

## West Seattle and Ballard Link Extensions

Capital Committee | October 11, 2018

## Agenda

- Project overview
- Alternatives development process
- Community engagement
- Level 2 recommendations





# ST3 Representative project

- Identifies mode, corridor, number of stations, general station locations
- Informs cost, schedule, operating needs

## West Seattle project timeline



2017-2022

2016 Alternatives development

Board identifies preferred

**Draft Environmental** Impact Statement

Final Environmental **Impact Statement** 

Board selects project to be built

Federal Record of

PUBLIC INVOLVEMENT



**DESIGN** 

2022-2025

Final route design

Final station designs

Procure and commission station and public art

Obtain land use and construction permits

PUBLIC INVOLVEMENT



**CONSTRUCTION** 

2025-2030

START OF **SERVICE** 



2030

Conversations with property owners

Safety education

Testing and pre-operations

PUBLIC INVOLVEMENT

## Ballard project timeline



APPROVAL

2016



Alternatives development

Board identifies preferred

**Draft Environmental** 

Final Environmental

Board selects project

Impact Statement

**Impact Statement** 



#### **DESIGN**

2023-2026

Final route design

Final station designs

Procure and commission station and public art

construction permits

Obtain land use and

Conversations with

Safety education

#### **CONSTRUCTION**

2027-2035

START OF **SERVICE** 



2035

Federal Record of

to be built

PUBLIC INVOLVEMENT

PUBLIC INVOLVEMENT

Testing and pre-operations

PUBLIC INVOLVEMENT

#### VOTER APPROVAL

2016



#### **PLANNING**

DESIG

#### 2017-2019

Alternatives development

Board identifies preferred alternative

#### 2019-2022

Draft Environmental Impact Statement

Final Environmental Impact Statement

Board selects project to be built

Federal Record of Decision

PUBLIC INVOLVEMENT

# Alternatives development process

## Alternatives development process

LEVEL 1

Early-2018

Conduct early scoping

Study ST3 representative project and alternatives

Screen alternatives

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LEVEL 2

Alternatives development

Mid-2018

Technical analysis

Refine and screen alternatives

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LEVEL 3

Alternatives development

Late-2018 / Early-2019

Refine and screen alternatives

Conduct Environmental Impact Statement (EIS) scoping

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PREFERRED ALTERNATIVE\*



Early-2019

<sup>\*</sup>The Sound Transit Board identifies preferred alternatives and other alternatives to study.

## Screening process

Broad range of initial alternatives

Refine remaining alternatives

Further evaluation

Preferred Alternative and other EIS alternatives

## Purpose and need

Purpose Statement	Symbol
Provide high quality rapid, reliable, and efficient peak and off-peak LRT service to communities in the project corridors as defined in ST3.	Ä
Improve regional mobility by increasing connectivity and capacity through downtown Seattle to meet the projected transit demand.	STATION
Connect regional centers as described in adopted regional and local land use, transportation, and economic development plans and Sound Transit's Regional Transit Long-Range Plan.	0
Implement a system that is consistent with the <i>ST3 Plan</i> that established transit mode, corridor, and station locations and that is technically feasible and financially sustainable to build, operate, and maintain.	Q.
Expand mobility for the corridor and region's residents, which include transit dependent, low income, and minority populations.	
Encourage equitable and sustainable urban growth in station areas through support of transit-oriented development, station access, and modal integration in a manner that is consistent with local land use plans and policies.	
Preserve and promote a healthy environment and economy by minimizing adverse impacts on the natural, built and social environments through sustainable practices.	

#### Evaluation criteria

#### > 17 criteria consistent in all levels of evaluation

- Reliable service
- Travel times
- Regional connectivity
- Transit capacity
- Projected transit demand
- Regional centers served
- ST Long-Range Plan consistency
- ST3 consistency
- Technical feasibility

- Financial sustainability
- Historically underserved populations
- Station area local land use plan consistency
- Modal integration
- Station area development opportunities
- Environmental effects
- Traffic operations
- Economic effects

#### Measures and methods

- > 50+ quantitative and/or qualitative measures
- > Rating thresholds for High, Medium and Low
- Key differentiators and findings

Lower Performing

Medium Performing

Higher Performing

#### Cost assessment

- Purpose: To inform comparison of Level 2 alternatives
- Comparative costs by segment
  - Consistent methodology (2017\$; construction, real estate, etc.)
  - Based on limited conceptual design (less than 5% design)
  - > Final project budget established at 60% design (~ 2024)
- Costs for end-to-end alternatives in Level 3



## Community engagement and collaboration





Neighborhood Forums



Stakeholder Advisory Group



Elected Leadership Group



Sound Transit Board



Meeting dates subject to change.

