Community Effects</i> | <i>Energy</i> |
| <i>Visual and Aesthetic</i> | <i>Hazardous Materials</i> |
| <i>Historic</i> | <i>Public Safety and Security</i> |
| <i>Parklands</i> | <i>Utilities</i> |
| <i>Geology and Soils</i> | <i>Construction</i> |
| <i>Ecosystems</i> | <i>Phasing</i> |
| <i>Hydrology</i> | <i>Environmental Justice</i> |

Transportation
Analysis

- Traffic Impacts*
- Transit Impacts*
- Transit Benefits*

December
2010

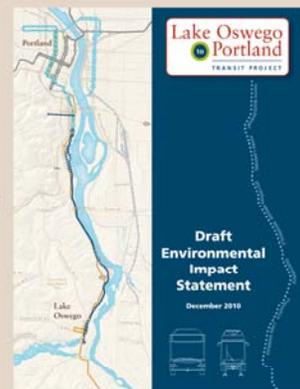
Publish
Draft
Environmental
Impact Statement

January
2011

Public Comment Period

Winter
2011

Locally
Preferred
Alternative
Decision



Lake Oswego to Portland

TRANSIT PROJECT

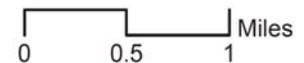
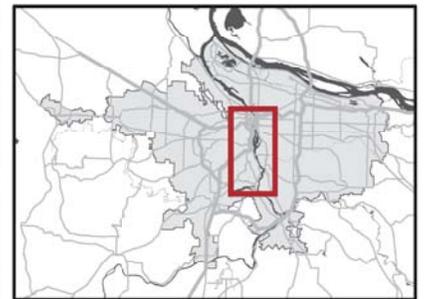
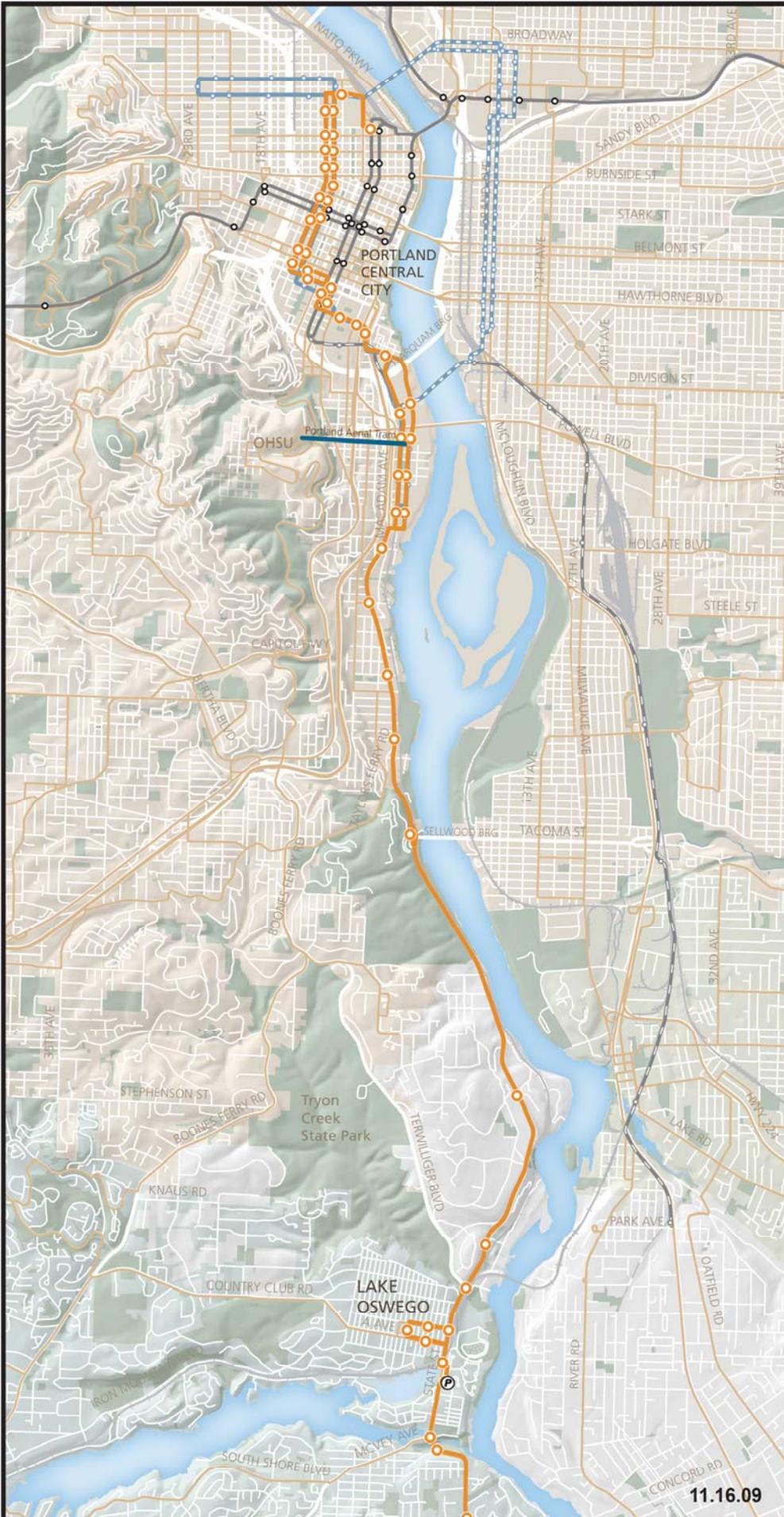
Enhanced Bus Alternative

