



West Seattle and Ballard Link Extensions

Seattle Planning Commission | 3.08.18

Agenda

- › *Representative project*
- › *Previous studies*
- › *Next steps*

Sound Transit District



Sound Transit district

- 3 counties: King, Pierce, Snohomish
- More than 3 million residents
- 51 cities
- 800,000 more people by 2040



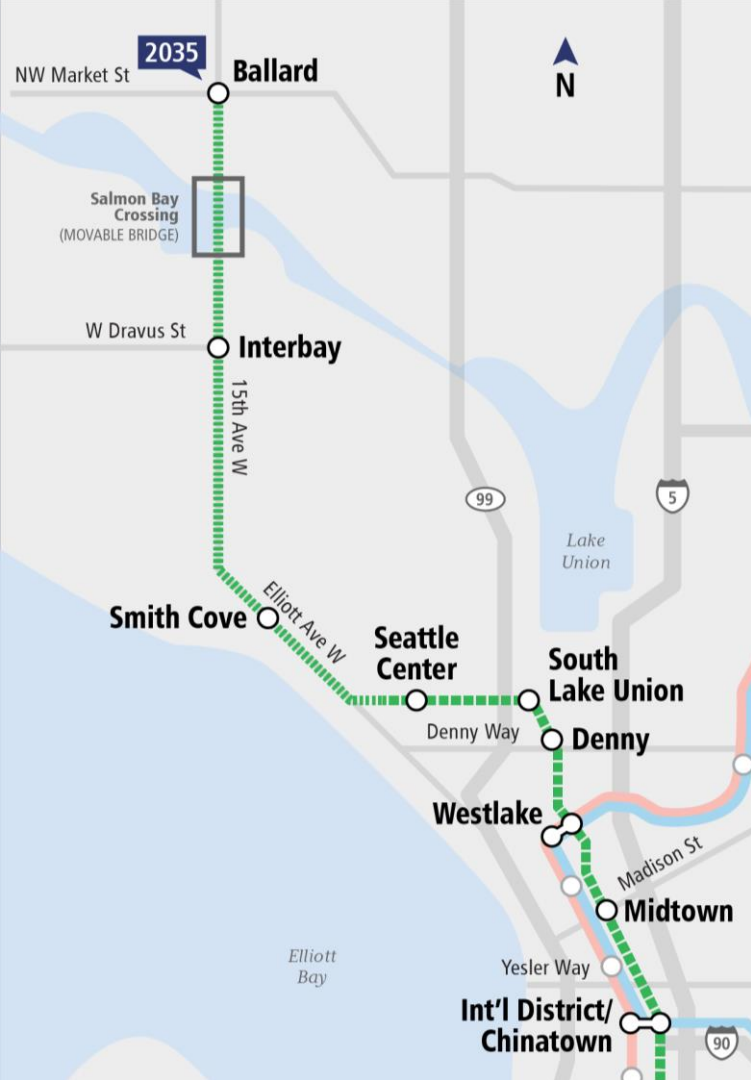
Representative project

- Identifies mode, corridor, station areas
- Informs cost, schedule, operating needs

West Seattle Link Extension

- Opening 2030
- Four elevated stations at SODO, Delridge, Avalon and Alaska Junction; one at-grade station at Stadium
- New rail-only fixed span crossing of the Duwamish River
- Length: 4.7 miles



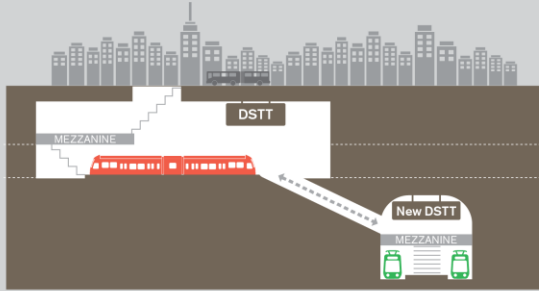


Ballard Link Extension

- Opening 2035
- Three elevated stations: Ballard, Interbay, Smith Cove
- Six tunnel stations: Seattle Center, South Lake Union, Denny, Westlake, Midtown, International District/Chinatown
- New rail-only movable bridge over Salmon Bay
- Length: 7.1 miles

