West Seattle and Ballard Link Extensions Further Studies Community feedback summary

Board of Directors 2/23/23



Why we're here today

- Review community feedback
- Review potential Ballard Link Extension endto-end scenarios and results comparisons
- Review an example modified preferred alternative

No action today



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.



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

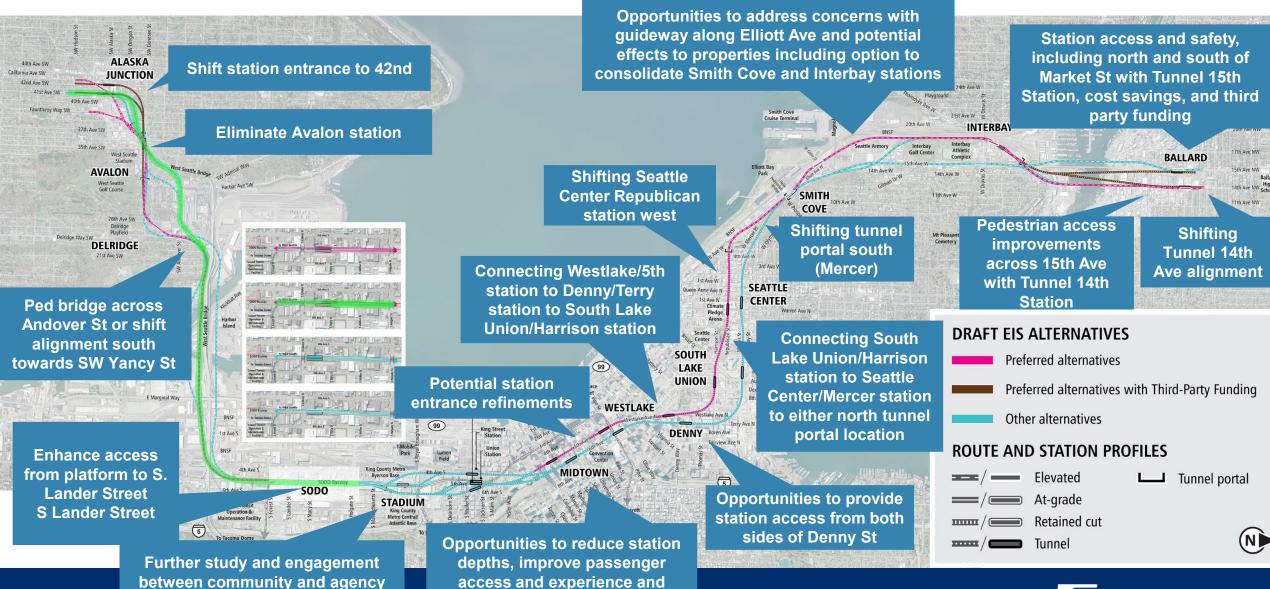
Feb 23, Board: Community feedback summary

Mar 9, SEC: Recommendation to Board

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

Areas of Further Study

partners



refine Midtown station entrance



Community Feedback Summary

Further studies corridor-wide engagement

July 28, 2022 - Feb. 17, 2023



12 open houses / workshops



4 online surveys with more than 2,000 responses



community briefings, tours, property owner meetings



fairs, festivals and other tabling events



7 email updates 411

engaging more than

11K+ subscribers



8 posts on social media platforms, with 783K+ impressions



200 businesses eng

engaged through door-to-door outreach



180 residents

engaged through in-language forums

Chinatown-International District (CID) Further Studies Community Feedback

CID Engagement Snapshot

Engagement activities, 7/28/22 - 2/17/23

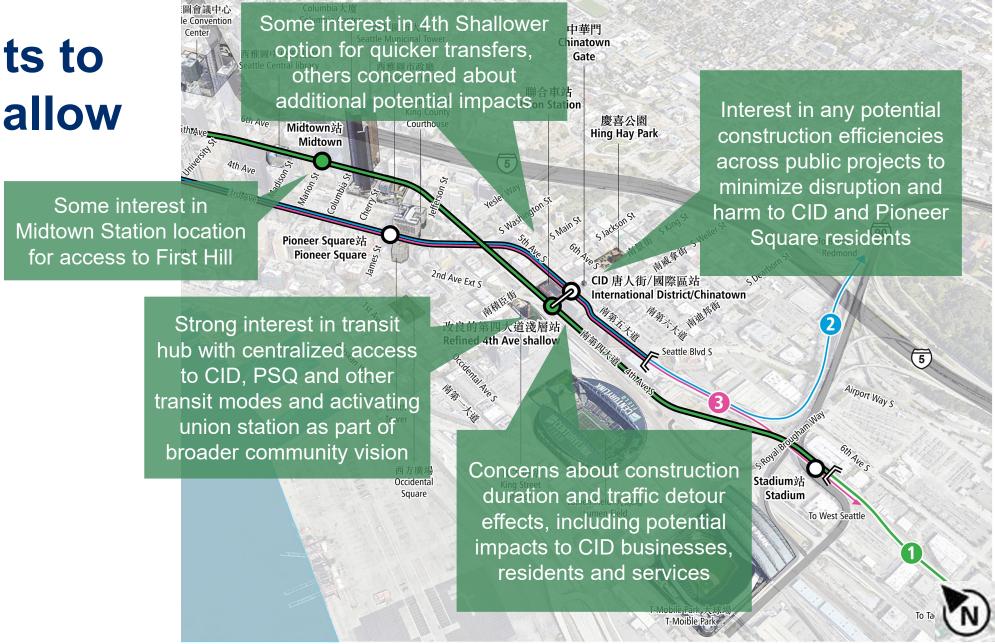
- Community briefings & meetings = 35+
- Workshops & open houses = 6
- Online surveys = 3
- Door to door outreach = 100+ businesses
- In-language residential and business forums = 5
- Survey responses = 650+



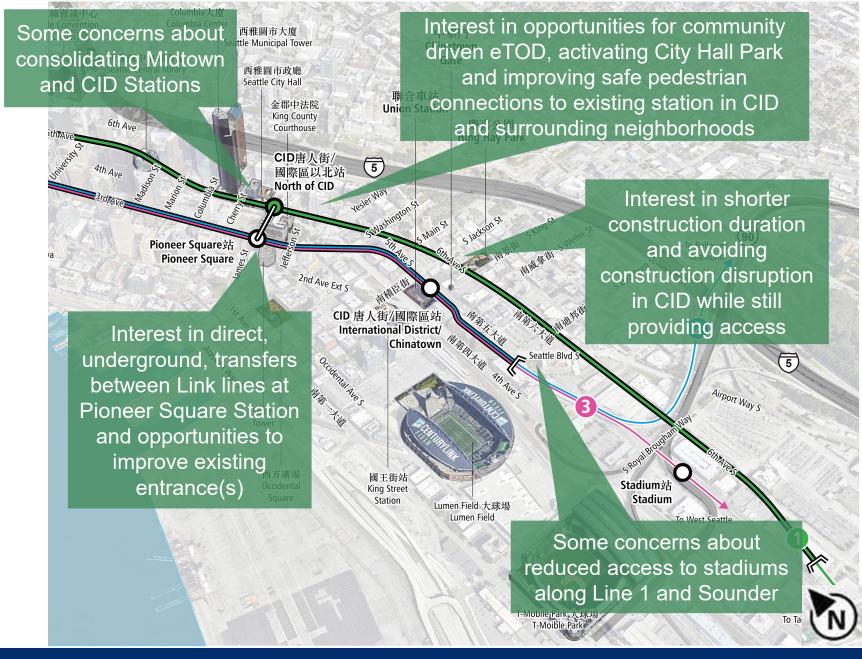




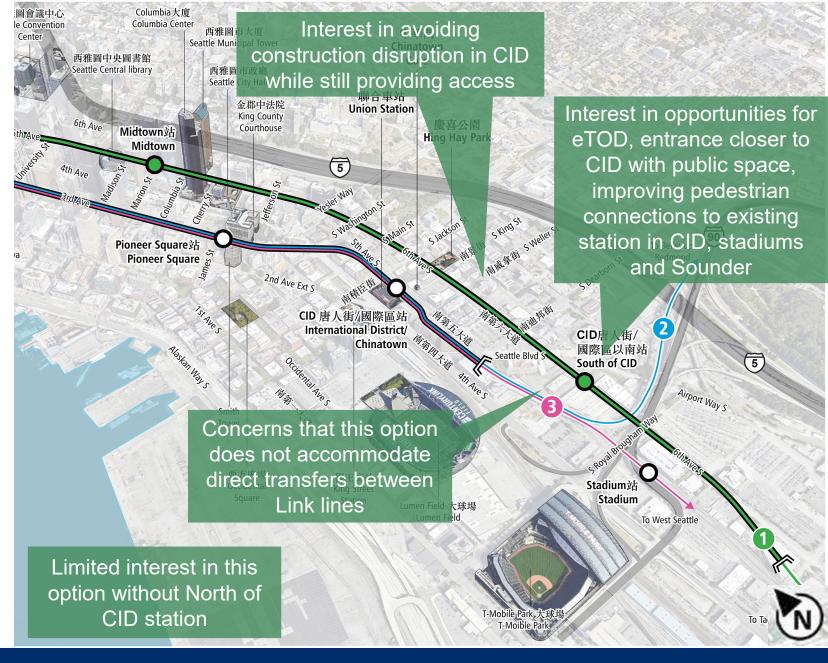
Refinements to 4th Ave Shallow (CID-1a)



