

# Progress Report

## Regional Express & Bus Rapid Transit Program

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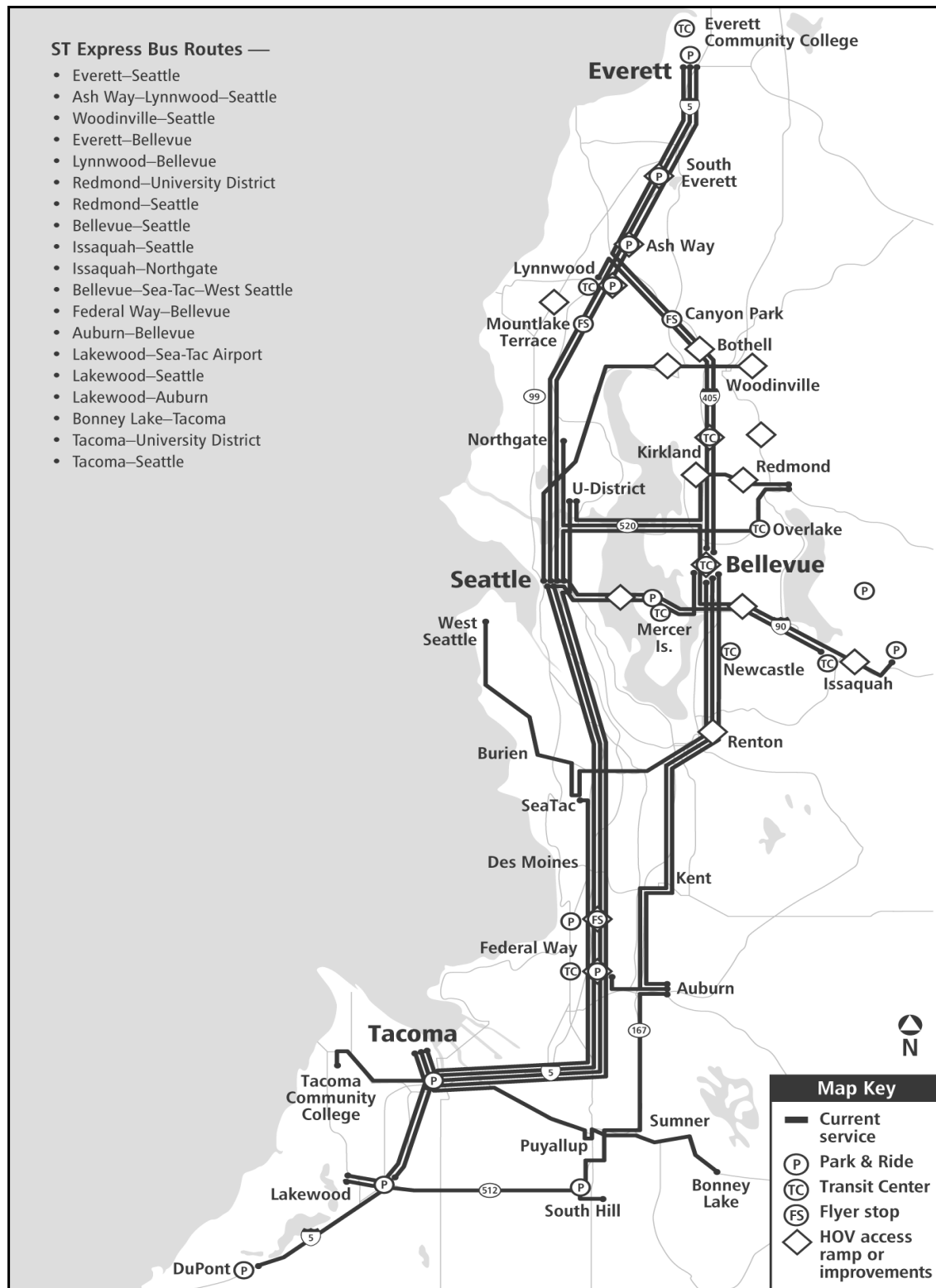
ST Express Bus routes serve urban centers in Snohomish, King, and Pierce.

March | 2018



Prepared by Project Control & VE | Design, Engineering & Construction Management

# Regional Express & Bus Rapid Transit Program Overview



*ST Regional Express Bus Routes*

# Regional Express & Bus Rapid Transit Program Overview



**ST Express Bus Base:** Sound Transit is evaluating the need for an operations and maintenance base. Project development activities include confirmation of fleet operations; facilities and site programming; and identification of site alternatives. Project is on hold.

