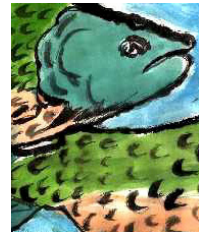


Lake Oswego to Portland

TRANSIT PROJECT

DEIS/PROJECT UPDATE

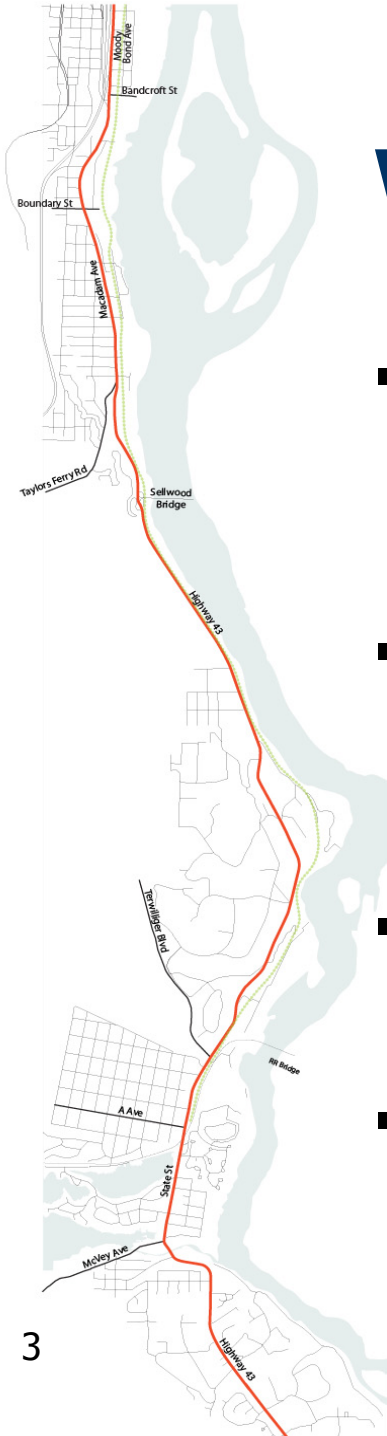


Outcomes for a successful future

- Sustained economic competitiveness and prosperity
- Safe and reliable transportation choices
- Vibrant, walkable communities
- Minimal contributions to global warming
- Clean air, clean water and healthy ecosystems
- Benefits and burdens of growth shared throughout the region

Why study this corridor?

- In 1988 local leaders had the foresight to purchase Willamette Shore Line right of way between downtown Portland and Lake Oswego
- That \$2 million investment was part of a long-term vision to bring high capacity transit choices to all parts of our region
- Willamette Shore Line is worth \$80-\$100 million today
- Region should seriously evaluate the most effective use of this asset for the region, which is one purpose of the DEIS





Project purpose

- Optimize the regional transit system by improving transit within the Hwy. 43 corridor
- Develop transit that:
 - ✓ Supports land use goals
 - ✓ Maximizes regional resources
 - ✓ Is environmentally sensitive
 - ✓ Is fiscally responsible
 - ✓ Garner public support
 - ✓ Maximizes economic development potential



Project need

- Population and employment growth
- Historic and projected traffic congestion
- Increasing transit travel times and deteriorating reliability
- Increasing transit operating expenses
- Topographic, geographic and built environment constraints
- Local and regional land use and development plans, goals and objectives

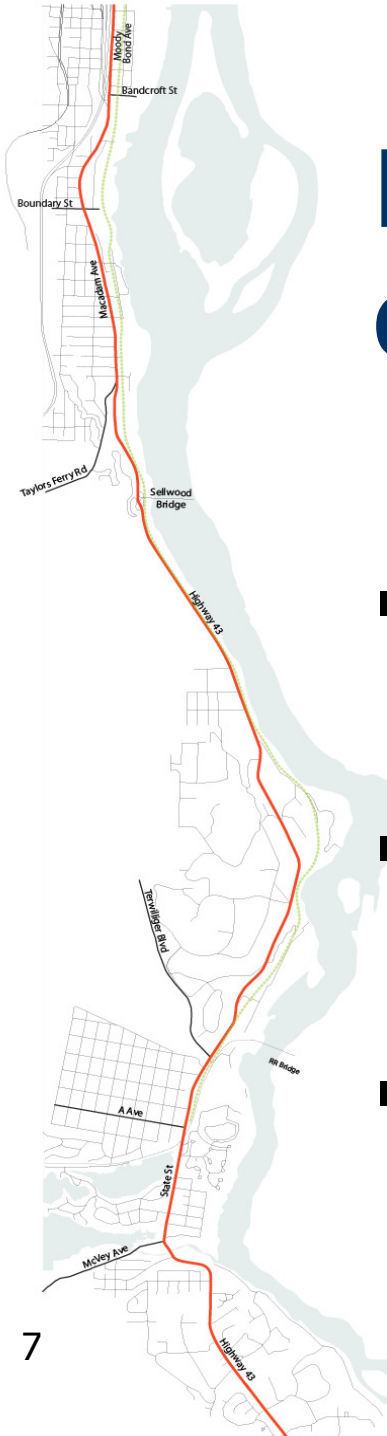
Highway 43

- ODOT determined widening not feasible (1996)
- Long planned for transit enhancements
- Right of way purchased in 1988