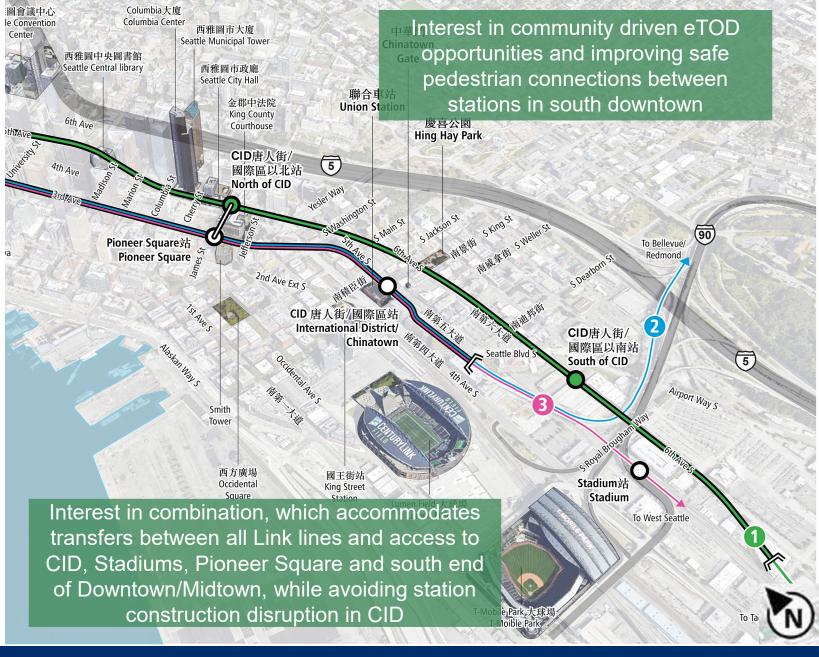
Station North of CID



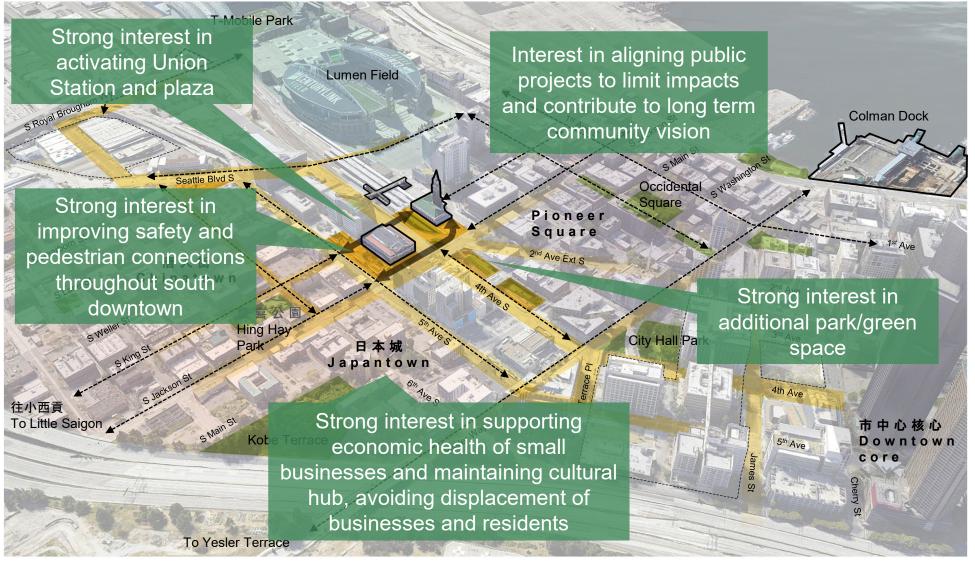
Station South of CID



Station North of CID and Station South of CID



Historic station hub and neighborhood connections Additional community feedback







Downtown Further Studies Community Feedback

Downtown Engagement Snapshot

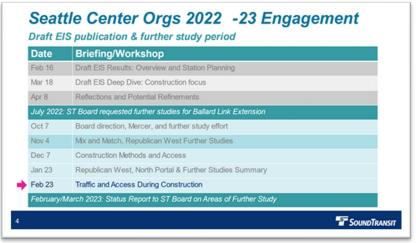
Engagement activities, 7/28/22 - 2/17/23

zoom

February 9th - Sound Transit and Uptown Allianc...

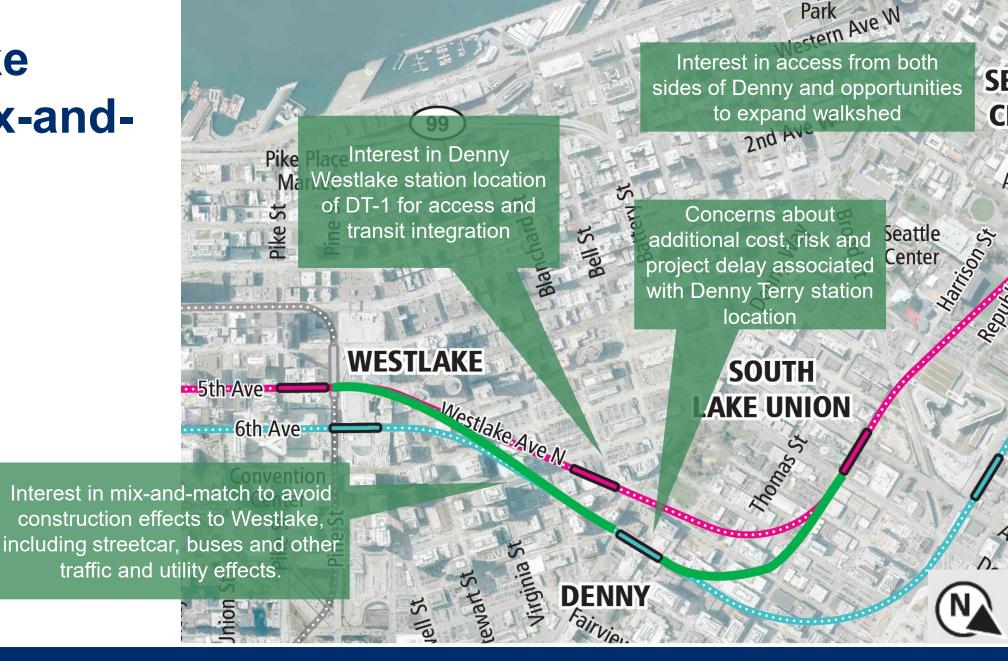
- Community briefings & meetings = 25+
- Workshops & open houses = 5
- Online surveys = 1
- Door to door outreach = 85+ businesses
- Survey responses = 265







South Lake Union: Mix-andMatch

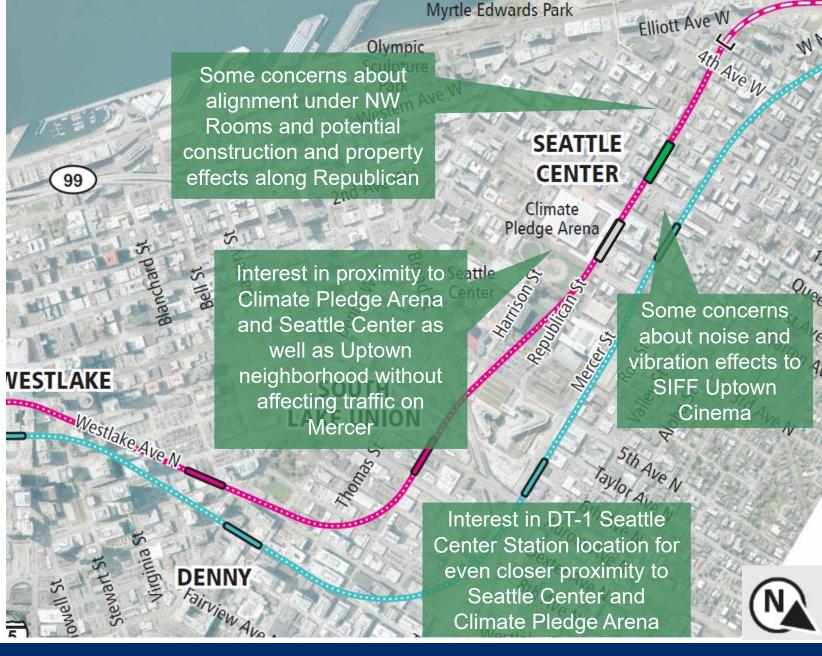


Seattle Center: Mix-and-Match





Seattle Center: Republican West





Interbay-Smith Cove Further Studies Community Feedback

Interbay/Ballard Engagement Snapshot

Engagement activities, 7/28/22 - 2/17/23

- Community briefings & meetings = 8+
- Workshops & open houses = 3
- Online surveys = 2
- Survey responses = 700+



