Seattle City Council

January 11, 2016

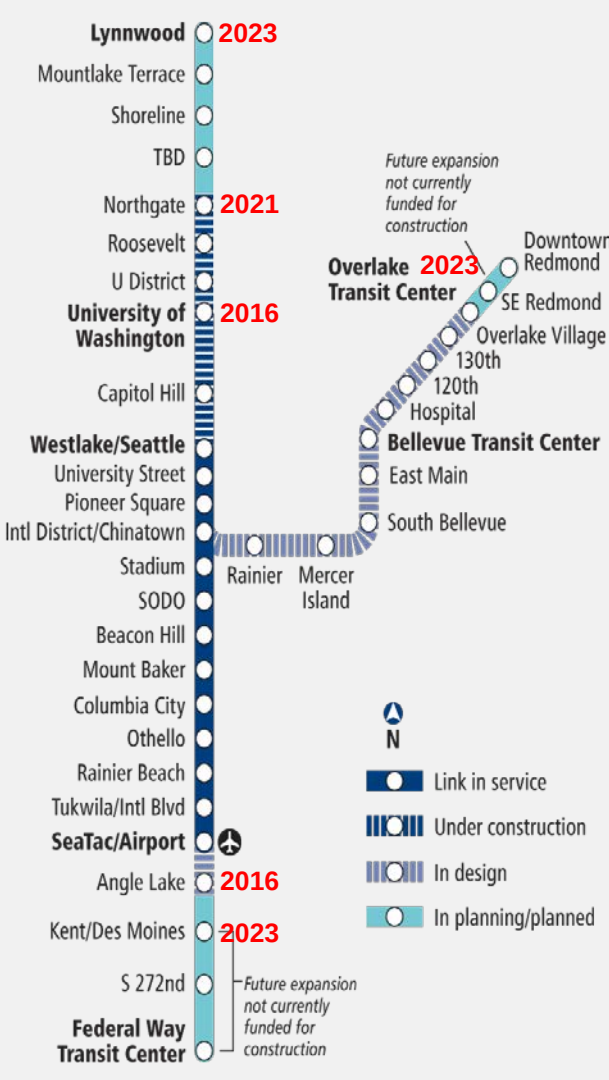
Agenda

- **University Link Update**

- **ST3**
  - **Focus on projects in Seattle**
  - **Financial plan options**
  - **Next Steps and Opportunities for Engagement**

Regional Link light rail expansion

By 2023, Puget Sound will have 50+ miles of light rail, with 30+ stations, directly connecting 11 cities



University Link

Stations – Capitol Hill & UW

Length: 3.15 miles connects downtown Seattle to UW (Husky Stadium)

Construction type: Twin-bored tunnels

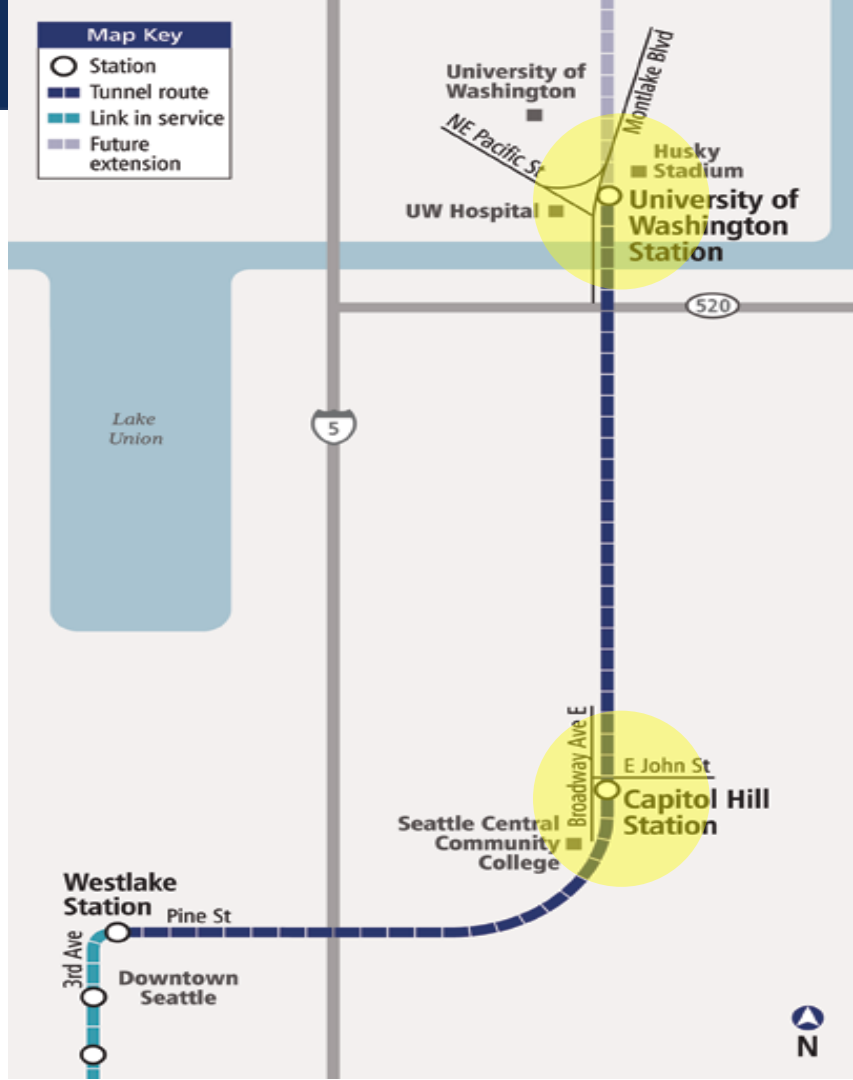
Budget: $1.9 billion
(Federal Funding - $813m)

Rider projection: 71,000 daily riders by 2030, bringing the system-wide total to 114,000.