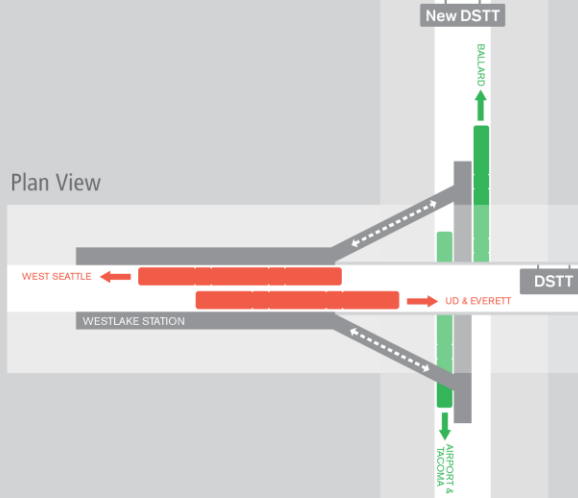
New Downtown Transit Tunnel

WESTLAKE/6TH AVE STATIONS

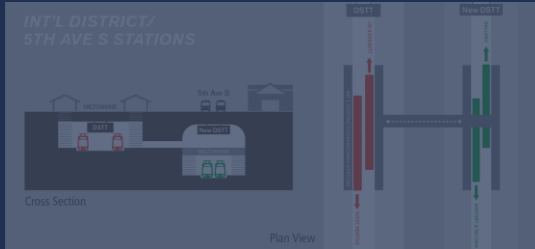


Cross Section

Plan View

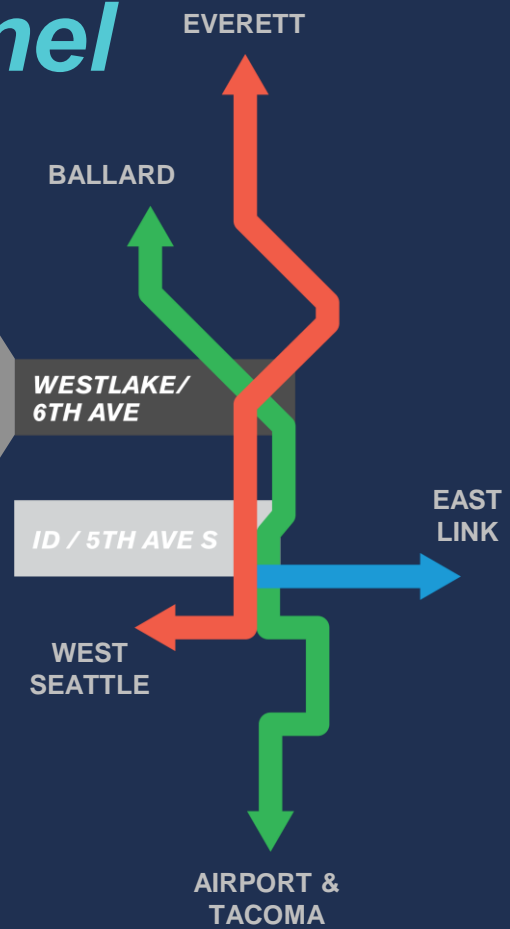


INT'L DISTRICT/ 5TH AVE S STATIONS

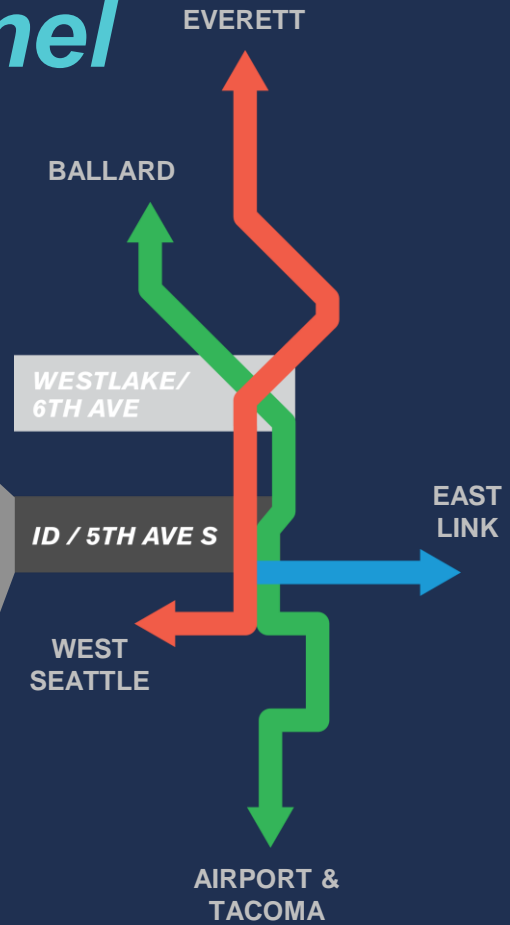
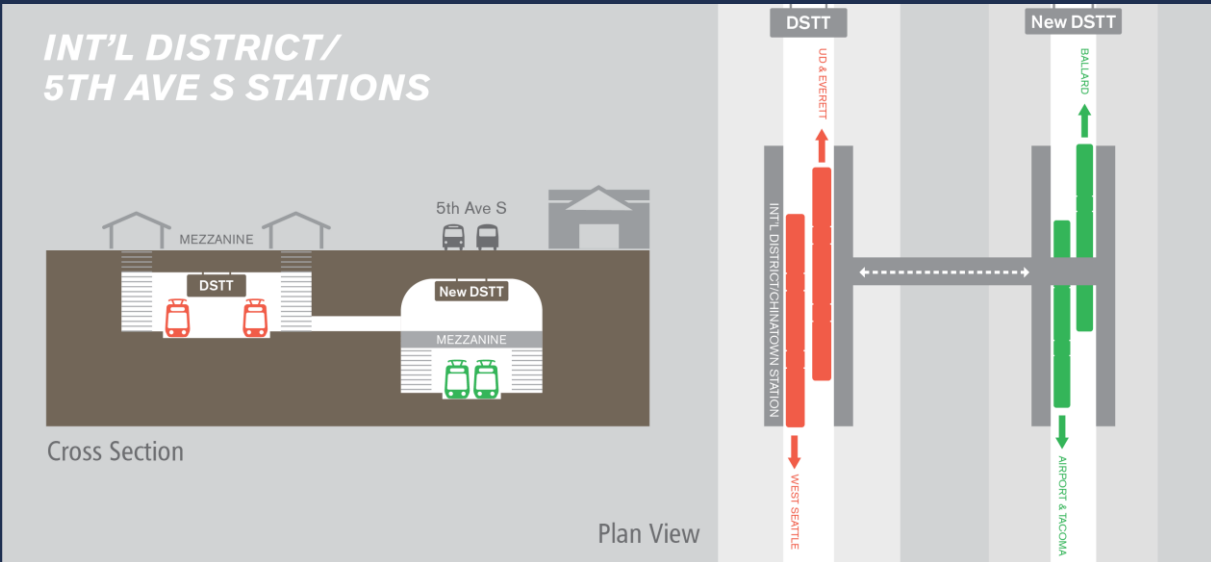
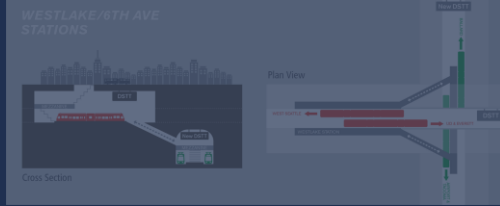


