

# ***Ballard Link Extension***

*Feasibility study of potential new  
alternative in South Lake Union*

*System Expansion Committee*

*5/09/2024*



# *Why we're here today*

**Motion No. M2023-109** – approved in December 2023

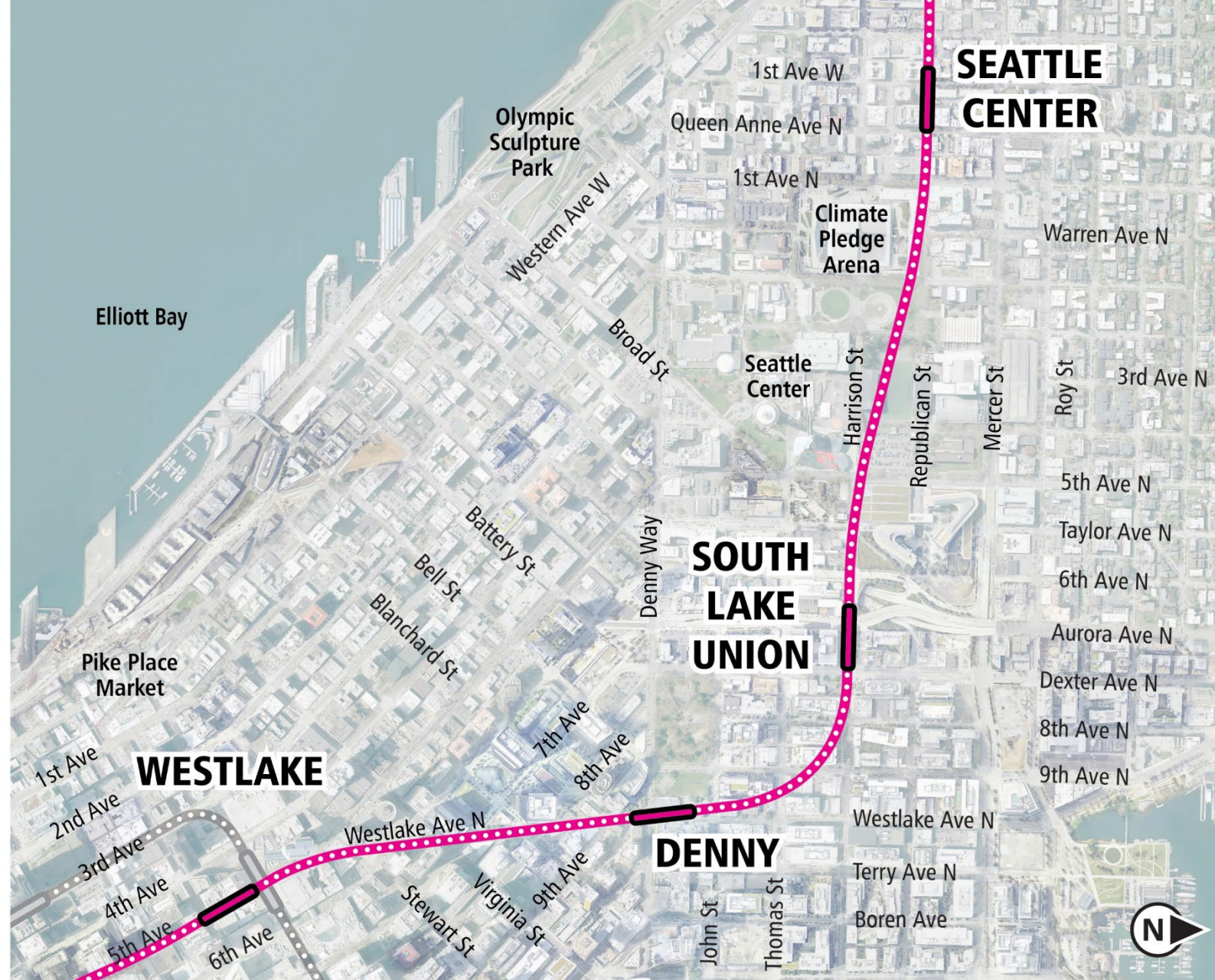
Directing staff to assess the feasibility of an additional alternative in the South Lake Union area for potential inclusion in the Draft Environmental Impact Statement for the Ballard Link Extension