Opening: 1Q 2016

UW to Westlake – 8 min
Capitol Hill to Westlake – 4 min

Trains every 6 minutes during peak



University Link

$150 million

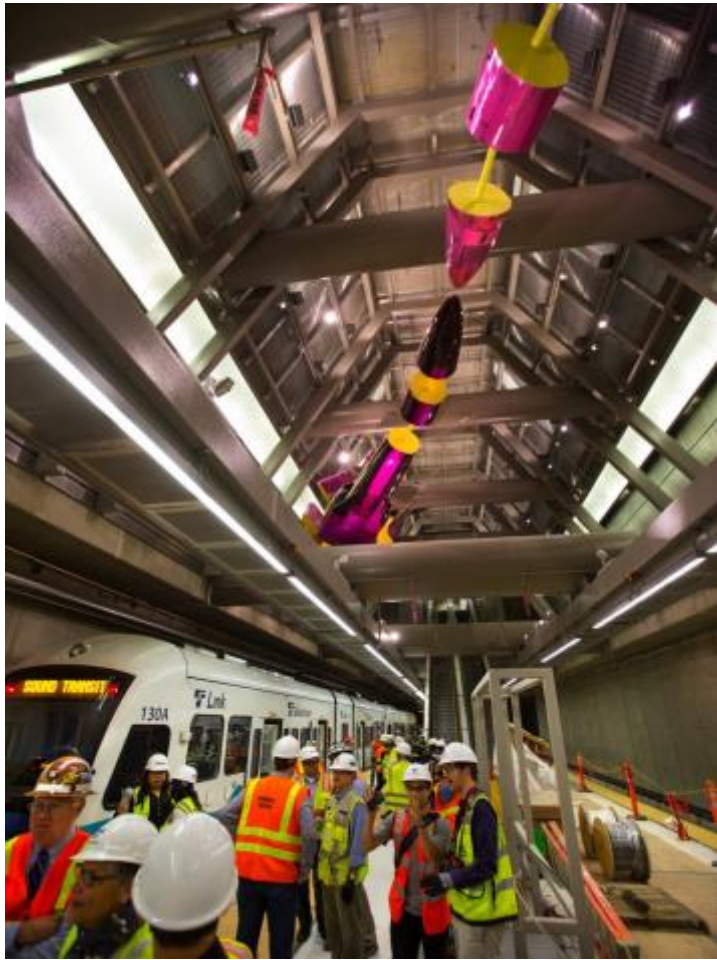
under budget

6 months

ahead of schedule

UW Station

Capitol Hill Station



Capitol Hill Station – Transit-oriented development (TOD)

ST3 Timeline

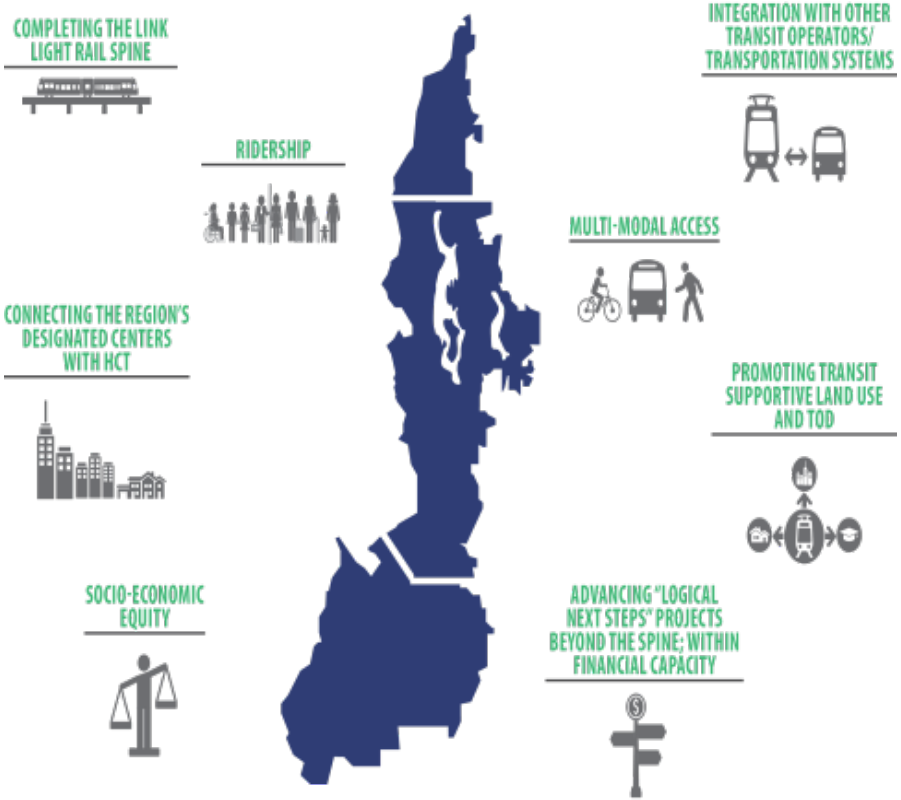
2015

- **Draft Priority Projects List** — May 2015
- **Public Input on Draft Priority Projects List** — June – July 2015 — Public Involvement
- **Board advances ST3 Candidate Projects** — Aug. 2015
- **Detailed evaluation of ST3 Candidate Projects** — Aug. – Dec. 2015

2016

- **Draft System Plan** — Jan – Mar. 2016
- **Public Input on Draft System Plan** — April 2016 — Public Involvement
- **Final System Plan Development** — Apr.– May 2016
- **Adopt System Plan** — June 2016
- **Possible Public Vote on System Plan** — Nov. 2016

ST Board's Core Priorities for ST3



Overview of Technical Evaluation and Process

	Regional Light Rail Spine *Does project help complete regional light rail spine?*
	Ridership *2040 daily station boardings / 2040 daily project riders*
	Capital Cost *Cost in Millions of 2014 $*
	Annual O&M Cost *Cost in Millions of 2014 $*
	Travel Time *In-vehicle travel time along the project (segment)*
ON TIME	**Reliability** *Quantitative/qualitative assessment of alignment/route in exclusive right-of-way*
	System Integration *Qualitative assessment of issues and effects related to connections to local bus service and potential future integration opportunities*

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- **Daily project riders: How many are using the project to travel in the corridor?**
- **Daily boardings: What are the boardings per station(s)?**

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ON TIME	**Reliability** *Quantitative/qualitative assessment of alignment/route in exclusive right-of-way*
	System Integration *Qualitative assessment of issues and effects related to connections to local bus service and potential future integration opportunities*

- **Project cost estimate, plus 7% project reserve**

Overview of Technical Evaluation and Process

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	Capital Cost *Cost in Millions of 2014 $*
	Annual O&M Cost *Cost in Millions of 2014 $*
	Travel Time *In-vehicle travel time along the project (segment)*
ON TIME	**Reliability** *Quantitative/qualitative assessment of alignment/route in exclusive right-of-way*
	System Integration *Qualitative assessment of issues and effects related to connections to local bus service and potential future integration opportunities*