## External Engagement Report: June-Sept. 2018



#### 66 community briefings



engaging more than

11 festivals 3,800 community members



4 Stakeholder Advisory Group meetings



Elected Leadership Group meeting



3 neighborhood forums



online open house



email updates engaging more than

 $4,\!000$  subscribers

# Neighborhood forums and open houses

#### **West Seattle**

Saturday, Sept. 8

→ 140 sign-ins

#### **Downtown Seattle**

Tuesday, Sept. 11

→ 75 sign-ins

#### **Ballard**

Monday, Sept. 17

→ 85 sign-ins



## Online open house

OPEN Sept. 6–23, 2018

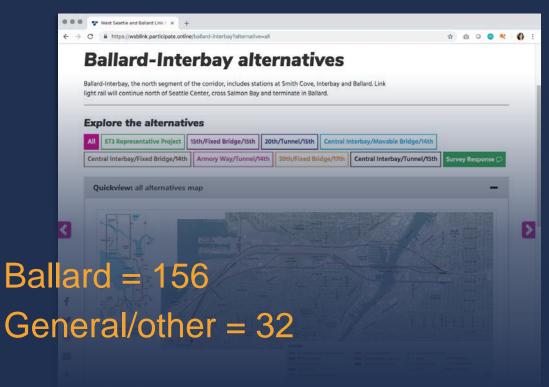
TOTAL USERS 3,446

**SURVEYS SUBMITTED** 

West Seattle = 140

SODO/CID = 49

Downtown = 65



## June briefings snapshot

- ✓ Chinatown-International District BIA (6/7)
- ✓ Seattle Design Commission (6/7)
- ✓ Pigeon Point Neighborhood Council (6/11)
- ✓ South downtown stakeholders (6/12)
- ✓ Seattle Planning Commission (6/14)
- ✓ Neighborcare Health Ballard (6/18)
- ✓ SODO BIA Transportation Committee (6/19)
- ✓ Ballard Food Bank (6/20)
- ✓ Sound Transit Citizen Oversight Panel (6/21)
- ✓ CID Framework Capital Projects
  Coordination Workgroup (6/22)

- ✓ UW Medicine (6/25)
- ✓ NSIA (6/26)
- ✓ Ethiopian Community in Seattle (6/26)
- √ West Seattle Food Bank (6/28)
- ✓ Southwest Youth & Family Services (6/29)



## July briefings snapshot

- ✓ WSB Station Access Discussion (7/6)
- ✓ Mary's Place (7/10)
- ✓ Central Ballard Residents Association (7/12)
- ✓ South downtown stakeholders (7/12)
- ✓ SODO BIA Transportation Committee (7/13)
- ✓ Ballard Mill Marina (7/16)
- ✓ Western Towboat & American Waterway
   Operators (7/18)
- ✓ Ferguson Terminal (7/18)
- ✓ Fremont Tugboat (7/19)
- √ Transit Access Coalition (7/25)
- ✓ Plymouth Housing Group (7/25)
- ✓ Coastal Transportation (7/25)

- ✓ CID Forum (7/25)
- ✓ Neighborhood House at High Point (7/26)
- ✓ Seattle Maritime Academy (7/26)
- ✓ West Seattle JuNO (7/26)
- ✓ Downtown Residents Council / DSA (7/27)
- ✓ Chinese Information & Service Center (7/30)
- ✓ Mercer Corridor Stakeholders Committee (7/31)



## August briefings snapshot

- ✓ Seniors in Action Foundation (8/1)
- ✓ NW Marine Trade Association (8/3)
- ✓ Seattle Yacht Club (8/3)
- ✓ Bowman Refrigeration (8/7)
- ✓ Drink & Link in Delridge (8/8)
- ✓ Labor organizations (8/8)
- ✓ Tugboat tour with Western Towboat (8/10)
- ✓ The Salvation Army (8/20)
- √ Wing Luke Museum (8/21)
- ✓ Seahawks/Public Stadium Authority (8/22)

- ✓ Housing Development Consortium (8/23)
- ✓ Downtown Emergency Service Center (8/28)
- ✓ St. Luke's Episcopal Church (8/29)
- ✓ SLU Community Council, Transportation Committee (8/29)
- ✓ United Indians of All Tribes Foundation (8/29)



## September briefings snapshot

- ✓ Ballard Alliance Ratepayer Advisory Board (9/6)
- ✓ South downtown stakeholders (9/10)
- ✓ Transit AccessStakeholders (9/13)
- ✓ Seattle Planning Commission (9/13)
- ✓ Real Change (9/14)
- ✓ Uwajimaya (9/17)
- ✓ Coastal Transportation (9/17)
- ✓ West Seattle JuNO (9/18)

- √ CID Forum (9/19)
- ✓ Boys and Girls Club of King County (9/20)
- ✓ Seattle Design Commission (9/20)
- ✓ Uptown Alliance (9/20)
- ✓ Bellwether Housing (9/21)
- ✓ North Seattle Industrial Association (9/12, 9/25)
- ✓ West Seattle Transportation Coalition (9/27)
- ✓ CID Framework Capital Projects Coordination Workgroup (9/30)



## 2018 Festivals

- ✓ Morgan Junction Festival (6/16)
- ✓ Festival Sundiata (6/16-6/17)
- ✓ West Seattle Summer Fest (7/13-7/15)
- ✓ Ballard Seafood Fest (7/13-7/15)
- ✓ Dragon Fest (7/14-7/15)
- ✓ South Lake Union Block Party (8/10)
- ✓ Delridge Day (8/11)
- ✓ Celebrate Little Saigon (8/26)
- ✓ Night Market (9/8)
- ✓ Fishermen's Fall Festival (9/15)
- ✓ Sustainable Ballard Festival (9/22)
- ✓ Magnolia Farmers Market (10/6)





