

***West Seattle and Ballard
Links Extensions
System Expansion Committee Workshop***

May 20, 2022



Why we're here today

- Learn about project alternatives, benefits, key differentiators and cost savings and refinement ideas
- No action today

Presentation

- 1) Project context and overview
- 2) Segment alternatives, benefits, and key differentiators
- 3) Cost saving and refinement concepts
- 4) Next Steps

Project context

Current system (2022)



Link light rail **1** **T**

- Two lines
- 25 miles
- 26 stations
- Connecting Northgate–Angle Lake, Tacoma Dome–Theater District

Sounder trains **N** **S**

- Two lines
- 83 miles
- 12 stations
- Connecting Everett–Seattle and Lakewood–Seattle

ST Express buses

- 24 express routes on regional freeway corridors



System expansion

Link light rail 1 2 3 4 T

- Five lines
- 116 miles
- 83 stations

Sounder trains N S

- Two lines
- 91 miles
- 14 stations

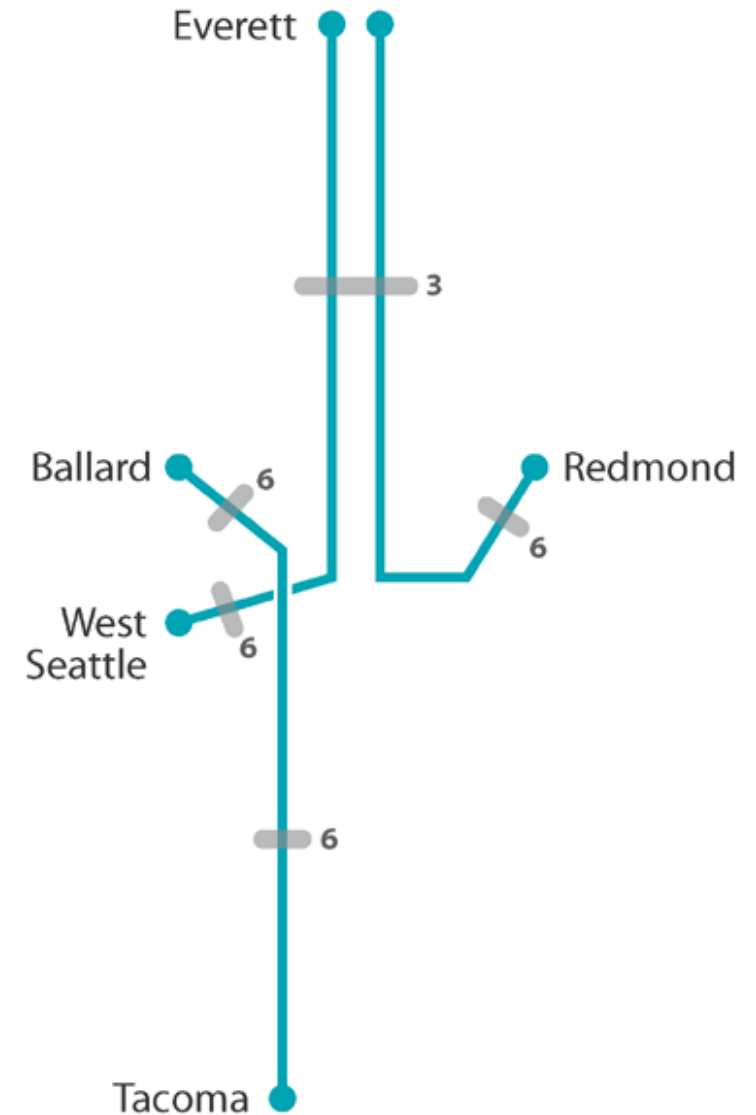
Stride bus rapid transit S1 S2 S3

- Three lines
- 45 miles on I-405 and SR 522.
- Serving 12 cities and connecting to light rail in Shoreline, Lynnwood, Bellevue and Tukwila.

ST3 operating plan

Spine segmentation

- Reduces longest line run-time to < 90 minutes
- Increases regional reliability and capacity
- Utilizes 2nd downtown Seattle tunnel, which ST3 funds regionally



Board-adopted realigned program

Work toward initial Target Schedule with the Affordable Schedule as safety net

Projects with affordability gaps:

- **West Seattle and Ballard Link Extensions**
- **Everett Link Extension**
- **Tacoma Community College Link Extension**
- **South Kirkland-Issaquah Link Extension**

Collaborate to tackle funding gaps through project cost savings and seeking additional financial capacity.

Realignment plan for West Seattle and Ballard Link Extensions



Smith Cove to Ballard: Target schedule 2037;
affordable schedule 2039



WSBLE share of the regional affordability gap was
\$1.8B (2019\$) based on 2021 cost estimates and
financial projections



Affordable schedule finance plan based on Draft EIS
cost estimates for the project's preferred alternative

M2019-51: Preferred and other alternatives

Preferred Alternative

- Basis of Finance Plan

Preferred Alternative with 3rd party funding

- Establishes basis of cost comparison and timing for identifying funding
- Rise in real estate costs impact comparisons to preferred alternative

Other DEIS alternatives

- May be considered as the Board confirms or modifies the preferred alternative

Project overview



West Seattle and Ballard Link Extensions project (WSBLE)

- ✓ Included in Sound Transit 3 (ST3) plan
- ✓ Two light rail extensions and new, light rail-only downtown tunnel
- ✓ 12 miles of light rail service that will serve 14 stations

Operating plan: 2032

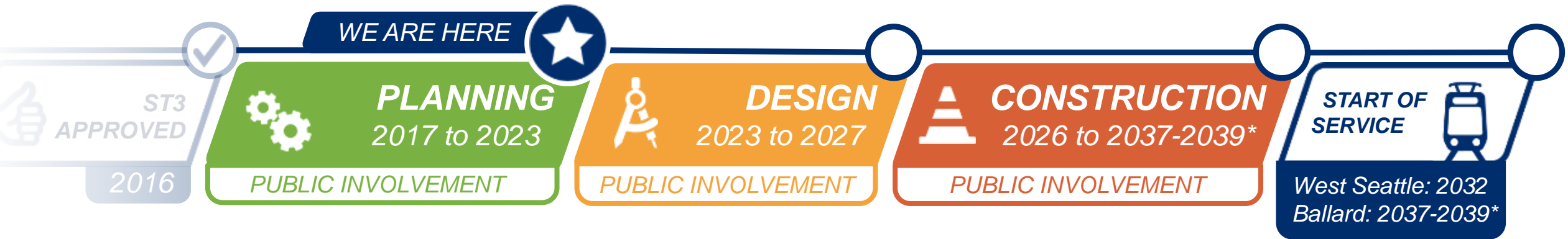


Operating plan: 2042



West Seattle and Ballard Link Extensions

Project timeline



Project timeline





ST3
APPROVED

2016



PLANNING



DESIGN

2017–2019

Alternatives development

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

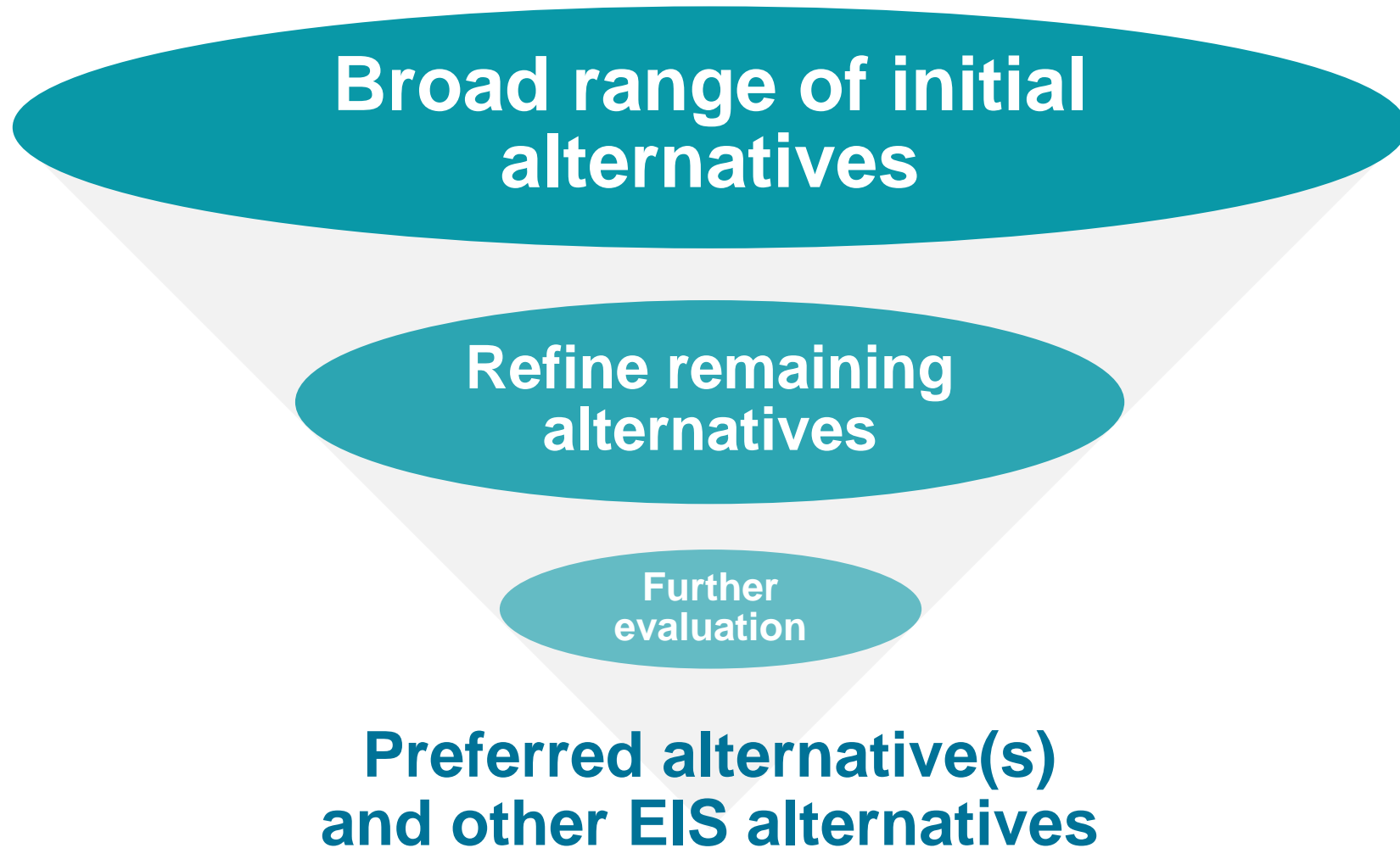
2019–2023

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

PUBLIC INVOLVEMENT

Alternatives development screening process



Draft EIS alternatives

What we're studying in this phase

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

*Dates reflect an affordable schedule based on current financial projections and cost estimates, and a target schedule.





ST3
APPROVED

2016



PLANNING



DESIGN

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2019–2023

Environmental review

Early 2022: Publish Draft EIS

Public comment period

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Federal Record of Decision

PUBLIC INVOLVEMENT

Draft EIS comment period



*Published Draft EIS
January 28, 2022*



*Comment period
ended April 28, 2022*



External engagement snapshot (1/28-4/28)



5,000+ Draft EIS comments



5 Draft EIS public meetings



1 online open house engaging more than
19,500 online visitors



82 community briefings,
office hours and workshops



74 property owner webinars,
office hours and meetings



12 Community Advisory Group meetings



Ads featured on **30** unique radio,
digital and print publications



38 posts on social media platforms,
with 140K+ impressions



34 Fairs, festivals and other
tabling events



8 email updates engaging more than
and blog posts **10,900** subscribers



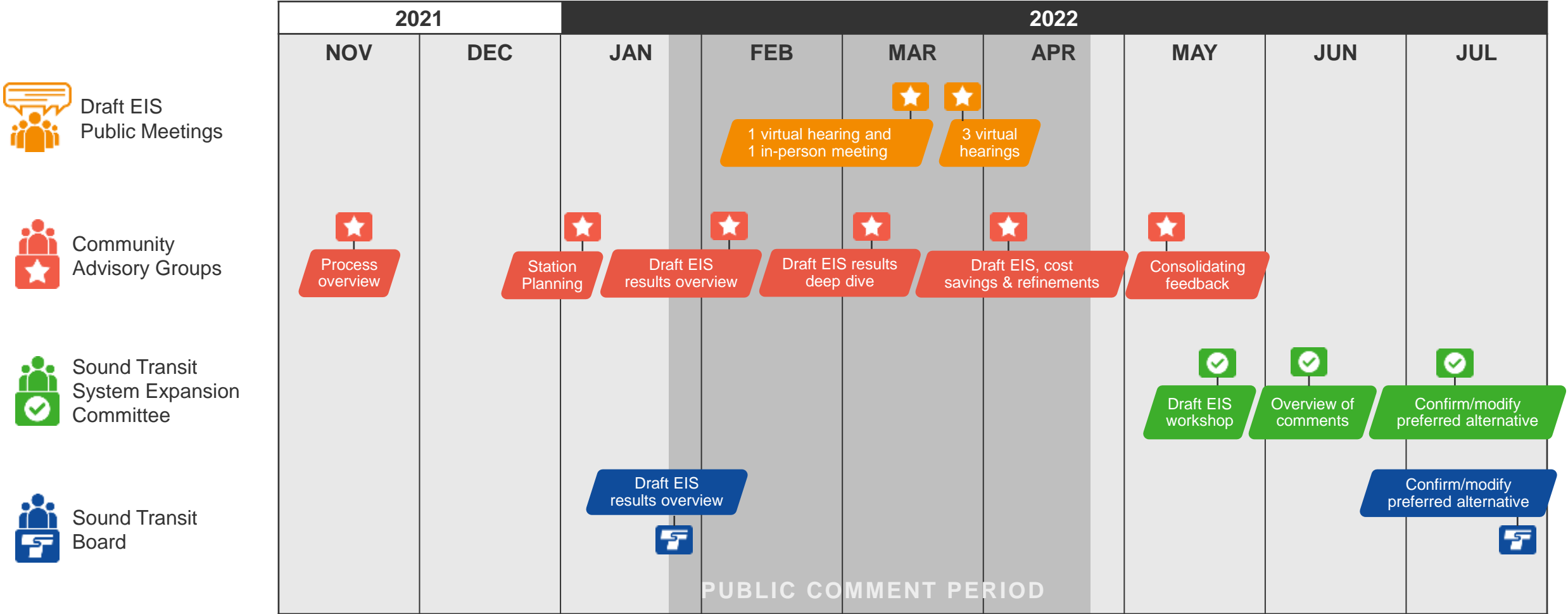
1,200+ posters delivered along
the corridor



11 Community liaisons engaging more than
280 businesses

Community engagement and collaboration

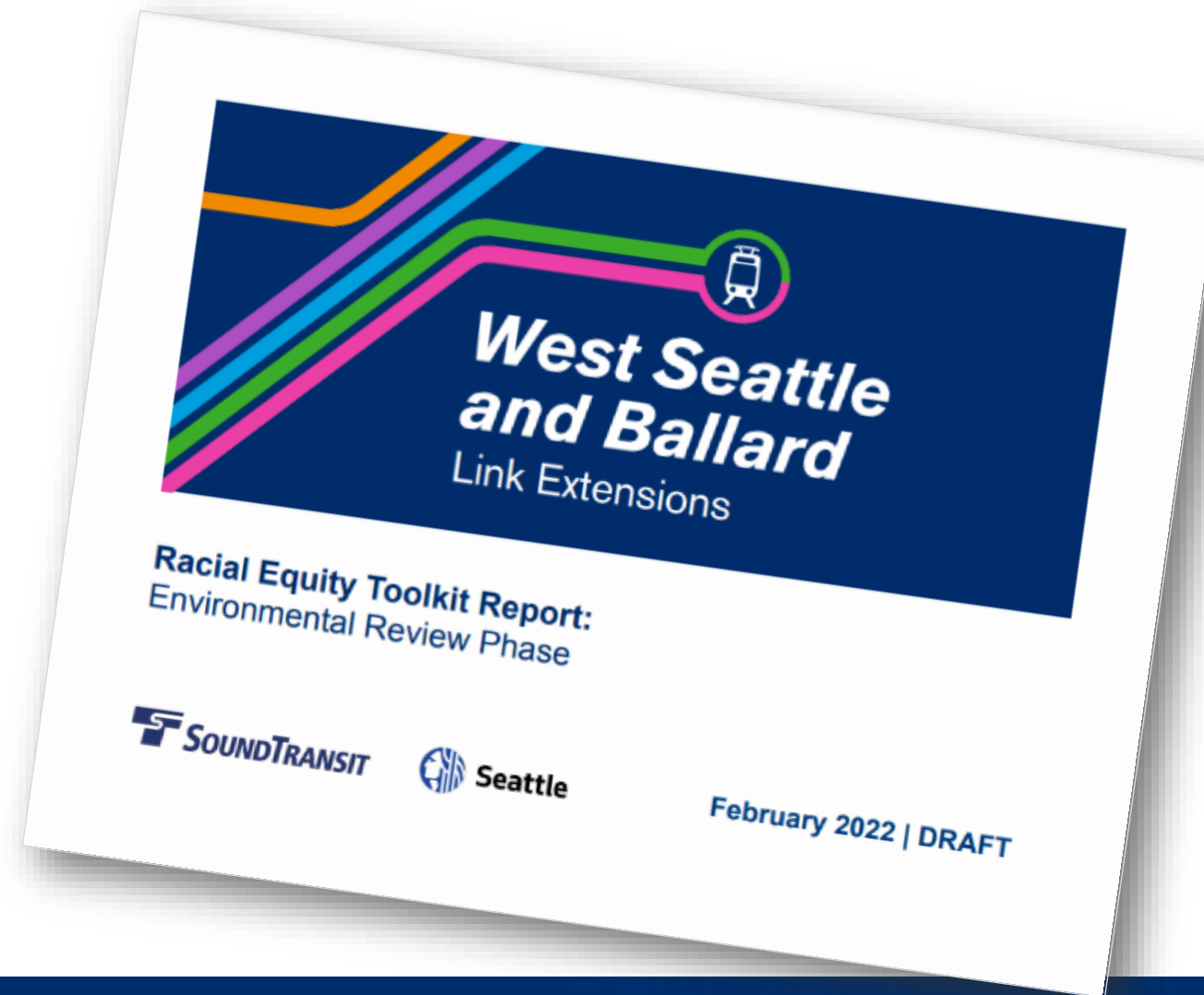
Draft Environmental Impact Statement (EIS)



Racial Equity Toolkit (RET) Report

Environmental review

- ✓ Released as a Draft
- ✓ Sets forth RET Outcomes, for RET focus areas and corridor-wide
- ✓ Will be updated based on comments received on the Draft EIS



RET focus area outcomes

Chinatown / ID Station area

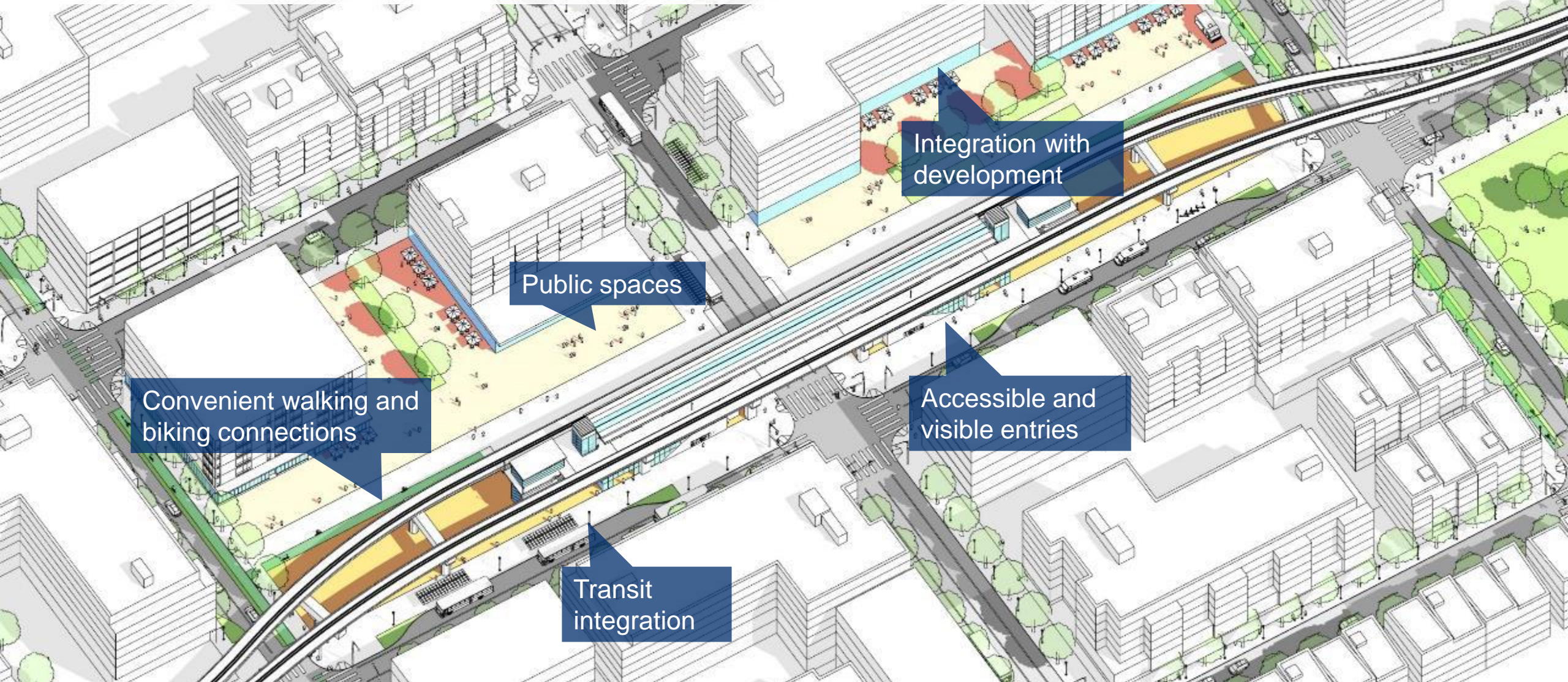
- Limit harmful impacts of the project and work with impacted communities to identify opportunities to repair past harm
- Maximize connections for all users, and
- Community shapes decisions that impact them, through self-determination and with a 100-year vision for future generations.

Delridge Corridor

- An excellent transfer experience including bus and rail integration and options for RET community-desired amenities provided at the station; and
- Equitable transit-oriented development serving the community.