**I-90 Two-Way Transit and HOV Operations (Stage 3):** Stage 3 provides for two-way transit/HOV operations on I-90 between 80th Avenue SE and Rainier Ave. Following completion of the Stage 3 project, the center roadway will be closed to traffic to allow construction of East Link Extension. Project detail page is located under the Link light rail section of this report.

**I-405 Bus Rapid Transit:** This project establishes Bus Rapid Transit (BRT) from the Lynnwood Transit Center to the Burien Transit Center via I-405 and SR 518. The project relies on the I-405 express toll system where available, and Business Access Transit (BAT) lanes on SR 518 from Tukwila to Burien. Project elements include parking, station access improvements, and 11 stations, including a new transit center in South Renton and new stations at Northeast 85th Street with BAT lanes extending toward Downtown Kirkland and at Northeast 44th Street in Renton.

**SR522 Bus Rapid Transit:** This project establishes BRT from the Link station at I-5 and Northeast 145th Street to UW Bothell, with service continuing at lower frequencies to Woodinville. On Northeast 145th Street, this project includes transit priority spot treatments to facilitate BRT movement through corridor bottlenecks. On SR 522 the majority of the corridor through Lake Forest Park, Kenmore and Bothell will feature BAT lanes, with transit-supportive enhancements on arterials from downtown Bothell to UW Bothell. This project includes nine pairs of stations with additional parking at Lake Forest Park, Kenmore and Bothell and an expanded transit center at UW Bothell.

**Bus on Shoulder:** This program provides opportunities for buses to use shoulders on freeway and state route facilities during periods of congestion in general traffic and/or HOV lanes. This program will require coordination and further study with transit partners, WSDOT and Federal Highway Administration in order to determine locations that may be feasible.

## Program Budget

Figures are shown in millions below.

REX & BRT	Authorized Project Allocation	Commitment to Date	Incurred to Date	Forecast to Complete	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
ST EXPRESS BUS BASE	\$5.8	\$3.1	\$1.2	\$2.7	\$5.8	\$0
I-405 BUS RAPID TRANSIT	\$88.1	\$7.4	\$1.3	\$80.6	\$88.1	\$0
SR 522 BUS RAPID TRANSIT	\$18.6	\$3.1	\$0.4	\$15.5	\$18.6	\$0
BUS ON SHOULDER PROJECT	\$3.9	\$0.7	\$0.0	\$3.2	\$3.9	\$0
REX I-90 2 WAY TRANS& HOV III	\$225.6	\$194.5	\$185.4	\$31.2	\$225.6	\$0
<b>Total REX &amp; BRT</b>	<b>\$341.9</b>	<b>\$208.7</b>	<b>\$188.2</b>	<b>\$133.2</b>	<b>\$341.9</b>	<b>\$0</b>

*\*The Authorized Project Allocation reflects the budget for each project through the approved project phase, meaning that for projects approved for Final Design activities only, the project budget will be amended at some point to add budget for construction activities.*

## Program Schedule

Schedule for active projects are summarized below.

Activity Name	Start	Finish																																								
			2018				2019				2020				2021				2022				2023				2024				2025				2026							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1							
Sound Transit 2	10-Nov-09 A	01-Feb-21																																								
BRT - Bus Rapid Transit (REX)	10-Nov-06	01-Feb-21																																								
X500005 - ST Express Bus Base	10-Nov-06	01-Feb-21																																								
Sound Transit 3	01-Jul-17 A	31-Dec-25																																								
ST3 Project Schedule	01-Jul-17 A	31-Dec-25																																								
EAST CORRIDOR PROJECTS	01-Jul-17 A	31-Dec-25																																								
Bus Rapid Transit (BRT) - East Corridor	01-Jul-17 A	31-Dec-25																																								
ST3 Project Schedule	01-Jul-17 A	31-Dec-25																																								
EAST CORRIDOR PROJECTS	01-Jul-17 A	31-Dec-25																																								
Bus Rapid Transit (BRT) - East Corridor	01-Jul-17 A	31-Dec-25																																								
I-405 BRT	01-Jul-17 A	31-Dec-25																																								
BRT Maintenance Base	25-Jan-19	31-Dec-23																																								
North Sammamish Park and Ride	01-Jan-18	31-Dec-24																																								
NORTH CORRIDOR PROJECTS	01-Jul-17 A	31-Dec-25																																								
Bus Rapid Transit (BRT) - North Corridor	01-Jul-17 A	31-Dec-25																																								
ST3 Project Schedule	01-Jul-17 A	31-Dec-25																																								
NORTH CORRIDOR PROJECTS	01-Jul-17 A	31-Dec-25																																								
Bus Rapid Transit (BRT) - North Corridor	01-Jul-17 A	31-Dec-25																																								
SR522 & 145th BRT	01-Jul-17 A	31-Dec-25																																								