Enhanced Bus

-  Enhanced Bus
-  bus stop
-  park-and-ride

Transit: existing/planned

-  Streetcar, existing
-  Streetcar, under construction/planned
-  MAX, existing
-  MAX, planned
-  Portland Aerial Tram
-  Existing bus routes
-  Railroads



11.16.09

Lake Oswego to Portland

TRANSIT PROJECT

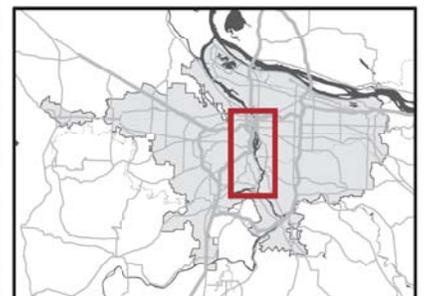
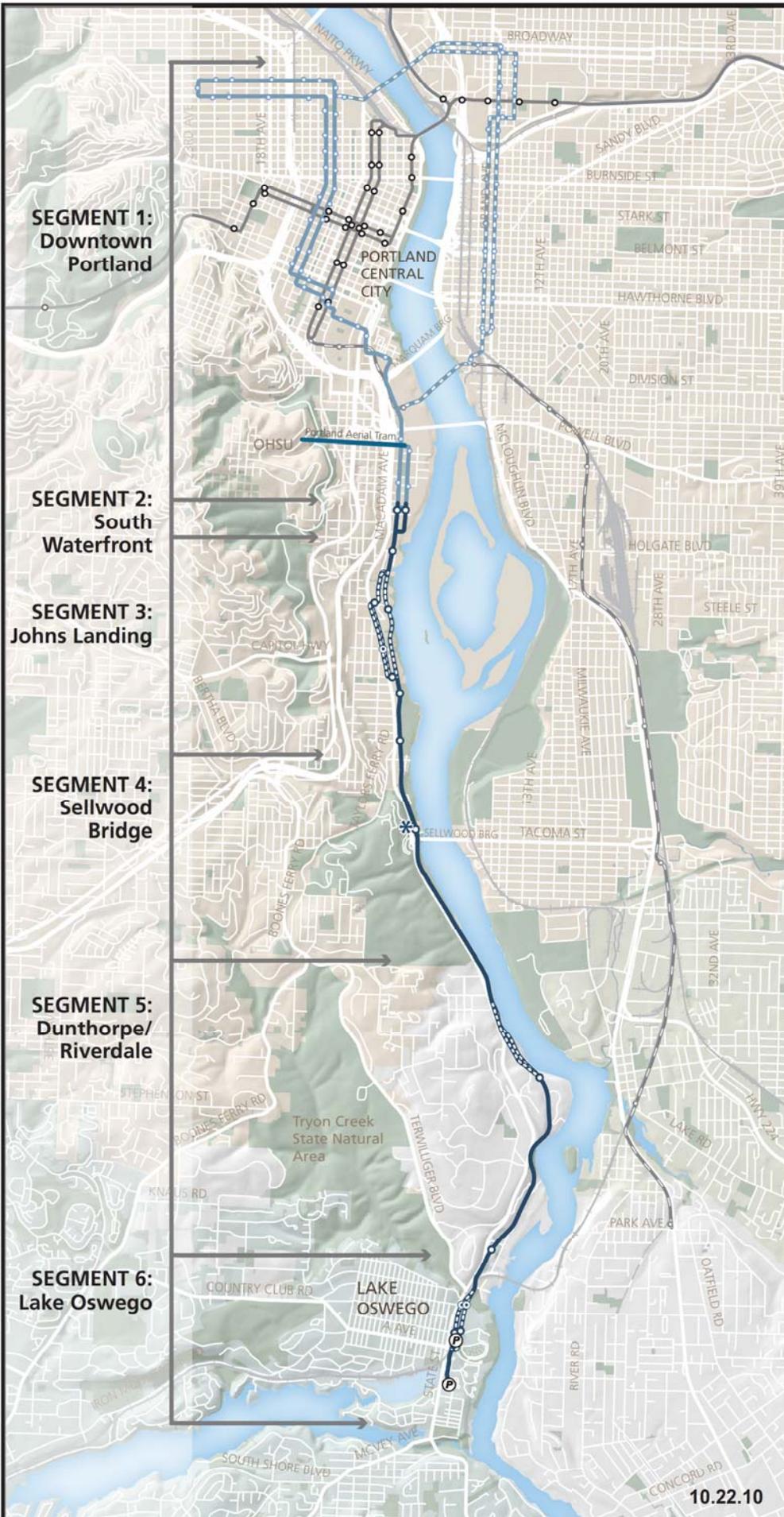
Streetcar Alternative and Design Options