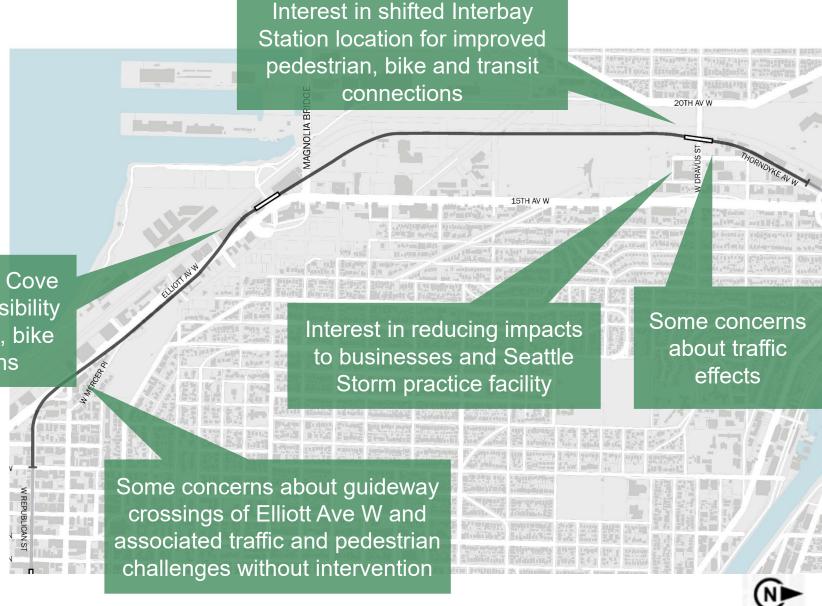




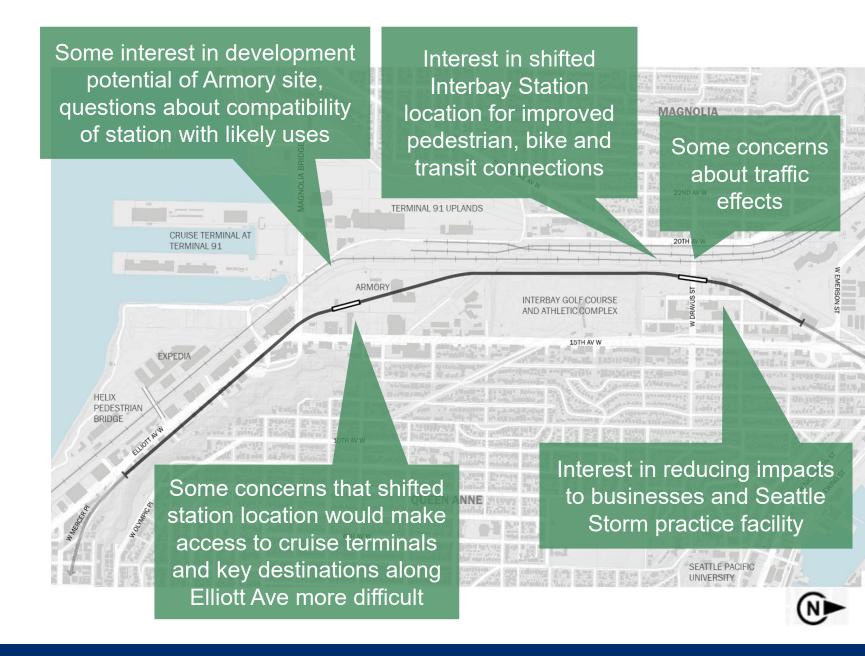
Modified SIB-1 Alignment

Interest in Galer St Smith Cove Station location for accessibility and improved pedestrian, bike and transit connections

Interest in maintaining two stations in Interbay to support access and future development

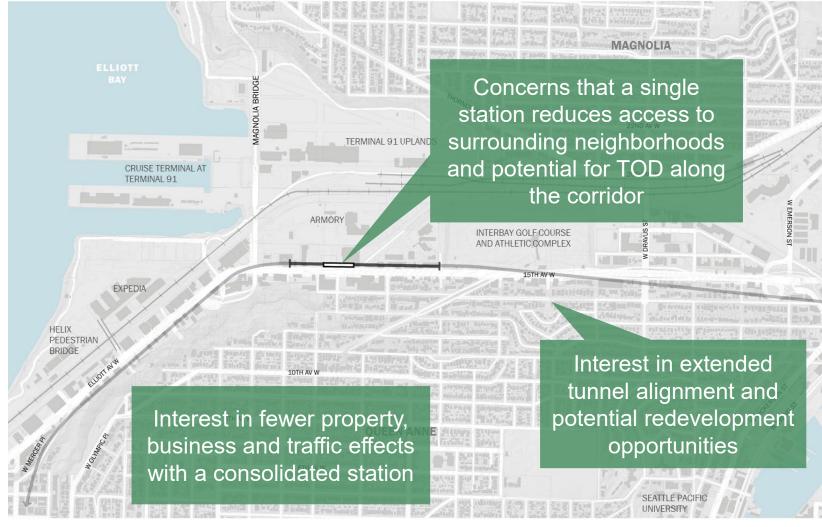


Modified SIB-3 Alignment





Consolidated Alignment

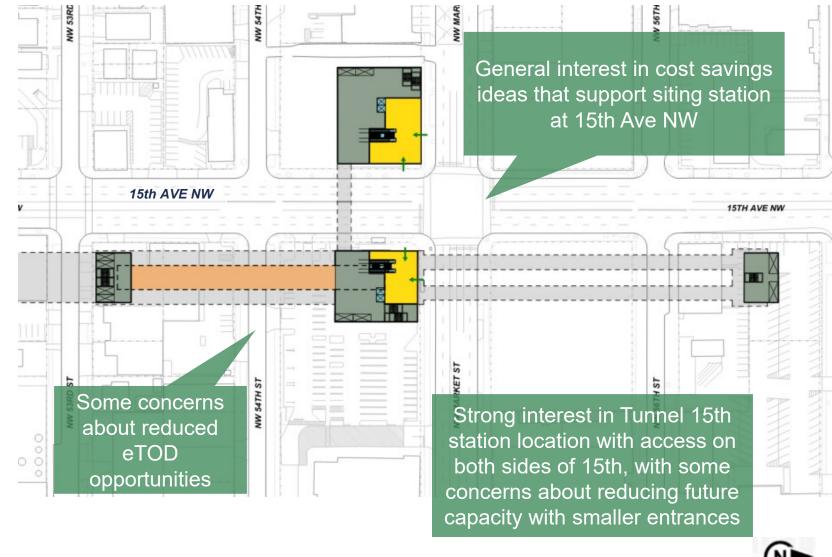






Ballard Further Studies Community Feedback

Tunnel 15th Ave Cost Savings: Draft EIS Station Entrance Refinements







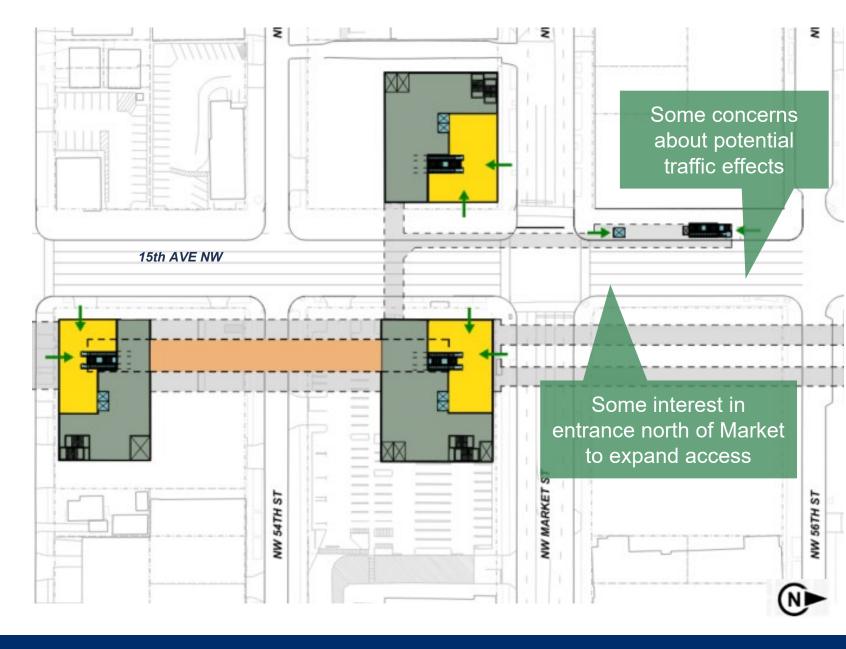
Tunnel 15th Ave Cost Savings: Station in Right-of-Way







Tunnel 15th Ave Entrance North of Market



Tunnel 14th Ave Station Access

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

Some interest in grade-separated improvements to reduce passenger-vehicle interactions; others prefer at-grade improvements for sense of safety