- **High: 100% grade-separated**
- **Medium-High: At-grade rail portions; BRT in managed lanes/express lanes**
- **Medium: Arterial bus-only or Business Access Transit (BAT) Lanes**
- **Low to Medium-Low: Limited BAT lanes and/or intersection or spot improvements**

Overview of Technical Evaluation and Process

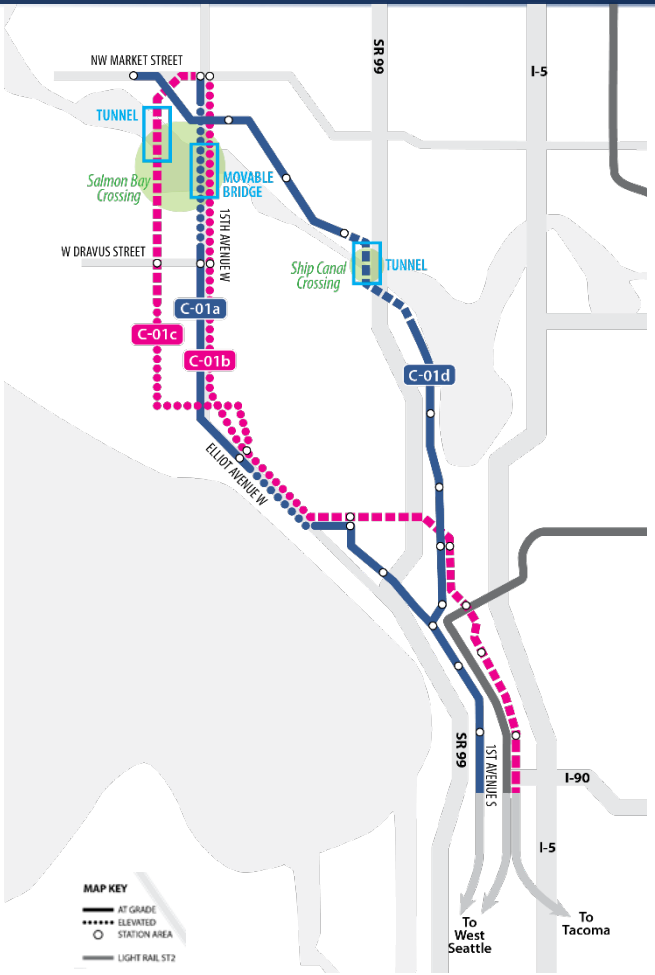
	Regional Light Rail Spine *Does project help complete regional light rail spine?*
	Ridership *2040 daily station boardings / 2040 daily project riders*
	Capital Cost *Cost in Millions of 2014 $*
	Annual O&M Cost *Cost in Millions of 2014 $*
	Travel Time *In-vehicle travel time along the project (segment)*
ON TIME	**Reliability** *Quantitative/qualitative assessment of alignment/route in exclusive right-of-way*
	System Integration *Qualitative assessment of issues and effects related to connections to local bus service and potential future integration opportunities*

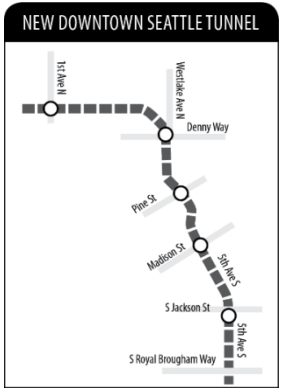
- **Coordinating with ST Transit partners regarding specific elements to be included in Draft Plan**

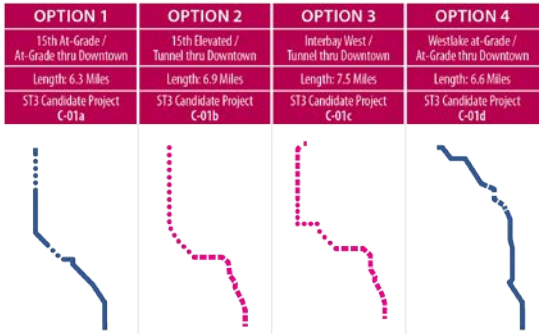
Review of ST3 Candidate Projects

City of Seattle

C-01a,b,c,d: Ballard to downtown Seattle LRT





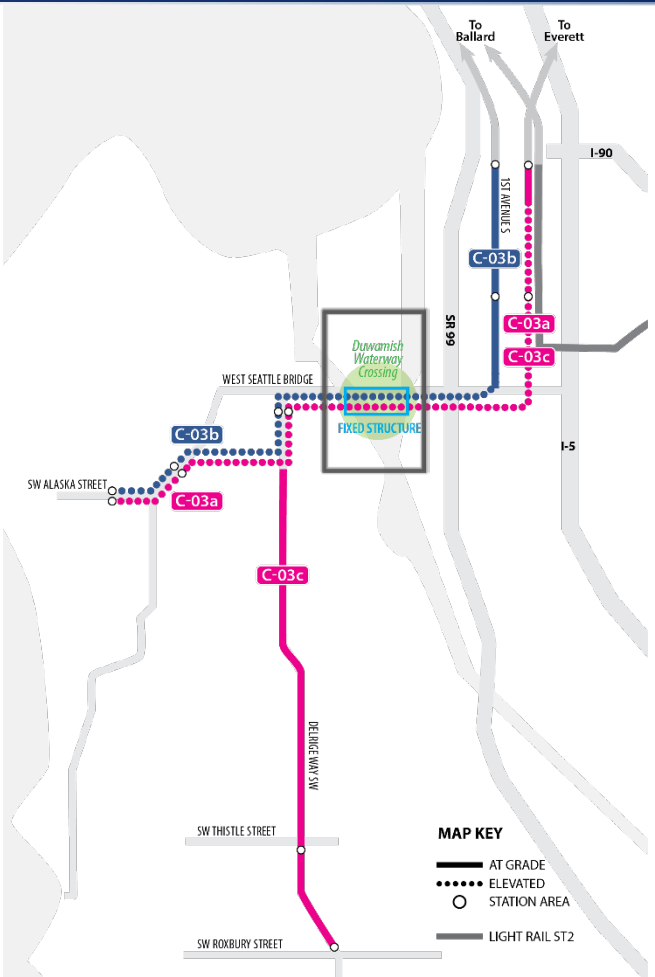


* APPROXIMATELY HALF OF RIDERSHIP SHOWN FOR C-01b AND C-01c TRAVEL SOLELY WITHIN THE BALLARD-IDS SEGMENT.