The goal: integrated station areas



Integration with development

Public spaces

Convenient walking and biking connections

Accessible and visible entries

Transit integration

Co-planning focus: the “Station Context”

- **1-3 blocks surrounding the station**, which will see the most direct physical change from station construction and operations
- **Area of shared responsibility**; geography encompasses Sound Transit, City, and others’ investments
- Work to **align existing and planned investments** in service of community priorities and accessibility needs



Station Planning Progress Report

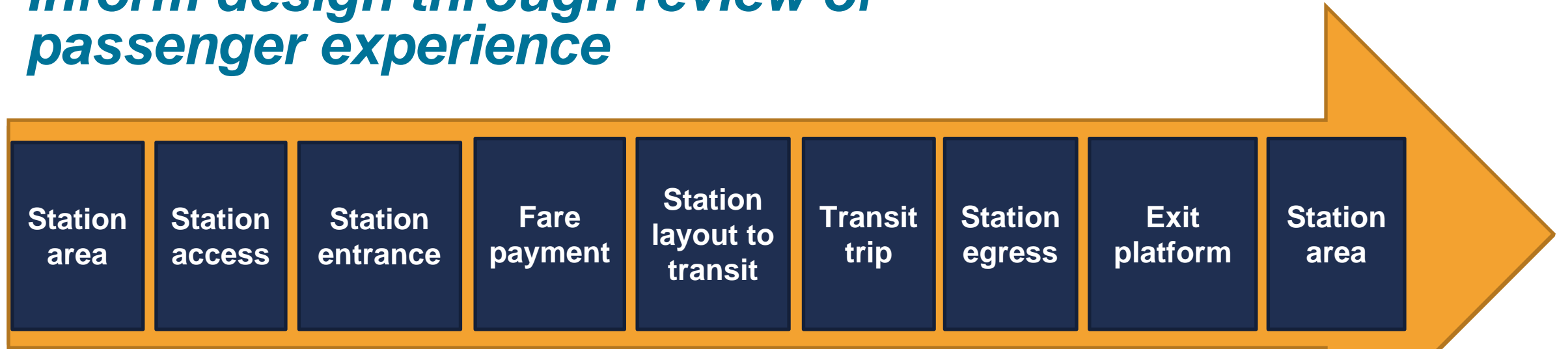
Available at:
wsblink.participate.online

- Viewable and downloadable as full document or individual chapters on “Stations” tab
- **Summary of Draft EIS station concepts**
- Presents ideas developed by agency partners **for communities to provide feedback on in future station area planning**
- Focuses on access to stations by foot, bike, and bus; potential transit-oriented development areas; and opportunities for public space and streets around the stations



Passenger experience workshops

Inform design through review of passenger experience



You are the passenger

Victor is a retired veteran who lives alone in Lynnwood. Victor has a disability, uses a wheelchair and cannot drive. He owns a reduced fare ORCA card and relies on public transportation. Today he is scheduled to see a specialist at a hospital in Beacon Hill in the morning. He has not been to this hospital in Beacon Hill before and this will be his first transportation. Today he is scheduled to see a specialist at a hospital in Beacon Hill in the morning. He has not been to this hospital in Beacon Hill before and this will be his first time using public transportation for this trip. On his way home, one of the elevators at a station along his journey has “just” gone out of service. There is no signage.



Persona characteristics

Regular Riders

Occasional Riders

First-time Riders

Personas have at least one blue characteristic.

Limited English Proficiency

Tourist

Family & Children with strollers

Persons traveling with belongings

Women who are pregnant

Senior

Youth

Persons with mobility assistance device

Persons with hearing impairment

Persons with visual impairment

Persons with speech impairment

Persons traveling with service animals

Persons traveling with pets

Technology literate

Personas may have none, few or many orange characteristics, further framing their rider needs.

PASSENGER FOCUS:

We always start with our passengers' needs and work back from there. They are the focus of everything we do.



*Aaron, Barry,
Charlene & Darlene*



Andrew



Anita



Anthonia



Anthony



Bert & Ernie



Casa



Desta & Sebele



Drake



Helen



Jack & Jill



Jae



Josephine



朱莉婭



Katherine



Kris



Mackenzie



Morgan



Ms. Burke



Roseanne



Sidney



Susy



Tom & Geri



Verona



Victor

***Segment alternatives, benefits,
and key differentiators***

What is typically studied in an EIS?

Transportation

- Regional transportation
- Transit services
- Arterial and local street systems
- Parking
- Non-motorized facilities
- Navigation
- Freight

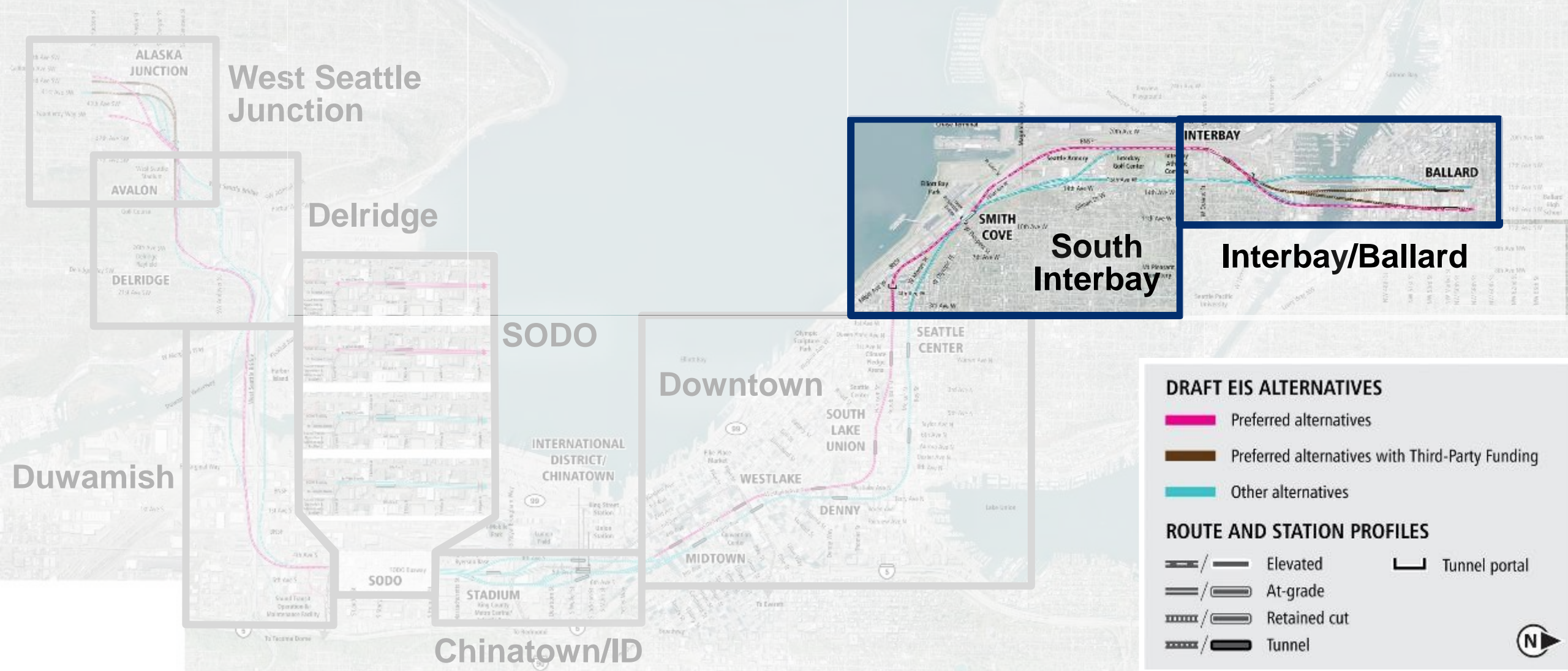
Natural environment

- Air quality and greenhouse gas emissions
- Ecosystems
- Water resources
- Geology and soils

Built environment

- Acquisitions, displacements and relocations
- Noise and vibration
- Economic effect
- Visual resources
- Parks and recreation
- Land use
- Energy
- Hazardous materials
- Public services
- Historic and archaeological resources
- Social resources, community facilities and neighborhoods
- Electromagnetic fields
- Utilities

Draft EIS alternatives





PM Peak Travel Times (in 2042)

NW Market St/15th Ave NW to Westlake
38 mins without Link
11 mins with Link



PM Peak Transit Reliability (in 2042)

Ballard Link Project Corridor
E/F rating without Link
A rating with Link

DRAFT EIS ALTERNATIVES

- Preferred alternatives
- Preferred alternatives with Third-Party Funding
- Other alternatives

ROUTE AND STATION PROFILES

- Elevated
- At-grade
- Retained cut
- Tunnel
- Tunnel portal





All Smith Cove Alternatives

2,600 Daily Boardings
65% Walk



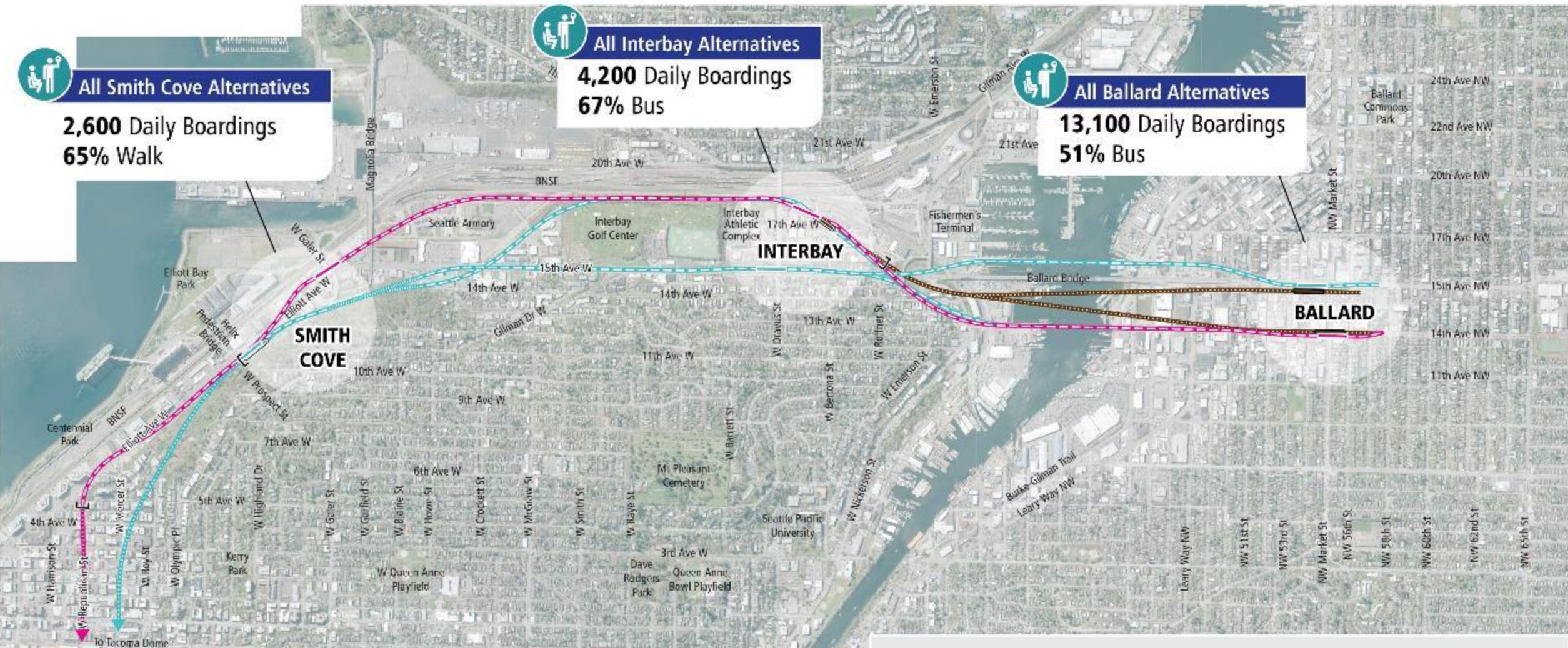
All Interbay Alternatives

4,200 Daily Boardings
67% Bus

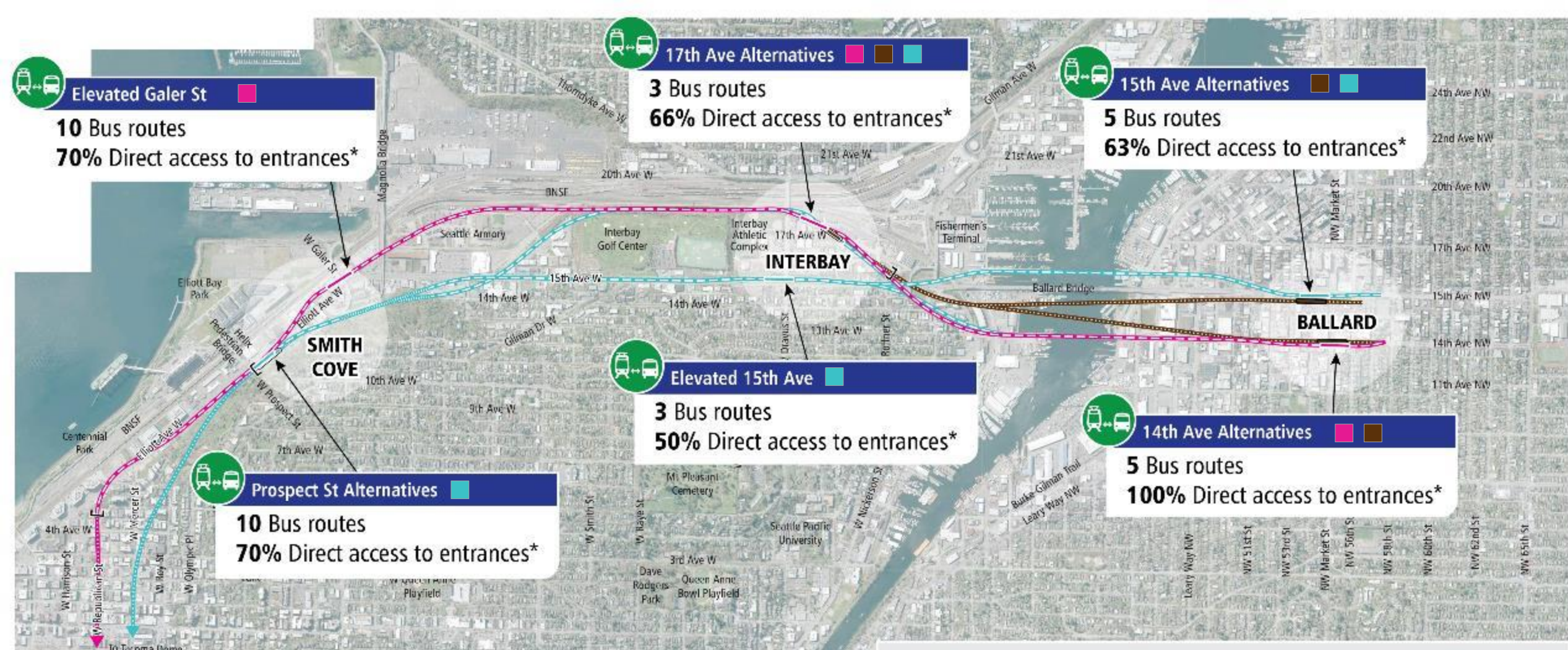


All Ballard Alternatives

13,100 Daily Boardings
51% Bus



DRAFT EIS ALTERNATIVES		ROUTE AND STATION PROFILES	
	Preferred alternatives		Elevated
	Preferred alternatives with Third-Party Funding		At-grade
	Other alternatives		Retained cut
			Tunnel
			Tunnel portal



Note: Assumes MetroConnects 2040 vision network and service designations.

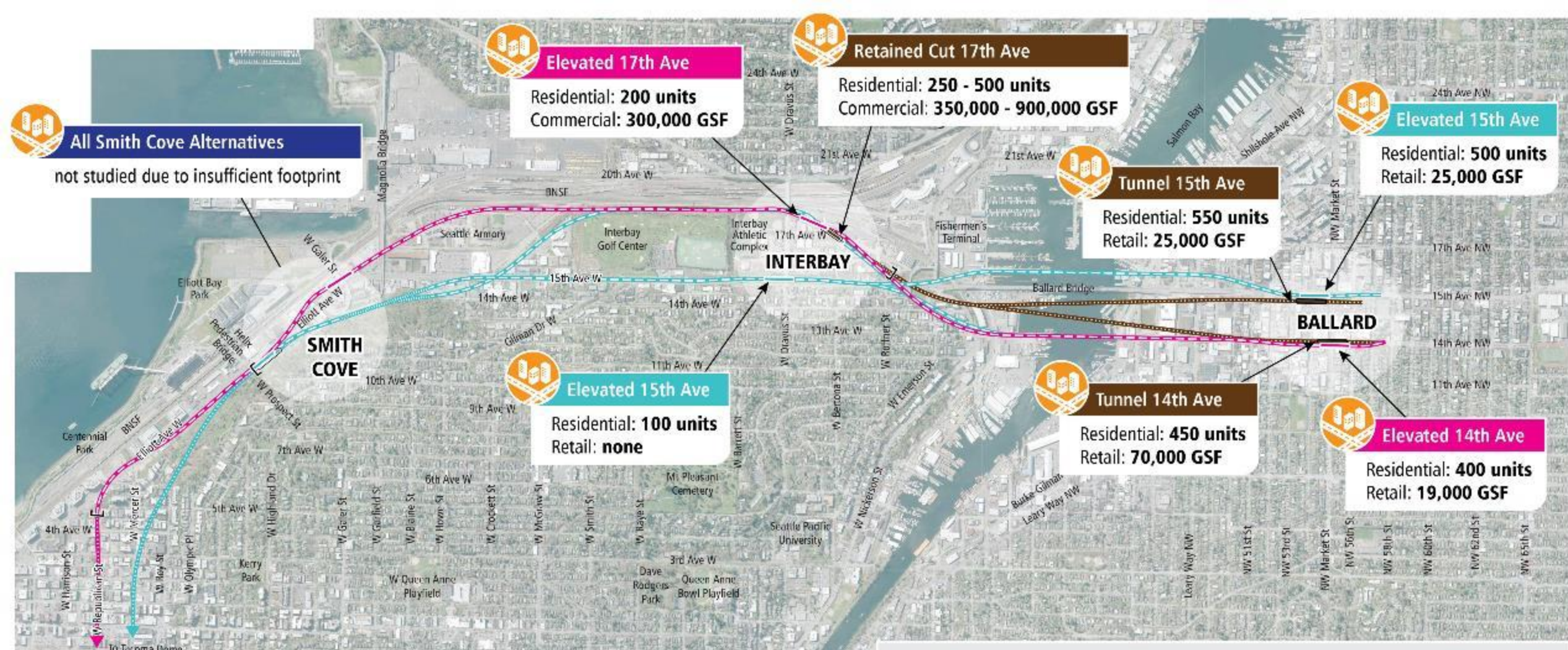
*Measured by number of peak hour trips serving stops on the same block not requiring street crossings and within 100 feet of a primary station entrance.

DRAFT EIS ALTERNATIVES

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- Other alternatives

ROUTE AND STATION PROFILES

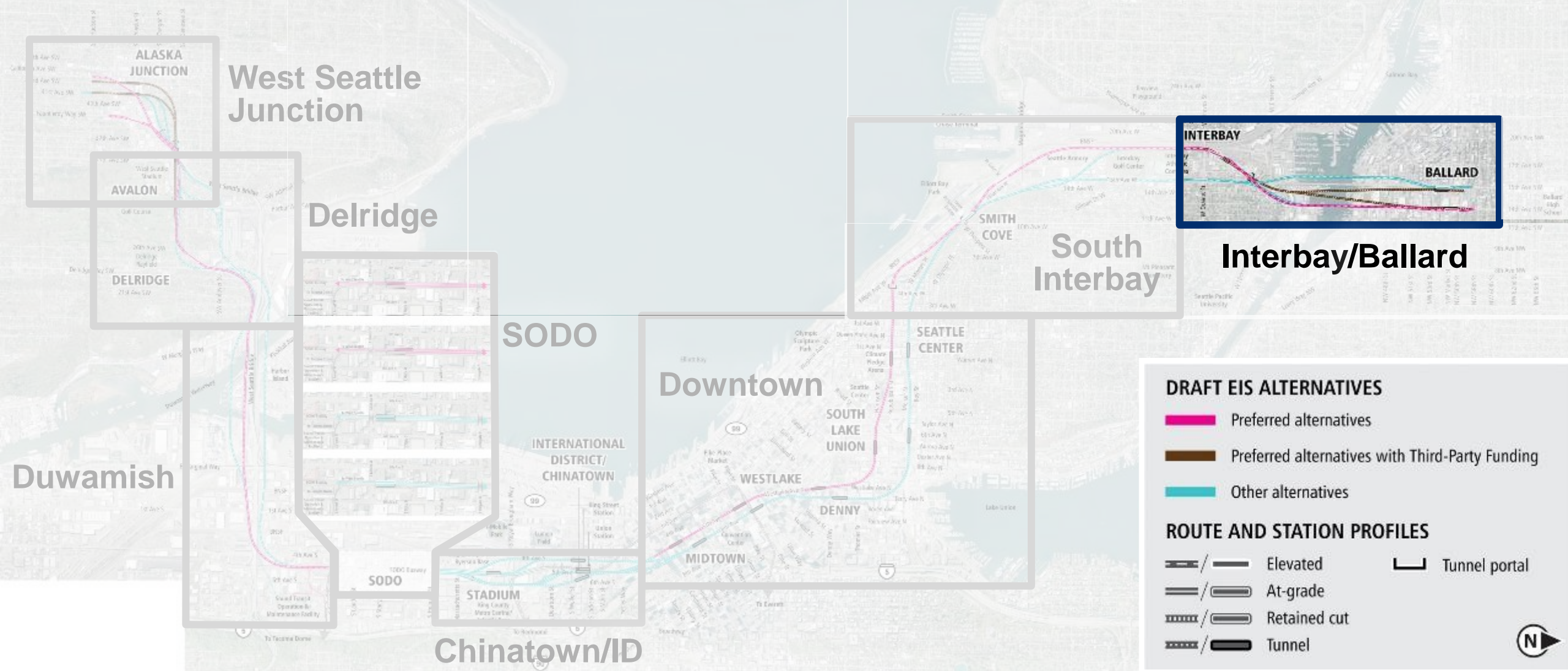
- Elevated
- At-grade
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- Tunnel portal

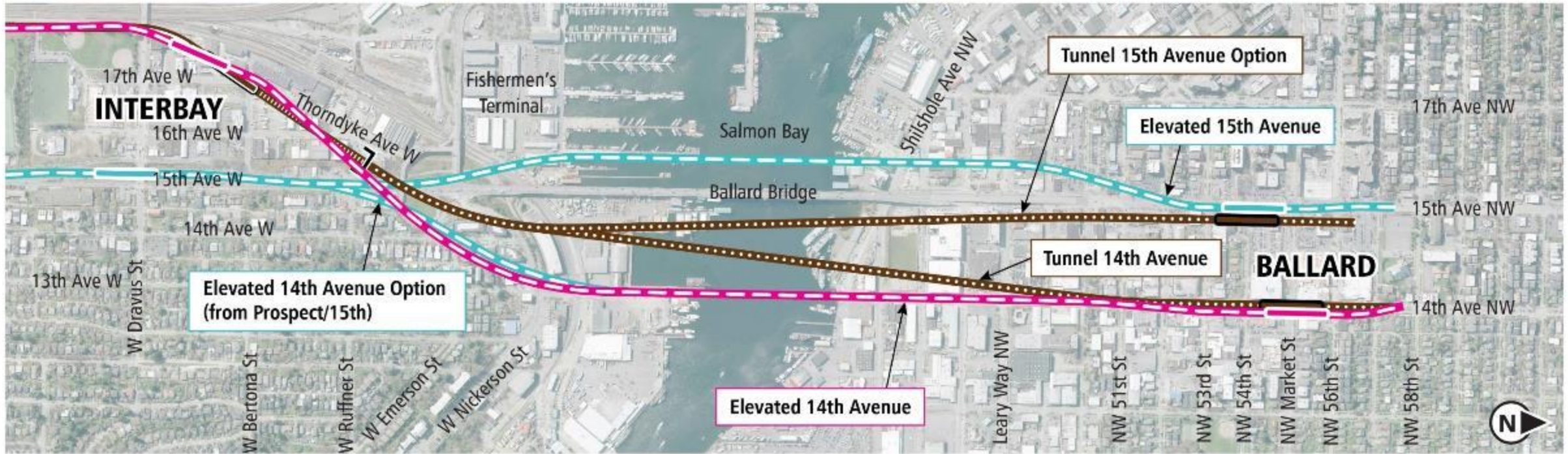


Note: Current zoning designations and station footprints were used to model capacity and feasibility of potential development sites. In some cases, modified zoning was assumed. Assumptions do not constitute official policy.