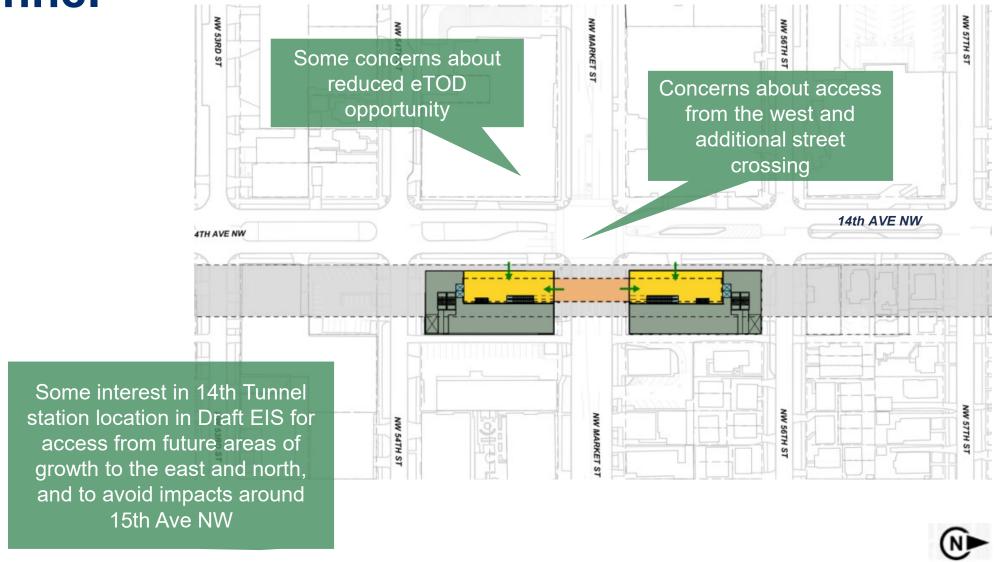








Shifted Tunnel 14th Ave Station

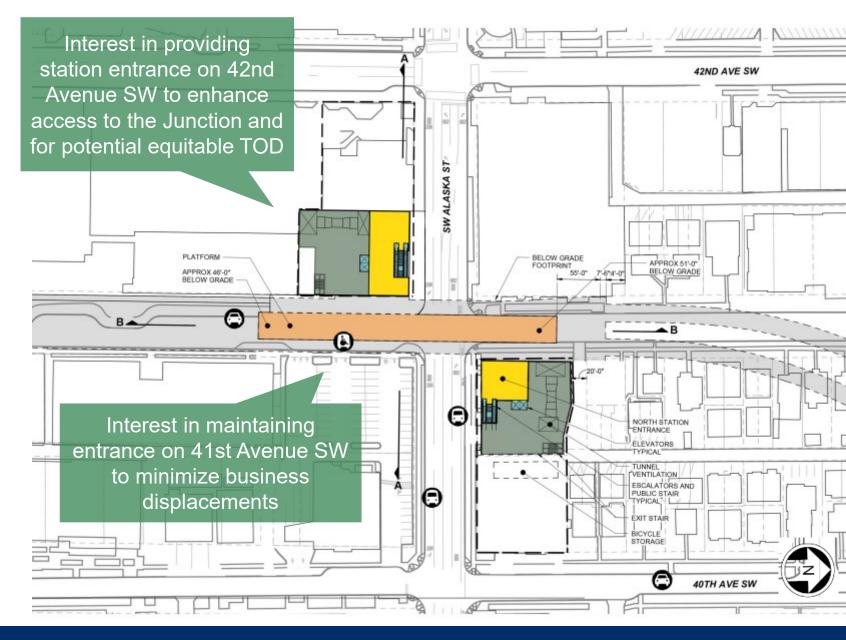




West Seattle Extension Further Studies Community Feedback

Alaska Junction Station Access Refinement

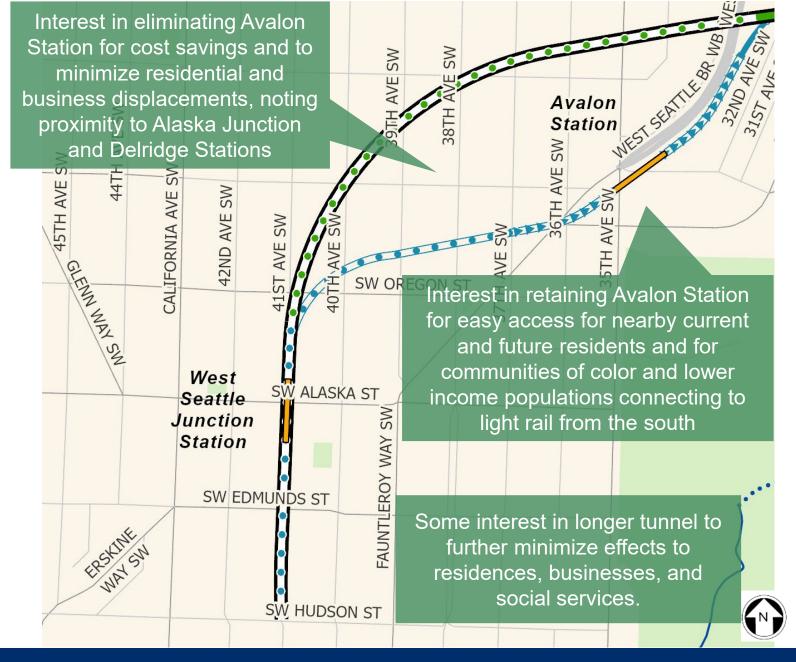
Shift station entrance to 42nd Ave SW



Eliminate Avalon Station

Eliminate station and optimize alignment

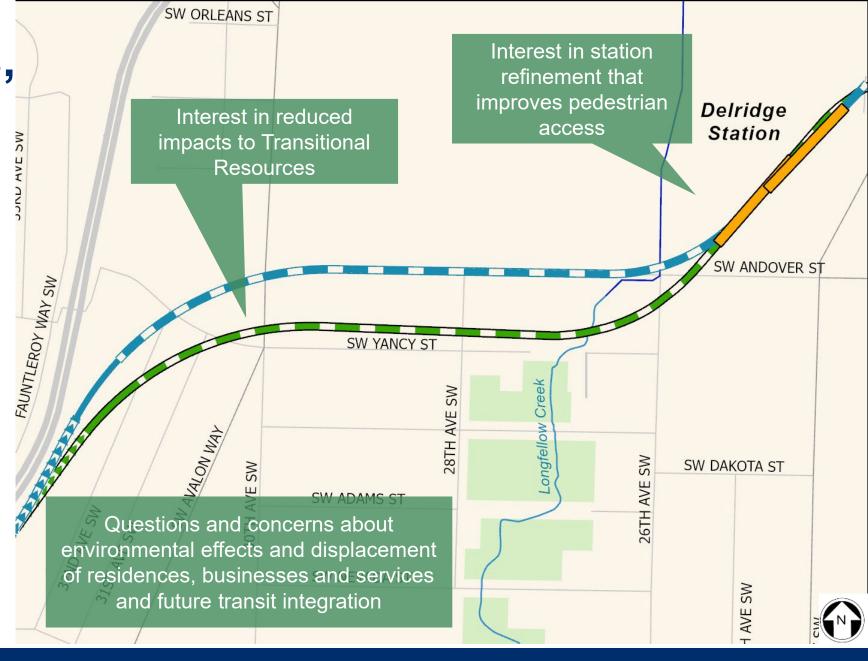
(assumes shifting alignment south towards SW Yancy St)





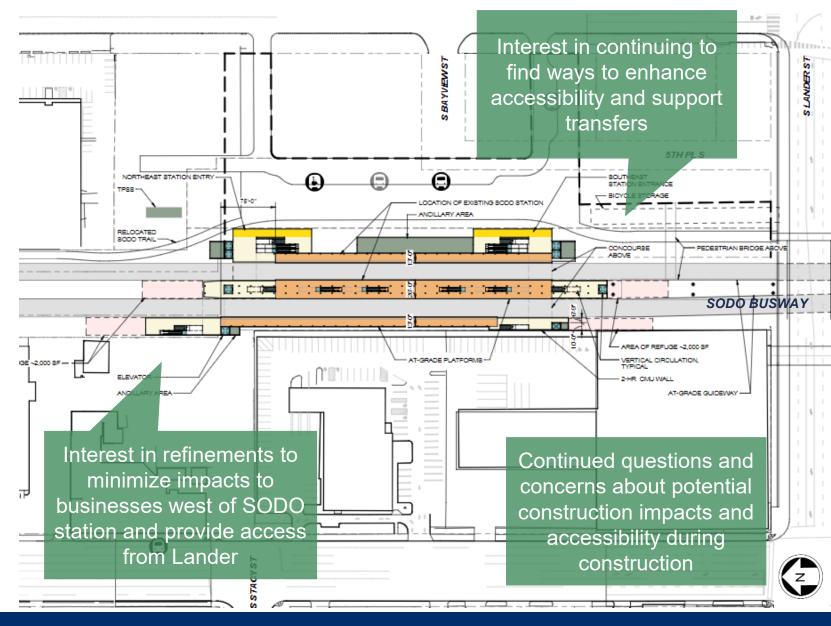
Delridge Access, Integration, and Alignment Refinement