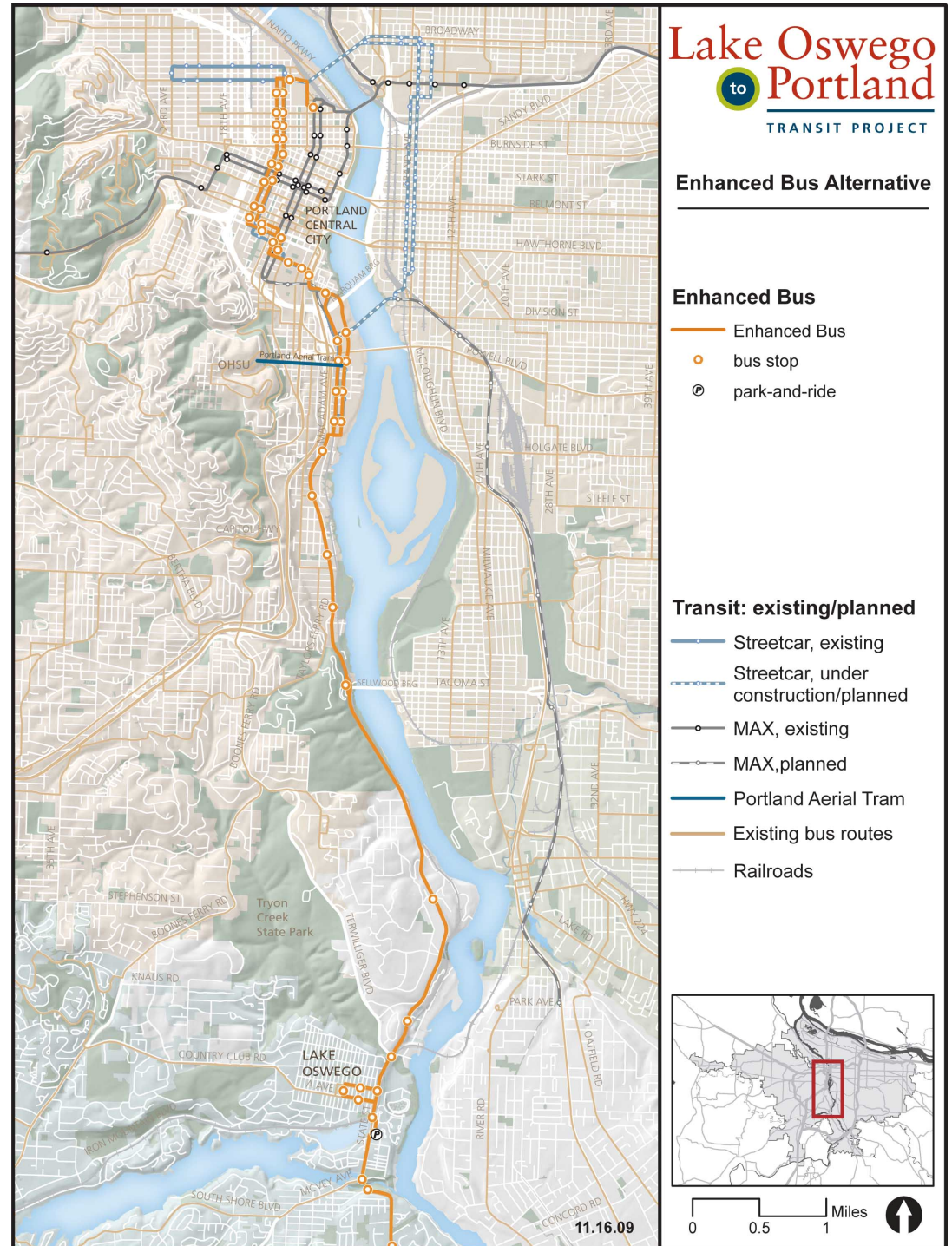
Draft EIS Alternatives and design options

- No-build alternative
- Enhanced bus alternative
- Streetcar alternative
 - Phasing and design options



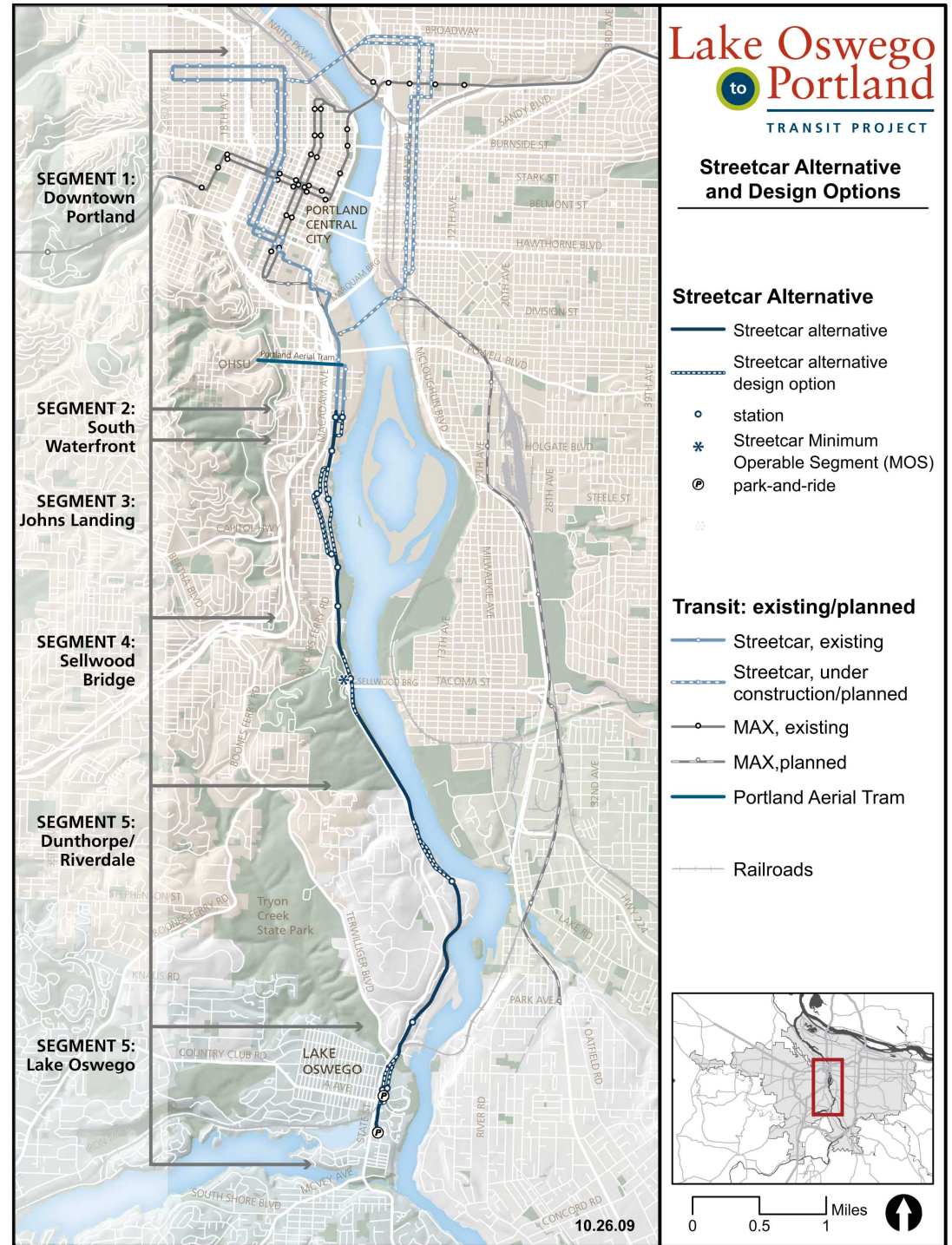
Enhanced bus alternative

- Operates in mixed-traffic on existing streets
- Has fewer stops than existing bus
- Operates more frequently than the existing bus



Streetcar alternative

- Extension of existing streetcar service
- Operates almost exclusively in existing rail right of way.
- Has fewer stops and more frequency than existing bus.



