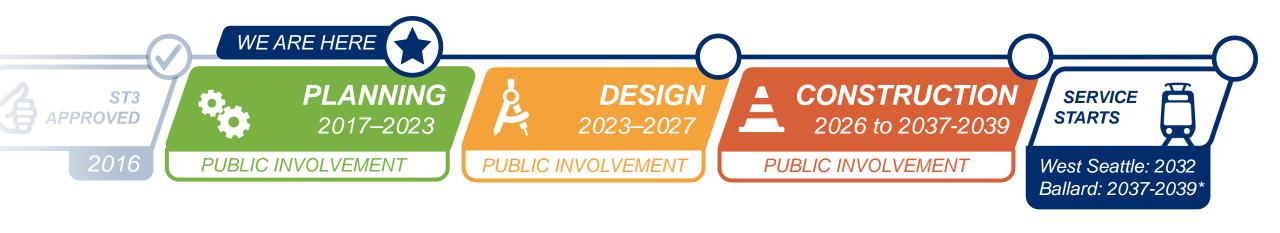
# West Seattle and Ballard Link Extensions Further Studies Results Summary

Community Oversight Panel 3/8/2023



# West Seattle and Ballard Link Extensions Project timeline







2016



# PLANNING



2017-2019

**Alternatives** development

- Feb-March 2018: Early scoping
- Feb-April 2019: Scoping
- May-Oct 2019: Board identified preferred alternatives and other DEIS alternatives

2019-2023

**Environmental review** 

**Early 2022: Publish Draft EIS** 

Public comment period

Board confirms or modifies preferred alternatives

2023: Publish Final EIS

Board selects projects to be built

Federal Record of Decision



#### **Ballard** Interbay Seattle South Center Lake Union Smith Cove Denny Link light rail Westlake West Seattle and Ballard Midtown Link Extensions\* Preferred alternatives Preferred alternatives with Puget Int'l District/ Sound third-party funding Chinatown Other Draft EIS alternatives Stadium Route profiles Flevated route ↑Ballard Link Tunnel route **↓**West Seattle Link Surface route SODO Delridge West Seattle Link A Preferred Alternative N

# Draft EIS alternatives What we're studying in this phase

- Preferred Alternatives
- Preferred Alternatives with Third-Party Funding
- Other Draft EIS alternatives

\*July 2022: The Sound Transit Board identified the preferred alternative for the West Seattle Link Extension and will also consider the At-Grade South Station Option (SODO 1-b) as a possible Preferred Alternative. Further study and community input are required before the Board confirms or modifies the preferred alternative for the Ballard Link Extension.



### 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

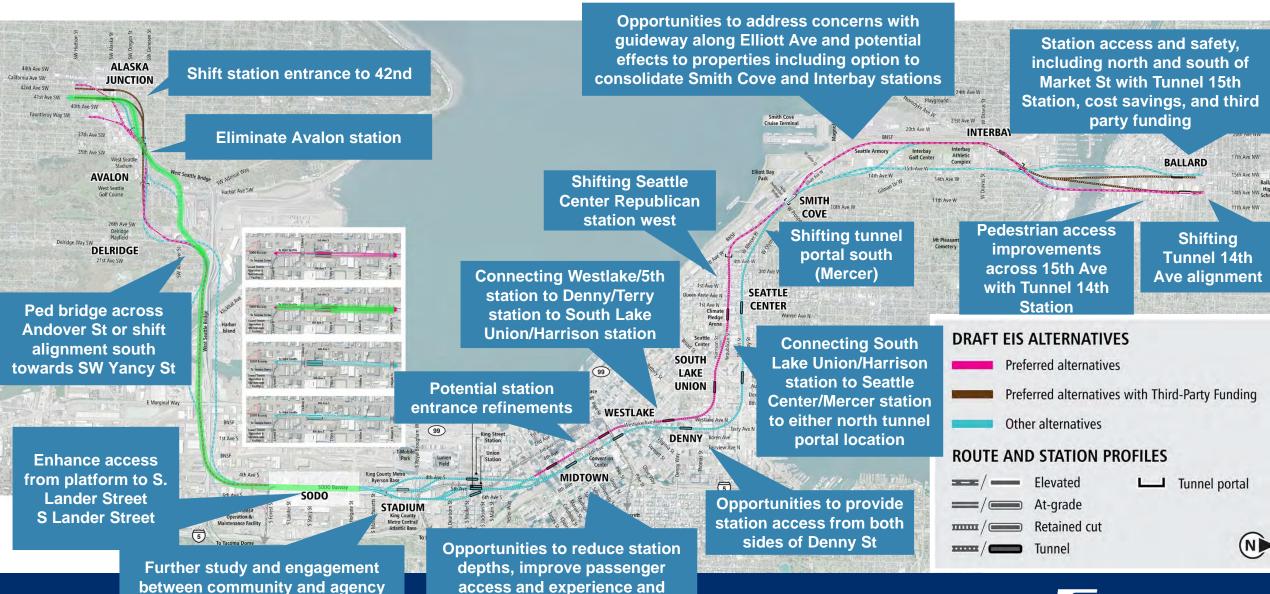
Feb 23, Board: Community feedback summary

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



# Today's discussion

#### **Further Studies**

- Ballard Link Extension
  - By segment (CID, Downtown, Interbay-Smith Cove, Ballard)
  - Example modified preferred alternative
- West Seattle Link Extension

# Chinatown-International District (CID) Further Studies



#### CID Further Studies Focus

Based on the Board Motion, the following study elements guided the further studies in CID:

- Seek to address remaining questions, minimize potential impacts, and maximize community benefits
- Explore how to create an integrated, well-connected hub for all modes, opportunities to enhance ridership and access, activate or modify use of Union Station and plaza, as well as funding and cost savings opportunities
- Include study concepts requested by community and agency partners, including but not limited to work to define a 4th Avenue shallow tunnel option with the goal to maximize benefits while minimizing costs and impacts

#### CID Engagement Process



Process informed by CID Engagement Toolkit and discussions with community

#### **Key Questions**

- What hasn't worked with previous engagement?
- What does a transparent process look like?
- What would you like to see in the process?
- Would you like a facilitator?

#### WHAT COULD THIS PROCESS LOOK LIKE?

Iterative, facilitated, and responsive process adapts as needed to serve community

#### Oct. 13, 2022

#### **Open House**

- Context and Value
- · How we got here
- Community informs engagement process and scope of studies

#### Nov. 2, 2022

#### Workshop 1: Options

- Bring forward and evaluate
- · Breakout groups
- Explore challenges and opportunites and identify refinements

#### Nov. 16, 2022

#### Workshop 2: Tradeoffs

 Discuss tradeoffs and refine options



#### Dec. 14, 2022

#### Workshop 3: Key Issues

- Problem solving around key issues for each option
- Discussion of mitigation measures



#### Jan. 5, 2023

#### Workshop 4: Summary

 Bring it all together and get feedback on direction for Sound Transit Board



#### February 2023

Sound Transit Board: Status Report



#### SUPPORTING THE PROCESS

General awareness building including media, social media posts, ethnic media



Optional small group, topic specific meetings (potential continuation of virtual breakout groups, focus groups, etc.)

Resident and business owner outreach with Community Liaisons



Targeted Level of Community Engagement: Involve
We will aim to engage at a Collaborate level wherever possible.

