

West Seattle and Ballard Link Extensions

*M2023-18: Preferred alternative
for Ballard Link Extension*

System Expansion Committee

03/09/23

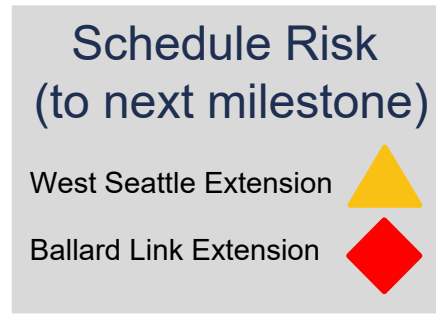
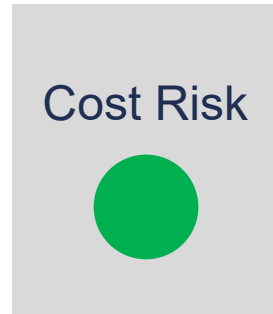


Why we're here today

Motion No. M2023-18

A motion of the Board of the Central Puget Sound Regional Transit Authority to confirm or modify the preferred alternative light rail route and station locations for the Ballard Link Extension, for evaluation in the Final Environmental Impact Statement along with other alternatives.

Cost and schedule risks



Cost Risks

- Potential for additional costs associated with alternatives that cost more than anticipated in current financial plan.
- 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

- **Delays in identifying preferred alternatives and potential additional environmental process requirements.**
- Potential permitting challenges and other necessary coordination/approvals associated with water crossings.
- Potential schedule risks associated with real estate acquisition process.
- Potential risk in processing reviews/approvals with permitting authorities in a timely manner.

Comparative estimates

- To *inform comparison* of further study concepts and end-to-end scenarios
- Consistent methodology to Draft EIS (2019\$), based on limited design
- *Project budget* established during realignment: \$12.2 billion

Schedule implications

Environmental phase:

- Additional environmental review is likely under any end-to-end scenario (~1 yr on top of already-incurred 10-month further studies delay)

Design phase:

- Scenarios including South Lake Union mix-and-match and CID 4th Shallow(er) will require additional time for coordination with third parties

Construction phase:

- Scenarios including CID 4th Shallow(er) will require additional time for construction (~2 yrs) due to 4th Ave viaduct reconstruction, traffic detour phasing, etc.
- Potential risk of additional delay for CID 4th Shallow(er) due to poor ground conditions, deep Midtown station, proximity to BNSF and existing downtown transit tunnel, phasing of Link closures

Prior Board action

Motion No. M2022-57

Confirms or modifies the preferred light rail route and station locations for the West Seattle and Ballard Link Extensions Final Environmental Impact Statement and requesting **further studies in some areas** to inform potential additional future Board action to confirm or modify the Preferred Alternative.

Board process

Jan 26, Board: Further Studies results overview

Jan 26 – Feb 17: Gather additional community feedback

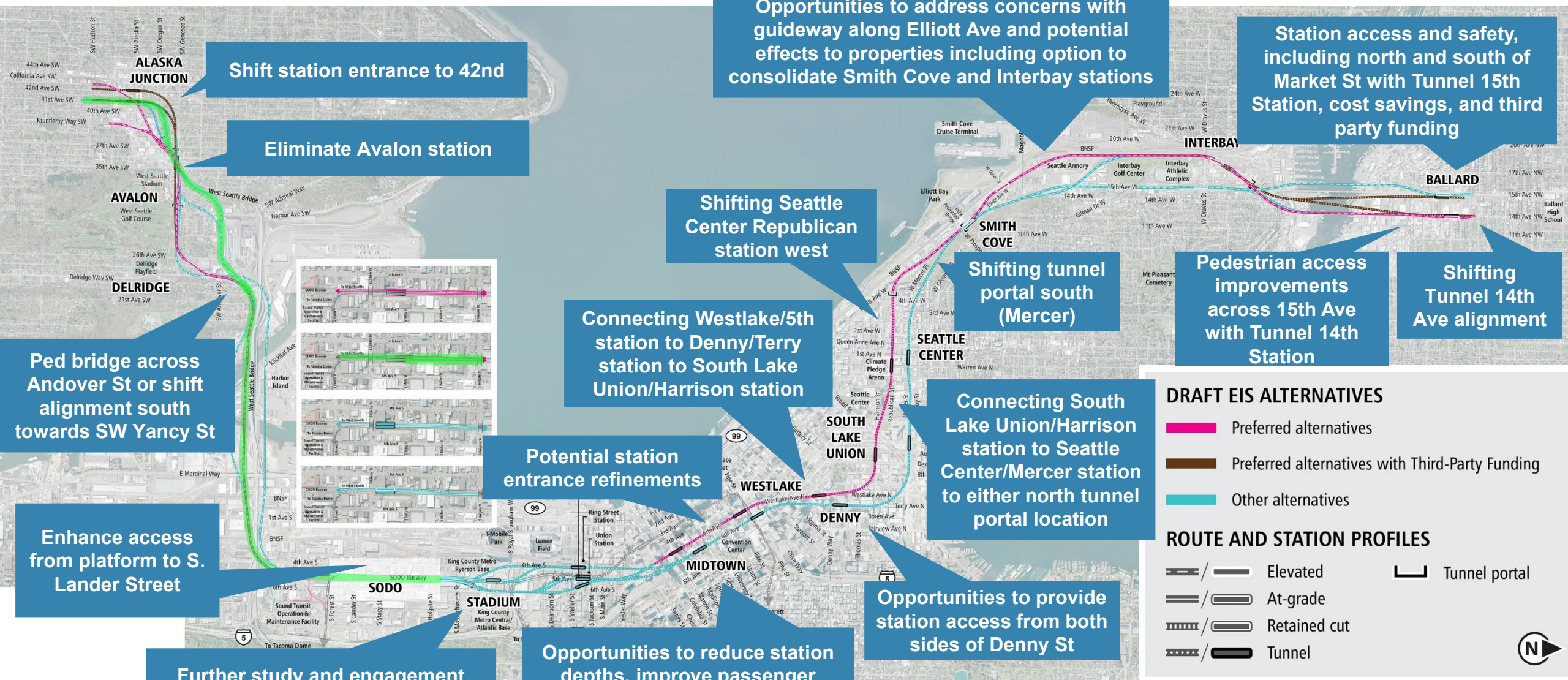
Feb 9, SEC: Further Studies results deeper dive

Feb 23, Board: Community feedback summary

Mar 9, SEC: Recommendation to Board

Mar 23, Board: Board identifies preferred alternative for Ballard Link Extension

Areas of Further Study



Shift station entrance to 42nd

Eliminate Avalon station

Opportunities to address concerns with guideway along Elliott Ave and potential effects to properties including option to consolidate Smith Cove and Interbay stations

Station access and safety, including north and south of Market St with Tunnel 15th Station, cost savings, and third party funding

Shifting Seattle Center Republican station west

Shifting tunnel portal south (Mercer)

Pedestrian access improvements across 15th Ave with Tunnel 14th Station

Shifting Tunnel 14th Ave alignment

Ped bridge across Andover St or shift alignment south towards SW Yancy St

Connecting Westlake/5th station to Denny/Terry station to South Lake Union/Harrison station

Connecting South Lake Union/Harrison station to Seattle Center/Mercer station to either north tunnel portal location

Potential station entrance refinements

Enhance access from platform to S. Lander Street

Opportunities to provide station access from both sides of Denny St

Further study and engagement between community and agency partners

Opportunities to reduce station depths, improve passenger access and experience and refine Midtown station entrance

DRAFT EIS ALTERNATIVES
 Preferred alternatives
 Preferred alternatives with Third-Party Funding
 Other alternatives

ROUTE AND STATION PROFILES
 Elevated
 At-grade
 Retained cut
 Tunnel
 Tunnel portal