## Station Charrettes

Collaborative design sessions with agencies and community stakeholders

- √ 6/28: Ballard / Interbay
- ✓ 7/12: Seattle Center
- ✓ 7/20: Delridge
- ✓ 7/24: Alaska Junction / Avalon
- ✓ 7/31: Chinatown International District
- √ 8/2: Denny / SLU
- √ 8/28: SODO/Stadium
- ✓ 9/13: Smith Cove

## Equity & Inclusion

- Sound Transit & City of Seattle partnership utilizing the Racial Equity Toolkit (RET)
- Working group structure focused on engagement and data analysis
- Collaboration to elevate issues and considerations to better inform the alternatives development process
- Strive to provide information that data alone cannot provide
- What's next?: Report back to stakeholders & expand engagement with the community at large

#### **Racial Equity Toolkit**

RACE & SOCIAL JUSTICE
INITIATIVE

to Assess Policies, Initiatives, Programs, and Budget Issues

The vision of the Seattle Race and Social Justice Initiative is to eliminate racial inequity in the community. To do this requires ending individual racism, institutional racism and structural racism. The Racial Equity Toolkit lays out a process and a set of questions to guide the development, implementation and evaluation of policies, initiatives, programs, and budget issues to address the impacts on racial equity.

#### When Do I Use This Toolkit?

Early. Apply the toolkit early for alignment with departmental racial equity goals and desired outcomes.

#### How Do I Use This Toolkit?

With Inclusion. The analysis should be completed by people with different racial perspectives.

Step by step. The Racial Equity Analysis is made up of six steps from beginning to completion

#### Step 1. Set Outcomes.

Leadership communicates key community outcomes for racial equity to guide analysis.

unintended consequences.

#### Step 2. Involve Stakeholders + Analyze Data.

Gather information from community and staff on how the issue benefits or burdens the community in terms of racial equity.

#### Step 3. Determine Benefit and/or Burden.

Analyze issue for impacts and alignment with racial equity outcomes.

#### Step 4. Advance Opportunity or Minimize Harm. Develop strategies to create greater racial equity or minimize

Step 5. Evaluate. Raise Racial Awareness. Be Accountable.

#### Track impacts on communities of color overtime. Continue to communicate

with and involve stakeholders. Document unresolved issues.

#### Step 6. Report Back.

Share information learned from analysis and unresolved issue with Department Leadership and Change Team.







Level 2 alternatives



Public feedback - common themes



#### Results summary

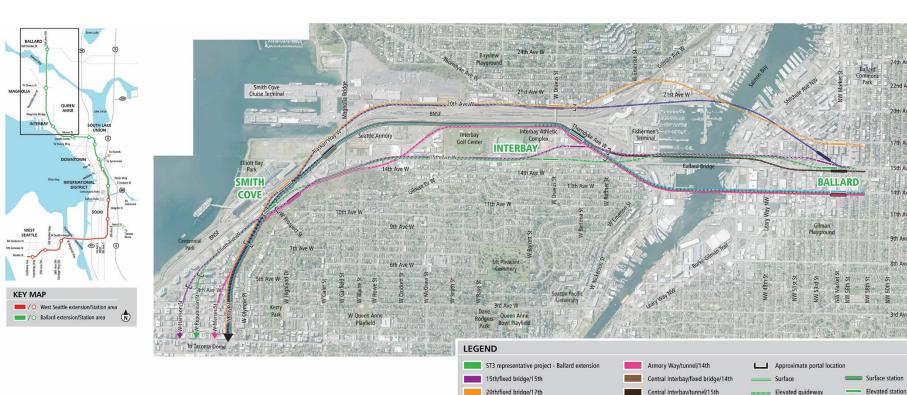


**ELG** recommendations

## Level 2 alternatives

#### Interbay/Ballard

- ST3 Representative Project
- 15th/Fixed Bridge/15th
- 20th/Fixed Bridge/17th
- 20th/Tunnel/15th
- Armory Way/Tunnel/14th
- Central Interbay/Movable Bridge/14th
- Central Interbay/Fixed Bridge/14th
- Central Interbay/Tunnel/15th