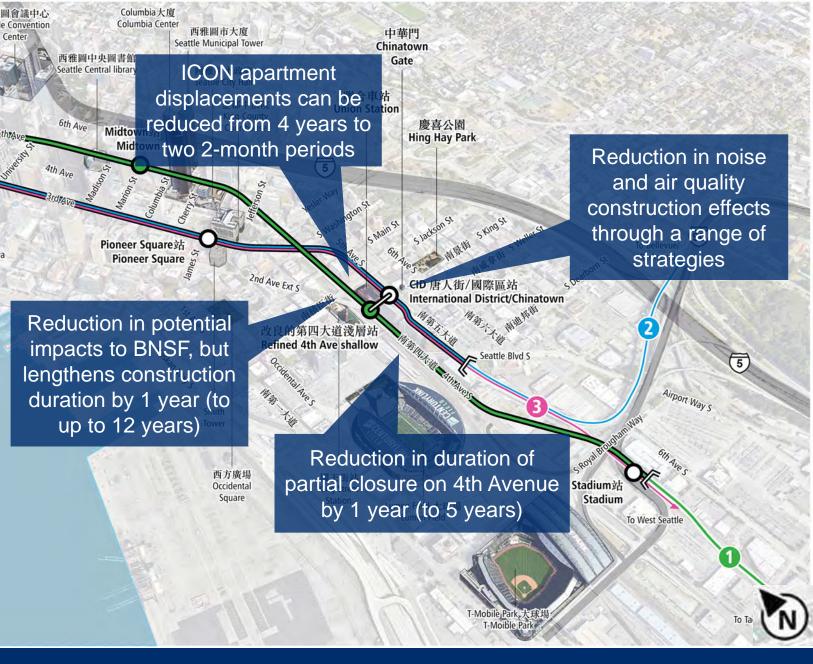


# Refinements to 4th Ave Shallow (CID-1a)

**Maximize community** benefits while minimizing costs and impacts

Cost (Pike to Holgate): \$3.1 billion

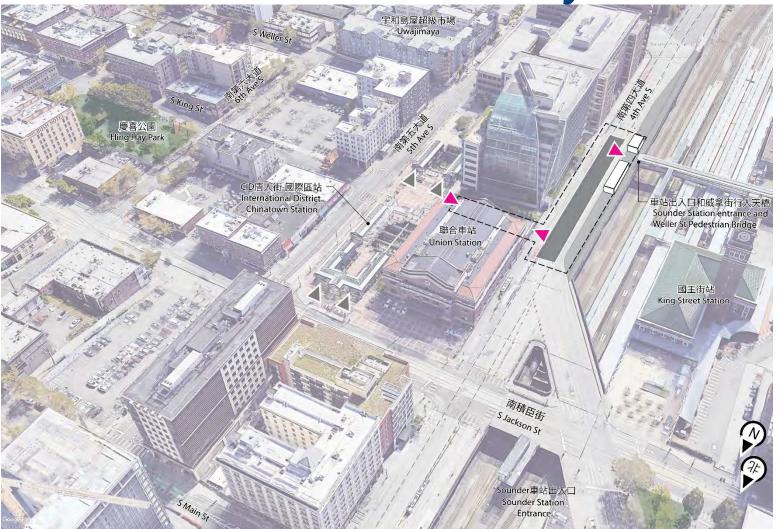
Cost delta compared to realigned financial plan: +\$700 million





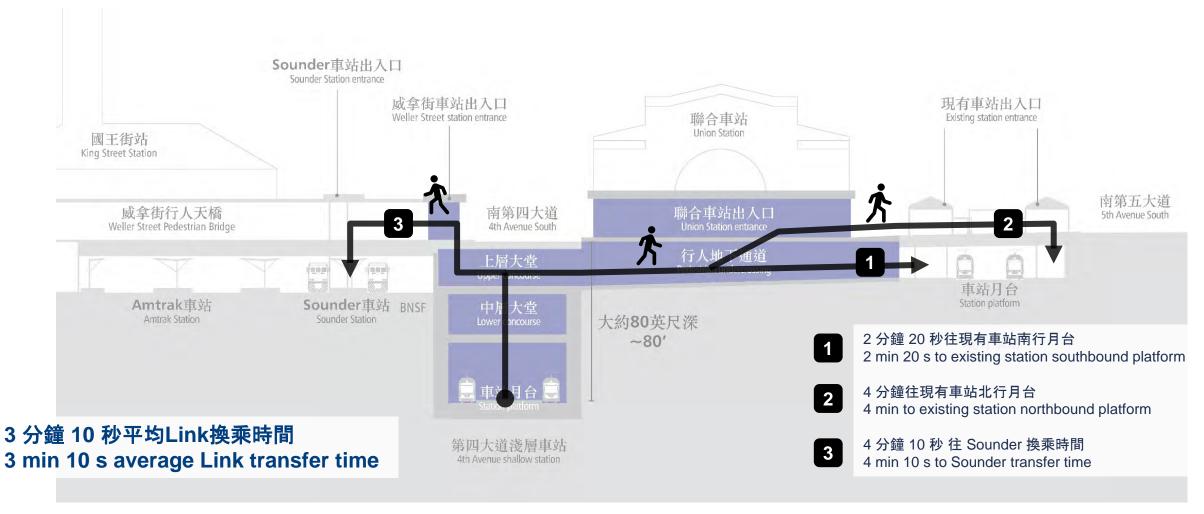
### 第四大道淺層方案:車站佈局

4th Ave Shallow: station layout





# 第四大道淺層方案:轉乘通道和時間 4th Ave Shallow: transfer pathways and times





# **Station North** of CID

Other ideas from community and agency partners

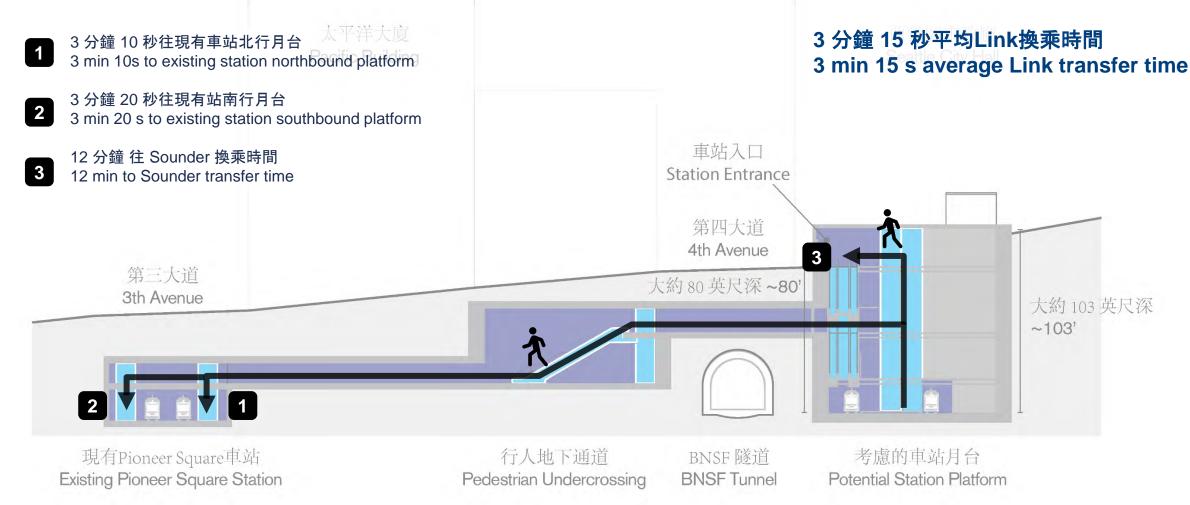
Consolidates Displaces King County Midtown and Admin building and **CID Stations** social services Courthouse CID唐 eTOD opportunity 5 Temporary closure of Avoids direct station James St for 4 years construction 2nd Ave Ext S disruption in CID **Accommodates** CID 唐人街/國際區站 International District/ direct transfers Chinatown at Pioneer **Square Station** Could facilitate transit integration with Madison BRT Stadium站 Within 10-minute walk to CID, Pioneer Square, Colman Dock, and south end of Downtown/Midtown T-Moible Park