# Region Express & Bus Rapid Transit

## ST Express Bus Base

### Project Summary

**Scope** Sound Transit is evaluating the need for an operations and maintenance base. Project development activities include confirmation of fleet operations, facilities and site programming, and identification of site alternatives.

**Phase** Planning

**Budget** \$5.8 Million

**Schedule** Project is on hold



*St Express bus maintenance currently performed by transit partners.*

### Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

#### Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$0.8	\$0.4	\$0.4	\$0.8	\$0.0
Preliminary Engineering	\$4.8	\$2.7	\$0.8	\$4.8	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0
<b>Total</b>	<b>\$5.8</b>	<b>\$3.1</b>	<b>\$1.2</b>	<b>\$5.8</b>	<b>\$0.0</b>

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# Region Express & Bus Rapid Transit

## I-405 Bus Rapid Express

### Project Summary

#### Scope

**Limits** King and Snohomish Counties: Lynnwood, Bothell, Kirkland, Bellevue, Renton, Tukwila, SeaTac, Burien; I-5, I-405 and SR 518 corridors.

**Alignment** I-405 BRT extends approximately 37 miles between Lynnwood and Burien along the I-5, I-405 and SR 518 corridors. BRT will serve Lynnwood, Bothell, Kirkland, Bellevue, Renton, SeaTac, Tukwila, and Burien

Buses will operate on general purpose lanes, bus-only shoulders, high occupancy vehicle lanes, express toll lanes, and bus-

**Stations** Lynnwood City Center, Canyon Park, NE 195th, NE 160th/Brickyard, NE 128th/Totem Lake, NE 85th, Bellevue Transit Center, NE 44th, South Renton Transit Center, Tukwila International Blvd Station, Burien Transit Center.

**Systems** Bus operations and maintenance facility  
BRT operations systems  
BRT rider services

**Phase** Alternatives Development / ST3 Project

**Budget** \$88.1 Million through Preliminary Engineering

**Schedule** Revenue Service: 2024



### Key Project Activities

- Sound Transit Board approved the consultant contract for Project Development Services (Phase 1: Alternatives Development) for the I-405 Bus Rapid Transit Project on February 22, 2018. Notice to Proceed was issued in March 2018.
- Alternatives development activities are ongoing per schedule.
- External engagement efforts have begun and are ongoing as planned.
- Planning for programmatic BRT elements (branding, station design, bus operations and maintenance base, and vehicle fleet) has begun.

### Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

#### Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$13.7	\$0.6	\$0.6	\$13.7	\$0.0
Preliminary Engineering	\$29.0	\$6.0	\$0.2	\$29.0	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.4	\$0.3	\$0.1	\$0.4	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$45.0	\$0.5	\$0.3	\$45.0	\$0.0
<b>Total</b>	<b>\$88.1</b>	<b>\$7.4</b>	<b>\$1.3</b>	<b>\$88.1</b>	<b>\$0.0</b>

### Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

The following are the top project risks:

- The I-405 Bus Rapid Transit (BRT) Project and Bus Operations and Maintenance Facility are early deliverables and involve close coordination with multiple project partners. Early concurrence on project components is a key effort in the first year of project development.
- The I-405 BRT project relies on the Washington State Department of Transportation (WSDOT) to maintain adequate speed and reliability along the I-405 corridor using a managed lane system. WSDOT's completion of the express toll lanes as part of WSDOT's I-405 Renton to Bellevue Widening and Express Toll Lanes Project is a critical element of the BRT program.
- The I-405 BRT project connects to existing and future light rail stations. Future stations include the Lynnwood City Center as part of Lynnwood Link Extension and Bellevue Downtown Station as part of East Link Extension.
- An Interagency Group has been established to support project decision-making and partner concurrence on project components.