** 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
	ST3 Candidate Project C-01a	ST3 Candidate Project C-01b	ST3 Candidate Project C-01c	ST3 Candidate Project C-01d
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
LAND USE AND DEVELOPMENT/ TOD POTENTIAL — PLANS AND POLICIES	MEDIUM	MEDIUM-HIGH	MEDIUM-HIGH	MEDIUM-HIGH
LAND USE AND DEVELOPMENT/ TOD POTENTIAL — MARKET SUPPORT	HIGH	HIGH	HIGH	HIGH
LAND USE AND DEVELOPMENT/ TOD POTENTIAL — ACTIVITY UNITS — POP PER ACRE (2014/2040)	21 / 30	22 / 33	22 / 33	22 / 30
LAND USE AND DEVELOPMENT/ TOD POTENTIAL — ACTIVITY UNITS — EMP PER ACRE (2014/2040)	64 / 94	65 / 98	65 / 97	62 / 94
LAND USE AND DEVELOPMENT/ TOD POTENTIAL — ACTIVITY UNITS — POP + EMP PER ACRE (2014/2040)	85 / 124	87 / 131	87 / 130	84 / 124
SOCIOECONOMIC BENEFITS — 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	64,500 / 90,000
SOCIOECONOMIC BENEFITS — EMPLOYMENT (2014/2040)	170,500 / 249,800	206,400 / 310,300	205,300 / 308,500	183,200 / 277,100

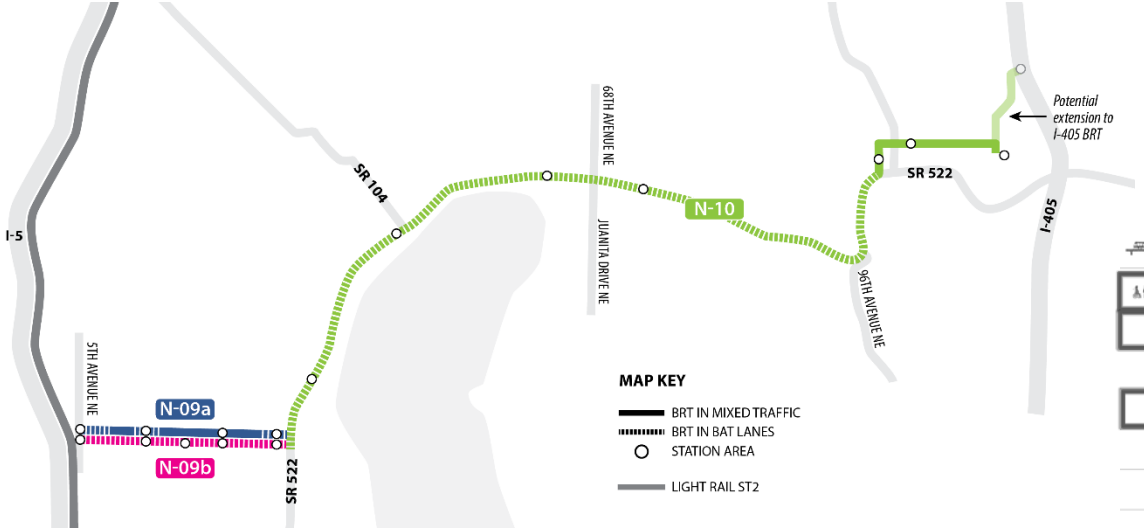
C-03a,b,c: W. Seattle to downtown Seattle LRT

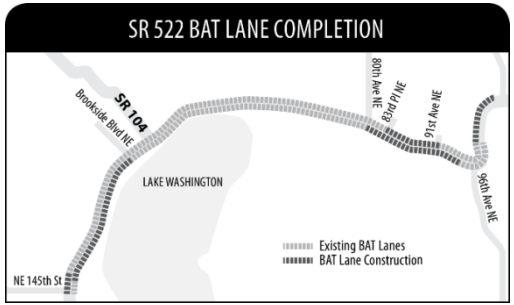


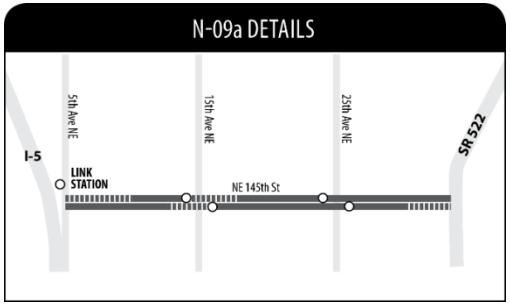
	OPTION 1	OPTION 2	OPTION 3
	Tunnel thru Downtown Elevated to West Seattle Junction	At-Grade thru Downtown Elevated to West Seattle Junction	Tunnel thru Downtown Elevated to Delridge/ At-Grade to White Center
	Length: 4.7 Miles	Length: 4.4 Miles	Length: 6.5 Miles
	ST3 Candidate Project C-03a	ST3 Candidate Project C-03b	ST3 Candidate Project 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
LAND USE AND DEVELOPMENT/ TOD POTENTIAL — MARKET SUPPORT	MEDIUM	MEDIUM	MEDIUM
LAND USE AND DEVELOPMENT/ TOD POTENTIAL — ACTIVITY UNITS — POP PER ACRE (2014/2040)	7 / 10	7 / 9	7 / 10
LAND USE AND DEVELOPMENT/ TOD POTENTIAL — ACTIVITY UNITS — EMP PER ACRE (2014/2040)	13 / 19	13 / 19	11 / 17
LAND USE AND DEVELOPMENT/ TOD POTENTIAL — ACTIVITY UNITS — POP+EMP PER ACRE (2014/2040)	20 / 29	20 / 28	18 / 27
SOCIOECONOMIC BENEFITS — MINORITY/LOW-INCOME	28% / 12%	27% / 13%	54% / 18%
SOCIOECONOMIC BENEFITS — POPULATION (2014/2040)	14,900 / 21,300	13,500 / 19,600	16,700 / 22,900
SOCIOECONOMIC BENEFITS — EMPLOYMENT (2014/2040)	27,300 / 39,400	27,200 / 38,600	25,900 / 37,800