Streetcar Alternative

-  Streetcar alternative
-  Streetcar alternative design option
-  station
-  possible future
-  park-and-ride
-  Streetcar Minimum Operable Segment (MOS)

Transit: existing/planned

-  Streetcar, existing
-  Streetcar, under construction/planned
-  MAX, existing
-  MAX, planned
-  Portland Aerial Tram
-  Railroads



10.22.10

Streetcar Alternative Design Option Details

A: Johns Landing Design Options

- Willamette Shore Line
- Macadam In-Street
- Macadam Additional Lane

B: Sellwood Bridge Design Options

- Willamette Shore Line
- New Interchange

C: Dunthorpe/Riverdale Design Options

- Willamette Shore Line
- Riverwood In-Street

D: Lake Oswego Design Options

- UPRR Right-of-Way
- Foothills

Streetcar alignment common for all options

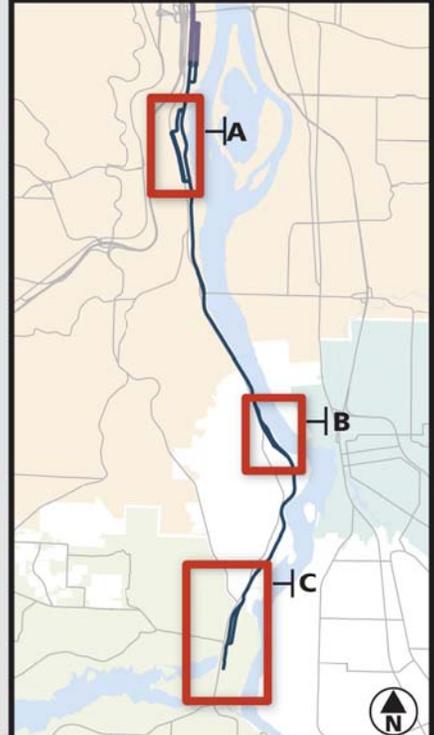
Streetcar design options

Streetcar station park and ride

Optional station

Transit Center

Map Index



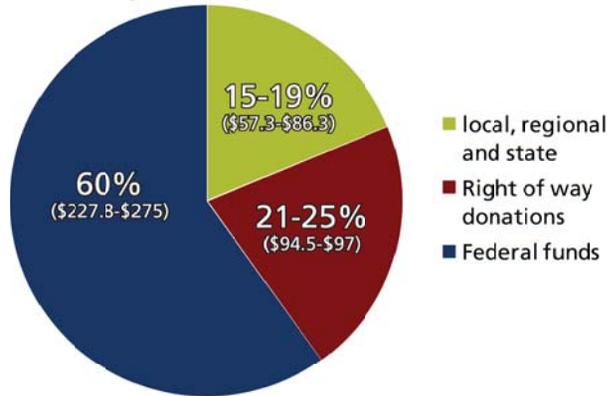
Comparison of Project Alternatives

	Enhanced bus	Streetcar
Ridership and travel time	<p>Advantages: 730,550 more new transit trips annually in 2035 than no-build</p> <p>A savings of five minutes in transit travel time from Lake Oswego to Portland State University compared to the no-build; total travel time: 39 minutes</p>	<p>Advantages: 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 11 to 14 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: 30 to 33 minutes</p>
Costs and financing	<p>Advantage: 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>Disadvantages: 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>Advantages: 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>Disadvantage: 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>
Traffic	<p>Advantages: Savings of 200 hours of "vehicle hours of delay" per day in 2035 compared to the no-build</p> <p>Disadvantages: 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>Advantages: 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>Disadvantage: 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>
Redevelopment and economy	<p>Advantage: Creation of 240 construction jobs and 28 long-term jobs</p> <p>Disadvantage: Would not encourage development or redevelopment to occur sooner than the no-build alternative</p>	<p>Advantages: Creation of 1,430 to 1,500 construction jobs and 27 long-term jobs</p> <p>Expected to encourage development and redevelopment in Johns Landing and Lake Oswego sooner than the no-build alternative (around 43 million square feet of available floor area for retail or offices in the station areas)</p>
Community environment	<p>Advantages: 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>Advantage: No impacts to historic resources beyond effects to the Red Electric Eastside Rail Line (generally, the Willamette Shore Line right of way)</p> <p>Disadvantages: 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>
Natural environment	<p>Advantages: 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>Disadvantages: 1.3 acres of flood plain filled</p> <p>Less than 1 acre of new paved surface</p>	<p>Advantages: 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>Disadvantages: Less than 0.1 acre of wetland filled, depending on selected design options</p> <p>6 to 11 acres of flood plain filled, depending on selected design options</p> <p>7 to 18 acres of new paved surface</p>

