CORRIDOR 11
LOYAL HEIGHTS-BALLARD-FREMONT-SOUTH LAKE UNION-DOWNTOWN

Corridor Overview

- Length: 70 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, Battery St, Denny Way, Westlake Hub, 4th/5th Ave - Union/University St, Madison/M Terminator St, James St, King Street Hub
- Average Stop Spacing: 2,400 feet
- Key Connections:
  - King Street Hub
  - 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 Ave NW: This neighborhood collector has 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 34th Street could benefit from parking removal to allow cars to pass stopped transit vehicles.
- Ballard/Leary Couplet: Traffic on Ballard Avenue and Leary Way would remain 2-way (with the exception of the segment of Ballard Avenue and Leary Way between 34th Street and 15th Avenue), and would be double tracked. Rail operates in the western lane to reduce conflicts with regional bus traffic.
- 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 one, 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.

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.
CORRIDOR 11: COMPARATIVE MEASURES
LOYAL HEIGHTS-BALLARD-FREMONT-SOUTH LAKE UNION-DOWNTOWN

Weekday Riders (2030)
- Rail: up to 26,000 Riders (Net New Riders - 12,500 Riders)
- BRT: up to 21,000 Riders (Net New Riders - 9,500 Riders)
- Enhanced Bus: up to 16,000 Riders (Net New Riders - 6,400 Riders)

Productivity (Weekday Riders per Revenue Hour)
- Rail: 170 Riders/Hour
- BRT: 100 Riders/Hour
- Enhanced Bus: 60 Riders/Hour

Annual Operating Cost (Operating Cost per Boarding Ride)
- Rail: $9 million ($1.10)
- BRT: $8 million ($1.20)
- Enhanced Bus: $10 million ($2.10)

Net Operating Cost per Net New Ride (Accounts for Service Restructuring and Consolidation Opportunities)
- Rail: $1.85
- BRT: $2.20
- Enhanced Bus: $4.60

Total Capital Costs (and Cost per Mile)
- Rail: $327 million ($47 million per mile)
- BRT: $111 million ($16 million per mile)
- Enhanced Bus: $17 million ($3 million per mile)

Annualized Cost per Rider (Operating and Capital)
- Rail: $3.00
- BRT: $2.60
- Enhanced Bus: $3.40

End-to-End Travel Time Savings (Average Savings per Ride including In- and Out-of-Vehicle Time)
- Rail: 11 Minutes (average 8 minutes)
- BRT: 11 Minutes (average 9 minutes)
- Enhanced Bus: 2 Minutes (average 3 minutes)

Annual GhG Savings
- BRT: -245 (Emissions Increase)
- Enhanced Bus: -104 (Emissions Increase)
- Rail: -223 (Emissions Increase)

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.