

West Seattle and Ballard Link Extensions

*Denny Station
status report*

System Expansion Committee

07/13/23

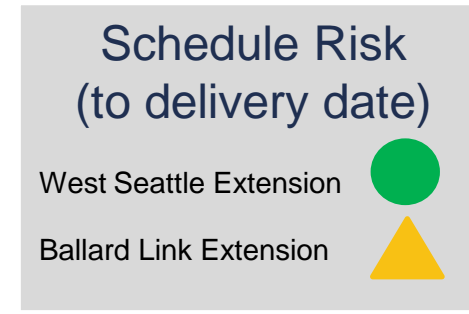
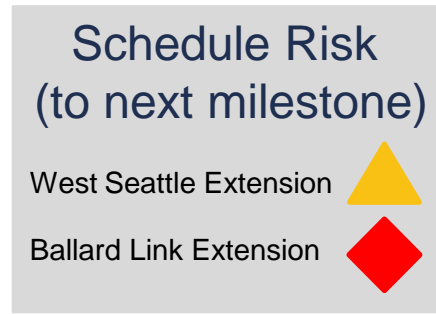
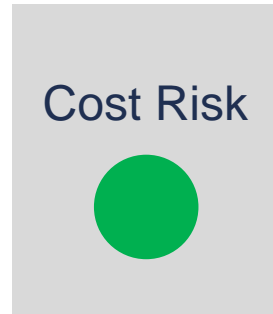


Why we're here today

- Brief recap of May status report to Board on Denny Station
- Overview of current activities in anticipation of July 27 status report to Board

No Board action required today

Cost and schedule risks



Cost Risks

- Additional cost elements of preferred alternative dependent on third party funding.
- Potential for additional costs associated with permitting requirements.
- Potential impacts from higher real estate and construction costs.
- Potential that design or construction challenges could emerge as work progresses.

Schedule Risks

- Potential additional environmental process delays.
- Potential permitting challenges and other necessary coordination/approvals associated with water crossing.
- Potential schedule risks associated with real estate acquisition process.
- Potential risk in processing reviews/approvals with permitting authorities in a timely manner.

Environmental process next steps

- West Seattle and Ballard Link Extensions Draft EIS was published in January 2022
- Both extensions were initially on the same environmental review timeline
- Additional environmental review needed for project refinements for Ballard Link Extension resulting from Board action in March 2023
- Environmental review for the two extensions is now proceeding on different timelines
 - West Seattle Link Extension is proceeding to a Final EIS
 - Ballard Link Extension requires a SEPA Supplemental Draft EIS/NEPA Draft EIS
(incorporating all work to date including previous comments, public outreach and environmental analysis)



Continued study of Denny Station locations

March Board action

Motion No. M2023-18

While the previously-identified preferred alternative is not modified at this time, staff is directed to **carry forward both the Denny Station on Westlake** (DT1) Draft EIS Station alternative **and Denny Station on Terry** (i.e. South Lake Union Mix and Match) alternative as part of ongoing environmental review. Staff is directed to continue collaboration with City of Seattle and community partners to **further clarify the technical, financial, schedule and risk implications of both alternatives** and return to the Board with a **status report by May 25, 2023.**