N-09, N-10: 145th/SR 522 BRT

SOUNDTRANSIT
RIDE THE WAVE



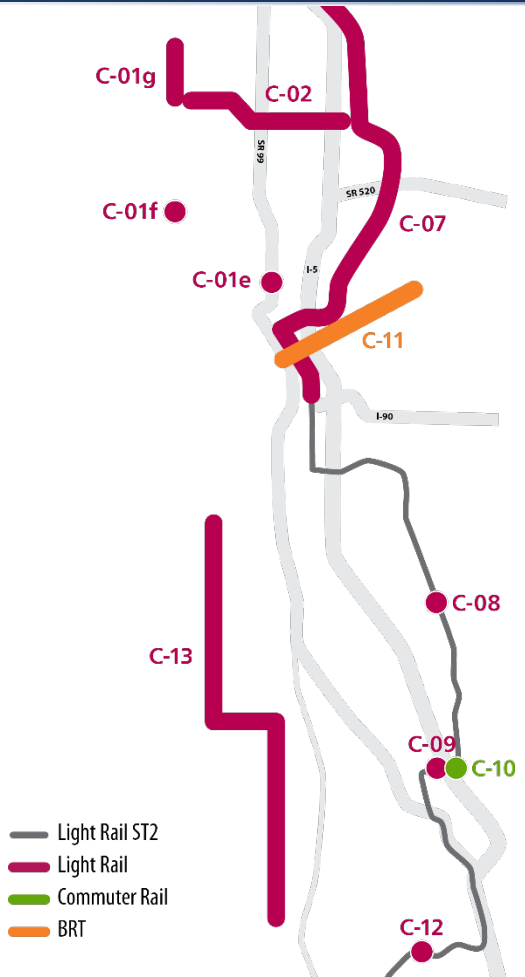




	OPTION 1	OPTION 2
	Length: 8.0 Miles	Length: 8.0 Miles
	ST3 Candidate Project N-09a + N-10	ST3 Candidate Project N-09b + N-10
REGIONAL LIGHT RAIL SPINE	NO	NO
RIDERSHIP (DAILY PROJECT RIDERS)	7,000—8,000	7,000—8,000
CAPITAL COST (2014 $ M)	$360—$386	$416—$446
ANNUAL O&M COST (2014 $ M)	$12.16	$12.24
TRAVEL TIME (MIN)	28	27
RELIABILITY	MEDIUM	MEDIUM
SYSTEM INTEGRATION	MEDIUM	MEDIUM
EASE OF NON-MOTORIZED ACCESS	MEDIUM-LOW	MEDIUM-LOW
PERCENT OF NON-MOTORIZED ACCESS	25—35%	25—35%
CONNECTION TO PSRC-DESIGNATED REGIONAL CENTERS	0 CENTERS	0 CENTERS
LAND USE AND DEVELOPMENT/ TOD POTENTIAL: PLANS AND POLICIES	MEDIUM-LOW	MEDIUM-LOW
LAND USE AND DEVELOPMENT/ TOD POTENTIAL: MARKET SUPPORT	MEDIUM	MEDIUM
LAND USE AND DEVELOPMENT/ TOD POTENTIAL: ACTIVITY UNITS: POP PER ACRE (2014/2040)	7 / 9	7 / 9
LAND USE AND DEVELOPMENT/ TOD POTENTIAL: ACTIVITY UNITS: EMP PER ACRE (2014/2040)	2 / 3	2 / 3
LAND USE AND DEVELOPMENT/ TOD POTENTIAL: ACTIVITY UNITS: POP+EMP PER ACRE (2014/2040)	9 / 12	9 / 12
SOCIOECONOMIC BENEFITS: MINORITY/LOW-INCOME	33% / 12%	33% / 12%
SOCIOECONOMIC BENEFITS: POPULATION (2014/2040)	23,700 / 29,800	23,700 / 29,900
SOCIOECONOMIC BENEFITS: EMPLOYMENT (2014/2040)	6,800 / 10,100	6,900 / 10,200