DRAFT EIS ALTERNATIVES		ROUTE AND STATION PROFILES	
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Draft EIS alternatives











DRAFT EIS ALTERNATIVES

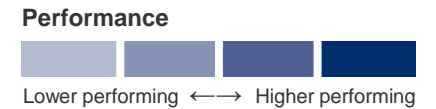
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- Other alternatives







ROUTE AND STATION PROFILES

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- At-grade
- Retained cut
- Tunnel
- Tunnel portal

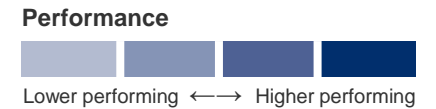
	Elevated 14th Avenue	Tunnel 14th Avenue	Tunnel 15th Avenue Option	Elevated 14th Avenue Option (from Prospect/15th)	Elevated 15th Avenue
Project cost (2019\$ in billions) 	\$1.5-1.6B	\$1.5B	\$1.7B	\$1.6B	\$1.5B
Residential displacements 	105 units	14 units	21 units	151 units	25 units
Historic property effects 	7	4	3	7	10
Employee displacements 	610	380	370	400	620
In-water effects (Permanent) 	1.2 acre	none	none	1.2 acre	0.8 acre
Other considerations 	Maritime business displacements Boat ramp and stormwater outfall relocation		Construction closures on 15th	Maritime business displacements Boat ramp and stormwater outfall relocation	Maritime business displacements Delays from bridge opening

The above information is for illustration only. Please refer to DEIS for further detail.



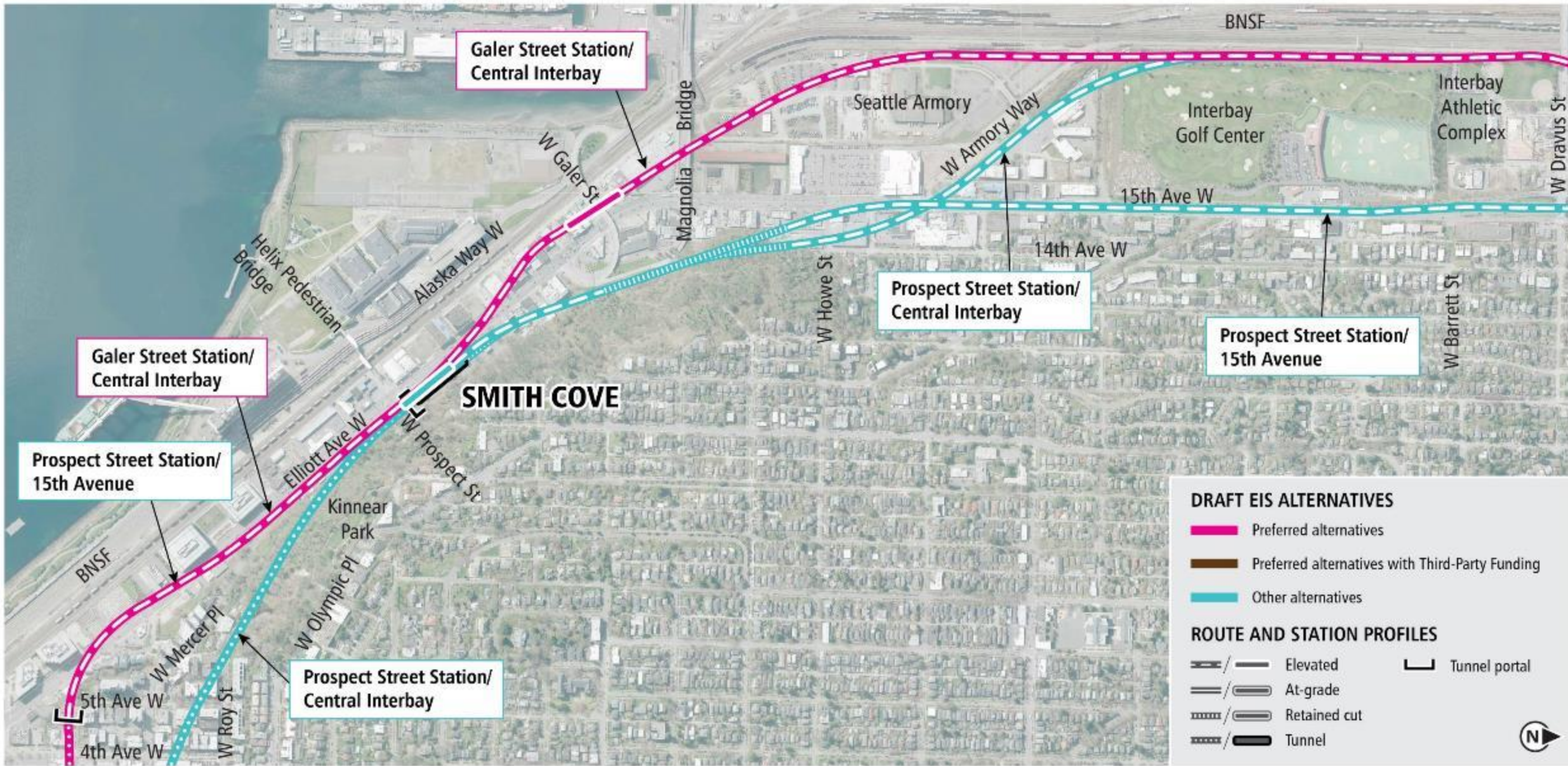
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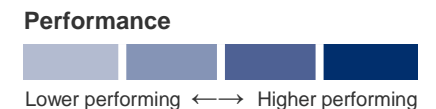
Draft EIS alternatives











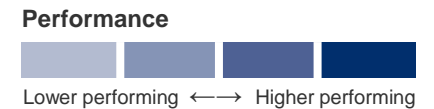
	Galer Street Station/ Central Interbay	Prospect Street Station/ 15th Avenue	Prospect Street Station/ Central Interbay
Project cost  (2019\$ in billions)	\$1.3B	\$1.4-1.5B	\$1.5-1.6B
Residential displacements 	174 units	123 units	5 units
Historic properties effects 	7	8	2
Park effects  (Permanent)	3.1 acres	0.7 acres	4.0 acres
Biodiversity effects  (Permanent)	<0.1 acre	3.8 acres	5.5 acres
Roadway effects  (Guideway)	0.4 mile	1.0 mile	0.1 mile
Other considerations 		Queen Anne hillside steep slopes	Queen Anne hillside steep slopes

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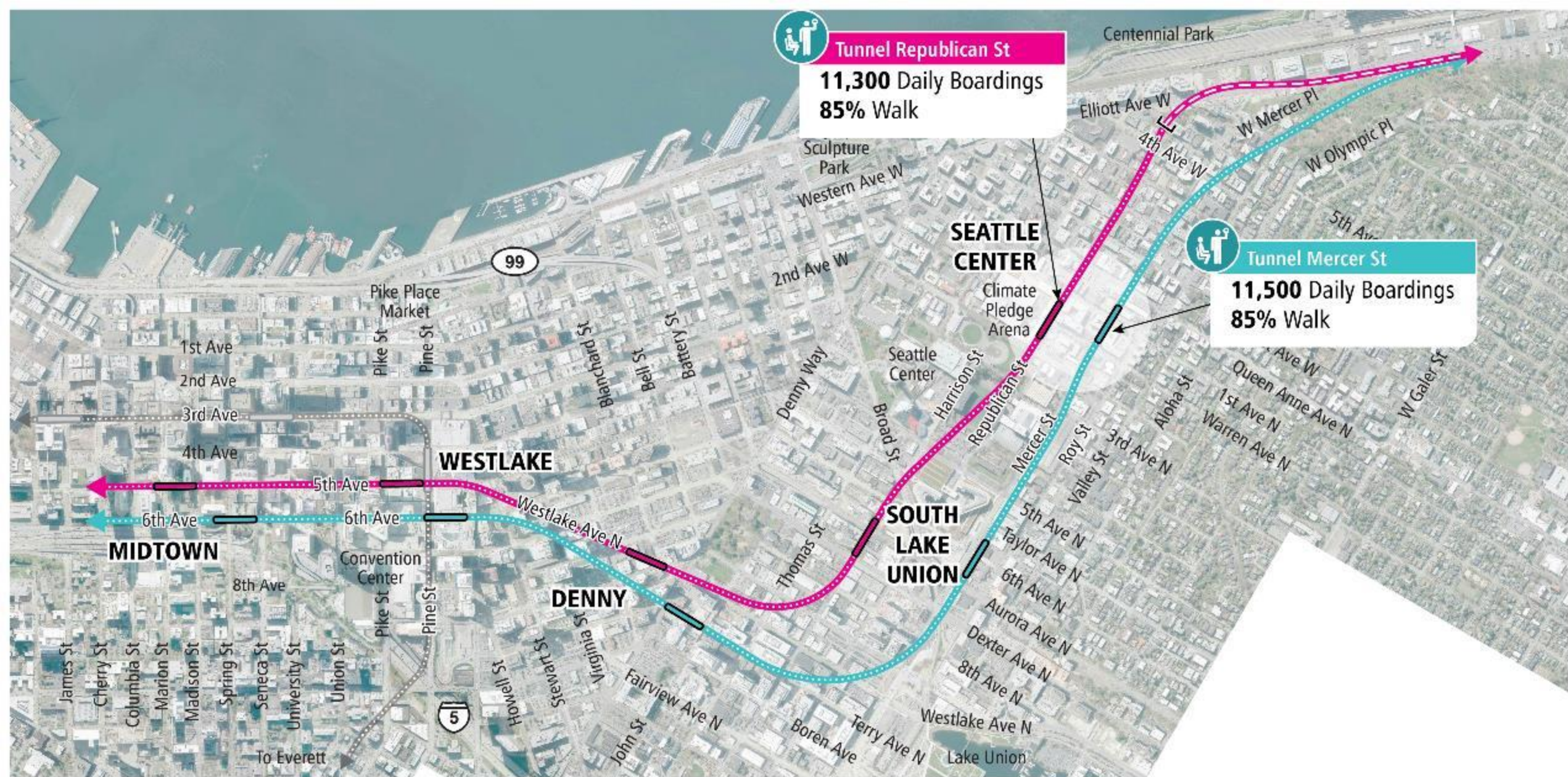
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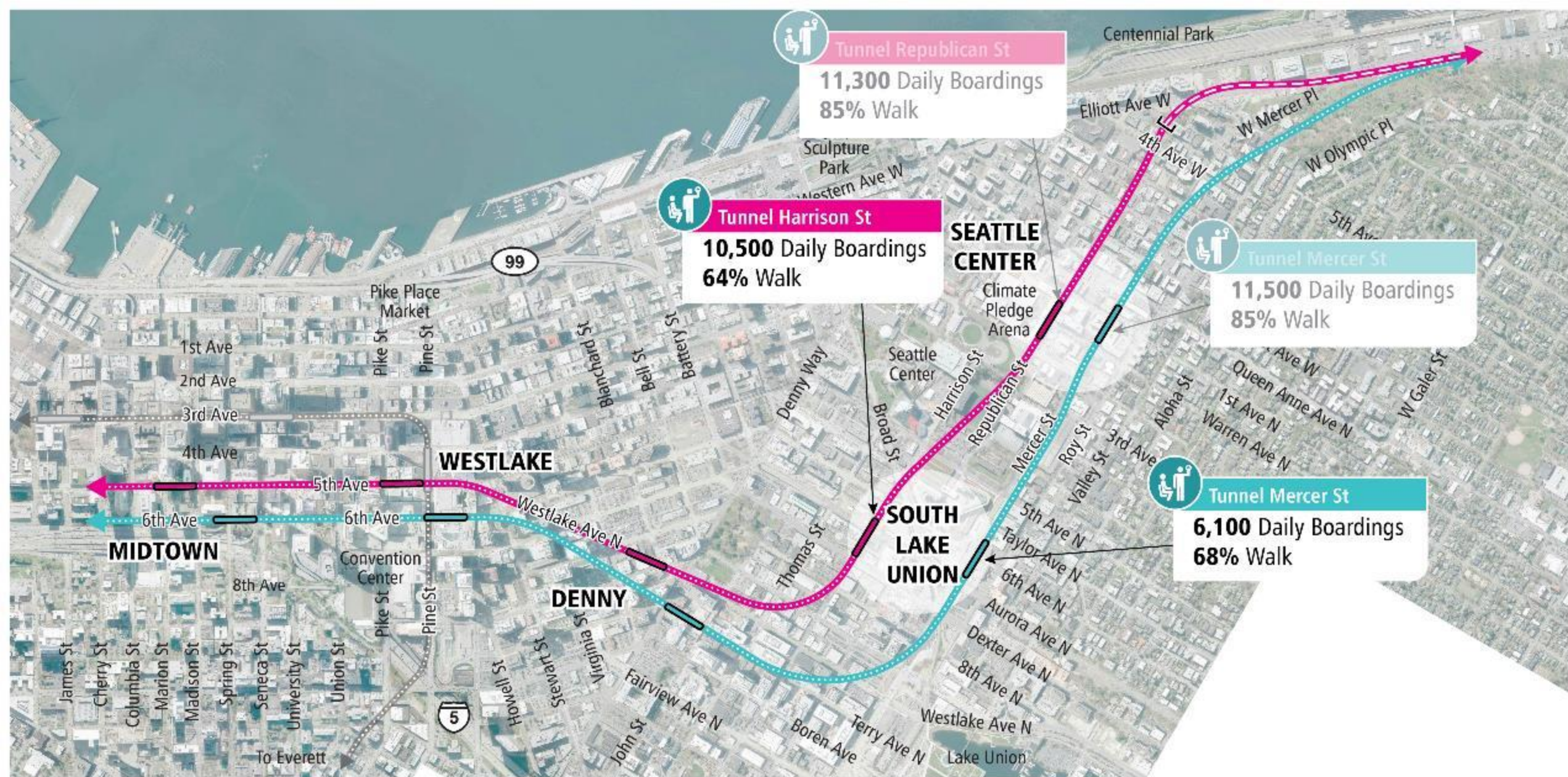


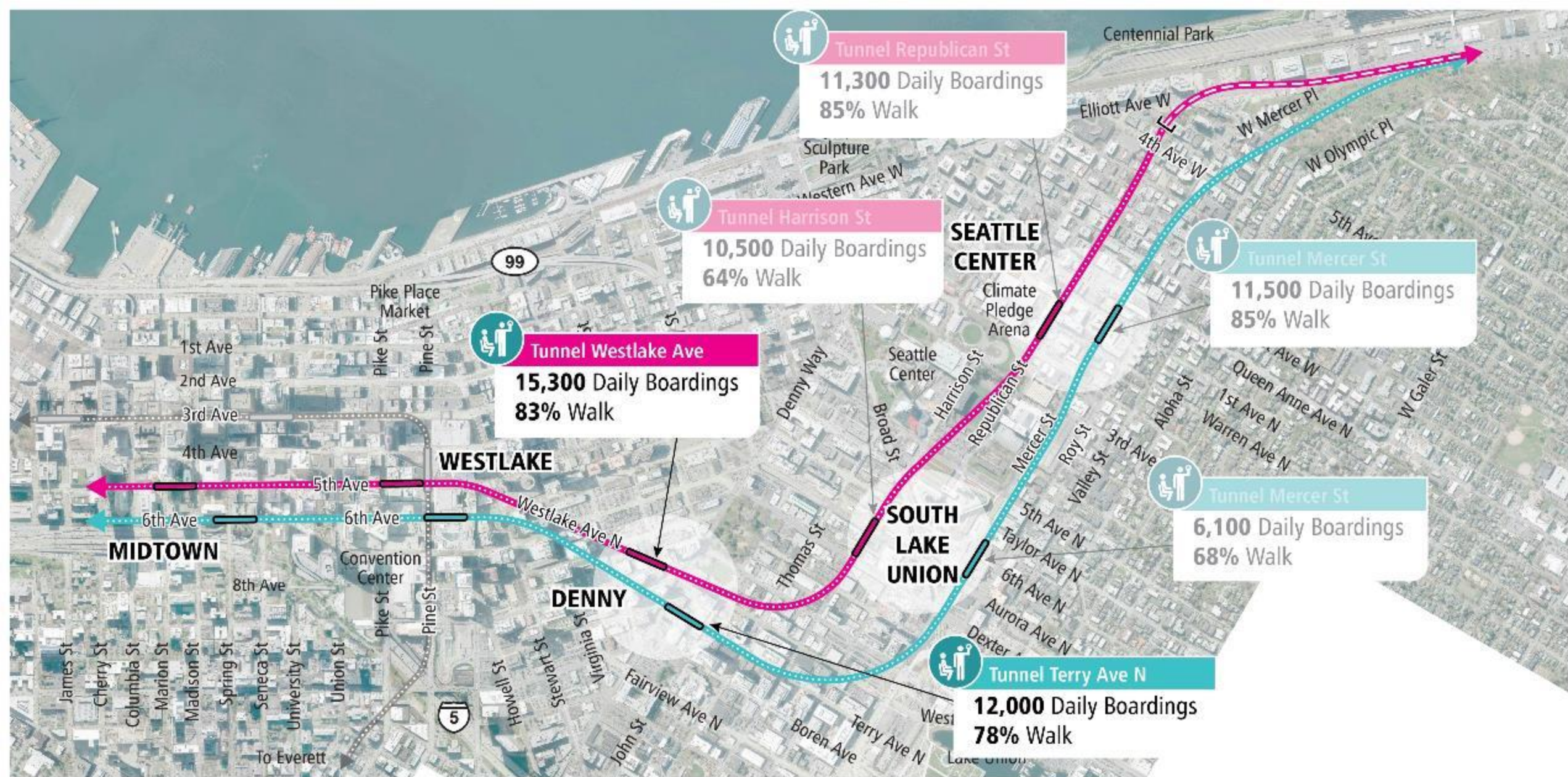
***Board discussion of
Interbay/Ballard segment***

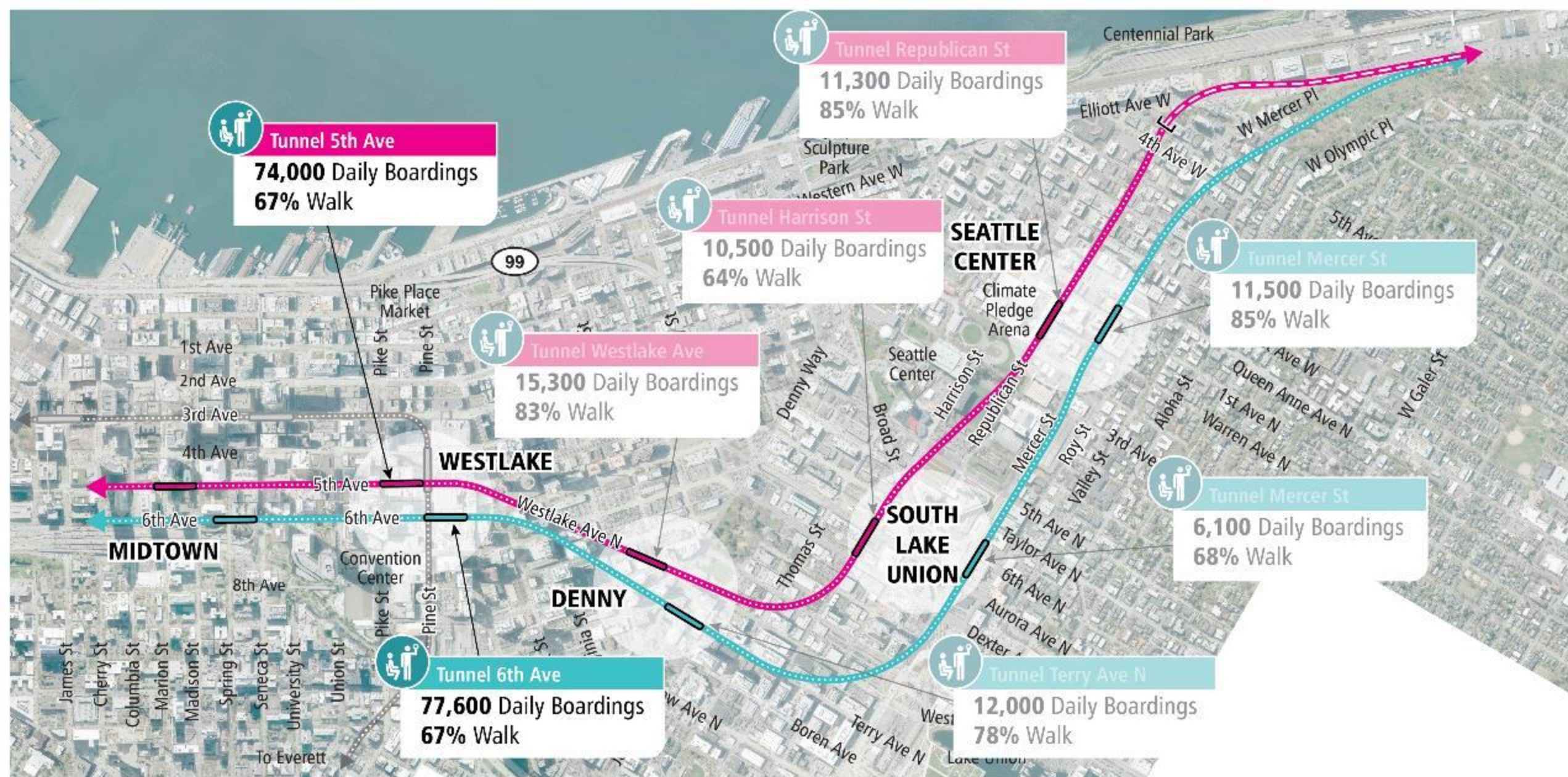
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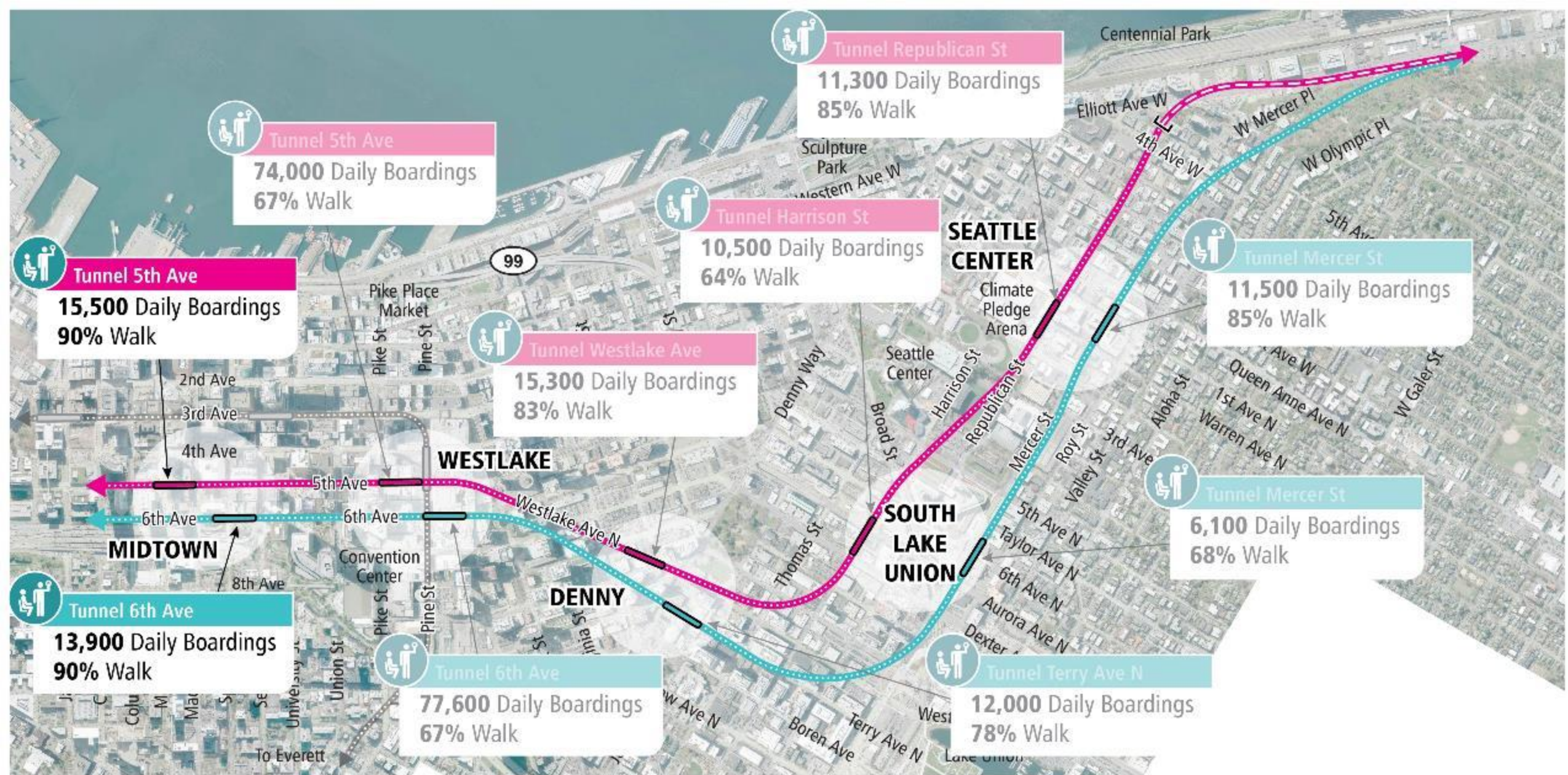












Note: Assumes MetroConnects 2040 vision network and service designations.