Cost (Pike to Holgate): \$2.05 billion

Cost delta compared to realigned financial plan: -\$360 million



# CID 唐人街-國際區以北車站: 車站佈局 North of CID: transfer pathways and times



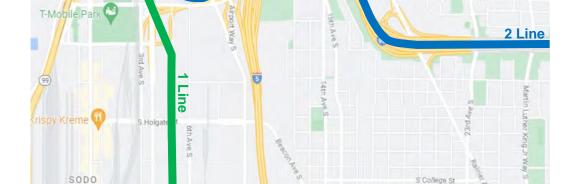


## Transfer Difference for 2 Line (WB) to 1 Line (SB)

JUDKINS PARK

#### **Transfer at CID** Harborview Medical Ctr Pioneel YESLER TERRACE E Yesler Way



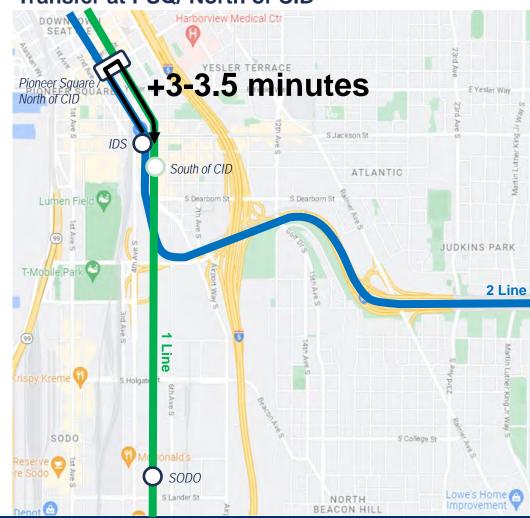


NORTH

BEACON HILL

SODO

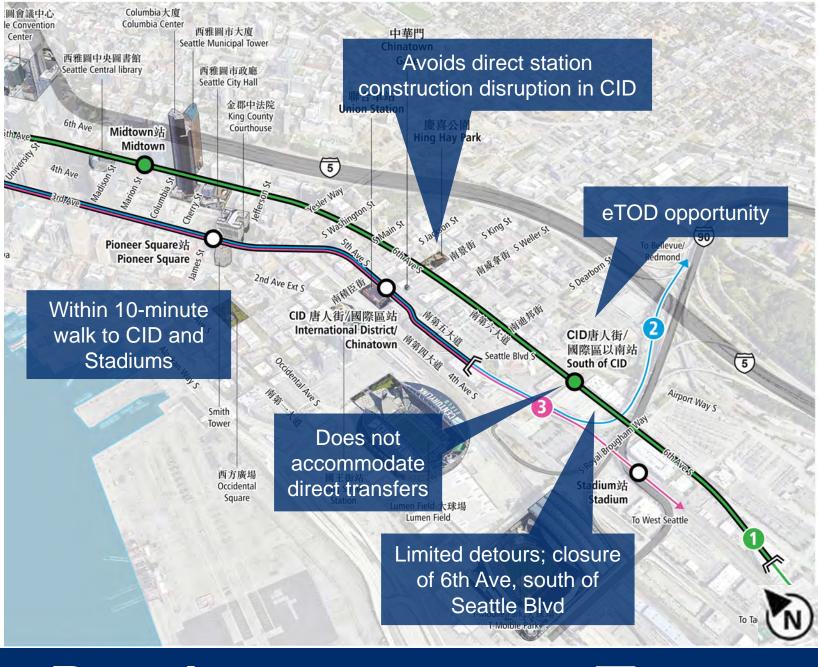
#### Transfer at PSQ/ North of CID



## **Station South** of CID Other ideas from community and agency partners

Cost (Pike to Holgate): \$2.5 billion

Cost delta compared to realigned financial plan: +\$80 million

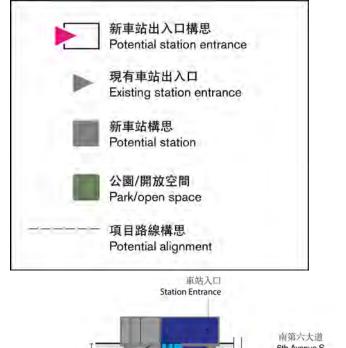


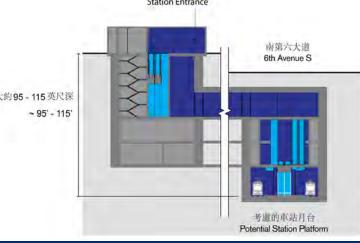


CID唐人街-國際區以南車站: 車站佈局

South of CID: station layout

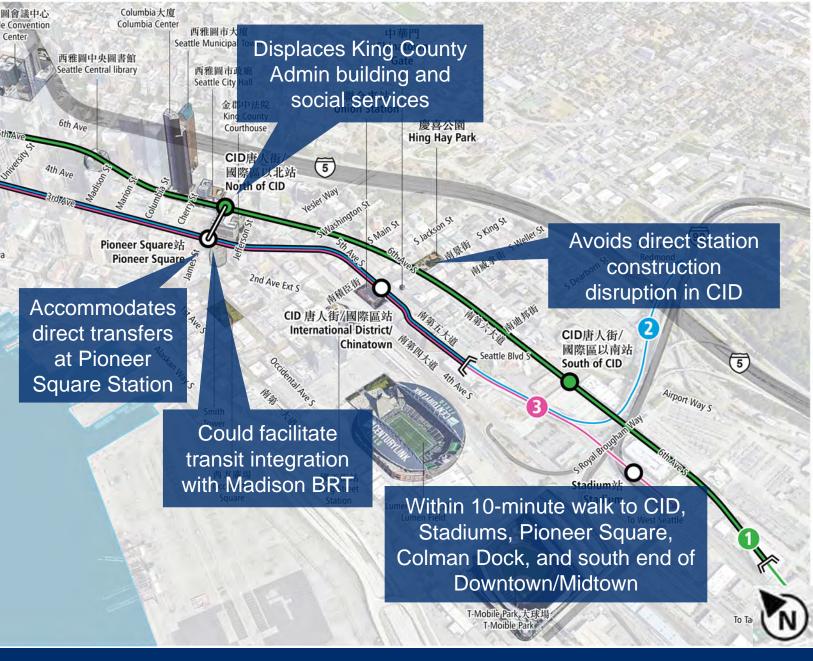






# Station North of CID and Station South of CID Other ideas from community and agency partners

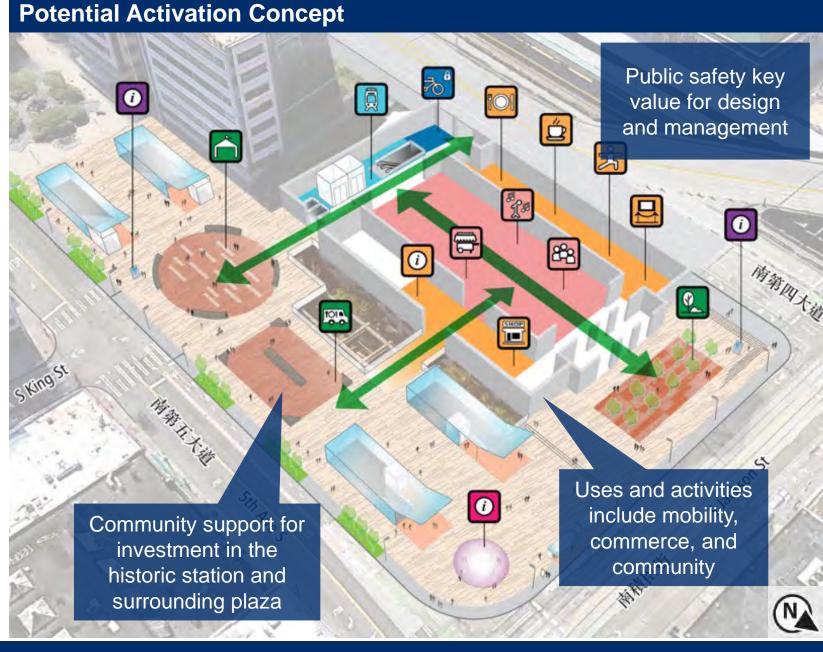
Cost (Pike to Holgate): **\$2.55 billion**Cost delta compared to realigned financial plan: **+\$160 million** 