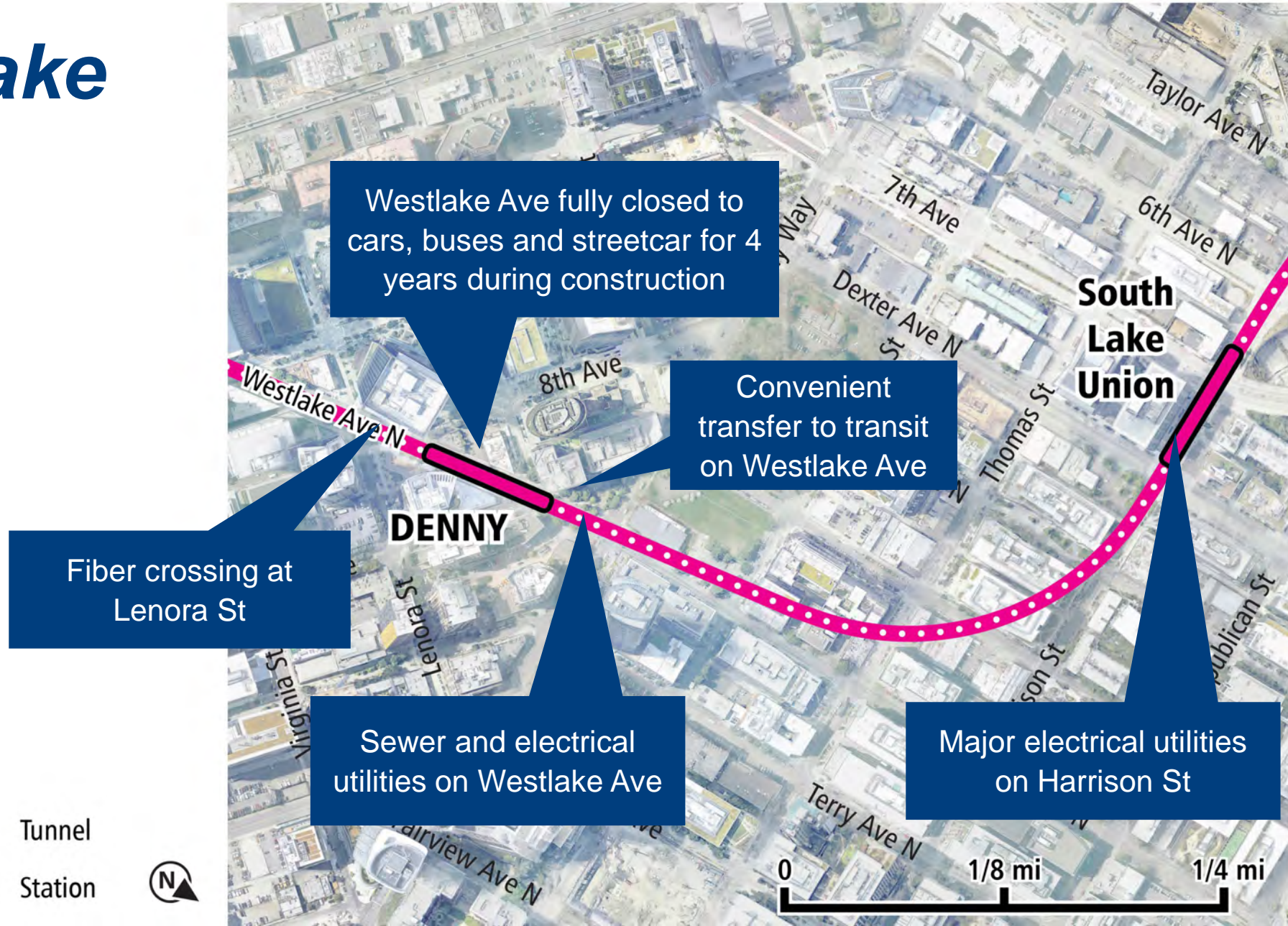
***Recap of May
status report***

Work sessions

- Over **20 technical work sessions** since Board action in March to clarify technical and other implications and look for ways to minimize impacts
- **Topics** included utilities (including electrical, fiber optic/telecom, sewer, etc.), constructability, construction schedule, roadway closures, cost
- For Denny/Terry, assessed potential to **detour fiber infrastructure off Terry Ave** and potential modifications to the carrier hotel in that area
- For Denny/Westlake, examined potential **refinements to the station location** to reduce effects to Westlake Ave including:
 - Shifting the station **north** to allow traffic to be maintained on Westlake Ave during construction
 - Shifting the station **west** onto private property to avoid Westlake Ave

Denny Westlake

Draft EIS DT-1



Denny Terry SLU Mix-Match

\$340m additional cost

Uncertainty of fiber relocation could delay overall schedule

Substantial disruption and litigation risk if inadvertently cut fiber lines

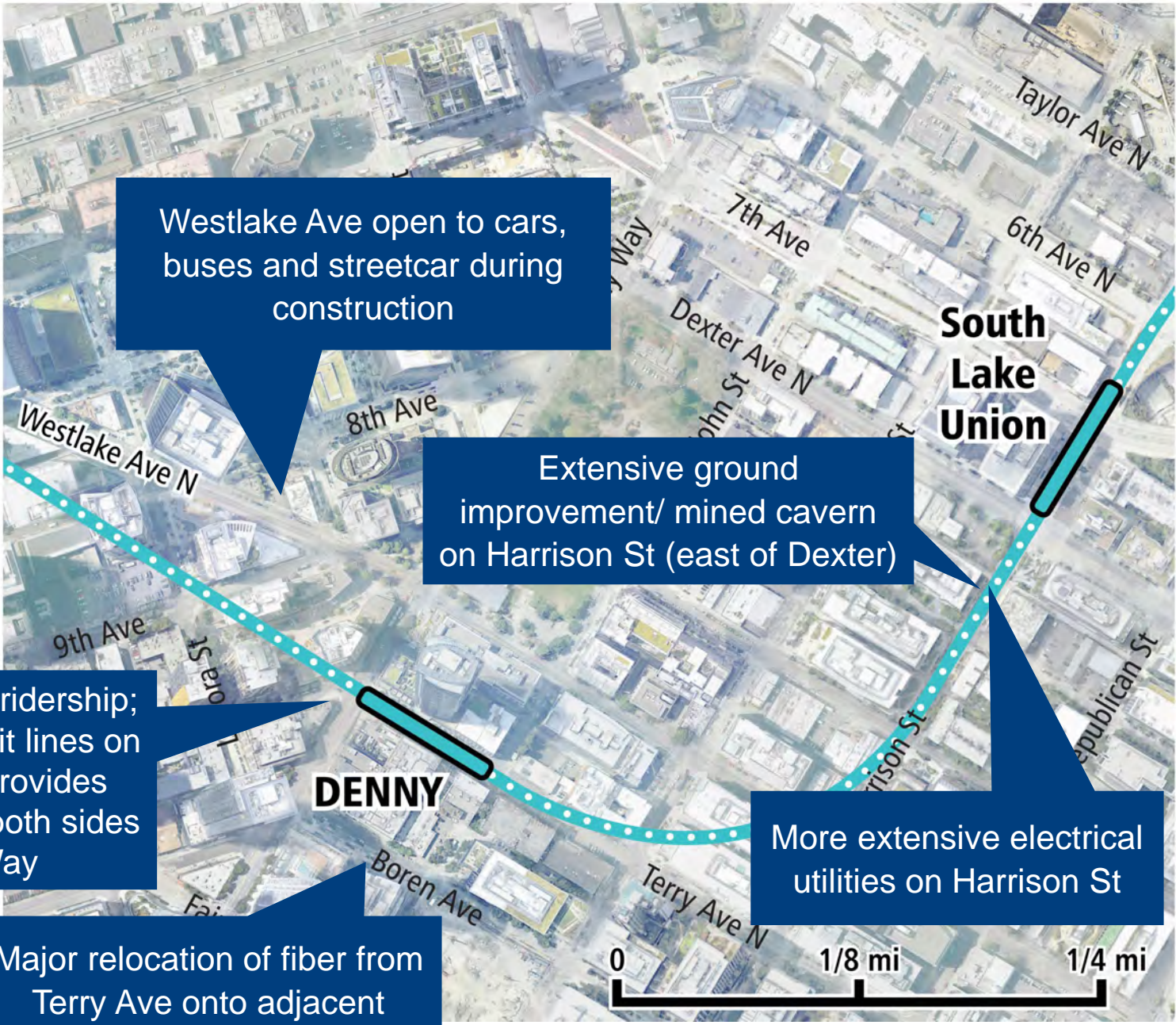
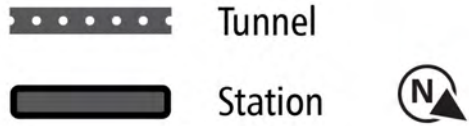
Minimal impact to ridership; short walk to transit lines on Westlake Ave; provides station access to both sides of Denny Way

Major relocation of fiber from Terry Ave onto adjacent streets (Boren, Denny)

Westlake Ave open to cars, buses and streetcar during construction

Extensive ground improvement/ mined cavern on Harrison St (east of Dexter)

More extensive electrical utilities on Harrison St



Denny Westlake Shifted North

\$170m additional cost*

Phased in-street construction to maintain traffic adds construction complexity and extends duration of street effects (8 years vs 4 years)

Westlake Ave temporarily decked during construction. Open to cars and buses but not streetcar. Reduced number of lanes for 3-4 years.