*Key transit integration consideration.



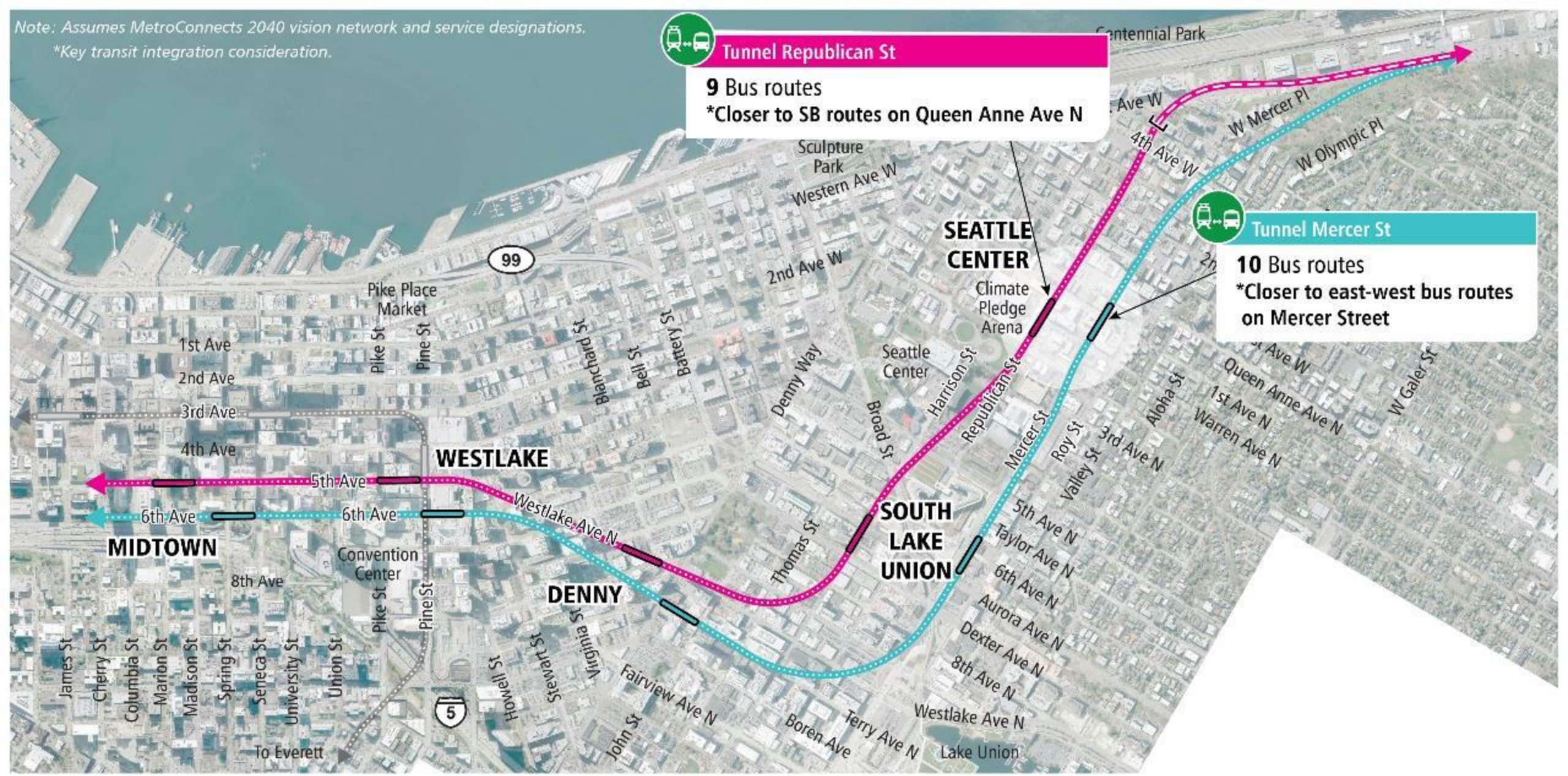
Tunnel Republican St

9 Bus routes
*Closer to SB routes on Queen Anne Ave N



Tunnel Mercer St

10 Bus routes
*Closer to east-west bus routes on Mercer Street



Note: Assumes MetroConnects 2040 vision network and service designations.

*Key transit integration consideration.



Tunnel Republican St

9 Bus routes

*Closer to SB routes on Queen Anne Ave N



Tunnel Harrison St

9 Bus routes

*Direct connection to E Line and east-west routes on Harrison St



Tunnel Mercer St

10 Bus routes

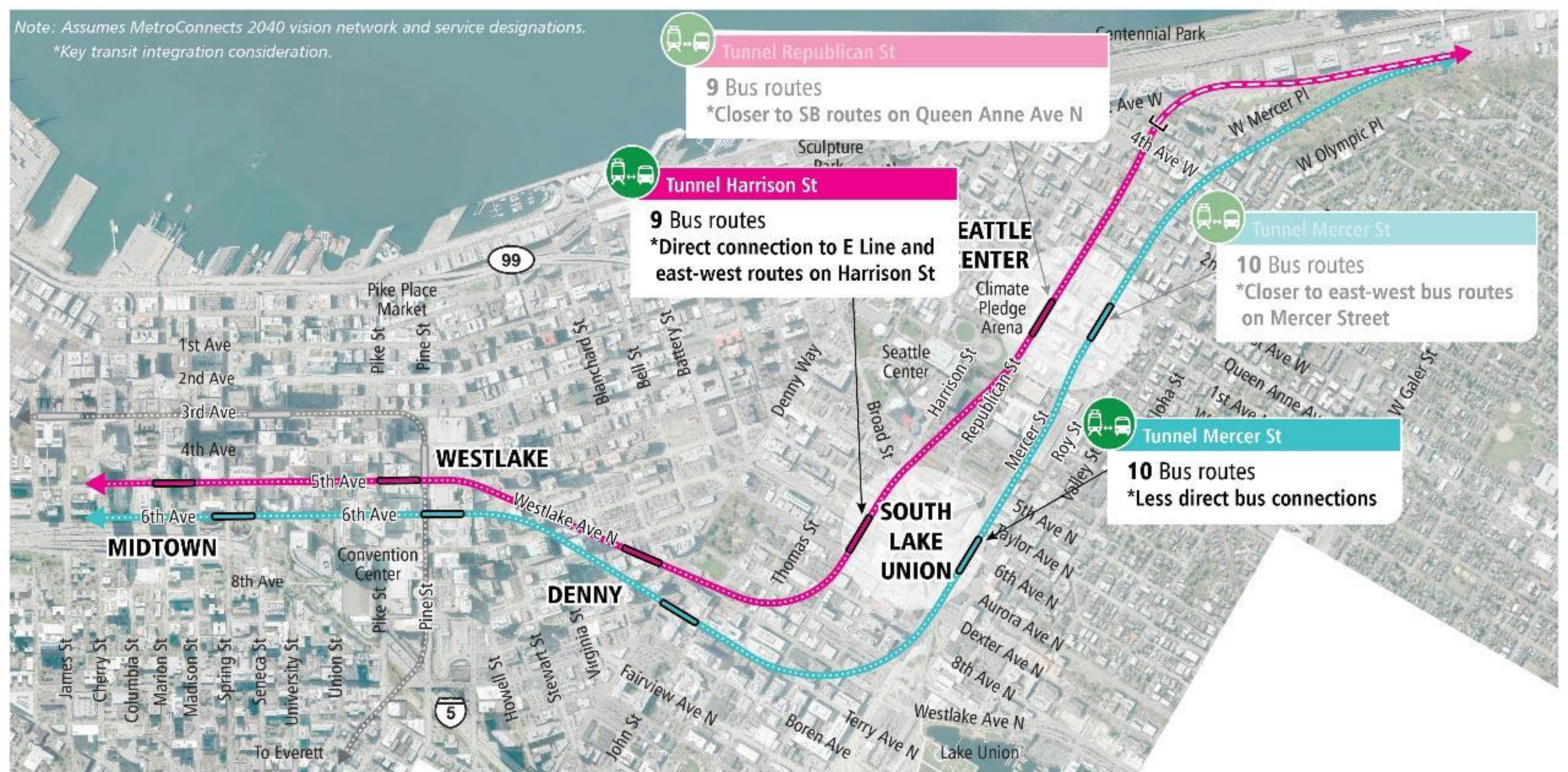
*Closer to east-west bus routes on Mercer Street



Tunnel Mercer St

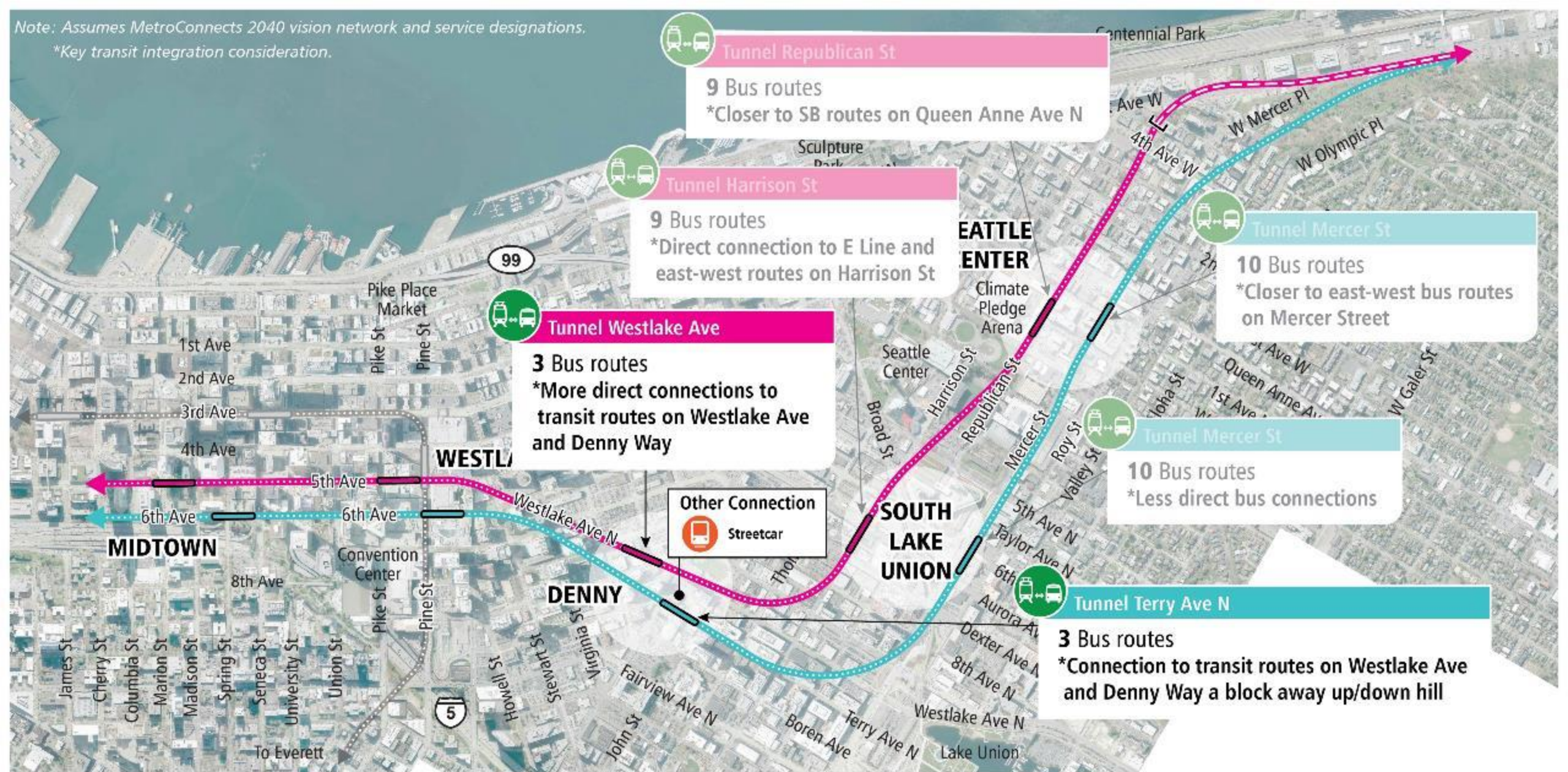
10 Bus routes

*Less direct bus connections



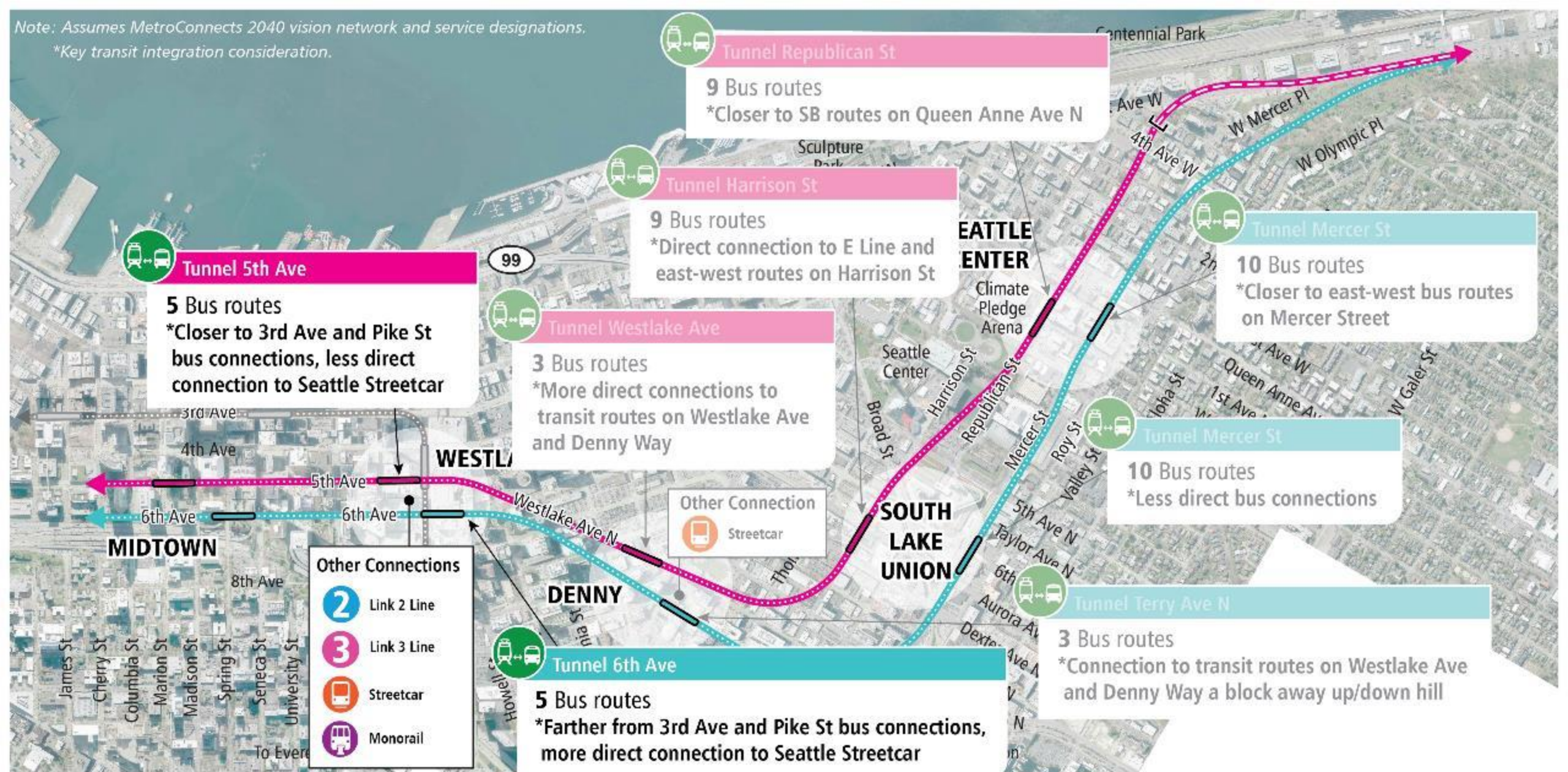
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Tunnel 5th Ave

2 Bus routes
 *More direct connection to RapidRide G Line, closer to 3rd Ave bus corridor

Tunnel 5th Ave

5 Bus routes
 *Closer to 3rd Ave and Pike St bus connections, less direct connection to Seattle Streetcar

Tunnel 6th Ave

2 Bus routes
 *Less direct connection to RapidRide G Line, farther from 3rd Ave bus corridor

Other Connections

- Link 2 Line
- Link 3 Line
- Streetcar
- Monorail

Tunnel Republican St

9 Bus routes
 *Closer to SB routes on Queen Anne Ave N

Tunnel Harrison St

9 Bus routes
 *Direct connection to E Line and east-west routes on Harrison St

Tunnel Westlake Ave

3 Bus routes
 *More direct connections to transit routes on Westlake Ave and Denny Way

Other Connection

- Streetcar

Tunnel 6th Ave

5 Bus routes
 *Farther from 3rd Ave and Pike St bus connections, more direct connection to Seattle Streetcar

Tunnel Mercer St

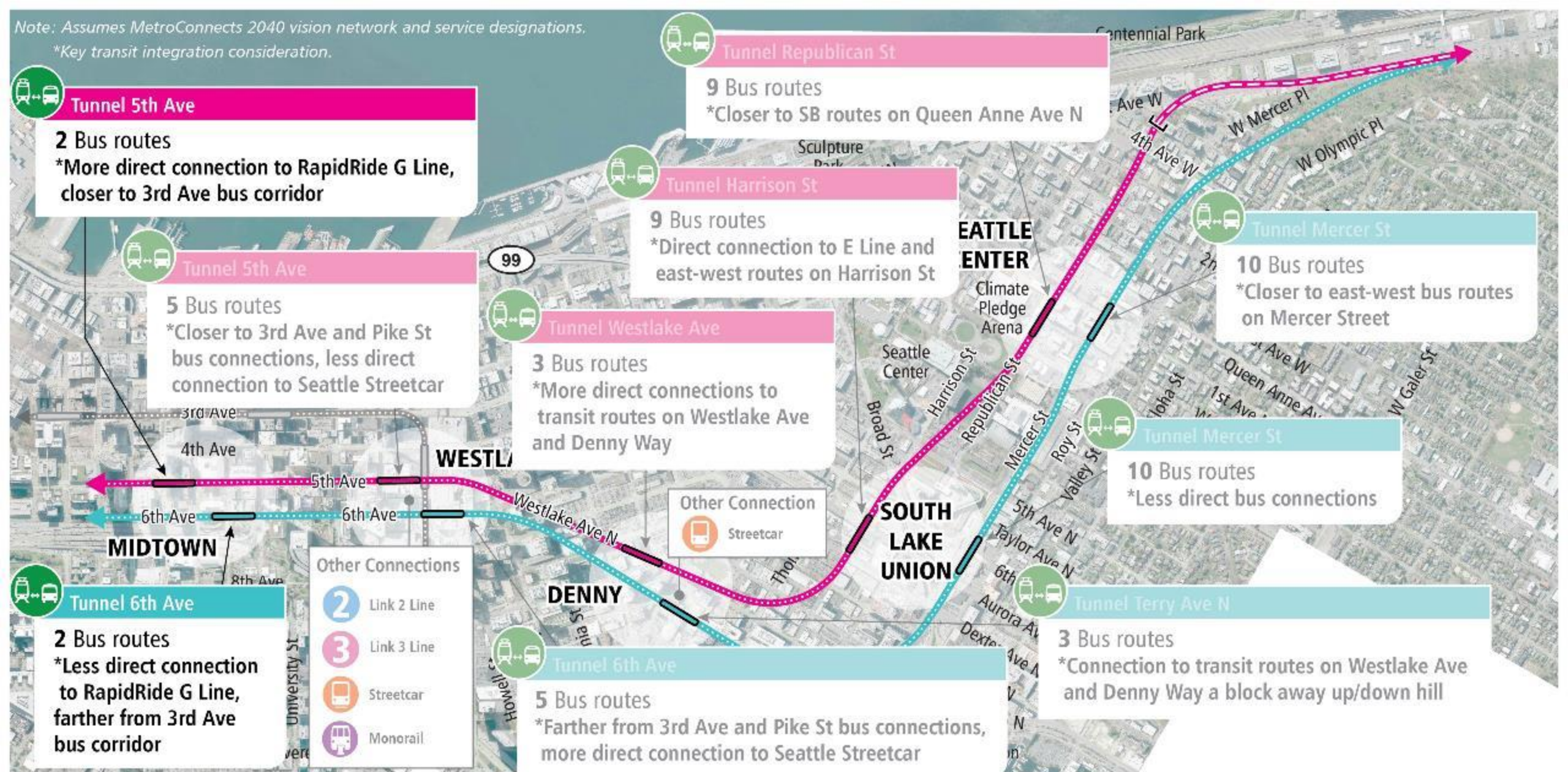
10 Bus routes
 *Closer to east-west bus routes on Mercer Street