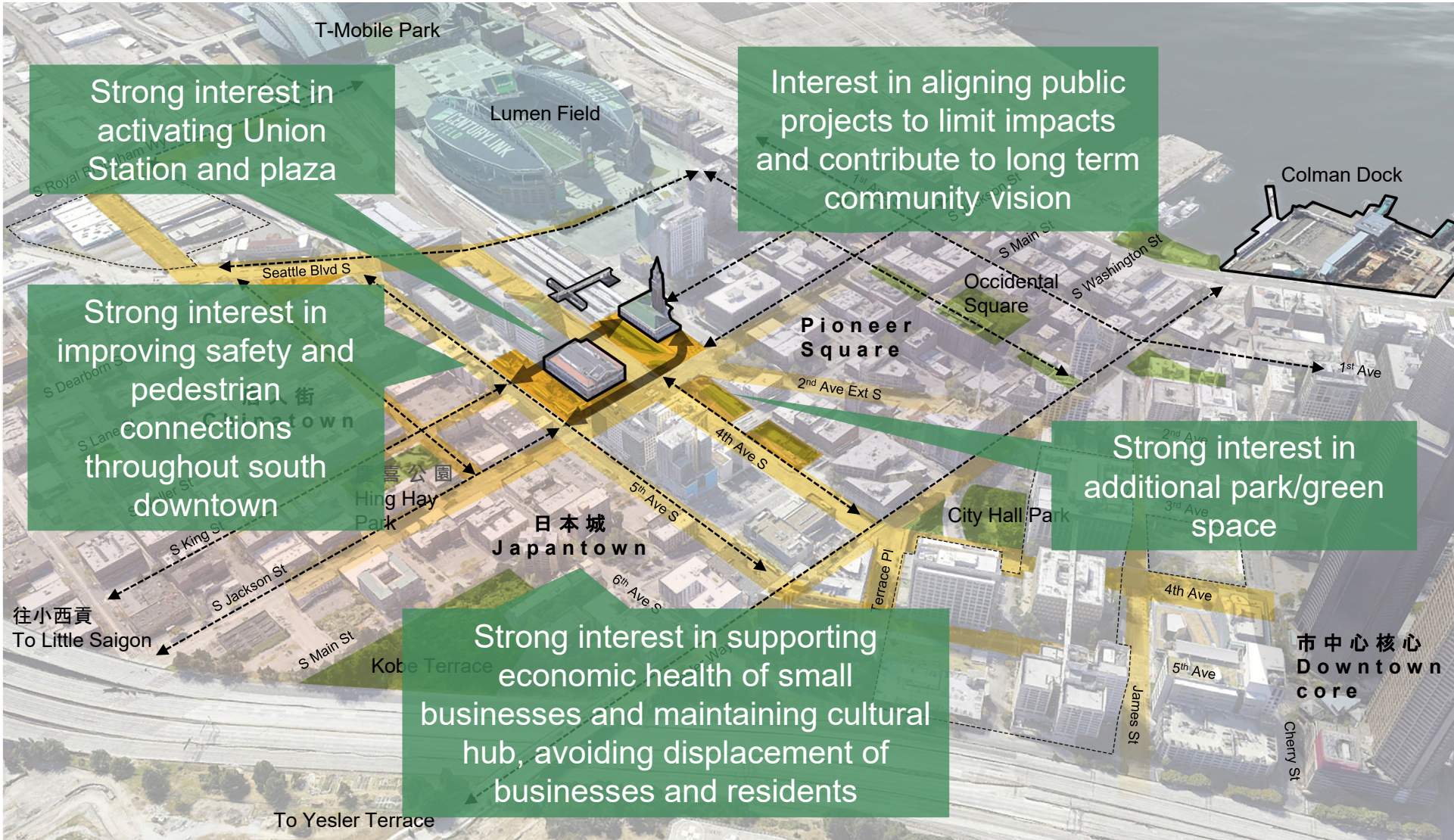
***Responses to items requested at
February board meeting***

***Proposal: Union Station
Activation and Jackson Hub***

Context

- Preliminary concepts informed by past planning studies, recent community input and interagency RET workshops
- Further design, engineering and community engagement required
- Relies on partnerships with City of Seattle, King County and potentially others and would require additional funding

Community feedback themes



Strong interest in activating Union Station and plaza

Interest in aligning public projects to limit impacts and contribute to long term community vision

Strong interest in improving safety and pedestrian connections throughout south downtown

Strong interest in additional park/green space

Strong interest in supporting economic health of small businesses and maintaining cultural hub, avoiding displacement of businesses and residents

	公共廣場 (現有的和潛在的) Public plaza (existing and potential)
	步行街 (現有的和潛在的) Pedestrian-focused street (existing and potential)
	公共公園 Public park
	計劃的未來發展 Planned future development
	重點步行路線 Key walking route

Activation of Union Station and surrounding plazas

1

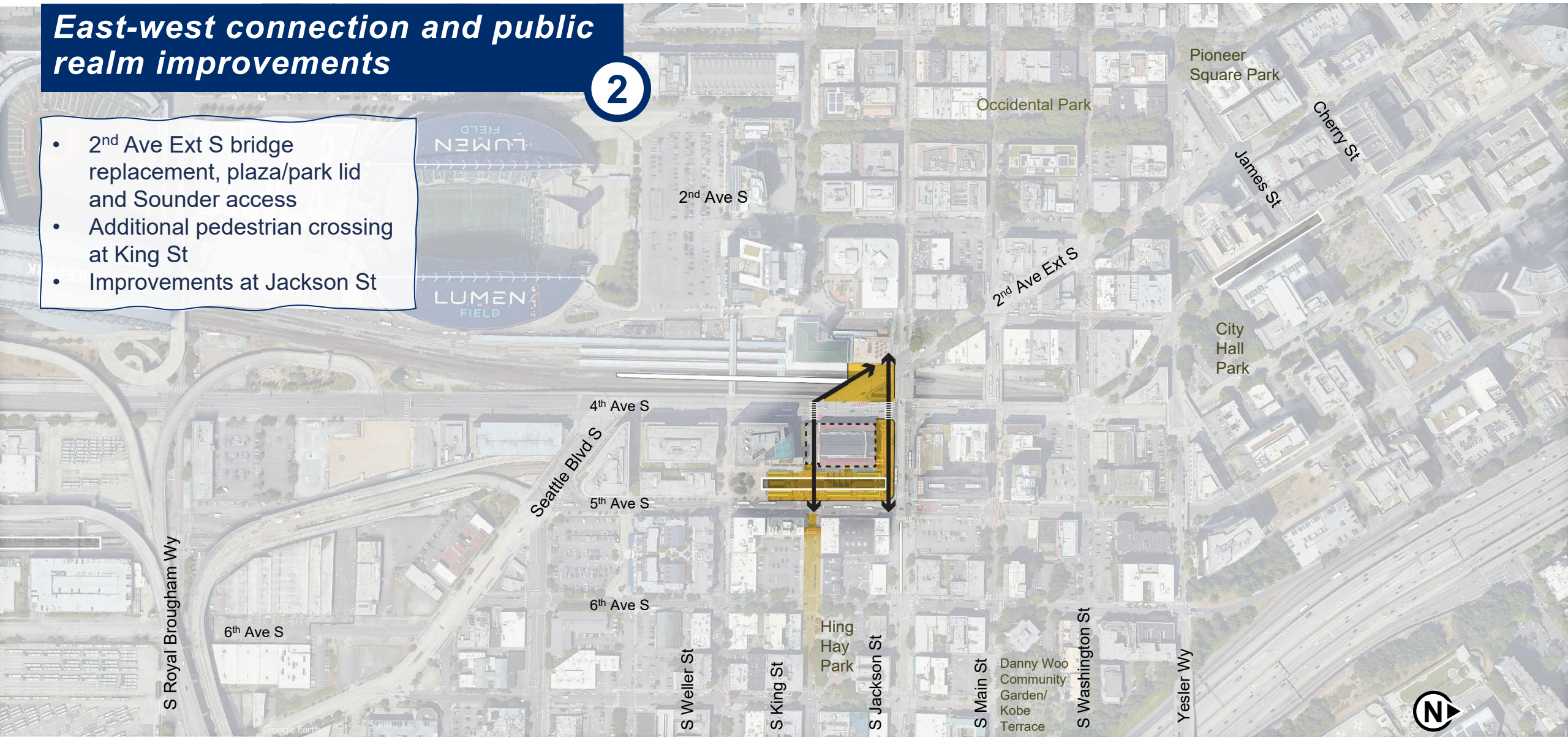
- Clean up existing plaza and open-up sightlines; update paving, landscaping and public art; enhance lighting; revise entry canopies to offer clearer access to existing light rail station and improve sense of safety
- Activate Union Station and surrounding plaza with spaces for a range of active and passive uses, such as community gathering, food kiosks, performances, retail, information booths and more



East-west connection and public realm improvements

2

- 2nd Ave Ext S bridge replacement, plaza/park lid and Sounder access
- Additional pedestrian crossing at King St
- Improvements at Jackson St

