



PORTLAND-MILWAUKIE
LIGHT RAIL TRANSIT PROJECT

Portland-Milwaukie A Vital Transportation Link



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October 10, 2016



PORTLAND-MILWAUKIE LIGHT RAIL TRANSIT PROJECT

Project Overview

- 7.3-mile light rail extension
- 10 stations
- Expands light rail system to 60 miles
- New multi-modal bridge
- Two new Park & Ride facilities
- Enhances connections to Innovation Quadrant
- Projected to carry up to 25,500 weekday rides by 2030
- Opened September 12, 2015





FTA Funded Project: New Starts

- ❑ Discretionary program requires project sponsors to undergo a multi-step, multi-year process to be eligible for funding
- ❑ Project Management Oversight Contractor assigned
- ❑ Surface transportation authorization funding by Congress
- ❑ Moving Ahead for Progress in the 21st Century (MAP -21)

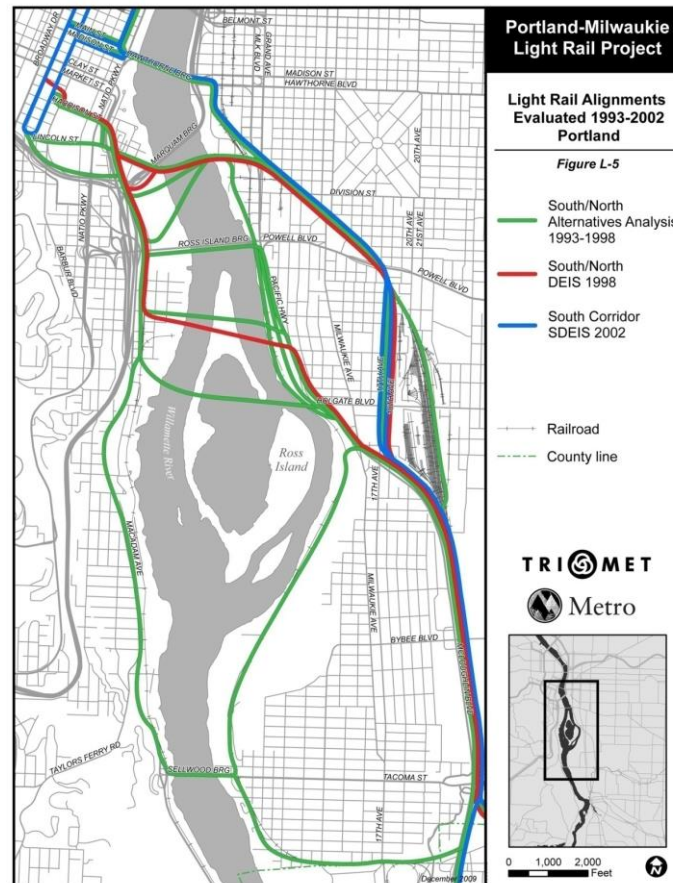




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Where should Portland's newest bridge go?

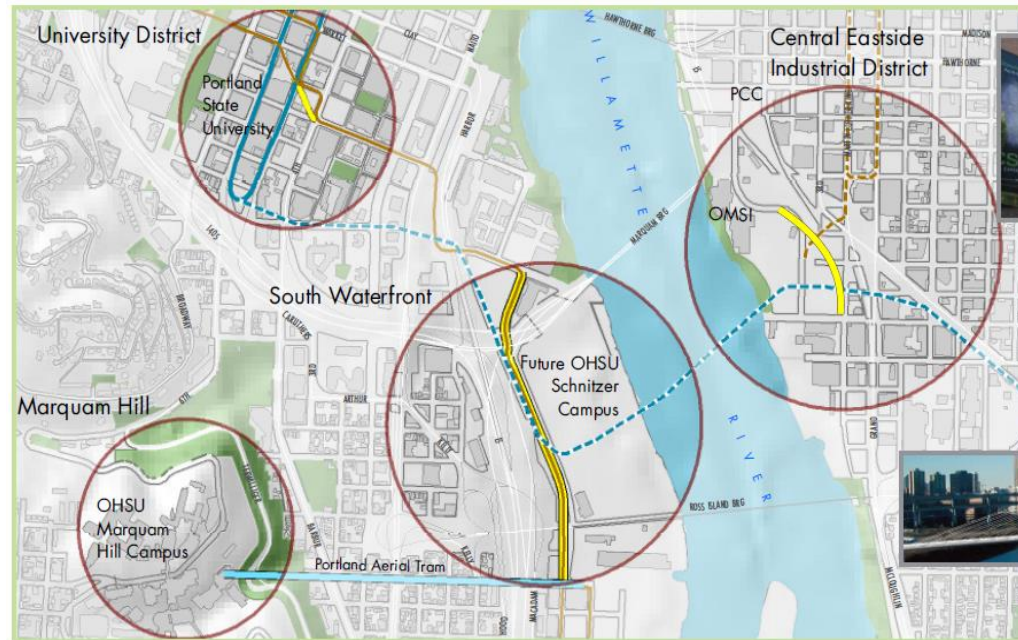
- ☐ Many options examined:
 - ☐ Hawthorne
 - ☐ Ross Island
 - ☐ Sellwood