Streetcar phasing options—

South Waterfront



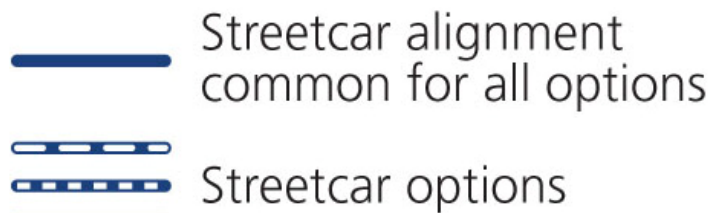
- A: South Waterfront
- Willamette Shore Line phasing option
 - Moody/Bond couplet extension

- Streetcar alignment common for all options
- - - Streetcar options

Streetcar design options—

Johns Landing



- B:Johns Landing Design Options
- Willamette Shore Line
 - Macadam In-Street
 - Macadam Additional Lane



Streetcar phasing options—

Sellwood Bridge



C: Sellwood Bridge Design Options
- Willamette Shore Line
- New Interchange

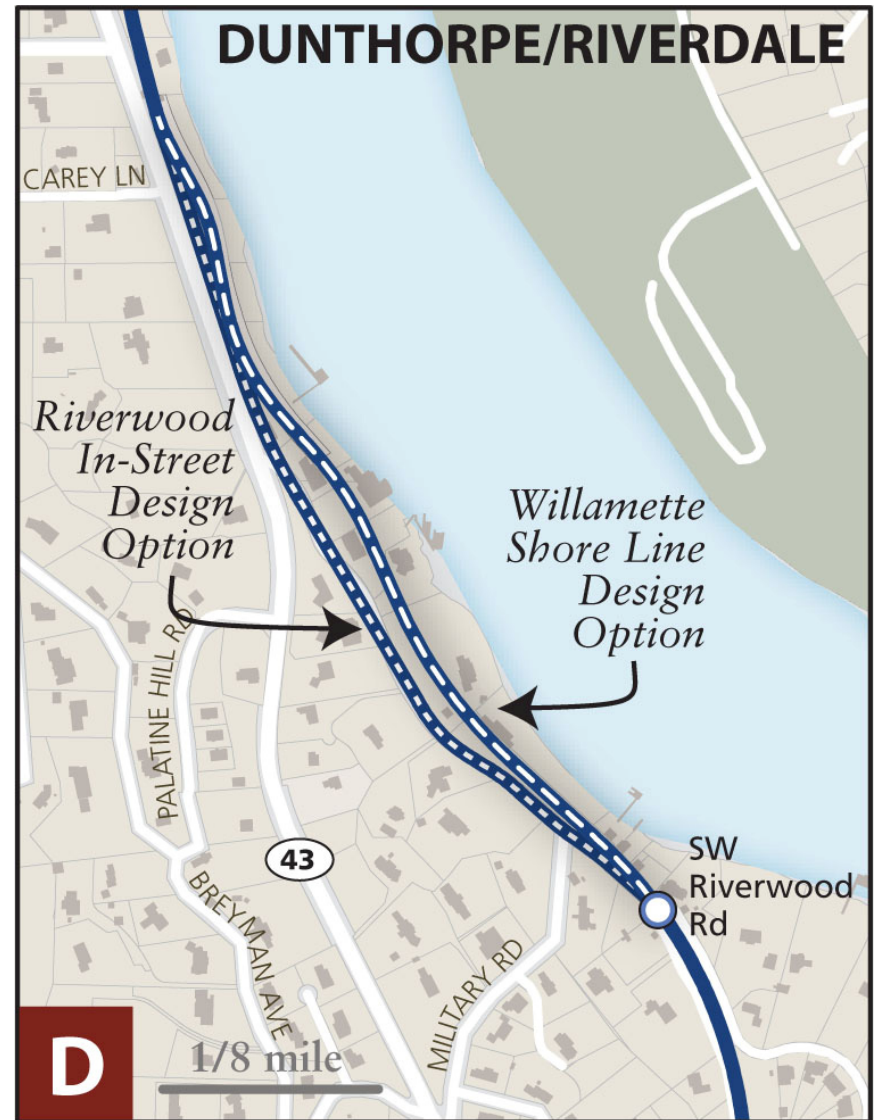
-  Streetcar alignment common for all options
-  Streetcar options



Streetcar design options— Dunthorpe/Riverdale

D: Dunthorpe/Riverdale Design Options
- Willamette Shore Line
- Riverwood In-Street


-  Streetcar alignment common for all options
-  Streetcar options



Streetcar design options—

Lake Oswego Foothills District

E: Lake Oswego Design Options
 - UPRR Right-of-Way
 - Foothills

 Streetcar alignment common for all options


 Streetcar options

  Streetcar station park-and-ride





Potential mitigation

- Alternatives designed to avoid known impacts
- DEIS identified potential impacts and mitigation
- During PE, design will avoid, minimize and mitigate impacts
- Current conditions can be improved through mitigation opportunities
 - Such as stormwater, impervious surfaces, culvert replacements
- FEIS will commit to mitigation



