

***West Seattle and Ballard
Links Extensions
Draft EIS results overview***

1/27/2022

Why we are here

- To announce start of Draft EIS comment period
- To provide brief overview of Draft EIS results

For information only; no action required today

WSBLE and Realignment

- The current cost estimate for the WSBLE project is \$12,158 million in 2019\$ and is affordable within the Agency's Finance Plan by 2039.
- For the West Seattle Extension, the Target and Affordable schedules are the same (2032).
- For the Ballard Link Extension, Staff are managing the project toward the Target Schedule of 2037, while working to close an affordability gap of \$1,800 million (2019\$).

Project background



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

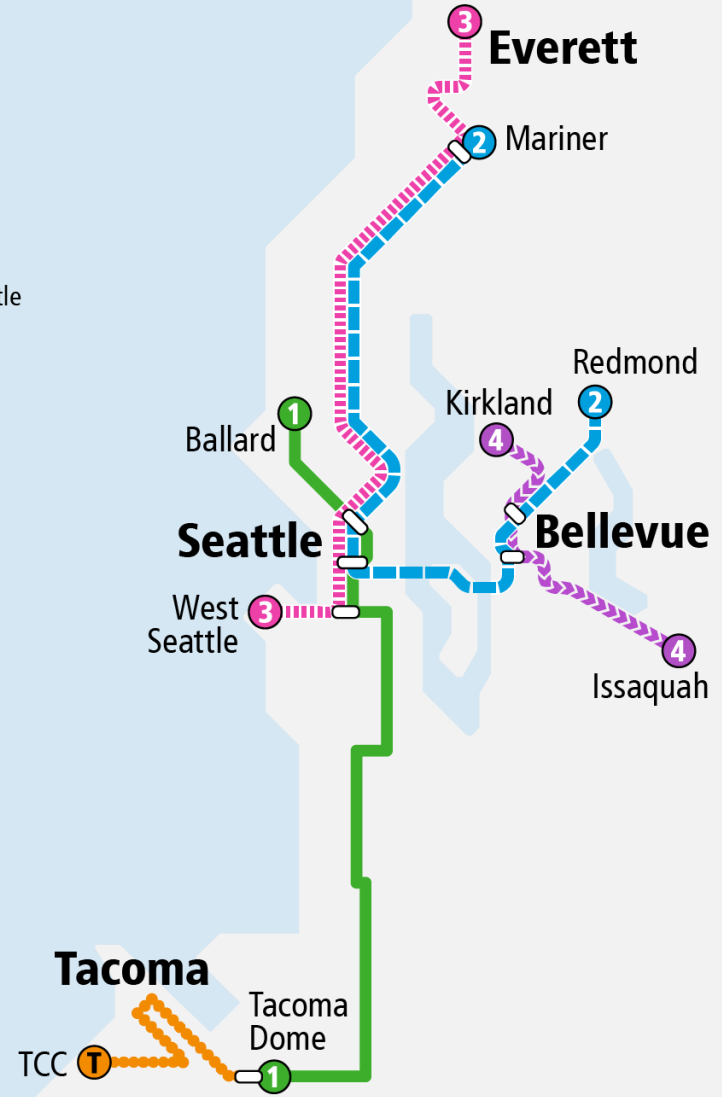
Operating plan: 2032

-  1
Lynnwood–Tacoma
-  2
Lynnwood–Redmond
-  3
West Seattle–SODO
-  T
Tacoma Dome–Hilltop
-  Transfer



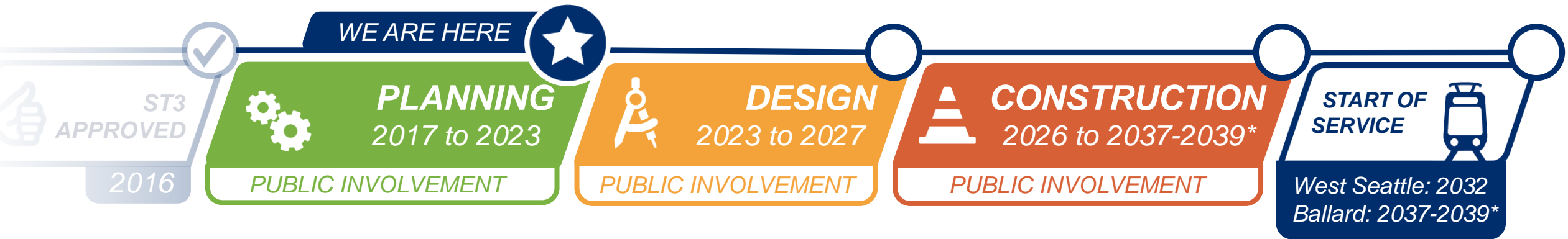
Operating plan: 2042

-  1
Ballard–Tacoma
-  2
Mariner–Redmond
-  3
Everett–West Seattle
-  4
Kirkland–Issaquah
-  T
Tacoma Dome–Tacoma Community College
-  Transfer