## **Union Station Activation**

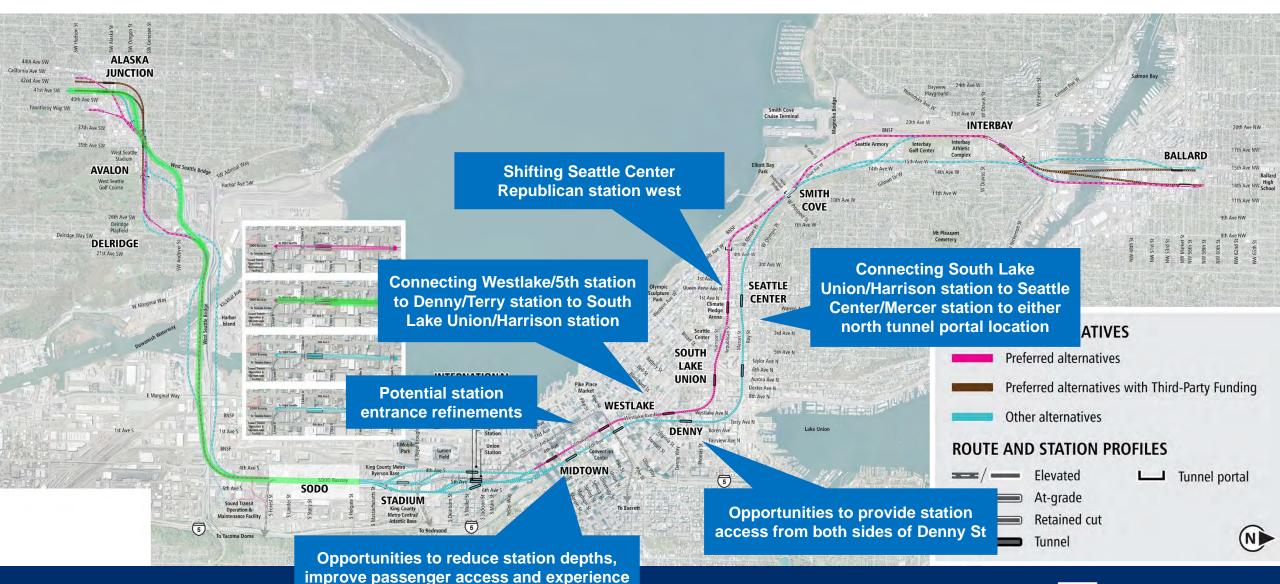
Activate and/or modify uses of **Union Station and** the adjacent plaza





# Downtown Further Studies

#### Ballard Link Extension: Further studies - Downtown



and refine Midtown station entrance

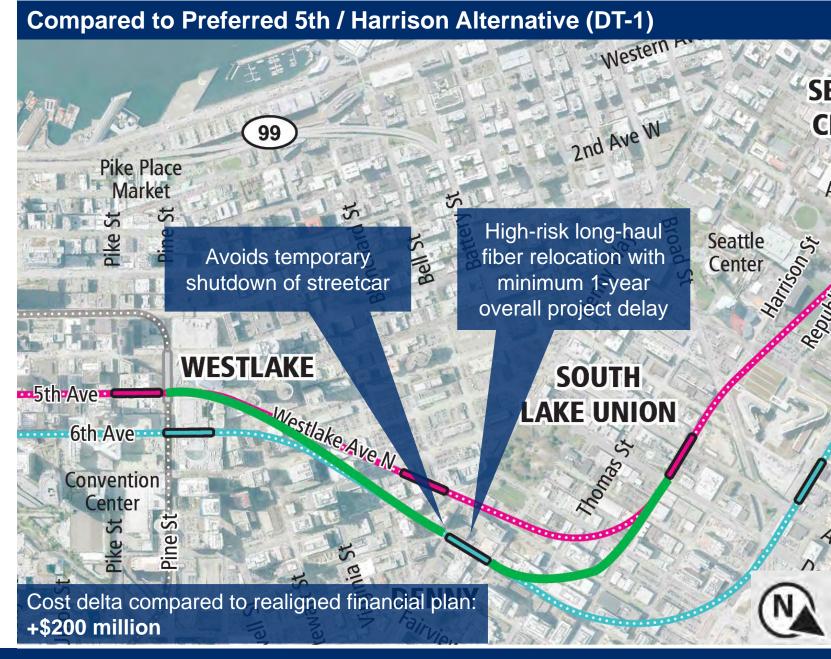


# South Lake Union: Mix-andMatch

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

Study focus:

Feasibility of mix-and-match

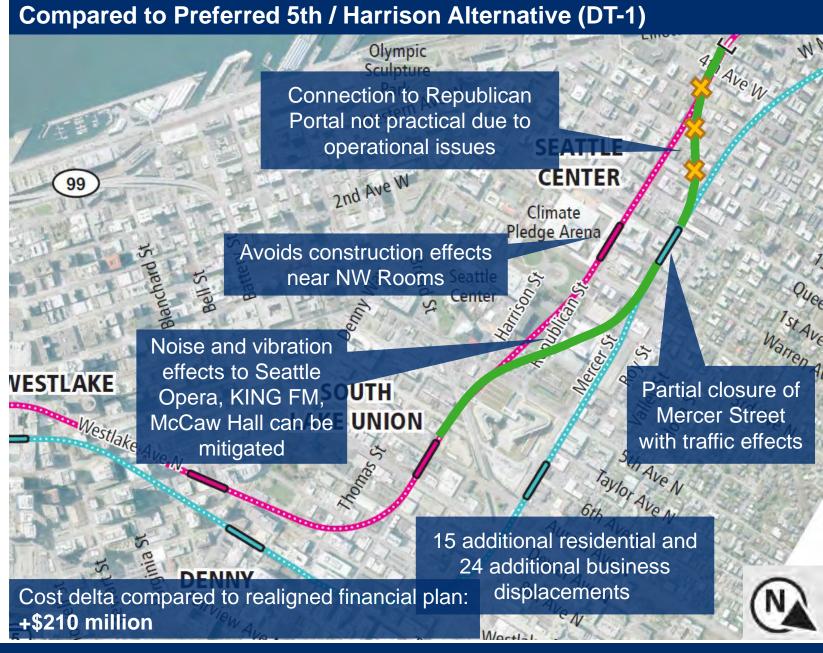


# **Seattle Center: Mix-and-Match**

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

Study focus:

Feasibility of mix-and-match





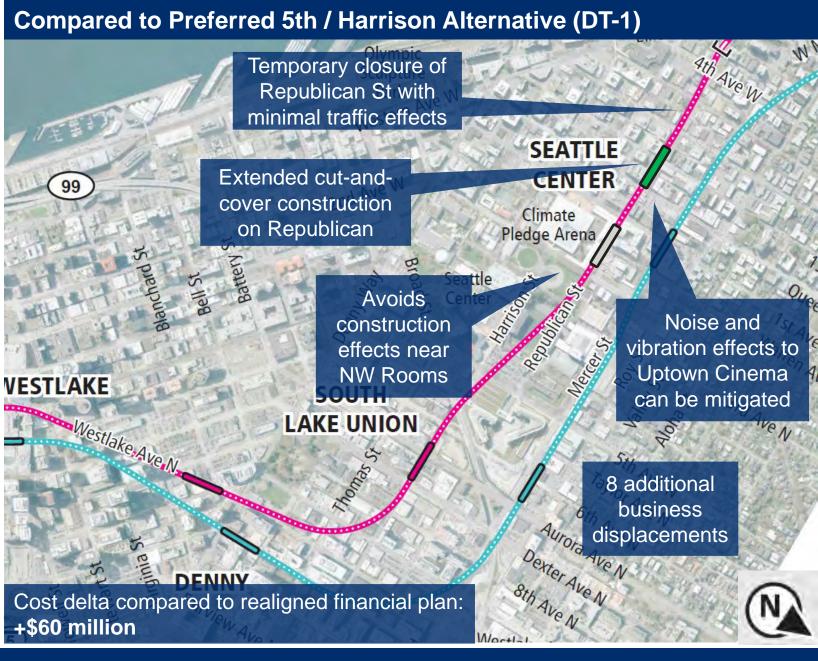


# Seattle Center: Republican West

Shifting Seattle Center Republican station west

Study focus:

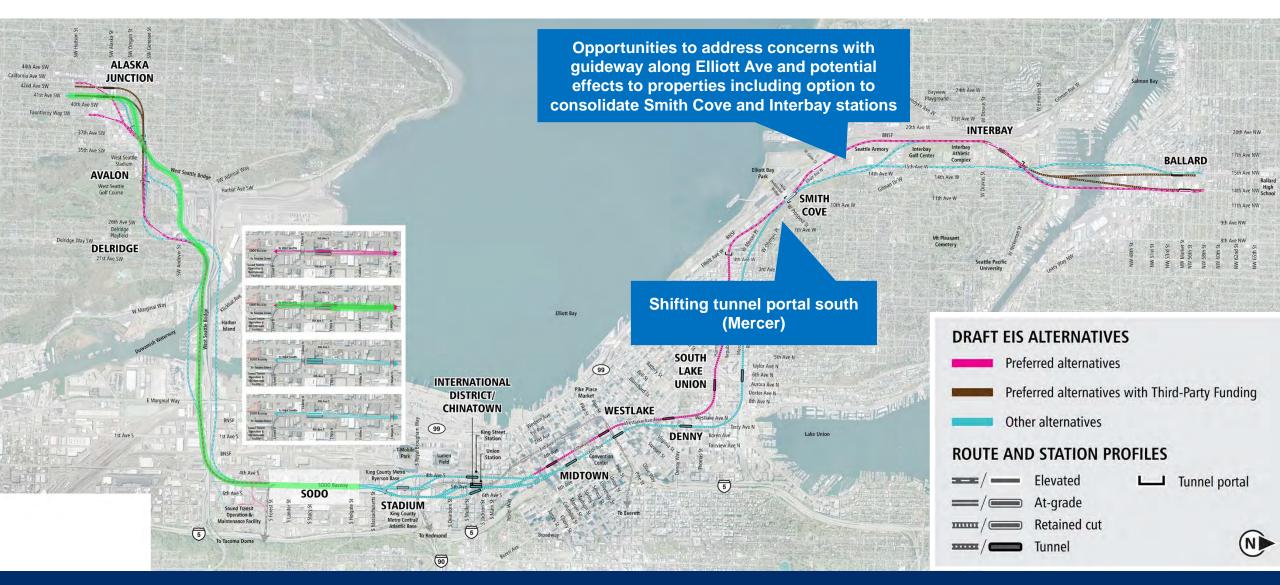
Feasibility of shifting station west





# Interbay-Smith Cove Further Studies

## Ballard Link Extension: Further studies – South Interbay



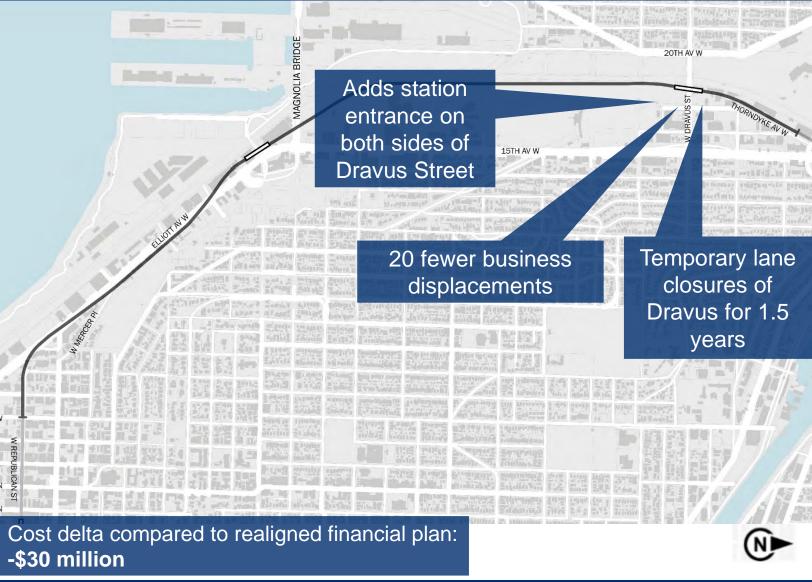
# **Modified SIB-1 Alignment**

Shift Interbay
Station south to
straddle below
Dravus St

#### Study focus:

**Avoid Seattle City Light and Seattle Storm properties** 

Compared to Preferred Galer Street Station/Central Interbay Alternative (SIB-1) to Preferred Tunnel 14th/15th Avenue (IBB-2a/b)





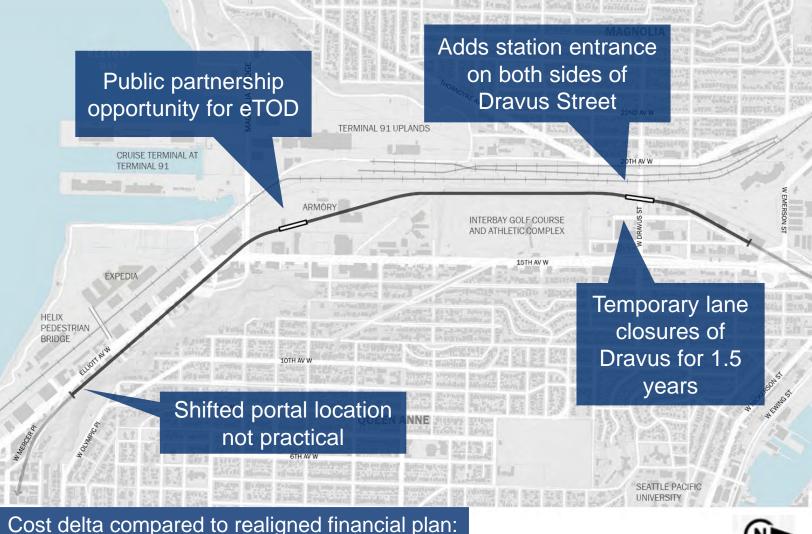
# Modified SIB-3 Alignment

Shift north portal location south and shift Smith Cove Station north of Magnolia Bridge

#### Study focus:

- Avoid unstable slope risk on Queen Anne hillside
- Avoid Seattle City Light and Seattle Storm properties

Compared to Prospect Street Station/Central Interbay Alternative (SIB-3) to Preferred Tunnel 14th/15th Avenue (IBB-2a/b)





N/A

# Consolidated Alignment

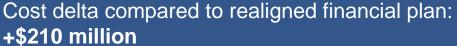
Consolidate Smith
Cove and Interbay
Stations with below
grade alignment

#### Study focus:

- Avoid concerns with guideway along Elliott Ave
- Avoid unstable slope risk on Queen Anne hillside
- Avoid Seattle City Light and Seattle Storm properties

Compared to Preferred Galer Street Station/Central Interbay Alternative (SIB-1) to Preferred Elevated 14th Ave Alternative (IBB-1a)