*Staff report today on community feedback*

*Potential action at May 23 full board meeting*

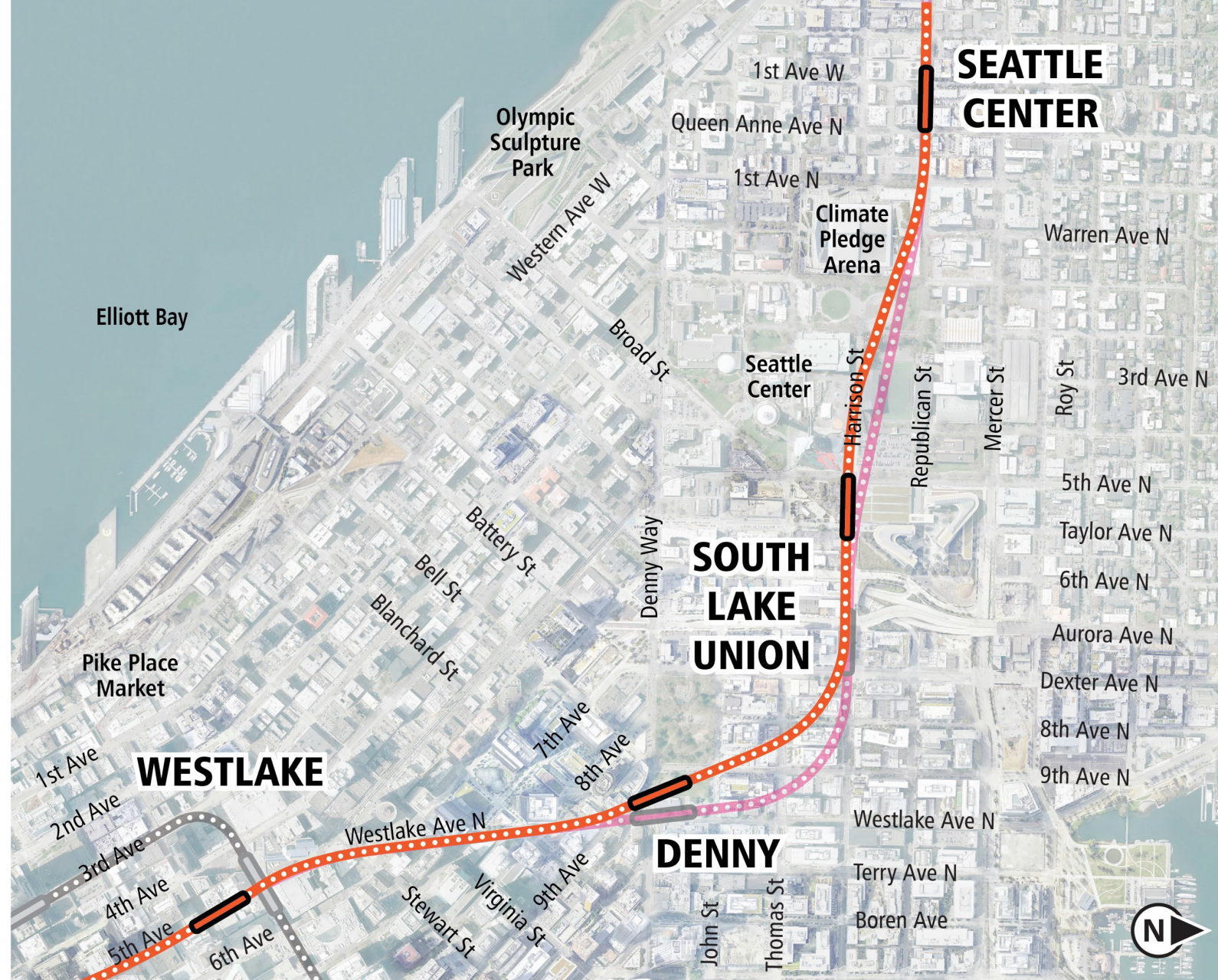
# Current preferred alternative

Current preferred alternative identified by the Board in July 2023



# Potential new alternative

Potential new alternative identified for feasibility study in December 2023



# Potential new alternative

## Study scope

Evaluate cost & schedule implications

Evaluate system implications

Evaluate environmental implications – roadway closure/access, utilities, noise & vibration, properties