Conceptual finance plan

Streetcar finance plan

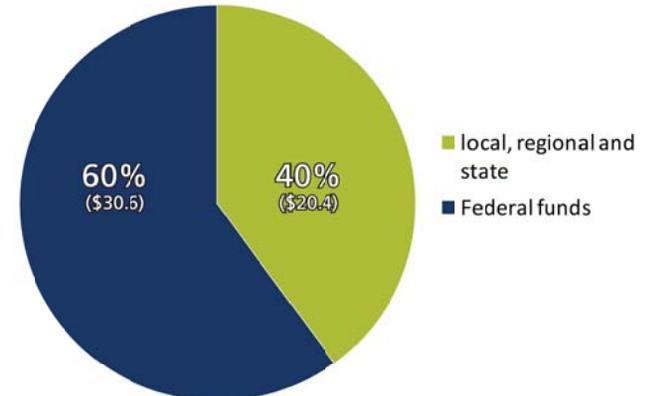
(in millions, in year-of-expenditure (2017) dollars)



Total Capital Costs for Streetcar range from \$379.6 - \$458.3 million
(range is \$288.9 - \$347.4 million in 2010 dollars)

Enhanced Bus finance plan

(in millions, in year-of-expenditure (2017) dollars)



Total Capital Costs for Enhanced Bus is \$51 million
(\$37.8 million in 2010 dollars)

Estimated annual operations and maintenance costs in 2035

(in millions, in 2010 dollars)

(in 2010 dollars)	Corridor streetcar	Corridor bus	Total corridor transit	Change from no-build
No-build	n/a	\$26.71	\$26.71	n/a
Enhanced bus	n/a	\$29.50	\$29.50	\$2.79
Streetcar	\$3.78	\$24.18	\$27.90	\$1.25

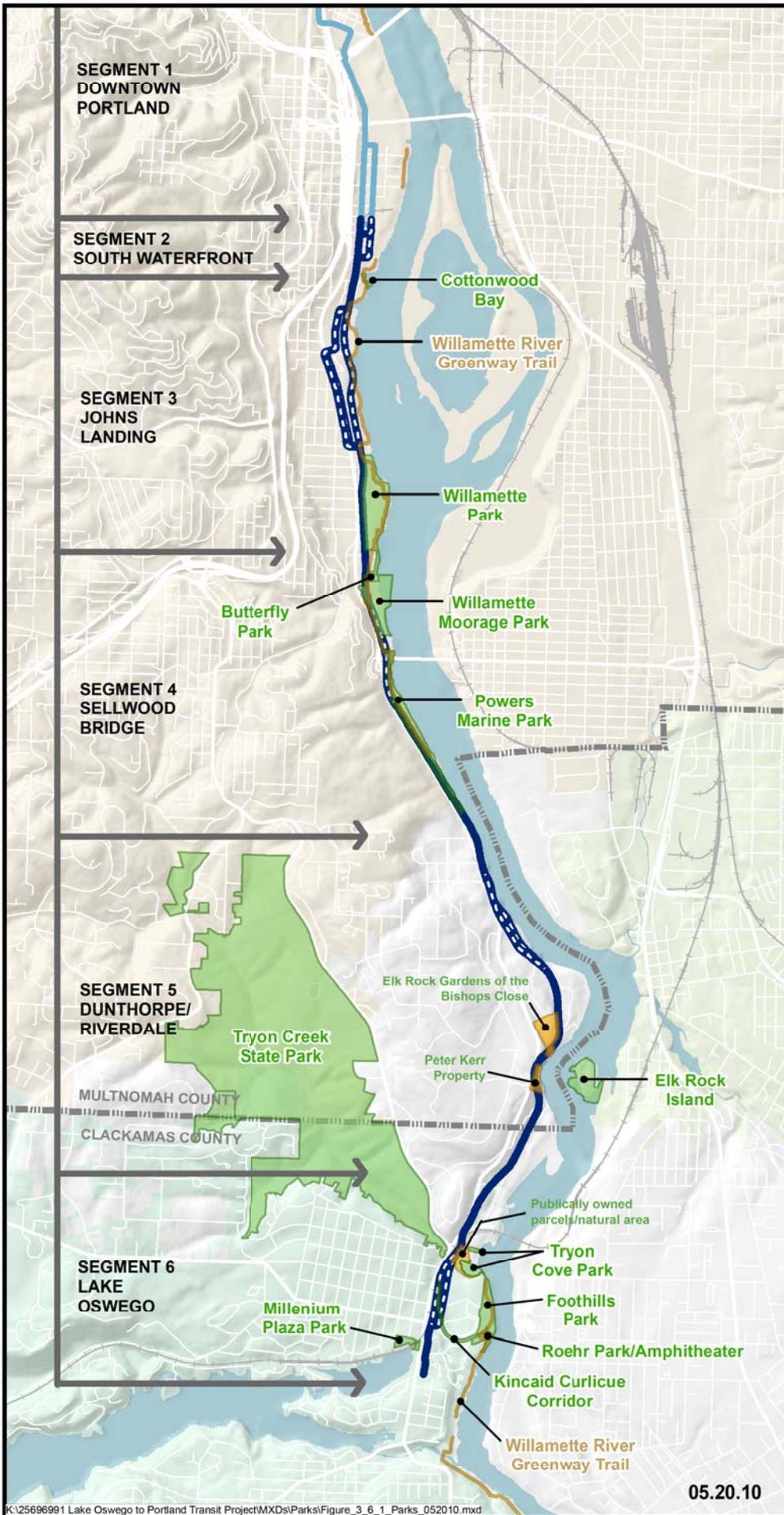
Difference between streetcar and enhanced bus: \$1.54 million annually