Tunnel Mercer St

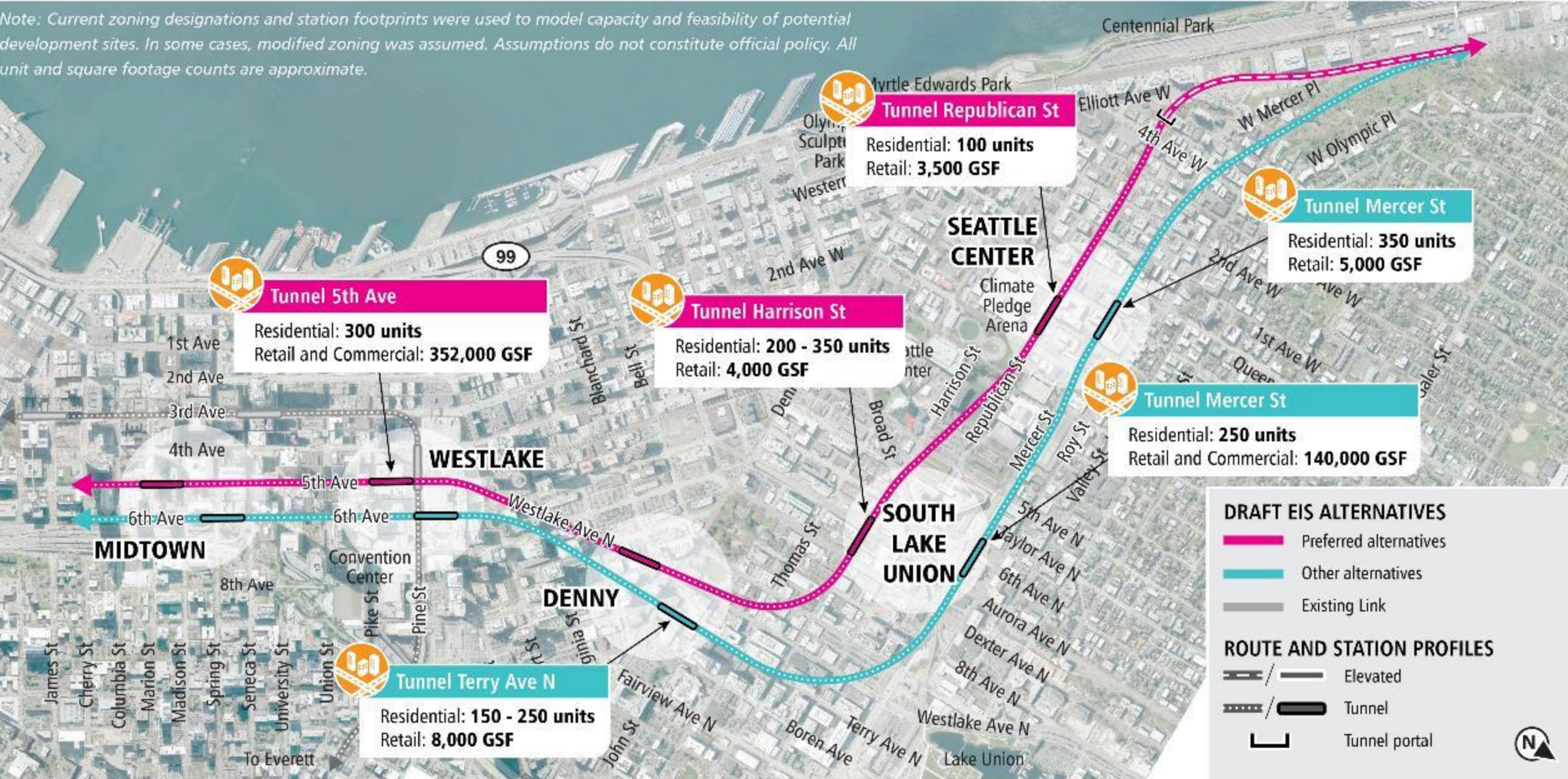
10 Bus routes
 *Less direct bus connections

Tunnel Terry Ave N

3 Bus routes
 *Connection to transit routes on Westlake Ave and Denny Way a block away up/down hill



Note: Current zoning designations and station footprints were used to model capacity and feasibility of potential development sites. In some cases, modified zoning was assumed. Assumptions do not constitute official policy. All unit and square footage counts are approximate.







DRAFT EIS ALTERNATIVES

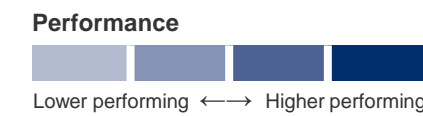
- Preferred alternatives (Pink line)
- Other alternatives (Teal line)
- Existing Link (Grey line)








ROUTE AND STATION PROFILES

- Elevated (Solid line with cross-section)
- Tunnel (Dotted line with cross-section)
- Tunnel portal (L-shaped symbol)

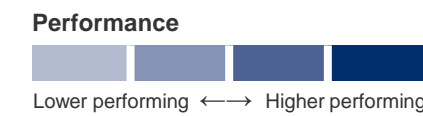
	5th/Harrison	6th/Mercer
Project cost  (2019\$ in dollars)	\$4.7-4.9B	\$4.9-5.0B
Residential displacements 	26 units	167 units
Business displacements 	44 to 46	47
Historic properties effects 	3	9
Park effects  (permanent)	1 park (0.4 acres)	2 parks (0.6 acres)
Traffic effects  (full closures)	5 to 8 roadways	4 roadways
Other considerations 	<p>Construction groundborne noise/vibration effects</p> <ul style="list-style-type: none"> • 2 sensitive uses in South Lake Union • 5 sensitive uses in Seattle Center <p>Disruption to Streetcar operation during construction (Westlake Ave)</p> <p>Connects to all CID alternatives</p> <p>Connects to both Galer Street Station (preferred) and Prospect Street Stations in South Interbay</p>	<p>Construction groundborne noise/vibration effects</p> <ul style="list-style-type: none"> • 4 sensitive uses in South Lake Union • 4 sensitive uses in Seattle Center <p>Disruption to Streetcar operation during construction (Terry/Thomas)</p> <p>Connects only to CID shallow alternatives</p> <p>Connects only to Prospect Street Station in South Interbay</p>

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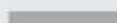
***Board discussion of
Downtown segment***

Draft EIS alternatives





DRAFT EIS ALTERNATIVES

-  Other alternatives
-  Existing Link

ROUTE AND STATION PROFILES

-  At-grade
-  Tunnel
-  Retained cut
-  Tunnel portal



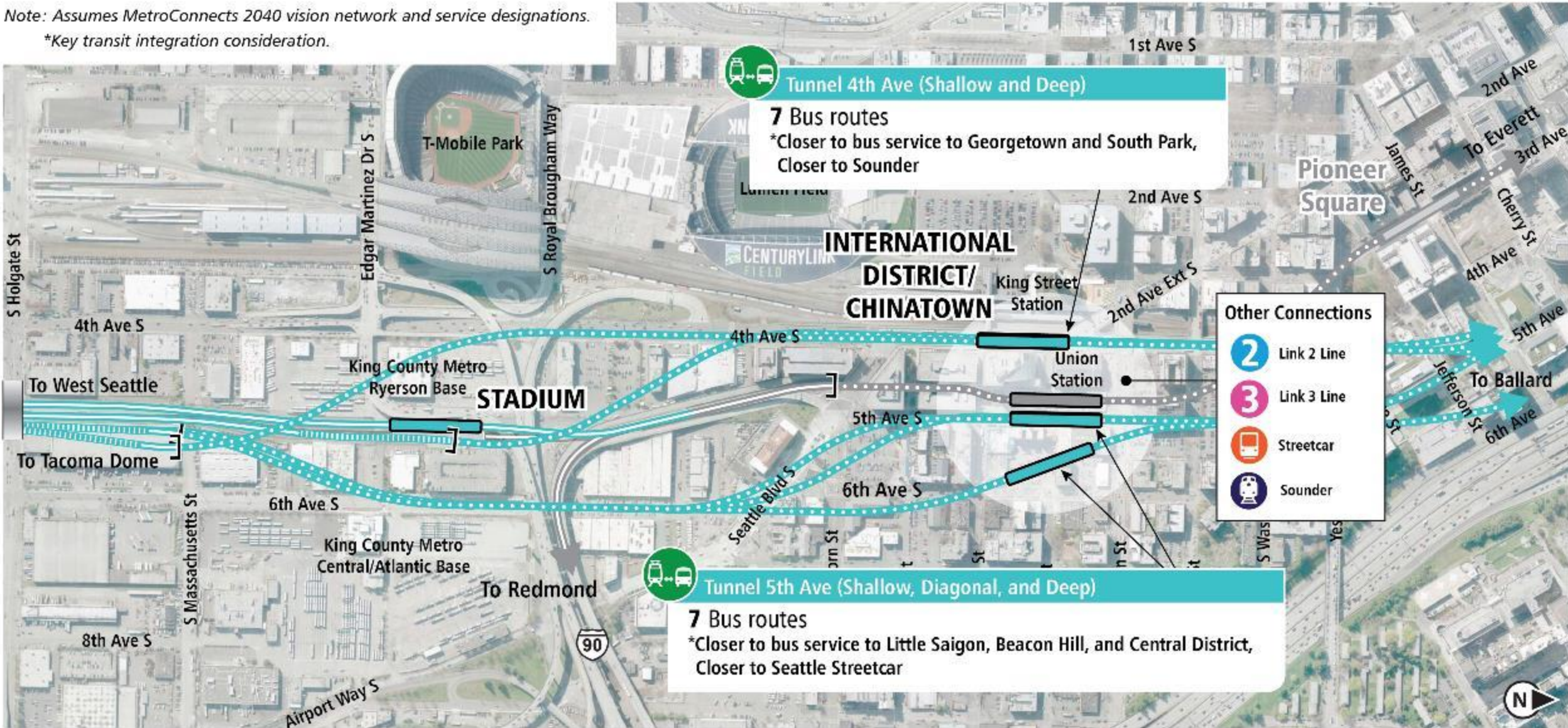
Note: *range reflects potential variation in where passengers might transfer between Link lines.



Note: The International District/Chinatown Station 4th Avenue Shallow Alternative would necessitate reconstruction of the existing Stadium Station.

Note: Assumes MetroConnects 2040 vision network and service designations.








*Key transit integration consideration.










Note: Current zoning designations and station footprints were used to model capacity and feasibility of potential development sites. In some cases, modified zoning was assumed. Assumptions do not constitute official policy. All unit and square footage counts are approximate.



Note: The International District/Chinatown Station 4th Avenue Shallow Alternative would necessitate reconstruction of the existing Stadium Station.

	4th Shallow	4th Deep	5th Shallow	5th Shallow Diagonal Station Configuration	5th Deep	
Project cost  (2019\$ in billions)	\$1.8B (+\$100M)*	\$1.7B (+200M)*	\$1.2-1.3B	\$1.2-1.3B	\$1.3B (+200M)*	
Residential displacements 	120 units	none	none	none	none	
Business displacements 	5 to 8	5	19	19	18	
Platform access 		Elevator only			Elevator only	
Construction effects 	Station construction duration (9 to 11 years)	Station construction duration (8 to 10 years)	Station construction duration (8 to 9 years)	Station construction duration (5 to 6 years)	Station construction duration (6.5 to 7.5 years)	
	Detours 15,000 vehicles per day (6 years)	Detours 30,000 vehicles per day (6.5 years)	Detours 5,000 vehicles per day (9 months)	—	—	
	Disrupts streetcar operations (2 years)	Disrupts streetcar operations (2 years)	Disrupts streetcar operations (6 months)	—	—	
	Relocates major utilities	Relocates major utilities	Relocates major utilities and utility corridor	Avoids major utility relocations	Avoids major utility relocations	
	Closes Stadium Station (up to 2 years)	—	—	—	—	
	Link light rail closure ** (6 to 7 weeks)	—	—	Re-routes trolley bus (to 7th or 8th Ave S)	Temporary closure: 8 businesses (< 1 year)	—
Other considerations 	Connects to all Downtown alternatives	Connects only to Downtown 5th Ave/ Harrison St.	Connects to all Downtown alternatives	Connects to all Downtown alternatives	Connects only to Downtown 5th Ave/ Harrison St.	
	Connects to all SODO Alternatives	Connects only to SODO At-Grade South Station Option	Connects to all SODO alternatives	Connects to all SODO alternatives	Connects to SODO At-Grade, SODO At-Grade Staggered Station Configuration and SODO At-Grade South Station Option	
	Affects Ryerson Bus Base	Displaces Ryerson Bus Base				
	<i>The above information is for illustration only. Please refer to DEIS for further detail.</i>					
				Performance  Lower performing ← → Higher performing		

*Additional cost to the preferred alternative in the Downtown Segment as compared to the 5th Shallow connection)
** Between SODO and International District/Chinatown stations

	4th Shallow	4th Deep	5th Shallow	5th Shallow Diagonal Station Configuration	5th Deep	
Project cost  (2019\$ in billions)	\$1.8B (+\$100M)*	\$1.7B (+200M)*	\$1.2-1.3B	\$1.2-1.3B	\$1.3B (+200M)*	
Residential displacements 	120 units	none	none	none	none	
Business displacements 	5 to 8	5	19	19	18	
Platform access 		Elevator only			Elevator only	
Construction effects 	Station construction duration (9 to 11 years)	Station construction duration (8 to 10 years)	Station construction duration (8 to 9 years)	Station construction duration (5 to 6 years)	Station construction duration (6.5 to 7.5 years)	
	Detours 15,000 vehicles per day (6 years)	Detours 30,000 vehicles per day (6.5 years)	Detours 5,000 vehicles per day (9 months)	—	—	
	Disrupts streetcar operations (2 years)	Disrupts streetcar operations (2 years)	Disrupts streetcar operations (6 months)	—	—	
	Relocates major utilities	Relocates major utilities	Relocates major utilities and utility corridor	Avoids major utility relocations	Avoids major utility relocations	
	Closes Stadium Station (up to 2 years)	—	—	—	—	
	Link light rail closure ** (6 to 7 weeks)	—	—	Re-routes trolley bus (to 7th or 8th Ave S)	Temporary closure: 8 businesses (< 1 year)	—
Other considerations 	Connects to all Downtown alternatives	Connects only to Downtown 5th Ave/ Harrison St.	Connects to all Downtown alternatives	Connects to all Downtown alternatives	Connects only to Downtown 5th Ave/ Harrison St.	
	Connects to all SODO Alternatives	Connects only to SODO At-Grade South Station Option	Connects to all SODO alternatives	Connects to all SODO alternatives	Connects to SODO At-Grade, SODO At-Grade Staggered Station Configuration and SODO At-Grade South Station Option	
	Affects Ryerson Bus Base	Displaces Ryerson Bus Base				
	<i>The above information is for illustration only. Please refer to DEIS for further detail.</i>					
				Performance  Lower performing ← → Higher performing		

*Additional cost to the preferred alternative in the Downtown Segment as compared to the 5th Shallow connection)
** Between SODO and International District/Chinatown stations

Draft EIS alternatives



At-Grade



At-Grade South Station Option



At-Grade Staggered Configuration



Mixed Profile



DRAFT EIS ALTERNATIVES

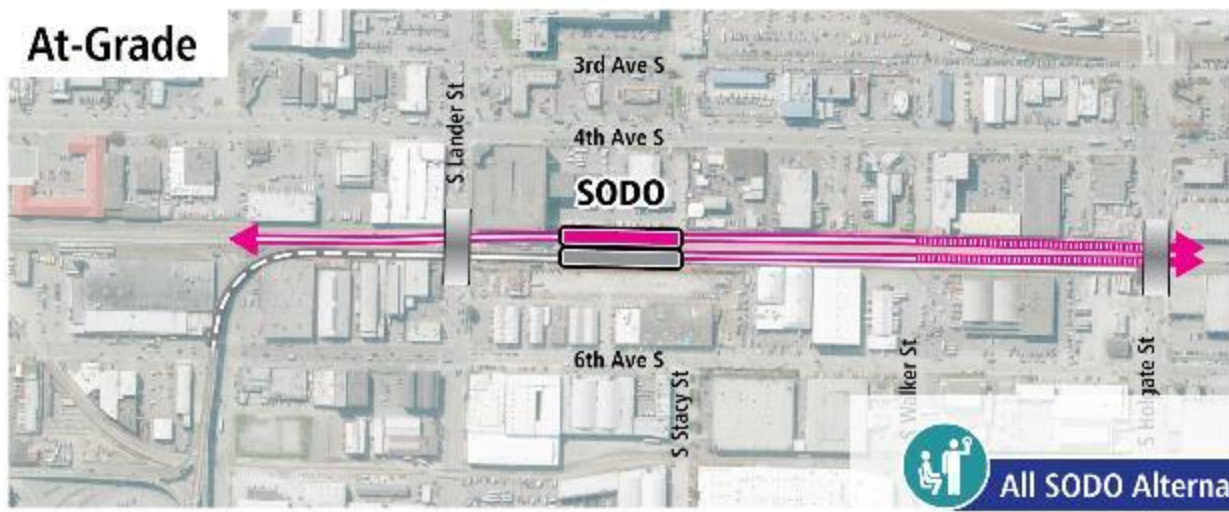
- █ Preferred alternatives
- █ Other alternatives
- █ Existing Link

ROUTE AND STATION PROFILES

- At-grade
- Retained cut
- Elevated
- Street overpass



At-Grade



At-Grade South Station Option



All SODO Alternatives

14,600 Daily Boardings
79% Transit transfers
 (Ridership includes existing & new platforms)

At-Grade Staggered

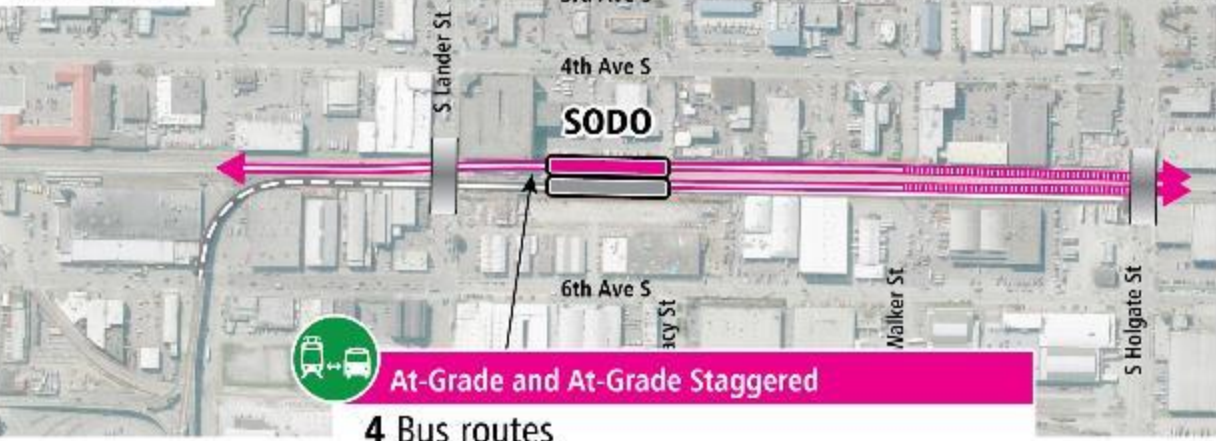


Mixed Profile

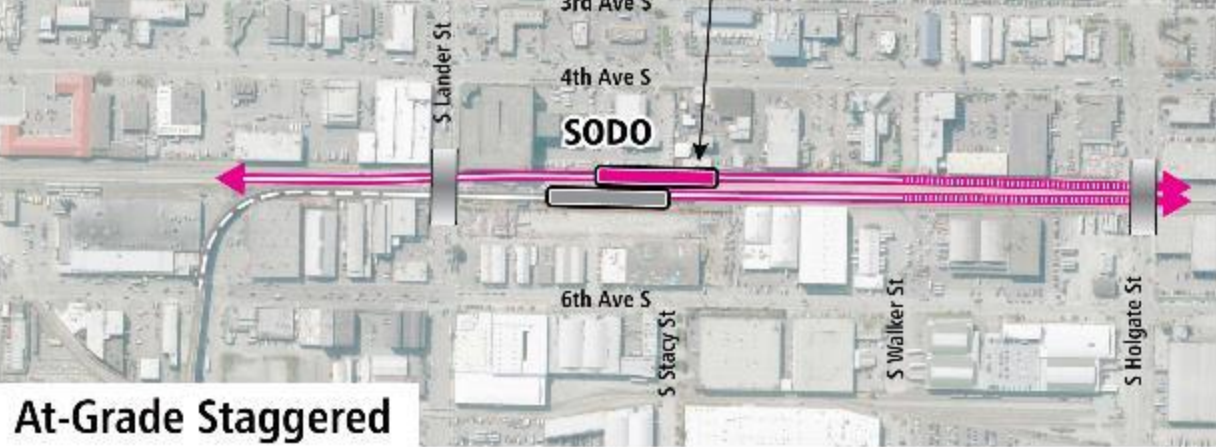


DRAFT EIS ALTERNATIVES		ROUTE AND STATION PROFILES	
	Preferred alternatives		At-grade
	Other alternatives		Retained cut
	Existing Link		Elevated
			Street overpass

At-Grade



At-Grade Staggered



At-Grade South Station Option



Mixed Profile



Note: Assumes MetroConnects 2040 vision network and service designations.
 *Key transit integration consideration.