Cross Section

Plan View



New Downtown Transit Tunnel

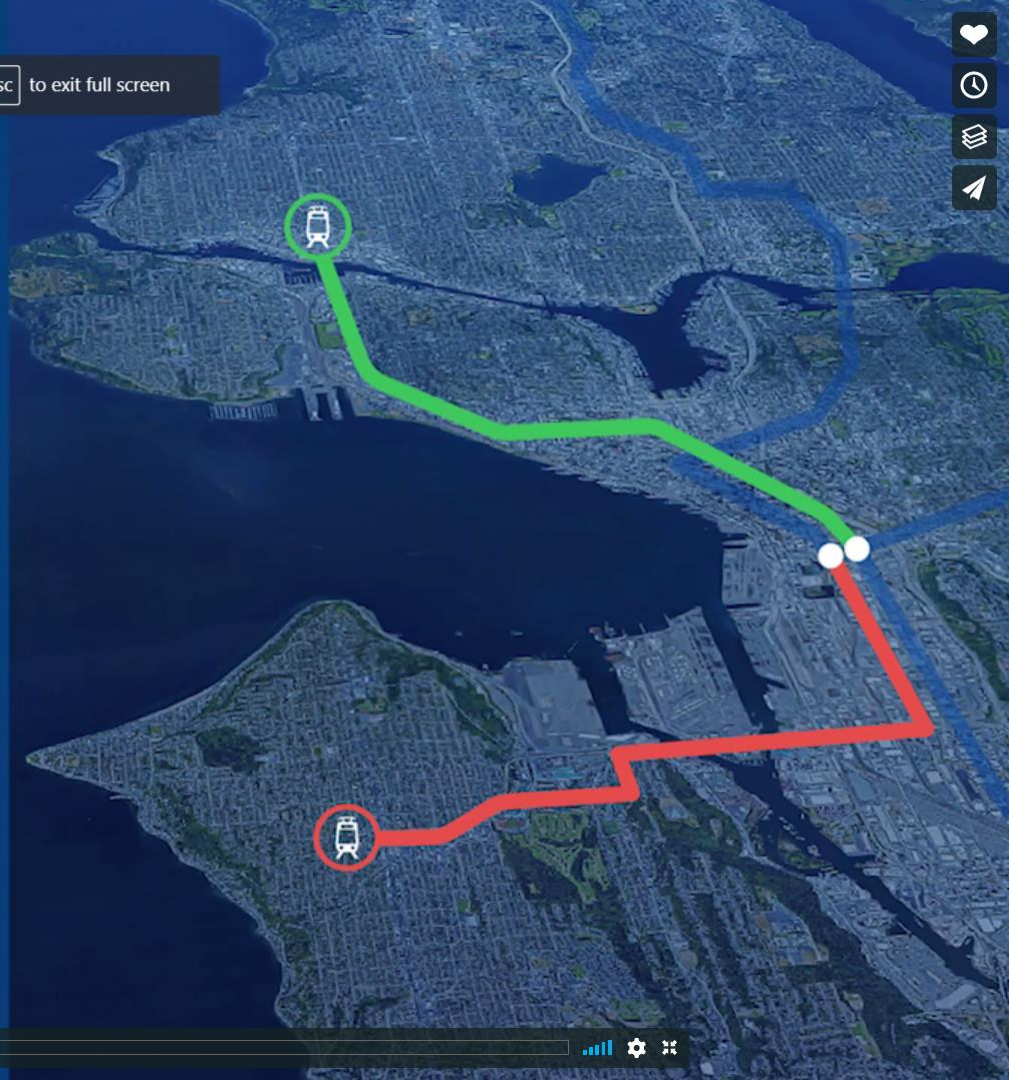


West Seattle **Ballard**

Link light rail extensions

Representative Project:
Google Earth tour

Press **Esc** to exit full screen





Previous studies

Previous studies

Forward Thrust

1968, 1970



ST2 Long Range Plan update

2005



ST3 Long Range Plan update

2014



Seattle Monorail Project

2005



HCT corridor studies

2013–2014



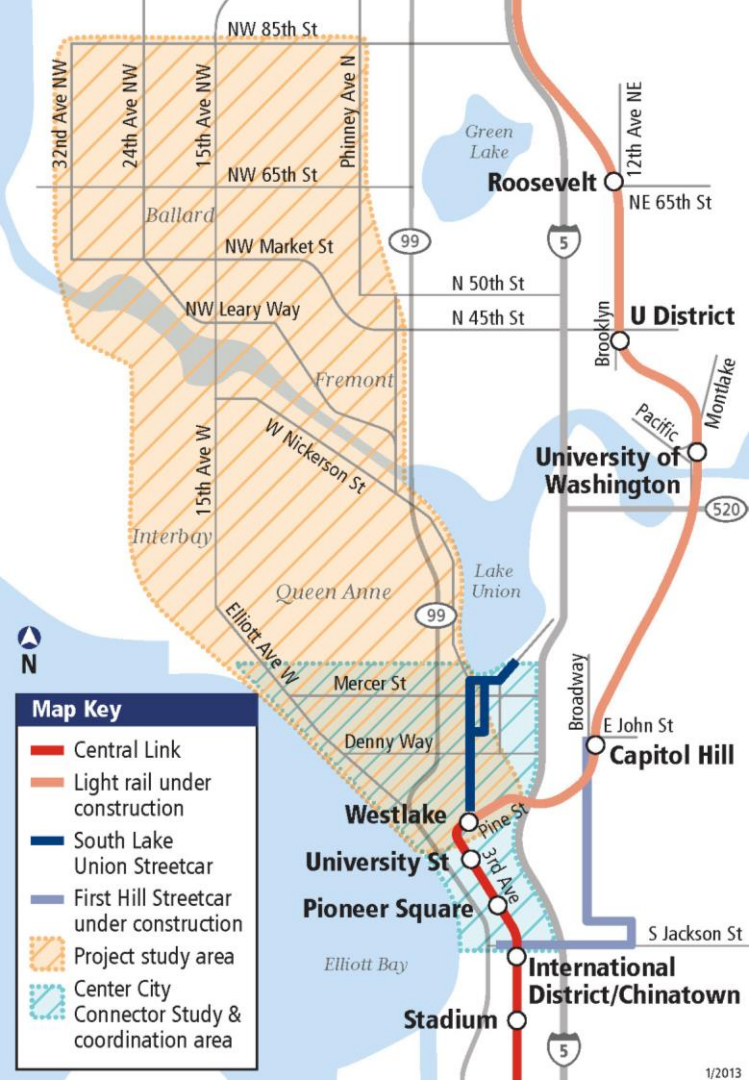
ST3 System Plan

2015–2016



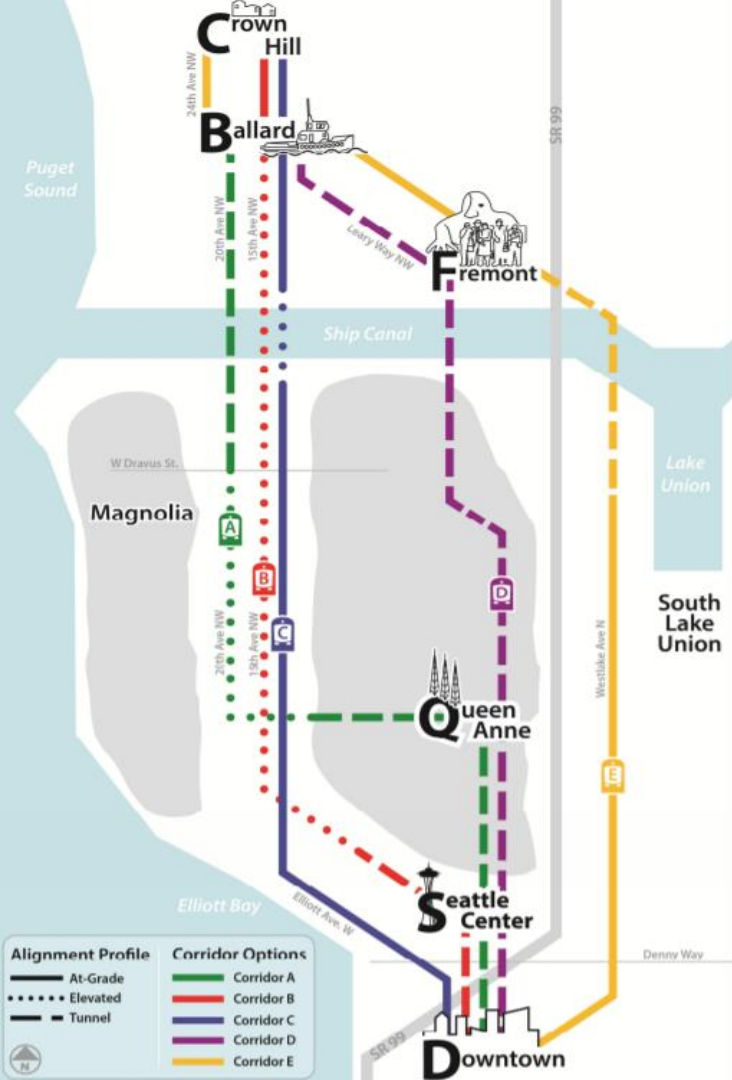
Transit Expansion Study Ballard to Downtown

- City and Sound Transit partnership
- Supported Seattle Transit Master Plan
- Supported ST Long-Range Planning



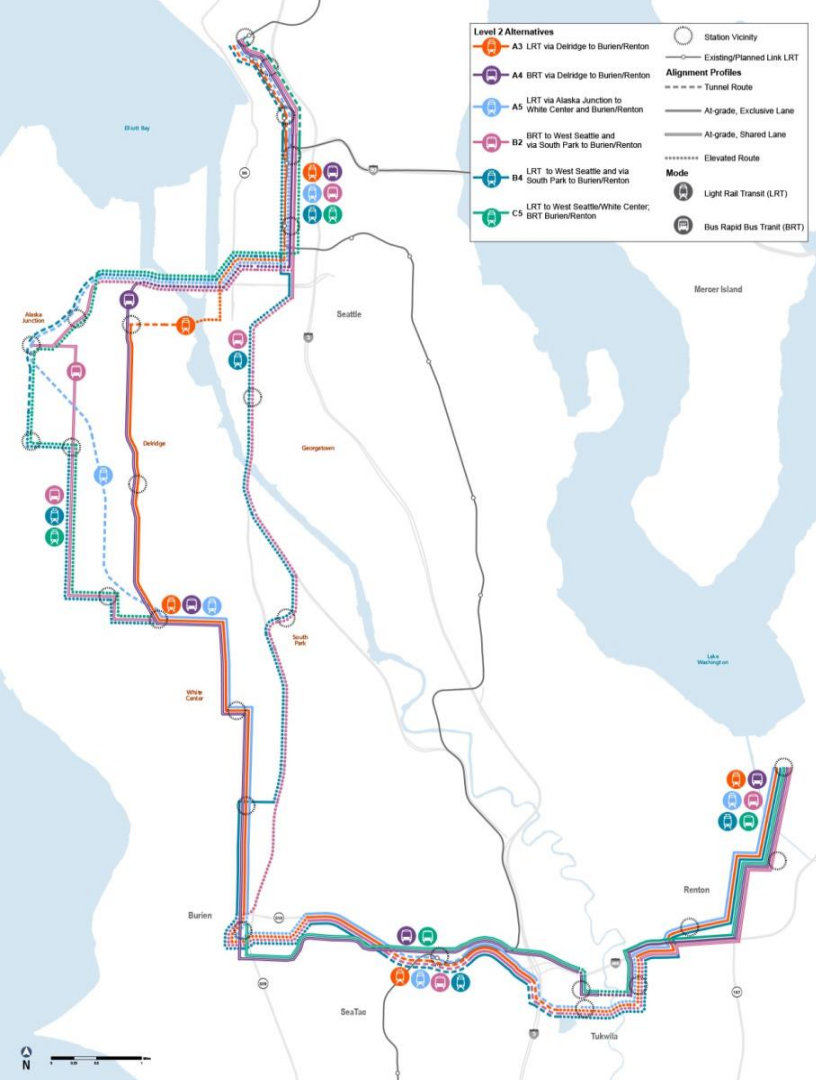
Transit Expansion Study Ballard to Downtown

- Studied five representative alignments
- Included Light Rail and Rapid Streetcar



South King County HCT Corridor Study

- Studied six alternatives
- Considered options to the Junction, along Delridge and to Burien and Renton
- Included light rail and BRT



2014 LONG-RANGE PLAN



On December 18, 2014, the Sound Transit Board adopted the following changes to Sound Transit's Long-Range Plan, which was originally adopted in 1996, and updated in 2005:

- 1 Added a potential light rail corridor from Downtown Seattle to West Seattle/Burien.
- 2 Added a potential light rail corridor from Everett to North Everett.
- 3 Added a potential light rail corridor from Downtown Tacoma to Tacoma Mall and DuPont, and defined the terminus of the light rail spine at Tacoma Mall.
- 4 Added a HCT corridor from Downtown Seattle along Madison Street.
- 5 Added a HCT corridor from SR 522 to SR 520, serving the Totem Lake Urban Center and the South Kirkland Park-and-Ride.
- 6 Added a potential light rail corridor from Lynnwood to Everett, serving the Southwest Everett Industrial Center (Paine Field).
- 7 Added a potential light rail corridor from Downtown Tacoma to Tacoma Community College.
- 8 Added a potential light rail corridor from Issaquah to Issaquah Highlands.
- 9 Added a HCT corridor from Puyallup/Summer to Orting.
- 10 Added a HCT corridor from Downtown Tacoma to Parkland.
- 11 Added a BRT corridor to the Puyallup vicinity, along Meridian Avenue.
- 12 Added a Regional Express bus/BRT corridor along 145th Street from I-5 to SR 522, and a HCT corridor from I-5 to SR 522.
- 13 Added a Regional Express bus corridor from Woodinville to Bellevue.



Sound Transit Long Range Plan

Regional Transit Long-Range Plan

December 2014

ST3: Ballard to Downtown – Candidate Projects



* APPROXIMATELY HALF OF RIDERSHIP SHOWN FOR C-01b AND C-01c TRAVEL SOLELY WITHIN THE BALLARD-IDS SEGMENT.
 ** ENTIRE ALIGNMENT OF C-01b IN EXCLUSIVE RIGHT-OF-WAY. RELIABILITY COULD BE AFFECTED BY MOVABLE BRIDGE OVER SALMON BAY.

OPTION 1	OPTION 2	OPTION 3	OPTION 4
15th At-Grade / At-Grade thru Downtown	15th Elevated / Tunnel thru Downtown	Interbay West / Tunnel thru Downtown	Westlake at-Grade / At-Grade thru Downtown
Length: 6.3 Miles	Length: 6.9 Miles	Length: 7.5 Miles	Length: 6.6 Miles
C-01a	C-01b	C-01c	C-01d

	NO	NO	NO	NO
REGIONAL LIGHT RAIL SPINE	NO	NO	NO	NO
RIDERSHIP (DAILY PROJECT RIDERS)	44,000—54,000	102,000—133,000*	102,000—133,000*	39,000—48,000
CAPITAL COST (2014 \$ M)	\$1,827—\$1,955	\$4,391—\$4,699	\$4,960—\$5,307	\$1,725—\$1,846
ANNUAL O&M COST (2014 \$ M)	\$34.88	\$42.63	\$45.17	\$37.91
TRAVEL TIME (MIN)	23	18	19	25
RELIABILITY	MEDIUM-HIGH	MEDIUM-HIGH**	HIGH	MEDIUM-HIGH
SYSTEM INTEGRATION	MEDIUM-HIGH	HIGH	HIGH	MEDIUM-HIGH
EASE OF NON-MOTORIZED ACCESS	MEDIUM-HIGH	MEDIUM-HIGH	MEDIUM-HIGH	MEDIUM-HIGH
PERCENT OF NON-MOTORIZED ACCESS	75—85%	75—85%	75—85%	75—85%
CONNECTION TO PSRC-DESIGNATED REGIONAL CENTERS	3 CENTERS	4 CENTERS	4 CENTERS	3 CENTERS
PLANS AND POLICIES	MEDIUM	MEDIUM-HIGH	MEDIUM-HIGH	MEDIUM-HIGH
MARKET SUPPORT	HIGH	HIGH	HIGH	HIGH
LAND USE AND DEVELOPMENT/TOD POTENTIAL	POP PER ACRE (2014/2040)	21 / 30	22 / 33	22 / 30
ACTIVITY UNITS	EMP PER ACRE (2014/2040)	64 / 94	65 / 98	65 / 97
	POP+EMP PER ACRE (2014/2040)	85 / 124	87 / 131	87 / 130
MINORITY/LOW-INCOME	30% / 17%	32% / 17%	32% / 17%	28% / 16%
SOCIOECONOMIC BENEFITS	POPULATION (2014/2040)	55,600 / 78,300	69,600 / 105,900	69,500 / 105,900
	EMPLOYMENT (2014/2040)	170,500 / 249,800	206,400 / 310,300	205,300 / 308,500
		183,200 / 277,100		