Natural environment



2035 Carbon Dioxide (CO₂) Emissions

- Enhanced Bus

25.40 tons/day reduction in CO₂

- Streetcar

40.51 to 42.12 tons/day reduction in CO₂



2035 Fuel Consumption in the Lake Oswego to Portland Transit Corridor

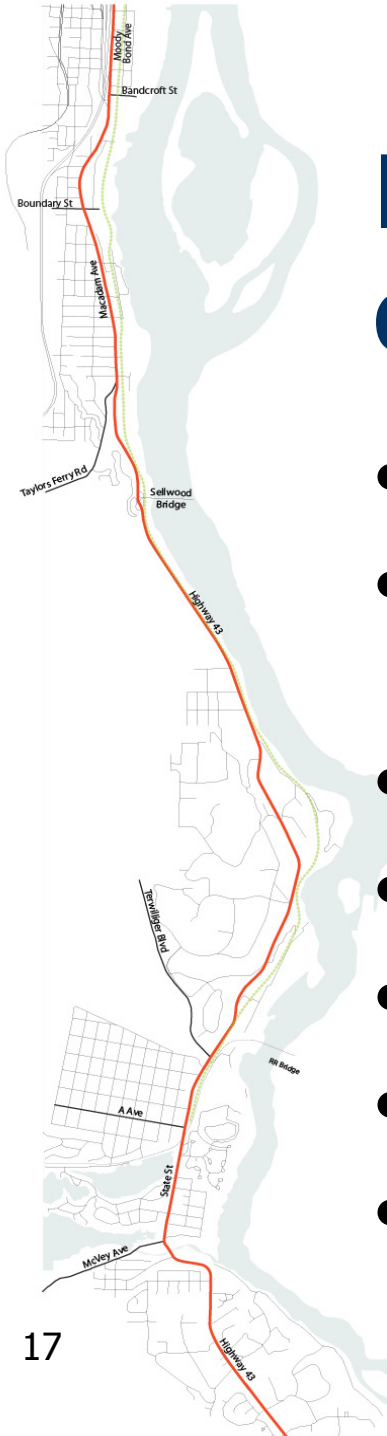
- Enhanced Bus

-13,500 gallons/year

- Streetcar

-58,000 to -66,400 gallons/year





Foothills District development opportunities

- 107 acres
- Envisioned as an urban, mixed-use neighborhood
- Connections to waterfront
- Diverse housing types
- Sustainable, pedestrian orientation
- Master planning underway
- More development potential with Streetcar

Average weekday ridership projections, L.O. to South Waterfront

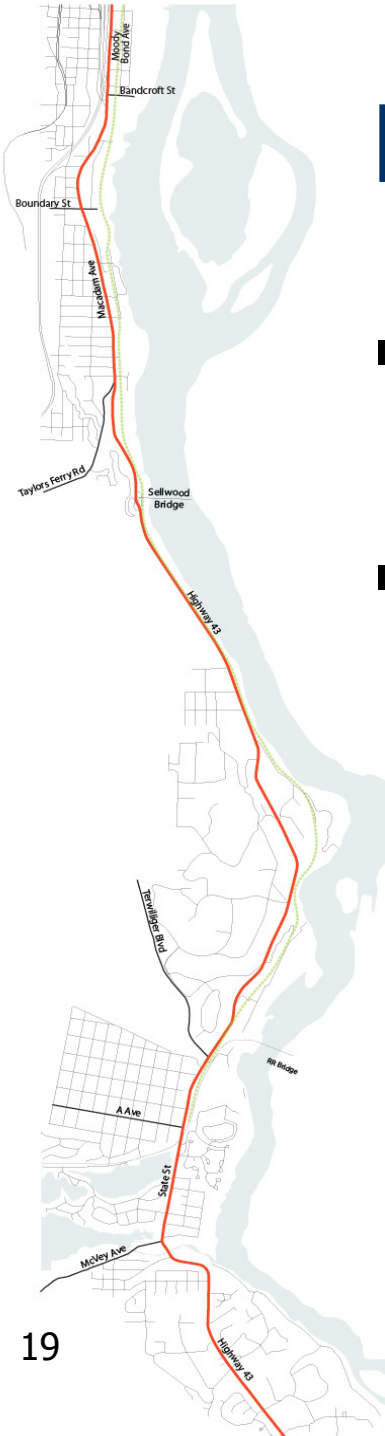


	2035 ridership	Change from no-build	Percent change from no-build
No-build*	6,920	n/a	n/a
Enhanced bus	9,810	2,890	42%
Streetcar	11,170 to 11,920	4,250 to 5,000	61% to 72%

* No-build does not meet future demand of 8,590

Peak Travel Times

- The streetcar would be the fastest option
- In 2035 between Lake Oswego and PSU, the streetcar would:
 - ✓ save 9-13 minutes of total travel time over the No Build
 - ✓ Would be 6-10 minutes faster than the Enhanced Bus





Estimated annual operations and maintenance costs, 2035

(in 2010 dollars)	Corridor streetcar	Corridor bus	Total corridor transit	Change from no-build
No-build	n/a	\$26,710,000	\$26,710,000	n/a
Enhanced bus	n/a	\$29,500,000	\$29,500,000	\$2,790,000
Streetcar	\$3,780,000	\$24,180,000	\$27,960,000	\$1,250,000

Difference between streetcar and enhanced bus: \$1,540,000 annually

- Streetcar costs reflect service between Lowell Street in Portland (the current streetcar terminus) and Lake Oswego as well as increased service on the existing alignment to support greater passenger loads resulting from the extension to Lake Oswego.
- Corridor bus costs include all buses operating within a geographic travel shed between Portland and Lake Oswego, both in a north-south orientation and an east-west orientation.