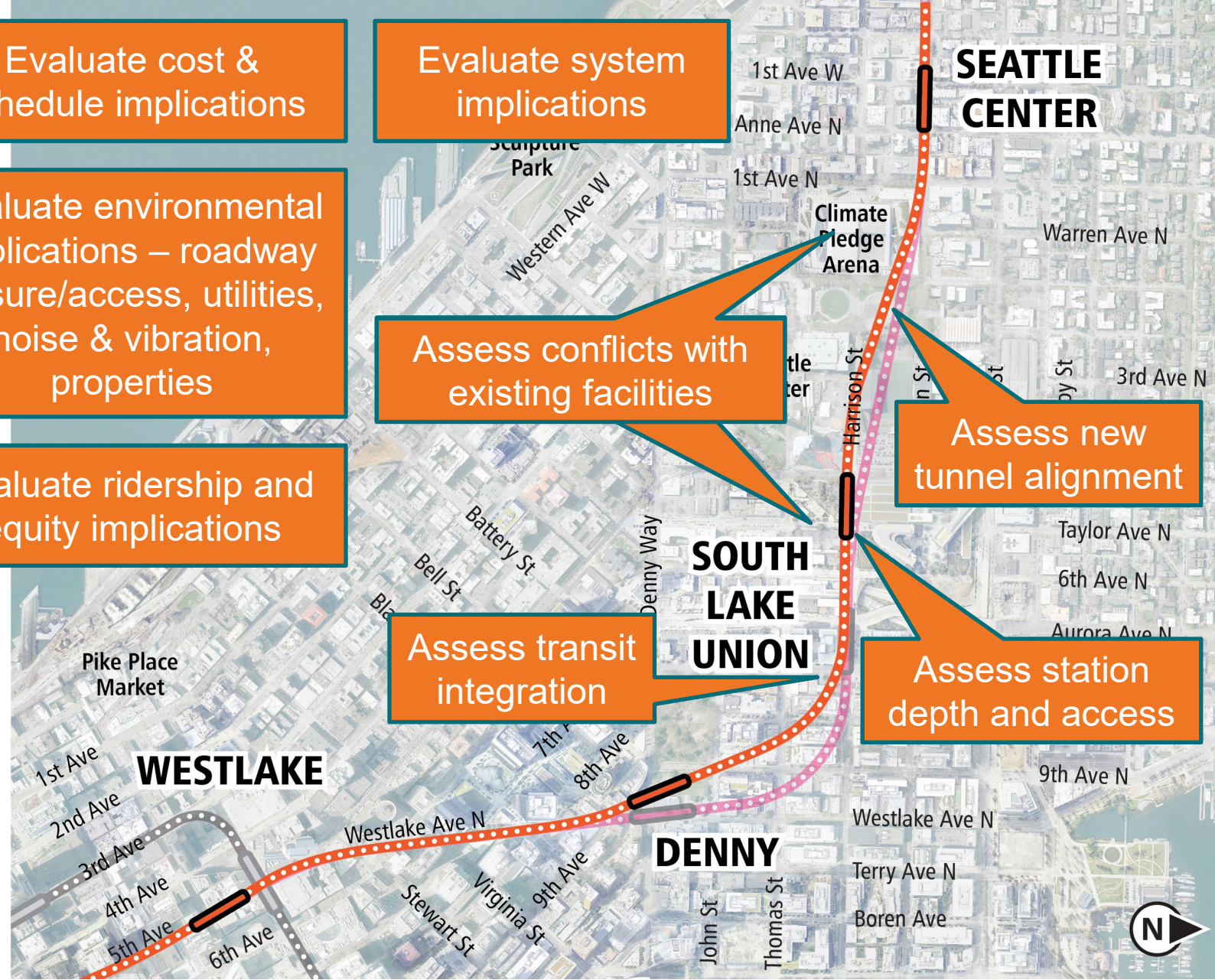
Assess conflicts with existing facilities