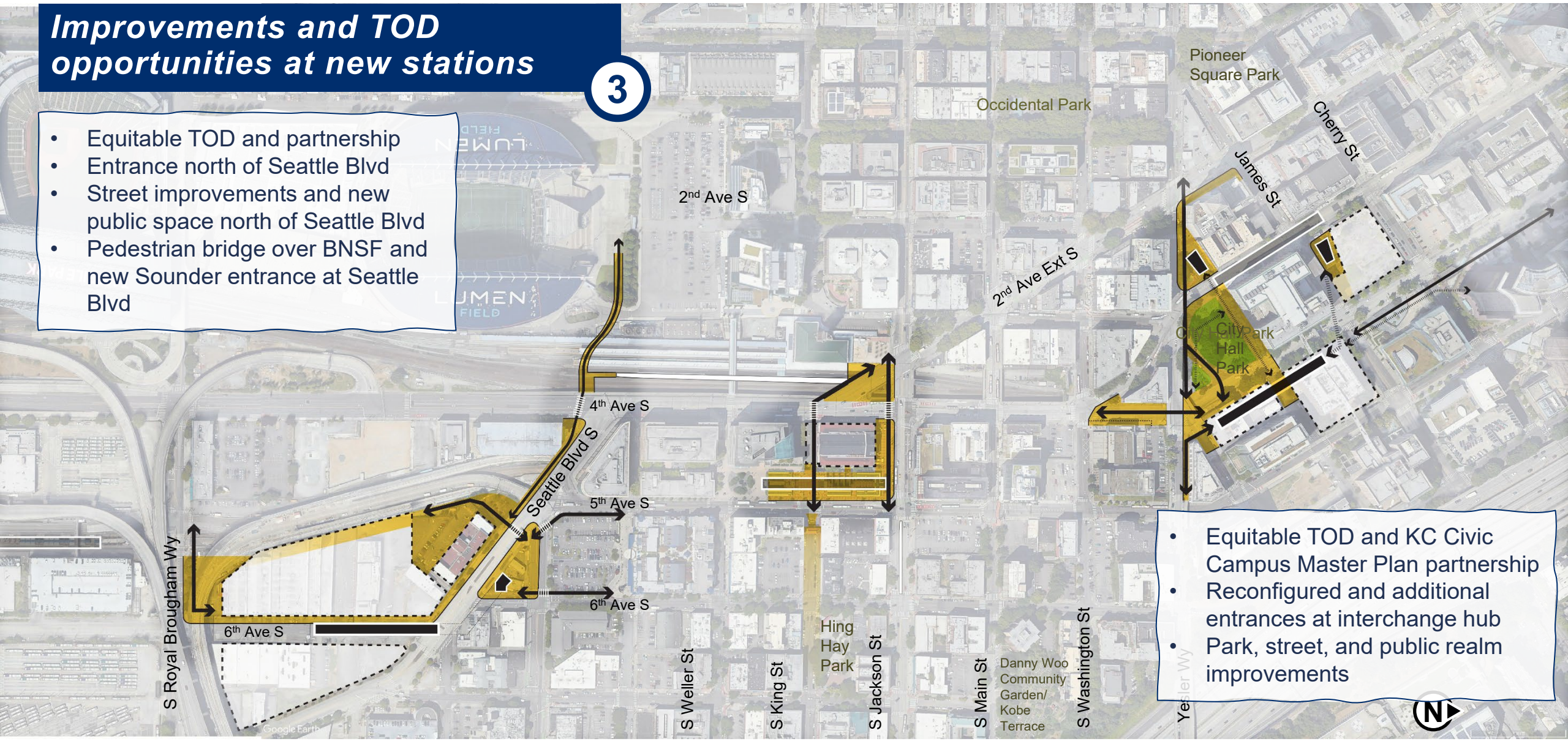


Improvements and TOD opportunities at new stations

3

- Equitable TOD and partnership
- Entrance north of Seattle Blvd
- Street improvements and new public space north of Seattle Blvd
- Pedestrian bridge over BNSF and new Sounder entrance at Seattle Blvd

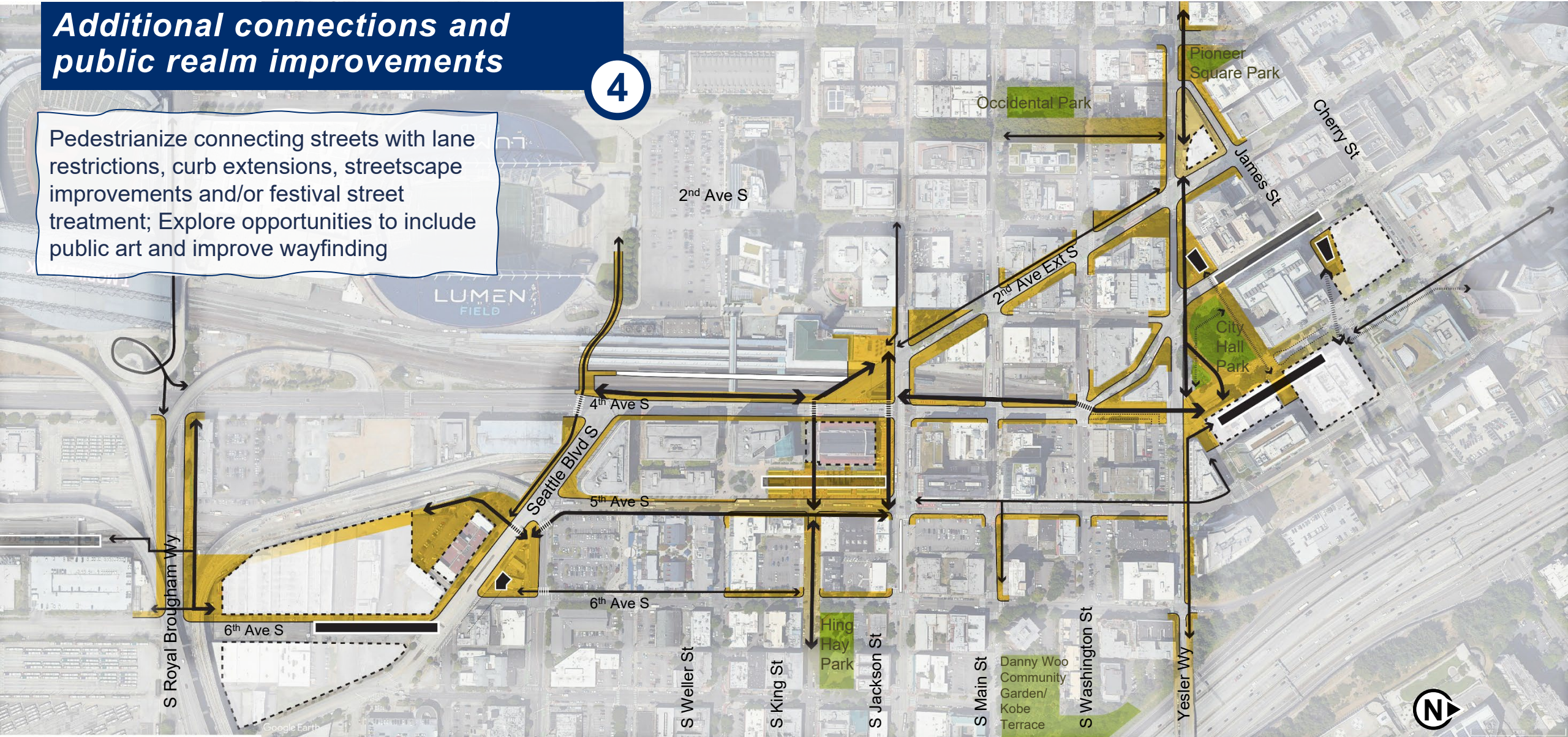
- Equitable TOD and KC Civic Campus Master Plan partnership
- Reconfigured and additional entrances at interchange hub
- Park, street, and public realm improvements



Additional connections and public realm improvements

4

Pedestrianize connecting streets with lane restrictions, curb extensions, streetscape improvements and/or festival street treatment; Explore opportunities to include public art and improve wayfinding



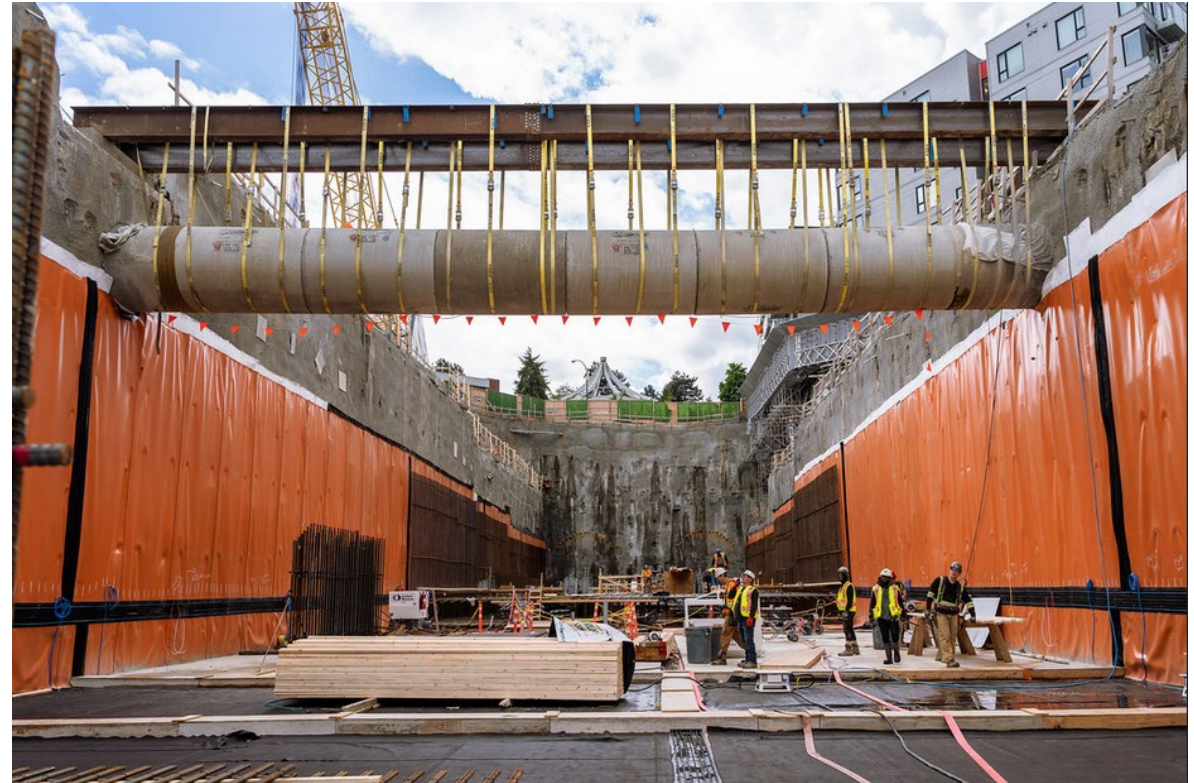
Potential next steps

- Regardless of the location of the CID station, south downtown would benefit from Union Station activation and Jackson Hub improvements.
- Building upon the recent further studies effort and past community and agency planning efforts, the Sound Transit staff could work with the City of Seattle, King County and other potential partners, and through engagement with community, to clarify the potential scope and schedule of such improvements as well as funding and partnership opportunities.
- Staff would report back to the Board on the above in advance of Board selection of the project to be built.