# Region Express & Bus Rapid Transit

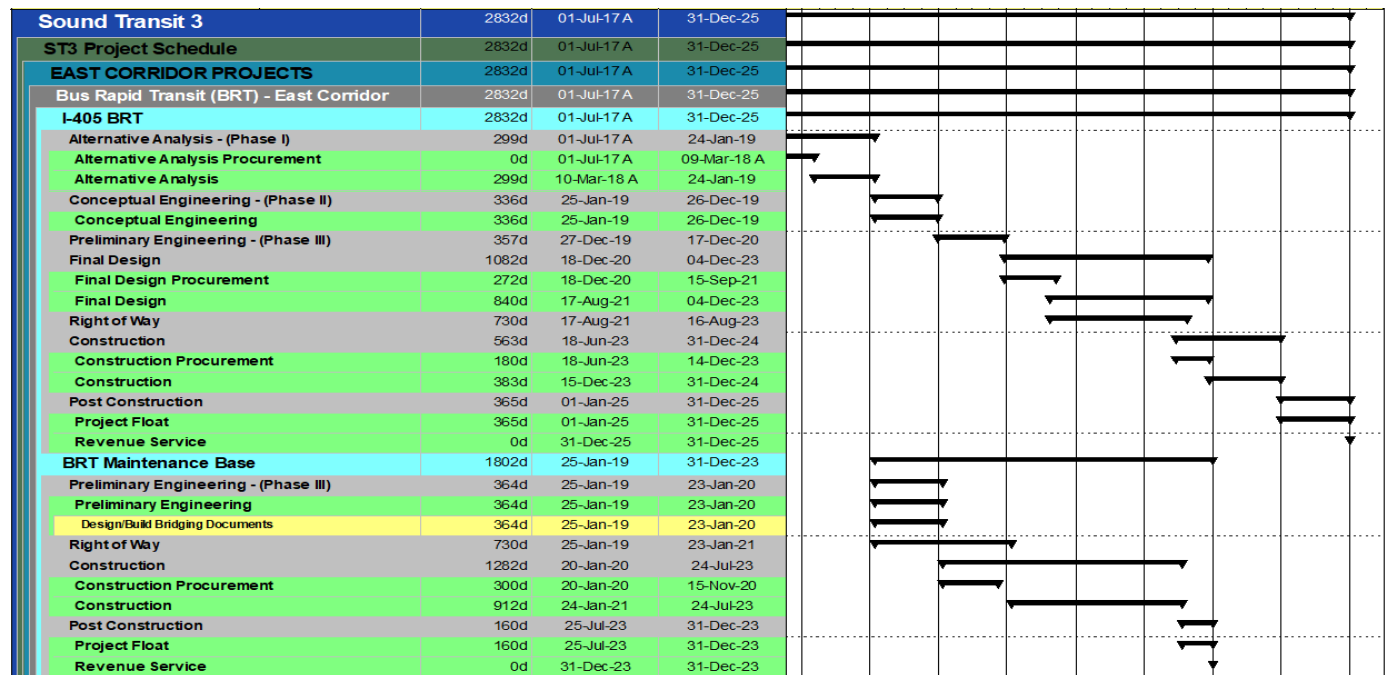
## I-405 Bus Rapid Express



### Project Schedule

Phase 1 of Project Development (analysis of project refinements) is expected to be completed by 1Q 2019.

### Schedule Snapshot



### Environmental

- Sound Transit met with federal partners, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to discuss lead agency potential. Sound Transit is the lead agency under SEPA.
- Decisions about Phase 2 environmental needs will be made in the context of previous environmental work, tiering off of existing environmental documents as much as possible—the I-405 Corridor FEIS (2002) and the Long Range Plan FSEIS (2014).
- Phase 1 environmental work underway includes: defining the study area to identify the potentially affected environment; identifying and applying environmental screening criteria as the project is refined.

### Community Outreach

Sound Transit is committed to proactively seeking public input during all stages of the I-405 BRT Project. The I-405 BRT Community Engagement and Communications Plan under development will establish a stakeholder engagement process that helps ensure priorities of local communities are heard and considered along with the project-wide goals. The BRT team will collaborate with elected officials, partner staff, and local communities throughout the project.