West Seattle and Ballard Link Extensions

Project timeline





ST3
APPROVED

2016



PLANNING



DES

2017–2019

Alternatives development

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

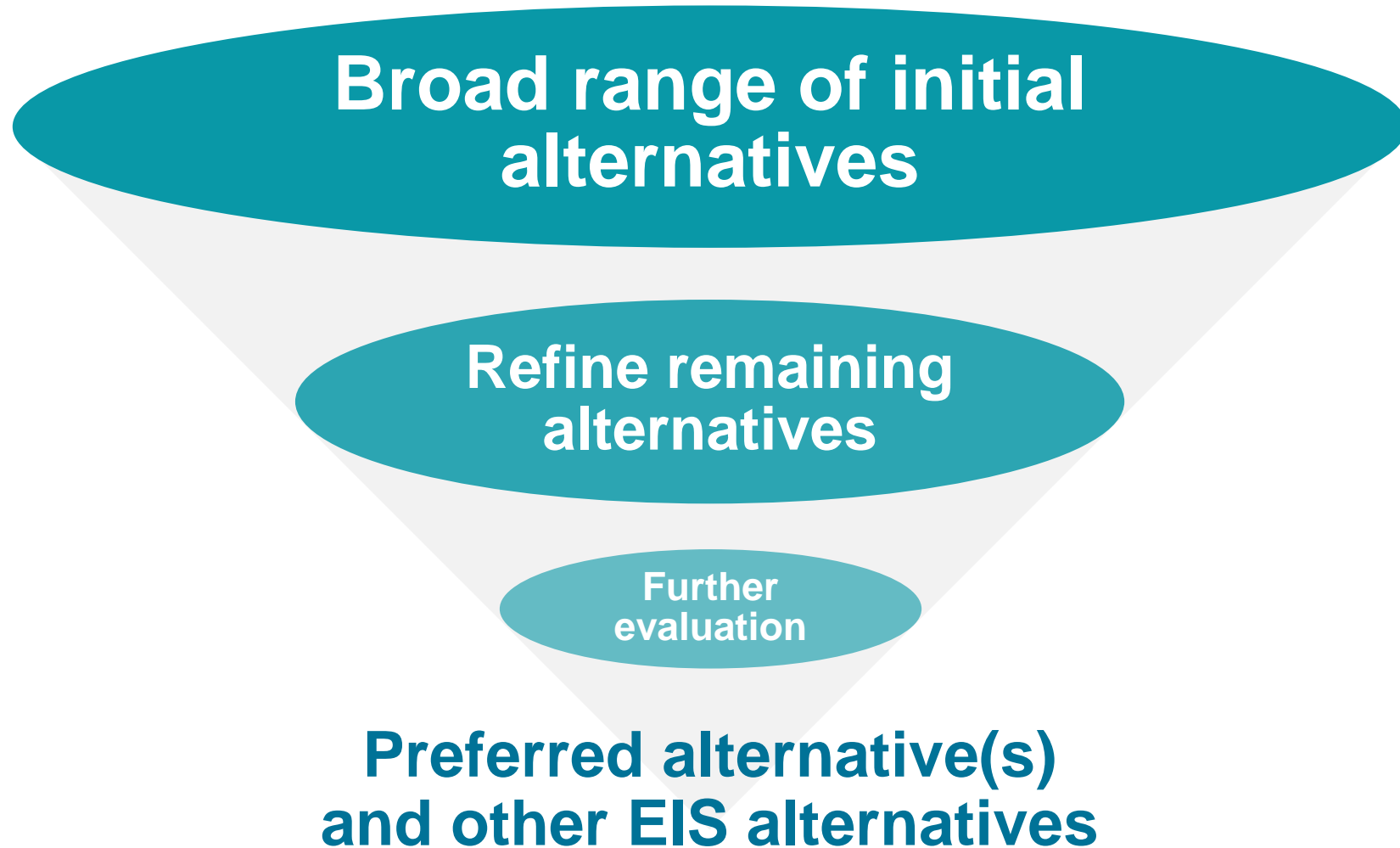
2019–2023

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



DES

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

Community engagement

Upcoming community engagement



Publish Draft EIS

Friday, January 28th

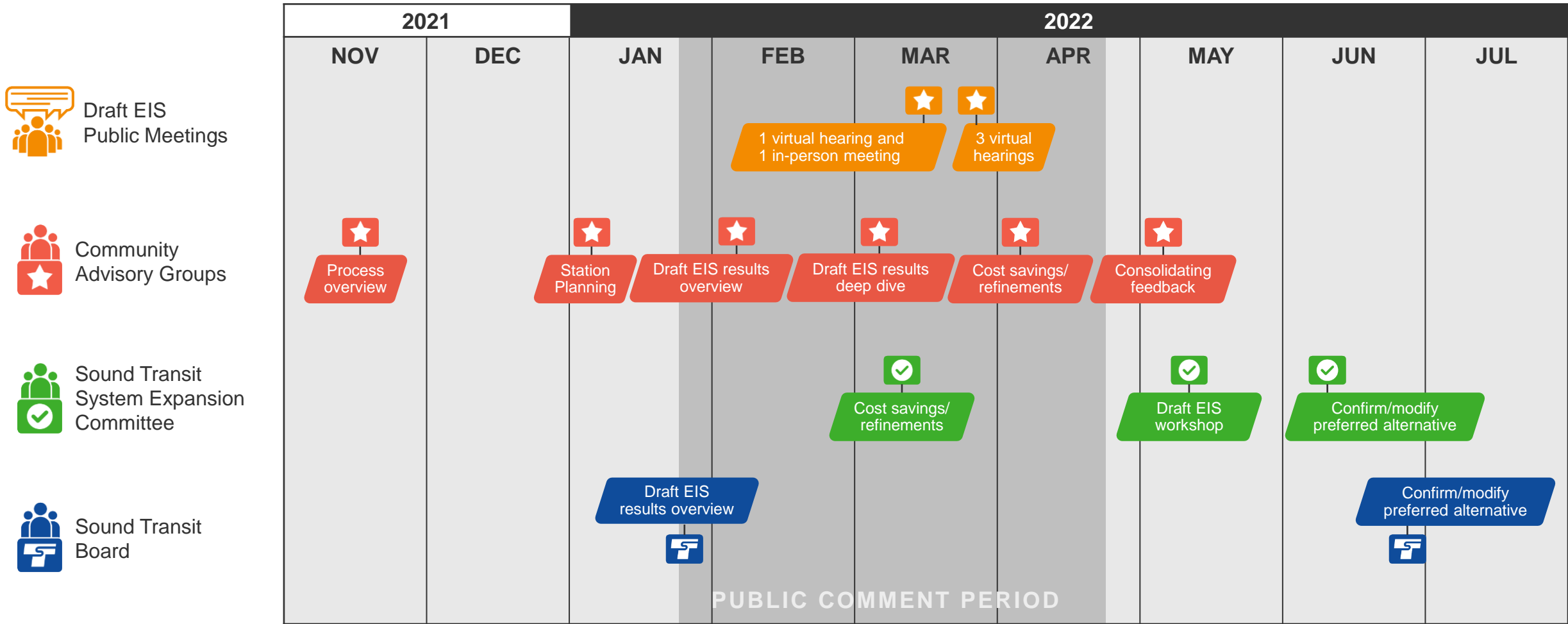


Collect public feedback

Comment period ends April 28th

Community engagement and collaboration

Draft Environmental Impact Statement (EIS)



Upcoming community engagement

Online open house  wsblink.participate.online

Community Advisory Groups: 4 meetings/month through May

Draft EIS meetings: 4 virtual, one in-person in March

Draft EIS mailer: delivered to 130,000 addresses

Other activities/events including community briefings; fairs, festivals and tabling events; property owner webinars; office hours; community liaison outreach