Land Use: District Connections

- ❑ 400,000 new regional residents expected by 2035
- ❑ Orange Line builds transit capacity to support this growth
- ❑ Improves commute times between Downtown Portland and Northern Clackamas County, reduces vehicle trips



Oregon Museum of Science and Industry (OMSI) in the Central Eastside Industrial District



Future light rail/bus transitway



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Willamette River Crossing Options





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South Waterfront History





Tilikum Crossing, *Bridge of the People*

First of its kind bridge in
U.S., carrying:

- ☐ MAX trains
- ☐ Streetcars
- ☐ buses
- ☐ bicycles
- ☐ pedestrians
- ☐ no private vehicles





Tilikum Crossing, *Bridge of the People*

- ❑ First span built over river in Portland area since 1973
- ❑ Approximately 1,720 feet in length
- ❑ 75.5 feet wide (110.5 feet at the towers)
- ❑ 2 paths – each 14 feet wide for cyclists and pedestrians
- ❑ 2 bus lines – 9, 17





Tilikum Crossing, *Bridge of the People*

- ❑ Willamette River Crossing Partnership Committee recommended alignment and bridge type
- ❑ Bridge Naming Committee reviewed over 9,500 name submissions
- ❑ 178 LED lights change color based on the river's speed, height and temperature





Tilikum Crossing, *Bridge of the People*

- ❑ Improved access to Innovation Quadrant: PSU, OHSU, Central Eastside and OMSI
- ❑ Multimodal connection hub to MAX, bus, Portland Streetcar, Portland Aerial Tram and multi-use paths
- ❑ Stormwater runoff is directed to stormwater treatment basins on land
- ❑ Reduces commute pressure on other bridges





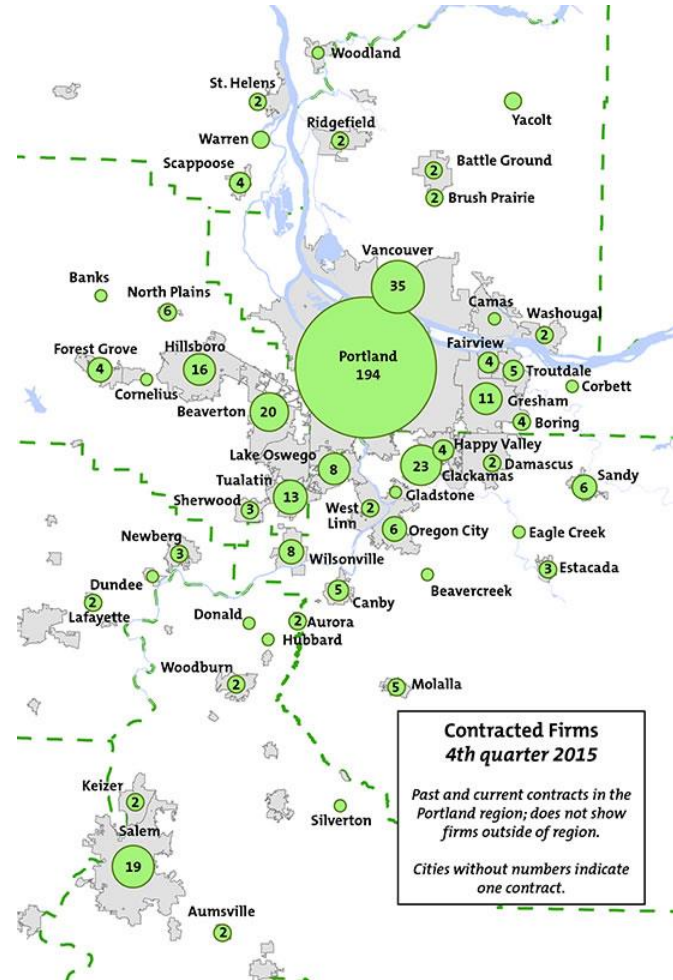
South Waterfront Plans For The Future





Economic Benefits

- ❑ Supported region's long-term vitality while providing short-term benefits to the economy
- ❑ More than 14,500 jobs created
- ❑ Includes 5,346 on-site construction jobs
- ❑ 569 private-sector firms, including 134 disadvantaged business enterprise firms