20th/tunnel/15th

Central Interbay/movable bridge/14th

# Interbay / Ballard Level 2 alternatives

24th Ave NW

20th Ave NW

17th Ave NW

15th Ave NW

14th Ave NW

11th Ave NW

9th Ave NW

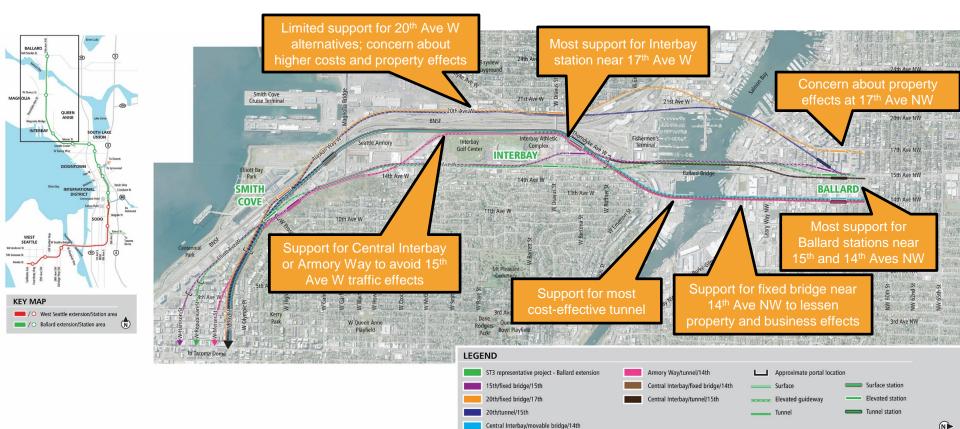
Tunnel station

Central Interbay/tunnel/15th

Elevated guideway

## Interbay / Ballard Results summary

Alternative	Key findings	Cost comparison*	Schedule Comparison**
ST3 Representative Project			
Central Interbay/ Fixed Bridge/14 <sup>th</sup>	<ul> <li>Maritime business effects (but less than movable bridge)</li> <li>Affects fewer parcels in Ballard (along 14th Ave NW)</li> </ul>	+\$100M	Higher Performing
Central Interbay/ Movable Bridge/14 <sup>th</sup>	<ul> <li>Potential service interruptions</li> <li>Maritime business and potential vessel navigation effects</li> <li>Affects fewer parcels in Ballard (along 14<sup>th</sup> Ave NW)</li> </ul>	+\$200M	Higher Performing
15 <sup>th</sup> /Fixed Bridge/15 <sup>th</sup>	<ul> <li>Maritime business effects (Fishermen's Terminal)</li> <li>Elevated guideway (west side 15<sup>th</sup> Ave NW) affects more residences</li> </ul>	+\$200M	Higher Performing
Armory Way/ Tunnel/14 <sup>th</sup>	<ul> <li>Less environmental, maritime business/navigation effects</li> <li>Affects fewer parcels in Ballard (along 14<sup>th</sup> Ave NW)</li> <li>Includes tunnel; requires 3<sup>rd</sup> Party funding</li> </ul>	+\$300M	Higher Performing
Central Interbay/ Tunnel/15 <sup>th</sup>	<ul> <li>Less environmental, maritime business/navigation effects</li> <li>Tunnel station (east side 15<sup>th</sup> Ave NW) affects businesses</li> <li>Includes tunnel; requires 3<sup>rd</sup> Party funding</li> </ul>	+ \$500M	Higher Performing
20th/Fixed Bridge/17th	<ul> <li>Long span bridge (over BNSF tracks) adds complexity</li> <li>Ballard terminus/crossing location affects more residences</li> </ul>	+ \$500M	Higher Performing
20 <sup>th</sup> /Tunnel/15 <sup>th</sup>	<ul> <li>Long span bridge (over BNSF tracks), constrained tunnel portal location, deeper tunnel station add complexity</li> <li>Tunnel station (west side 15<sup>th</sup> Ave NW) affects residences</li> <li>Includes tunnel; requires 3<sup>rd</sup> Party funding</li> </ul>	+ \$700M	Higher Performing



## Interbay / Ballard Public feedback - common themes

### Interbay / Ballard ELG recommendations

Alternative	Public feedback - common themes	Do Not Carry Forward?	Carry Forward?	w/suggested refinements?
ST3 Representative Project				
Central Interbay/ Fixed Bridge/14 <sup>th</sup>	Some support for fixed bridge and Ballard station with fewer property effects		<b>√</b>	
Central Interbay/ Movable Bridge/14 <sup>th</sup>	Concern about movable bridges	✓		
15 <sup>th</sup> /Fixed Bridge/15 <sup>th</sup>	Concern about Fishermen's Terminal effects	✓		
Armory Way/ Tunnel/14 <sup>th</sup>	<ul> <li>General support for more cost-effective tunnel crossing</li> <li>Support for Ballard station with fewer property effects</li> <li>Explore Ballard Station access at 15<sup>th</sup> Ave NW, closer to center of urban village</li> </ul>		<b>✓</b>	Explore Ballard Station access at 15 <sup>th</sup> Ave NW, closer to center of urban village
Central Interbay/ Tunnel/15 <sup>th</sup>	<ul> <li>Concern about tunnel cost vs. Armory Way/Tunnel/14<sup>th</sup></li> <li>Support for 15<sup>th</sup> Ave NW station</li> </ul>	✓		
20 <sup>th</sup> /Fixed Bridge/17 <sup>th</sup>	<ul> <li>Concern about overall cost</li> <li>Concern about Ballard Station property, construction and visual effects, though support for location</li> </ul>	✓		
20 <sup>th</sup> /Tunnel/15 <sup>th</sup>	Concern about tunnel cost vs. Armory Way/Tunnel/14 <sup>th</sup>	✓		

