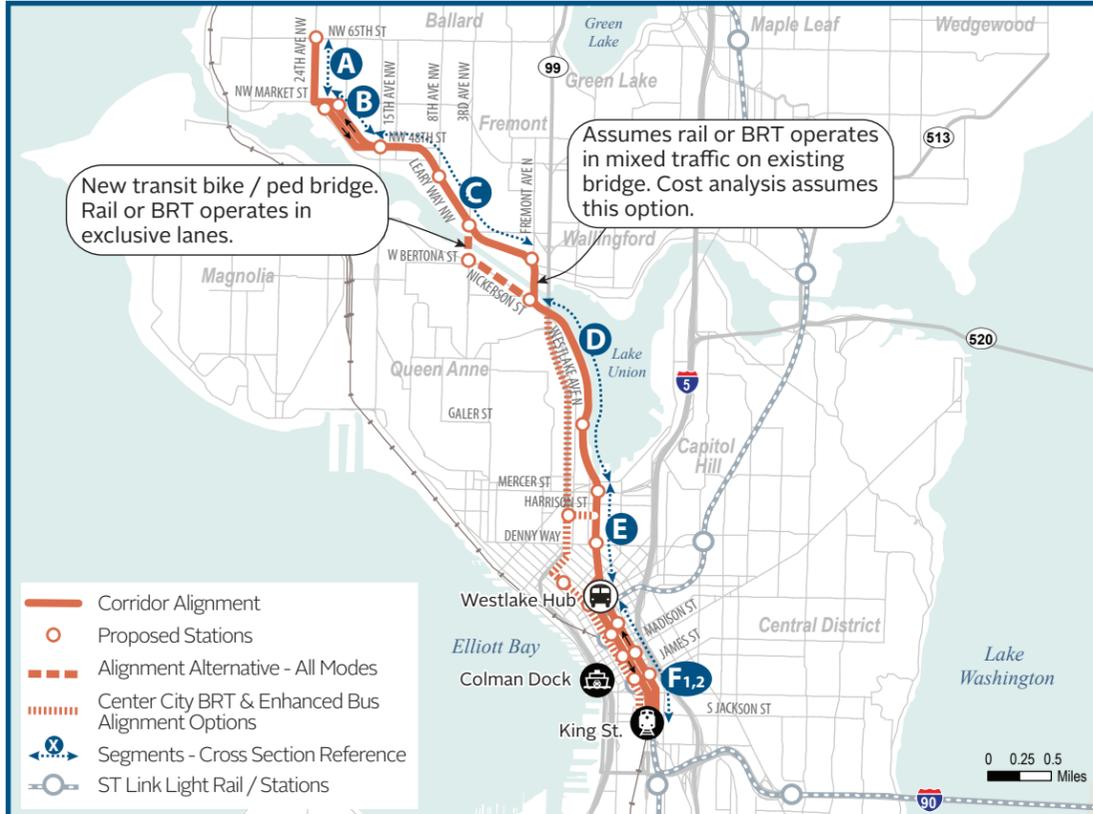


CORRIDOR 11

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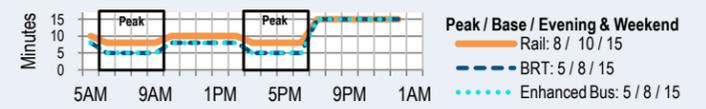
LOYAL HEIGHTS-BALLARD-FREMONT-SOUTH LAKE UNION-DOWNTOWN



Corridor Overview

- Length:** 7.0 miles
- New Track Length:** 10.6 single-track miles (rail-only)
- Stations:** 24th Ave NW - NW 65TH St, Leary/Ballard Ave - NW Market St, 15th Ave NW, 8th Ave NW, 3rd Ave NW, Fremont Ave N, Westlake Ave N - Nickerson St, Galer St, Mercer St, Denny Way, Westlake Hub, 4th/5th Ave - Union/University St, Madison/Marison St, James St, King Street Hub
- Average Stop Spacing:** 2,400 feet
- Key Connections:**
 - King Street Hub
 - Financial District Station
 - Pioneer Square Station
 - Westlake Hub
- Service Restructuring**
 - Streetcar and BRT options:** Route 17 would operate on Dexter between Nickerson and downtown Seattle, replacing Route 28 in that segment.
 - Enhanced Bus option:** Route 17 would remain unchanged.
 - All Options:** Route 28 would be truncated to only serve areas north of the 45th/Leary stop.