Lake Oswego to Portland

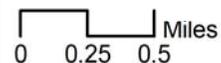
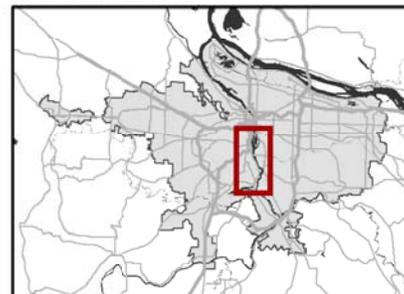
TRANSIT PROJECT

Parks, Trails, and Natural Areas

-  Streetcar Alternative
-  Streetcar Alternative Design Option
-  Streetcar, Existing
-  Parks - Section 4(f) Resource
-  Natural Area - Not a Section 4(f) Resource
-  Willamette River Greenway Trail



Source: Metro, Regional Land Information System



05.20.10

Comparison of Transit Project Alternatives

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

○=good | ◐=better | ●=best



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 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.

E-mail comments to trans@oregonmetro.gov.

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

Determining the Locally Preferred Alternative

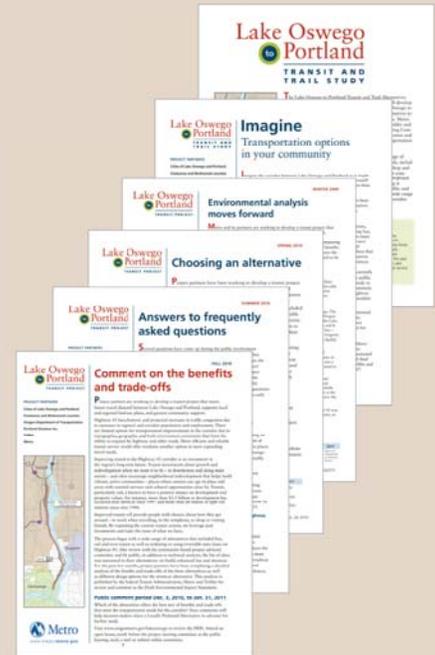
The project steering committee is responsible for providing the Locally Preferred Alternative recommendation to partner city, county and state jurisdictions and transit authorities. The Metro Council is responsible for final adoption. The project steering committee will consider:

- public comments
- the DEIS analysis
- community advisory committee recommendation
- project management group recommendation

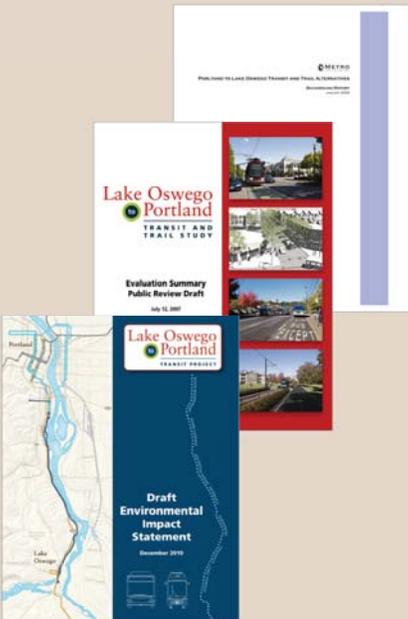
December 2010	January 2011	February 2011	March 2011
DEIS publication	Steering committee public hearing, Jan. 24	Community advisory committee recommendation	Partner agency and Joint Policy Advisory Committee on Transportation action on Locally Preferred Alternative recommendation
Comment period begins	Comment period ends	Comment report published	Metro Council adoption of the Locally Preferred Alternative
Open houses, Dec. 9 and 16		Steering committee recommendation	
		Partner agency action on Locally Preferred Alternative recommendation	