ST3: West Seattle to Downtown – Candidate Projects

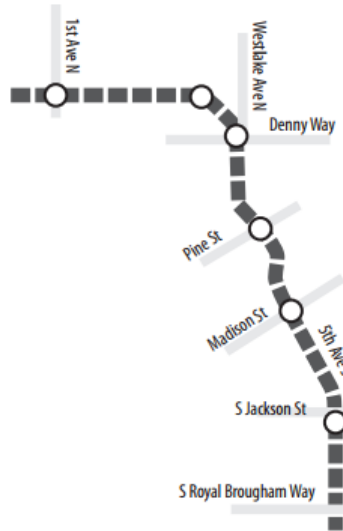


OPTION 1	OPTION 2	OPTION 3
Tunnel thru Downtown Elevated to West Seattle Junction	At-Grade thru Downtown Elevated to West Seattle Junction	Tunnel thru Downtown Elevated to Delridge/At-Grade to White Center
Length: 4.7 Miles	Length: 3.4 Miles	Length: 6.5 Miles
C-03a	C-03b	C-03c

REGIONAL LIGHT RAIL SPINE		NO	NO	NO
RIDERSHIP (DAILY PROJECT RIDERS)		39,000—50,000	20,000—24,000	34,000—40,000
CAPITAL COST (2014 \$ M)		\$1,740—\$1,862	\$1,851—\$1,980	\$1,913—\$2,047
ANNUAL O&M COST (2014 \$ M)		\$24.48	\$20.81	\$33.54
TRAVEL TIME (MIN)		11	11	18
RELIABILITY		HIGH	MEDIUM-HIGH	MEDIUM-HIGH
SYSTEM INTEGRATION		MEDIUM-HIGH	MEDIUM	MEDIUM
EASE OF NON-MOTORIZED ACCESS		MEDIUM-LOW	MEDIUM-LOW	MEDIUM-LOW
PERCENT OF NON-MOTORIZED ACCESS		75—85%	70—80%	70—80%
CONNECTION TO PSRC-DESIGNATED REGIONAL CENTERS		2 CENTERS	2 CENTERS	2 CENTERS
LAND USE AND DEVELOPMENT/TOD POTENTIAL	PLANS AND POLICIES	MEDIUM-LOW	MEDIUM-LOW	MEDIUM-LOW
	MARKET SUPPORT	MEDIUM	MEDIUM	MEDIUM
	POP PER ACRE (2014/2040)	7 / 10	7 / 9	7 / 10
	ACTIVITY UNITS (2014/2040)	13 / 19	13 / 19	11 / 17
SOCIOECONOMIC BENEFITS	POP+EMP PER ACRE (2014/2040)	20 / 29	20 / 28	18 / 27
	MINORITY/LOW-INCOME	28% / 12%	27% / 13%	54% / 18%
	POPULATION (2014/2040)	14,900 / 21,300	13,500 / 19,600	16,700 / 22,900
	EMPLOYMENT (2014/2040)	27,300 / 39,400	27,200 / 38,600	25,900 / 37,800

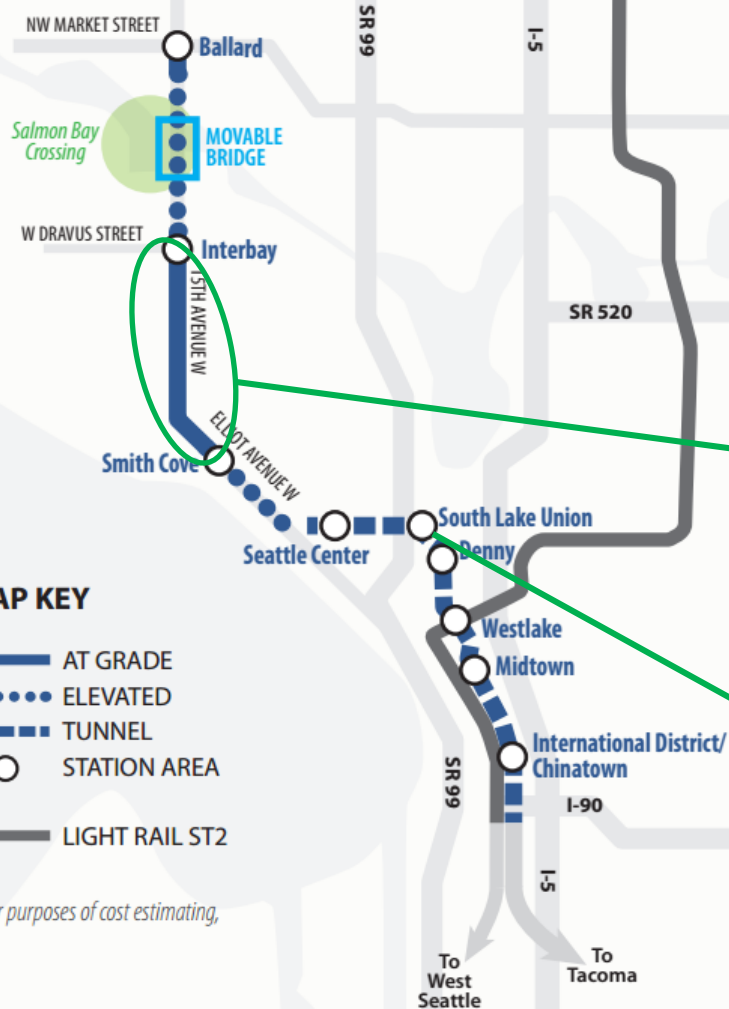
BALLARD TO DOWNTOWN SEATTLE LIGHT RAIL

NEW DOWNTOWN SEATTLE TUNNEL



MAP KEY

- AT GRADE
- ELEVATED
- TUNNEL
- STATION AREA
- LIGHT RAIL ST2



ST3 Draft Plan

At-grade on 15th Ave W

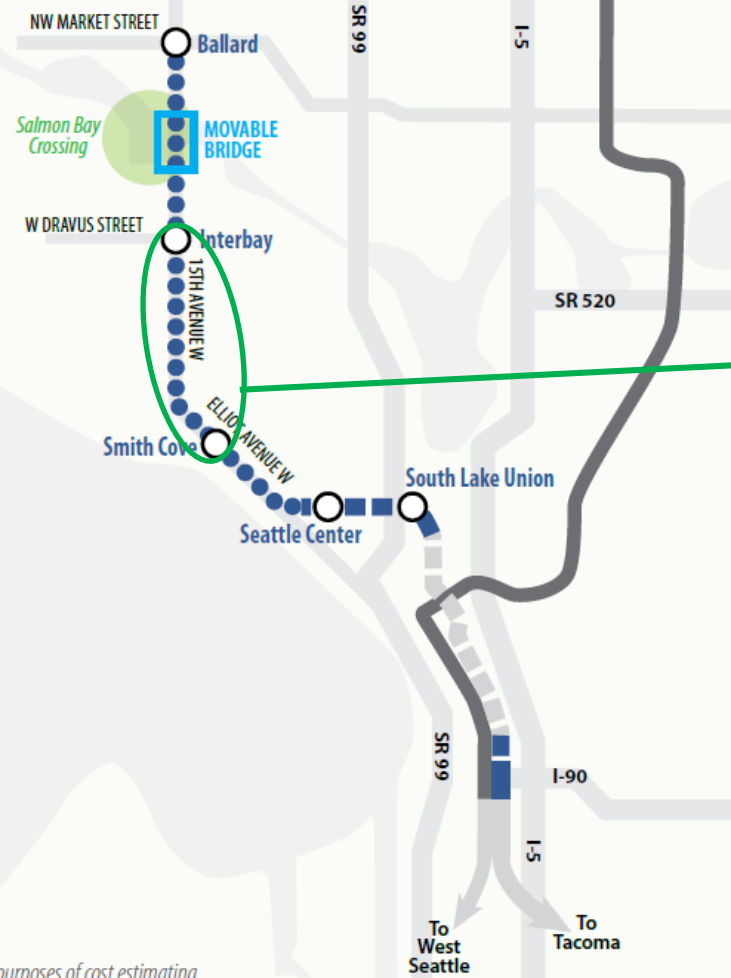
Included South Lake Union Station

Alignments and stations shown are representative and are identified for purposes of cost estimating, ridership forecasting and other evaluation measures.