- To inform the Community Engagement and Communications Plan, Community Outreach staff are interviewing stakeholders along the corridor to learn about issues of importance and preferred methods of engagement.
  - The first I-405 BRT Interagency Group Meeting will be held on April 18.
  - The first I-405 BRT Elected Leadership Group Meeting will be held on April 25.
  - A public open house with WSDOT and the City of Kirkland is scheduled for April 26. Subsequent I-405 BRT Project public open houses are being planned for June.
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### Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

# System Expansion

## SR 522 Bus Rapid Transit

### Project Summary

#### Scope

**Limits** SR 522 and NE 145th Street in Seattle/Shoreline, Lake Forest Park, Kenmore, Bothell, Woodinville

**Alignment** The SR 522/145th BRT route will connect the South Shoreline Light Rail Station to the UW Bothell/Cascadia College area, with less frequent service to the Woodinville Park-and-Ride. The approximately 8 mile route will travel via NE 145th Street and SR 522 serving Seattle, Shoreline, Lake Forest Park, Kenmore, and Bothell. Every other bus will travel 4 additional miles from UWB/CC to serve Woodinville. Buses will operate in Business and Transit (BAT) lanes, transit queue jumps and in mixed use roadways.

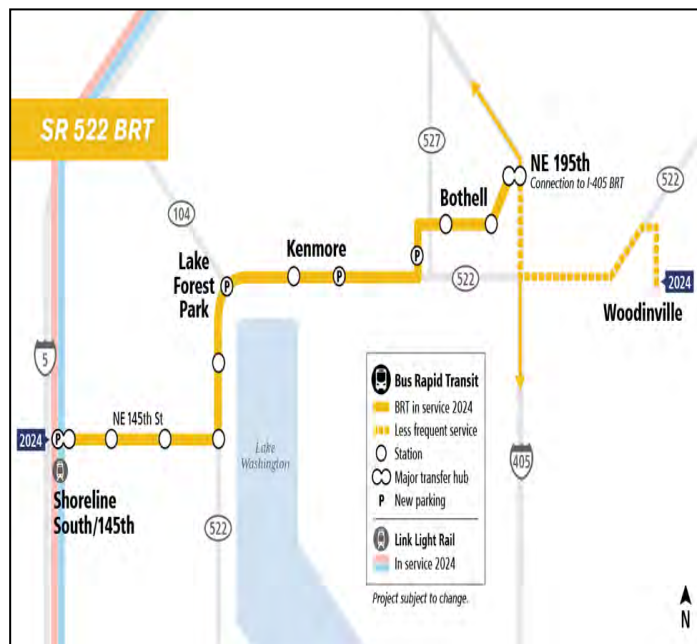
**Stations** The representative project includes 9 BRT station pairs plus an expanded transit center at UWB/CC. Additional parking is included

**Systems** BRT Operations  
Transit Signal Priority

**Phase** Project Refinements Analysis

**Budget** \$18.6 Million for Preliminary Engineering

**Schedule** Revenue Service: 2024



### Key Project Activities

- Sound Transit Capital Committee Approved Phase —Alternative Development consultant contract on February 8, 2018.
- First Interagency Group meeting on April 3.
- First Elected Official meeting on April 4.
- Project refinements activities are on-going as per schedule.

### Project Cost Summary

The project cost is summarized in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

#### Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$6.6	\$0.4	\$0.4	\$6.6	\$0.0
Preliminary Engineering	\$10.3	\$2.5	\$0.0	\$10.3	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$1.4	\$0.1	\$0.0	\$1.4	\$0.0
Construction	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
ROW	\$0.2	\$0.0	\$0.0	\$0.2	\$0.0
<b>Total</b>	<b>\$18.6</b>	<b>\$3.0</b>	<b>\$0.4</b>	<b>\$18.6</b>	<b>\$0.0</b>

### Risk Management

The Risk and Contingency Management Plan (RCMP) establishes a risk management and oversight process for identifying, assessing, and monitoring risks and develops risk reduction/mitigation plans. It provides a tool for the project team to proactively manage risks on the project. Sound Transit continuously monitors project status and assesses associated risks.

- The SR 522/145th Street BRT project is an early deliverable and involves close coordination with multiple project partners. Early concurrence on project components is a key effort in the first year of project deployment.
- Integration with the Shoreline South LRT Station at NE 145th, and with the I-405 BRT project in Bothell are two critical connections.
- An Interagency Group has been established to support project decision making project partner concurrence on the project components.