Funding and operating cost comparison

- Streetcar would cost \$380 to \$458 million in YOE Dollars
- Project would only move forward with a federal match, likely at 60%
- The Willamette Shore Line R-O-W would be part of the local contribution
- That would leave \$57M to \$83M million in new local contributions to build a streetcar line, while enhanced bus would require \$20.4M
- The streetcar also would save \$1.54M annually in operating costs over the Enhanced Bus alternative

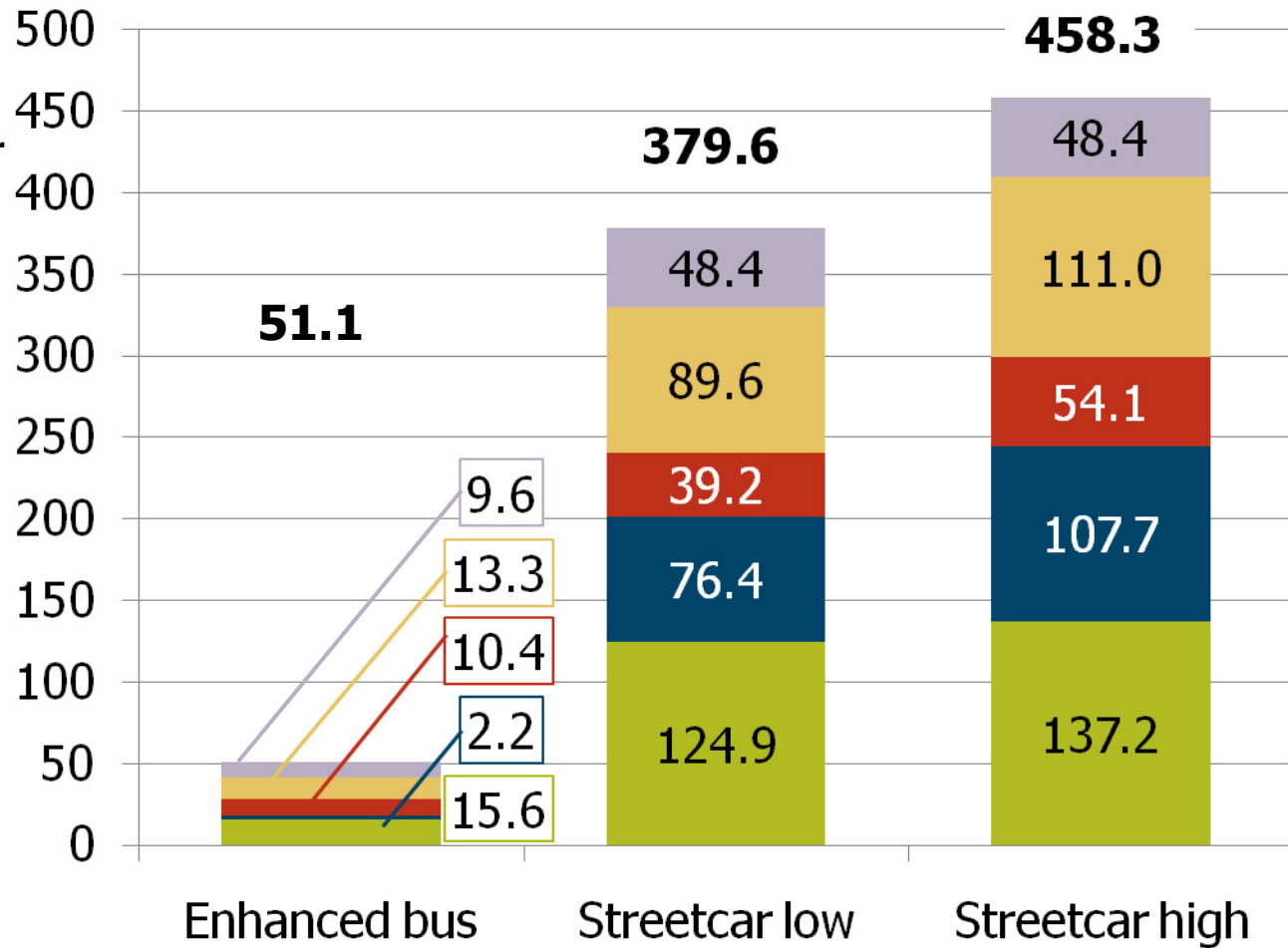




Estimated capital costs

(YOE\$ in millions)

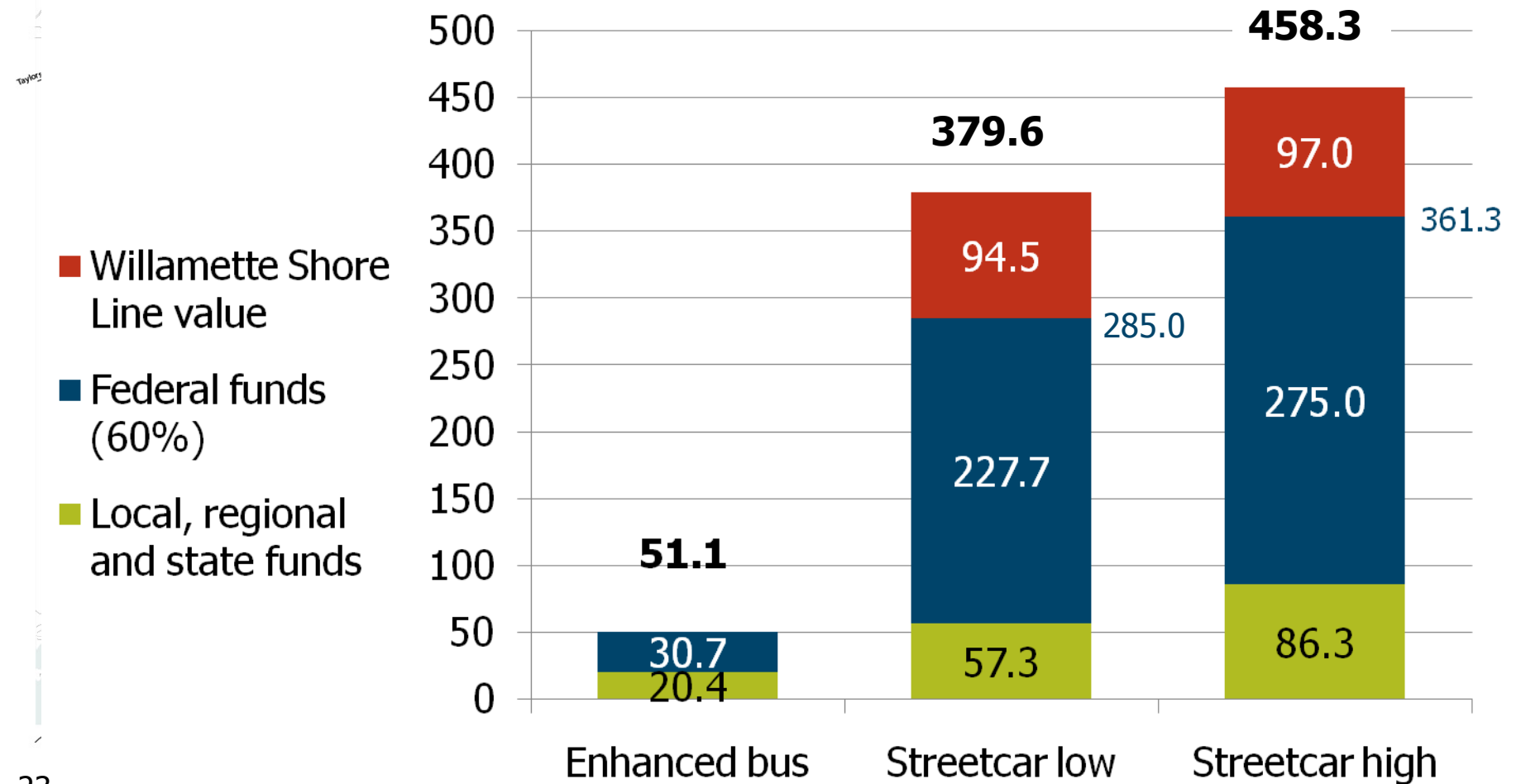
- Vehicles needed for 2035 operation
- Finance and escalation
- Engineering
- Right of way, land
- Capital improvements