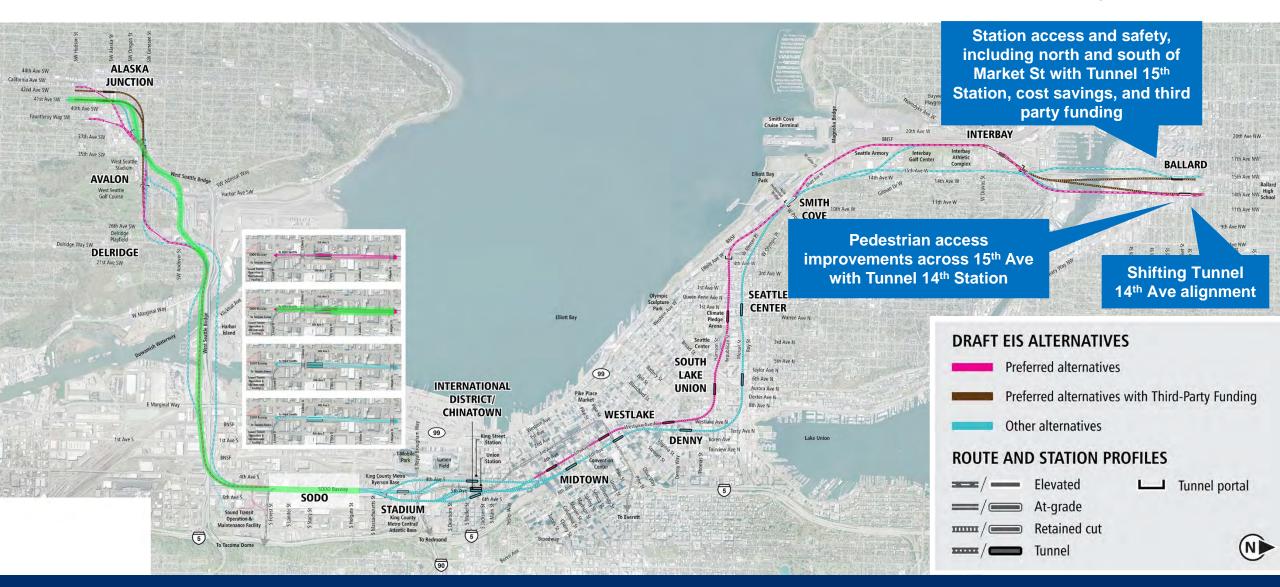






# Ballard Further Studies

## Ballard Link Extension: Further studies - Interbay/Ballard

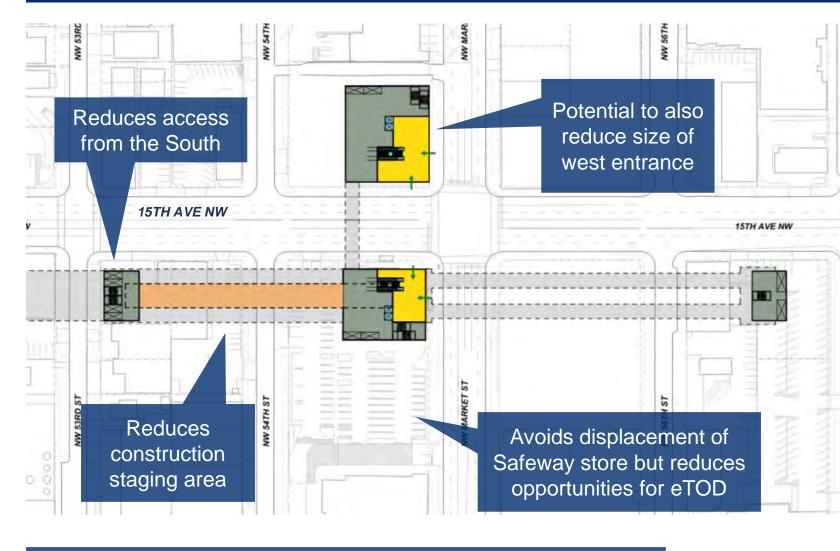


## **Tunnel 15th Ave Cost Savings: Draft EIS Station Entrance** Refinements Reduce size of east station entrance and eliminate south entrance

Study focus:

**Reduce costs** 

#### **Compared to Preferred Tunnel 15th Avenue Station Option (IBB-2b)**



Cost delta compared to realigned financial plan:

**+\$70 million** (or **+\$30** million with optional smaller west entrance)

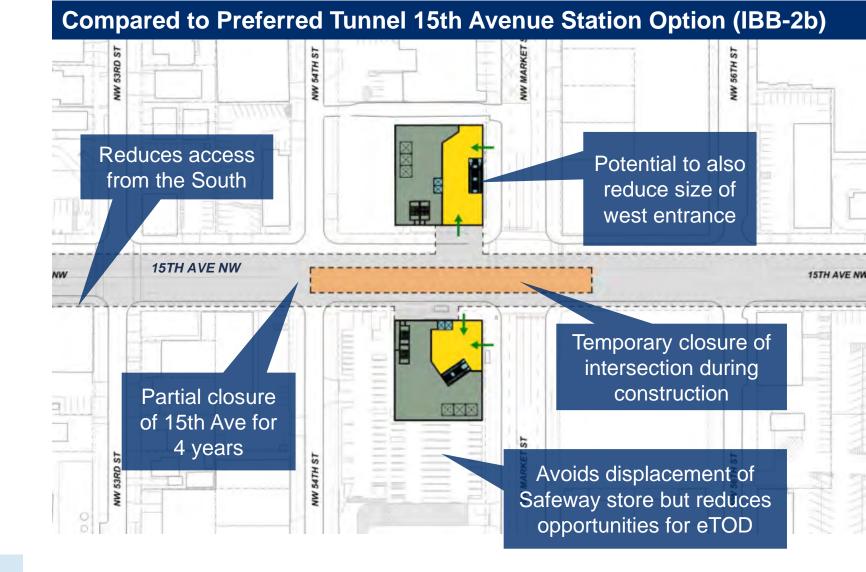






## **Tunnel 15th Ave Cost Savings:** Station in **Right-of-Way** Shift station construction into 15th Ave NW and eliminate south entrance

Study focus: Reduce costs



Cost delta compared to realigned financial plan:
+\$70 million (or +\$30 million with optional smaller west entrance)



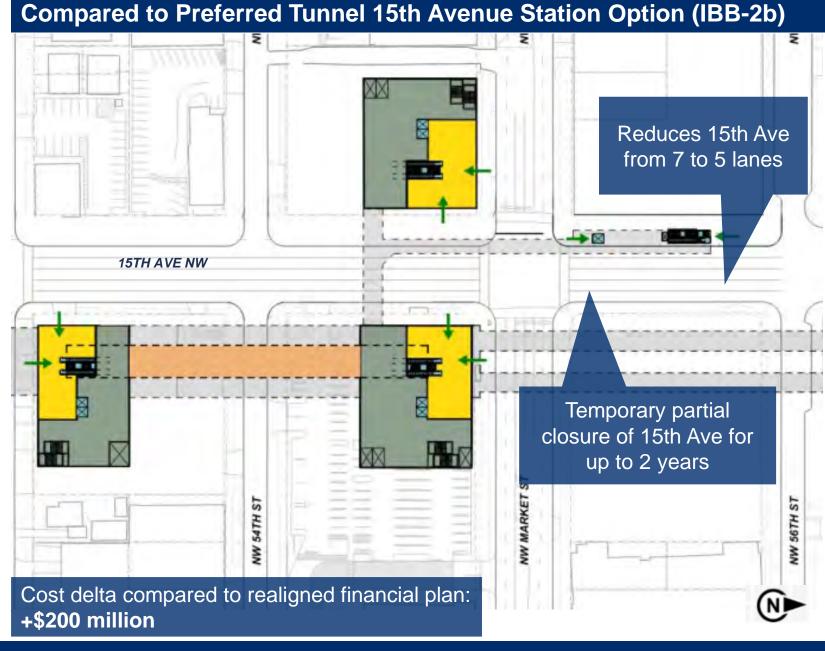


## **Tunnel 15th Ave Entrance North** of Market

Add station entrance to NW corner in public right-of-way

#### Study focus:

Improve passenger access to the north





### Compared to Preferred Tunnel 14th Avenue Alternative (IBB-2a)

## **Tunnel 14th Ave Station Access**

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

At-grade improvements may reduce pedestrian travel time, but have minor effects on traffic and transit operations