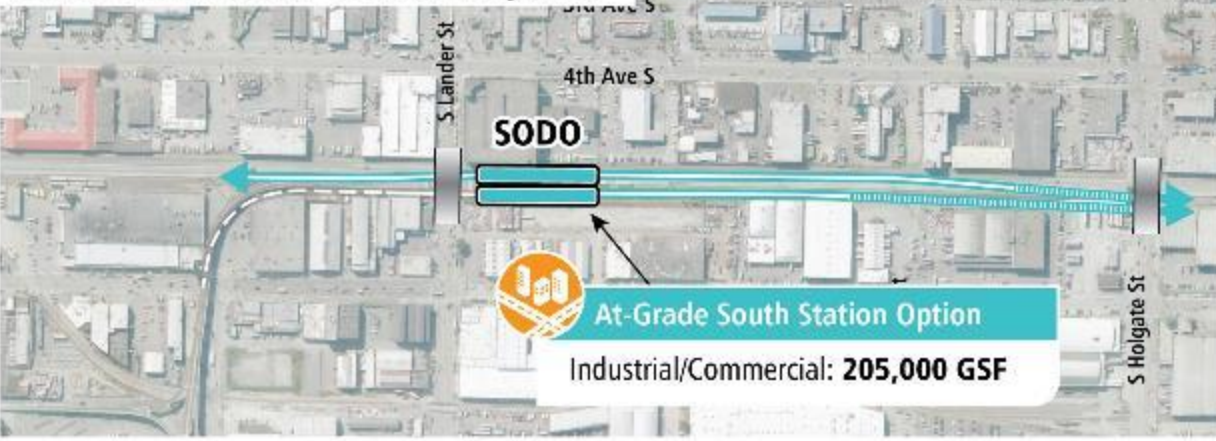
DRAFT EIS ALTERNATIVES		ROUTE AND STATION PROFILES	
	Preferred alternatives		At-grade
	Other alternatives		Retained cut
	Existing Link		Elevated
			Street overpass

At-Grade



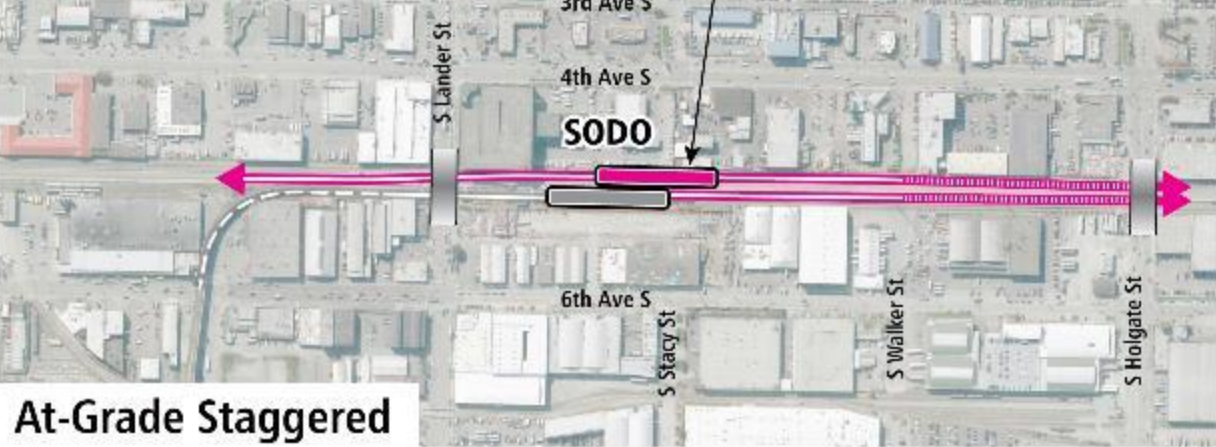
Industrial/Commercial: 205,000 GSF

At-Grade South Station Option



Industrial/Commercial: 205,000 GSF

At-Grade Staggered








Note: Current zoning designations and station footprints were used to model capacity and feasibility of potential development sites. In some cases, modified zoning was assumed. Assumptions do not constitute official policy. All unit and square footage counts are approximate.

Mixed Profile



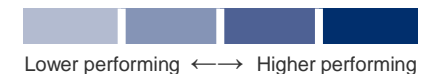
Industrial/Commercial: 205,000+ GSF






DRAFT EIS ALTERNATIVES		ROUTE AND STATION PROFILES	
	Preferred alternatives		At-grade
	Other alternatives		Retained cut
	Existing Link		Elevated
			Street overpass

	At-Grade	At-Grade Staggered Station Configuration	At-Grade South Station Option	Mixed Profile
Project cost  (2019\$ in billions)	\$0.6-0.7B	\$0.5-0.6B	\$0.6-0.7B	\$0.8B
Business displacements 	20 to 32	19 to 31	17 to 29	23
Transportation effects 	SODO Busway (permanent closure)	SODO Busway (permanent closure)	SODO Busway (permanent closure)	SODO Busway (temporary closure 10 years)
Construction effects 	S. Lander Street closure (2 years)	S. Lander Street closure (2 years)	S. Lander Street closure (3 years)	S. Lander Street closure (nights/weekends)
Other considerations 	Two new grade separated crossings Connects to CID 4th Shallow, 5th Shallow, 5th Shallow Diagonal and 5th Deep	Two new grade separated crossings Connects to CID 4th Shallow, 5th Shallow, 5th Shallow Diagonal and 5th Deep Avoids USPS relocation	Two new grade separated crossings Connects to all CID alternatives	One new grade separated crossing Connects to CID 4th Shallow, 5th Shallow and 5th Shallow Diagonal

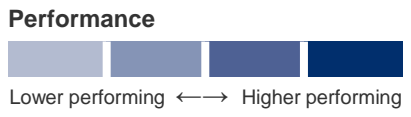
The above information is for illustration only. Please refer to DEIS for further detail.

Performance



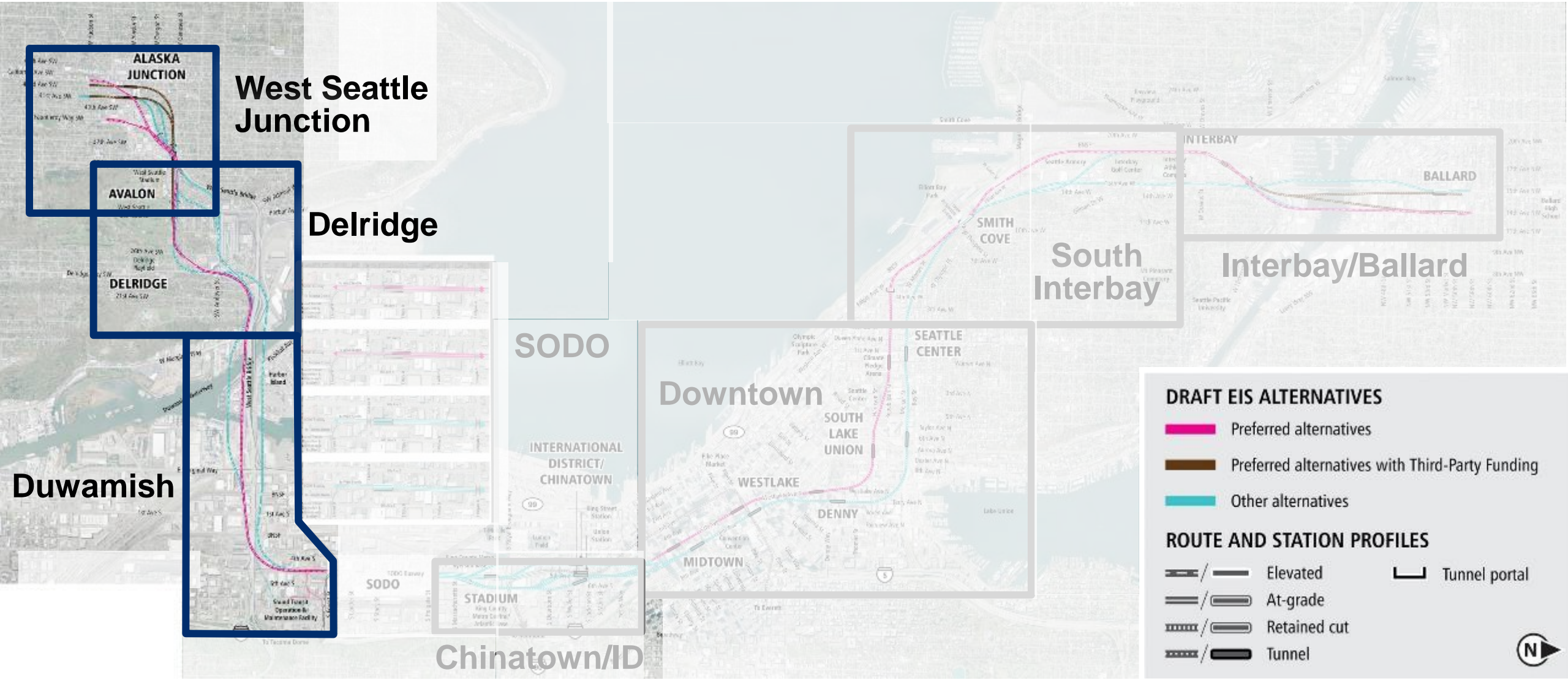
	At-Grade	At-Grade Staggered Station Configuration	At-Grade South Station Option	Mixed Profile
Project cost  (2019\$ in billions)	\$0.6-0.7B	\$0.5-0.6B	\$0.6-0.7B	\$0.8B
Business displacements 	20 to 32	19 to 31	17 to 29	23
Transportation effects 	SODO Busway (permanent closure)	SODO Busway (permanent closure)	SODO Busway (permanent closure)	SODO Busway (temporary closure 10 years)
Construction effects 	S. Lander Street closure (2 years)	S. Lander Street closure (2 years)	S. Lander Street closure (3 years)	S. Lander Street closure (nights/weekends)
Other considerations 	Two new grade separated crossings Connects to CID 4th Shallow, 5th Shallow, 5th Shallow Diagonal and 5th Deep	Two new grade separated crossings Connects to CID 4th Shallow, 5th Shallow, 5th Shallow Diagonal and 5th Deep Avoids USPS relocation	Two new grade separated crossings Connects to all CID alternatives	One new grade separated crossing Connects to CID 4th Shallow, 5th Shallow and 5th Shallow Diagonal

The above information is for illustration only. Please refer to DEIS for further detail.



***Board discussion of
CID/SODO segment***

Draft EIS alternatives





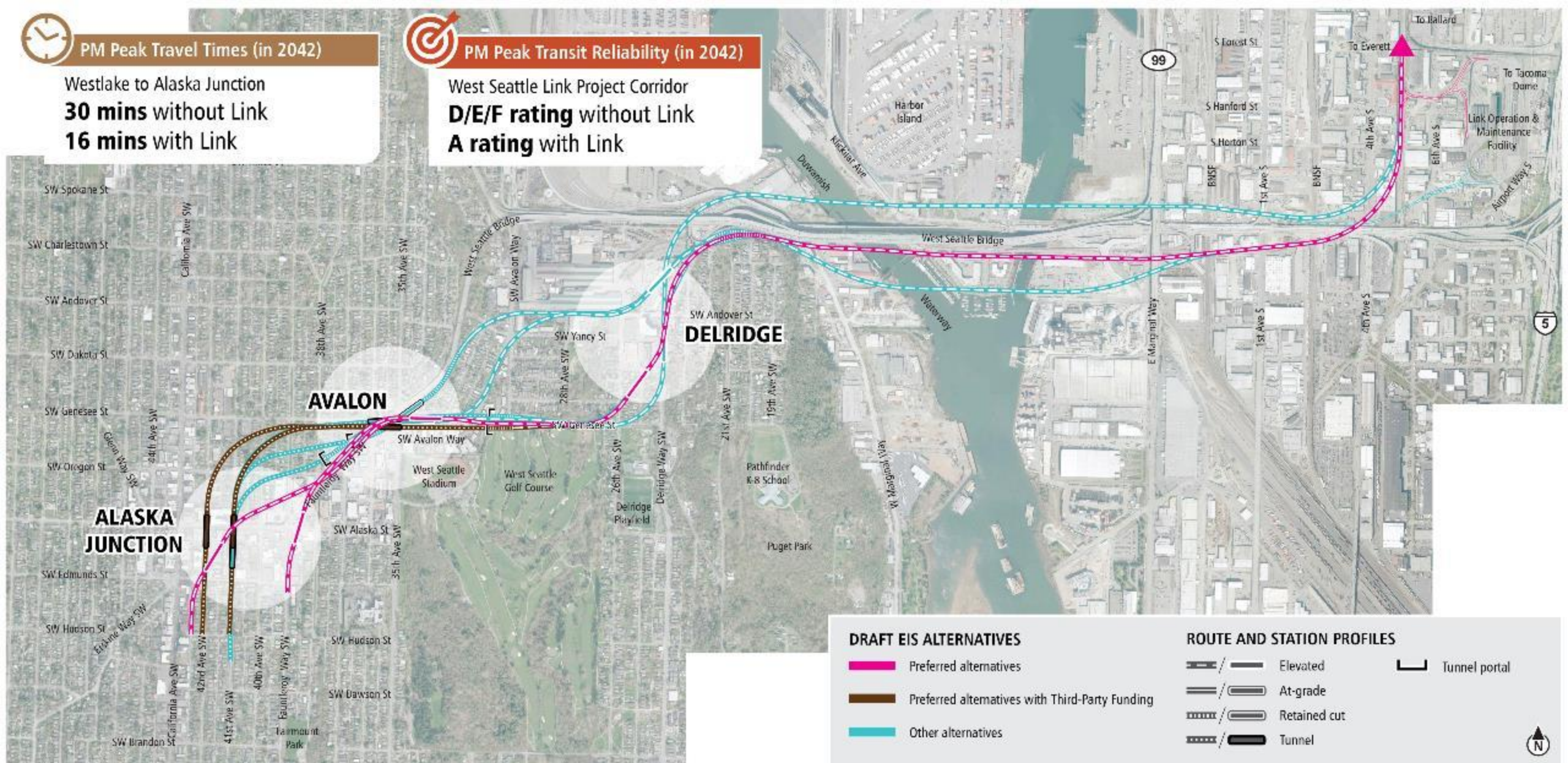
PM Peak Travel Times (in 2042)

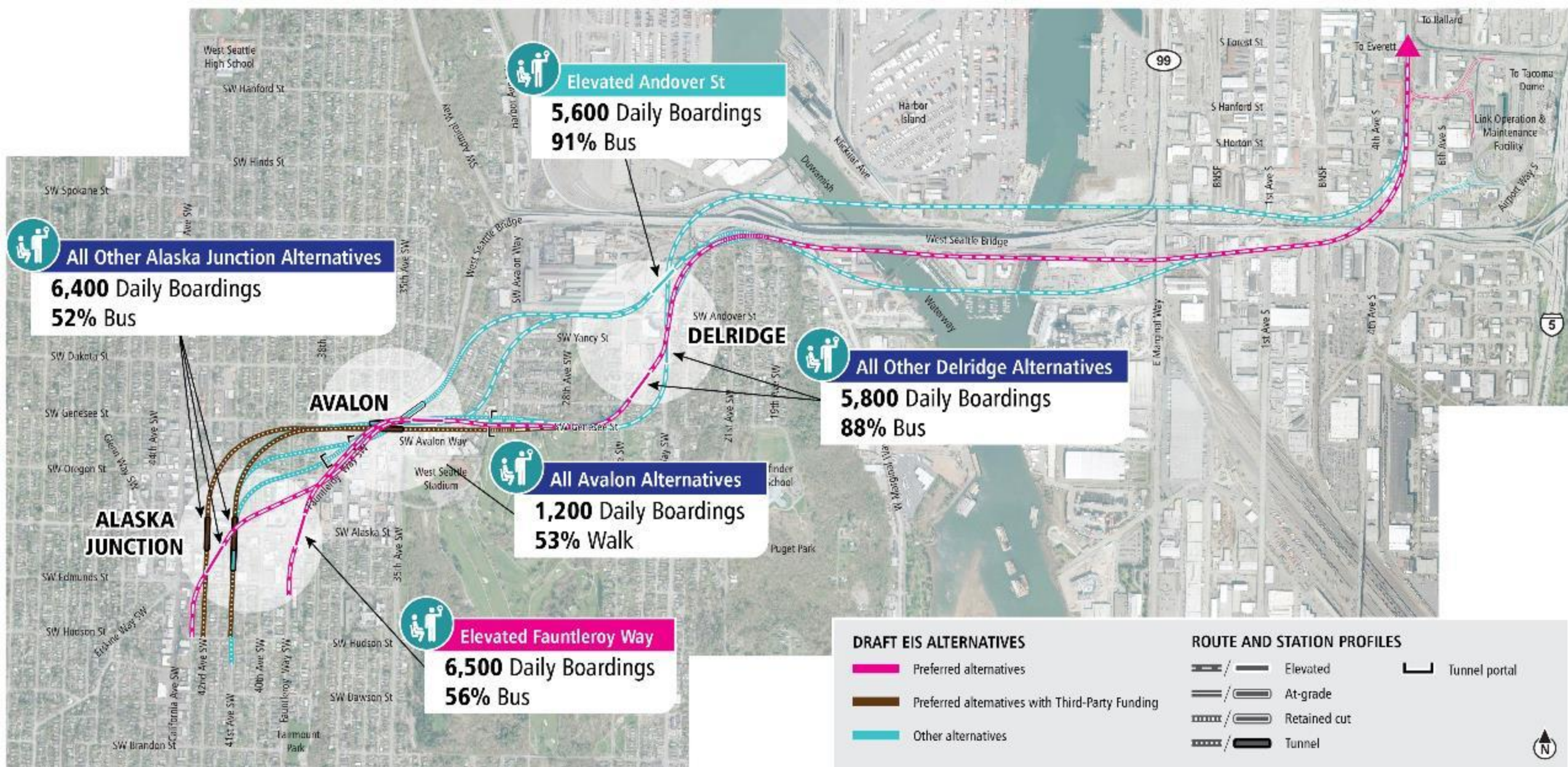
Westlake to Alaska Junction
30 mins without Link
16 mins with Link

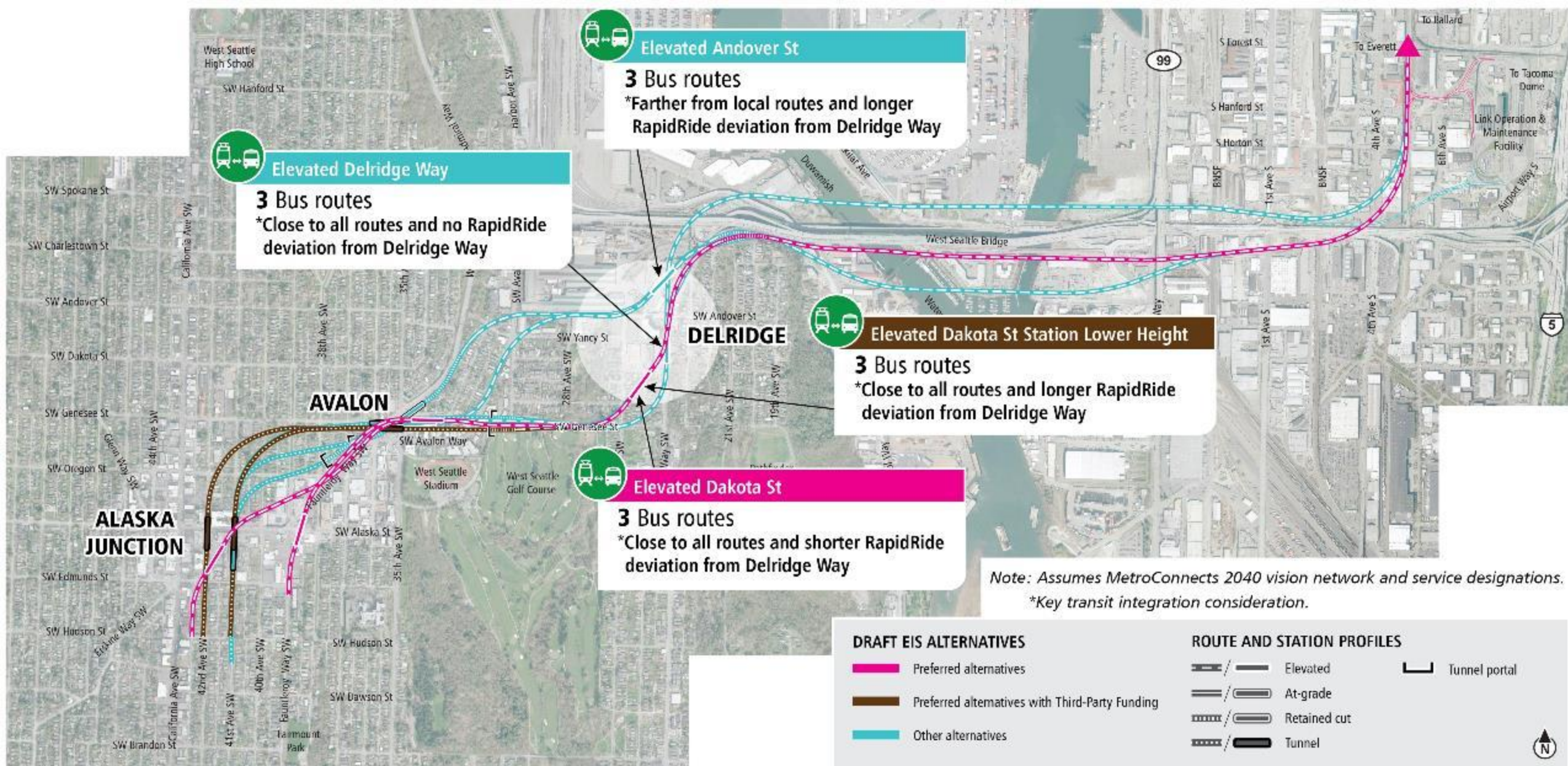


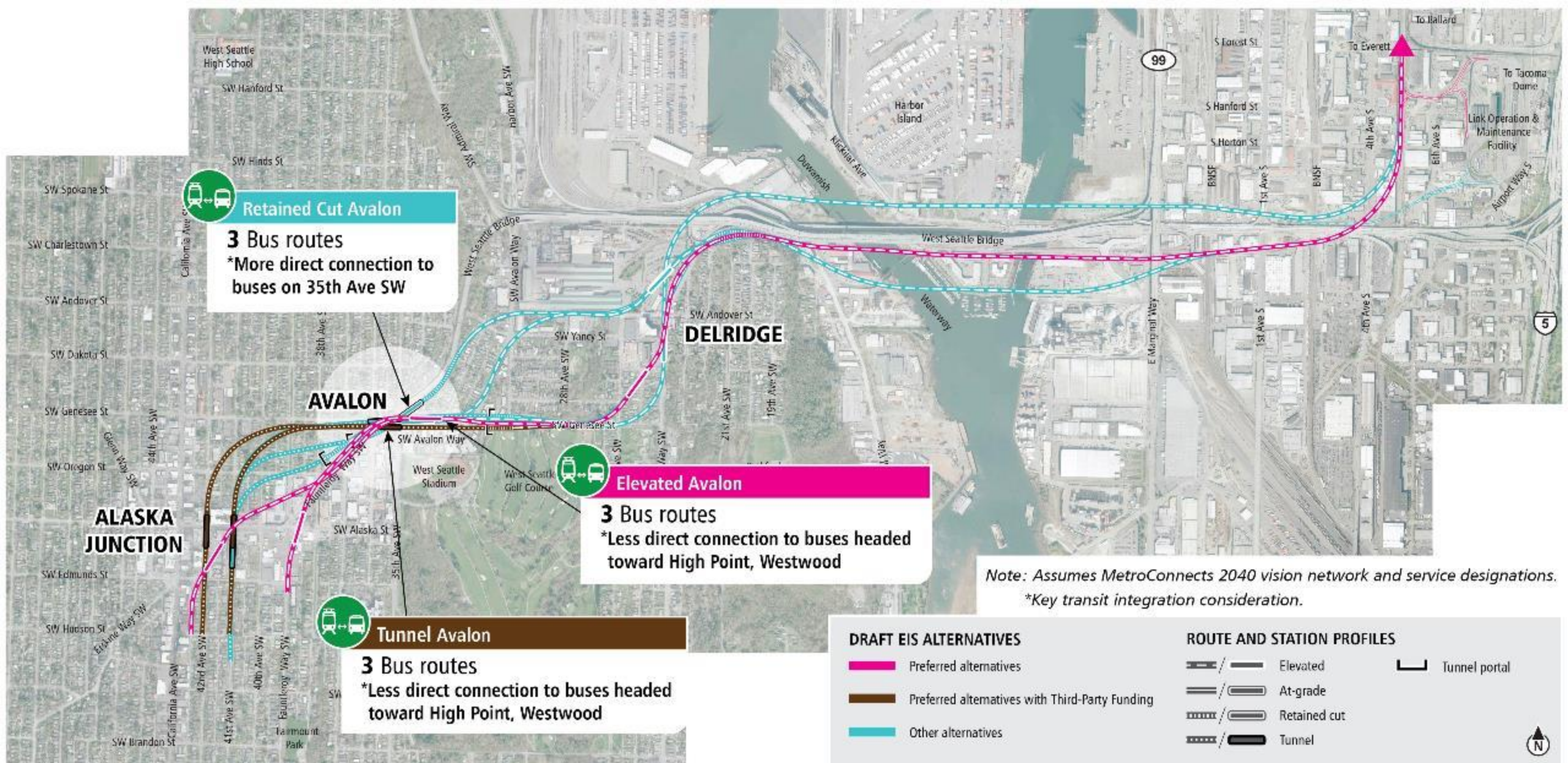
PM Peak Transit Reliability (in 2042)