Draft EIS results overview

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

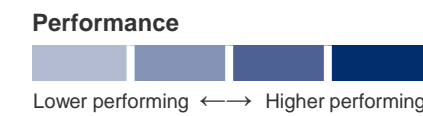
Draft EIS alternatives



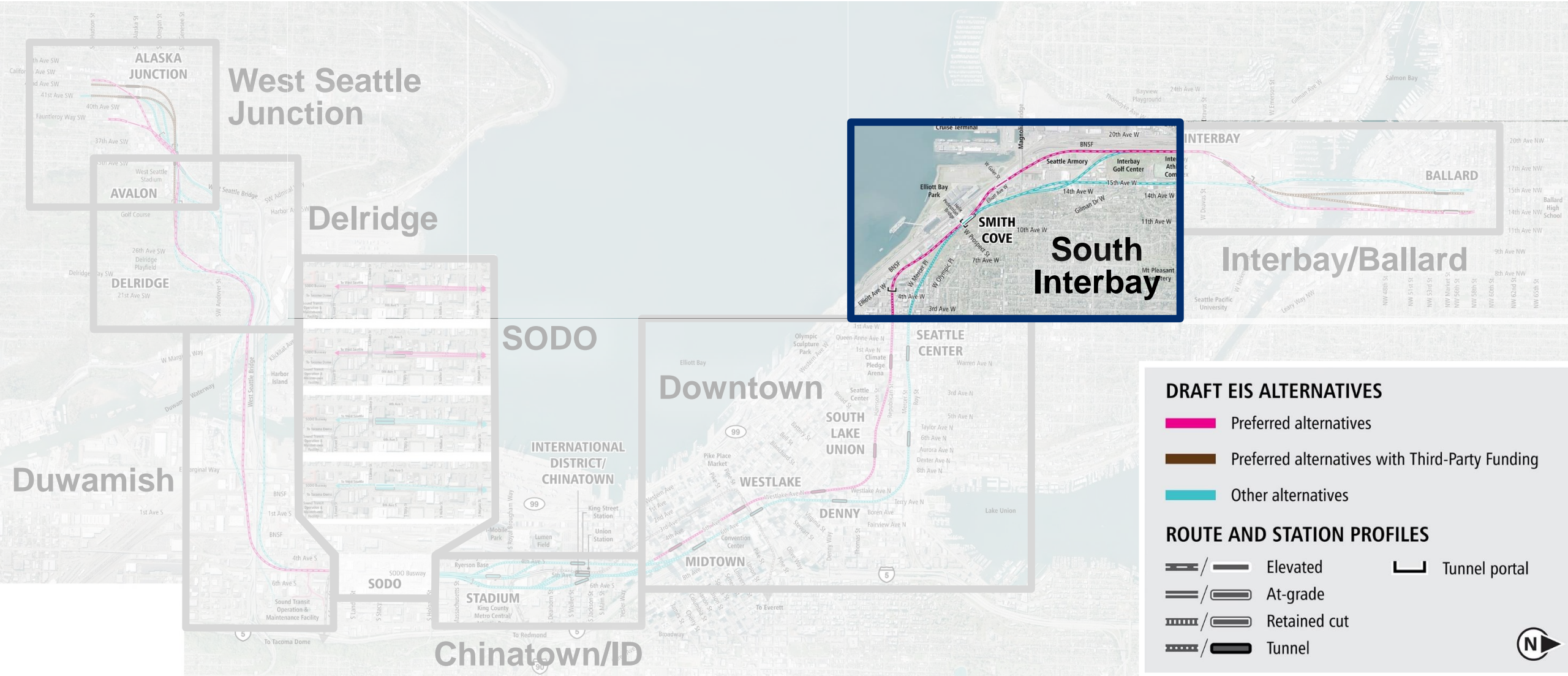


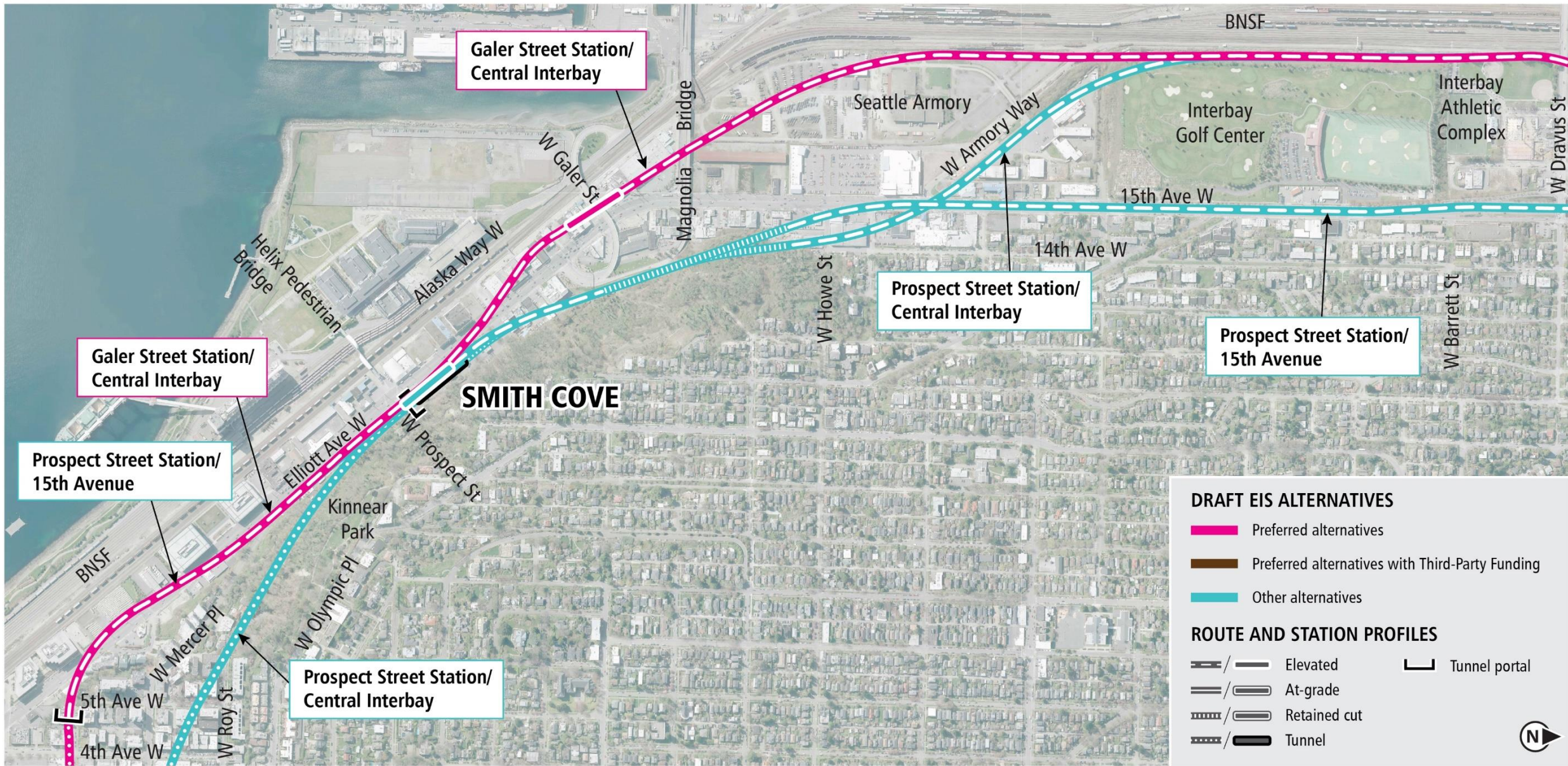
	5th/Harrison	6th/Mercer
Project cost  (2019\$ in dollars)	\$4.7-4.9B	\$4.9-5.0B
Residential displacements 	26 units	167 units
Business displacements 	44 to 46	47
Historic properties effects 	3	9
Park effects  (permanent)	1 park (0.4 acres)	2 parks (0.6 acres)
Traffic effects  (full closures)	5 to 8 roadways	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>