Alternatives Analysis, 2005 to 2007
 Lake Oswego Project Advisory Committee
 Community design workshop
 Group meetings
 Survey of bus riders
 Newsletters, postcard, media advisories,
 newspaper ads, email updates
 74-day public comment period
 Open houses
 Public hearing



Scoping
 Postcard, media advisory, newspaper ads, email updates
 Public meeting
 Informal 89-day public comment period



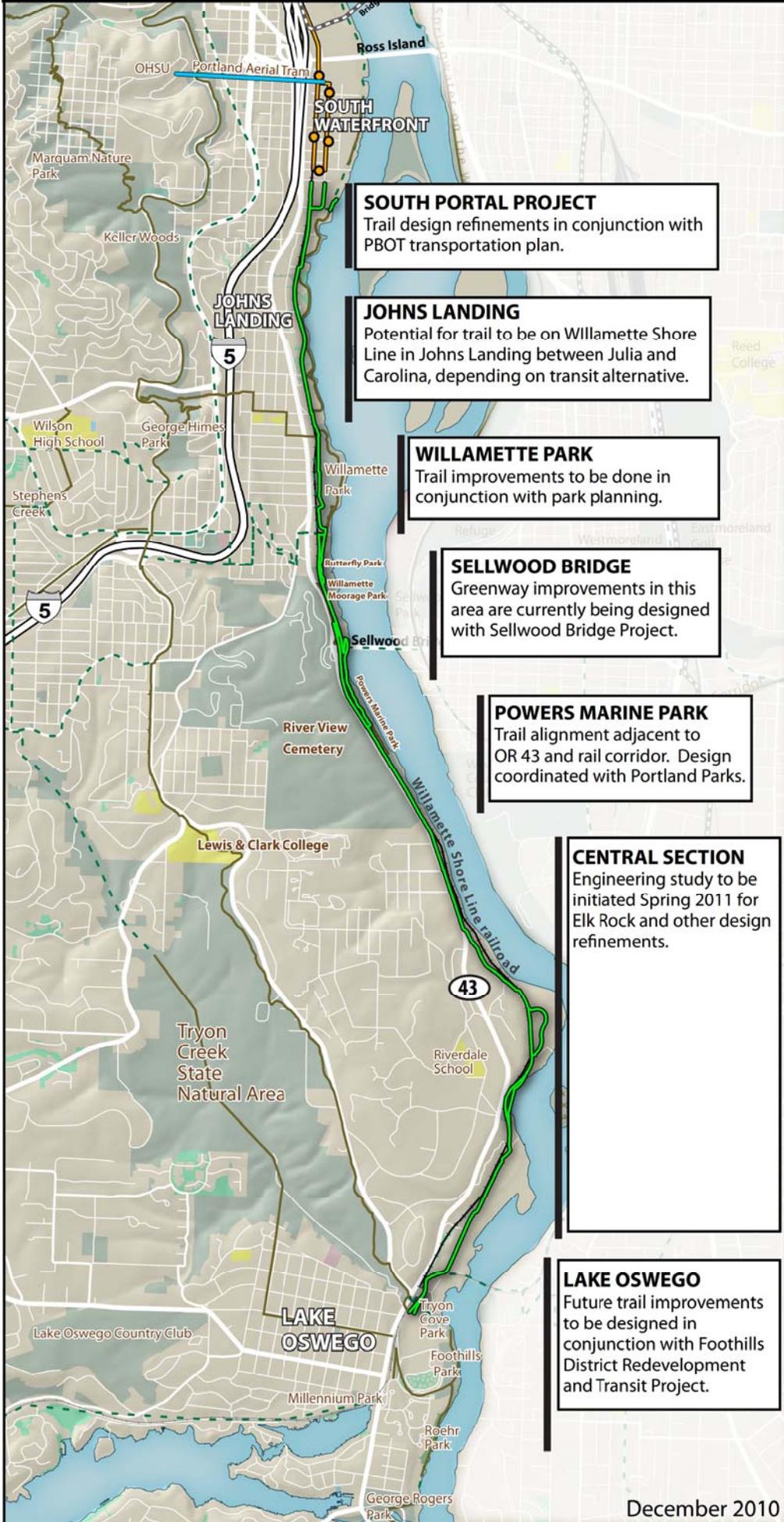
Refinement
 Property owner and stakeholder meetings
 Postcard, media advisory, newspaper ads, email updates
 Open houses
 Questionnaire and informal 30-day public comment period



DEIS preparation
 Community advisory committee
 College and institution meetings
 Commuter questionnaire
 Community event booths
 Community group meetings
 Newsletters, media advisories, email updates

DEIS publication
 Community advisory committee
 Newsletters, postcard, media advisories,
 newspaper ads, email updates
 60-day public comment period
 Open houses
 Public hearing



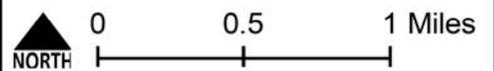


What is currently underway?