Evaluate ridership and equity implications

Assess new tunnel alignment

Assess transit integration

Assess station depth and access



# ***Denny Station***

***Construction impacts / Street closures***

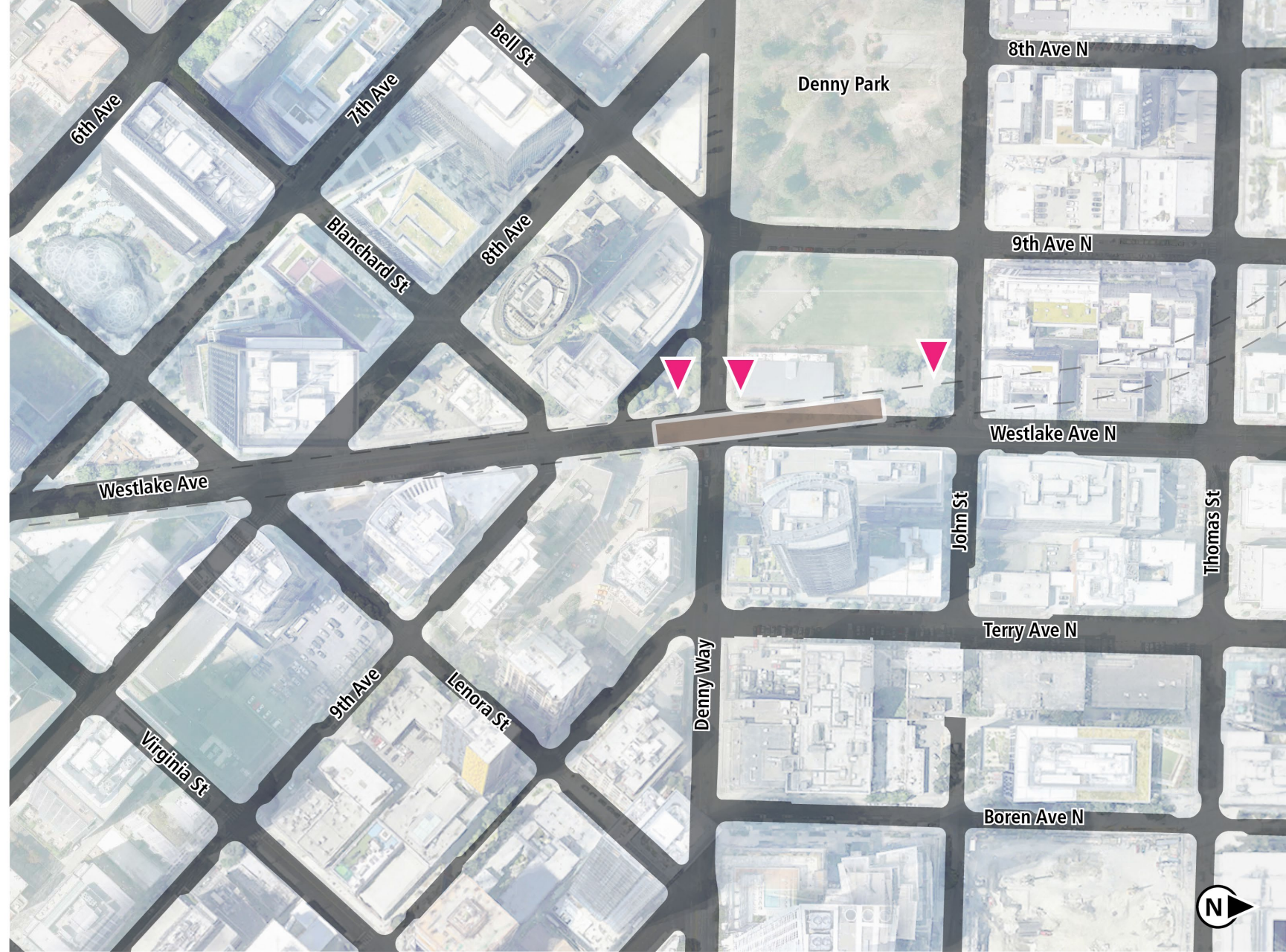
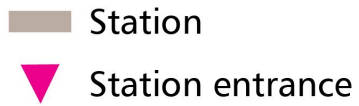
# Current preferred alternative

Key streets affected during construction:

- Westlake Ave
- Denny Way

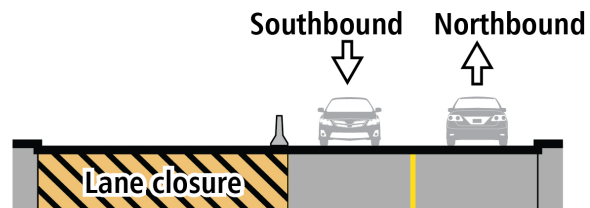
Streetcar closed

\* Potentially affected low volume streets not listed



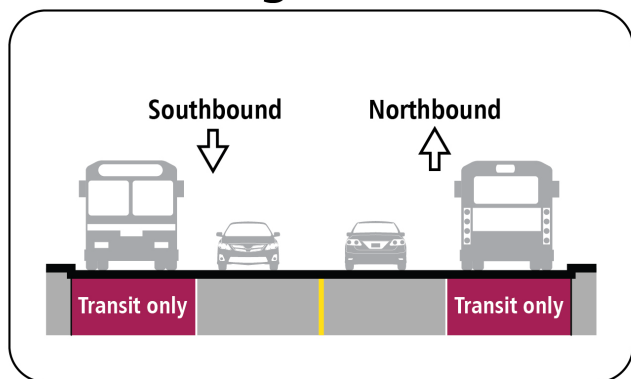
# Westlake Ave during construction

2 years



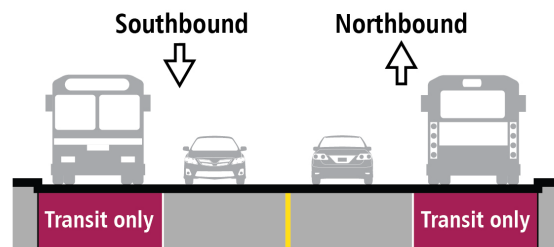
- *Two general purpose lanes*

## Existing Condition



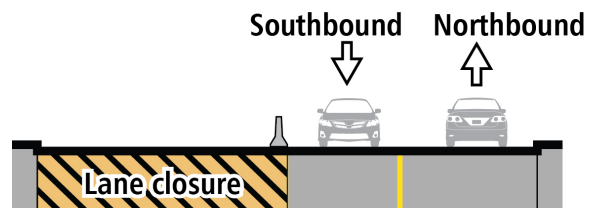
- *Two general purpose lanes*
- *Two transit lanes*

