



### Corridor Overview

**Length:** 1.1 miles

**New Track Length:** 2.4 signal-track miles (rail only)

**Stations:** King St Hub, 4th/5th Ave - James St, Madison St, University St, Union St, Westlake Hub, Westlake Ave - Virginia St, Blanchard St, Denny Way, Thomas/Harrison St, Republican St, Mercer St, Valley St - Terry Ave/Boren Ave, Fairview Ave N - Aloha St

**Average Stop Spacing:** 1,100 feet

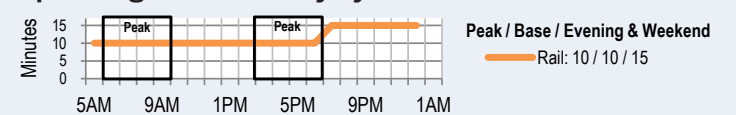
**Key Connections:**

- King Street Hub
- Financial District Station
- Pioneer Square Station
- Westlake Hub

**Service Restructuring**

- Rail placement on 4th and 5th would be designed to limit impact on regional bus service.

**Operating Plan Headway by Mode**

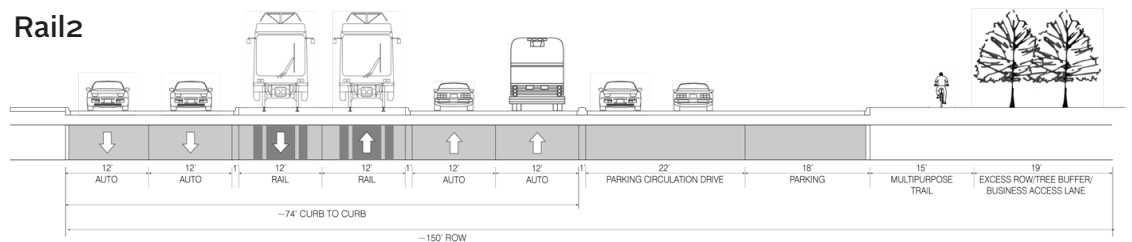


### Cross Sections

#### Segment A

**Existing SLU segment:** This existing South Lake Union segment's curb-lane orientation on Westlake is not ideal from a speed/reliability standpoint, but using the existing trackway would be much less expensive than a center-running trackway as described for 1st Avenue and/or combining both tracks on Westlake north of Terry (the 'streetcar couplet'). The Valley Street segment has not been examined in light of the proposed re-configuration of Valley with the Mercer East project, but the current north side-running configuration could be preserved even if the Terry track is moved to Westlake.

**Rail1** Existing SLU streetcar configuration north of Virginia St



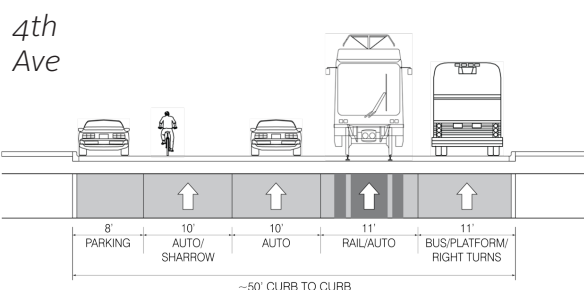
#### Segment B1

**4th/5th Couplet:** 4th will remain an important regional bus corridor; it has significant turning volumes at some cross-streets. Placing a rail circulator/streetcar line on the west side of 4th replaces conflicts with regional buses and I-5-bound turning traffic. An option to mitigate impacts to the 4th Ave bicycle lane is to construct a two-way 'cycle track' on 2nd Ave. Northbound rail would return to the existing SLU alignment via Virginia.

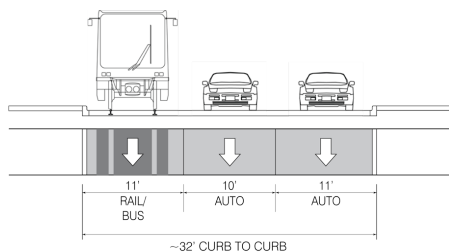
5th Avenue is only 3 lanes wide in the northern part of downtown; rail is proposed for the west curb lane (right turning vehicles could delay rail vehicles at some locations).