1. Metro and partners will be initiating an engineering study for the Central Section in the Spring of 2011, after the Locally Preferred Alternative (LPA) of the Transit Study.
2. Sellwood Bridge Project is currently designing trail improvements in the vicinity of the western interchange.
3. In Lake Oswego, the Foothills Redevelopment Plan currently underway will be considering bicycle and pedestrian improvements in the Foothills District.
4. In South Waterfront/Johns Landing, bicycle and pedestrian improvements will be developed in conjunction with the South Portal Project.
5. In Johns Landing, if the a streetcar design option on Macadam is selected as the Locally Preferred Alternative, there may be opportunities to use the Willamette Shore Line as a multi-use trail between Julia and Carolina Streets.

LEGEND

- Lake Oswego to Portland - proposed alignment
- Trails - existing
- Trails - proposed
- Streetcar - existing
- Aerial Tram
- Light rail - proposed
- Railroad
- Park/Open Space
- School





What is a Health Impact Assessment (HIA)?

A Health Impact Assessment (HIA) is an emerging practice that evaluates the impact of specific plans, policies and projects on the health of impacted individuals and suggests ways to improve the health outcomes of the policy, plan, or project in question. HIA is based on a comprehensive and prospective view of health, which emphasizes that physical and mental health is influenced by a broad range of environmental factors - physical, social, and economic.

What are the steps of a HIA?

The following are the typical steps of a HIA:

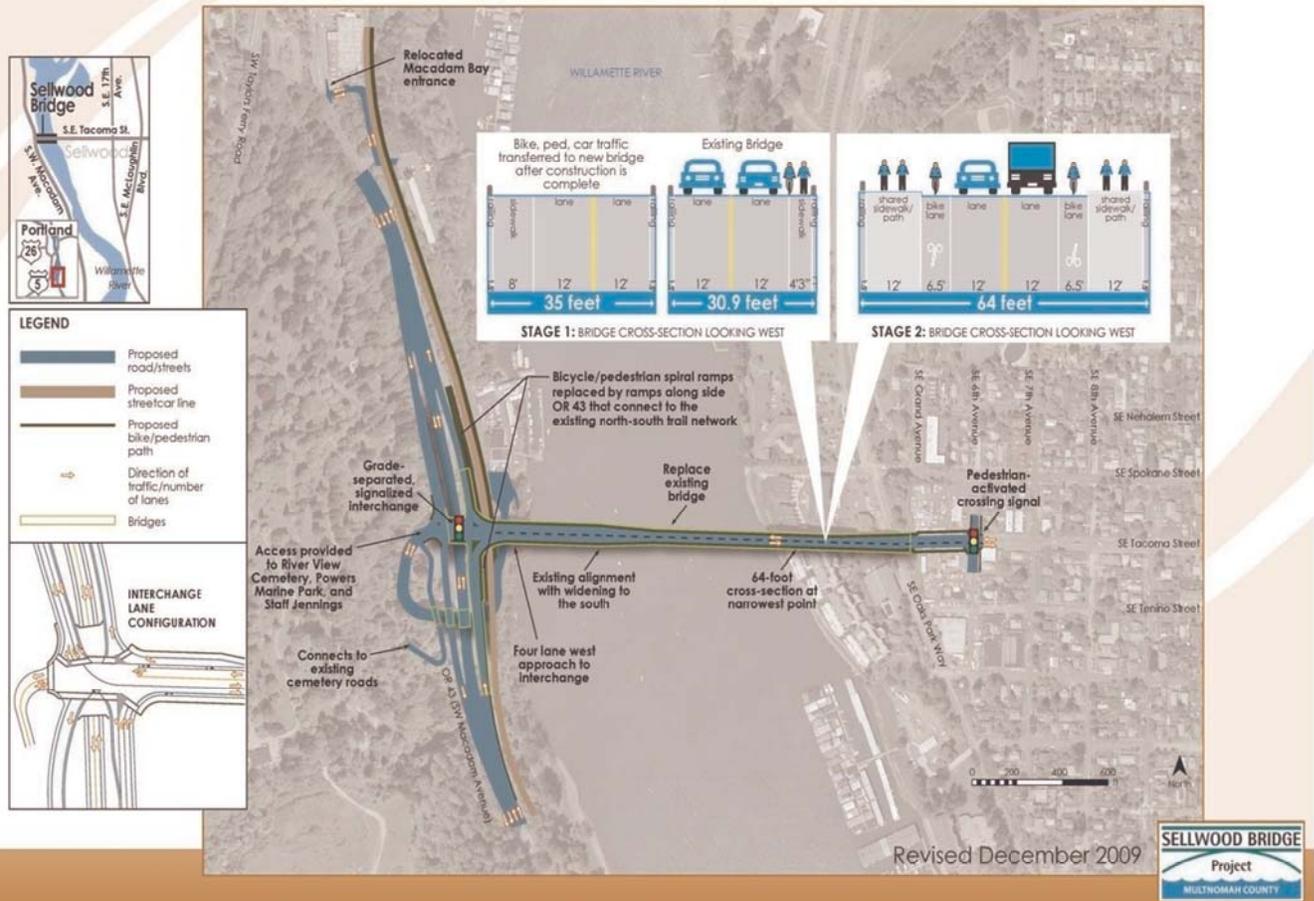
1. **Screening** - Identifies project or policy for which an HIA would be useful
2. **Scoping** - Identifies which health effects to consider
3. **Assessing** - Identifies populations that may be affected and how they may be affected
4. **Recommendations & Reporting** - Provides results to decision makers and stakeholders
5. **Evaluating** - Determines the affect of the HIA on the decision-making process