5 years



- *Two general purpose lanes*
- *Two transit lanes*

1 year



- *Two general purpose lanes*



# *Roadway decking during construction*



# ***SLU Station***

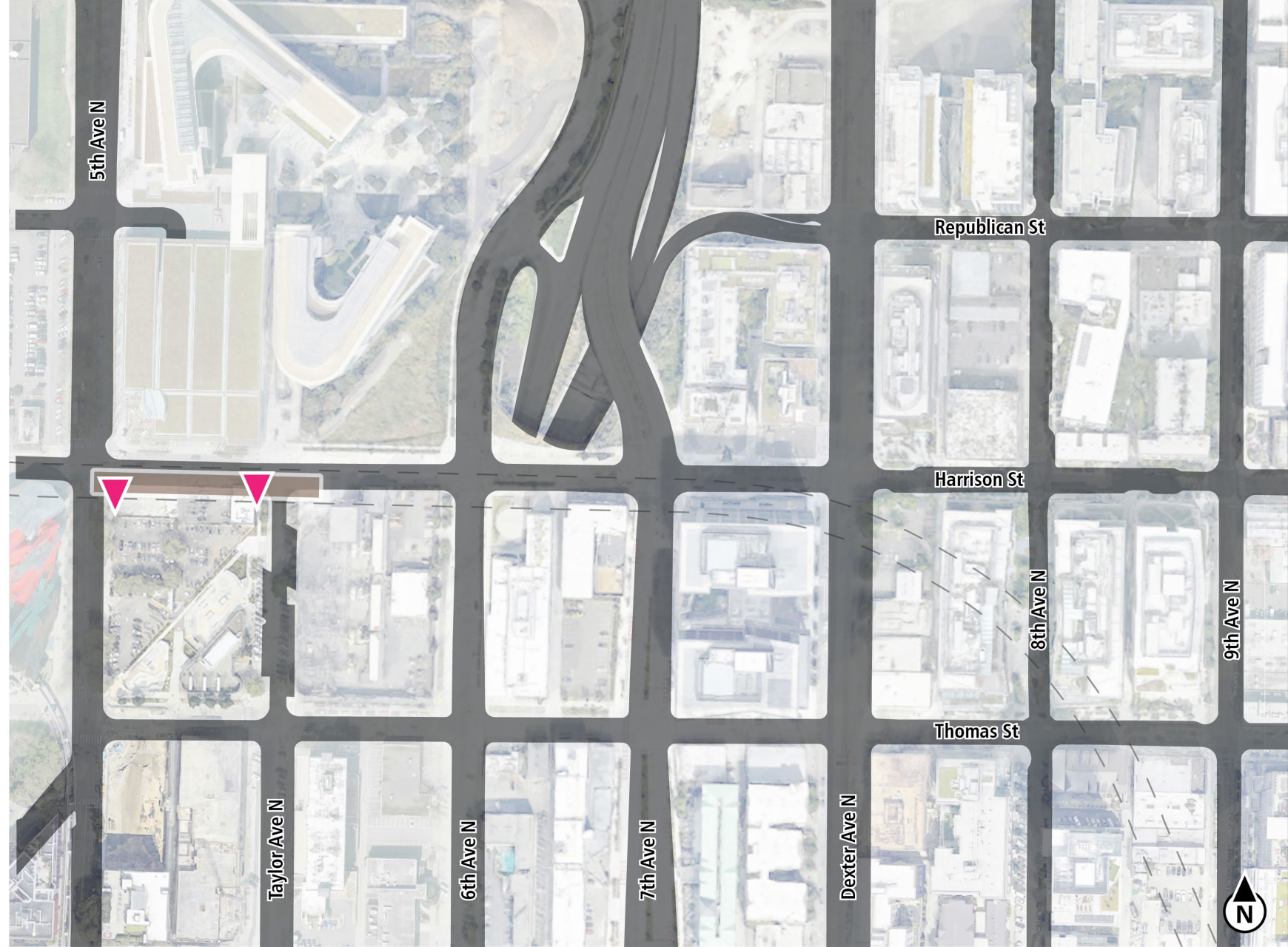
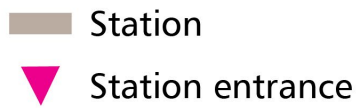
***Construction impacts / Street closures***