Convenient transfer to transit on Westlake Ave

Avoids fiber crossing at Lenora St

DENNY

South Lake Union

Less extensive sewer and electrical utility work on Westlake Ave

Potential property development risk

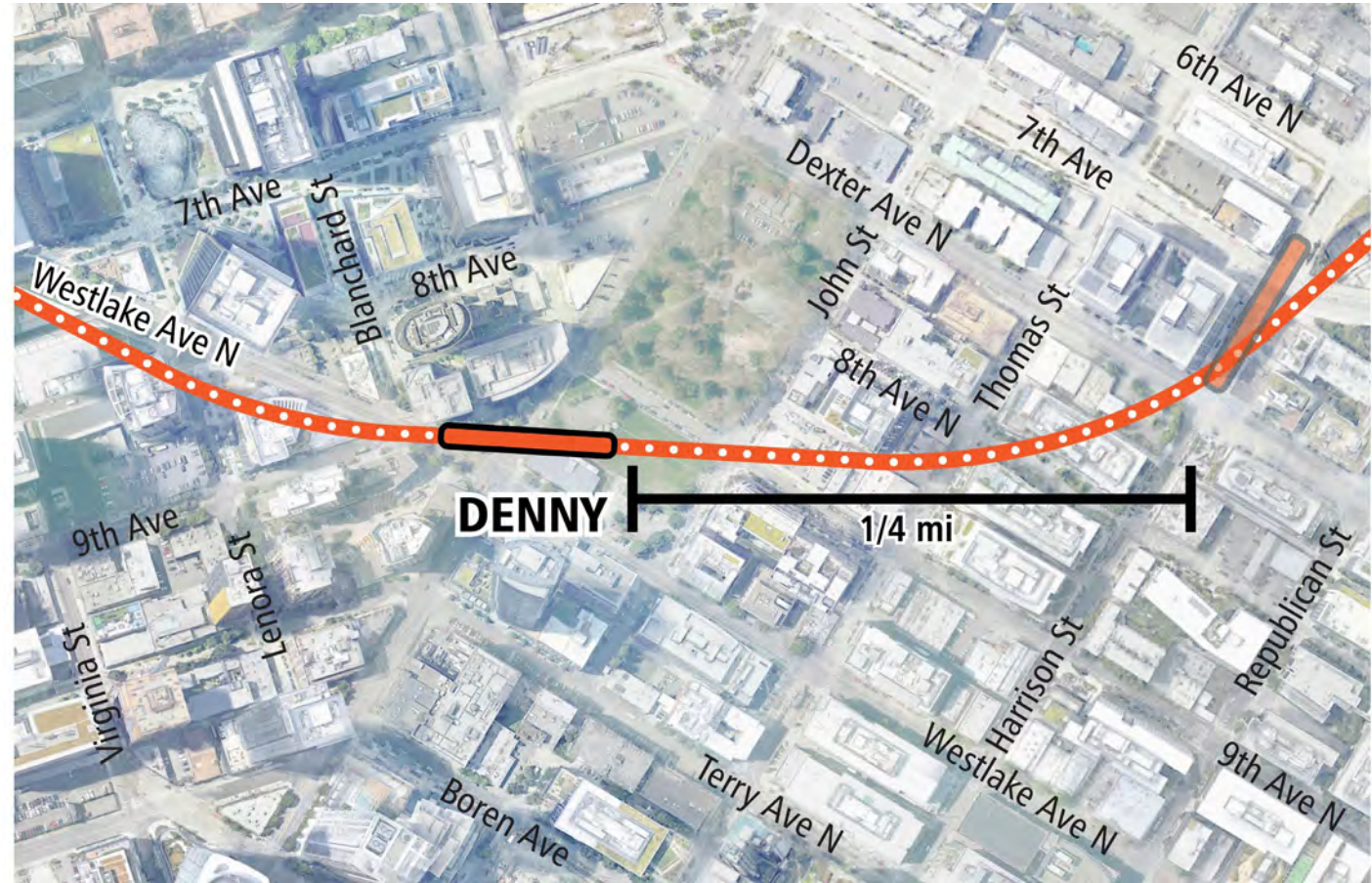
Major electrical utilities on Harrison St



Denny Westlake

Shifted West

- To further avoid impacts to Westlake Ave, shifted station west out of street right of way onto private property
- Resulted in very close spacing to Harrison St station with geometric and technical constraints
- Hence, considered consolidated station concept instead of two closely spaced stations