Grade-separated improvements may add travel time, but reduce passenger-vehicle interactions

### Study focus:

Improve passenger access to the west













Cost delta compared to realigned financial plan:

- +\$0.5-1 million for at-grade improvements
- +\$20-100 million for grade-separated improvements (+ O&M costs)



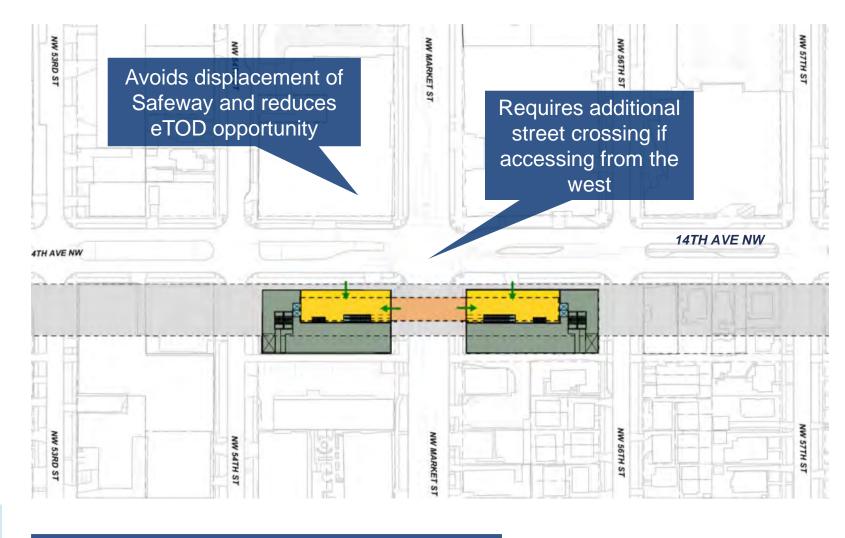
# Shifted Tunnel 14th Ave Station Shift tunnel

alignment to the east and eliminate western station entrance

Study focus:

**Reduce costs** 

#### **Compared to Preferred Tunnel 14th Avenue Alternative (IBB-2a)**



Cost delta compared to realigned financial plan: -\$140 million





## Example Modified Preferred Alternative

### 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:

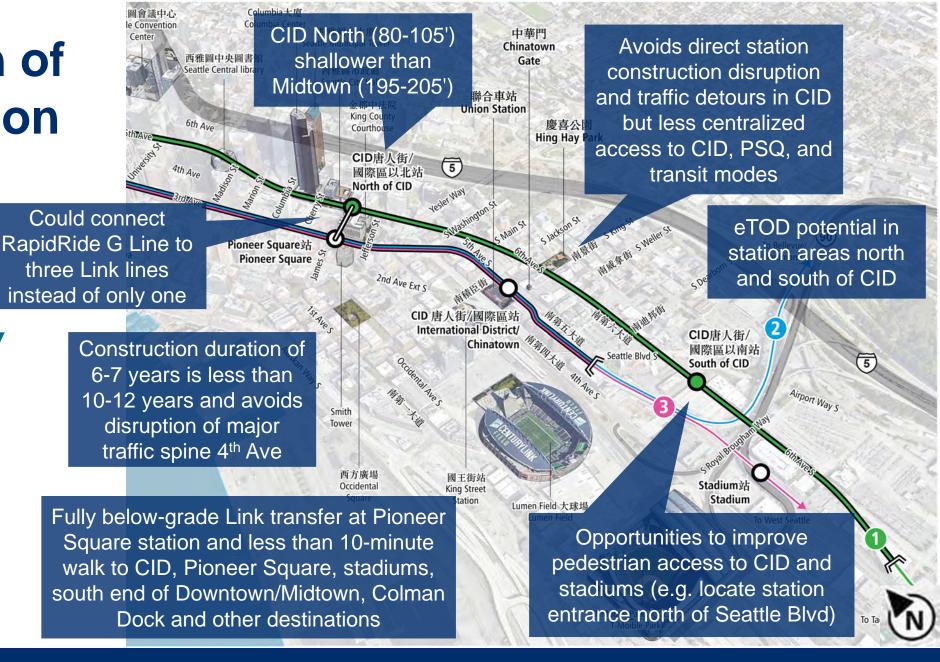
 Scenarios including South Lake Union mix-and-match and CID 4th Shallow(er) will require additional time for coordination with third parties

### **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

## Station North of CID and Station South of CID

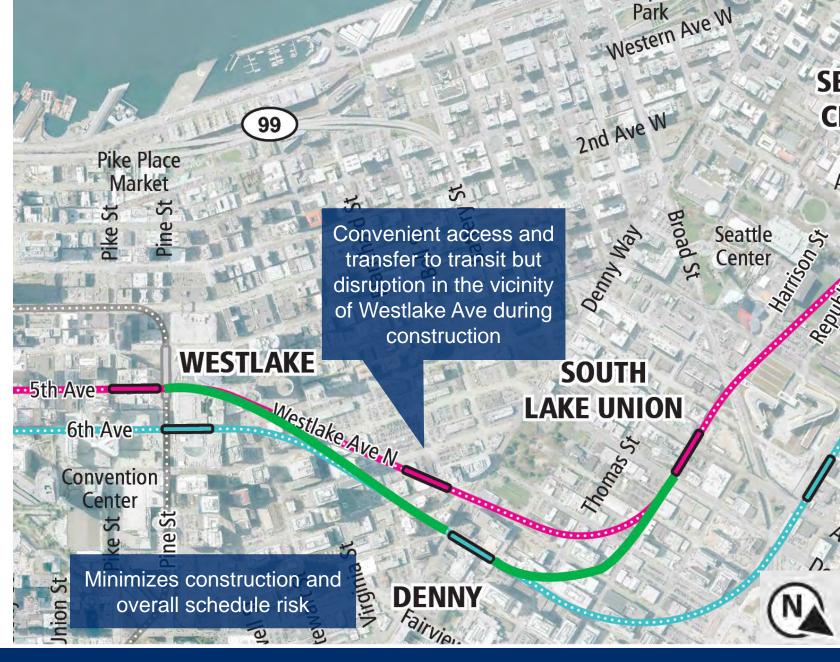
Compared to Refined 4th Avenue Shallow Station (CID-1a)





## 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

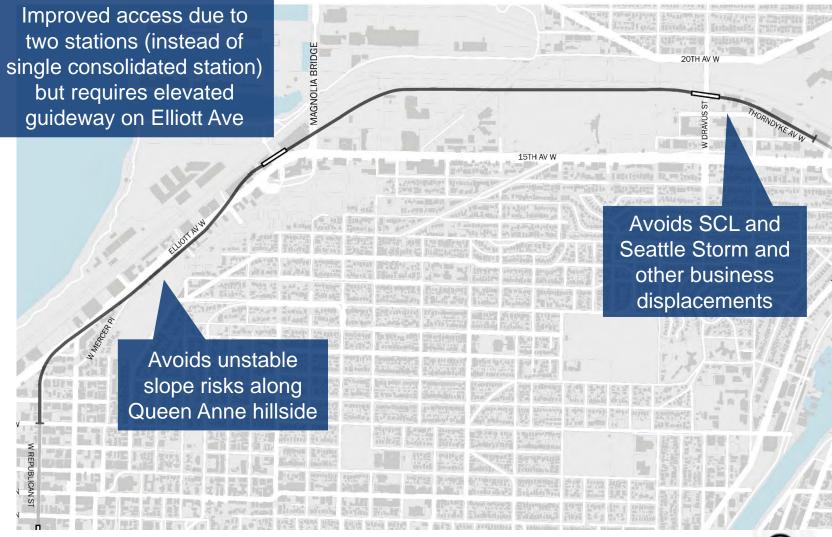
Compared to Seattle Center Station at Mercer (DT-2) with Mixand-Match