Additional Central Projects

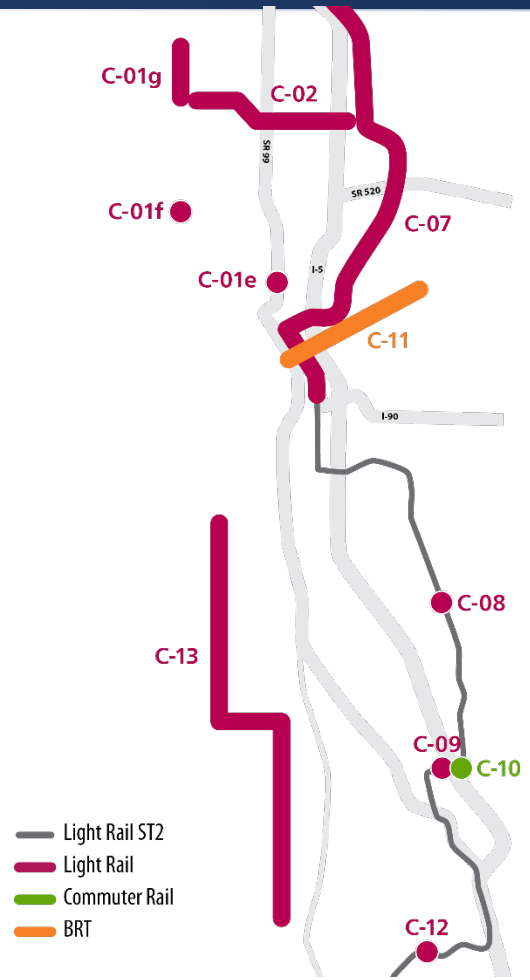
SOUNDTRANSIT
RIDE THE WAVE



		ST3 Candidate Project C-01e Additional potential light rail station in the vicinity of SR 99 and Harrison Street	ST3 Candidate Project C-01f Additional potential light rail station in Interbay	ST3 Candidate Project C-01g Additional LRT extension and potential station to the Ballard High School/65th Vicinity	ST3 Candidate Project C-02 Ballard to University District LRT	ST3 Candidate Project C-07 Transit Tunnel (International District to Northgate) improvements enabling increases in system frequency	ST3 Candidate Project C-08 Infill Light Rail Station: Graham Street
REGIONAL LIGHT RAIL SPINE		NO	NO	NO	NO	YES	NO
RIDERSHIP (DAILY PROJECT RIDERS)		2,500—3,500	< 1,000	4,000—5,000	19,000—24,000	N/A	3,000—4,000
CAPITAL COST (2014 $ M)		$367—$393	$90—$97	$351—$375	$2,939—$3,145	$20—$21	$66—$71
ANNUAL O&M COST (2014 $ M)		$2.37	$1.30	$2.53	$17.16	N/A	$1.63
TRAVEL TIME (MIN)		0.7	0.7	2	7	N/A	0.7
RELIABILITY		N/A	N/A	HIGH	HIGH	N/A	N/A
SYSTEM INTEGRATION		MEDIUM-HIGH	LOW	MEDIUM	MEDIUM-HIGH	N/A	MEDIUM-LOW
EASE OF NON-MOTORIZED ACCESS		MEDIUM	MEDIUM-LOW	MEDIUM-HIGH	MEDIUM-HIGH	N/A	MEDIUM
PERCENT OF NON-MOTORIZED ACCESS		70—80%	70—80%	70—80%	70—80%	N/A	70—80%
CONNECTION TO PSRC-DESIGNATED REGIONAL CENTERS		2 CENTERS	1 CENTER	0 CENTERS	2 CENTERS	N/A	0 CENTERS
LAND USE AND DEVELOPMENT/ TOD POTENTIAL	PLANS AND POLICIES	HIGH	MEDIUM-LOW	MEDIUM	MEDIUM-HIGH	N/A	MEDIUM
	MARKET SUPPORT	HIGH	MEDIUM	MEDIUM	MEDIUM-HIGH	N/A	MEDIUM
	ACTIVITY UNITS: POP PER ACRE (2014/2040)	20 / 30	9 / 11	20 / 26	21 / 27	N/A	16 / 20
	ACTIVITY UNITS: EMP PER ACRE (2014/2040)	45 / 77	7 / 10	9 / 13	15 / 23	N/A	3 / 4
	ACTIVITY UNITS: POP+EMP PER ACRE (2014/2040)	81 / 122	17 / 21	29 / 38	36 / 50	N/A	19 / 24
SOCIOECONOMIC BENEFITS	MINORITY/LOW-INCOME	32% / 15%	17% / 7%	15% / 7%	28% / 23%	N/A	81% / 25%
	POPULATION (2014/2040)	9,800 / 14,800	4,500 / 5,200	10,000 / 13,000	39,800 / 51,000	N/A	8,200 / 10,200
	EMPLOYMENT (2014/2040)	21,900 / 37,900	3,600 / 5,000	4,800 / 6,300	29,400 / 44,300	N/A	1,300 / 1,900

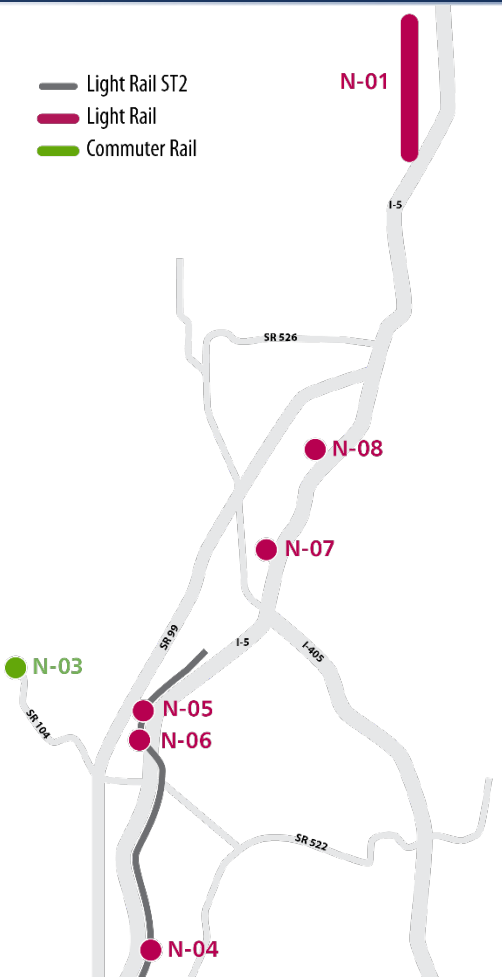
Additional Central Projects

SOUNDTRANSIT
RIDE THE WAVE



			ST3 Candidate Project C-09 Infill Light Rail Station: Boeing Access Road	ST3 Candidate Project C-10 Infill Sounder Station: Boeing Access Road	ST3 Candidate Project C-11 Madison Street BRT	ST3 Candidate Project C-12 Additional parking at Tukwila International Boulevard (TIB) Station	ST3 Candidate Project C-13 West Seattle/Junction to Burien Transit Center LRT
REGIONAL LIGHT RAIL SPINE			NO	NO	NO	NO	NO
RIDERSHIP (DAILY PROJECT RIDERS)			5,000—7,000	2,000—3,000	9,000—11,000	NA	18,000—26,000
CAPITAL COST (2014 $ M)			$124—$129	$94—$100	$125—$133	$58—$63	$2,697—$2,885
ANNUAL O&M COST (2014 $ M)			$1.63	$0.61	N/A	$0.47	$28.82
TRAVEL TIME (MIN)			0.7	1.5	14	N/A	22
RELIABILITY			N/A	N/A	MEDIUM	N/A	HIGH
SYSTEM INTEGRATION			MEDIUM	MEDIUM-LOW	MEDIUM-HIGH	N/A	MEDIUM
EASE OF NON-MOTORIZED ACCESS			LOW	LOW	HIGH	N/A	MEDIUM
PERCENT OF NON-MOTORIZED ACCESS			25—35%	25—35%	75—85%	N/A	55—65%
CONNECTION TO PSRC-DESIGNATED REGIONAL CENTERS			2 CENTERS	2 CENTERS	2 CENTERS	0 CENTERS	1 CENTER
LAND USE AND DEVELOPMENT/ TOD POTENTIAL	PLANS AND POLICIES		LOW	LOW	HIGH	N/A	MEDIUM-LOW
	MARKET SUPPORT		MEDIUM-LOW	MEDIUM-LOW	MEDIUM-HIGH	N/A	MEDIUM
	ACTIVITY UNITS	POP PER ACRE (2014/2040)	3 / 4	3 / 4	30 / 42	N/A	10 / 12
		EMP PER ACRE (2014/2040)	2 / 3	2 / 3	91 / 131	N/A	2 / 4
		POP+EMP PER ACRE (2014/2040)	5 / 7	5 / 7	122 / 173	N/A	12 / 16
SOCIOECONOMIC BENEFITS	MINORITY/LOW-INCOME		83% / 12%	83% / 12%	35% / 20%	N/A	43% / 15%
	POPULATION (2014/2040)		1,600 / 2,100	1,600 / 2,100	47,500 / 66,200	N/A	29,700 / 35,200
	EMPLOYMENT (2014/2040)		900 / 1,700	900 / 1,700	142,400 / 204,100	N/A	6,600 / 10,700