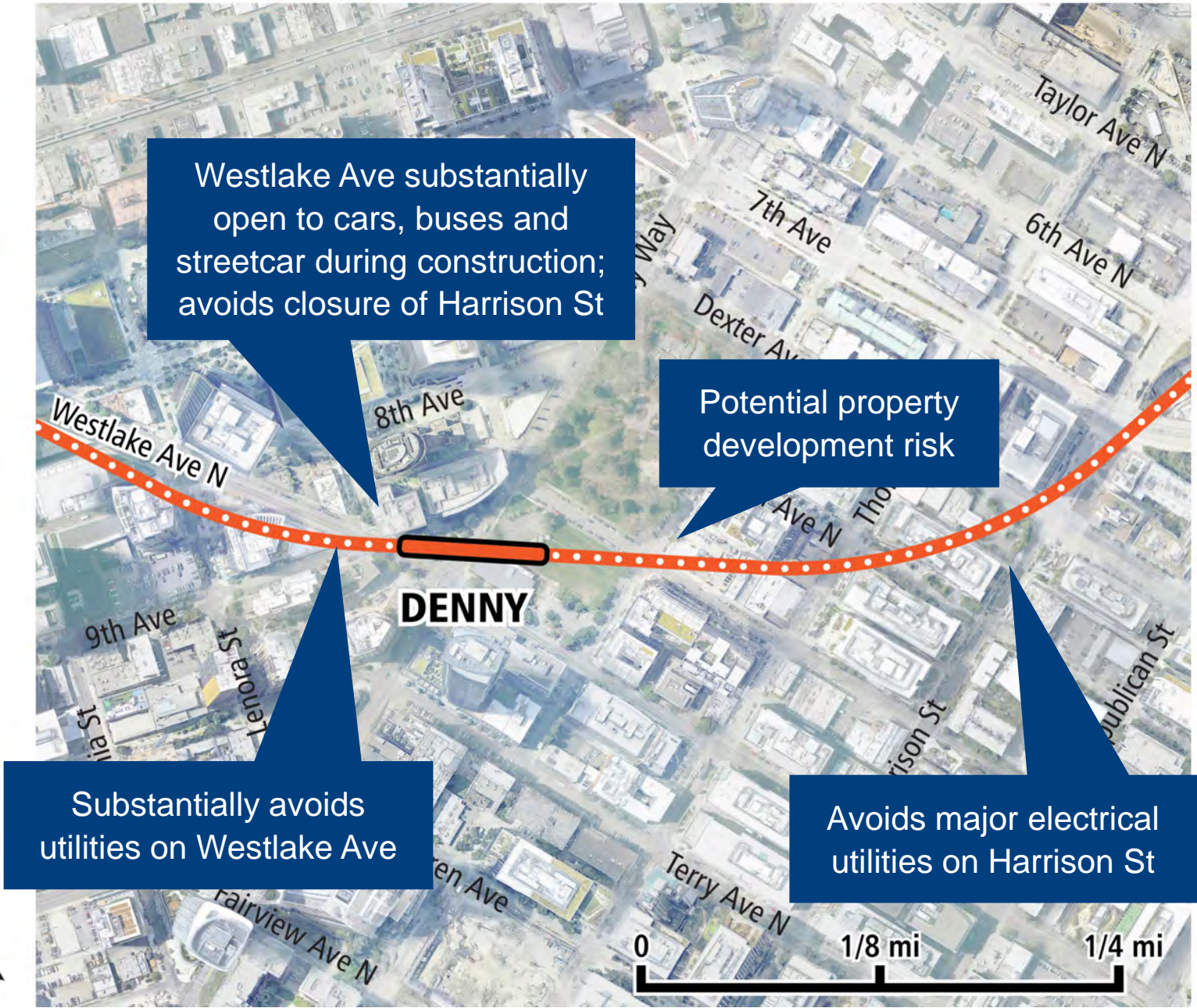
Denny Westlake

Shifted West

\$440m cost savings due to consolidation of Denny and Harrison St stations*

Potentially shorter station construction duration due to improved site access and mostly off-street construction

Ridership, transit integration and passenger experience implications of consolidated station to be further assessed