BALLARD TO DOWNTOWN SEATTLE LIGHT RAIL

MAP KEY

- ELEVATED
- ■ ■ ■ TUNNEL
- STATION AREA
- LIGHT RAIL ST2



ST3 Final Plan

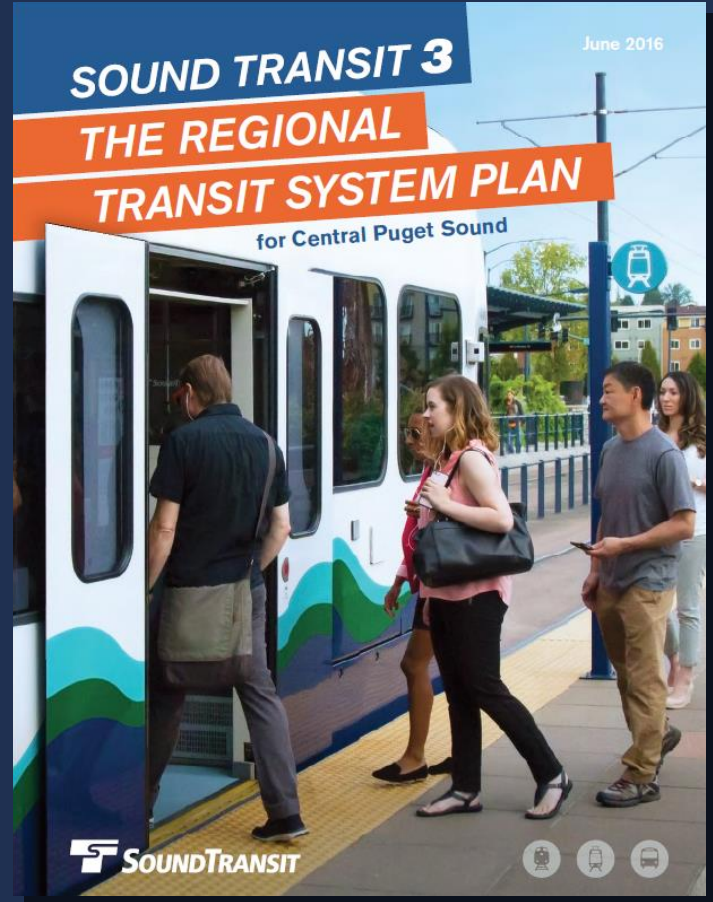
Elevated on 15th Ave W

Alignments and stations shown are representative and are identified for purposes of cost estimating, ridership forecasting and other evaluation measures.

Final plan

Sound Transit 3 (ST3) Plan

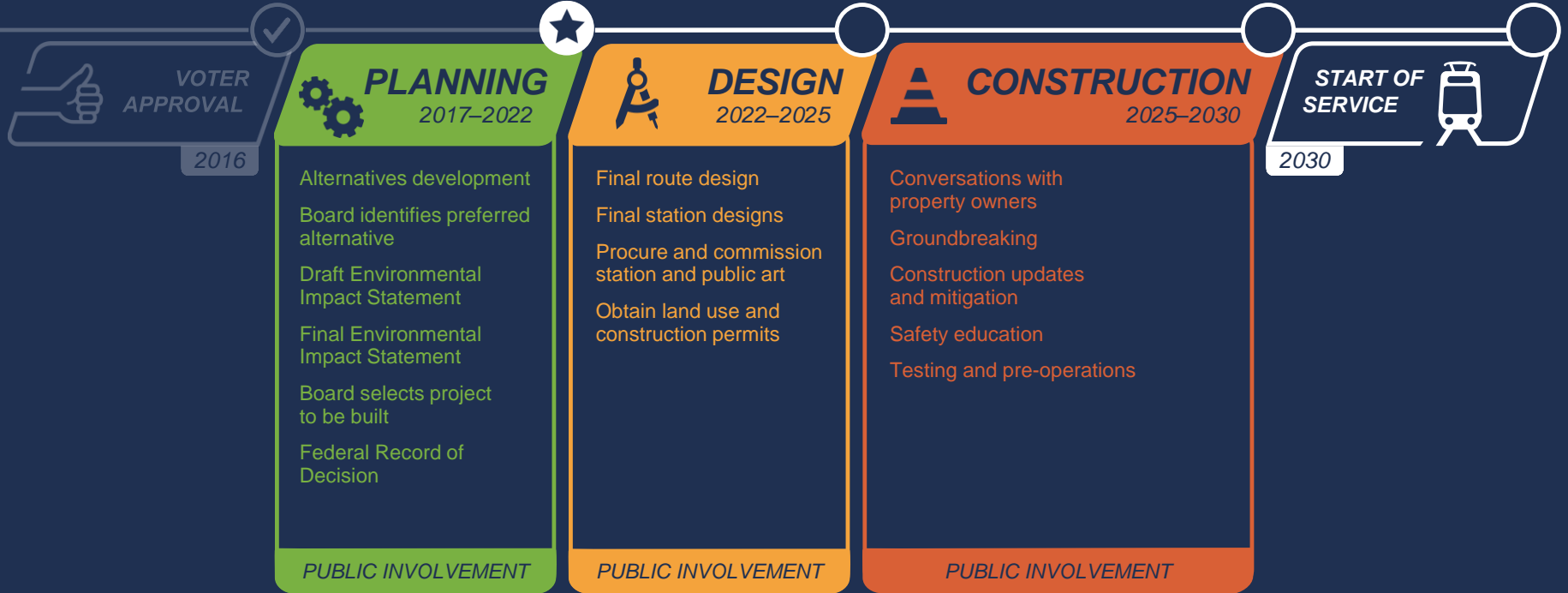
June 2016



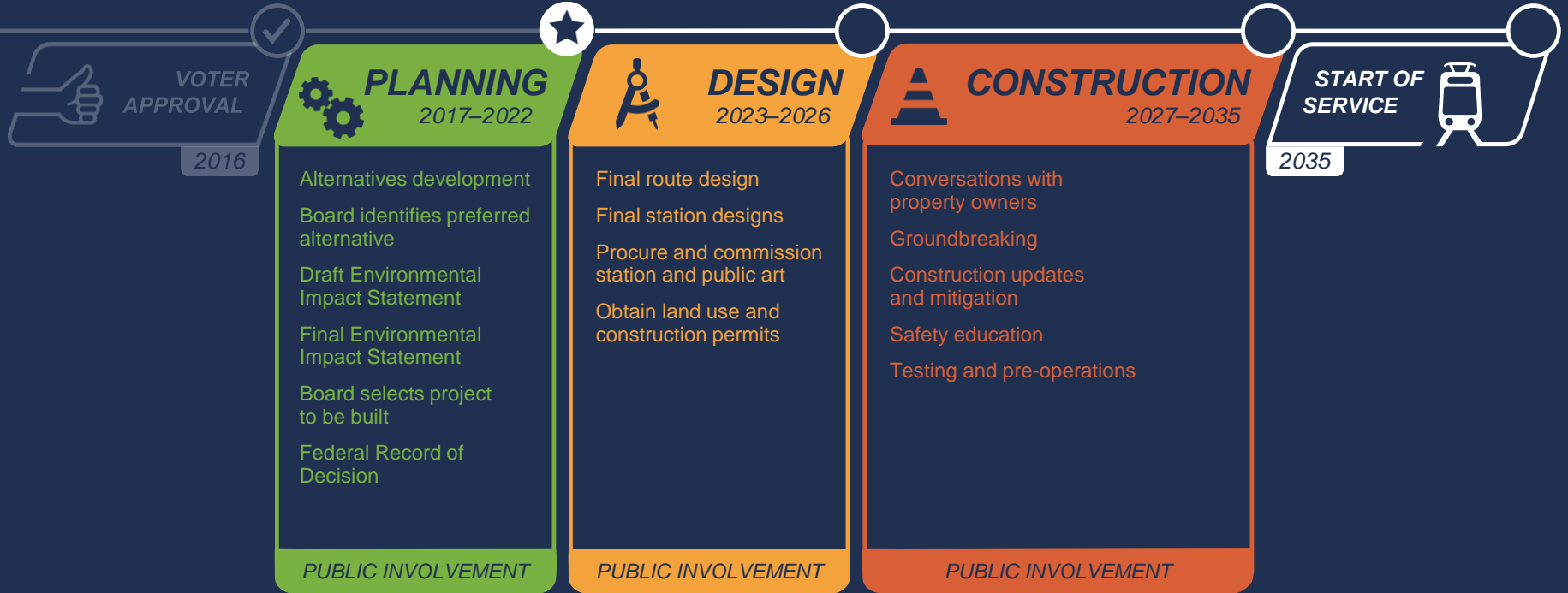
A woman with dark curly hair and glasses is smiling and looking out a window. The scene is dimly lit with a blue tint. Outside the window, a playground with colorful equipment is visible. The text "Next steps" is overlaid in the center in a white, bold, italicized font.