Additional North Projects



			ST3 Candidate Project N-01 Everett Station to North Everett LRT	ST3 Candidate Project *N-03 Edmonds Permanent Station	ST3 Candidate Project N-04 Infill Light Rail Station: 130th Street (Lynnwood Link)	ST3 Candidate Project N-05 Infill Light Rail Station: 220th Street (Lynnwood Link)
REGIONAL LIGHT RAIL SPINE			YES	NO	NO	NO
RIDERSHIP (DAILY PROJECT RIDERS)			6,000—7,000	N/A	< 1,000	< 1,000
CAPITAL COST (2014 $ M)			$714—$764	$54—$57	$79—$85	$86—$92
ANNUAL O&M COST (2014 $ M)			$11.11	$0.69	$1.96	$2.32
TRAVEL TIME (MIN)			8	N/A	0.7	0.7
RELIABILITY			HIGH	N/A	N/A	N/A
SYSTEM INTEGRATION			MEDIUM	MEDIUM-LOW	MEDIUM	LOW
EASE OF NON-MOTORIZED ACCESS			MEDIUM	MEDIUM-LOW	MEDIUM-LOW	MEDIUM-LOW
PERCENT OF NON-MOTORIZED ACCESS			70—80%	20—30%	70—80%	25—35%
CONNECTION TO PSRC-DESIGNATED REGIONAL CENTERS			1 CENTER	0 CENTERS	0 CENTERS	0 CENTERS
LAND USE AND DEVELOPMENT/ TOD POTENTIAL	PLANS AND POLICIES		MEDIUM	LOW	MEDIUM-LOW	LOW
	MARKET SUPPORT		MEDIUM-LOW	MEDIUM	MEDIUM-LOW	MEDIUM
	ACTIVITY UNITS	POP PER ACRE (2014/2040)	9 / 19	6 / 7	9 / 10	6 / 7
		EMP PER ACRE (2014/2040)	8 / 16	3 / 4	3 / 3	4 / 5
		POP+EMP PER ACRE (2014/2040)	17 / 35	9 / 11	12 / 14	9 / 12
SOCIOECONOMIC BENEFITS	MINORITY/LOW-INCOME		25% / 21%	16% / 9%	34% / 11%	34% / 14%
	POPULATION (2014/2040)		12,900 / 27,100	1,800 / 2,100	4,600 / 5,300	2,800 / 3,400
	EMPLOYMENT (2014/2040)		11,800 / 22,800	800 / 1,000	1,300 / 1,600	1,000 / 2,700

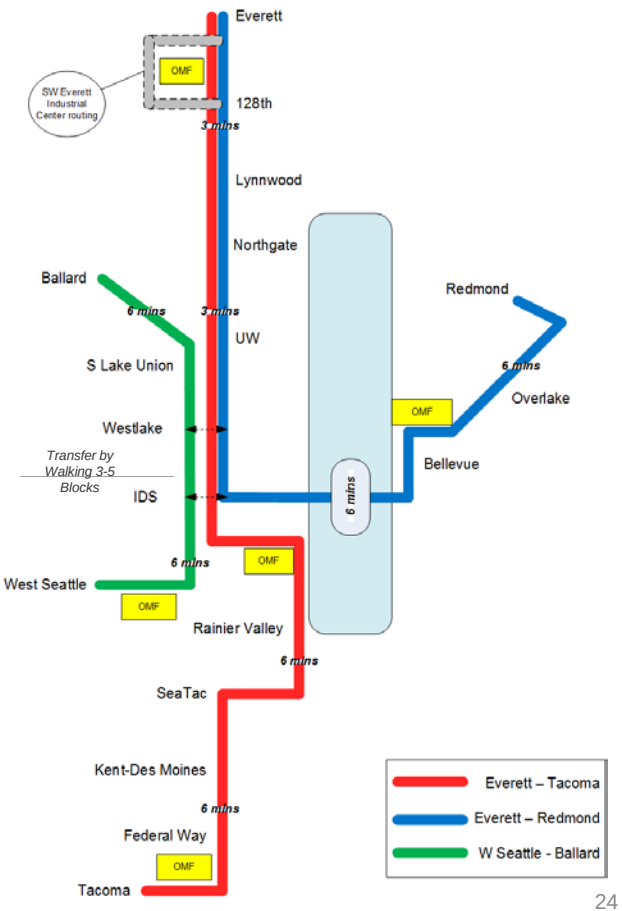
*Part of ST2 program; Due to reduced agency revenues experienced during the recession, implementation has been deferred.

Review of ST3 Candidate Projects

LRT System Operations Options

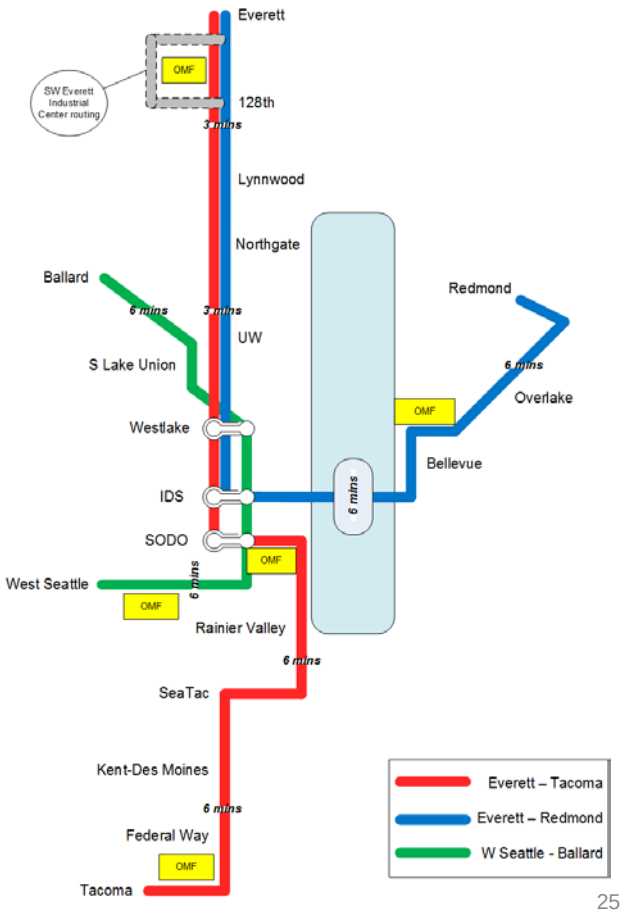
Potential LRT System Operations Option #1