Shift alignment south towards SW Yancy St



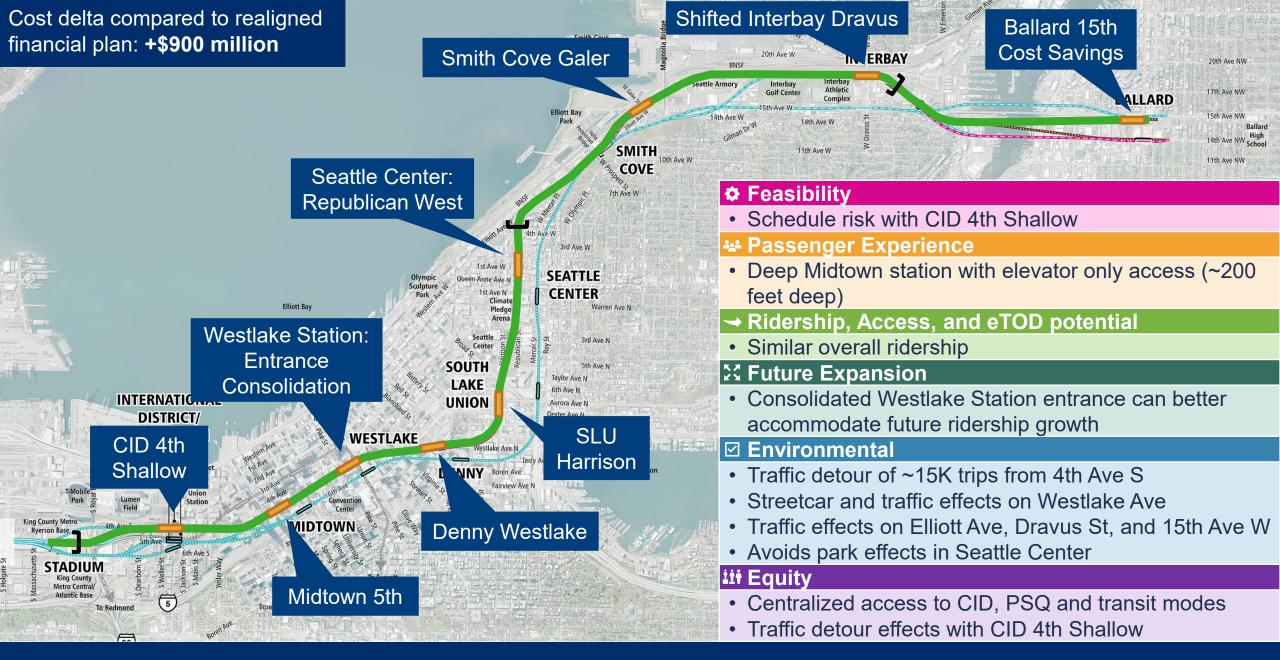


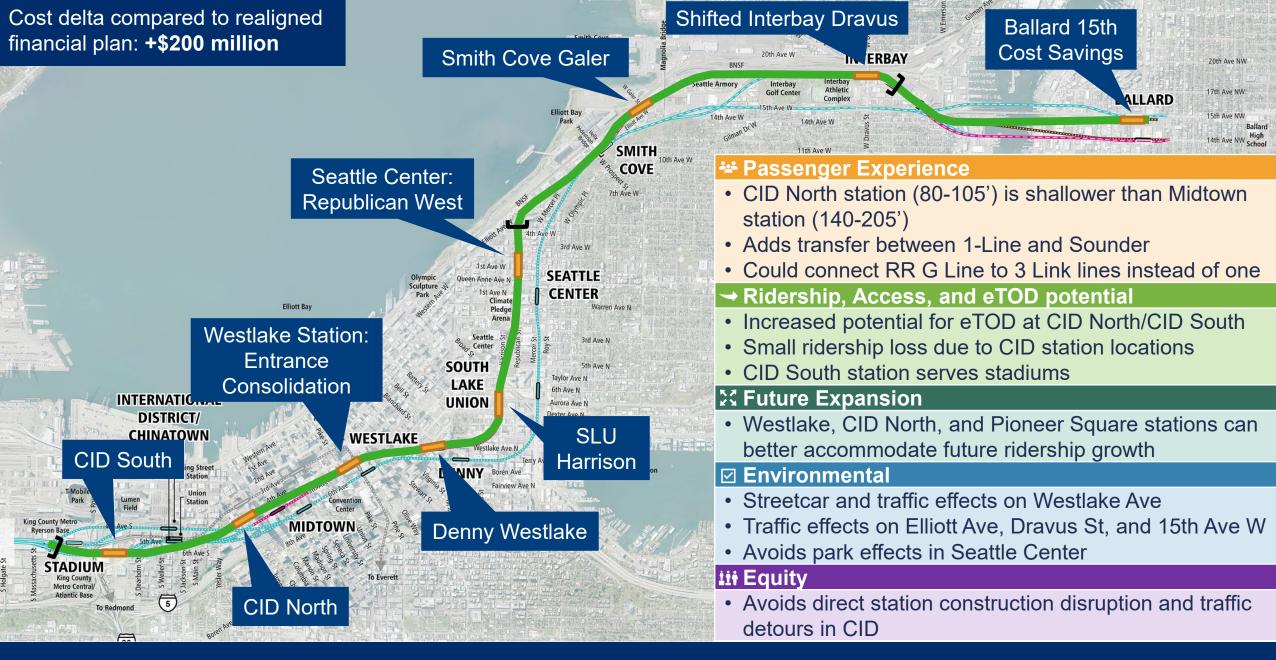
SODO Access to S Lander Street



Board discussion

Ballard Link Extension end-to-end scenarios









Passenger Experience

- CID North station (80-105') is shallower than Midtown station (140-205')
- Adds transfer between 1-Line and Sounder
- Could connect RR G Line to 3 Link lines instead of one

→ Ridership, Access, and eTOD potential

- Increased potential for eTOD at CID North/CID South
- Moderate ridership loss due to CID station locations and consolidation of Interbay/Smith Cove Stations
- CID South station serves stadiums

💢 Future Expansion

 Westlake, CID North, and Pioneer Square stations can better accommodate future ridership growth

I⊠ Environmental

- Streetcar and traffic effects on Westlake Ave
- Traffic effects on Mercer St and 15th Ave
- Avoids park effects in Interbay and Seattle Center

Lit Equity

 Avoids direct station construction disruption and traffic detours in CID







Feasibility

Fiber relocation schedule risk with Denny Terry station

Passenger Experience

- CID North station (80-105') is shallower than Midtown station (140-205')
- Adds transfer between 1-Line and Sounder
- Could connect RR G Line to 3 Link lines instead of one

→ Ridership, Access, and eTOD potential

- Increased potential for eTOD at CID North/CID South
- Small ridership loss due to CID station locations
- CID South station serves stadiums
- Poor transit integration at Denny Station

 Westlake, CID North, and Pioneer Square stations can better accommodate future ridership growth

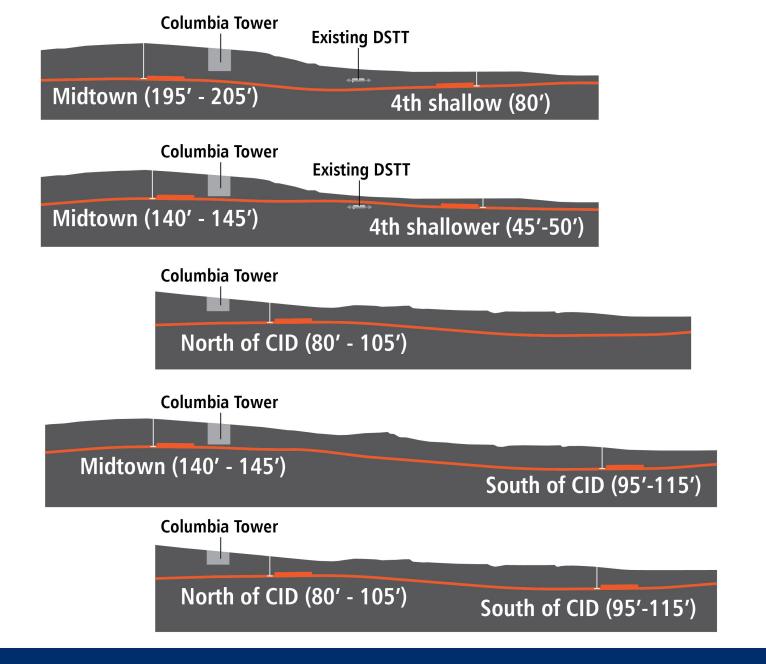
☑ Environmental

- Traffic effects on Elliott Ave, Dravus St, and 15th Ave
- Avoids park effects in Seattle Center

iii Equity

Avoids direct station construction disruption and traffic detours in CID

Ballard Link Extension results comparisons



Existing Station depth in the system:



Capitol Hill Station (65')



Roosevelt Station (80')



UW Station (95')



Beacon Hill Station (160')