Next steps

West Seattle project timeline



Ballard project timeline



VOTER
APPROVAL

2016



PLANNING



DESIGN

2017–2019

Alternatives
development

Board identifies
preferred alternative

2019–2022

Draft Environmental
Impact Statement

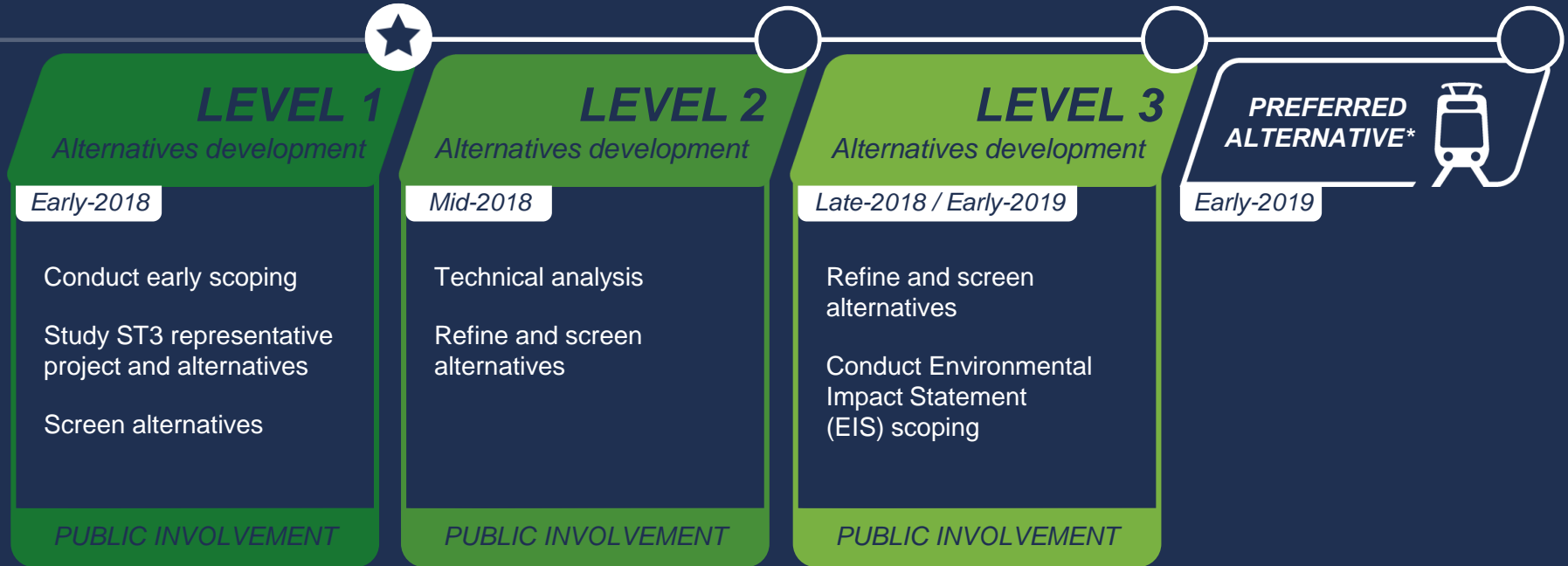
Final Environmental
Impact Statement

Board selects project
to be built

Federal Record of
Decision

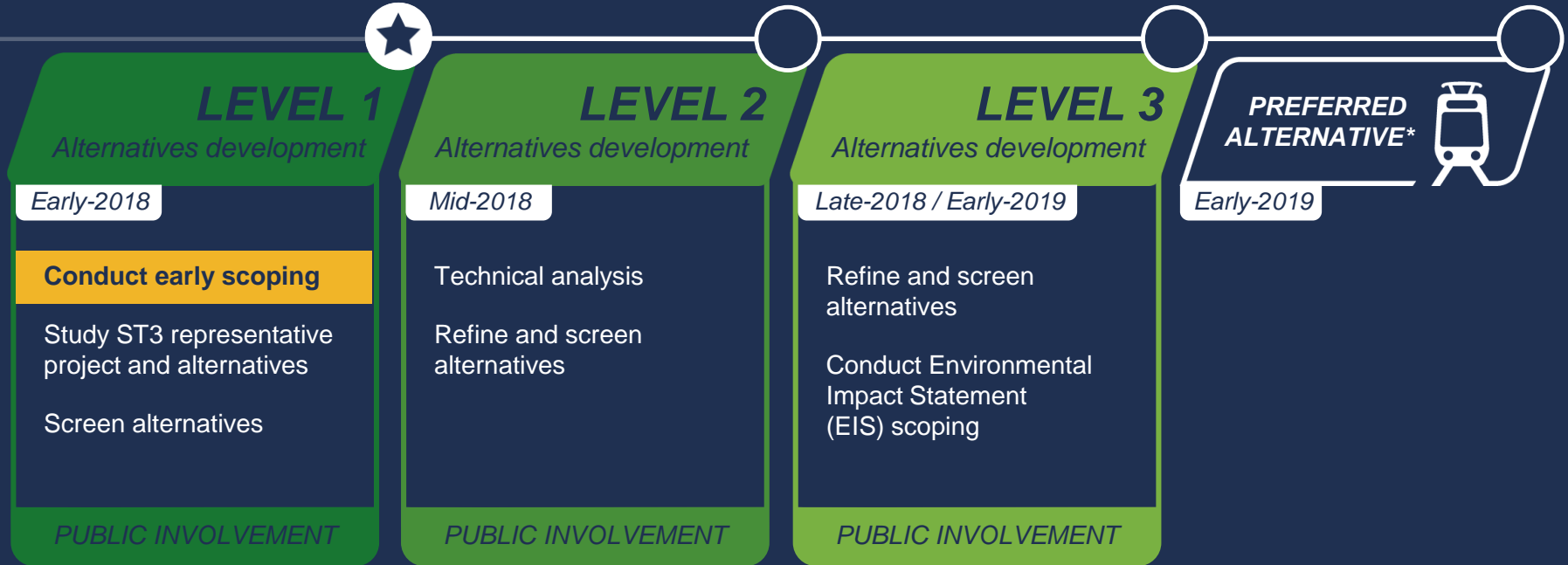
PUBLIC INVOLVEMENT

Alternatives development process



*The Sound Transit Board identifies preferred alternatives and other alternatives to study.

Alternatives development process



*The Sound Transit Board identifies preferred alternatives and other alternatives to study.

Community engagement and collaboration



Community Updates



Neighborhood Forums



Stakeholder Advisory Group



Elected Leadership Group



Sound Transit Board



Meeting dates subject to change.

Community engagement and collaboration



Community Updates



Neighborhood Forums



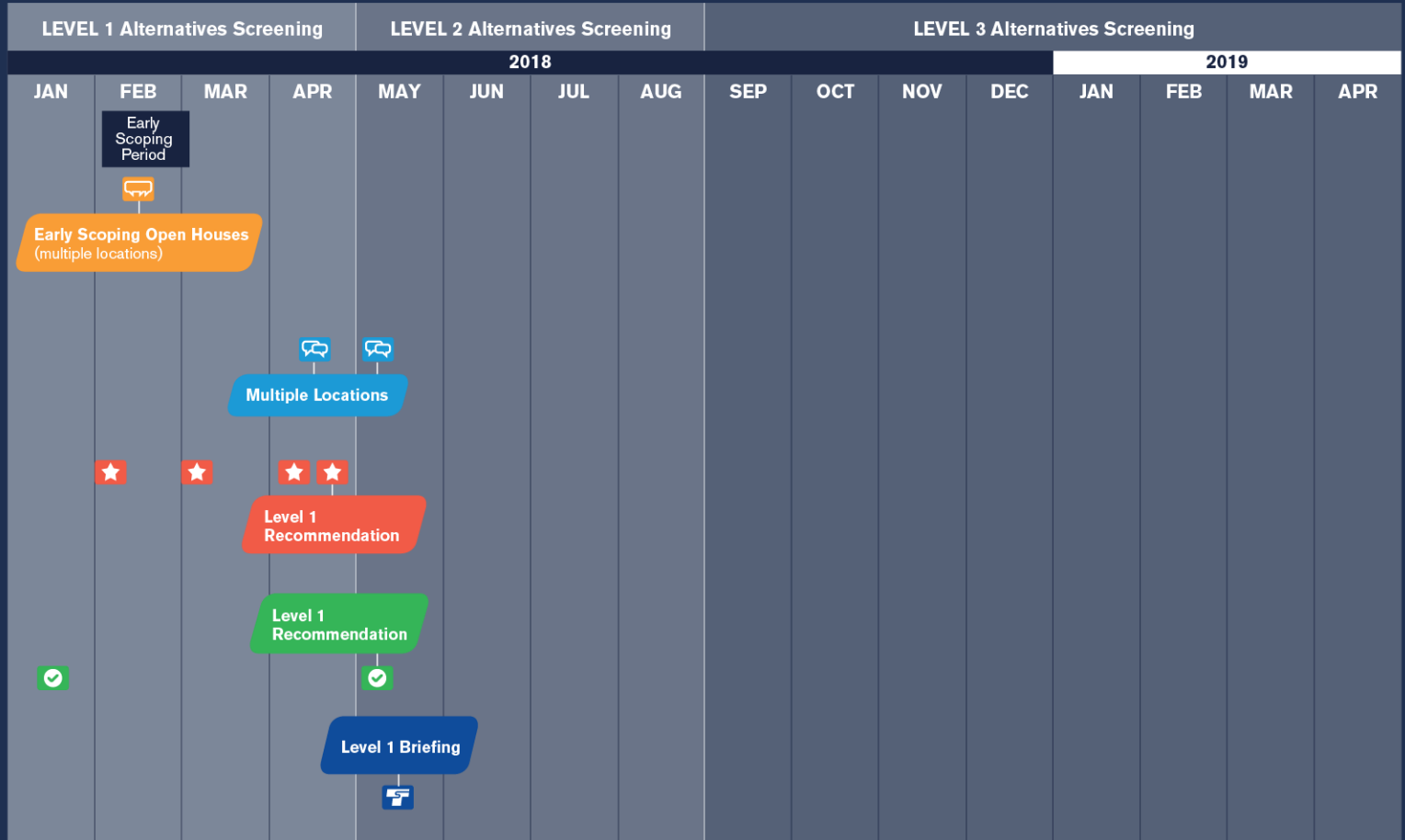
Stakeholder Advisory Group



Elected Leadership Group



Sound Transit Board



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Community engagement and collaboration



Community Updates



Neighborhood Forums



Stakeholder Advisory Group



Elected Leadership Group



Sound Transit Board



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Community engagement and collaboration



Community Updates



Neighborhood Forums



Stakeholder Advisory Group



Elected Leadership Group



Sound Transit Board



Meeting dates subject to change.