#### ELG Discussion - Interbay / Ballard

- Concern with Representative Project, movable bridge and anything on 15th Ave
- Consider pedestrian bridge if Smith Cove Station located east of 15<sup>th</sup> Ave
- Concern with effects on Fishermen's Terminal

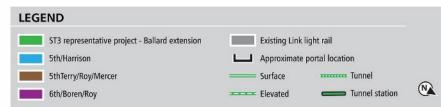
## Level 2 alternatives

#### Downtown

- ST3 Representative Project
- 5th/Harrison
- 5th/Terry/Roy/Mercer
- 6th/Boren/Roy







## **Downtown** Results summary

Alternative	Key findings	Cost comparison*	Schedule comparison*
ST3 Representative Project			
6th/Boren/Roy	<ul> <li>Avoids building tie-backs on 5<sup>th</sup> Ave, SR 99 portal and sewer</li> <li>More constrained Denny station location on Boren</li> <li>Seattle Center station location on Roy, two blocks from Key Arena</li> <li>Lower bus/rail integration opportunity at Seattle Center station on Roy</li> </ul>	Similar	Higher Performing
5 <sup>th</sup> /Harrison	<ul> <li>Better bus/rail integration opportunity at SLU station on Harrison</li> <li>Higher property effects due to tunnel portal location on Harrison west of Seattle Center</li> <li>Engineering challenges with tunneling under Key Arena</li> </ul>	+ \$200M	Higher Performing
5 <sup>th</sup> /Terry/Roy/ Mercer	<ul> <li>Avoids SR 99 portal and sewer</li> <li>Seattle Center station location on Mercer, one block from Key Arena</li> </ul>	+\$200M	Higher Performing

<sup>\*</sup>Cost compared to cost of ST3 Representative Project for this segment. Schedule compared to overall ST3 schedule for this extension.



## **Downtown**Public feedback - common themes

### **Downtown** ELG recommendations

Alternative	Public feedback - common themes	Do Not Carry Forward?	Carry Forward?	w/suggested refinements?
ST3 Representative Project				
6th/Boren/Roy	Limited support for Denny station at Boren (due to steep grade) and South Lake Union station at Roy, but interest in maintaining 6th Ave route through Downtown	✓		
5 <sup>th</sup> /Harrison	Support for this alternative with Seattle Center station located at Republican		<b>✓</b>	With Seattle Center station located at Republican
5 <sup>th</sup> /Terry/Roy/ Mercer	<ul> <li>Some support for Denny station at Terry, with interest in 6th Ave route through Downtown</li> </ul>		<b>✓</b>	With 6th Ave route through Downtown

#### **ELG Discussion – Downtown**

- Transfers at Westlake Station will be critical to serve region well
- Consider pedestrian safety upgrades, especially at South Lake Union station near Mercer

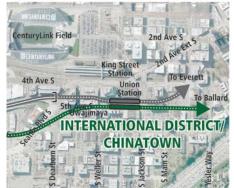
## Level 2 alternatives

#### SODO/Chinatown-ID

- ST3 Representative Project
- Surface E-3
- Massachusetts Tunnel Portal
- 5th Avenue Mined C-ID
- 4th Avenue Mined C-ID
- 4th Avenue Cut-and-Cover C-ID
- Occidental Avenue

Representative Project and Surface E-3





Massachusetts Tunnel Portal (5<sup>th</sup> Ave Bored Tunnel)



5<sup>th</sup> Ave Mined C-ID



4th Ave Mined C-ID



4th Ave Cut-and-Cover



## Chinatown-ID Results summary

Alternative	Key findings	Cost comparison*	Schedule comparison*
ST3 Representative Project			
Surface E-3 (shorter 5 <sup>th</sup> Ave Cut-and- Cover Tunnel)	<ul> <li>Shallow cut-and-cover station under 5<sup>th</sup> Ave; easy rider access/transfers</li> <li>Construction effects, parking lane closures on 5<sup>th</sup> Ave in station area</li> </ul>	- \$300M**	Higher Performing
Massachusetts Tunnel Portal (5th Ave Bored Tunnel)	<ul> <li>Shallow cut-and-cover station under 5<sup>th</sup> Ave; easy rider access/transfers</li> <li>Construction effects, parking lane closures on 5<sup>th</sup> Ave in station area</li> </ul>	- \$200M	Higher Performing
5 <sup>th</sup> Ave Mined C-ID	<ul> <li>Deep mined station (~200') under 5<sup>th</sup> Ave; poor rider access/transfers</li> <li>Less construction effects, parking closures on 5<sup>th</sup> Ave with mined station</li> <li>Some property effects (for mined station access shaft)</li> <li>Results in very deep Midtown Station (~250')</li> </ul>	Similar	Medium Performing
4 <sup>th</sup> Ave Mined C-ID	<ul> <li>Deep mined station (~200') under 4<sup>th</sup> Ave, poor rider access/transfers</li> <li>Major engineering/constructability constraints (4<sup>th</sup> Ave viaduct demolition/rebuild, active BNSF railway, existing transit tunnel, etc.)</li> <li>Large property effects (Ryerson Base for tunnel portal site)</li> <li>Requires 3<sup>rd</sup> party funding of 4<sup>th</sup> Ave Viaduct re-build costs</li> <li>Results in very deep Midtown Station (~250')</li> </ul>	+ \$500M	Lower Performing
4 <sup>th</sup> Ave Cut-and-Cover C-ID	<ul> <li>Shallow cut-and-cover station under 4<sup>th</sup> Ave; easy rider access/transfers</li> <li>Major engineering/constructability constraints (4<sup>th</sup> Ave viaduct demolition/rebuild, active BNSF railway, existing transit tunnel, etc.)</li> <li>Large property effects (King County Admin Building)</li> <li>Requires 3<sup>rd</sup> party funding of 4<sup>th</sup> Ave Viaduct re-buildcosts</li> </ul>	+\$600M	Lower Performing