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



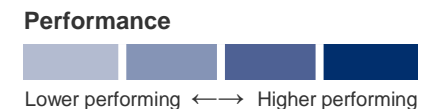
Draft EIS alternatives



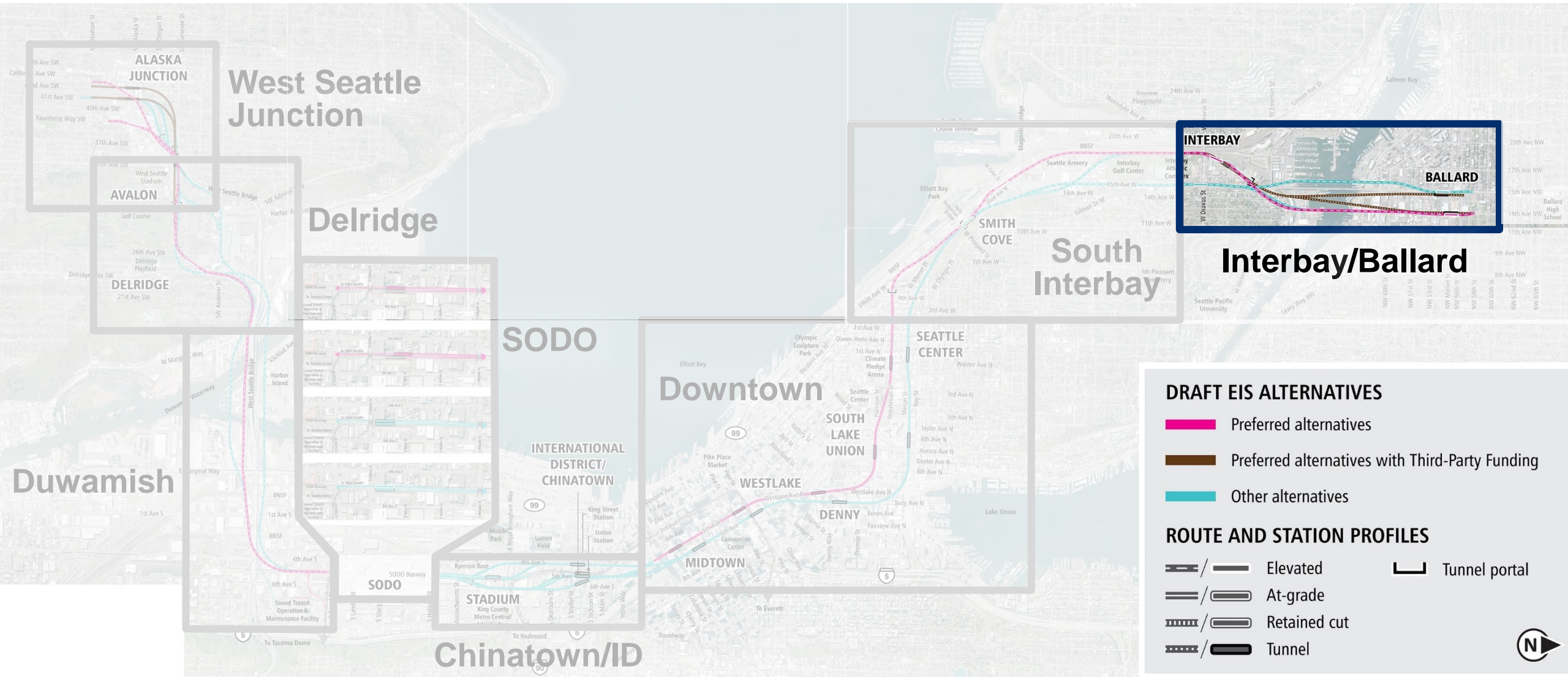


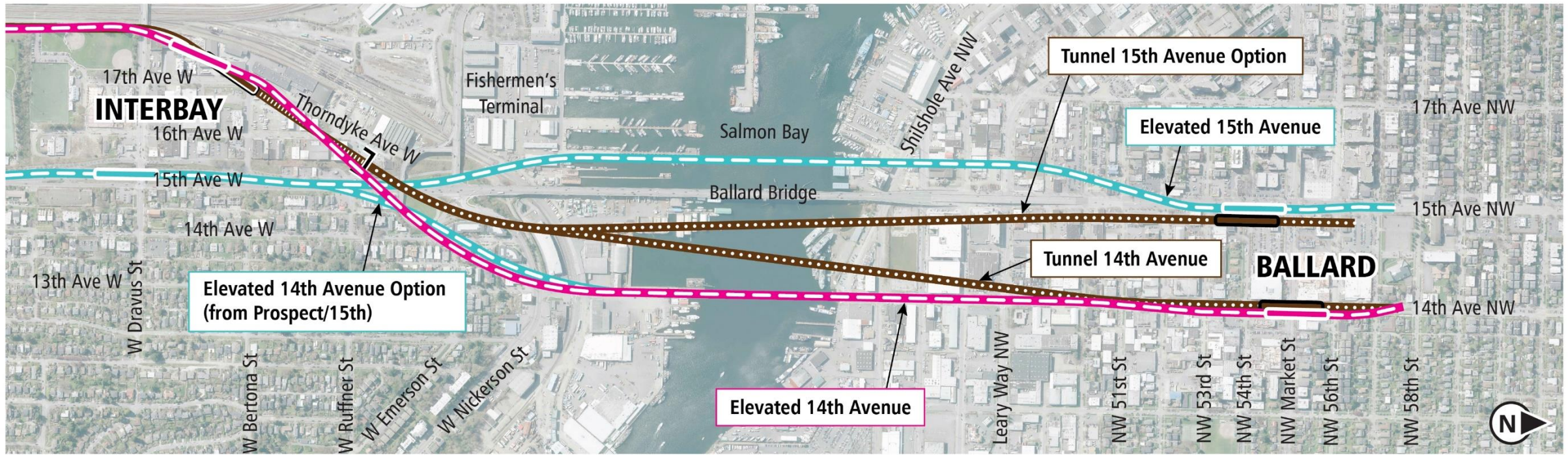
	Galer Street Station/ Central Interbay	Prospect Street Station/ 15th Avenue	Prospect Street Station/ Central Interbay
Project cost  (2019\$ in billions)	\$1.3B	\$1.4-1.5B	\$1.5-1.6B
Residential displacements 	174 units	123 units	5 units
Historic properties effects 	7	8	2
Park effects  (Permanent)	3.1 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

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



Draft EIS alternatives











DRAFT EIS ALTERNATIVES

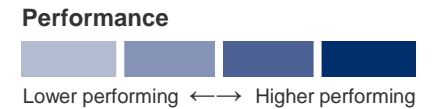
- █ Preferred alternatives
- █ Preferred alternatives with Third-Party Funding
- █ Other alternatives

ROUTE AND STATION PROFILES

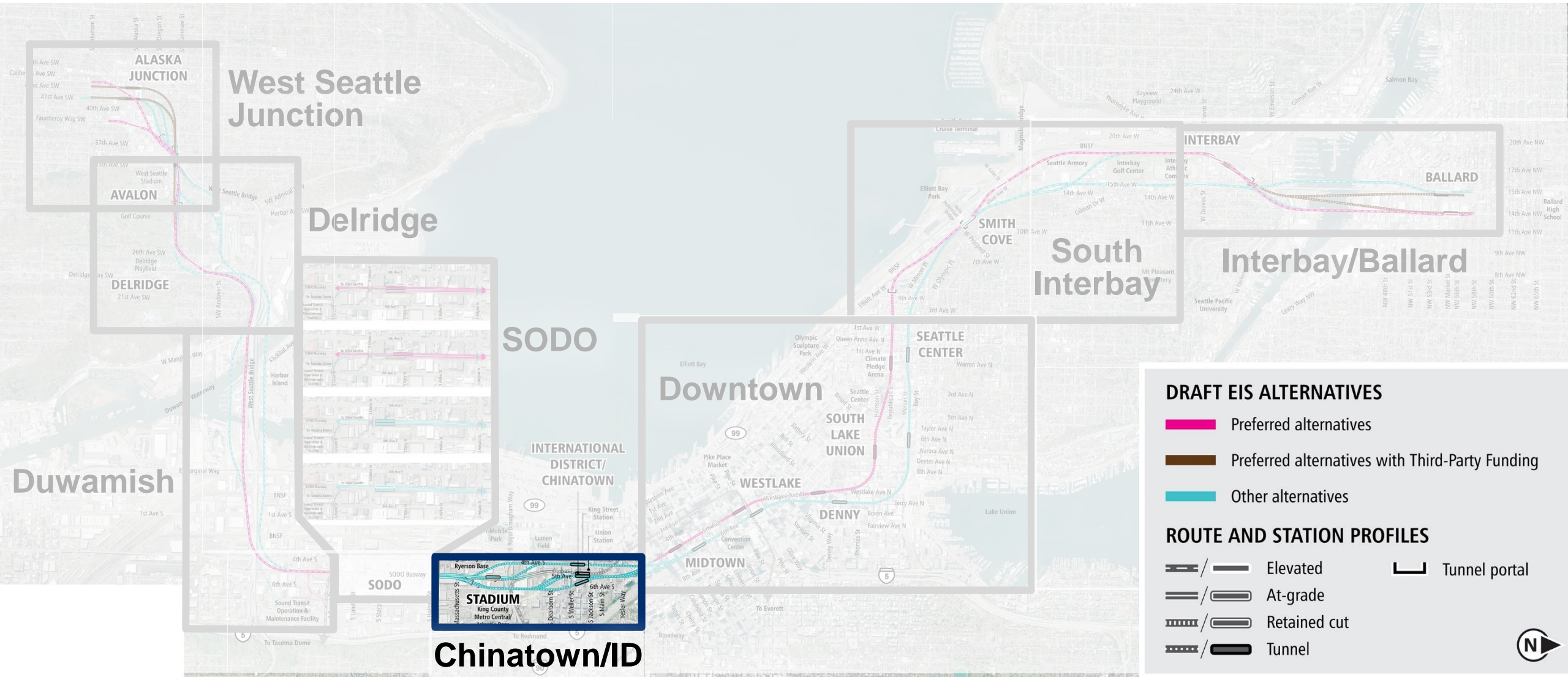
- Elevated
- At-grade
- Retained cut
- Tunnel
- Tunnel portal