CID 4th shallow & **CID 4th shallower**

To Everett

Westlake (

University Street

Pioneer Square

Stadium (

sodo (sodo

To SeaTac Airport/

Tacoma Dome

CID 4th shallow or CID 4th shallower

To West

Seattle

To Ballard

To Lynnwood/

Westlake

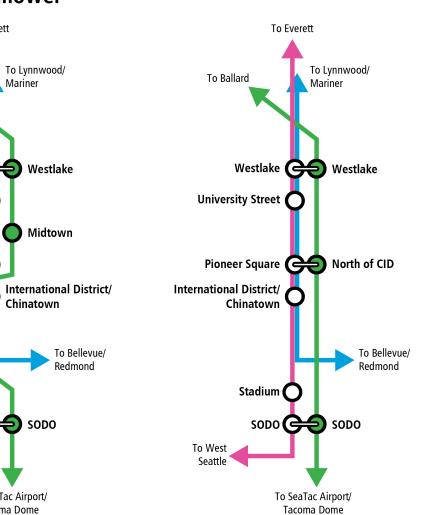
Midtown

Redmond

Chinatown

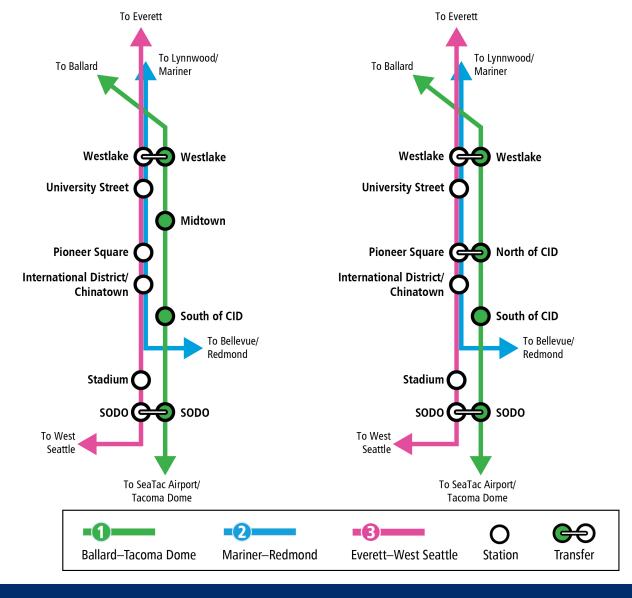
Mariner

North of CID only



Midtown + South of CID

North of CID + South of CID





	4th Avenue Shallow/ 4th Avenue Shallower	North of CID Only	Midtown + South of CID	North of CID + South of CID	
Walk time to neare	Walk time to nearest 1-Line station*: 0-5 min 6-10 min 11+ min				
Hing Hay Park	2 min	8 min	5 min	5 min	
Little Saigon	13 min	18 min	15 min	15 min	
Yesler Terrace	14 min	9 min	16 min	9 min	
Occidental Square	7 min	5 min	10 min	5 min	
Lumen Field	4 min	10 min	7 min	7 min	
T-Mobile Park	13 min	19 min	8 min	8 min	
Central Library	1 min	5 min	1 min	5 min	
Seattle City Hall	3 min	1 min	3 min	1 min	
Harborview	13 min	8 min	13 min	8 min	
Virginia Mason	10 min	13 min	10 min	13 min	
Frye Art Museum	10 min	10 min	10 min	10 min	
Sounder Station	1 min	4 min	6 min	4 min	
Amtrak Station	3 min	7 min	7 min	7 min	
Colman Dock	9 min	8 min	9 min	8 min	



North of CID +

Midtown +

Midtown +

	Midtown + 4th Avenue Shallow/ 4th Avenue Shallower	North of CID Only	Midtown + South of CID	North of CID + South of CID
Travel time between	en regional destinations:		0-5 min differ	ence 6-10 min difference
Hing Hay Park to SeaTac Airport		44 min	41 min	41 min
Occidental Square to SeaTac Airport	46 min	45 min	47 min	46 min
Bellevue Transit Center to Airport (via Link)	61 min*	64 min	66-69 min	64.5 min
Bellevue Transit Center to Airport (via STRIDE)		44-49 min	44-49 min	44-49 min

CID: Results comparison

	Refined 4th Avenue Shallow Station (CID-1a)	Station North of CID Only	Station North of CID and Station South of CID
Feasibility 🤷	Construction and schedule risk	-	-
Passenger Experience	 Shallow CID (80') and deep Midtown station (195-205') 3.2 min transfer time btw Link 	 Shallower station (80-105') 3.3 min transfer time btw Link* Fully below-grade Link transfer Adds transfer btw 1 Line and Sounder 	 Shallower stations (80-115') 3.3 min transfer time btw Link* Fully below-grade Link transfer Adds transfer btw 1 Line and Sounder
Ridership, Access, eTOD Potential	No expected change in ridershipLink light rail closure (6 to 7 weeks)	Small reduction in ridershipeTOD potential north of CID	Small reduction in ridershipeTOD potential north and south of CID
Future Expansion 👯 🛣	Does not preclude	 Does not preclude 	Does not preclude
Environmental 🗹	 Construction duration of 10-12 years Full closure of major traffic spine 4th Ave S for 4 years plus partial closure for 5 years Reduces displacement of ICON apartments (to two 2-month periods) 	 Construction duration of 6-7 years Full closure of James St for 4 years Displacement of KC Admin building and social service providers 	 Construction duration of 6-7 years Full closure of James St for 4 years and closure of 6th Ave S (south of Seattle Blvd) for 5-6 years Displacement of KC Admin building and social service providers
Equity ࠠ	 Centralized access to CID, PSQ, and transit modes 4th Ave S traffic detour effects 	 Avoids direct station construction disruption and traffic detours in CID 	 Avoids direct station construction disruption and traffic detours in CID
compared to realigned financial plan in \$2019 (Pike to Holgate)	+\$700M	-\$360M	+\$160M



CID: Results comparison

	Refined 4th Avenue Shallow Station (CID-1a)	4th Avenue Shallower Station	Station North of CID and Station South of CID
Feasibility 🏠	Construction and schedule risk	 In addition to impacts of CID-1a, added risk to DSTT and BNSF 	-
Passenger Experience	 Shallow CID (80') and deep Midtown station (195-205') 3.2 min transfer time btw Link 	 Shallower CID (40-45') and Midtown stations (140-145') 2.5 min transfer time btw Link 	 Shallower stations (80-115') 3.3 min transfer time btw Link* Fully below-grade Link transfer Adds transfer btw 1 Line and Sounder
Ridership, Access, eTOD Potential	No expected change in ridershipLink light rail closure (6 to 7 weeks)	 No expected change in ridership eTOD potential north of CID Link light rail closure (6 to 7 weeks) 	Small reduction in ridershipeTOD potential north and south of CID
Future Expansion	Does not preclude	Does not preclude	 Does not preclude
Environmental 🗹	 Construction duration of 10-12 years Full closure of major traffic spine 4th Ave S for 4 years plus partial closure for 5 years Reduces displacement of ICON apartments (to two 2-month periods) 	Washington St for two yearsAdds reconstruction of Yesler Bridge	 Construction duration of 6-7 years Full closure of James St for 4 years and closure of 6th Ave S (south of Seattle Blvd) for 5-6 years Displacement of KC Admin building and social service providers
Equity 🛂 🕇 🛉	Centralized access to CID, PSQ, and transit modes4th Ave S traffic detour effects	 Centralized access to CID, PSQ, and transit modes 4th Ave S traffic detour effects 	 Avoids direct station construction disruption and traffic detours in CID
compared to realigned financial plan in \$2019 (Pike to Holgate)	+\$700M	+\$800M	+\$160M

South Lake Union: Results comparison

	Denny Station at Westlake Ave (DT-1)	Denny Station at Terry Ave (DT-2) with Mix-and-Match	Denny Station at Terry Ave (DT-2) with Mix-and Match and Entrance Refinements
Feasibility 🏠	-	 Construction and schedule risk 	Construction and schedule risk
Passenger Experience	Convenient transfer to transit on Westlake Avenue	 Less convenient transfer to transit on Westlake Avenue 	 Shortens walk to transit lines on Westlake Avenue Adds station access to both sides of Denny Way
Ridership, Access, eTOD Potential	-	Minimal impact to ridership	Minimal impact to ridership
Future Expansion 🔭	Does not preclude	 Does not preclude 	Does not preclude
Environmental 🗸	 Full closure of Westlake Ave between 7th Ave and Denny Way for 4 years Streetcar effects 	 Full closure of Terry Ave between Denny Way and Thomas St for 4 years Avoids streetcar effects 	 Full closure of Terry Ave between Denny Way and Thomas St for 4 years Avoids streetcar effects
Equity 🚉 🛊	-	-	-
compared to realigned financial plan in \$2019	-	+\$200M	+\$190M



Seattle Center: Results comparison

	Seattle Center Station at Republican (DT-1)	Seattle Center Station Shifted West on Republican	Seattle Center Station at Mercer (DT-2) with Mix-and-Match
Feasibility 🏠	-	-	-
Passenger Experience	-	-	-
Ridership, Access, eTOD Potential	-	-	-
Future Expansion 🔀	 Does not preclude 	 Does not preclude 	Does not preclude
Environmental 🗸	 Full closure of Republican St between Queen Anne N and Warren Ave N for 5 years Affects Seattle Center/ NW Rooms during construction 	 Full closure of Republican St between 3rd Ave W and Queen Anne Ave N for up to 5 years Avoids effects to Seattle Center Affects Uptown Cinema during construction 	 Partial closure of Mercer St between Warren Ave N and 1st Ave W for 3.5 years Avoids effects to Seattle Center Fewer residential and more business displacements than DT-1
Equity 🛔 🛊 🛊	-	-	-
Cost compared to realigned financial plan in \$2019	-	+\$60M	+\$210M