<sup>\*</sup>Cost compared to cost of ST3 Representative Project for this segment. Schedule compared to overall ST3 schedule for this extension.

<sup>\*\*</sup>Cost comparison for Chinatown/ID sub-segment only; total SODO/C-ID segment cost difference is - \$400M compared to ST3 Representative Project.

Representative Project and Surface E-3



Support for bored tunnel/cutand cover station on 5<sup>th</sup> Ave
due to reduced construction
effects and shallower station

4th Ave S

Union
Station
To Ballard
INTERNATIONAL DISTRICT/
CHINATOWN

Massachusetts Tunnel Portal (5<sup>th</sup> Ave Bored Tunnel)

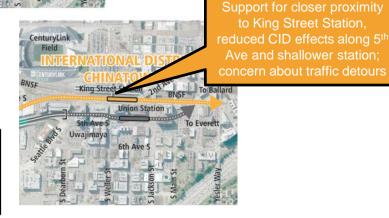


5<sup>th</sup> Ave Mined C-ID



Street Station and reduced CID effects along 5<sup>th</sup> Ave; concern about traffic detours and access due to deep station

4th Ave Mined C-ID



4th Ave Cut-and-Cover

Chinatown-ID

# Chinatown-International District RET – Community Input

- Inclusive, ongoing engagement is imperative to outcomes that benefit CID communities
- > Construction impacts are a top concern to CID communities
- Support from the CID and Pioneer Square communities for leveraging a new station to improve connections between transit modes, activate Union Station and improve the existing Chinatown/International District station and plaza

# Chinatown-International District RET – Community Input

- Support for continued exploration of both 4th and 5th Avenue South alternatives
- > The *user experience* and *comfort using light rail* is fundamental to understanding whether alternatives enhance mobility and access
- Strong interest in a comprehensive and coordinated cross-agency strategy to address displacement and gentrification in the CID

## Chinatown-ID ELG recommendations

Alternative	Public feedback - common themes	Do Not Carry Forward?	Carry Forward?	w/suggested refinements?
ST3 Representative Project				
Surface E-3 (shorter 5 <sup>th</sup> Ave Cut-and- Cover Tunnel)	Concern about cut-and-cover tunnel construction effects	<b>√</b>		
Massachusetts Tunnel Portal (5th Ave Bored Tunnel)	Support for reduced construction effects and shallower station		<b>√</b>	
5 <sup>th</sup> Ave Mined C-ID	<ul> <li>Support for reduced construction effects</li> <li>Concern about access due to deep station</li> </ul>		✓	
4 <sup>th</sup> Ave Mined C-ID	<ul> <li>Support for closer proximity to King Street Station and reduced CID effects along 5<sup>th</sup> Ave</li> <li>Concern about traffic detours and access due to deep station</li> </ul>		✓	
4 <sup>th</sup> Ave Cut-and-Cover C-ID	<ul> <li>Support for closer proximity to King Street Station, reduced CID effects along 5<sup>th</sup> Ave and shallower station</li> <li>Concern about traffic detours</li> </ul>		✓	

#### ELG Discussion - Chinatown-ID

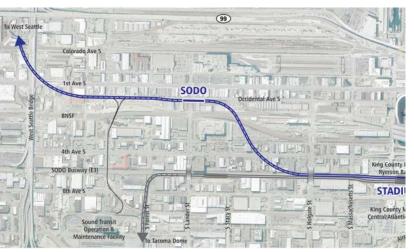
- Must recognize historical context of impacts to community
- Need to interact with community about short term vs. long term impacts and benefits
- Interest in activating Union Station
- Concern with effects of displacing Ryerson bus base and effects on bus use of E-3 Transitway
- Concern with poor transfer environment and customer experience with deep mined stations
- Need more time to engage with community on options



Surface E-3



Massachusetts Tunnel Portal



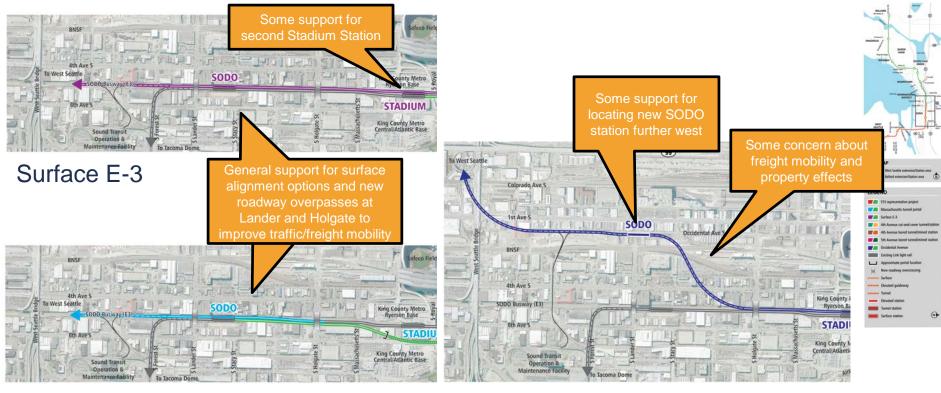
Occidental Ave.