	Elevated 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.



Draft EIS alternatives












DRAFT EIS ALTERNATIVES

- Other alternatives
- Existing Link

ROUTE AND STATION PROFILES

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

	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



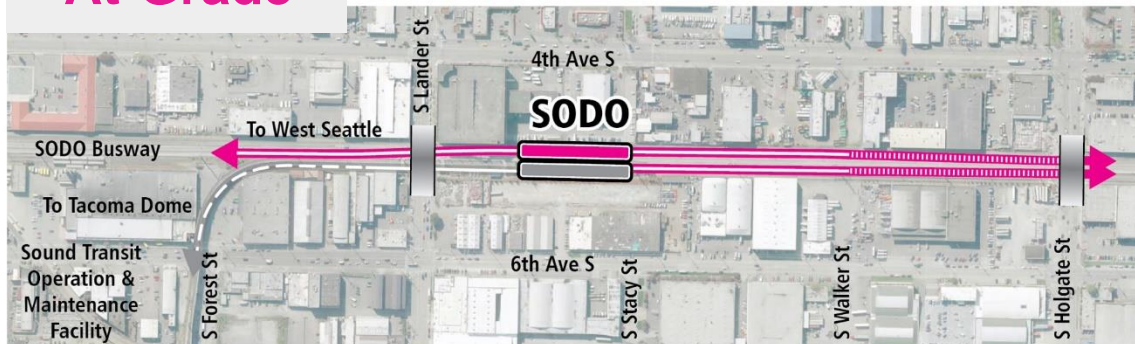
DRAFT EIS ALTERNATIVES

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

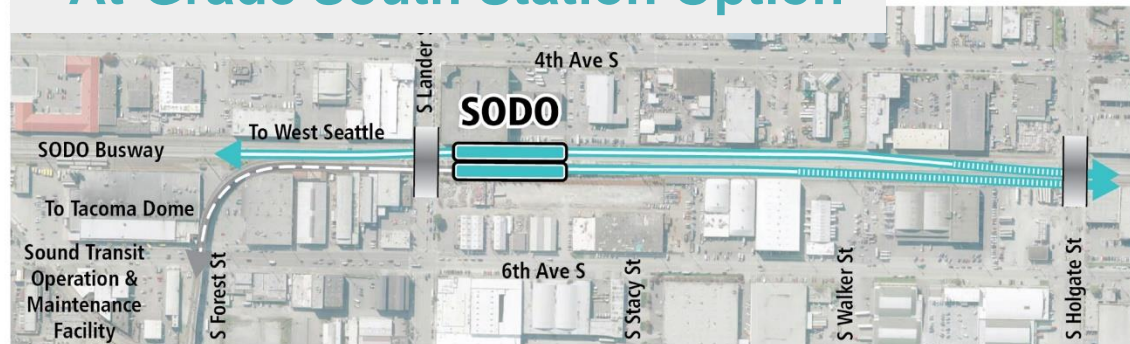
ROUTE AND STATION PROFILES

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

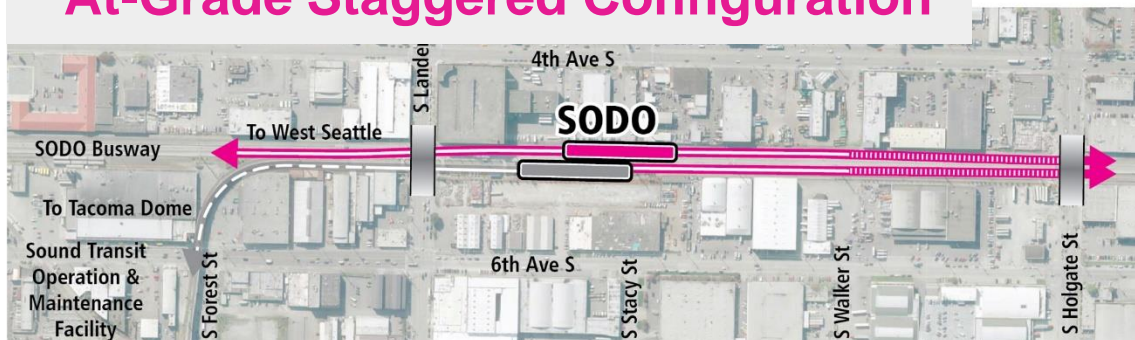
At-Grade



At-Grade South Station Option



At-Grade Staggered Configuration



Mixed Profile








DRAFT EIS ALTERNATIVES

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

ROUTE AND STATION PROFILES

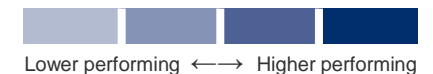
- At-grade
- Retained cut
- Elevated
- Street overpass