Interbay-Smith Cove: Results comparison

	Smith Cove Station at Galer Street (SIB-1)	Modified SIB-1 Alignment	Consolidated Alignment
Feasibility 🏠	-	-	 Ongoing analysis of unstable slope risk on Queen Anne hillside
Passenger Experience	-	 Adds entrances on both sides of Dravus St at Interbay Station 	-
Ridership, Access, eTOD Potential	 Allows some development adjacent to station 	Allows some development adjacent to station	 Reduces access due to single consolidated station in Interbay Allows development adjacent to station
Future Expansion 👯 🛪	 Does not preclude 	 Does not preclude 	Does not preclude
Environmental 🗹	 Affects SCL, Seattle Storm, and KCWTD properties Permanent columns within Elliott Ave and park effects in Interbay 	 Avoids SCL and Seattle Storm properties Permanent columns within Elliott Ave and park effects in Interbay Partial closure of Dravus Street for 18 months 	 Avoids SCL, Seattle Storm, and KCWTD properties Avoids columns within Elliott Ave and park effects in Interbay Fewer residential and more business displacements than SIB-1 Partial closure of major traffic spine 15th Ave W for 18 months
Equity i i i	-	-	-
Cost compared to realigned financial plan in \$2019	-	-\$30M	+\$210M



Ballard Tunnel 15th Ave: Results comparison

	Tunnel 14th Ave (IBB-2a)	Tunnel 15th Ave (IBB-2b)	Tunnel 15th Ave Cost Savings
Feasibility 🏠	¥	-	-
Passenger Experience	Convenient bus transfer	Less convenient bus transfer	 Less convenient bus transfer Optional smaller west entrance could limit vertical circulation capacity
Ridership, Access, eTOD Potential	 15-min walk to Ballard core with crossing of 15th Ave W eTOD potential on Safeway and other sites 	 10-min walk to Ballard core eTOD potential on Safeway and other sites 	 10-min walk to Ballard core Reduces access from southeast Reduces eTOD opportunity
Future Expansion	Does not preclude	Does not preclude	Optional smaller west entrance may not accommodate future ridership growth
Environmental 🗸	 Displaces Safeway store Full closure of 14th Ave NW btw 52nd and 58th for 3 years Partial closure of NW Market St at 14th Ave NW for 9 mo. 	 7 more residential and 2 more business displacements than IBB-2a Partial closure of NW Market St at 15th Ave NW for 3 years 	 7 more residential displacements than IBB-2a Partial closure of NW Market St at 15th Ave NW for 3 years Avoids Safeway store displacement
Equity 🛔 🛊	-	-	-
Cost compared to realigned financial plan in \$2019	+\$0M	+\$200M	+\$70M (or +\$30m with optional smaller west entrance)



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:

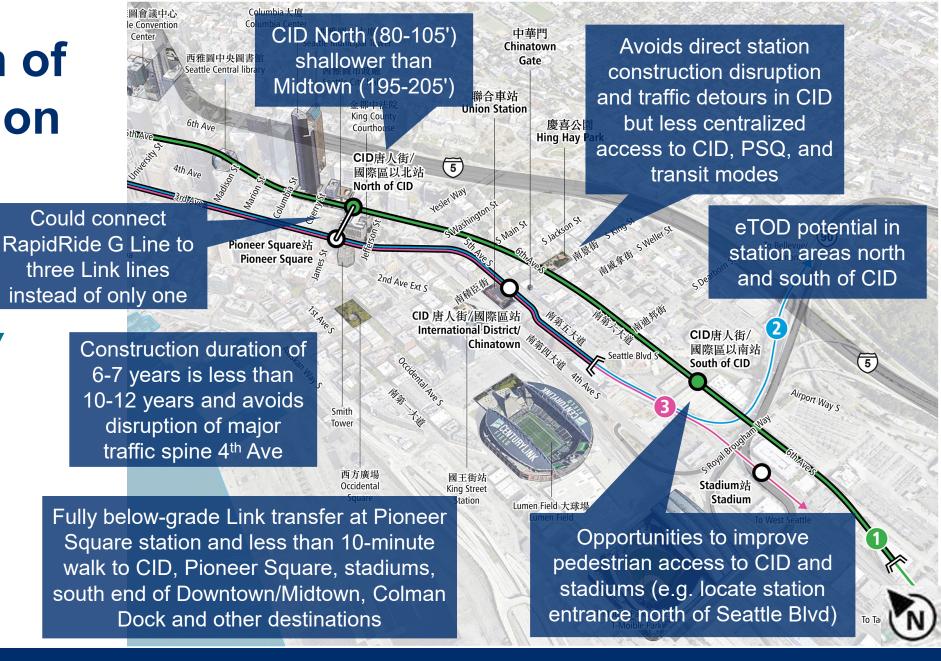
- Scenarios including CID 4th Shallow(er) will require additional time for construction (~2 yrs) due to 4th Ave viaduct reconstruction, traffic detour phasing, etc.
- Potential risk of additional delay for CID 4th Shallow(er) due to poor ground conditions, deep Midtown station, proximity to BNSF and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

Board discussion

Example Modified Preferred Alternative

Station North of CID and Station South of CID

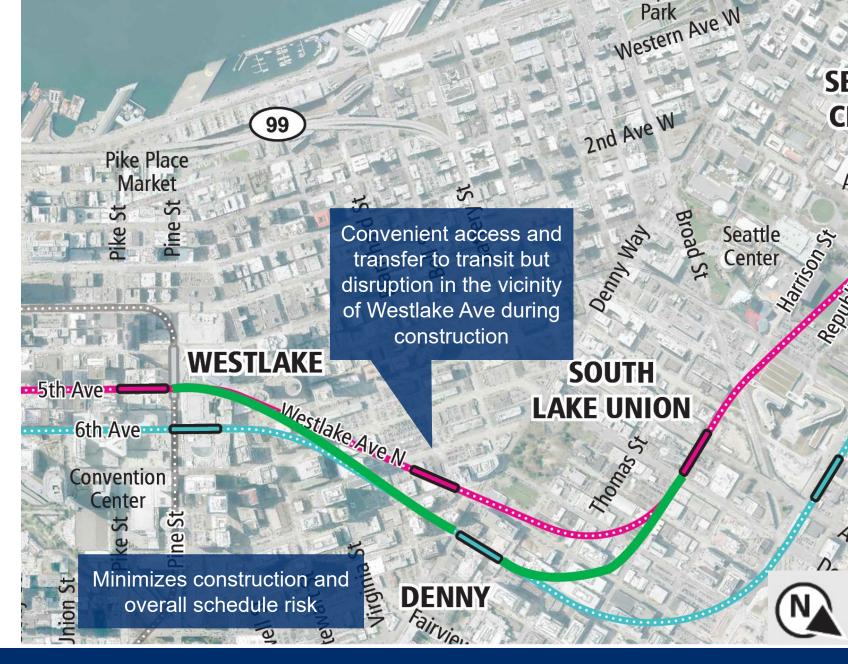
Compared to Refined 4th Avenue Shallow Station (CID-1a)





Denny Station at Westlake Ave (DT-1)

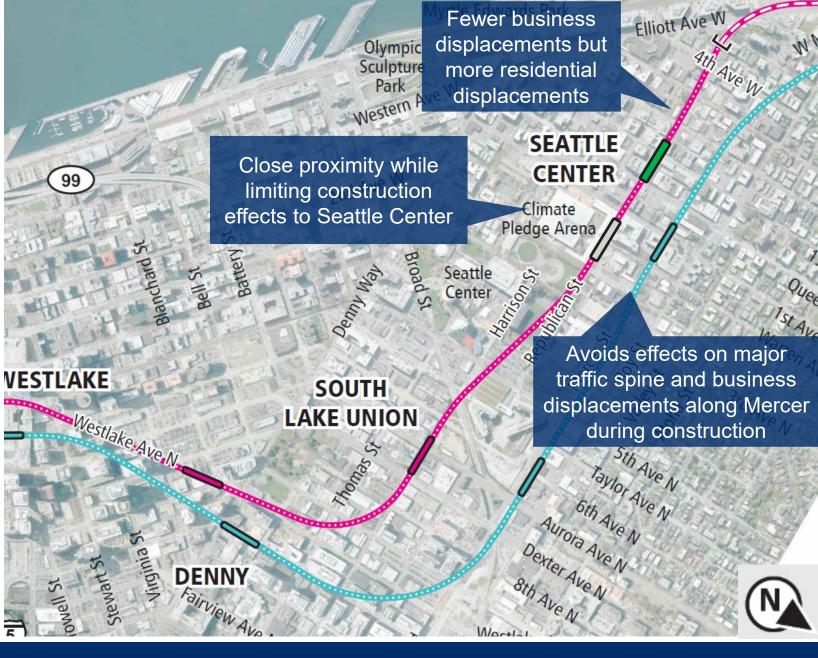
Compared to Denny Station at Terry Ave (DT-2) with Mix-and-Match