Next steps

March

Early Scoping

- **Stakeholder Advisory Group:** 3/14 (Early Scoping feedback summary)
- **Early Scoping Summary Report:** late March

April

Level 1 screening

- **Stakeholder Advisory Group:** 4/17 (Level 1 evaluation results)
- **Stakeholder Advisory Group:** 4/25 (Level 1 recommendation)
- **Neighborhood Forums:** beginning 4/21

May

Level 1 screening

- **Elected Leadership Group:** 5/17 (Level 1 recommendation)



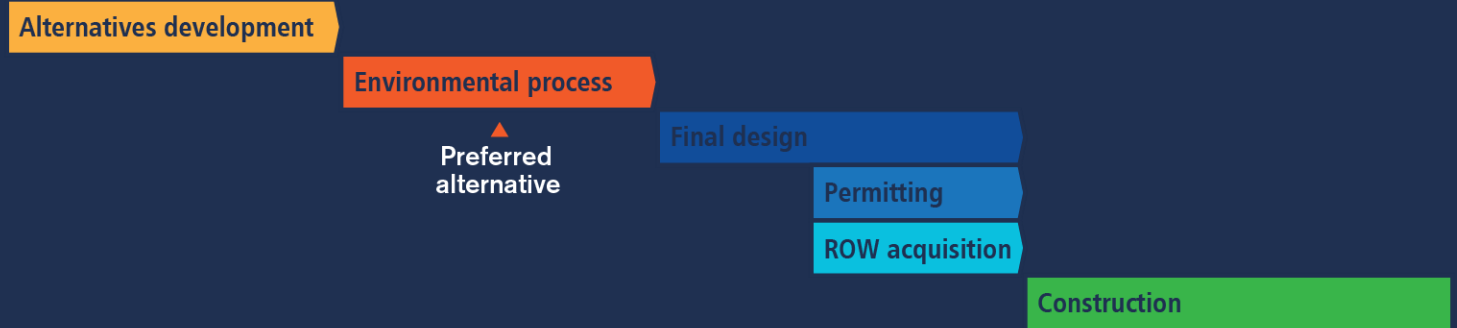
soundtransit.org/wsblink 



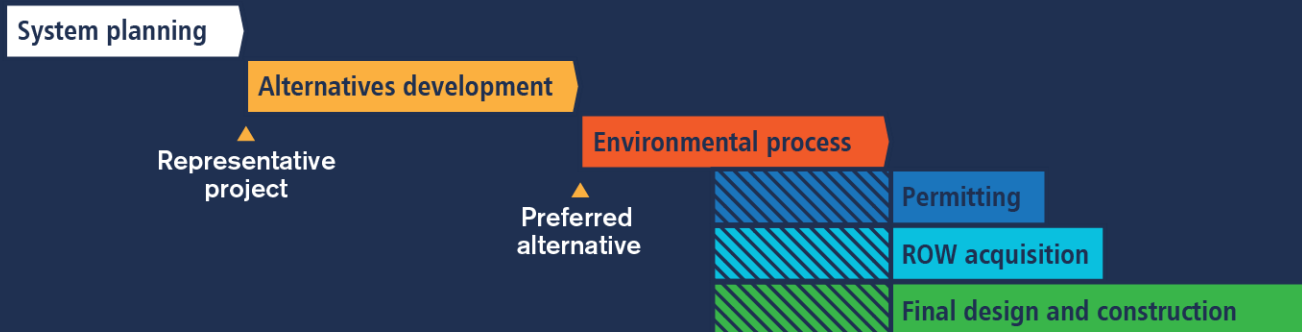
SOUNDTRANSIT

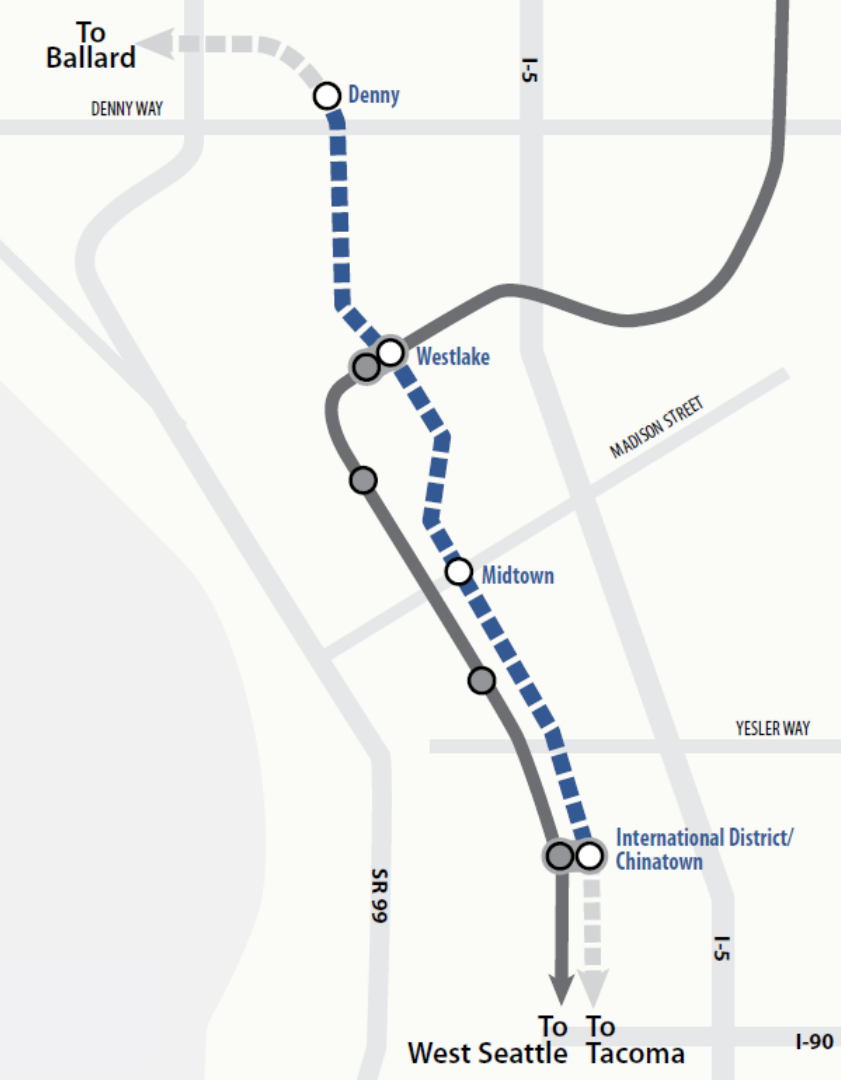
New approach to project development

ST2 process



ST3 process

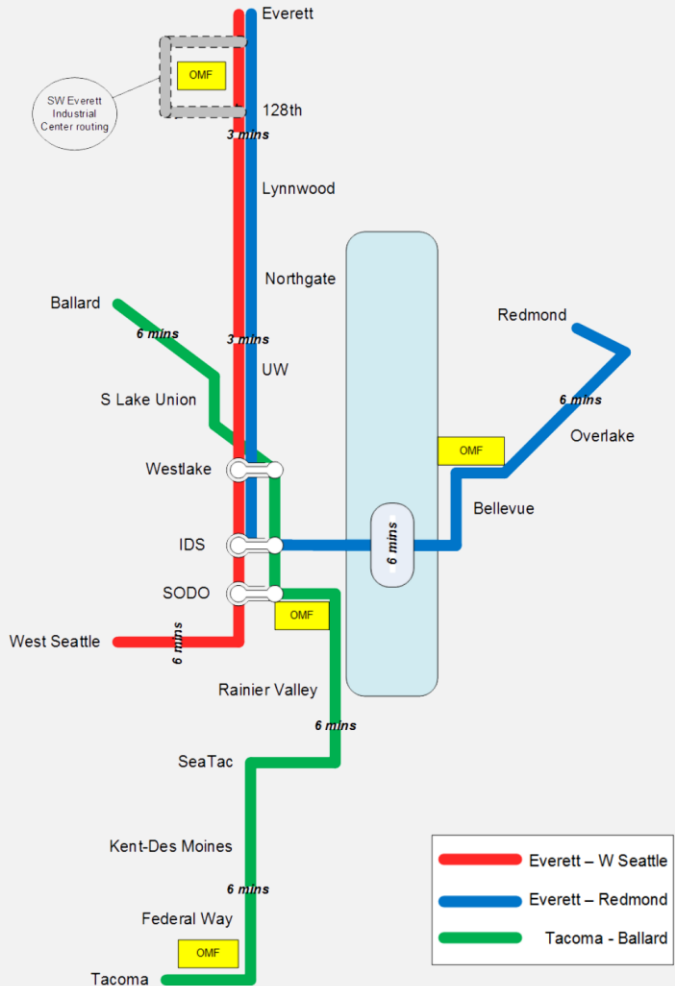




New Downtown Transit Tunnel

- System-wide investment