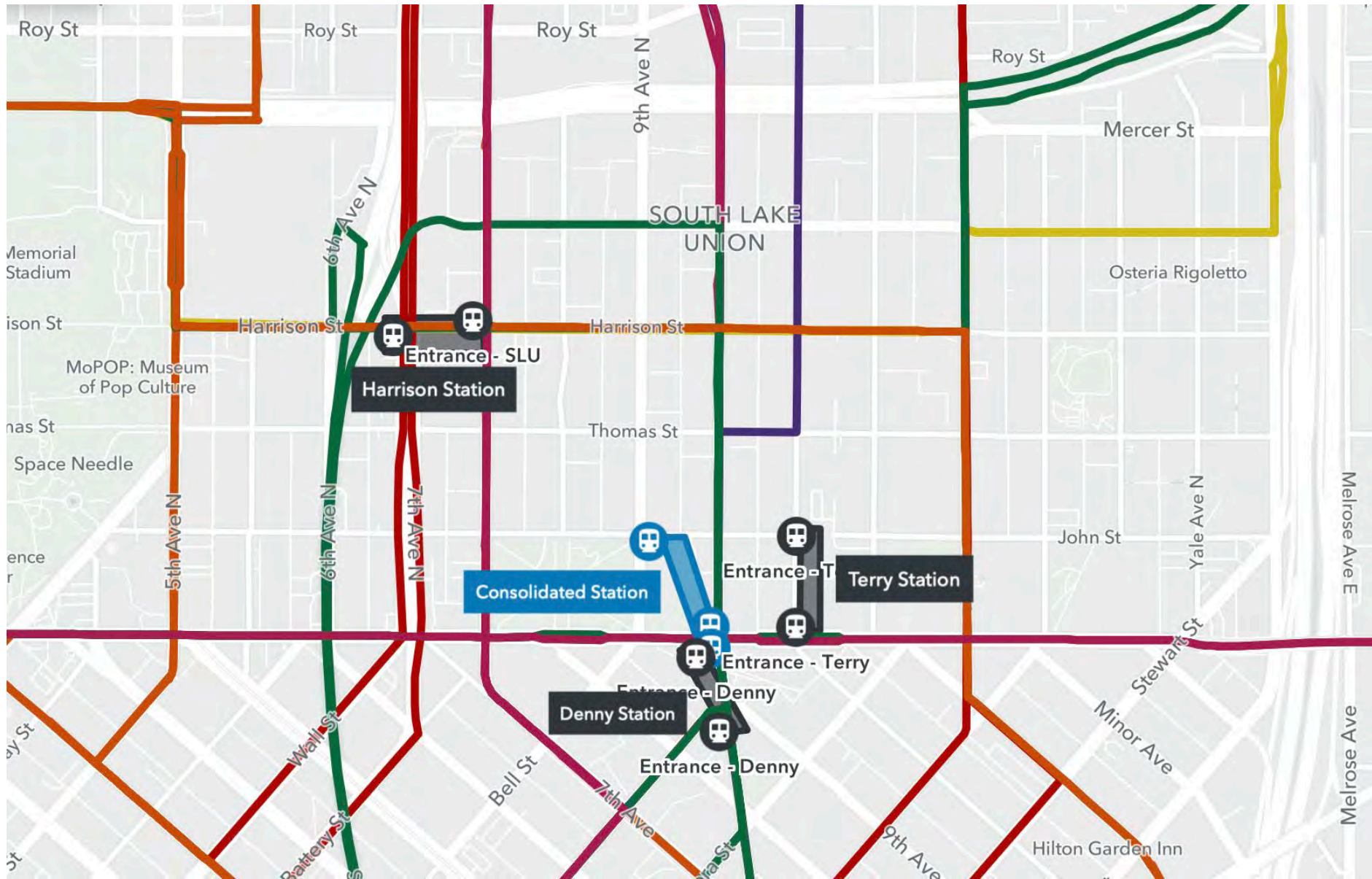
Denny Westlake

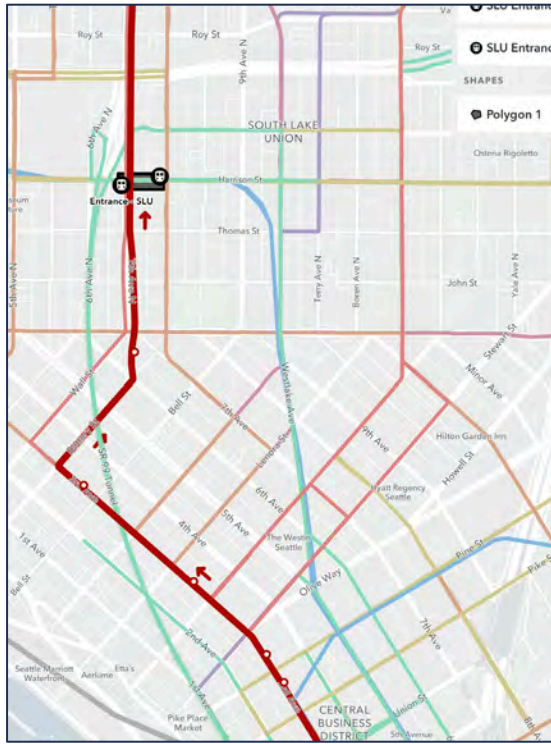
Denny Terry

Denny Westlake refinement options

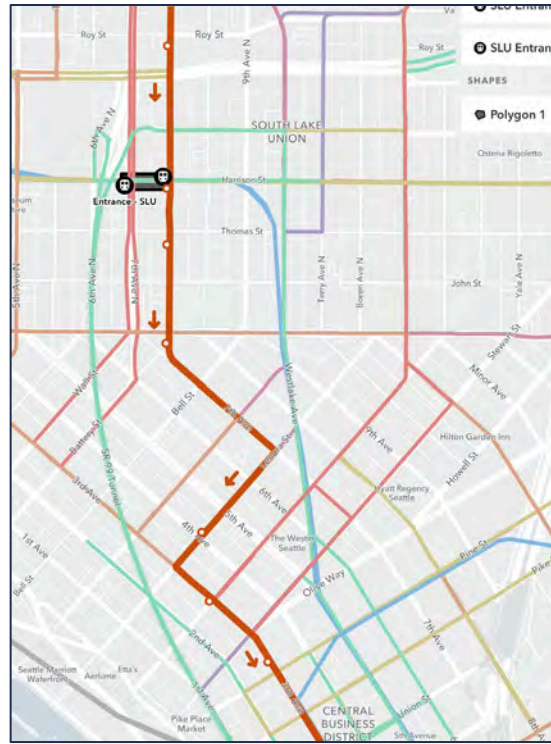
| | Draft EIS (DT-1) | SLU Mix-Match | Shifted North | Shifted West |
|---|--|---|---|--|
| Technical <i>street closures</i> | Westlake Ave fully closed to cars, buses and streetcar for 4 years during construction | Westlake Ave open to cars, buses and streetcar during construction | Westlake Ave temporarily decked during construction. Open to cars and buses but not streetcar. Reduced number of lanes for 3-4 years. | Westlake Ave substantially open to cars, buses and streetcar during construction; avoids closure of Harrison St |
| <i>utilities</i> | Sewer and electrical utilities on Westlake Ave; fiber crossing at Lenora St; major electrical utilities on Harrison St | Major relocation of fiber from Terry Ave onto adjacent streets (Boren, Denny); more extensive electrical utilities on Harrison St | Less extensive sewer and electrical utility work on Westlake Ave; avoids fiber crossing at Lenora St; major electrical utilities on Harrison St | Substantially avoids utilities on Westlake Ave and completely avoids major electrical utilities on Harrison St |
| <i>constructability</i> | Base case for constructability comparison | Extensive ground improvement/mined cavern on Harrison St (east of Dexter) | Phased in-street construction to maintain traffic adds construction complexity and extends duration of street effects (8 years vs 4 years) | Potentially shorter station construction duration due to improved site access and mostly off-street construction |
| Performance <i>ridership, transit integration, passenger experience</i> | Convenient transfer to transit on Westlake Ave | Minimal impact to ridership; short walk to transit lines on Westlake Ave; provides station access to both sides of Denny Way | Convenient transfer to transit on Westlake Ave | <i>To be assessed</i> |
| Cost <i>compared to Denny Westlake Draft EIS DT-1</i> | Base case for cost comparison | \$340m additional cost | \$170m additional cost* | \$440m cost savings due to consolidation of Denny and Harrison St stations* |
| Schedule <i>overall project delay</i> | Base case for schedule comparison | Uncertainty of fiber relocation could delay overall schedule | No delay to overall schedule | No delay to overall schedule |
| Risk <i>substantial cost, schedule, or feasibility risks</i> | Base case for risk comparison | Substantial disruption and litigation risk if inadvertently cut fiber lines | Potential property development risk | Potential property development risk; avoids major electrical utilities on Harrison St |