West Seattle Link Project Corridor
D/E/F rating without Link
A rating with Link











Tunnel 42nd Ave

4 Bus routes

*Less direct connection to routes coming from High Point, Westwood and heading toward Admiral



Tunnel 41st Ave and Short Tunnel 41st Ave and Medium Tunnel 41st Ave

4 Bus routes

*Most direct connection to all buses



Elevated Fauntleroy Way

5 Bus routes

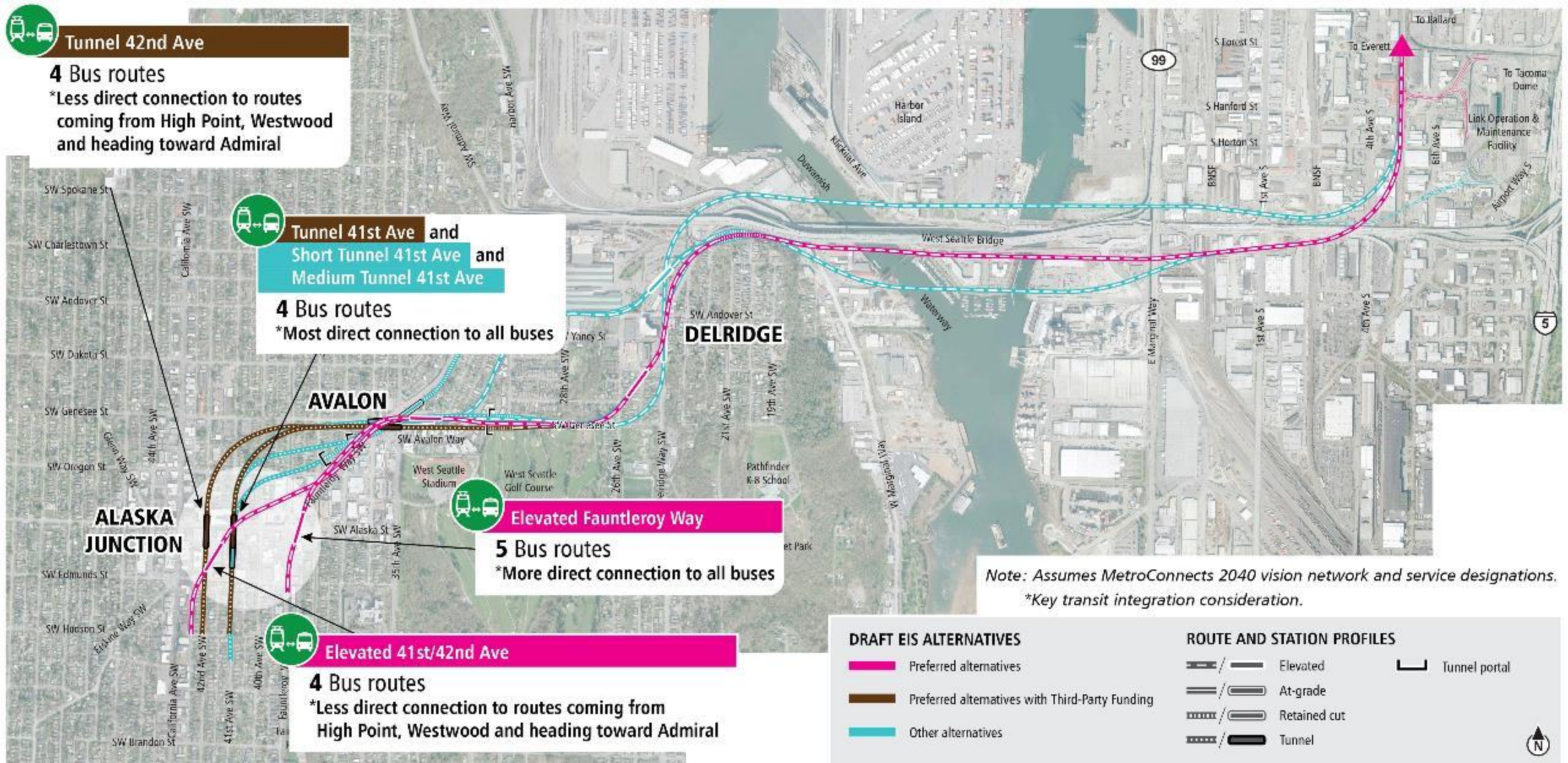
*More direct connection to all buses



Elevated 41st/42nd Ave

4 Bus routes

*Less direct connection to routes coming from High Point, Westwood and heading toward Admiral



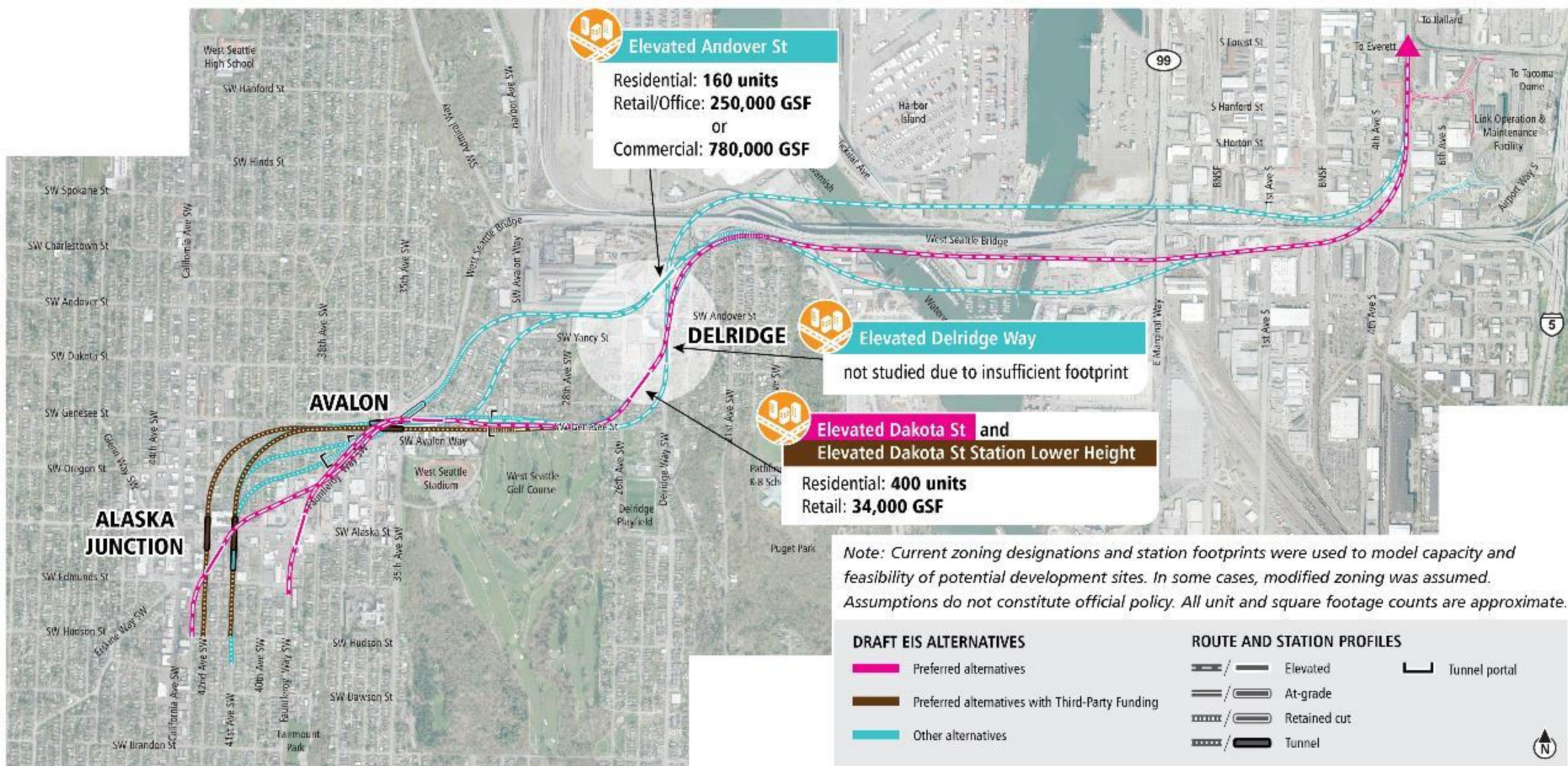
Note: Assumes MetroConnects 2040 vision network and service designations.
*Key transit integration consideration.

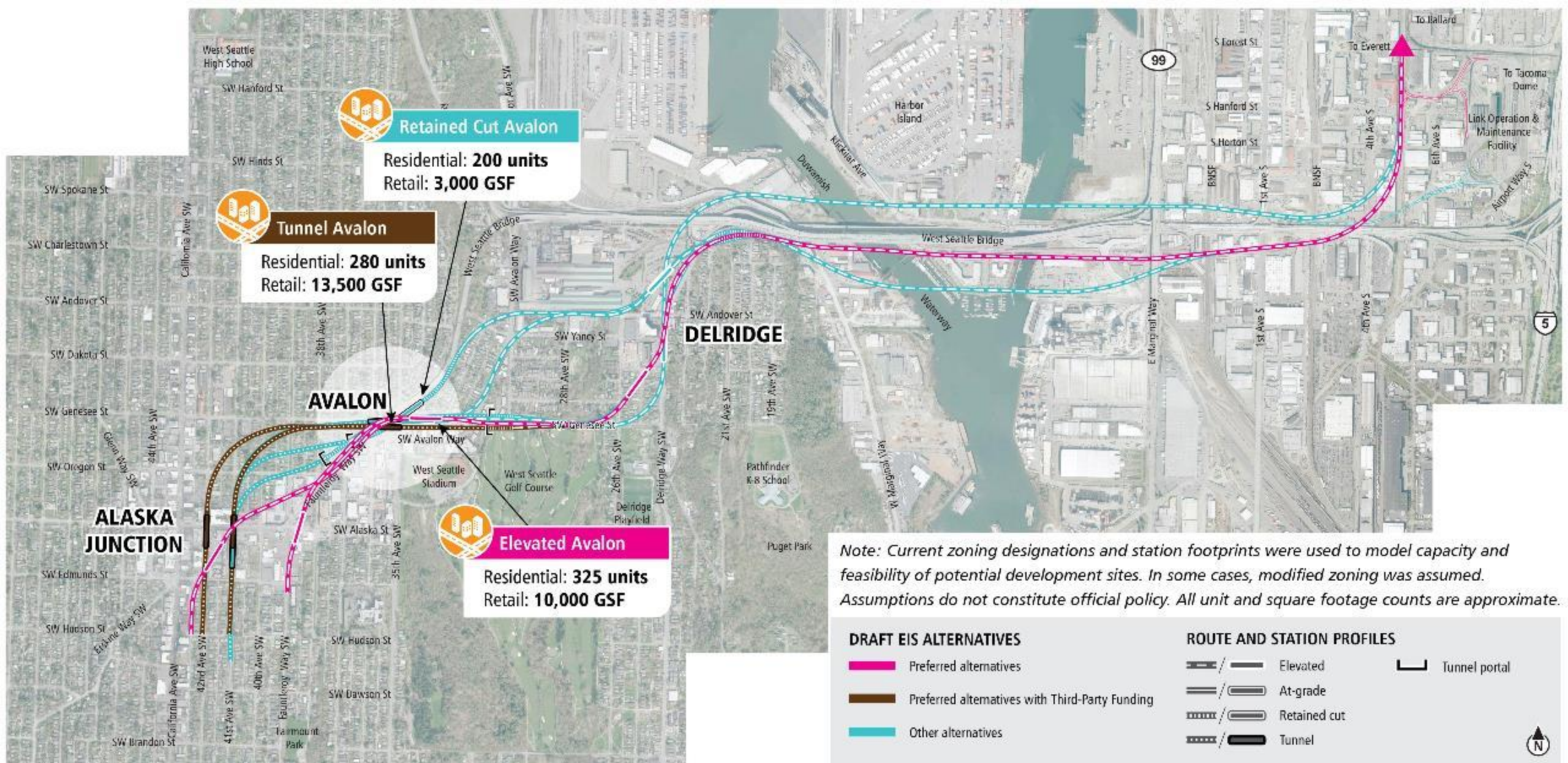
DRAFT EIS ALTERNATIVES

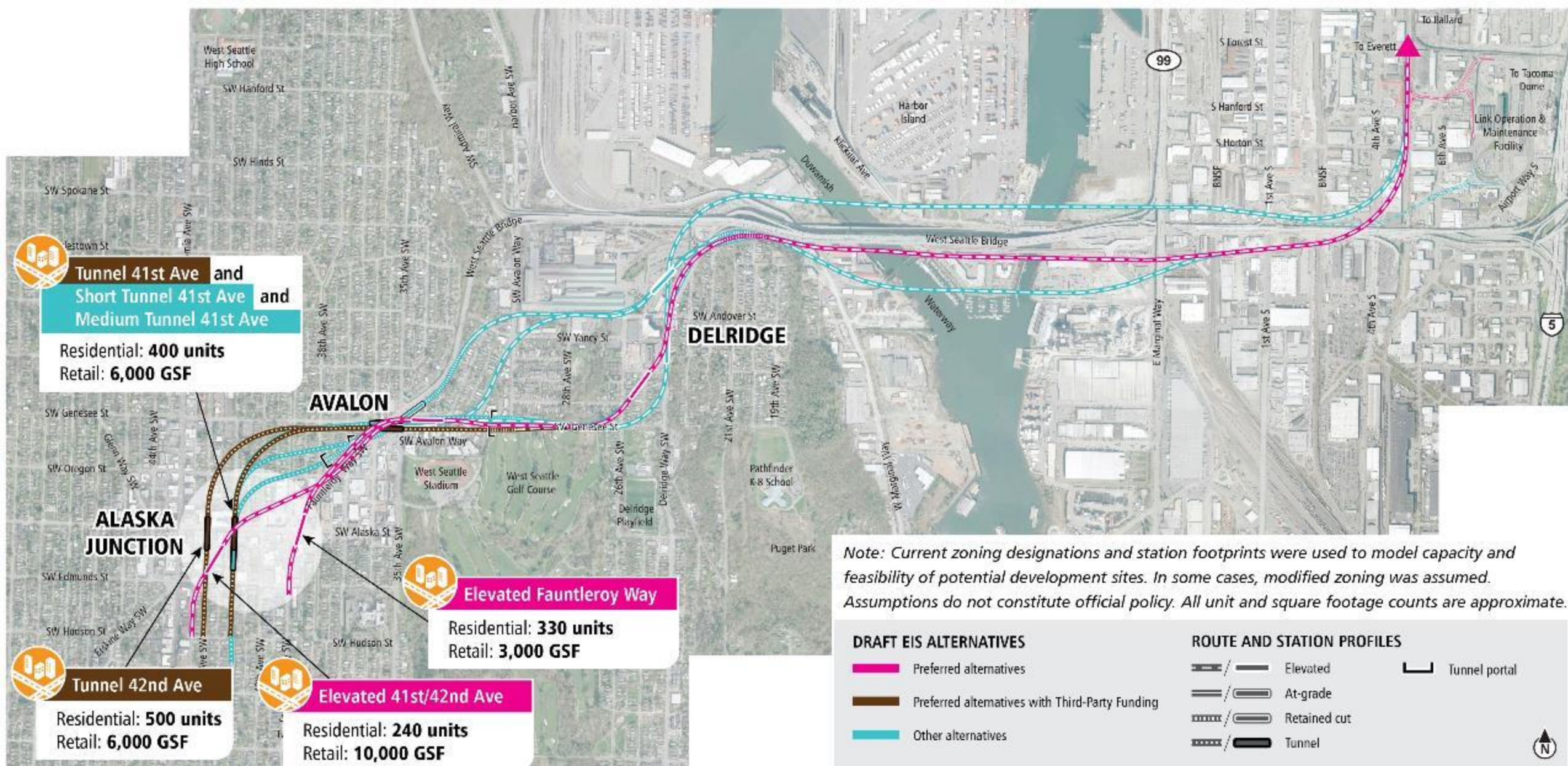
- Preferred alternatives
- Preferred alternatives with Third-Party Funding
- Other alternatives

ROUTE AND STATION PROFILES

- Elevated
- At-grade
- Retained cut
- Tunnel
- Tunnel portal

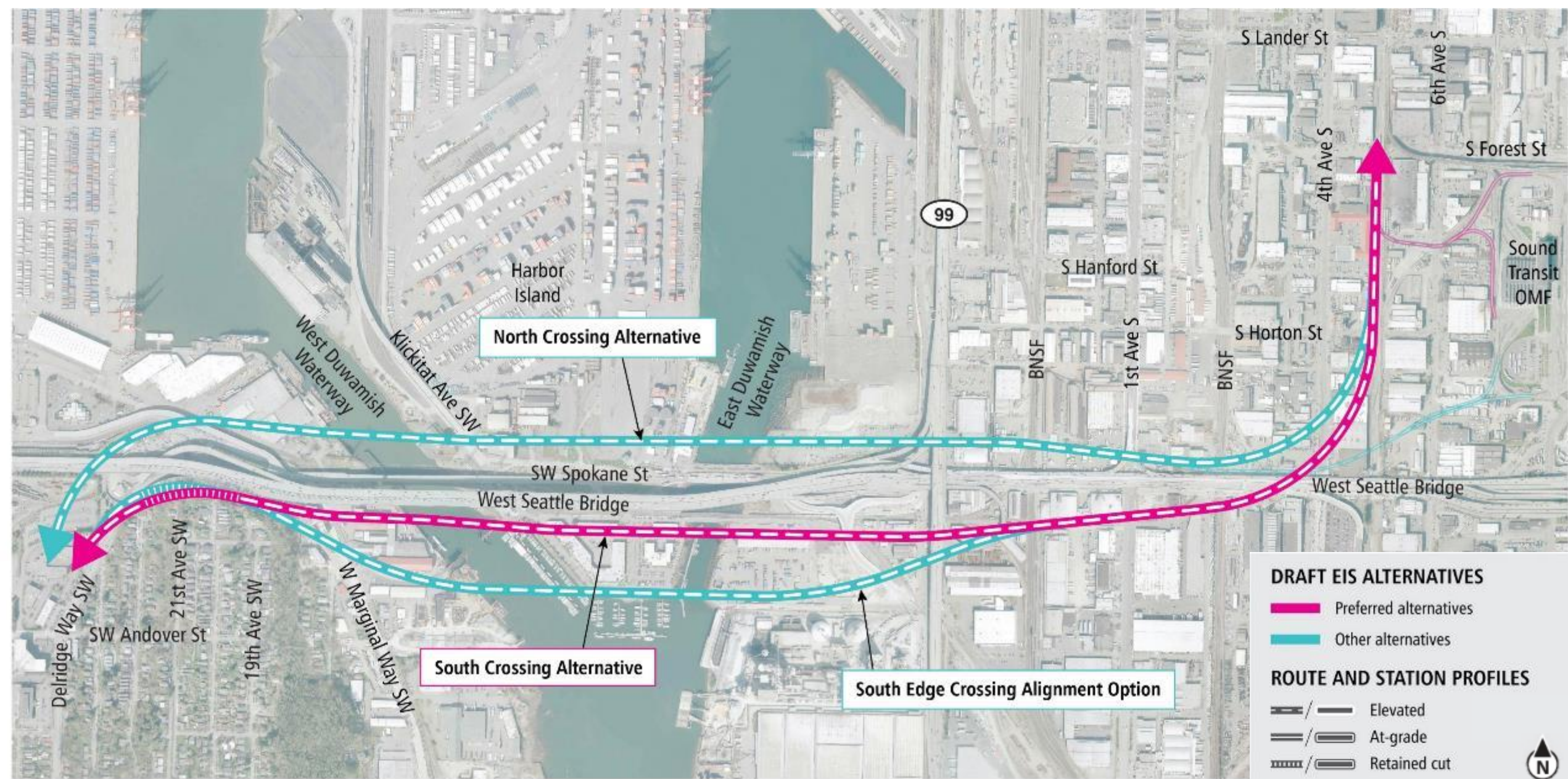






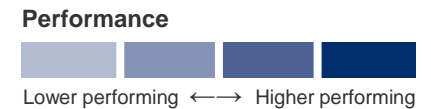
Draft EIS alternatives






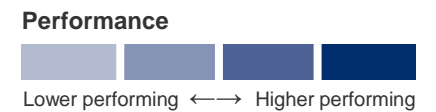
	South Crossing Alternative	South Edge Crossing Alignment Option	North Crossing Alternative
Project cost (2019\$ in billions) 	\$1.2B	\$1.3B	\$1.5B
Residential displacements 	26 units	26 units	none
Business displacements 	36	29	38
Maritime Business displacements 	3	5	10
Park effects (permanent) 	1.5 acres	1.9 acres	none
Other considerations 	Pigeon Point constructability BNSF bridge constructability	Pigeon Point constructability In-water columns necessary Marinas	Port of Seattle T-5 & T-18 T-25 restoration site Fire Station 14 effects

The above information is for illustration only. Please refer to DEIS for further detail.