# Potential new alternative

Key streets affected during construction:

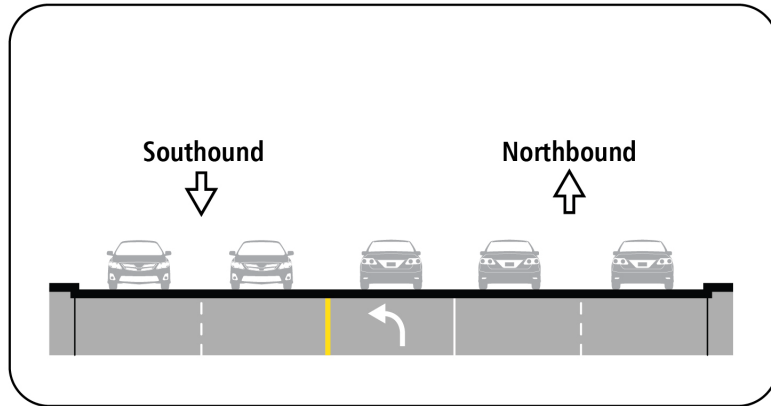
- 5th Ave
- Harrison St

\* Potentially affected low volume streets not listed



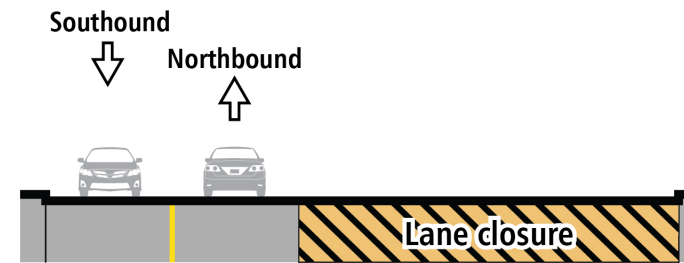
# 5<sup>th</sup> Ave during construction

## Existing Condition



- *Four general purpose lanes*

8.5 years



- *Two general purpose lanes*

# Key roadway effects

## Denny Shifted North + SLU 7th/Harrison

Street	2032 Peak Hour Volume	Construction Year							
		1	2	3	4	5	6	7	8
Westlake Ave	700-1,200								
Denny Way	1,500-1,800								
Harrison St*	800	E W							
5th Ave	700-1,400								
7th Ave	2,600								

\*E is Harrison Street east of 7<sup>th</sup> Ave, W is Harrison Street west of 7<sup>th</sup> Ave

\* Potentially affected low volume streets not listed

## Denny Shifted West + SLU 5th/Harrison

Street	2032 Peak Hour Volume	Construction Year								
		1	2	3	4	5	6	7	8	9
Westlake Ave	700-1,200									
Denny Way	1,500-1,800									
Harrison St*	800									
5th Ave	700-1,400									
7th Ave	2,600									

\*Closure only west of 7<sup>th</sup>

### Legend

- Reduced GP Lanes
- Full Closure
- Transit Lanes Closure Only

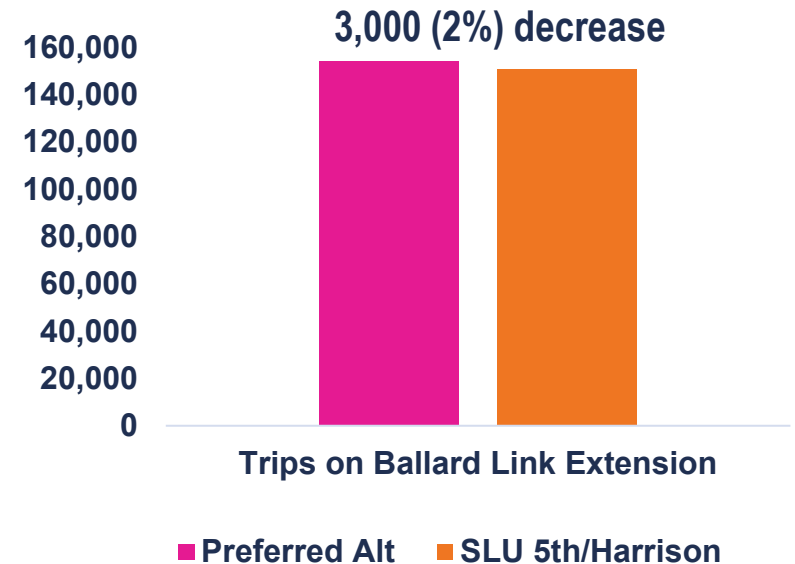
# *Ridership results*

# Ridership modeling results

*What would happen if the SLU station were moved from 7th to 5th...*

Overall transit ridership would remain steady but Link ridership would be slightly lower. Link ridership reduction due to lower volume of transit transfers – notably from E Line.