***Construction mitigation approach
at Denny station***

Sewer on Westlake Avenue

- Sewer relocation approach has been refined
- Sewer can be replaced and maintained within Westlake Avenue right of way throughout construction
- No utility relocation to other corridors



Potential construction refinement concept

- Goals:
 - Reduce construction staging footprint in public ROW
 - Maintain traffic on Westlake Avenue during construction
- Refinement concept:
 - Shift station location north of Denny Way
 - Increase off-street construction staging area to facilitate use of temporary decking to maintain traffic

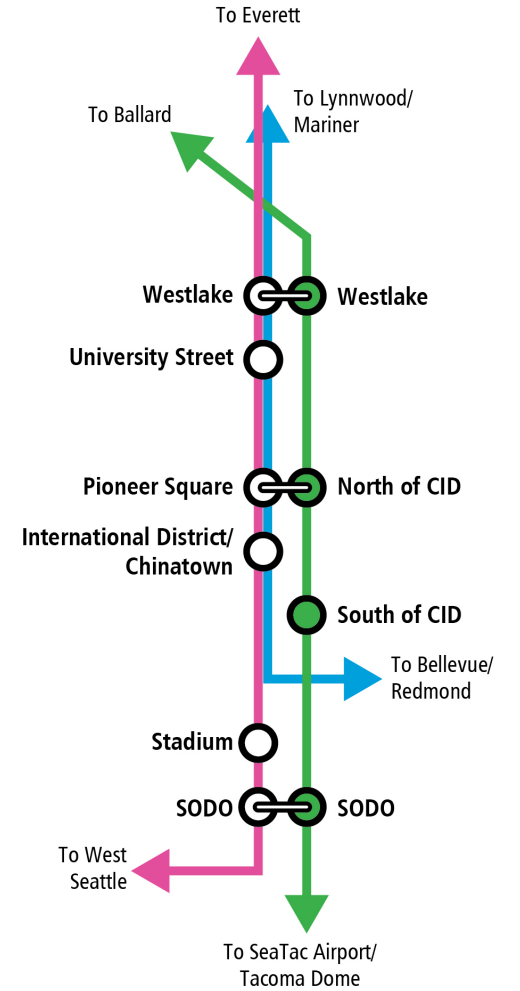
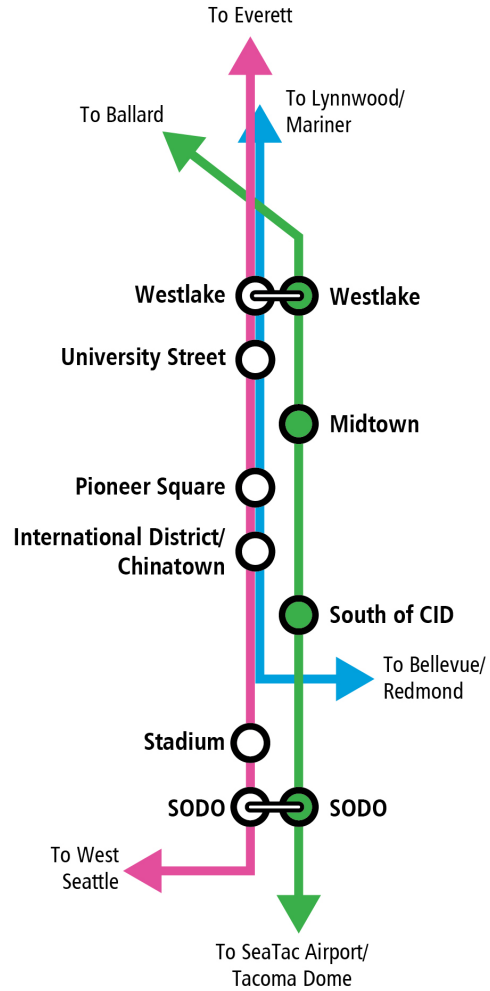
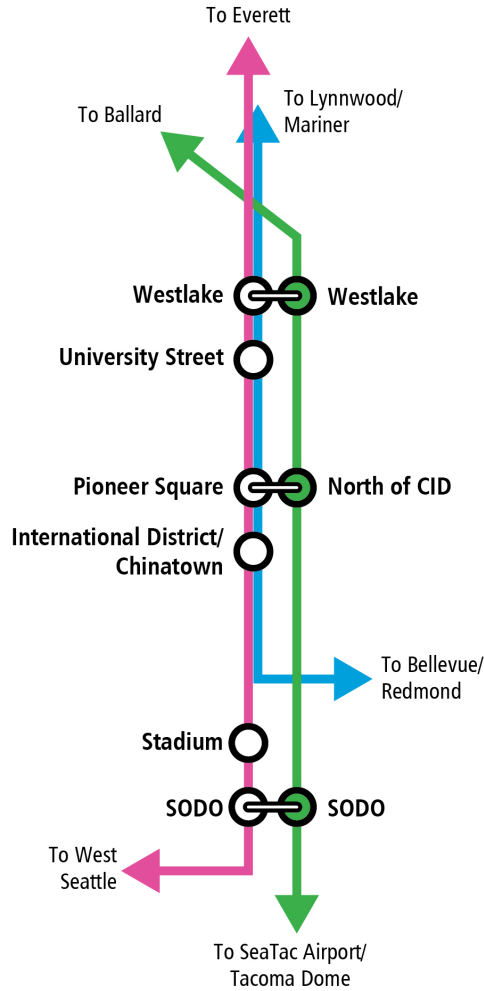
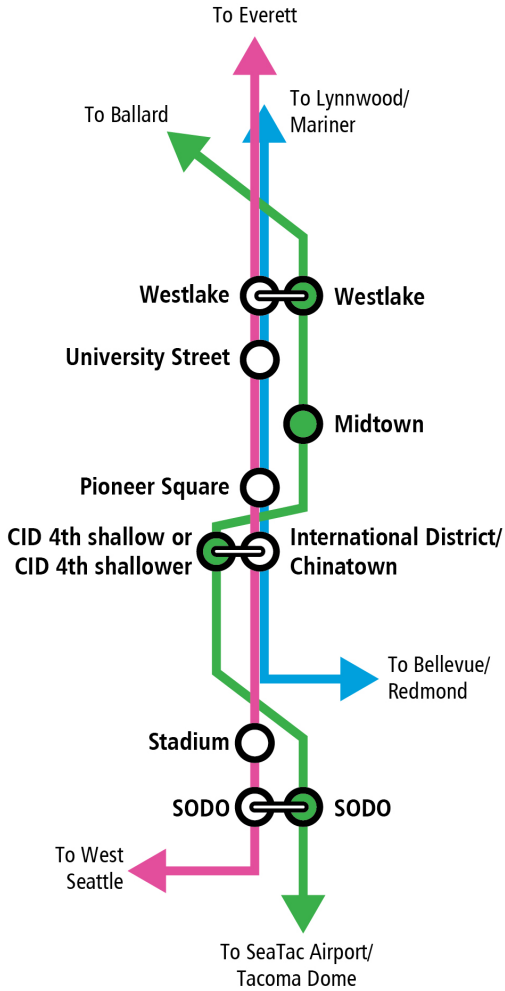
Passenger experience