Capital funding concept

(YOE\$ in millions)



Estimated Funding Sources

Est. Projects Costs (2010\$): \$288.9M to \$347.4M

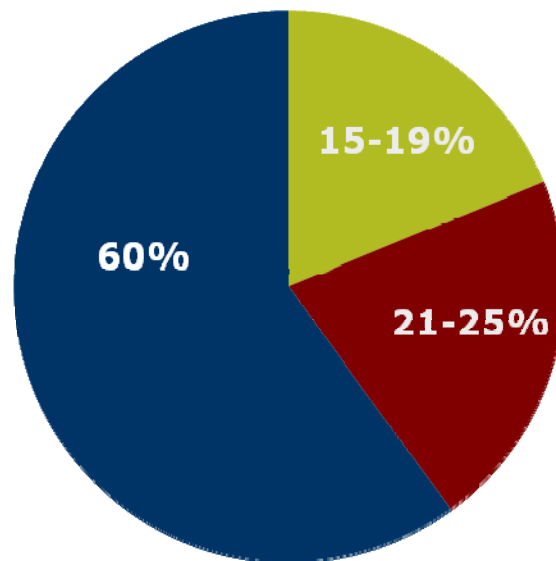
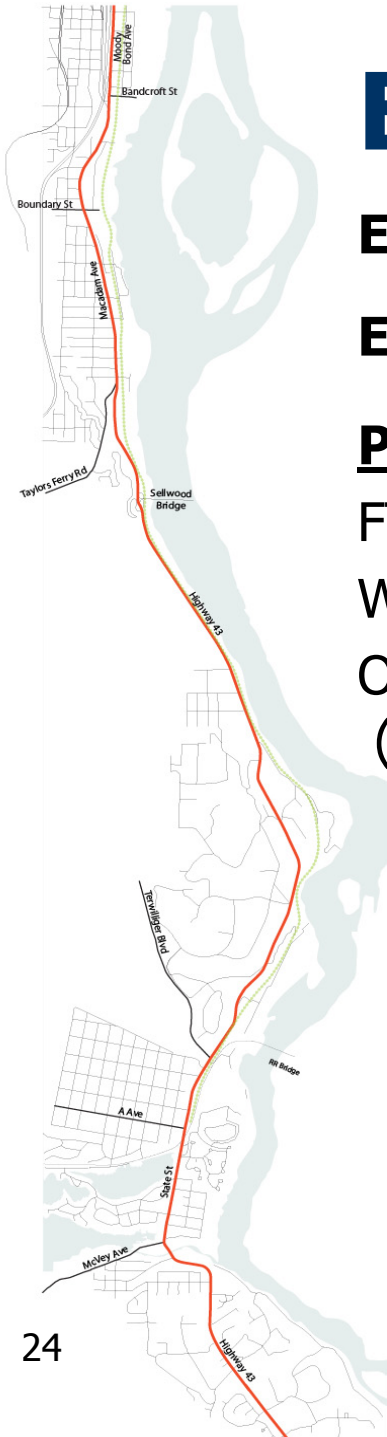
Est. Projects Costs (2017\$): \$379.6M to \$458.3M

Potential Funding Sources:

FTA News Starts (60%) \$227.8M to \$275.0M

Willamette Shore Line ROW \$94.5M to \$97.0M

Other Regional Sources
(state, region, cities) \$57.3M to \$86.3M

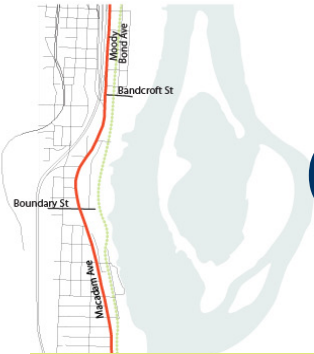


- local, regional and state
- Right of way donations
- Federal funds

What are the trade offs between enhanced bus and streetcar?

- ODOT determined widening Hwy. 43 was infeasible
- High capacity transit provides a transportation option in the heavily congested Highway 43 corridor
- As a high capacity transit option, streetcar would:
 - ✓ provide the fastest service for riders
 - ✓ be the cheapest to operate and provide more reliable service because it will mostly operate on exclusive right of way
- Streetcar reliability and greater rider capacity = more riders
- Key tradeoff: One-time capital costs vs. lower ongoing operating expenses and quality of service
- Streetcar helps to maximize the region's scarce transit operating dollars