## **Modified SIB-1 Alignment**

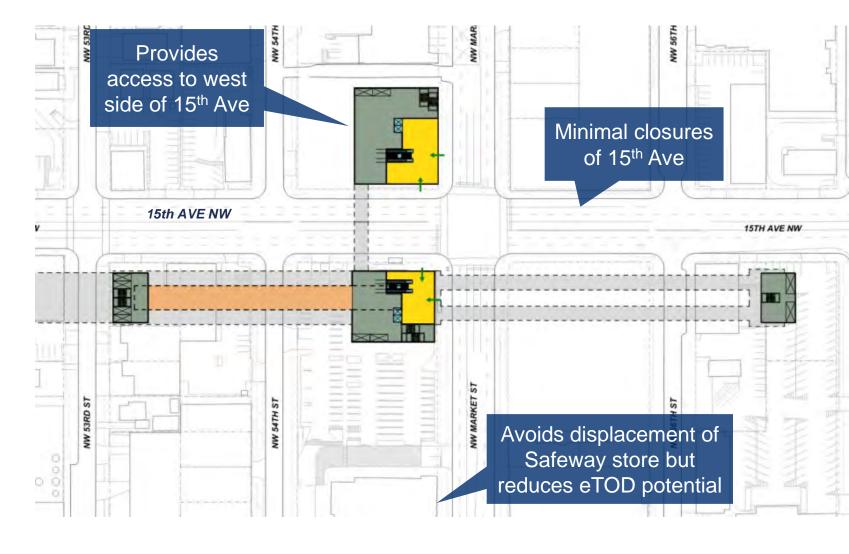
Compared to Consolidated Alignment





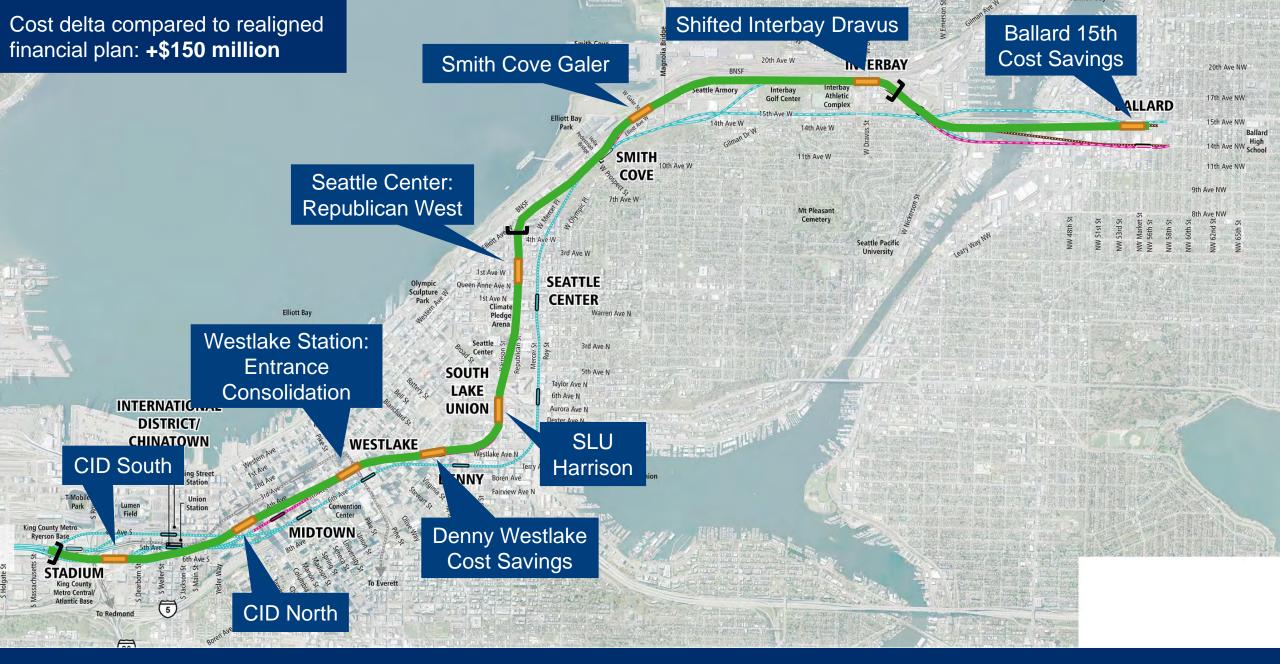


## **Tunnel 15th Ave Cost Savings**









## West Seattle Extension Further Studies

### West Seattle Link Extension: Preferred Alternative

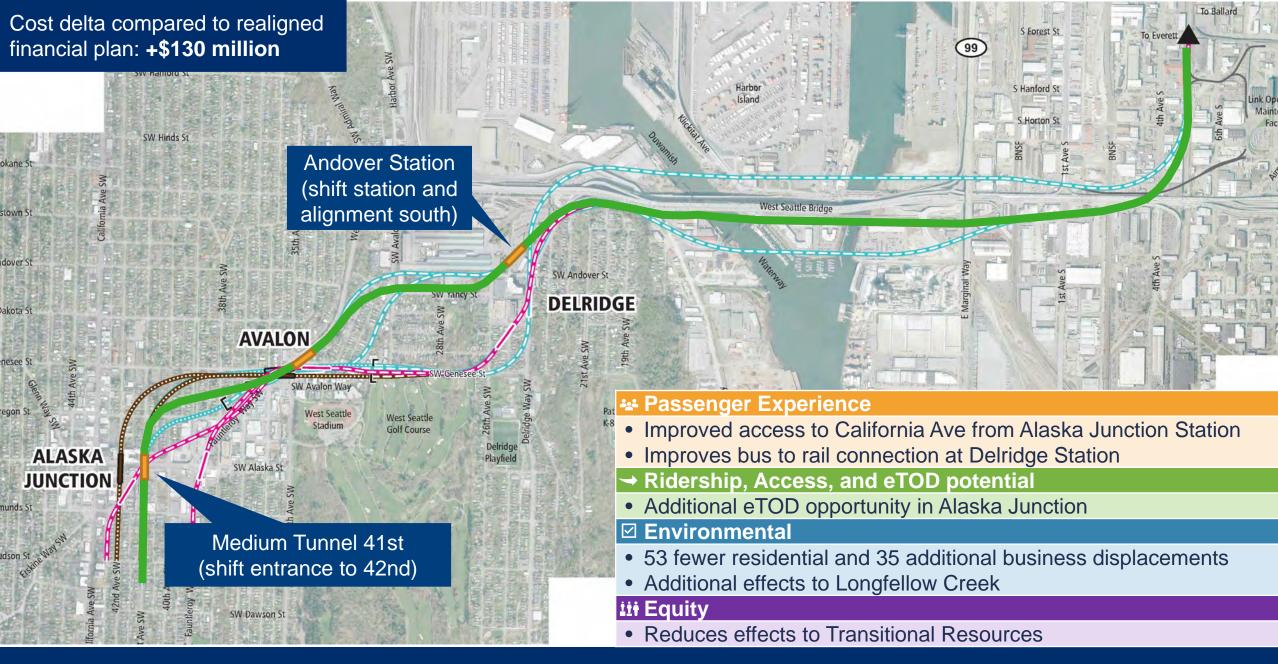




### West Seattle Link Extension: Further studies







## 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

## **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

## Q&A / Discussion

## Thank you.



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