



Corridor Overview

Length: 2.3 miles

New Track Miles: 4.5 single-track miles (rail only)

Major Stations: King Street Hub, S Jackson St - 2nd Ave S, 1st Ave - Yesler Way, Madison/Marison St, Seneca St, Pike St, Virginia St, Bell St, Queen Anne Ave N / 1st Ave N - Denny Way, Harrison St (or Mercer/Roy St)

Average Stop Spacing: 1,900 feet

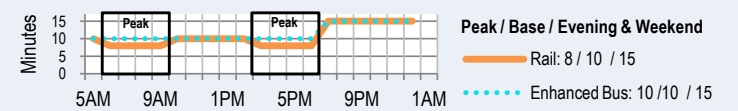
Key Connections:

- King Street Hub
- Financial District Station
- Pioneer Square Station
- Colman Dock
- RapidRide C (future)

Service Restructuring

None

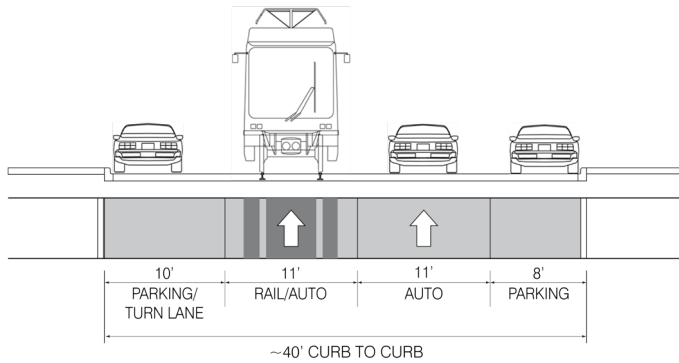
Operating Plan Headway by Mode



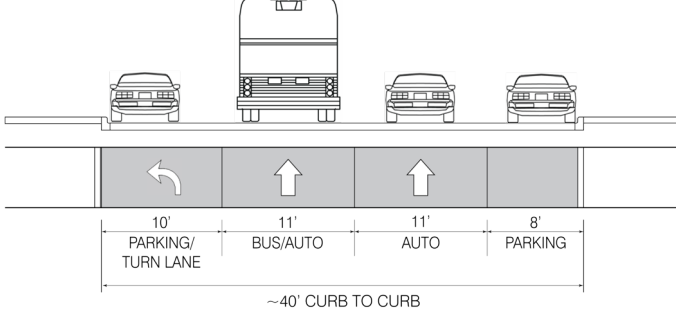
Segment A

Lower Queen Anne Couplet: North of Denny, rail would operate in a couplet formation and could operate in mixed traffic or dedicated lanes. Multiple options are available for a turnaround/terminus.

Rail



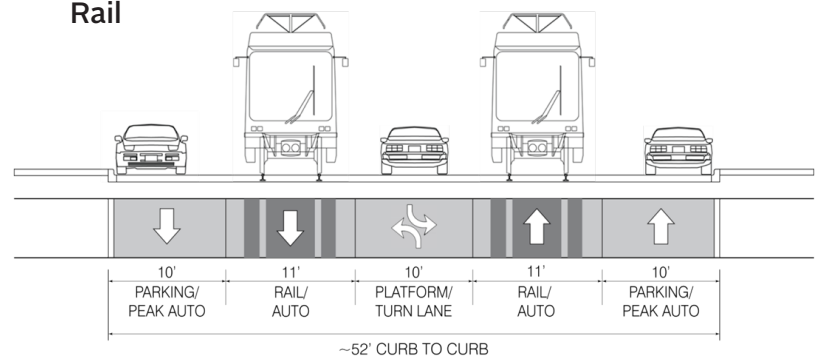
Bus



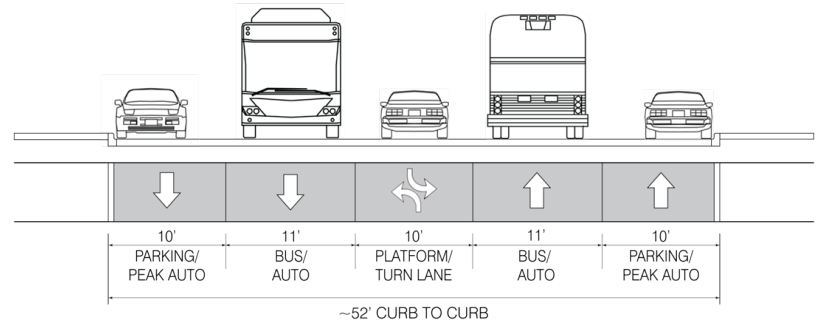
Segment B

1st Avenue: 1st Avenue has sufficient curb-to-curb width to accommodate 5 lanes. This would allow a center median dedicated or shared lane operation. Center-running rail and center platform stations would benefit traffic circulation on the downtown 1-way street grid all the way from Cherry to Denny. Stations are proposed at somewhat frequent intervals in the downtown core because this portion of the transit line could double as a 'waterfront circulator' in addition to being a high-capacity connection between Lower Queen Anne and Pioneer Square. Interlining/connecting the 1st Avenue line with the First Hill line at Jackson/Occidental would provide expanded circulation options.