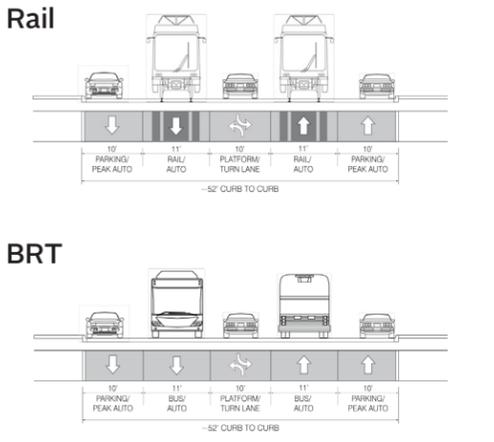
Operating Plan Headway by Mode



Cross Sections

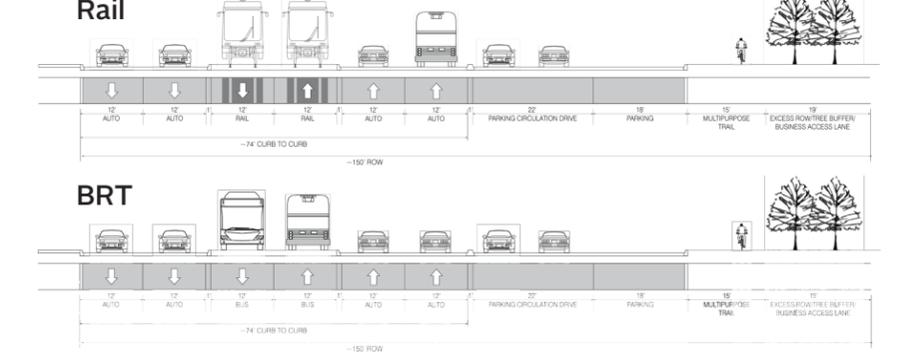
Segment A

24th Avenue NW: This neighborhood collector is low-volume and has a 3-lane section with bike lanes and parking on both sides. Adding rail to the auto lanes is not expected to have a substantial impact, but the center platform station in the vicinity of 64th Street could benefit from parking removal to allow cars to pass stopped transit vehicles.



Segment D

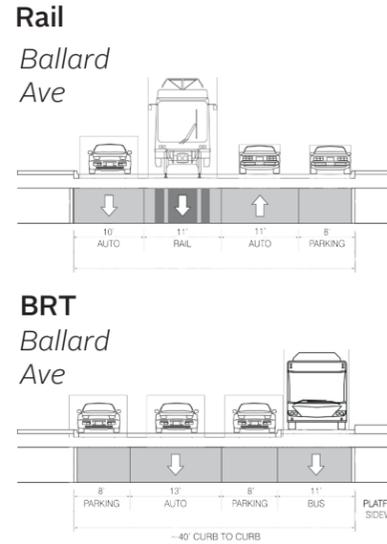
Westlake, Valley to Nickerson: Westlake has very wide ROW in this segment, and could support an exclusive guideway configuration to optimize safety, speed/reliability and traffic operations. Redesigning the public space east the current Westlake Alignment (mostly parking) would provide sufficient space for a rail guideway without sacrificing traffic capacity on Westlake. There is opportunity for a joint multiuse path project, along with numerous possible ROW configurations.