Average Weekday (2042)



# *Results comparison*



## Current preferred alternative

## Potential new alternative



### Performance *Ridership/Transit Integration/Equity*

#### Denny Shifted North and SLU 7th/Harrison

Convenient transfer to bus routes on Harrison St and 7<sup>th</sup> Ave E Line serving communities of color and low-income populations along the SR 99 corridor

**2% higher ridership (~3,000 more trips per day)**

**More convenient access to SLU core**

Denny station depth: 90 ft, SLU station depth: 110 ft (both stations facilitate stair, escalator and elevator access)

#### Denny Shifted West and SLU 5th/Harrison

Convenient transfer to bus routes on Harrison St. Two-block transfer to 7<sup>th</sup> Ave E Line (3-5 min walk).

**More convenient access to Seattle Center**

Denny station depth: 100 ft, SLU station depth: 130 ft (both stations facilitate stair, escalator and elevator access)

### System Implications

No delay to opening of BLE; does not affect other Link extension projects

Delays opening of BLE; results in trains operating through existing downtown tunnel – which will be constrained in capacity – for a longer period, and results in trains from West Seattle operating longer as a shuttle to SODO

### Construction effects *Street closures*

**Closure of transit lanes on Westlake Ave for ~3 years; streetcar closed for ~8 years**

Harrison St closed from 6<sup>th</sup> to 7<sup>th</sup> Ave and from 7<sup>th</sup> to Dexter Ave; maintain local access via decking/phased construction

**Reduced number lanes on Denny Way for ~3 years**

**Avoids closures on Westlake Ave; reduces number of lanes on 5<sup>th</sup> Ave for ~8.5 years**

Harrison St closed between 5<sup>th</sup> Ave and Taylor Ave; maintain local access (MoPOP, 5<sup>th</sup> Ave garage) via decking/phased construction

**Reduced number of lanes on Denny Way for ~1 year**

### Utilities

Major electrical utilities on Harrison St, but fits within overall project schedule

**Less intensive electrical utilities on Harrison St; avoids utilities on Westlake Ave**

### Noise and vibration

Potential noise and vibration effects to NW Rooms during tunnel construction

Potential noise and vibration effects to NW Rooms during tunnel construction

Potential effects to MoPOP during station and tunnel construction



### Current preferred alternative

### Potential new alternative

#### Denny Shifted North and SLU 7th/Harrison

#### Denny Shifted West and SLU 5th/Harrison

<b>Cost and schedule</b>
<i>Cost</i>
<i>Schedule</i>
<i>Risk</i>

Similar construction costs for both options (~\$60M more than finance plan)*
No delay to current project timeline
Hazardous materials risk
Potential property development risk (Block 48)

Similar construction costs for both options (~\$90M more than finance plan)
5th/Harrison would add some cost due to additional work associated with environmental review, PE, Admin, etc. costs (~\$25M)
<b>Main cost implication will be escalation from EIS delay associated with adding new alternative (~\$500M in year of expenditure dollars)</b>
<b>Reduces complexity of Denny station construction but overall project construction not faster because driven by the duration to tunnel from Queen Anne to SODO</b>
<b>Delay associated with environmental review/PE for new alternative potentially adds 10 months to 2 years to overall project schedule depending on if/when it is identified as preferred alternative</b>
Potentially higher hazardous materials risk
Additional potential property development risk (Block 48, 9 <sup>th</sup> /John, 9 <sup>th</sup> /Thomas)