#### Segment B2

**Rail**

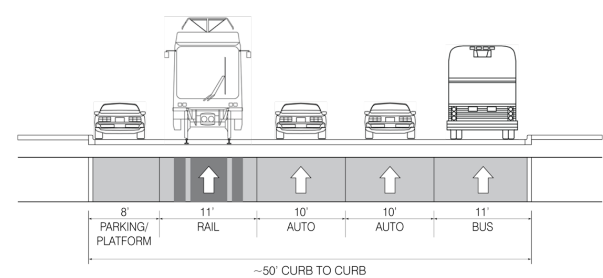


**5th Ave**

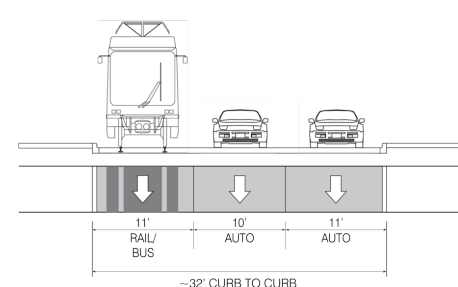


**Rail**

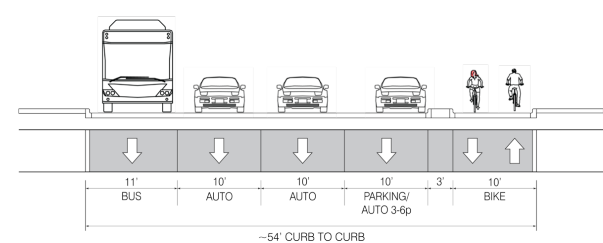
**4th Ave**



**5th Ave**



**2nd Ave**



**BRT** Operates in exclusive lanes on 3rd Avenue

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.

# CC2: COMPARATIVE MEASURES

## SOUTH LAKE UNION -DOWNTOWN

DRAFT

### Weekday Riders (2030)


Rail



**up to 11,500 Riders**  
(Net New Riders - 7,200 Riders)

### Productivity (Weekday Riders per Revenue Hour)


Rail



**155 Riders/Hour**

### Annual Operating Cost (Operating Cost per Boarding Ride)

Rail



**\$5 million**  
(\$1.20)

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


Rail



**\$1.10**

### Total Capital Costs (and Cost per Mile)


Rail



**\$74 million**  
(\$67 million per mile)

### Annualized Cost per Rider (Operating and Capital)

Rail




**\$2.55**


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

Rail

**0 Minutes**


### Annual GhG Savings


Personal vehicle 

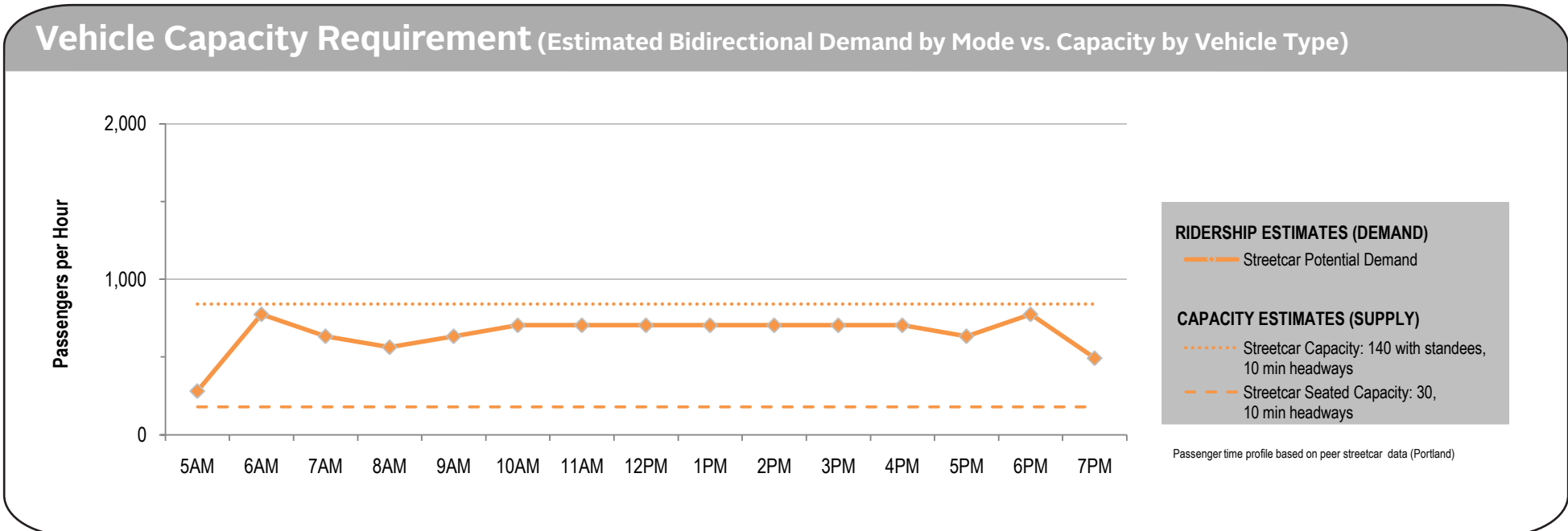
Transit 

Rail

← Emissions Decrease | Emissions Increase →

**-26** 

**14 MT CO<sub>2</sub>e** 



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