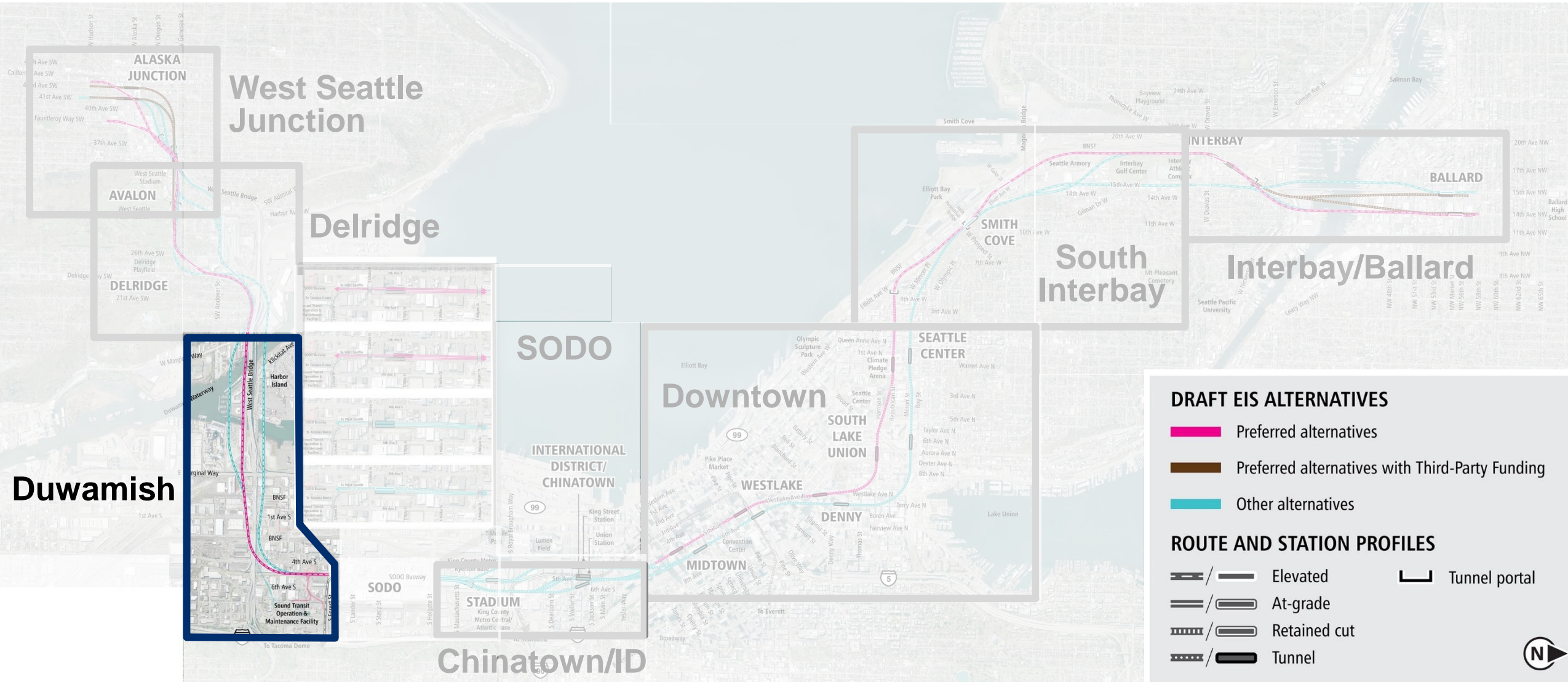
	At-Grade	At-Grade Staggered Station Configuration	At-Grade South Station Option	Mixed Profile
Project cost  (2019\$ in billions)	\$0.6-0.7B	\$0.5-0.6B	\$0.6-0.7B	\$0.8B
Business displacements 	20 to 32	19 to 31	17 to 29	23
Transportation effects 	SODO Busway (permanent closure)	SODO Busway (permanent 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

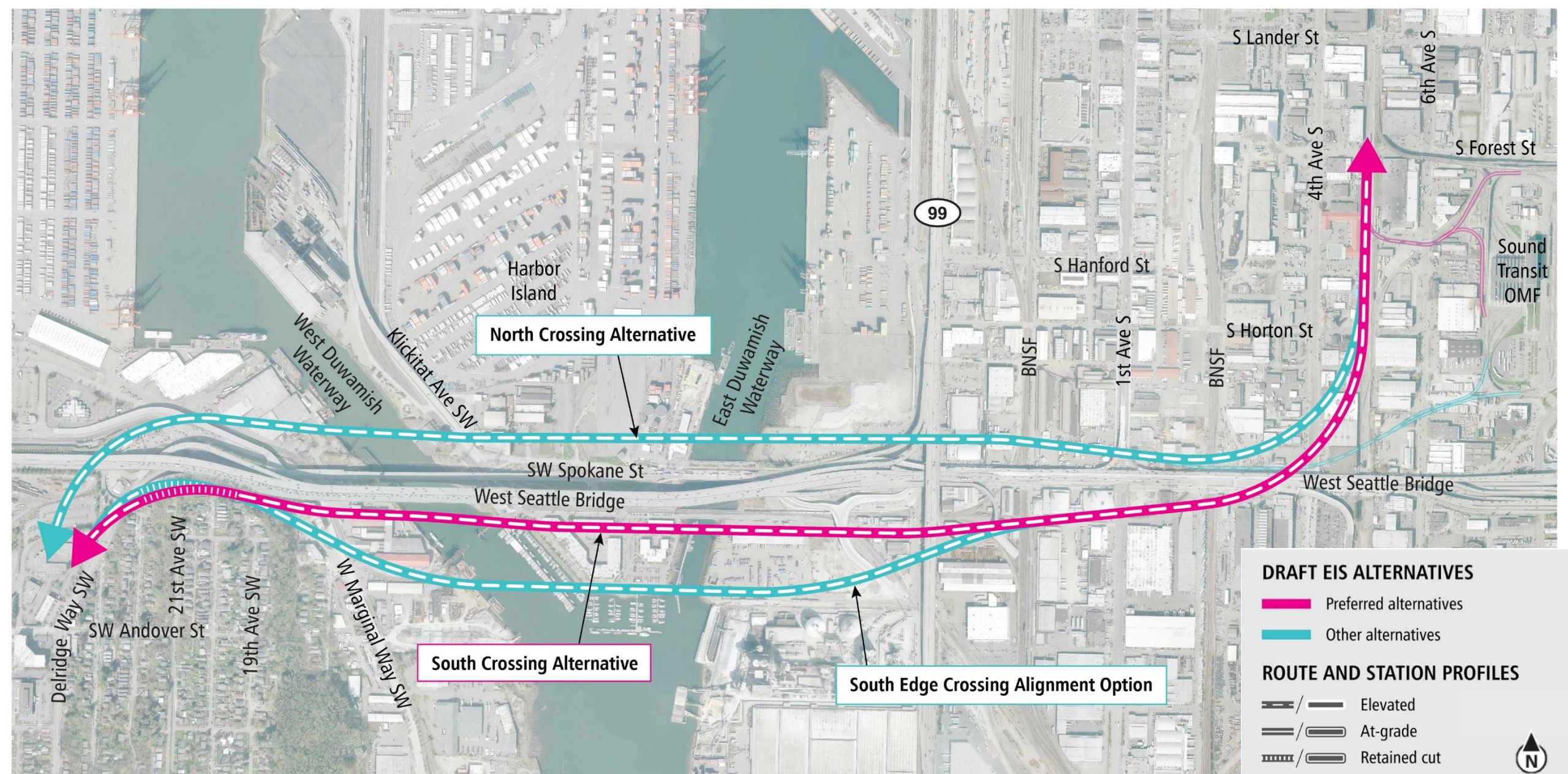
The above information is for illustration only. Please refer to DEIS for further detail.