\*Cost differential updated since prior further studies effort

***Community feedback***

# Engagement snapshot

December 2023 – May 7, 2024



**40+ briefings**

engaging community members, property owners, businesses, and organizations



**Online survey** with 1400+ responses



**2 community webinars**

engaging approx 50 participants



**6 email updates** engaging 12K+ subscribers



**Social media campaign** with 13K+ impressions



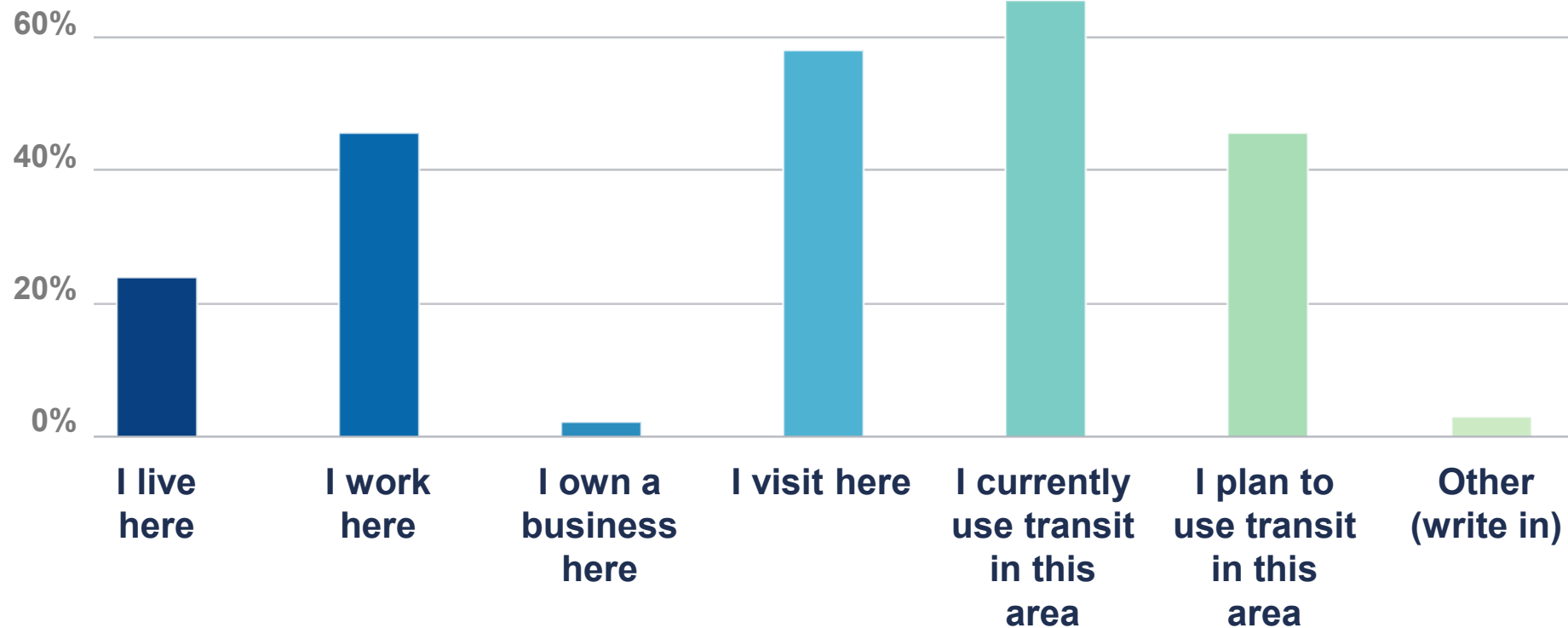
**320 posters**

distributed in and around the SLU and Denny communities

# Community feedback survey

1462 survey responses

What is your relationship to the South Lake Union and Denny station areas? (select all that apply)



**Current preferred alternative**

**Potential new alternative**

	<b>Denny Shifted North and SLU 7th/Harrison</b>	<b>Denny Shifted West and SLU 5th/Harrison</b>
<b>Performance</b> <i>Ridership/Transit Integration/Equity</i>	<p>Interest in better transfers, higher ridership, shallower stations</p> <p>Interest in more convenient access to SLU</p>	<p>Some interest in more convenient access to Seattle Center</p>
<i>System Implications</i>	<p>Broad interest in avoiding regional system effects</p>	
<b>Construction effects</b> <i>Street closures, Utilities, Noise and Vibration</i>	<p>Concerns about effects to traffic and pedestrian realm during construction and utility relocation, particularly along Westlake Ave</p> <p>Concerns with construction disruption impacting the vitality of SLU commercial core</p>	<p>Interest in avoiding effects to traffic and pedestrian realm during construction, particularly along Westlake Ave</p> <p>Concerns about traffic (particularly during events), pedestrian access and noise and vibration effects to Seattle Center during construction</p>
<b>Cost and schedule</b>	<p>Broad interest in limiting delays and cost increases</p>	

***Next steps***

# *Future actions*

- Project development is in the early stages of the project life cycle; we are exploring strategies to deliver the project effectively
- Will use innovative and best industry practices to support project delivery and performance
- Team will work to mitigate and manage risk via a robust risk management plan, plan is under development
- Will continue work with project partners to streamline processes where possible to reduce risks, improve efficiency and leverage collaboration



# Potential board action in May

Potential board action	Schedule delay	Cost of delay (YOES)
1. No action (i.e. do not add the new alternative to the Draft EIS)	None	None
2. Add the new alternative to the Draft EIS:		
a) Add the new alternative to the Draft EIS	~10 months	~\$0.5B
b) Add the new alternative to the Draft EIS and later identify it as the preferred after Draft EIS publication	~2 years	~\$1B
c) Add the new alternative to the Draft EIS and identify it now as the preferred alternative	~10 months	~\$0.5B

*Thank you.*



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