### **SODO** Results summary

Alternative	Key findings	Cost comparison*	Schedule comparison*
ST3 Representative Project			
Surface E-3	<ul> <li>New at-grade SODO Station on E-3 transitway at Lander</li> <li>Transfer at existing SODO Station</li> <li>Bus operations on E-3 transitway displaced</li> <li>New grade-separated roadway crossings (Lander, Holgate) improve existing rail/traffic/freight operations</li> <li>Property effects at tunnel portal site (for Massachusetts Tunnel Portal alternative only)</li> <li>Massachusetts Tunnel Portal alternative avoids impacts to Ryerson Base</li> </ul>	-\$100M	Higher Performing
Massachusetts Tunnel Portal		**	Higher Performing
Occidental Ave.	<ul> <li>New elevated SODO Station on Occidental Ave at Lander</li> <li>Transfer at existing Stadium Station</li> <li>Long span bridges over BNSF tracks and longer track connection to maintenance facility</li> <li>Bus operations on E-3 transitway partially displaced</li> <li>Property effects along Occidental, BNSF crossings and maintenance facility connection</li> </ul>	+ \$200M	Higher Performing

<sup>\*</sup>Cost compared to cost of ST3 Representative Project for this SODO sub-segment only. Schedule compared to overall ST3 schedule for this extension.



Massachusetts Tunnel Portal

Occidental Ave.

## **SODO** ELG recommendations

Alternative	Public feedback - common themes	Do Not Carry Forward?	Carry Forward?	w/suggested refinements?
ST3 Representative Project				
Surface E-3	<ul> <li>General support for surface alignment</li> <li>Support for new roadway overpasses at Lander and Holgate</li> <li>Some support for second Stadium station</li> <li>Explore shifting existing and new SODO stations closer to Lander</li> </ul>		<b>√</b>	
Massachusetts Tunnel Portal	<ul> <li>General support for surface alignment</li> <li>Support for new roadway overpasses at Lander and Holgate</li> <li>Explore shifting existing and new SODO stations closer to Lander</li> </ul>		<b>✓</b>	
Occidental Ave.	<ul> <li>Some support for locating new SODO station further west</li> <li>Some concern about freight mobility and property effects</li> </ul>	✓		

#### **ELG Discussion – SODO**

- Need to continue analysis on interim terminus options to avoid short-term forced transfer at SODO Station if possible
- Need improved mobility options in SODO
- Strong interest in resolving limited bus base capacity

## Level 2 alternatives

#### West Seattle/Duwamish

- ST3 Representative Project
- Pigeon Ridge/West Seattle Tunnel
- Oregon Street/Alaska Junction/Elevated
- Golf Course/Alaska Junction/Tunnel
- Oregon Street/Alaska Junction/Tunnel