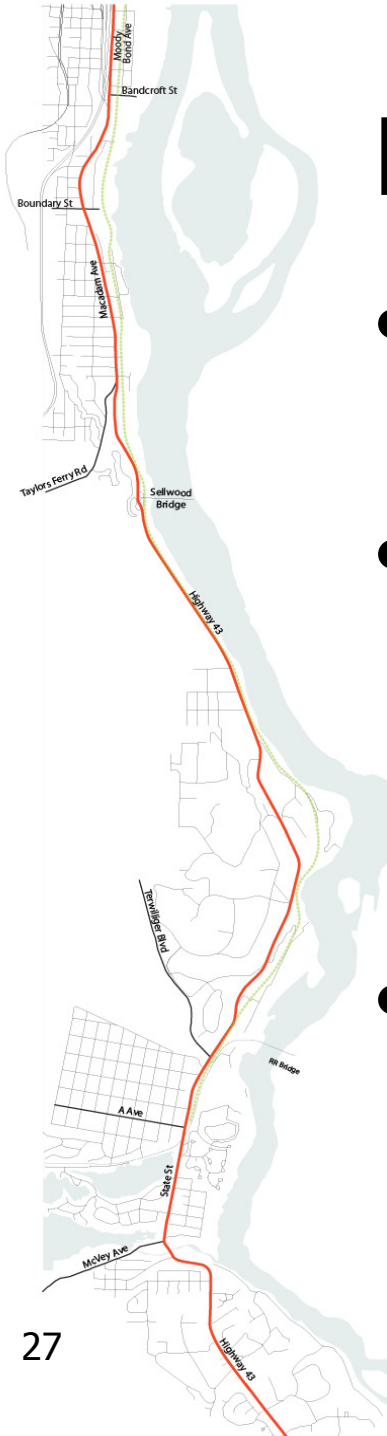


Comparison of alternatives

	No-build	Enhanced bus	Streetcar
Ridership	○	◐	●
Capital cost	●	◐	○
Travel time	○	◐	●
Operating and maintenance	●	○	◐
Reliability	○	○	●
Capacity	○	◐	●

○=good | ◐=better | ●=best





Next steps

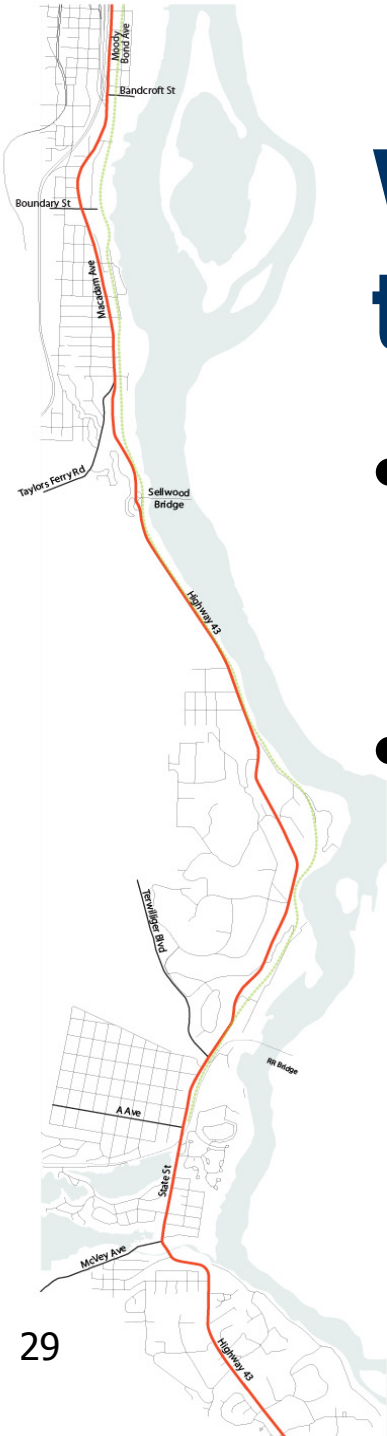
- Publication of DEIS
 - December 3rd
- 60-day public comment period
 - Open houses
 - Public hearing
 - Ends January 31
- Locally Preferred Alternative(LPA) process
 - Early 2011



Project Timeline

2010	2011	2012	2013	2014	2015	2016	2017
<ul style="list-style-type: none"> • Publish DEIS • Develop LPA 	<ul style="list-style-type: none"> • Adopt LPA • Develop Conceptual funding plan • Apply for Small/New Starts 	<ul style="list-style-type: none"> • Begin Preliminary Engineering • Begin FEIS 	<ul style="list-style-type: none"> • Publish FEIS • Confirm funding plan <i>(confirm funding sources)</i> 	<ul style="list-style-type: none"> • Final Design • Full Funding Grant Agreement (FFGA) • Finalize funding plan <i>(secure funding sources)</i> 	<ul style="list-style-type: none"> • Start Construction 	<ul style="list-style-type: none"> • Construction 	<ul style="list-style-type: none"> • Begin revenue service

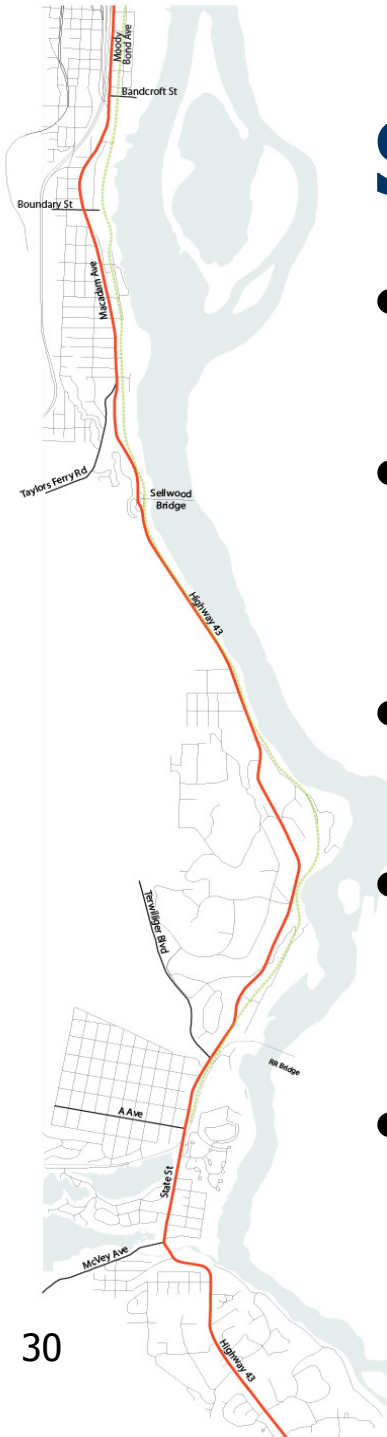




What do we need from the public?