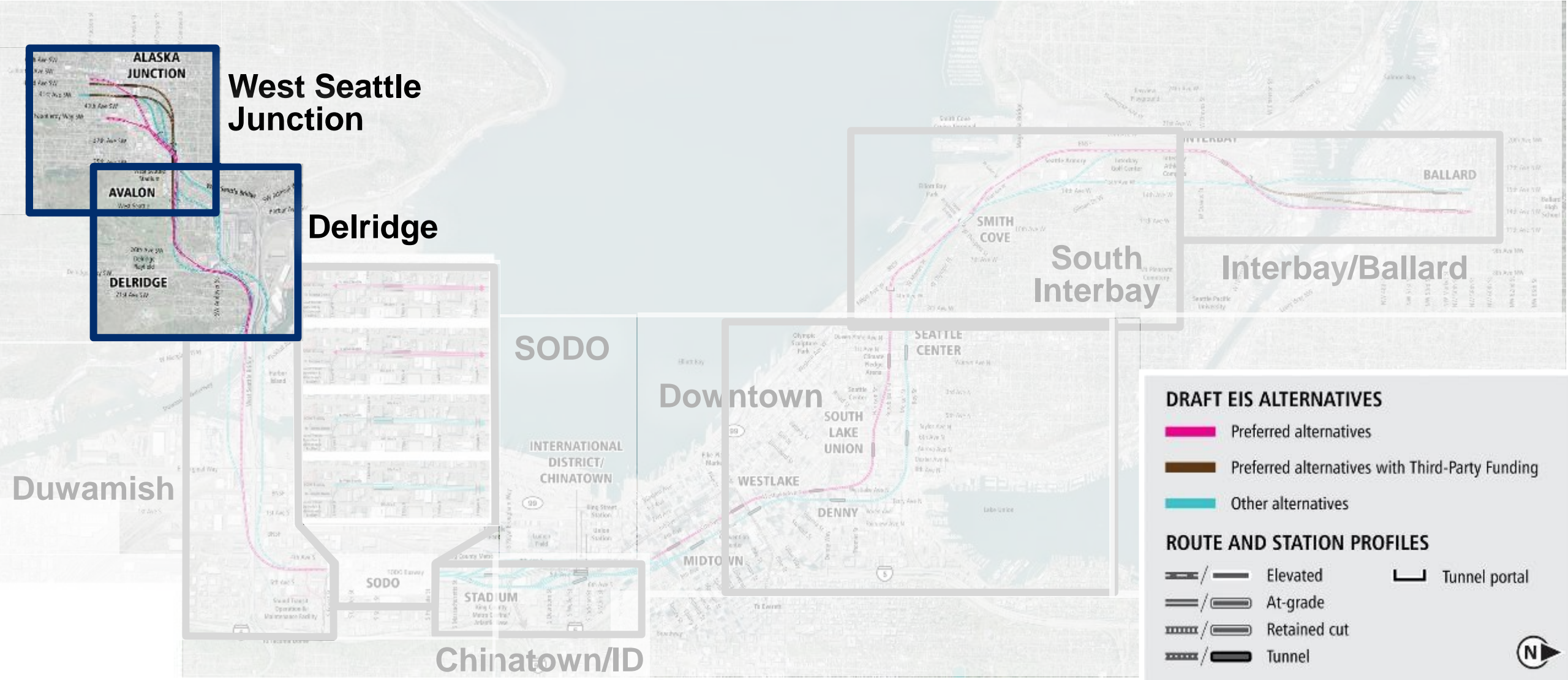


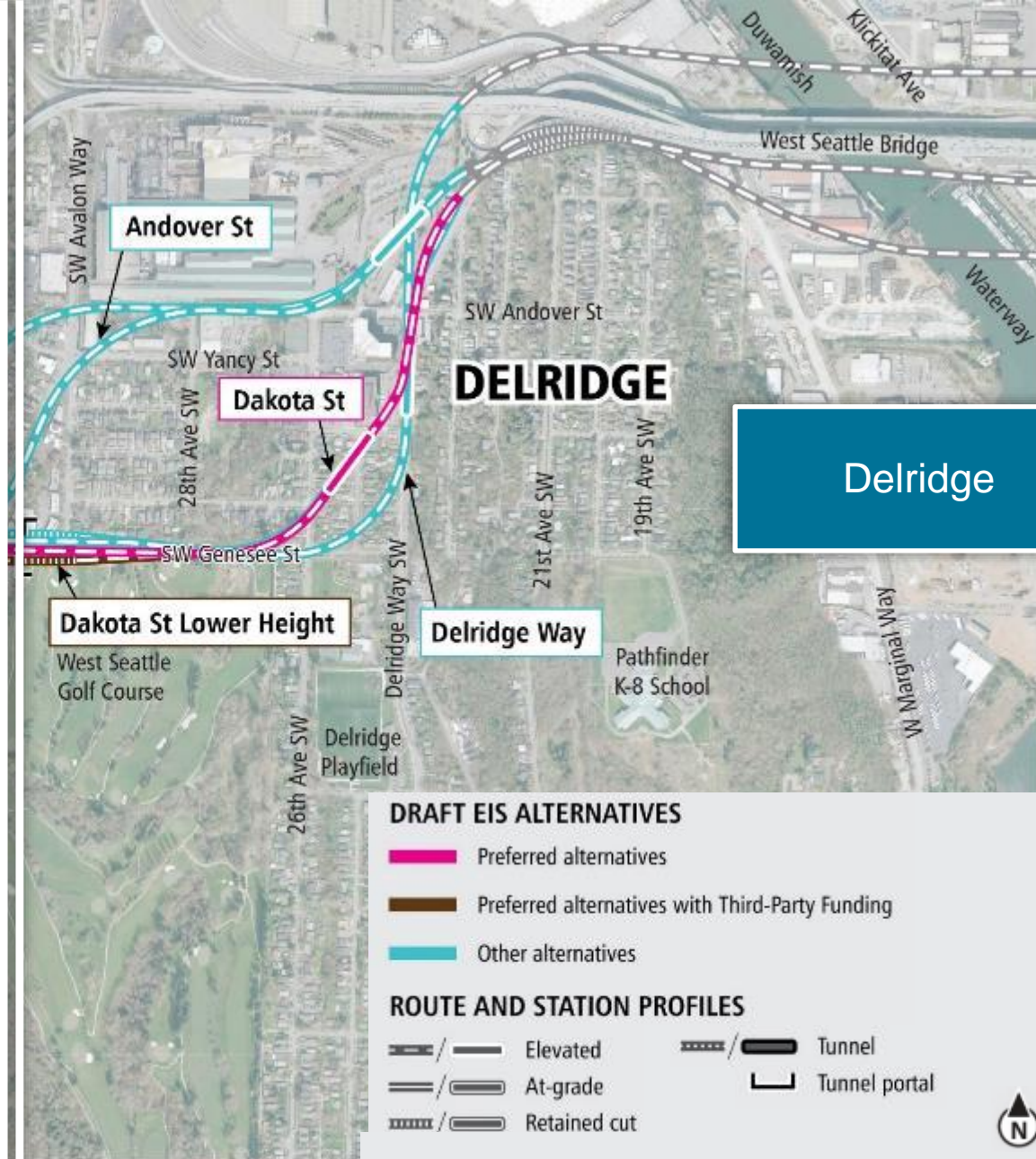
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Draft EIS alternatives










DRAFT EIS ALTERNATIVES

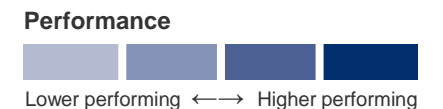
- Preferred alternatives
- Preferred alternatives with Third-Party Funding
- Other alternatives






ROUTE AND STATION PROFILES

- Elevated
- At-grade
- Retained cut
- Tunnel
- Tunnel portal

	Elevated Fauntleroy Dakota St	Elevated 41st /42nd Dakota St	Tunnel 41st Dakota St Lower Height	Tunnel 42nd Dakota St Lower Height	Short Tunnel 41st Dakota St	Medium Tunnel 41st Andover St Lower Height	Elevated Fauntleroy Andover St
Project cost (2019\$ in billions) 	\$1.6B	\$2.0B	\$2.1B	\$2.2B	\$1.9B	\$1.6B	\$1.5B
Residential displacements 	607 units	551 units	364 units	321 units	410 units	201 units	487 units
Business displacements 	32	77	31	60	34	35	34
Park effects (permanent) 	0.6 acres	0.6 acres	1.4 acres	1.6 acres	0.5 acres	none	none
Other considerations 	Taller guideway/ Delridge Station	Taller guideway/ Delridge Station	Lower guideway/ Delridge Station	Lower guideway/ Delridge Station	Taller guideway/ Delridge Station	Lower guideway/ Avalon Station	Taller guideway/ Delridge Station
	Social service provider	Social service provider	Tunnel Avalon and Alaska Jct. stations Social service provider	Tunnel Avalon and Alaska Jct. stations Social service provider	Tunnel Alaska Jct. station Social service provider	Guideway follows West Seattle Bridge Delridge Station further north Tunnel Alaska Jct. Station	Guideway follows Avalon Way SW Delridge Station further north

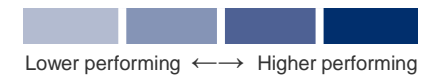
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	Elevated Fauntleroy Dakota St	Elevated 41st /42nd Dakota St	Tunnel 41st Dakota St Lower Height	Tunnel 42nd Dakota St Lower Height	Short Tunnel 41st Dakota St	Medium Tunnel 41st Andover St Lower Height	Elevated Fauntleroy Andover St
Project cost (2019\$ in billions) 	\$1.6B	\$2.0B	\$2.1B	\$2.2B	\$1.9B	\$1.6B	\$1.5B
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Business displacements 	32	77	31	60	34	35	34
Park effects (permanent) 	0.6 acres	0.6 acres	1.4 acres	1.6 acres	0.5 acres	none	none
Other considerations 	Taller guideway/ Delridge Station Social service provider	Taller guideway/ Delridge Station Social service provider	Lower guideway/ Delridge Station Tunnel Avalon and Alaska Jct. stations Social service provider	Lower guideway/ Delridge Station Tunnel Avalon and Alaska Jct. stations Social service provider	Taller guideway/ Delridge Station Tunnel Alaska Jct. station Social service provider	Lower guideway/ Avalon Station Guideway follows West Seattle Bridge Delridge Station further north Tunnel Alaska Jct. Station	Taller guideway/ Delridge Station Guideway follows Avalon Way SW Delridge Station further north

The above information is for illustration only. Please refer to DEIS for further detail.

Performance



***Board discussion of
West Seattle/Duwamish
segment***

***Capital cost saving and
refinement concepts***

Work purpose and limitations

- Initial assessment of **feasibility** and **potential cost savings**
- Based on limited engineering design
- Would require **further study** of environmental, passenger experience and other implications

Concepts we'll discuss today

Capital cost savings

- Potentially help address **affordability gap**

Other refinements

- Potentially address **other risks or opportunities**

Desired feedback

- Seeking Board direction on **whether to study any of these ideas further**
- Not seeking Board direction to adopt these ideas now

Concepts we'll discuss today

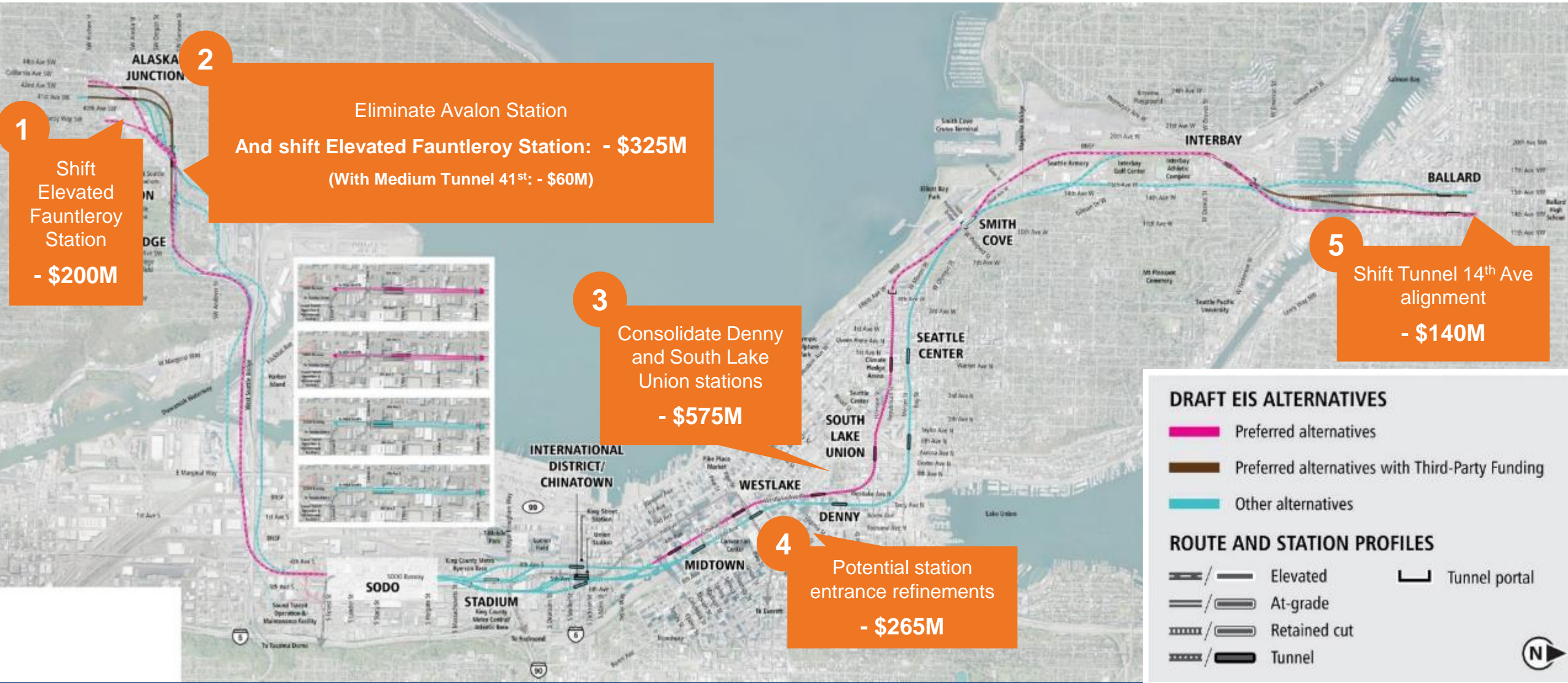
Capital cost savings

- Potentially help address **affordability gap**

Other refinements

- Potentially address **other risks or opportunities**

Capital cost savings concepts summary

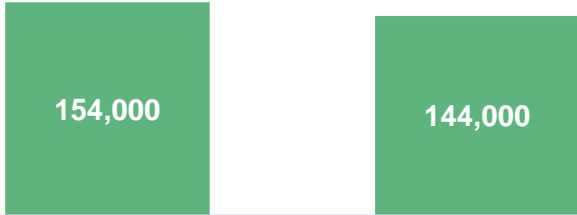


Consolidate Denny and South Lake Union stations



Cost savings: - \$575M

Daily Trips on Project



DEIS Preferred Alternative

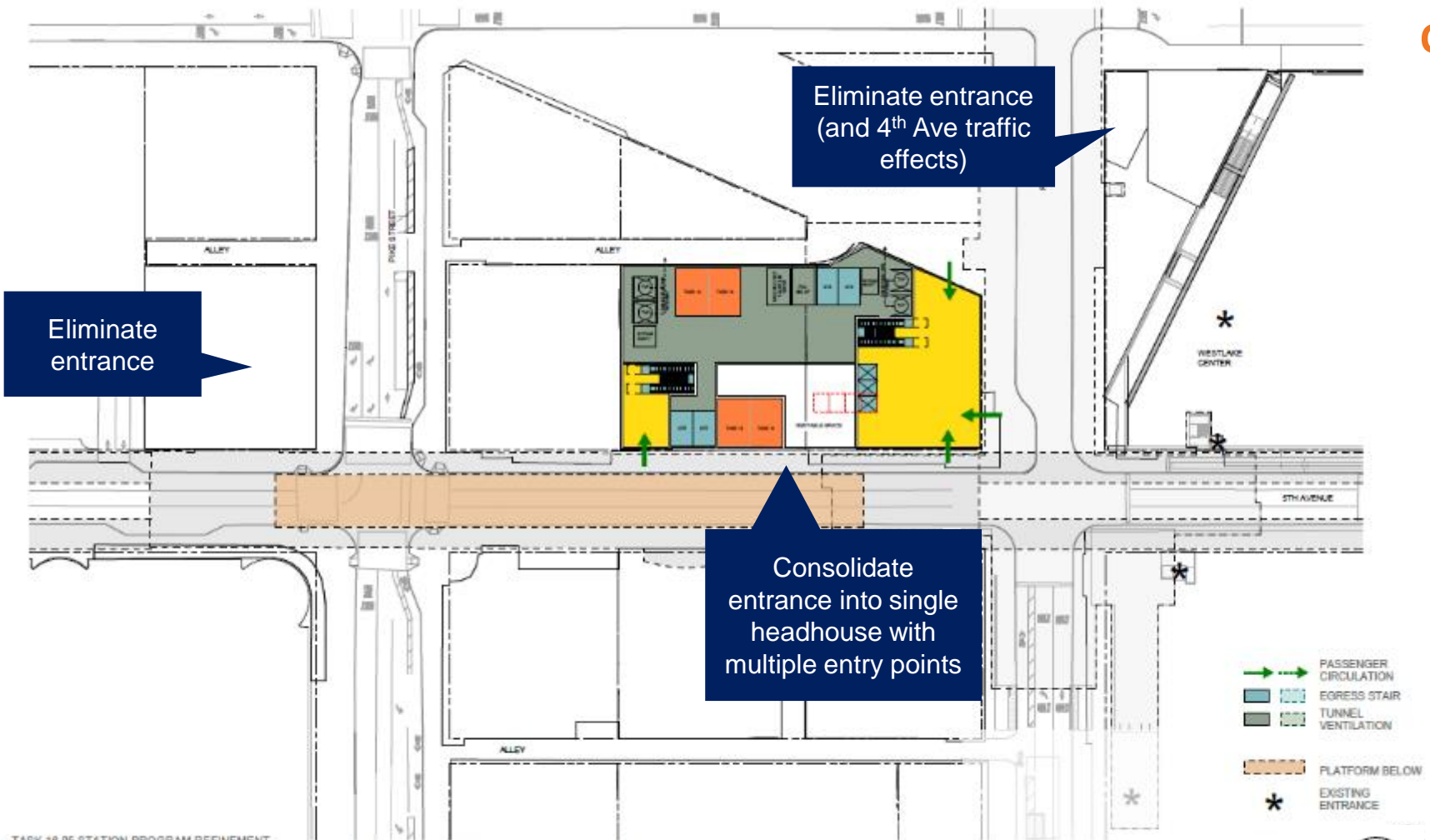
Refinement

Connects to either Seattle Center station

Estimates shown in 2019 dollars, based on conceptual design, and subject to change.

4b Westlake Station entrance refinement

Cost savings: - \$190M



TASK 16.05 STATION PROGRAM REFINEMENT
DT-1 WESTLAKE STATION STUDY1 OPTION 3 - SITE PLAN
12/01/2021
DRAFT - FOR INTERNAL DISCUSSION ONLY. NOT REVIEWED OR APPROVED ON BEHALF OF ANY PARTY.



Estimates shown in 2019 dollars, based on conceptual design, and subject to change.

Concepts we'll discuss today

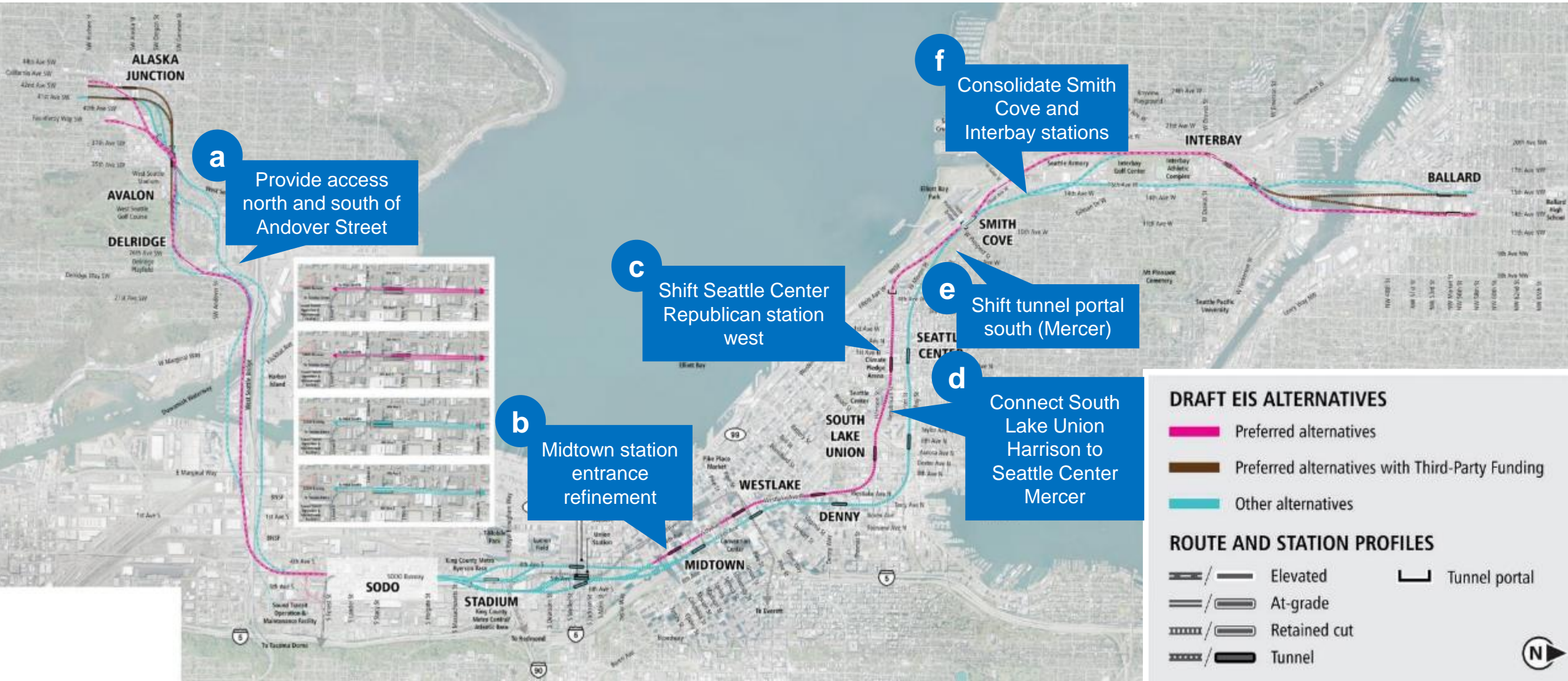
Capital cost savings

- Potentially help address **affordability gap**

Other refinements

- Potentially address **other risks or opportunities**

Other refinement concepts summary





Consolidate Smith Cove and Interbay stations



Daily Trips on Project



DEIS Preferred Alternative

Refinement

Next Steps

Upcoming Sound Transit Board Meetings



System Expansion Committee

Overview of Draft EIS comments

Thursday, June 9, 2022

System Expansion Committee

Confirm or Modify Preferred Alternative

Thursday, July 14, 2022

Sound Transit Board

Confirm or Modify Preferred Alternative

Thursday, July 28, 2022

Sound Transit Board and Committee meetings are livestreamed and recorded. For more information and meeting links, visit: <https://www.soundtransit.org/get-to-know-us/board-directors/livestream-video>

Next steps



Comments

Public comments shared with Sound Transit Board.

June 2022



Board action

Sound Transit Board confirms or modifies the preferred alternative.

July 2022



Final EIS

Sound Transit staff prepares the Final EIS, which responds to comments received on the Draft EIS.

Mid 2022 - 2023



Board action

Sound Transit Board selects the project to be built.

Late 2023

 *wsblink.participate.online*

 **SOUNDTRANSIT**