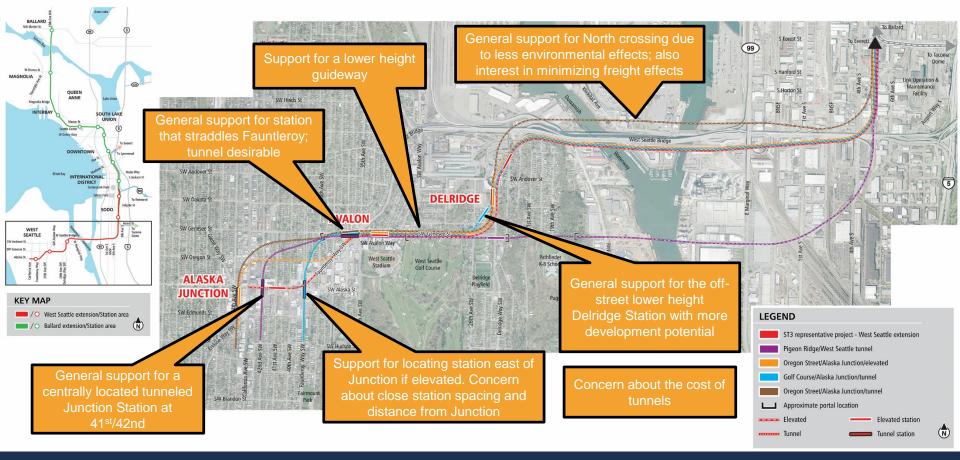
### West Seattle / Duwamish

Level 2 alternatives

### West Seattle / Duwamish Results summary

Alternative	Key findings	Cost comparison*	Schedule comparison*
ST3 Representative Project			
Oregon Street / Alaska Junction / Elevated	<ul> <li>3 elevated stations</li> <li>Increases residential/business effects at Junction</li> <li>Complicates future extension south</li> <li>High guideway along Genesee</li> </ul>	Similar	Higher Performing
Oregon Street / Alaska Junction / Tunnel	<ul> <li>1 tunnel station; 2 elevated stations</li> <li>High guideway along Genesee</li> <li>Fewer engineering constraints</li> <li>Affects freight, port terminal facilities during construction</li> <li>Includes tunnel; requires 3<sup>rd</sup> Party funding</li> </ul>	+ \$500M	Lower Performing
Golf Course / Alaska Junction / Tunnel	<ul> <li>2 tunnel stations; 1 elevated station</li> <li>Lessens residential/business effects at Junction</li> <li>Low guideway along Genesee</li> <li>Includes tunnel; requires 3<sup>rd</sup> Party funding</li> </ul>	+\$700M	Lower Performing
Pigeon Ridge / West Seattle Tunnel	<ul> <li>2 tunnels; 2 tunnel stations; 1 elevated station</li> <li>Most engineering constraints</li> <li>Most effects to Duwamish Greenbelt</li> <li>Low guideway along Genesee</li> <li>Lessens residential and business effects in Delridge</li> <li>Includes two tunnels; requires 3<sup>rd</sup> Party funding</li> </ul>	+ \$1,200M	Lower Performing

<sup>\*</sup>Cost compared to cost of ST3 Representative Project for this segment. Schedule compared to overall ST3 schedule for this extension.



### West Seattle / Duwamish

Public feedback - common themes

### West Seattle / Duwamish ELG recommendations

Alternative	Public feedback - common themes	Do Not Carry Forward?	Carry Forward?	w/suggested refinements?
ST3 Representative Project				
Oregon Street / Alaska Junction / Elevated	<ul> <li>Concern about elevated guideway across California Ave</li> <li>If elevated, explore locating terminus station east of Junction</li> </ul>	<b>√</b>		
Oregon Street / Alaska Junction / Tunnel	<ul> <li>General support for north crossing of Duwamish due to less environmental effects; but interest in minimizing freight effects</li> <li>Concern about Junction station location at 44<sup>th</sup></li> <li>Concern with higher guideway along Genesee</li> <li>Explore Junction station location at 41<sup>st</sup>/42<sup>nd</sup></li> </ul>	<b>√</b>		
Golf Course / Alaska Junction / Tunnel	<ul> <li>General support for this alternative, with development opportunities at Delridge station location to serve neighborhood</li> <li>Support for lower guideway along Genesee</li> <li>Explore Junction station location at 41st/42nd</li> <li>Explore north crossing of Duwamish</li> </ul>		<b>√</b>	Explore Junction station location at 41 <sup>st</sup> /42 <sup>nd</sup> Explore north crossing of Duwamish
Pigeon Ridge / West Seattle Tunnel	<ul> <li>Concern about overall cost and environmental effects</li> <li>Support for lower guideway along Genesee and support for fewer residential effects in Delridge</li> <li>Support for Junction station location at 42<sup>nd</sup></li> </ul>	✓		5.

#### ELG Discussion - West Seattle / Duwamish

- Interest in good transfer environment and TOD opportunities at Delridge Station
- Concern with location of station on Fauntleroy; does not serve Alaska Junction well and too close to Avalon Station
- Concern with state freight mobility impacts of construction of Duwamish crossing north of West Seattle Bridge
- Adopt SAG recommendations on modifying ST3 Representative Project
- Explore tradeoffs with 44<sup>th</sup> Ave station location
- > Continued interest in Junction station at 42<sup>nd</sup> Ave



## Community engagement and collaboration





Neighborhood Forums



Stakeholder Advisory Group



Elected Leadership Group



Sound Transit Board



Meeting dates subject to change.



# Chinatown-International District RET – Level 2 Evaluation Summary

- CID alternatives present varying degrees of potential construction impacts, with more proximate potential impacts to property and the right of way along the western edge of this community for 5th Avenue S alternatives, and more potential traffic impacts for the 4th Avenue S alternatives
- > Station access opportunities are better for shallow stations than for deep stations
- Dased on the Level 2 evaluation measures, it is unclear which alternative(s) would pose the greatest net benefit for the unique multicultural communities of color that live in the CID today

# **Delridge**RET – Level 2 Evaluation Summary

- Xey drivers of differentiation between alternatives with respect to racial and social equity include bus-rail integration, opportunities for equitable development, residential unit displacements and business and commerce effects
- Alternatives that provide the best transfer environment from other modes would best serve communities of color living further south and reliant on transfers at the Delridge Station
- Alternatives that result in more predictable redevelopment scenarios provide the highest potential for equitable transit-oriented development

# **Delridge**RET – Community Input

- Enhancing access to opportunity for communities of color would benefit from experiential improvements and educational efforts, together with increased transit service
- Equitable development opportunities that benefit communities of color could assist in addressing displacement pressures and providing sorely needed neighborhood amenities