Performance



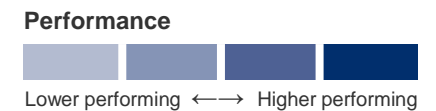
Draft EIS alternatives



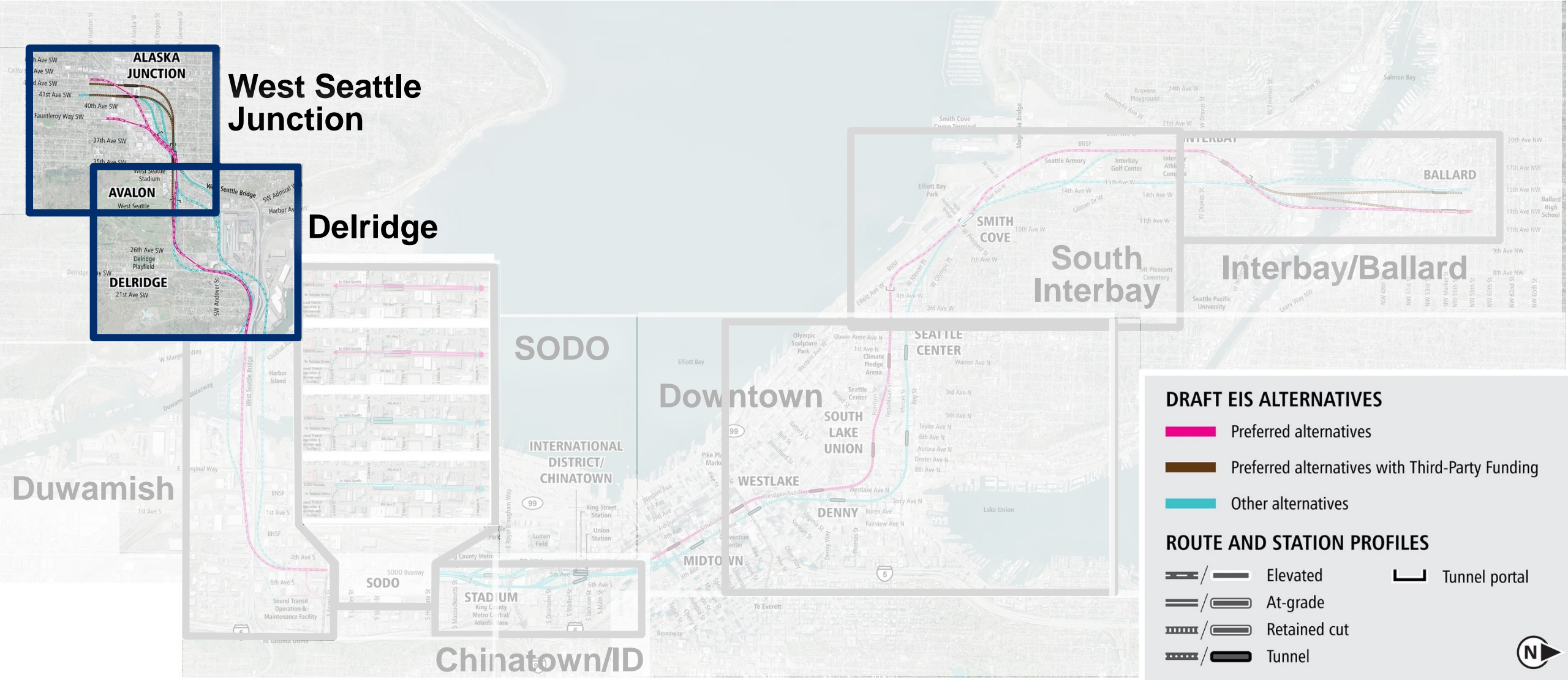


	South Crossing Alternative	South Edge Crossing Alignment Option	North Crossing Alternative
Project cost (2019\$ in billions) 	\$1.2B	\$1.3B	\$1.5B
Residential displacements 	26 units	26 units	none
Business displacements 	36	29	38
Maritime Business displacements 	3	5	10
Park effects (permanent) 	1.5 acres	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.



Draft EIS alternatives



ALASKA JUNCTION
 41st Ave SW
 40th Ave SW
 37th Ave SW
 36th Ave SW
 Faurterley Way SW

West Seattle Junction

AVALON
 West Seattle Stadium
 Harbor Ave

DELDRIDGE
 26th Ave SW
 Delridge Playfield
 21st Ave SW
 SW Anderson St

Delridge

SMITH COVE
 Elliott Bay Park
 10th Ave W
 7th Ave W
 3rd Ave W

South Interbay

INTERBAY
 Seattle Armory
 Interbay Golf Center
 Interbay Athletic Center
 14th Ave W
 11th Ave W
 9th Ave W
 8th Ave W
 7th Ave W

BALLARD
 Ballard High School
 20th Ave NW
 17th Ave NW
 15th Ave NW
 14th Ave NW
 11th Ave NW
 9th Ave NW
 8th Ave NW
 NW 60th St
 NW 58th St
 NW 56th St
 NW 54th St
 NW 52nd St
 NW 50th St
 NW 48th St
 NW 46th St
 NW 44th St
 NW 42nd St
 NW 40th St
 NW 38th St
 NW 36th St
 NW 34th St
 NW 32nd St
 NW 30th St
 NW 28th St
 NW 26th St
 NW 24th St
 NW 22nd St
 NW 20th St
 NW 18th St
 NW 16th St
 NW 14th St
 NW 12th St
 NW 10th St
 NW 8th St
 NW 6th St
 NW 4th St
 NW 2nd St
 NW 1st St

Interbay/Ballard

SODO
 Harbor Island
 Harbor Ave
 4th Ave S
 6th Ave S
 Sound Transit Operation & Maintenance Facility
 Tacoma Dome

SODO
 SODO Busway
 S 1st Ave S
 S 3rd Ave S
 S 5th Ave S
 S 7th Ave S
 S 9th Ave S
 S 11th Ave S
 S 13th Ave S
 S 15th Ave S
 S 17th Ave S
 S 19th Ave S
 S 21st Ave S
 S 23rd Ave S
 S 25th Ave S
 S 27th Ave S
 S 29th Ave S
 S 31st Ave S
 S 33rd Ave S
 S 35th Ave S
 S 37th Ave S
 S 39th Ave S
 S 41st Ave S
 S 43rd Ave S
 S 45th Ave S
 S 47th Ave S
 S 49th Ave S
 S 51st Ave S
 S 53rd Ave S
 S 55th Ave S
 S 57th Ave S
 S 59th Ave S
 S 61st Ave S
 S 63rd Ave S
 S 65th Ave S
 S 67th Ave S
 S 69th Ave S
 S 71st Ave S
 S 73rd Ave S
 S 75th Ave S
 S 77th Ave S
 S 79th Ave S
 S 81st Ave S
 S 83rd Ave S
 S 85th Ave S
 S 87th Ave S
 S 89th Ave S
 S 91st Ave S
 S 93rd Ave S
 S 95th Ave S
 S 97th Ave S
 S 99th Ave S

STADIUM
 King County Metro Central Atlantic Base
 S Duwamish St
 S Jackson St
 S Main St
 S Jackson St
 S Duwamish St