Where can I find more information about HIAs?

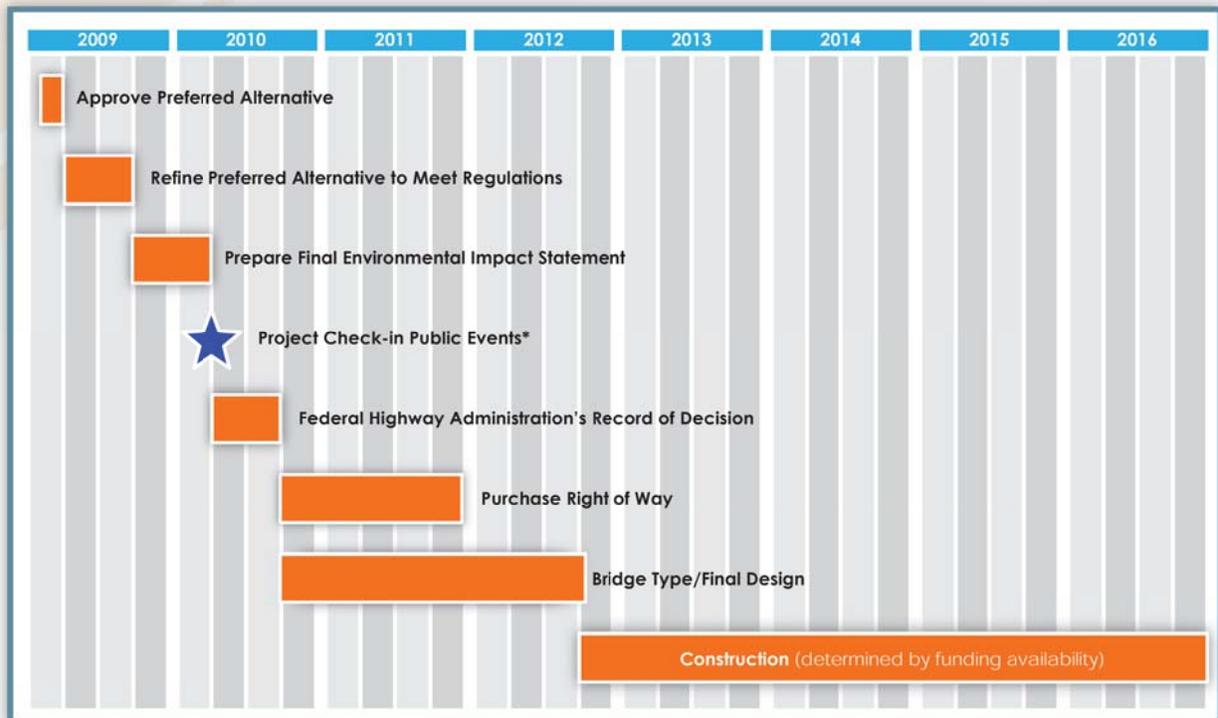
There are many high-quality and comprehensive HIA resources available on-line. Oregon Public Health Institute recommends the following:

- **Oregon's HIA Initiative** - <http://www.oregon.gov/DHS/ph/hia/index.shtml>
- **UCLA HIA Clearinghouse Learning and Information Center** - <http://www.hiaguide.org/>
- **Human Impact Partners** - <http://www.humanimpact.org/>
- **The Health Impact Project** - <http://www.healthimpactproject.org/>

Preferred Alternative



Sellwood Bridge Schedule



* Future public input opportunities will be scheduled for later phases of the project