CID 4th shallow & CID 4th shallower

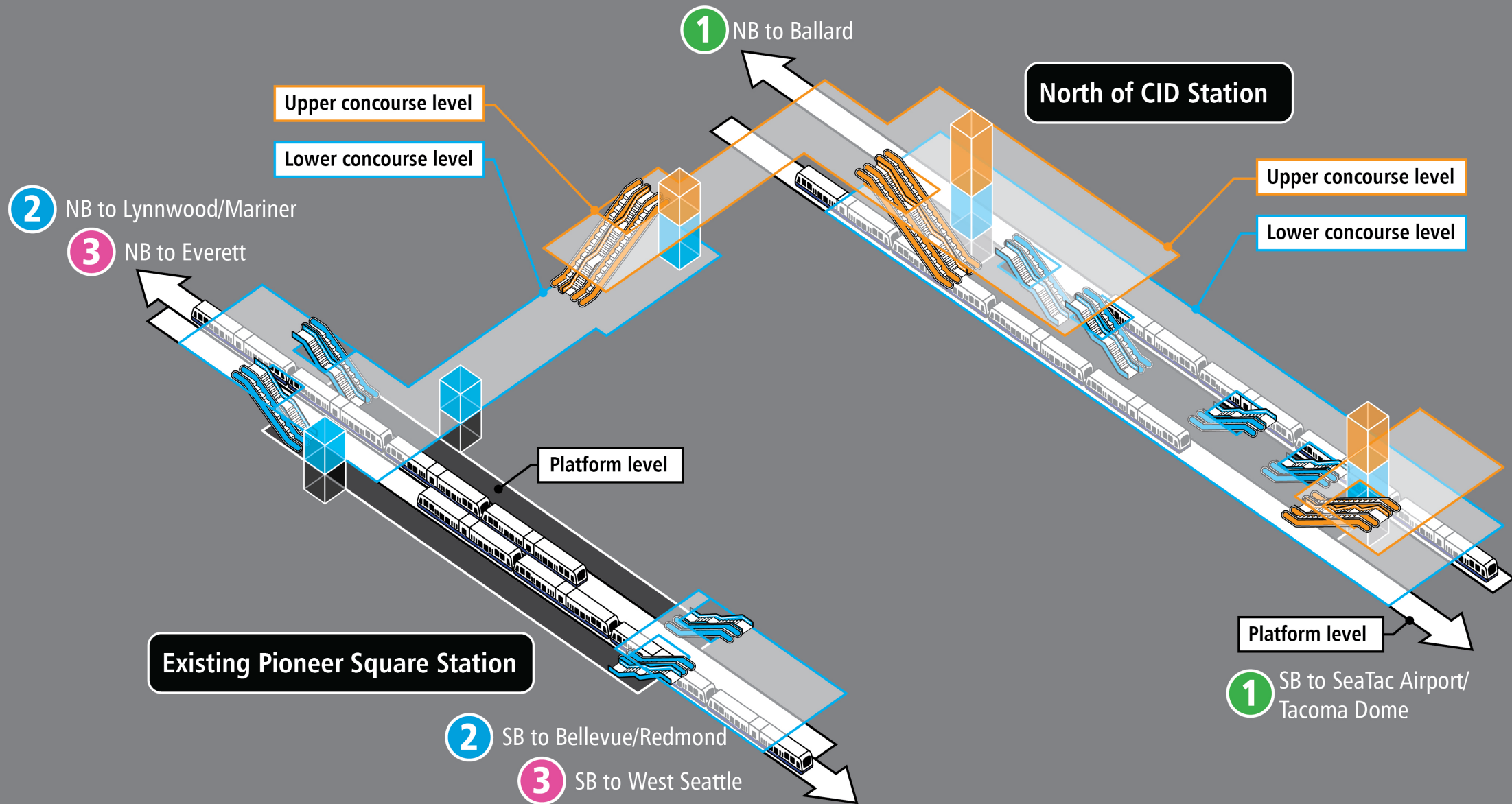
North of CID only

Midtown + South of CID

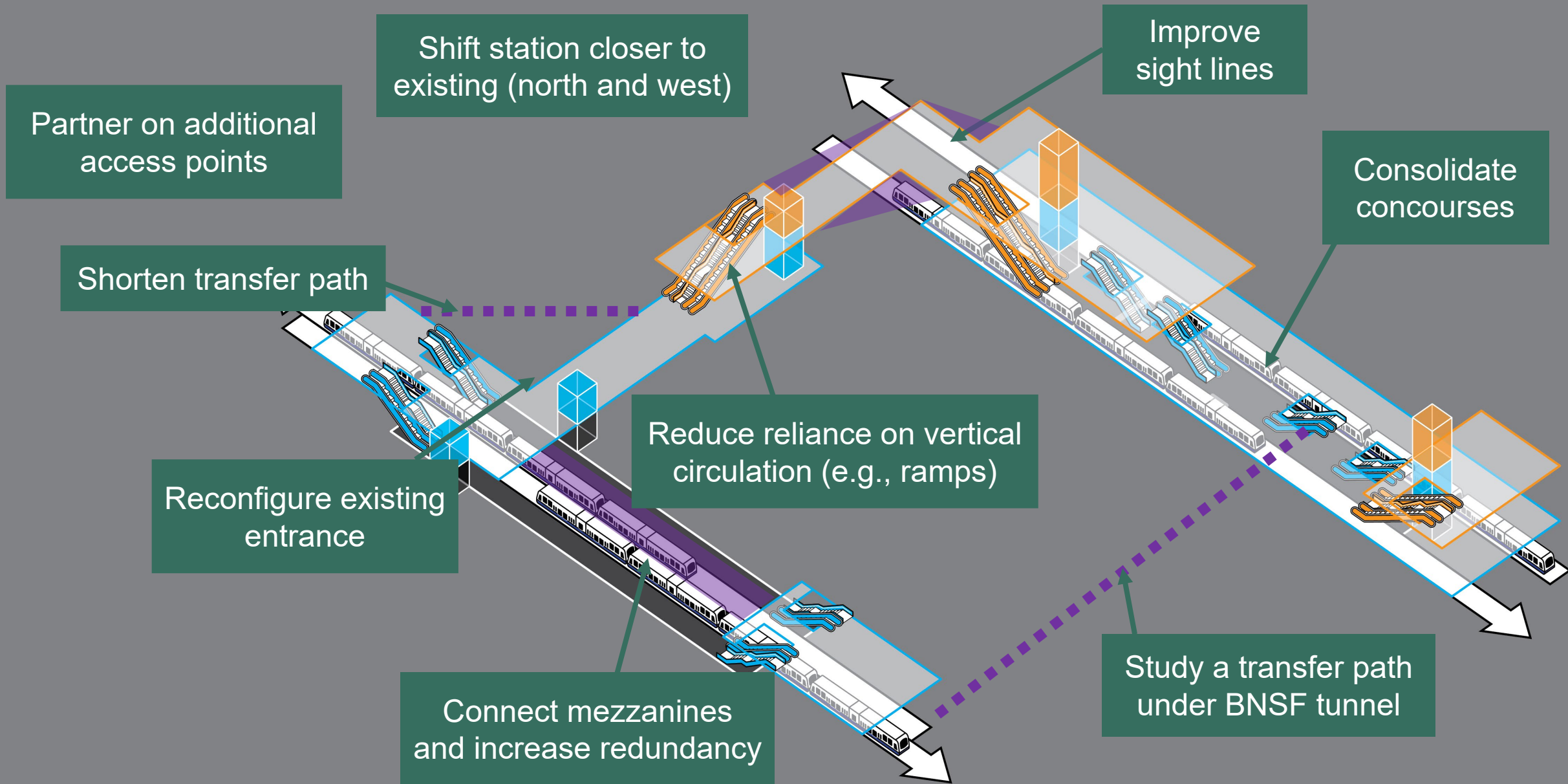
North of CID + South of CID



				
Ballard–Tacoma Dome	Mariner–Redmond	Everett–West Seattle	Station	Transfer



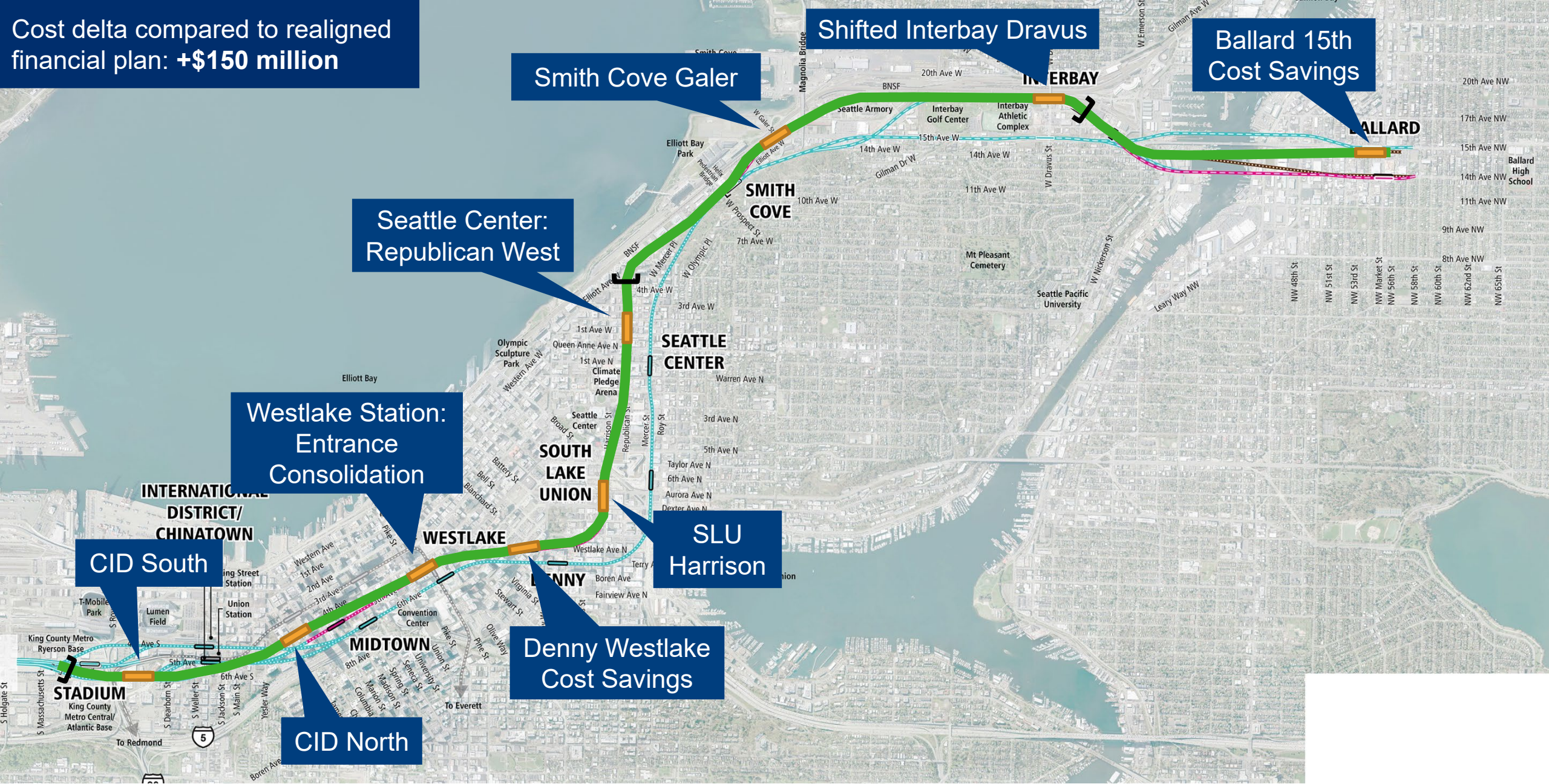
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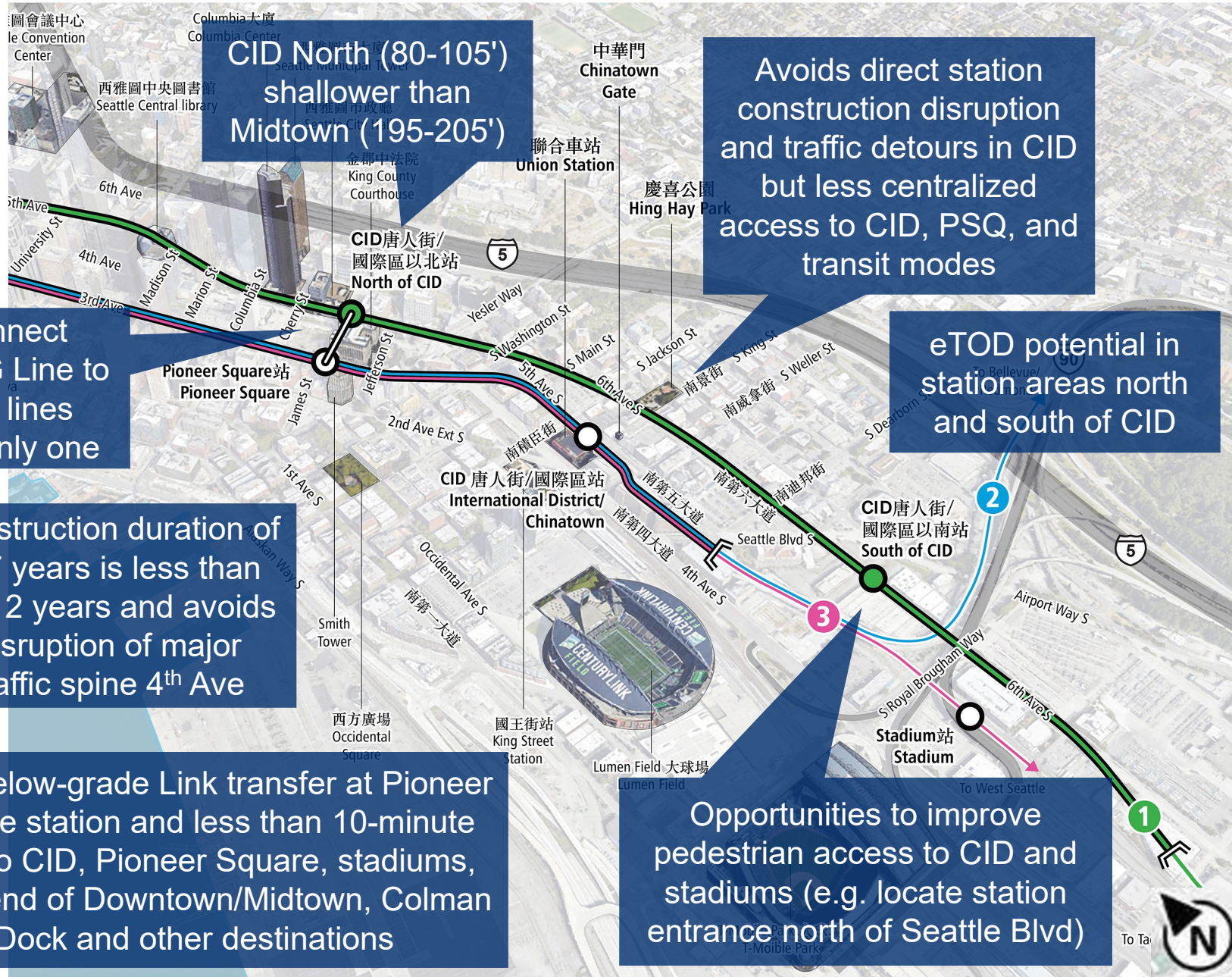
***Example Modified Preferred
Alternative***