- **Everett to Tacoma via Downtown Seattle Transit Tunnel**
- **Everett to Downtown Redmond via Downtown Seattle Transit Tunnel**
- **Ballard to West Seattle at-grade via Downtown Seattle**



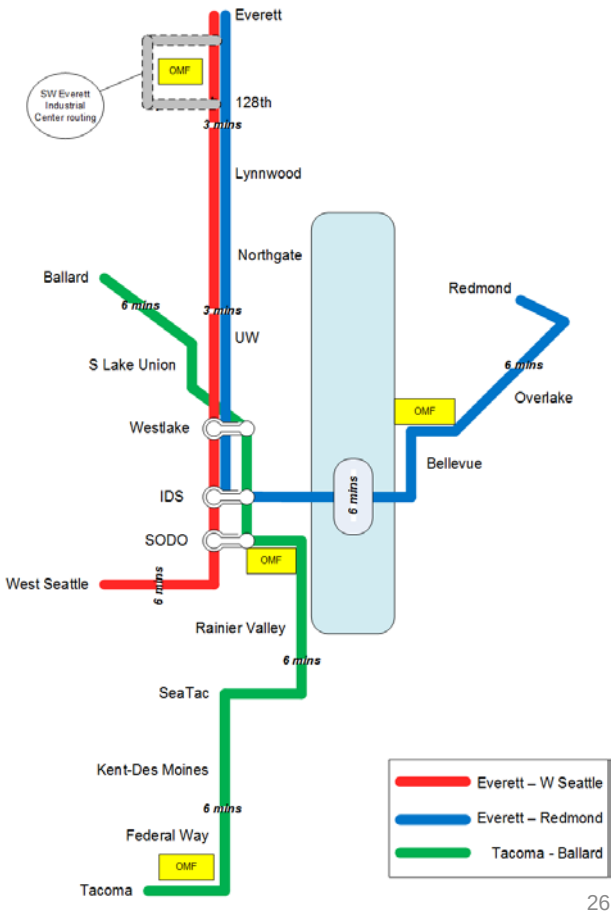
Potential LRT System Operations Option #2

- **Everett to Tacoma via Downtown Seattle Transit Tunnel**
- **Everett to Downtown Redmond via Downtown Seattle Transit Tunnel**
- **Ballard to West Seattle via new rail-only tunnel**

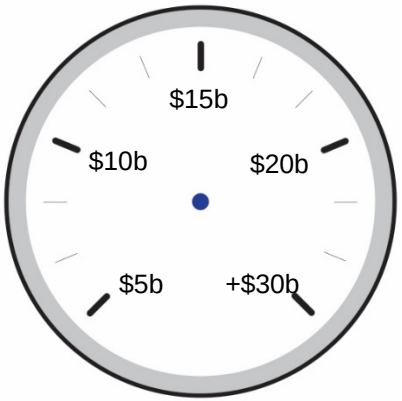


Potential LRT System Operations Option #3

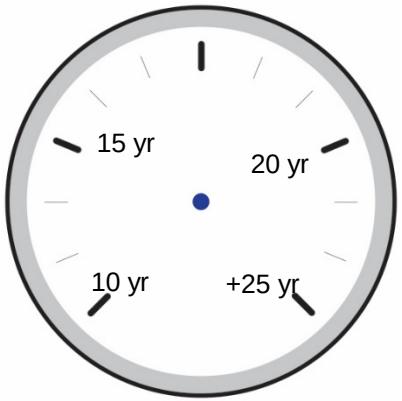
- **Everett to West Seattle via Downtown Seattle Transit Tunnel**
- **Everett to Downtown Redmond via Downtown Seattle Transit Tunnel**
- **Ballard to Tacoma via new rail-only tunnel**



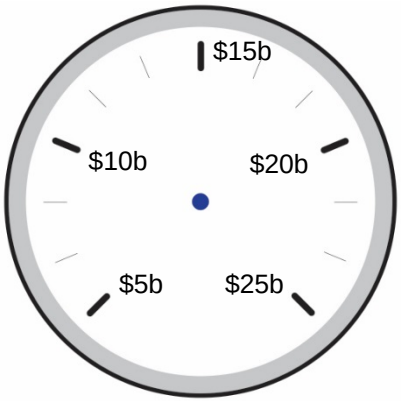
Building the ST3 Finance Plan



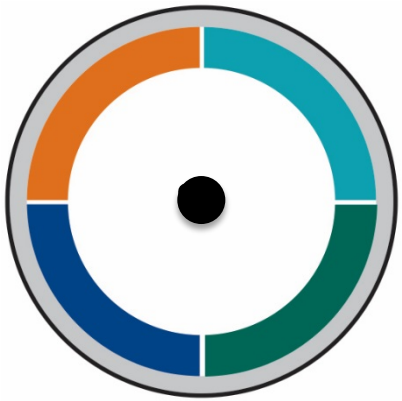
Capital Scope (Cost)



Time



Tax Level



Equity

Opportunities for Engagement

- **December 7, 2015:**
  - **Letter to jurisdictions/partners requesting acknowledgement of project scopes and comments**
  - **Responses requested by January 21, 2016**

- **March 2016: Draft System Plan adopted by ST Board**

- **April 2016: Public and Stakeholder Outreach:**
  - **Public meeting in each ST sub-area**
  - **Coordination with Metro's LRP public outreach**
  - **Online Survey**

- **June 2016: Potential adoption of Final System Plan**

Thank you.
SOUNDTRANSIT
RIDE THE WAVE