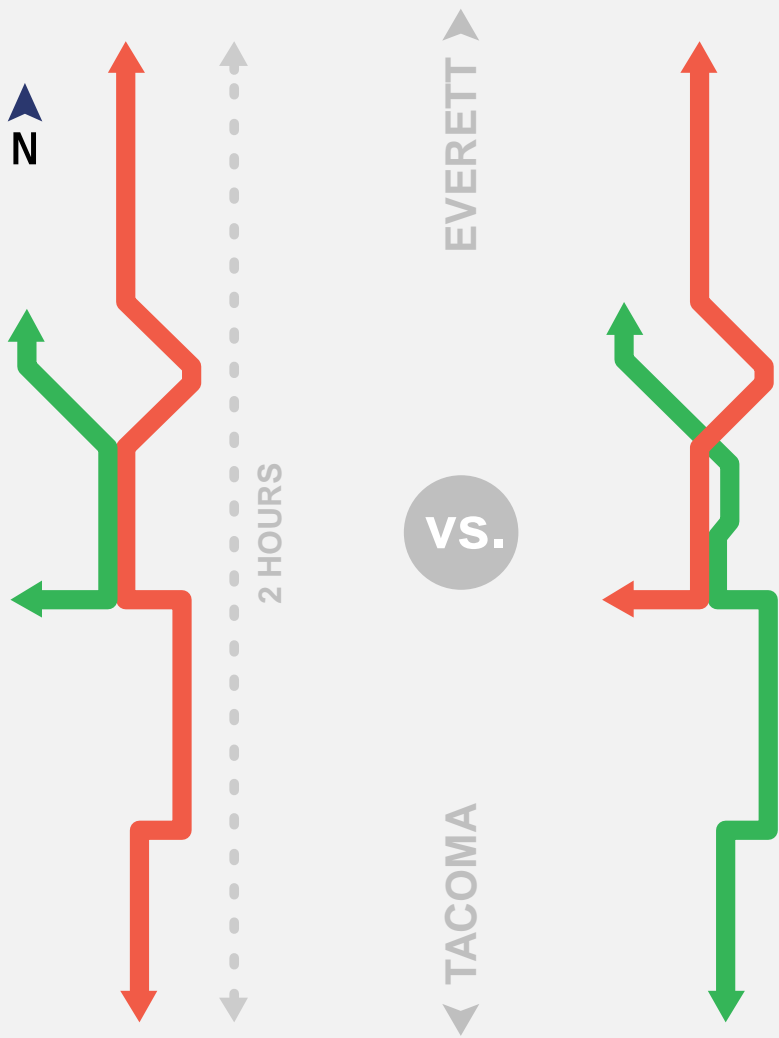
Operating plan



Everett to West Seattle
via Downtown Seattle Transit Tunnel

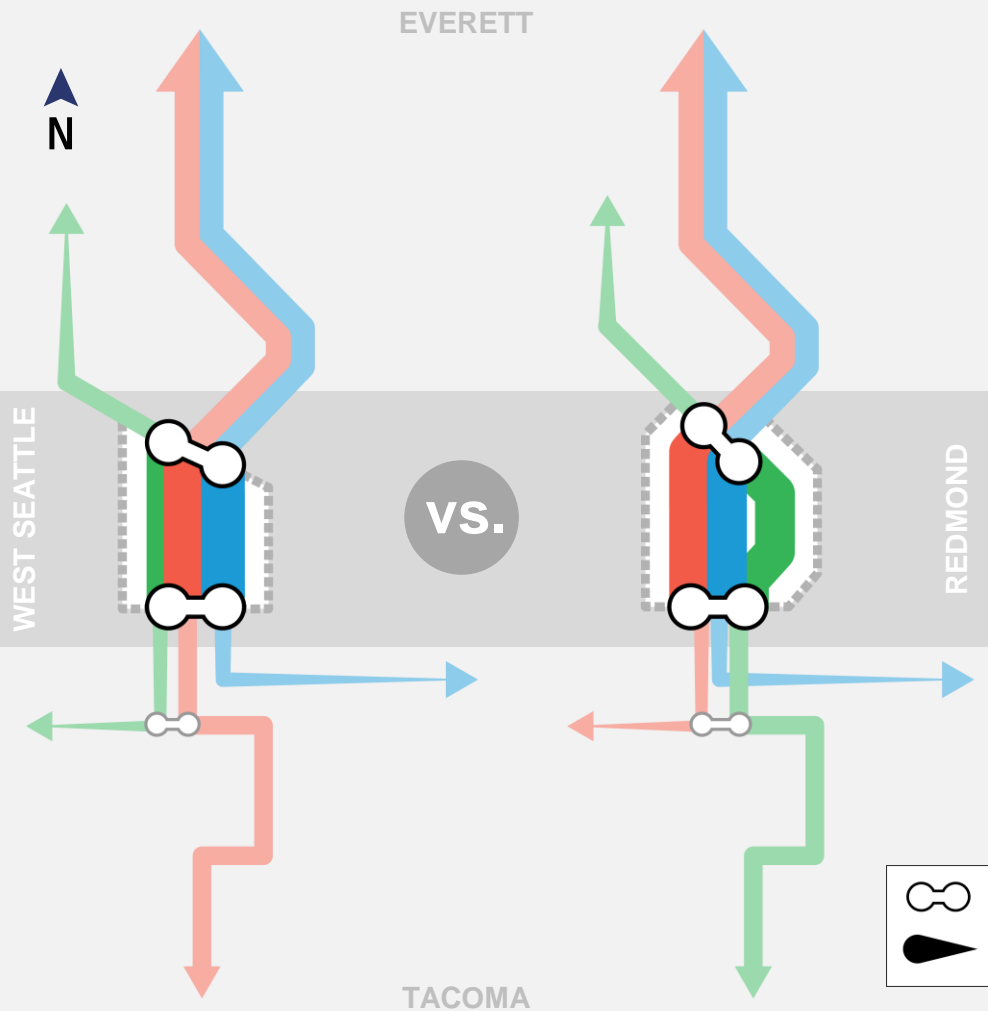
Everett to Downtown Redmond
via Downtown Seattle Transit Tunnel

Ballard to Tacoma via new rail-only tunnel



Spine segmentation

- Splits long trip from Tacoma to Everett



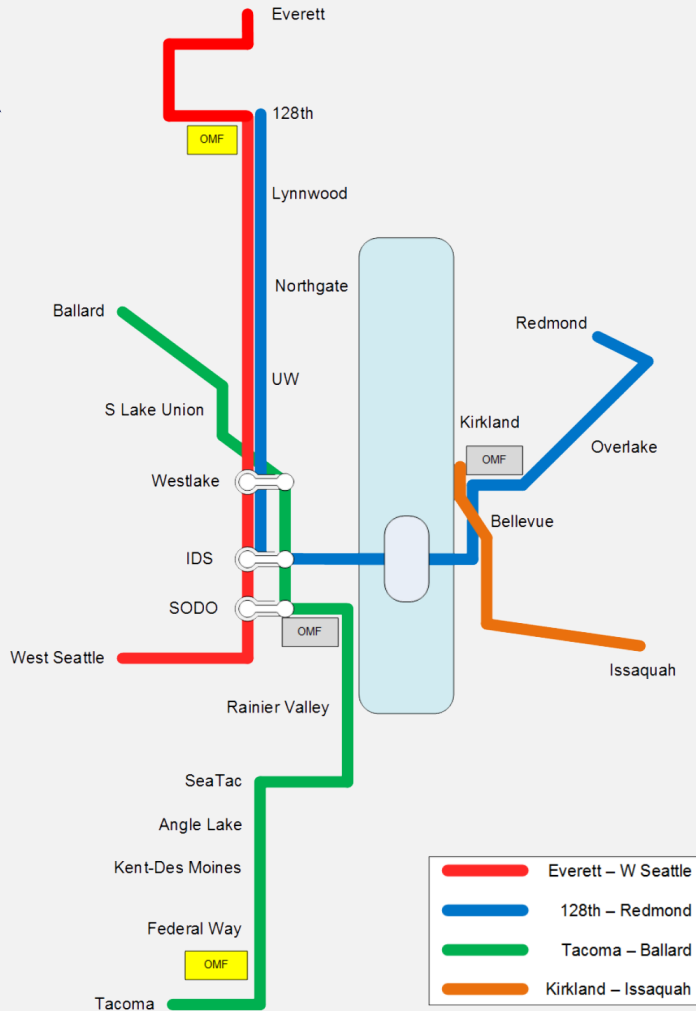
Balanced loads

- Balances passenger loads, enabling future growth
- All users benefit from core capacity expansion



Maintenance capacity: 2030

- West Seattle Extension dependent on new facility in the south



Maintenance capacity: 2041

- Forest Street (104 vehicles)
- Bellevue (96 vehicles)
- New facility in the south (~ 152 vehicles)
- New facility in the north (~108 vehicles)