Cost delta compared to realigned financial plan: **+\$150 million**



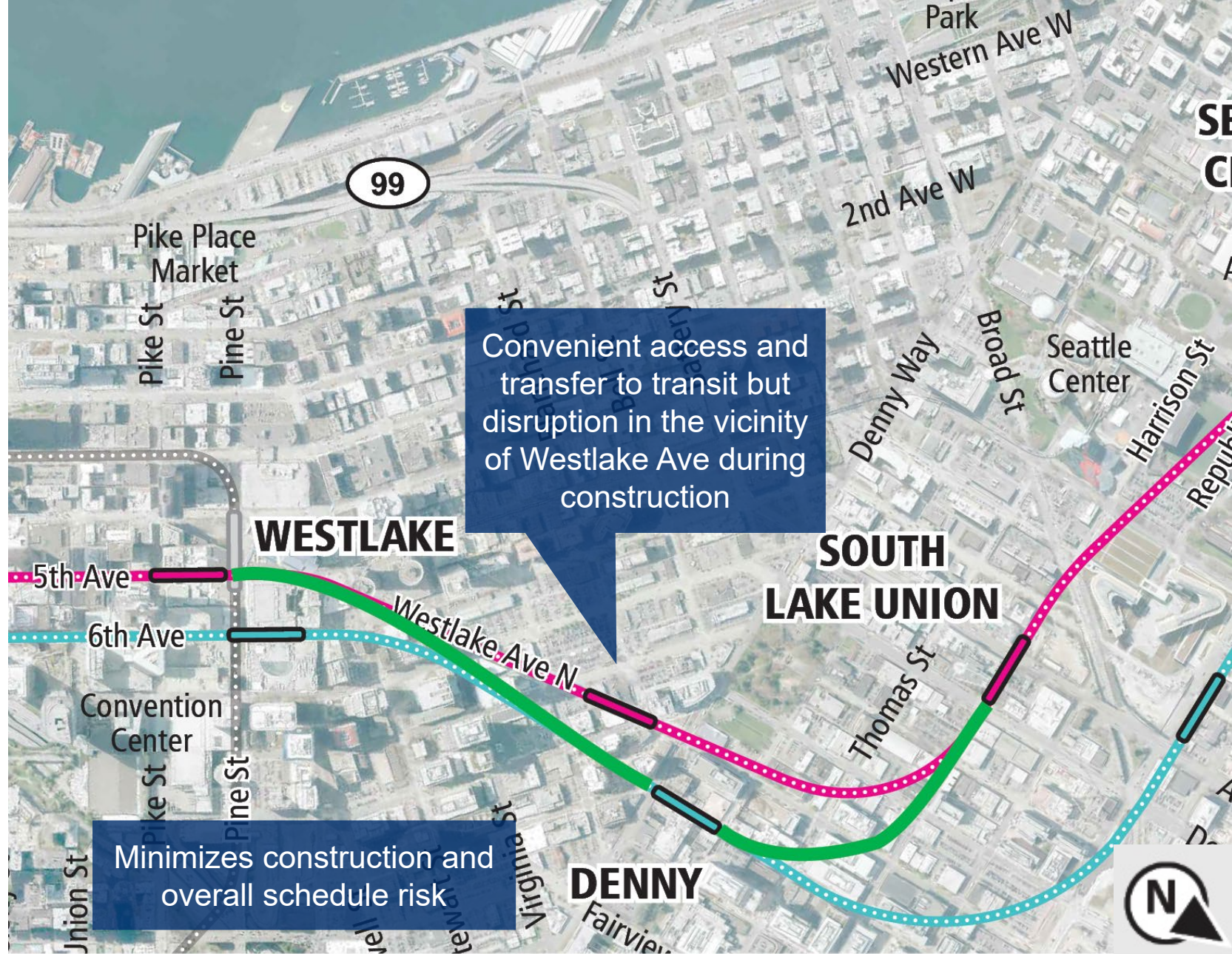
Station North of CID and Station South of CID

Compared to Refined 4th Avenue Shallow Station (CID-1a)



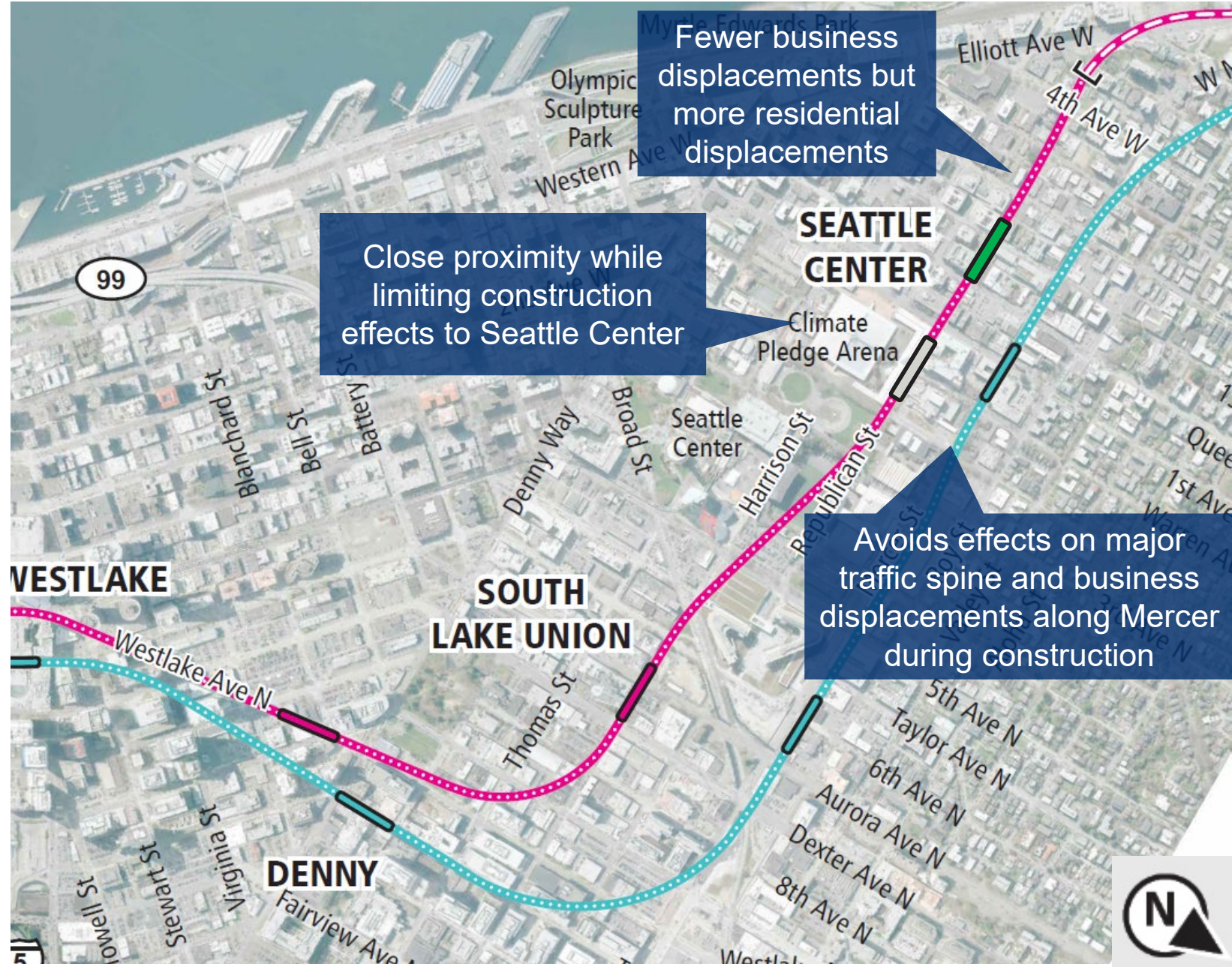
Denny Station at Westlake Ave (DT-1)