Segment B

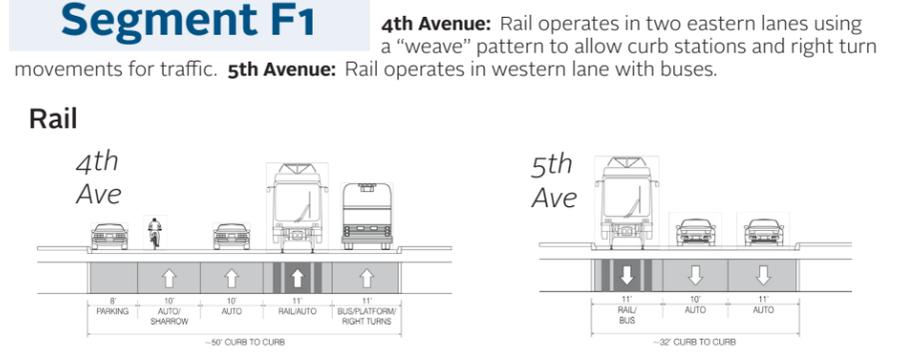
Ballard/Leary Couplet: Traffic on Ballard Avenue and Leary Way would remain 2-way (with the exception of the northernmost block of Ballard Ave, just S. of Market); rail would operate a 1-way couplet. There are no signals and would be few traffic impacts expected. Signalization/sequencing for rail on the short segment of Market between Leary Avenue and 24th Ave. NW would require further analysis.

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Segment E

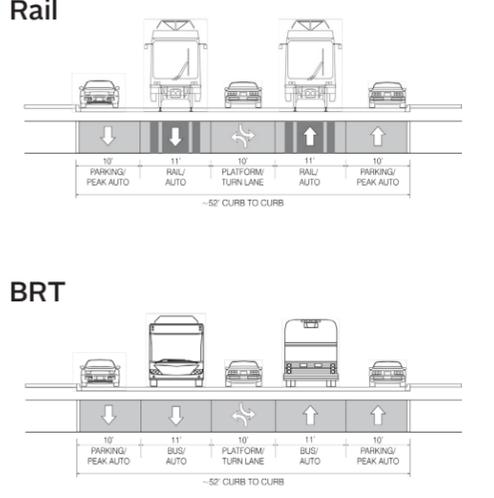
Westlake: This segment would operate in the path of the existing SLU streetcar and would be double tracked. This could use a new center median alignment as shown below (preferred) or utilize the existing southbound track with a new northbound track on the eastern curb. Terry track could be maintained for the SLU streetcar.



Segment C

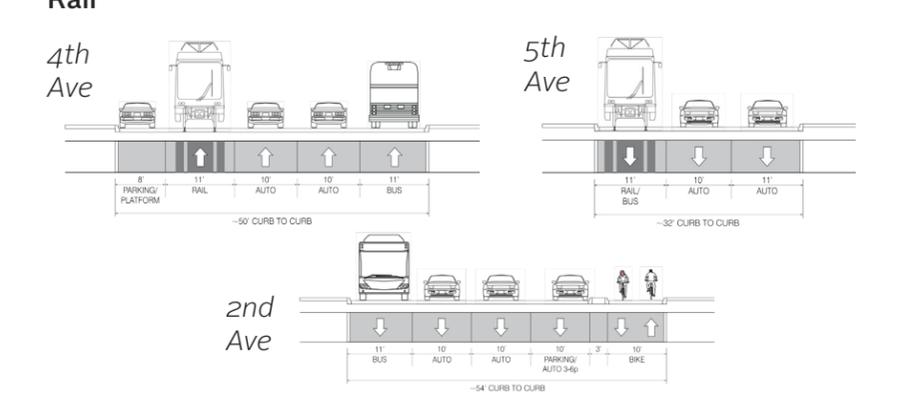
Fremont to 15th Avenue: The Fremont bridge can accommodate streetcar in mixed traffic. There are several alternatives to simply adding streetcar tracks to the existing bridge, including replacing the Fremont Bridge with a wider span, adding a second adjacent span, or continuing the streetcar line to the west on Nickerson and adding a new transit and non-motorized bridge near Seattle Pacific University. The cost of a new bridge is not likely to be offset by substantial travel time savings associated with either an exclusive crossing or the alternative Nickerson alignment; however, it would also provide benefits for bike and pedestrians.