Seattle Center Station shifted west on Republican

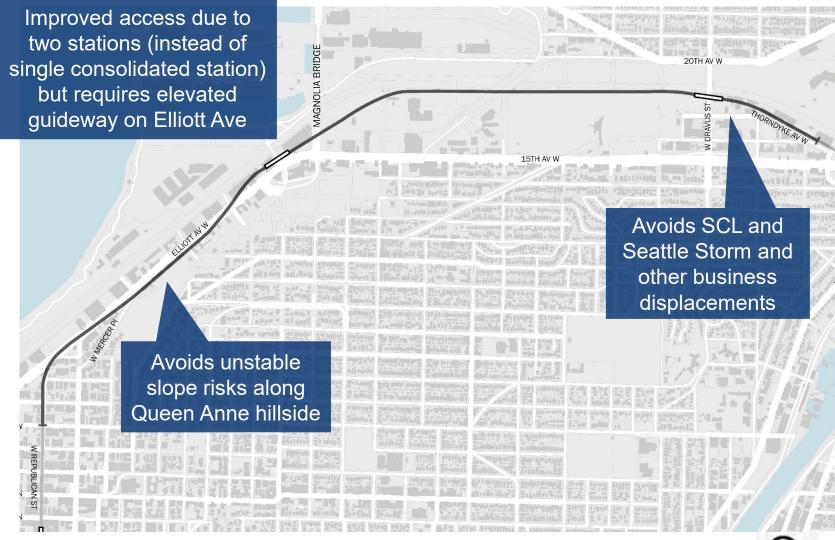
Compared to Seattle Center Station at Mercer (DT-2) with Mixand-Match





Modified SIB-1 Alignment

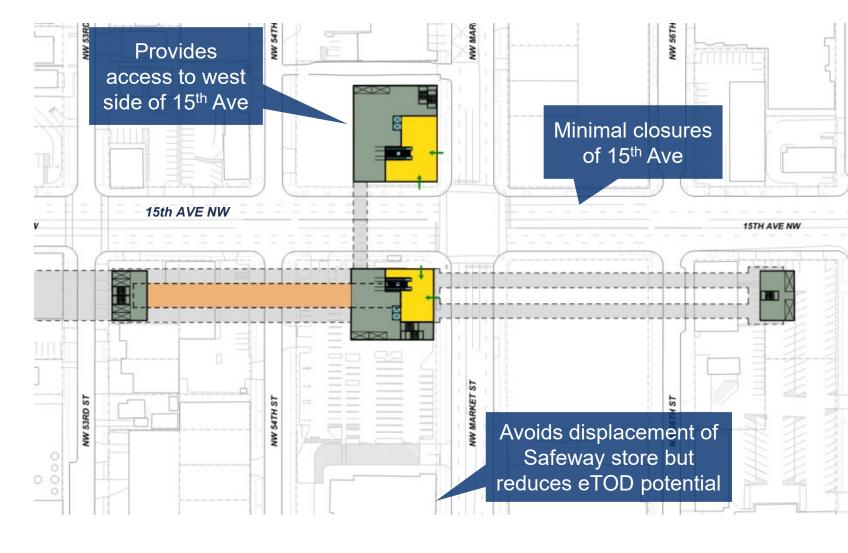
Compared to Consolidated Alignment





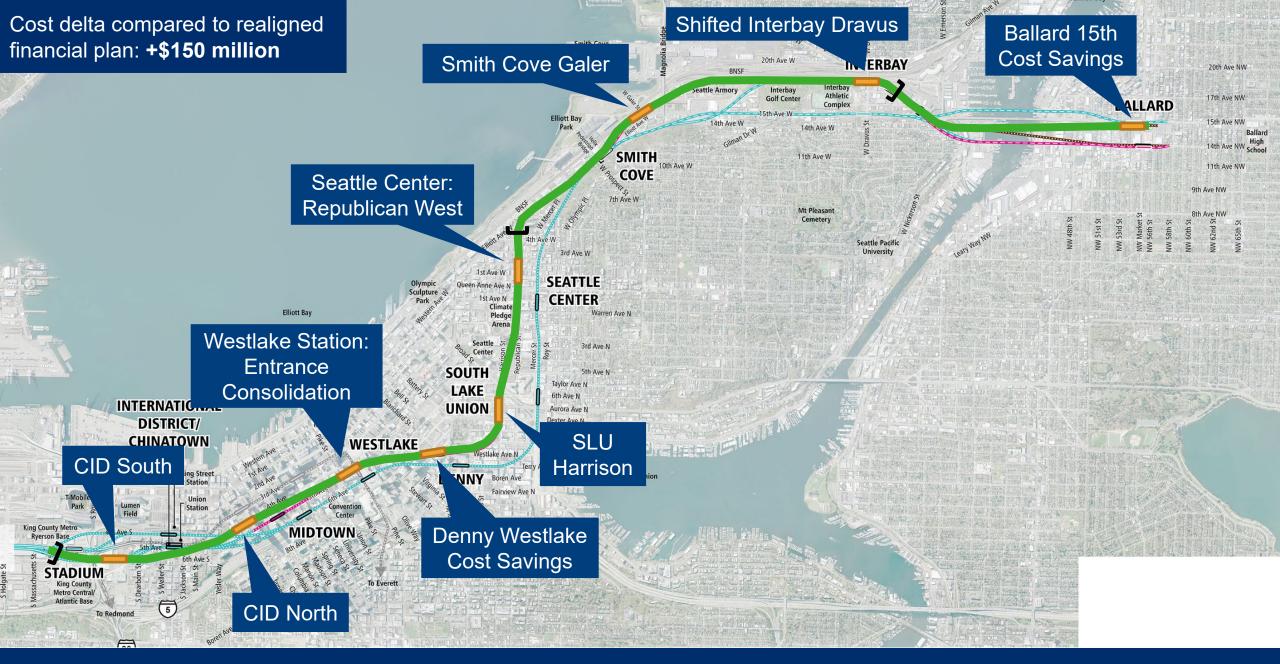


Tunnel 15th Ave Cost Savings



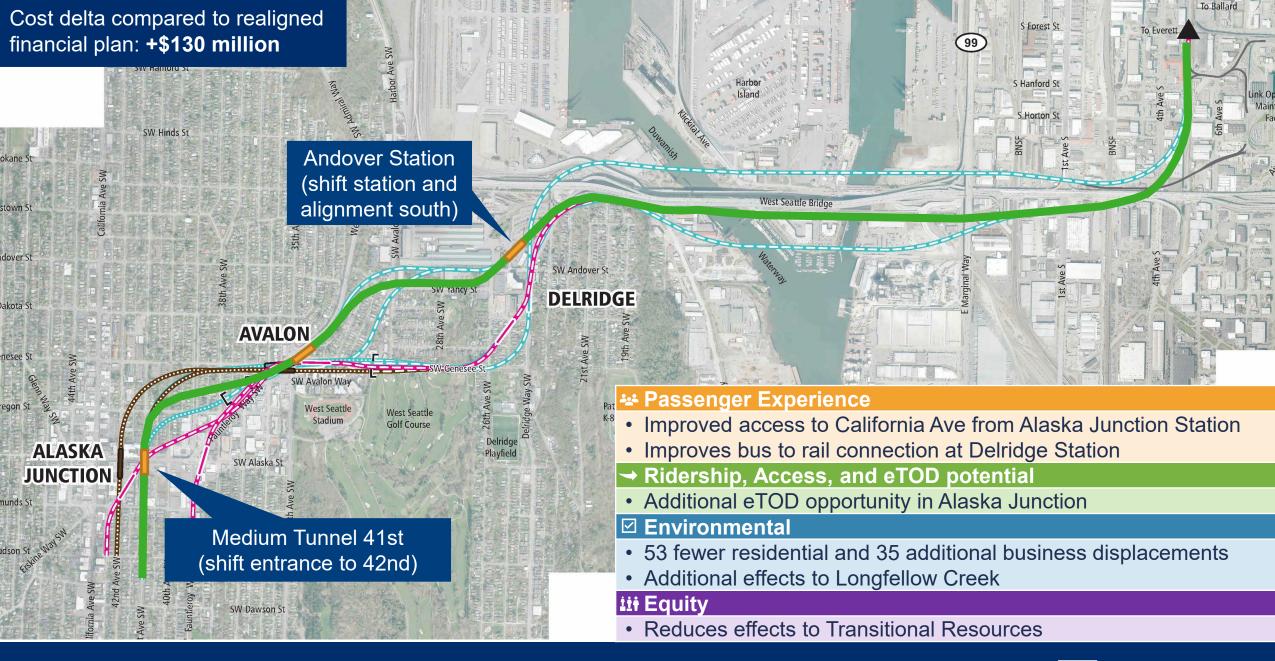






Board discussion

West Seattle Link Extension end-to-end scenario



Funding

M2022-57: "These studies will also determine ... funding needs"

- 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 City and County, 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: 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

Thank you.



soundtransit.org