Compared to Denny Station at Terry Ave (DT-2) with Mix-and-Match



Seattle Center Station shifted west on Republican

Compared to Seattle Center Station at Mercer (DT-2) with Mix-and-Match



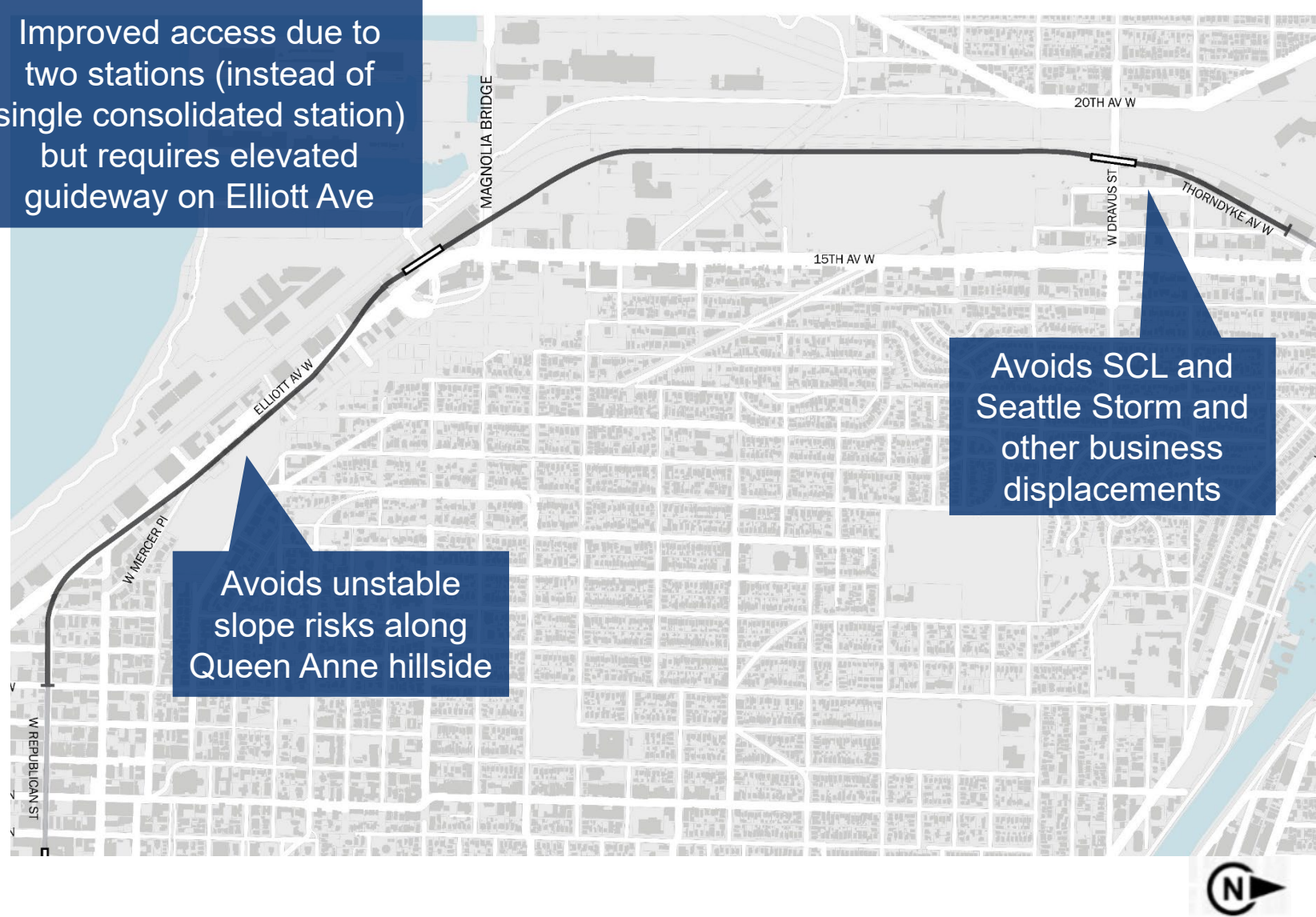
Modified SIB-1 Alignment

Compared to Consolidated Alignment

Improved access due to two stations (instead of single consolidated station) but requires elevated guideway on Elliott Ave

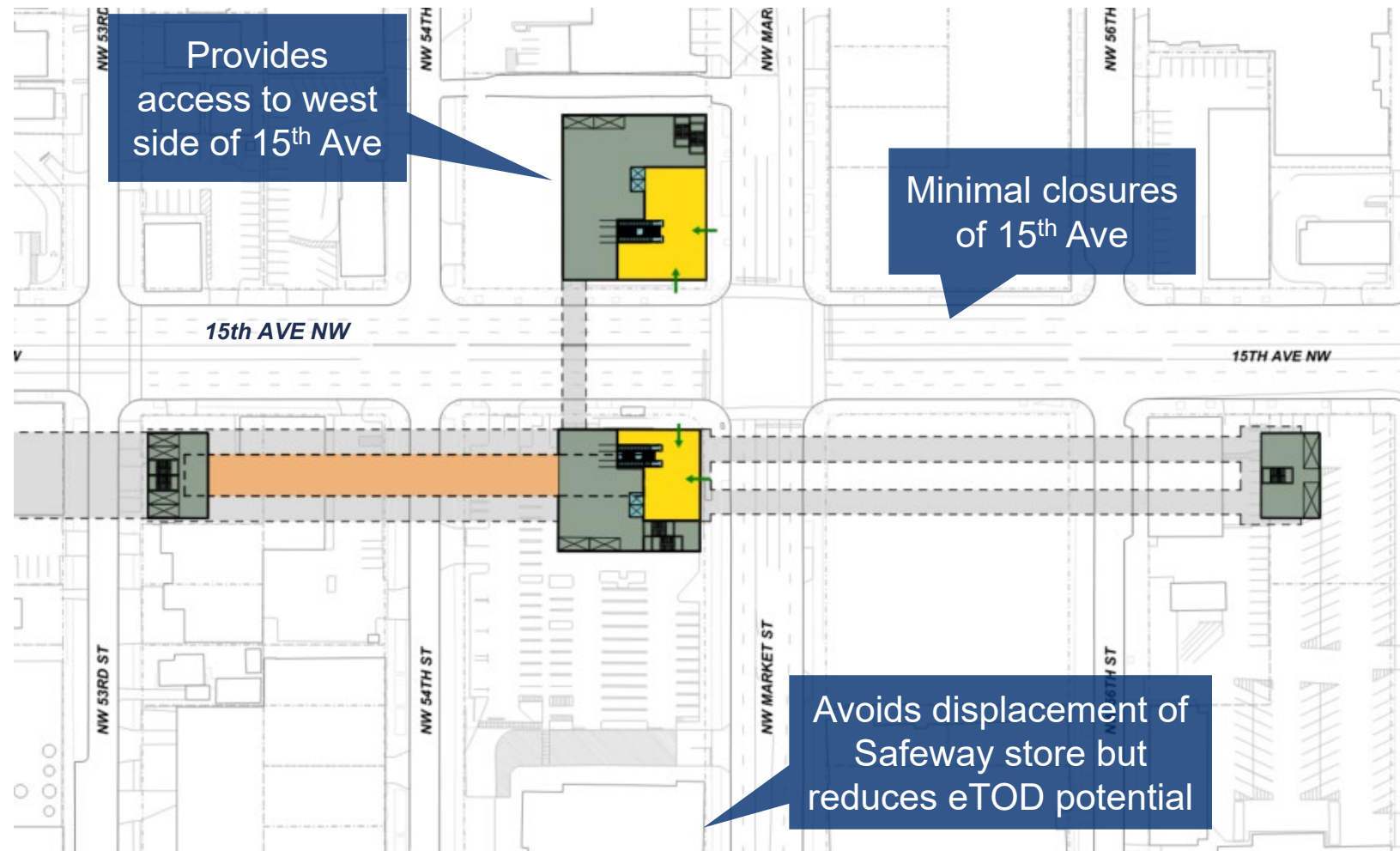
Avoids unstable slope risks along Queen Anne hillside