36th Avenue NW and Leary: Center-running/center platform on 36th, Leary Way, and potentially Nickerson are all straightforward.



Segment F2

4th Avenue: Rail operates in western lane to reduce conflicts with regional bus traffic. **2nd Avenue:** Two-way cycle track could be evaluated to mitigate loss of bike lane segments on 4th Ave.



Note: All cross sections are representative of a possible design option for a corridor segment. Right-of-way widths, utility constraints, and competing street use needs vary in each of the representative segments.

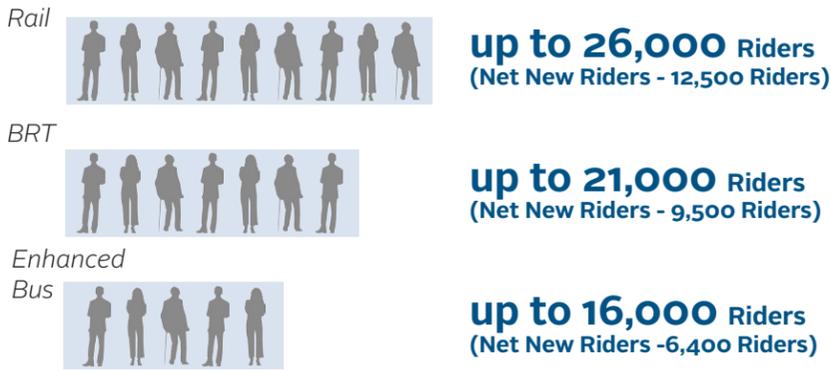
BRT Operates in exclusive lanes on 3rd Avenue

CORRIDOR 11: COMPARATIVE MEASURES

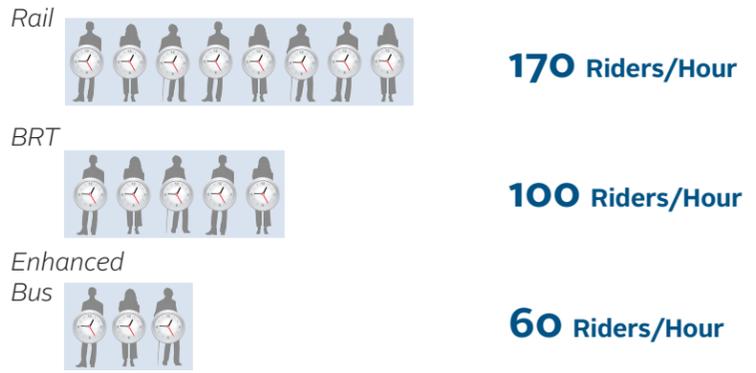
LOYAL HEIGHTS-BALLARD-FREMONT-SOUTH LAKE UNION-DOWNTOWN

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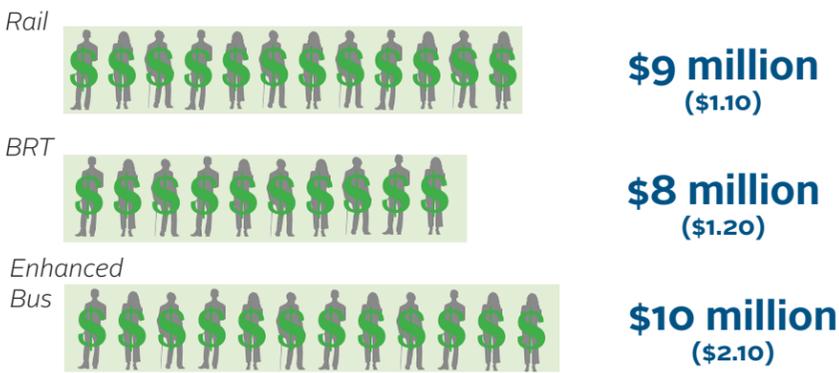
Weekday Riders (2030)