Rail



Bus




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.


CC1: COMPARATIVE MEASURES

DRAFT


LOWER QUEEN ANNE - DOWNTOWN


Weekday Riders (2030)

Rail

up to 12,600 Riders
 (Net New Riders - 9,600 Riders)


Enhanced Bus

up to 6,200 Riders
 (Net New Riders 3,200 Riders)


Productivity (Weekday Riders per Revenue Hour)

Rail

150 Riders/Hour


Enhanced Bus

80 Riders/Hour


Annual Operating Cost (Operating Cost per Boarding Ride)

Rail

\$5 million
 (\$1.20)


Enhanced Bus

\$3 million
 (\$1.60)


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

Rail

\$1.60


Enhanced Bus

\$3.10


Total Capital Costs (and Cost per Mile)

Rail

\$121 million
 (\$53 million per mile)


Enhanced Bus

\$5 million
 (\$2 million per mile)


Annualized Cost per Rider (Operating and Capital)

Rail

\$3.00



Enhanced Bus

\$2.70

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



Rail

1 Minutes



Enhanced Bus

1 Minutes

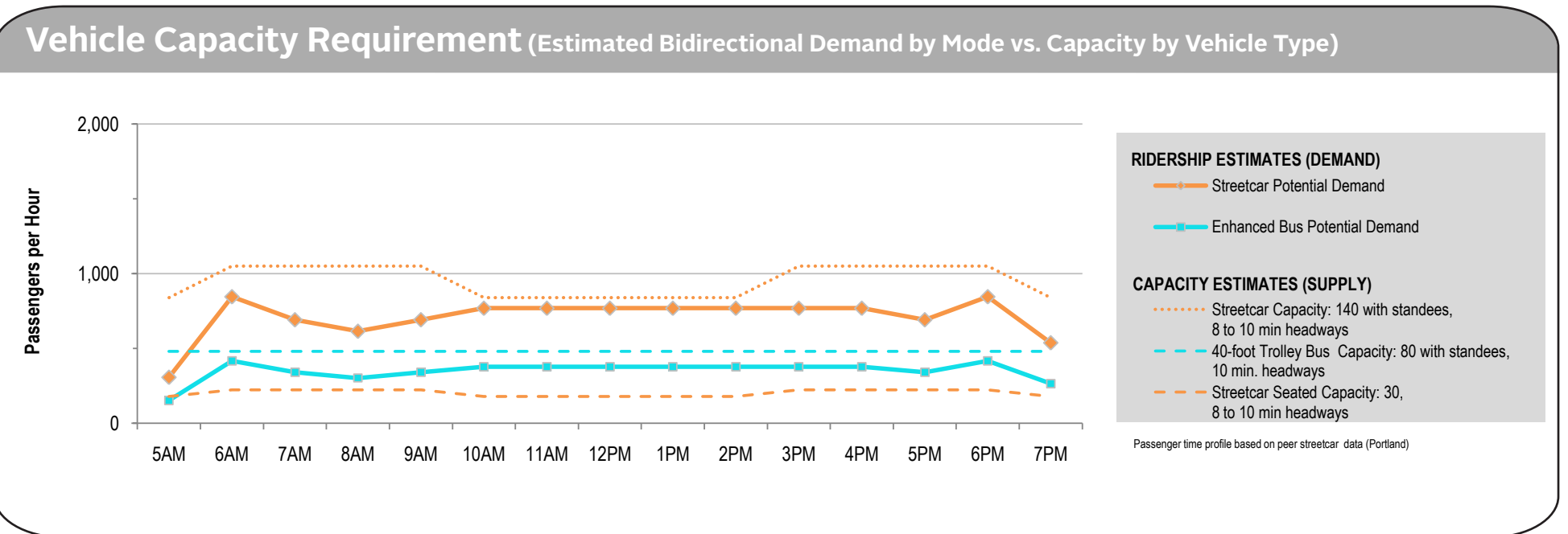
Annual GhG Savings

Personal vehicle 
 Transit 

← Emissions Decrease | Emissions Increase →

Rail
 -31  **32 MT CO₂e** 

Enhanced Bus
 -10  **29 MT CO₂e** 



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