Buying Materials from Local Companies

- ❑ First beam ready to roll out of the fabrication plant in Tigard





Disadvantaged Business Enterprise (DBE)

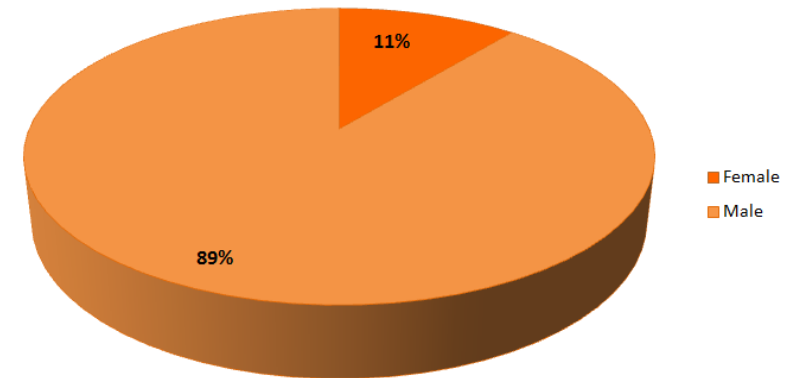
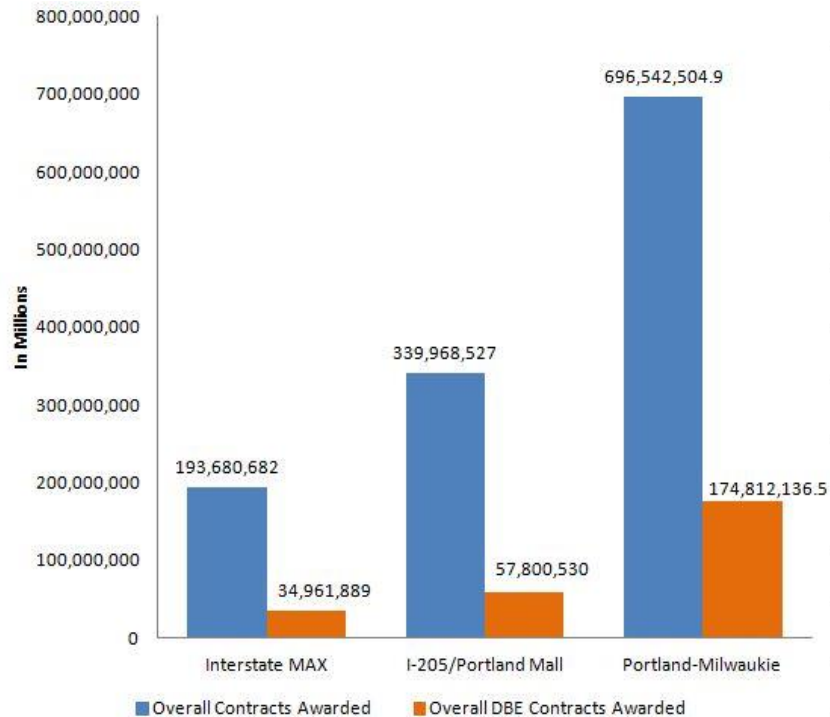
- ❑ Record levels of participation of firms owned by people of color and women
- ❑ MAX Orange Line construction cost = 2x the MAX Green Line
- ❑ \$ value of contracts with disadvantaged businesses is 3x amount earned on Green Line





Disadvantaged Business Enterprise (DBE)

Dollar value by contracts



Orange Line workforce by gender



Sustainability

- ❑ Industry leading approach to sustainable design, as well as collaborative partnerships
- ❑ Created new standards for what can be considered part of a light rail project
- ❑ Diverse initiatives:
 - ❑ Growing infrastructure
 - ❑ Active transportation amenities
 - ❑ Stormwater treatment
 - ❑ On-site alternative energy generation





Sustainability

Functional habitat

- ❑ Lincoln St/SW 3rd Ave Station, in Downtown Portland includes 4,204 square feet of eco-track
- ❑ Reduces train noise and vibration, and can divert stormwater
- ❑ Test pilot project for vegetated trackways in future projects