Productivity (Weekday Riders per Revenue Hour)



Annual Operating Cost (Operating Cost per Boarding Ride)



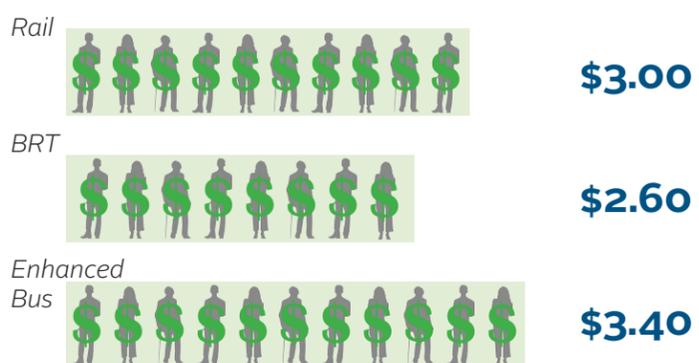
Net Operating Cost per Net New Ride (Accounts for Service Restructuring and Consolidation Opportunities)



Total Capital Costs (and Cost per Mile)



Annualized Cost per Rider (Operating and Capital)



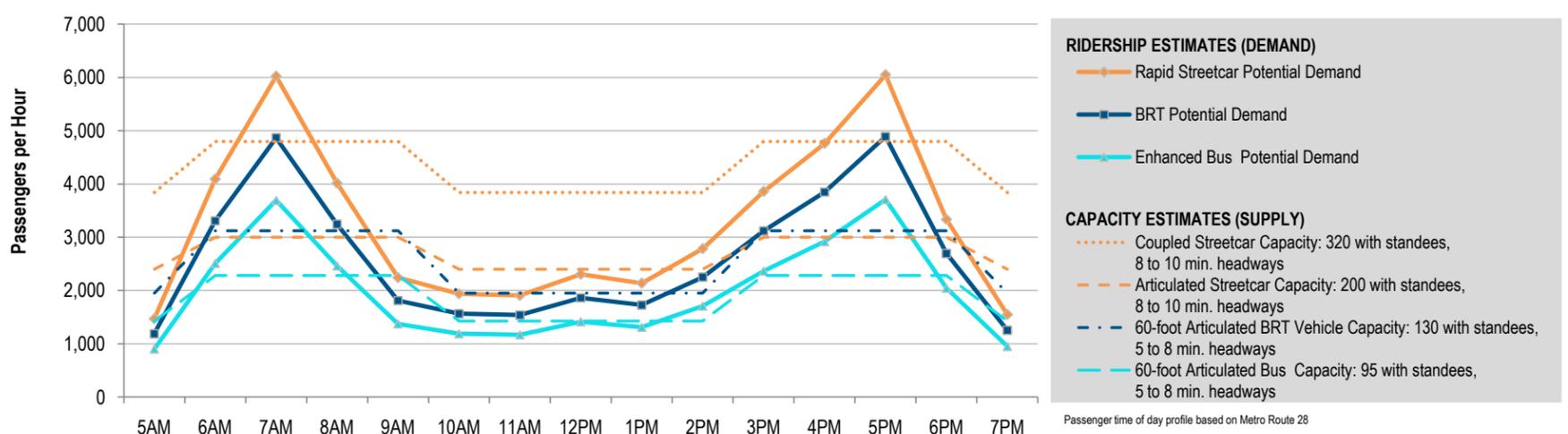
End-to-End Travel Time Savings (Average Savings per Ride including In- and Out-of-Vehicle Time)



Annual GhG Savings



Vehicle Capacity Requirement (Estimated Bidirectional Demand by Mode vs. Capacity by Vehicle Type)



Note: Methodology sheet describes purpose and methodology for each measure. All cost estimates are presented in 2011 dollars.