Current activities



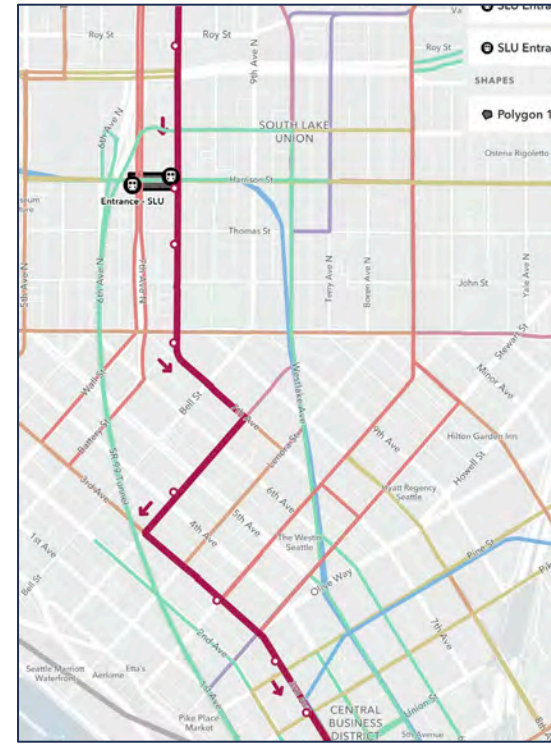


E line



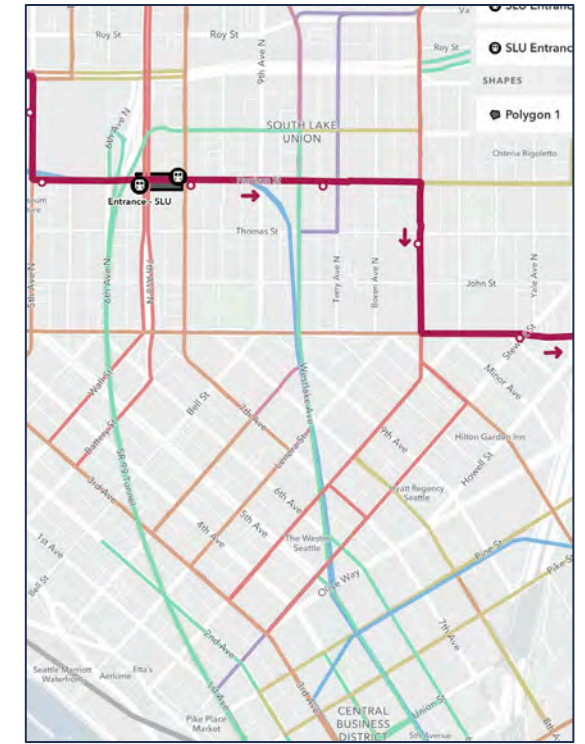
Route 5

Downtown-Fremont-Greenwood



Route 62

Downtown-Wallingford-Sand Point

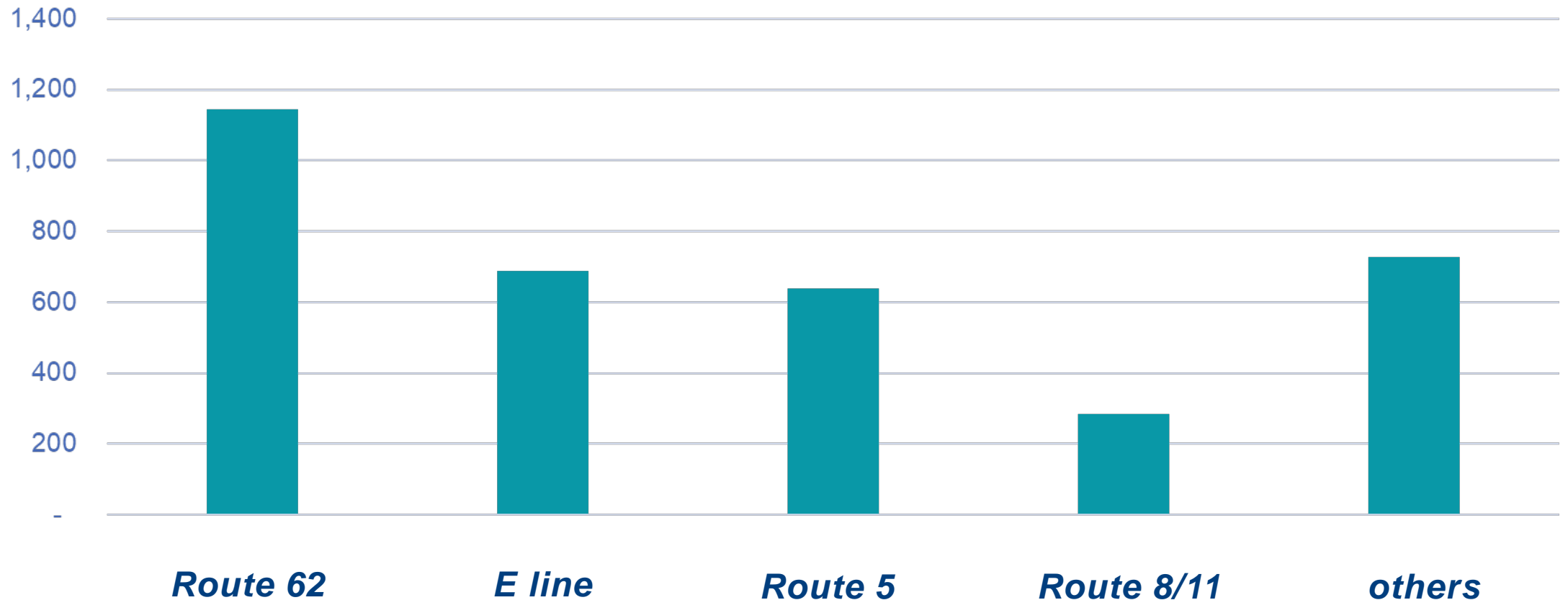


Route 8/11

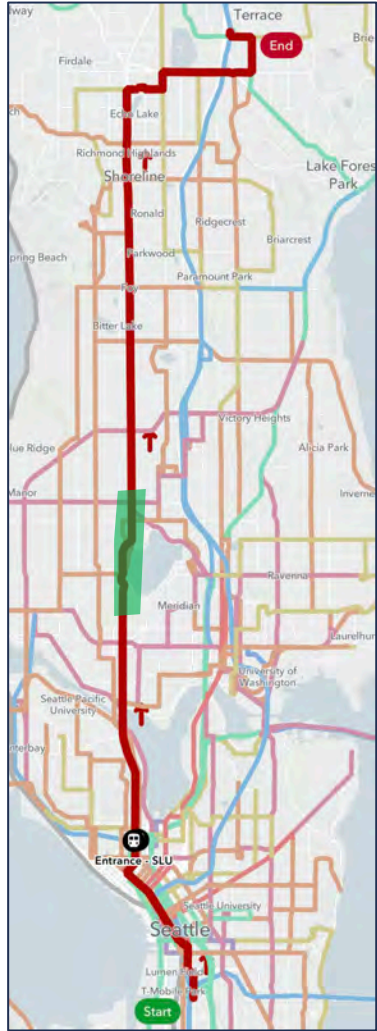
Interbay-Capitol Hill-Madison Park

- Bus-rail transfers are about 32% of total boardings at South Lake Union Station; 12% at Denny Station
- 80% of all bus-rail transfers related to four routes

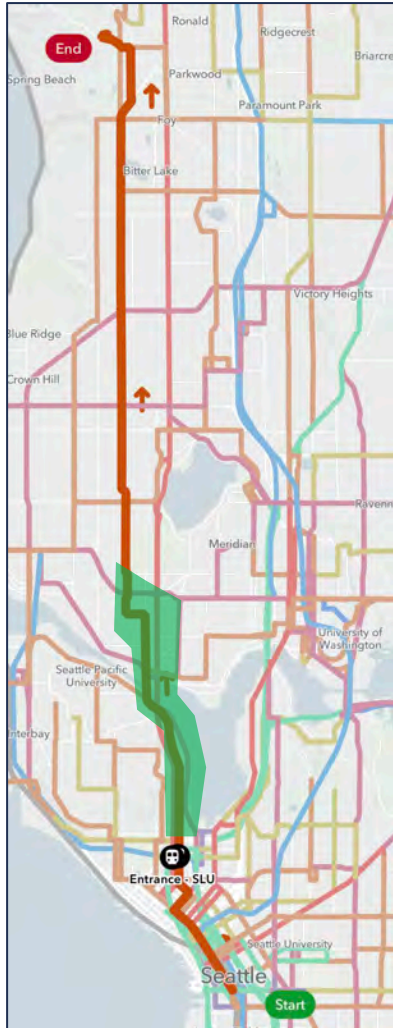
Daily Transfer Boardings to Link From Buses at SLU Station