Avoids SCL and Seattle Storm and other business displacements

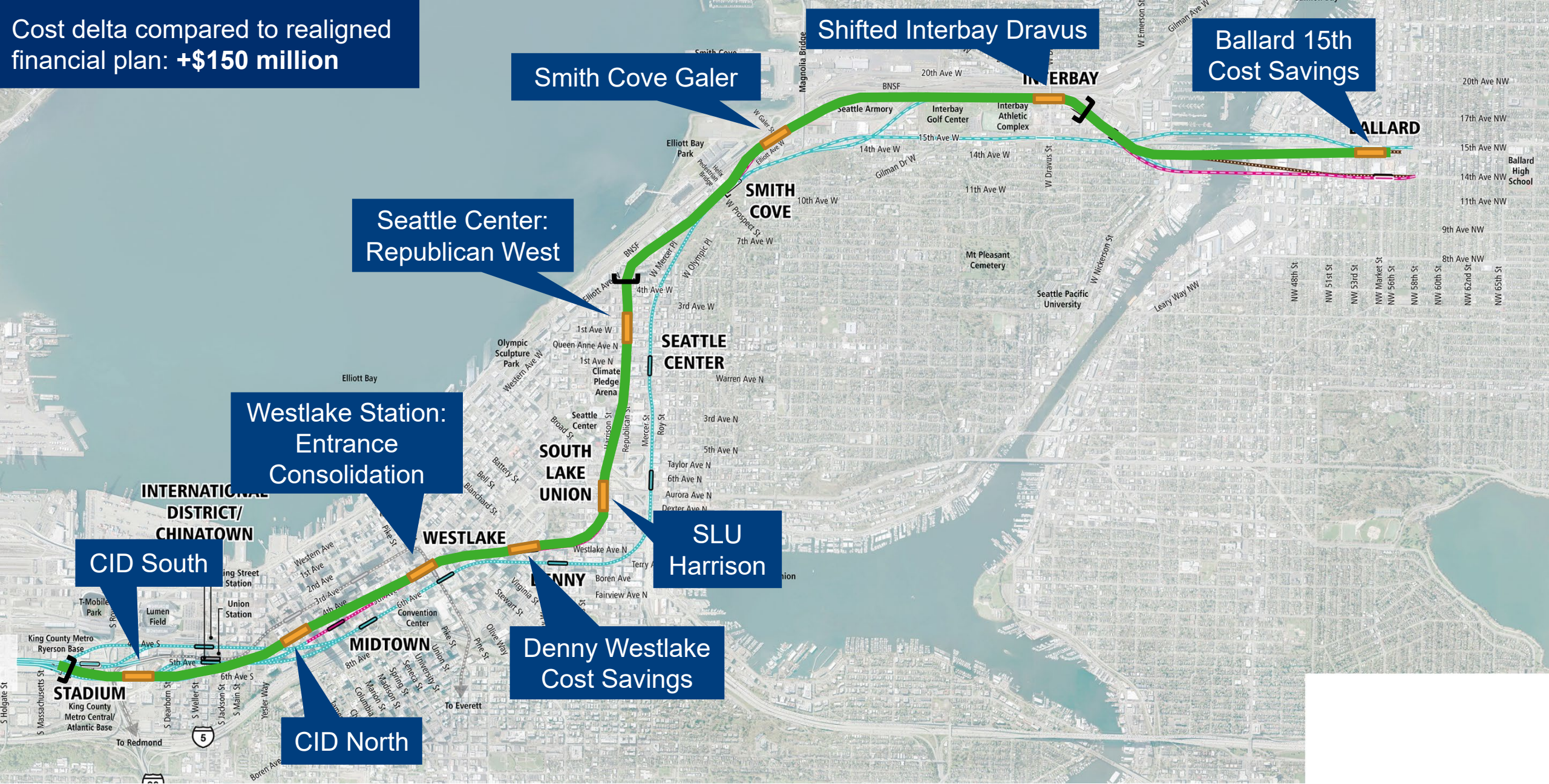


Tunnel 15th Ave Cost Savings

*Compared to
Tunnel 14th Ave
(IBB-2a)*

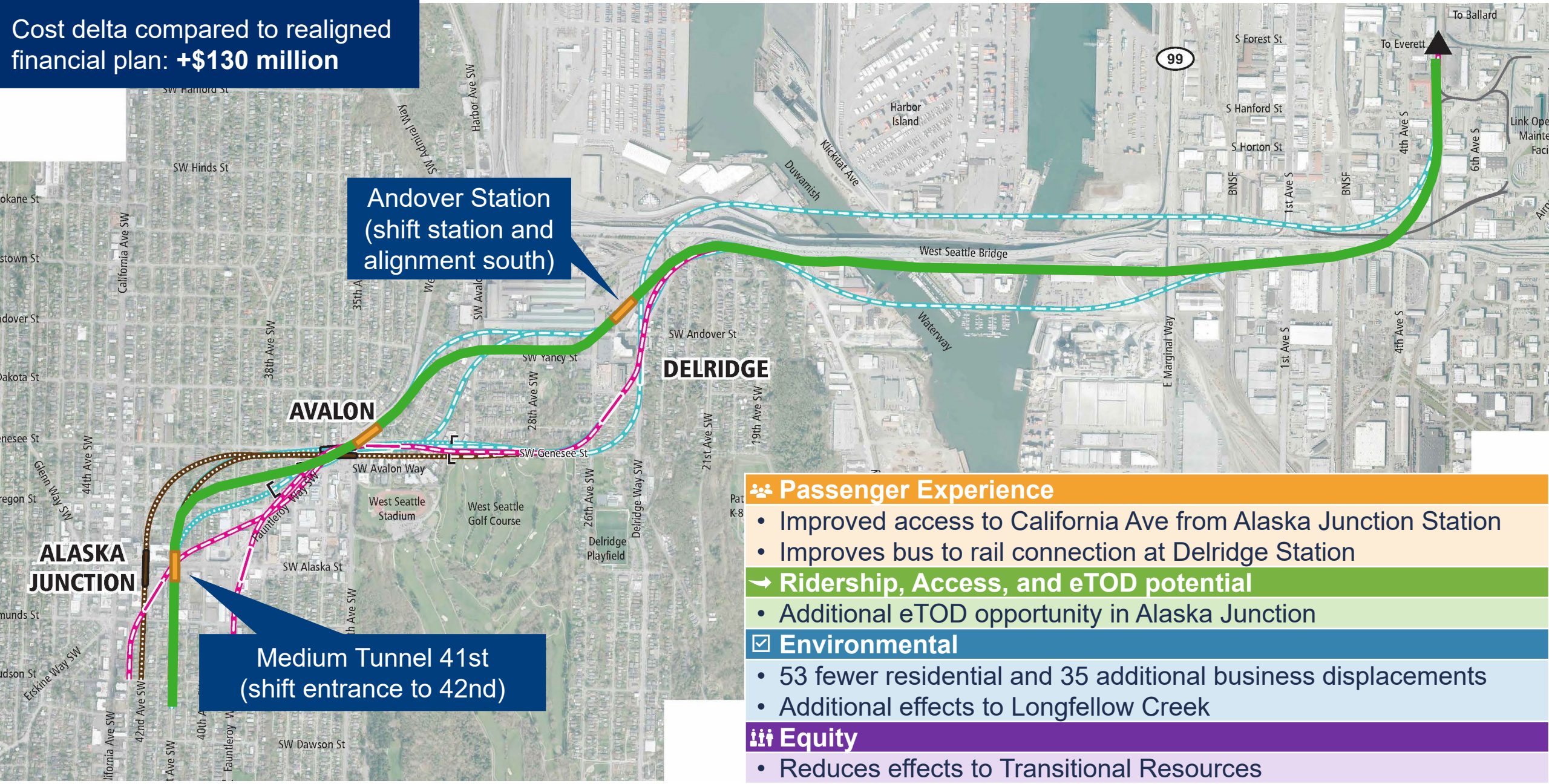


Cost delta compared to realigned financial plan: **+\$150 million**



***West Seattle Link Extension
end-to-end scenario***

Cost delta compared to realigned financial plan: **+\$130 million**



Andover Station
(shift station and alignment south)

Medium Tunnel 41st
(shift entrance to 42nd)

👤 Passenger Experience

- Improved access to California Ave from Alaska Junction Station
- Improves bus to rail connection at Delridge Station

➡ Ridership, Access, and eTOD potential

- Additional eTOD opportunity in Alaska Junction

☑ Environmental

- 53 fewer residential and 35 additional business displacements
- Additional effects to Longfellow Creek

👤 Equity

- Reduces effects to Transitional Resources

Funding

Example modified preferred alternative funding assumption per M2022-57

- Ballard example modified preferred alternative (\$150 million) + West Seattle preferred alternative refinements (\$130 million) = **+\$280 million**
- All CID options would benefit from Union Station activation / Jackson Hub improvements which would **require additional funding and partnerships**
- Through coordination with the City of Seattle Mayor's office and King County Executive's office, there is **up to \$400 million in potential funding** through various sources including publicly-owned property, value capture from increased development, and in-kind contributions. Anticipate receiving Letters of Intent before March board meeting.
- City and County to work with Sound Transit to further analyze costs and funding sources over the next year and develop a **funding agreement** in advance of Board action to select a project to be built

Next steps

Upcoming Board Process

Jan 26, Board:

Further Studies results overview

Jan 26 – Feb 17:

Gather additional community feedback

Feb 9, SEC:

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Recommendation to Board

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Thank you.



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