SODO

Downtown

INTERNATIONAL DISTRICT/CHINATOWN

WESTLAKE

DENNY

MIDTOWN

SEATTLE CENTER

SOUTH LAKE UNION

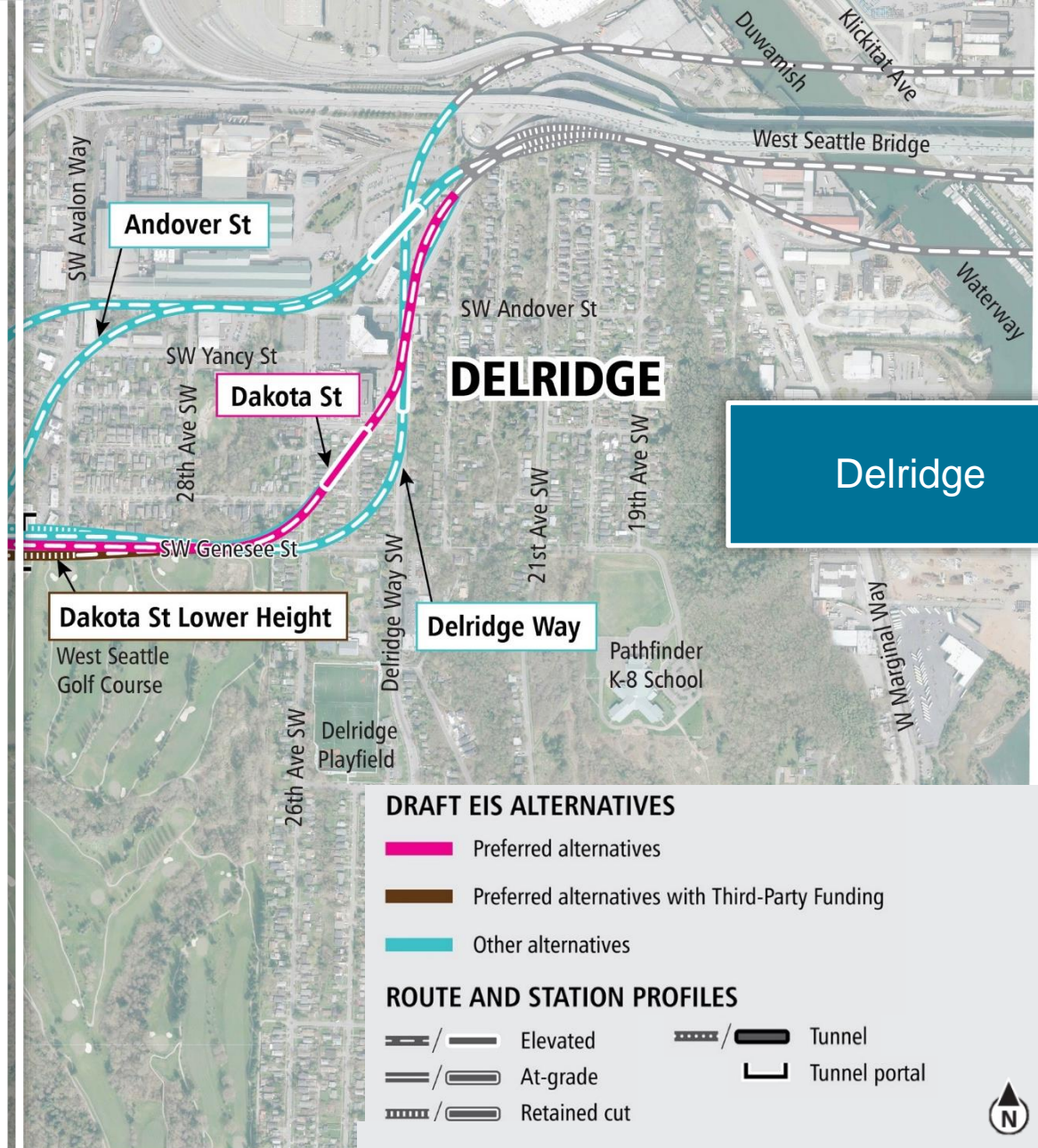
DRAFT EIS ALTERNATIVES






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

ROUTE AND STATION PROFILES

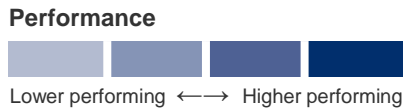
- Elevated
- At-grade
- Retained cut
- Tunnel
- Tunnel portal





	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 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

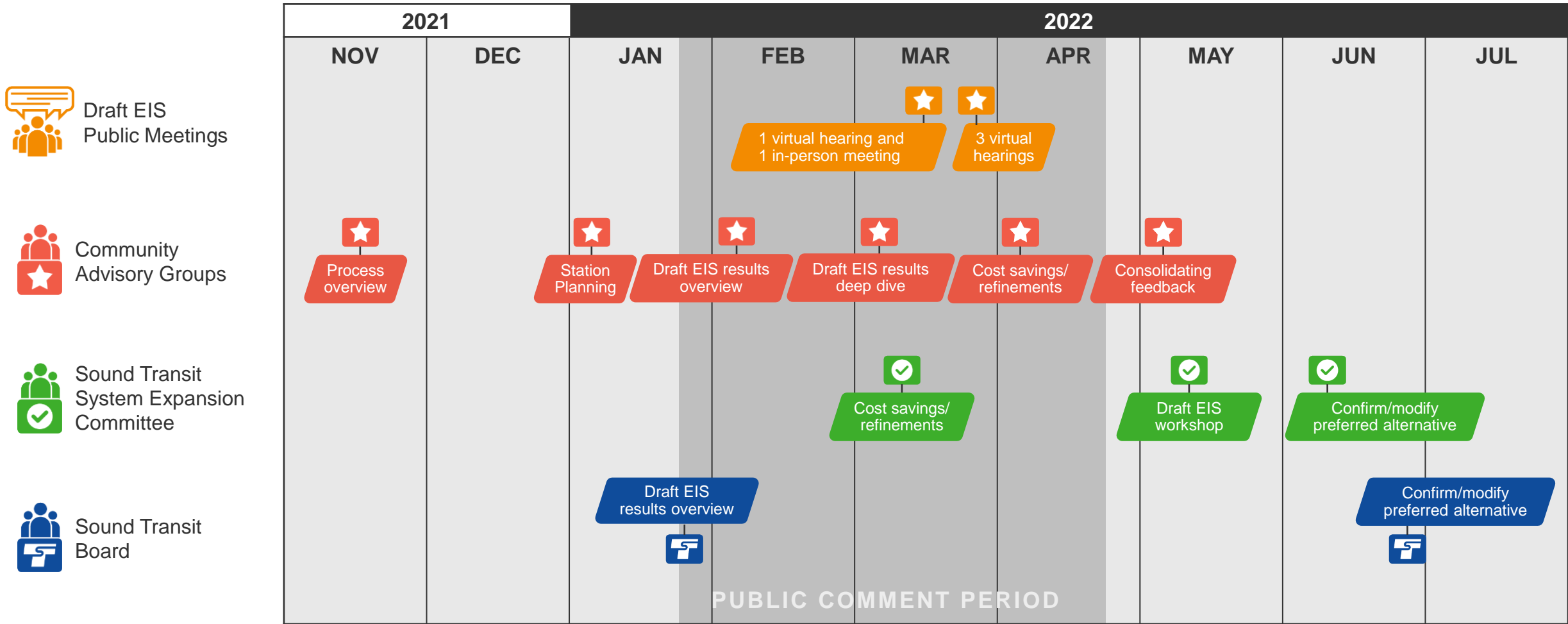
The above information is for illustration only. Please refer to DEIS for further detail.



Next steps

Community engagement and collaboration

Draft Environmental Impact Statement (EIS)



Upcoming Community Advisory Groups

Draft EIS results overview



Interbay/Ballard Community Advisory Group

Wednesday, February 2, 2022 from 5pm to 7pm

Downtown Community Advisory Group

Thursday, February 3, 2022 from 5pm to 7pm

West Seattle/Duwamish Community Advisory Group

Tuesday, February 8, 2022 from 5pm to 7pm

CID/SODO Community Advisory Group

Wednesday, February 9, 2022 from 5pm to 7pm

Advisory group meetings are livestreamed and recorded.

For more information and meeting links, visit: wsblink.participate.online

 *wsblink.participate.online*

 **SOUNDTRANSIT**