Sustainability

Functional habitat

- ❑ 8 structures with green roofs, for a total of 3,500 sq ft:
 - ❑ Divert stormwater
 - ❑ Improve building insulation
 - ❑ Provide habitat
 - ❑ Help lower urban air temperatures





Sustainability

Stormwater Treatment

- ❑ 286 stormwater basins and swales:
 - ❑ Collect stormwater and runoff from surrounding surfaces and retain it long enough to be safely filtered back into the groundwater
 - ❑ Treat an average of 25.9 million gallons of stormwater annually





Sustainability Green Energy

- ❑ Bi-facial solar panels generate electricity from both sides, taking advantage of both direct and ambient light
- ❑ All lighting in the project is LED, which lasts 3.5 times as long as metal halide bulbs





Sustainability

Park Avenue Park & Ride

- ❑ Shared vision: Multi-agency, citizen-committee collaboration
- ❑ Stormwater runoff is captured and treated onsite
- ❑ Over 400 car parking spaces; 130 bike spaces
- ❑ Solar panels offset all of the facility's operating functions, allowing the building to achieve net zero energy usage





Active Transportation Improvements

- ❑ Extensive consultation with bicycle and pedestrian groups during planning resulted in \$65 million in bicycle and pedestrian improvements:
 - ❑ Safe crossings of rail tracks
 - ❑ Multi-use paths
 - ❑ Bike facilities (lanes, boxes, paths)
 - ❑ 446 new bike parking spaces
 - ❑ 10 miles of new sidewalks





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Real Property

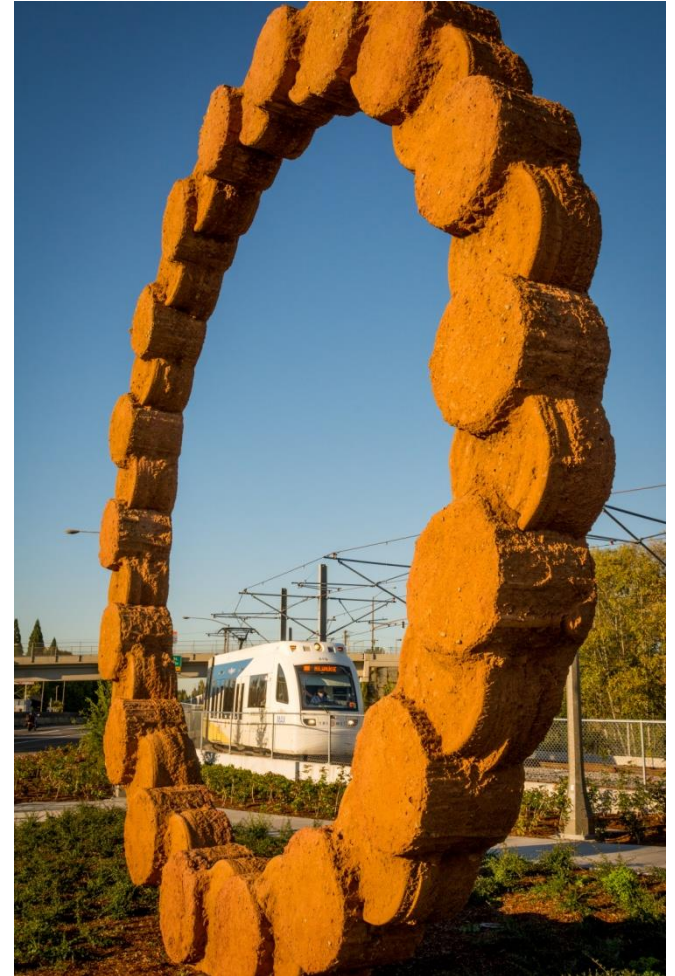
- ❑ \$13.2 billion in transit-oriented development along all MAX lines
- ❑ Project acquired several properties that will be sold to spur TOD:
 - ❑ SE Holgate Boulevard and SE 17th Avenue, 28,000 SFT
 - ❑ Pershing Street, 13,900 SFT
 - ❑ Advantis site, 14,700 SFT (pictured)





Public Art

- ❑ 25 projects with more than 200 separate elements by 26 artists and 57 writers
- ❑ Expresses uniqueness of individual station areas
- ❑ Brings meaning and visual character to each Orange Line station
- ❑ Photo: Two earthen sculptures entitled Kerf act as landmarks for the SE Tacoma St/Johnson Creek Station and speak to the influence of wheels upon the area





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Questions?