- The public has until 1/31/11 to comment on the DEIS and its three options.
- Mail or email comments to:

Jamie Snook
Metro
600 NE Grand Avenue
Portland, OR 97232
trans@oregonmetro.gov



Summary:

- Completion of the DEIS is the first step in a long process
- LPA Process will decide which option to advance to PE/FEIS – Does not represent final approval of the project
- Multiple future opportunities to approve the project
- City of Lake Oswego is one of numerous regional partners that could be asked to fund the project
- L.O. share anticipated to represent 3-4% of total project cost



Discussion & Questions



Affected Environment and Environmental Consequences



- Applicable regulations
- Affected environment
- Potential impacts
 - Direct, indirect and cumulative
- Potential mitigation measures





Potential mitigation

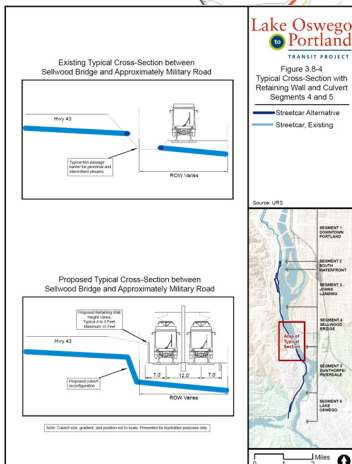
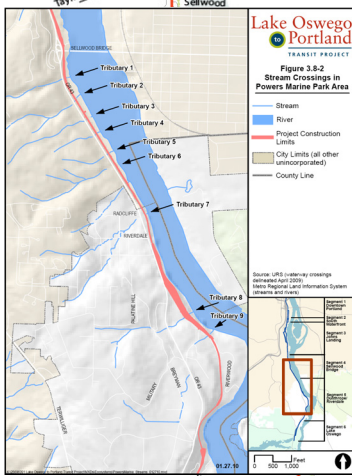
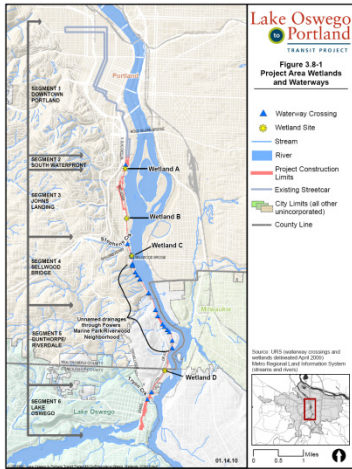
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Natural environment

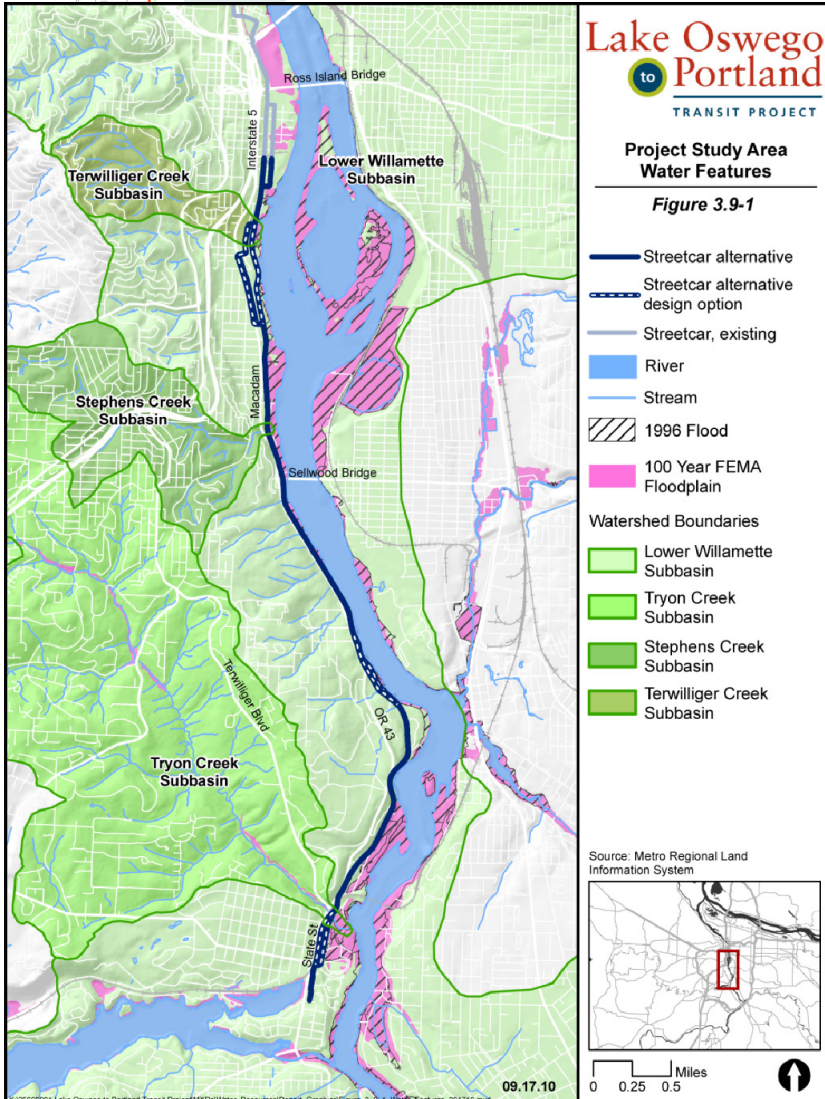
The Streetcar Alternative, compared to the no-build would include:

- Temporary construction impacts within stream channel
- New crossing structure in the 100-year floodplain of Tryon Creek
- Removal of riparian vegetation in 100-year floodplain of the Willamette, Tryon and Stephens
- Have up to 0.11 acres of permanent impacts to wetlands
- Potential affect to Threatened and Endangered Species that would require mitigation
- Provide opportunities to improve fish passage in replaced or repaired culverts, provide native vegetation, improved habitats

The Enhanced Bus would avoid above impacts, as well as benefits



Natural environment



The Streetcar Alternative, compared to the no-build would have:

- Up to 10.1 acres of fill in the 100-year floodplain
- Up to 18.2 acres of new impervious surface
- The opportunity to redevelop up to 7.6 acres of existing impervious surface to current standards

The Enhanced Bus would:

- Avoids most impacts, as well as benefits
- Up to .75 acre new impervious surface

Natural environment



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25.40 tons/day reduction in CO₂

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40.51 to 42.12 tons/day reduction in CO₂



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