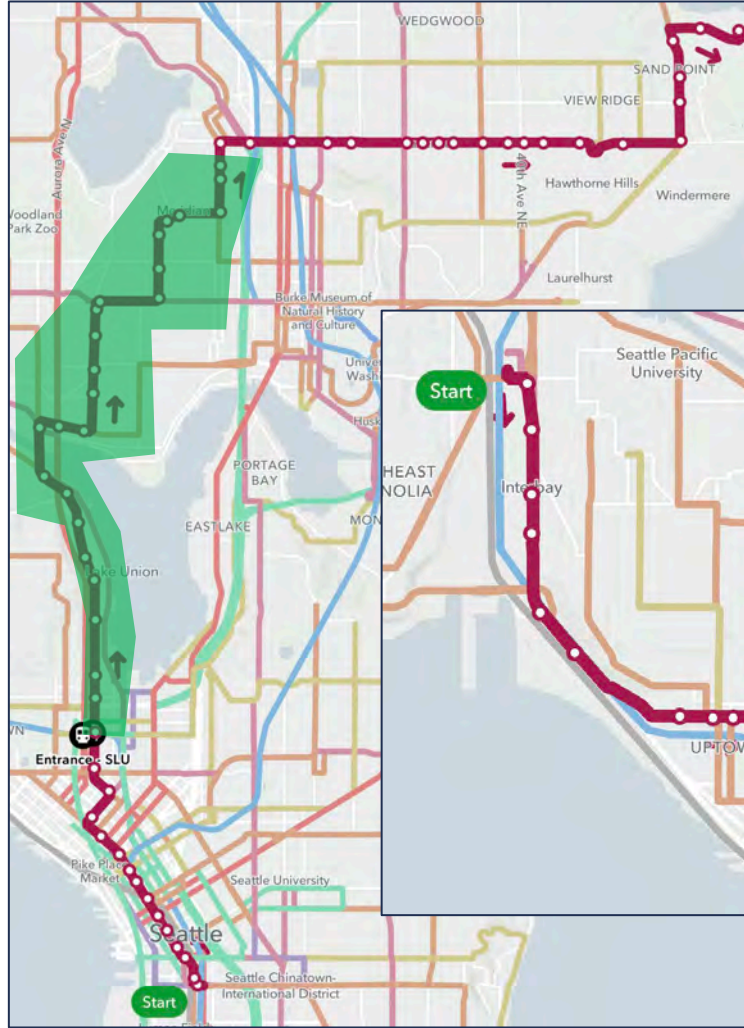
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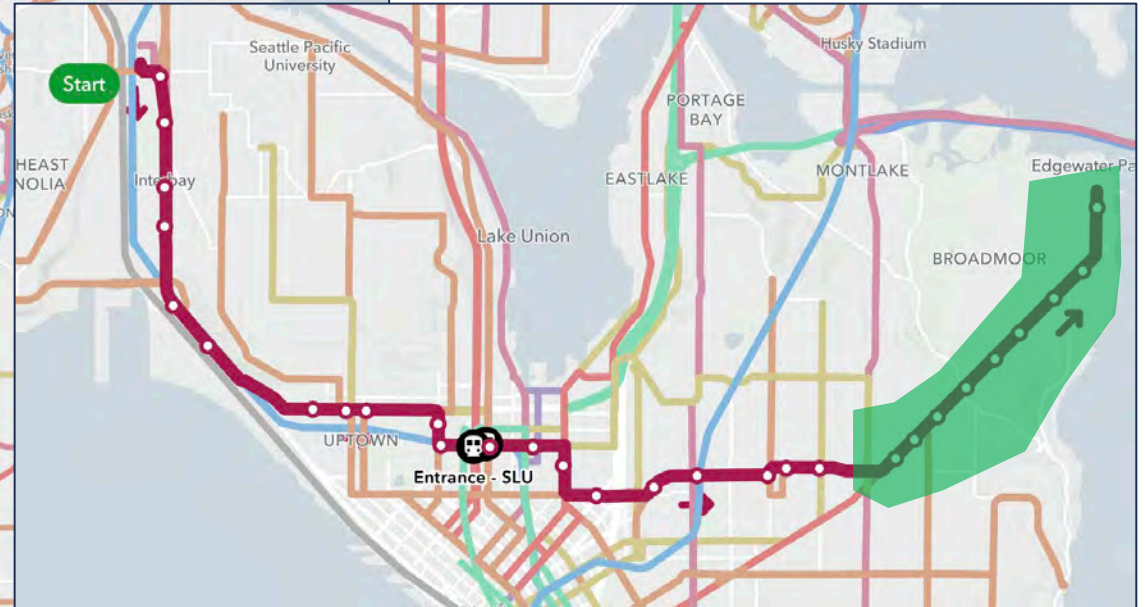
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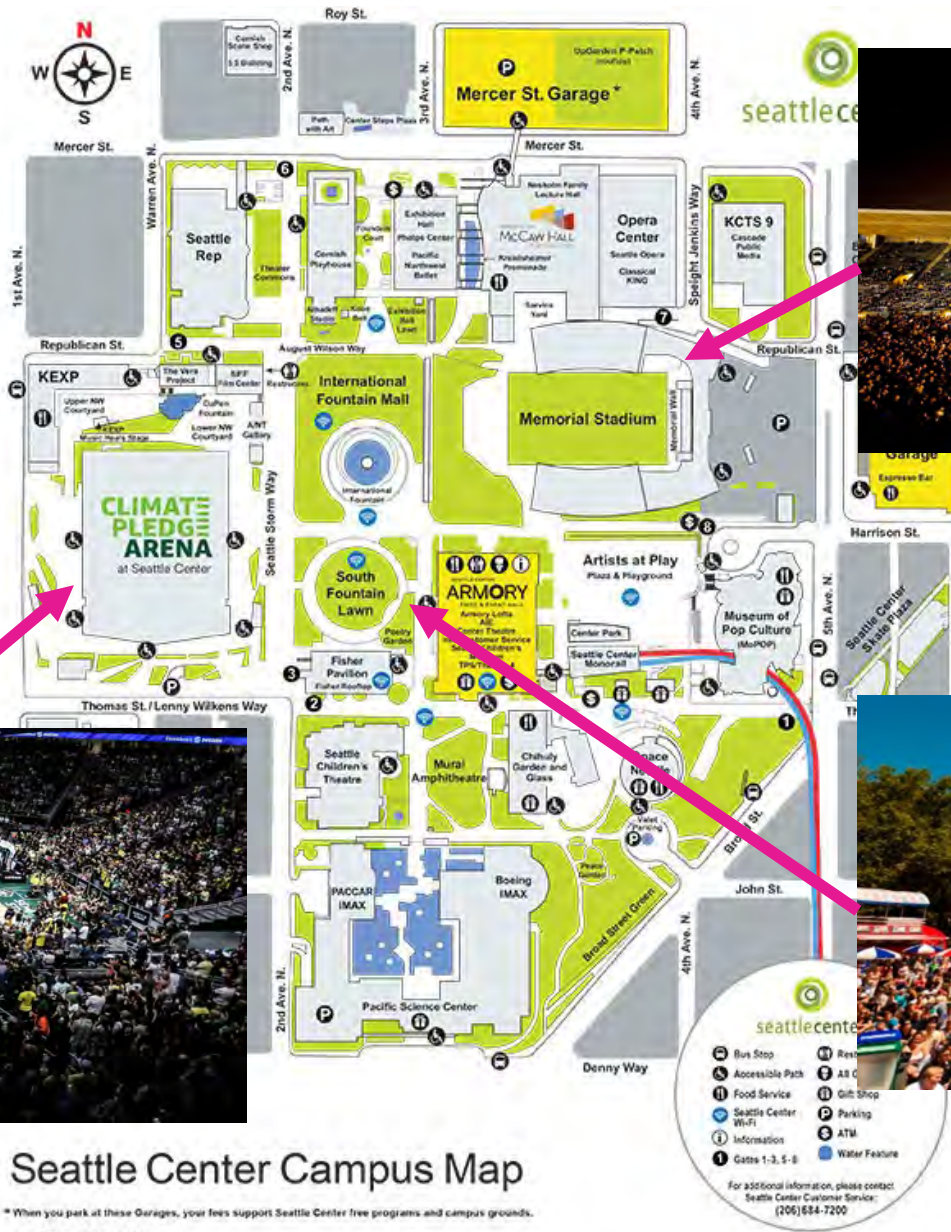
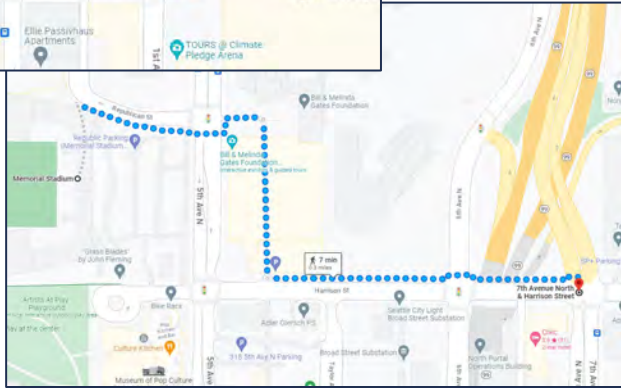


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8/11





Next steps

Next steps

- Complete assessment of ridership and transit integration solutions
- Engagement on assessment results
 - Upcoming webinars on July 20 and July 25
- Return to the Board with a status report and potential board action on July 27

 *wsblink.participate.online*
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 **SOUNDTRANSIT**