# System Expansion

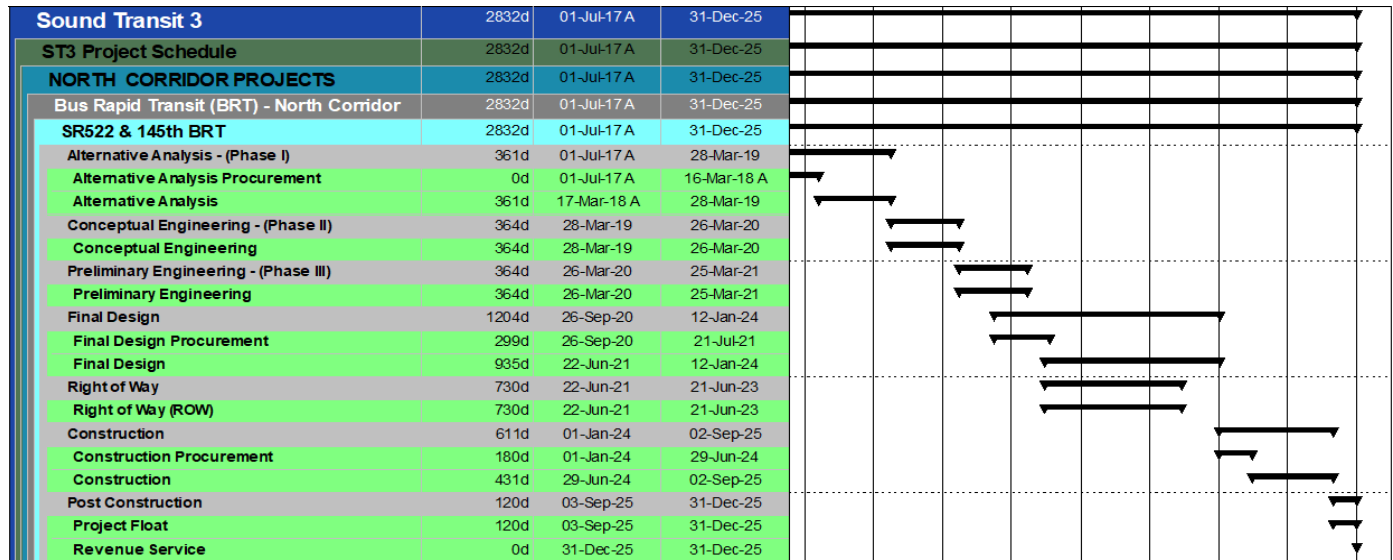
## SR 522 Bus Rapid Transit



### Project Schedule

Phase 1 of Project Development (analysis of project refinements) is expected to be completed by 1Q 2019.

### Schedule Snapshot



### Environmental

- Sound Transit has met with federal partners, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to discuss potential roles as lead agency and potential class of action for NEPA documents during Phase 2. Sound Transit is the lead agency under SEPA.
- Phase 1 environmental work underway includes: collecting baseline environmental information within the study area; identifying and applying environmental screening criteria as the project is refined.

### Community Outreach

Sound Transit is committed to proactively seeking public input during all stages of the SR 522 BRT Project. The SR BRT Community Engagement and Communications Plan under development will establish a stakeholder engagement process that helps ensure priorities of local communities are heard and considered along with the project-wide goals. The BRT team will collaborate with elected officials, partner staff, and local communities throughout BRT project development.

To inform the Community Engagement and Communications Plan, Community Outreach staff are interviewing stakeholders along the corridor to learn about issues of importance and preferred methods of engagement.

- The first SR 522 BRT Interagency Group Meeting took place on April 3.
- The first SR 522 BRT Elected Leadership Group Meeting took place on April 4.

**Sound Transit Board Actions**

Board Action	Description	Date
M2018-17	Authorized the chief executive office to execute a contract with David Evans and Associates, INC. to provide project development services for the SR 522/SR523/ Bus Rapid Transit project in the amount of \$2,500,000, with a 10% contingency of \$250,000, for a total authorized contract amount not to exceed \$2,750,000.	2/8/2018



# Regional Express & Bus Rapid Transit

## Bus on Shoulder

### Project Summary

#### Scope

This program provides opportunities for buses to use shoulders on freeway and state route facilities during periods of congestion in general traffic and/or HOV lanes.

This program will require coordination and further study with transit partners, WSDOT and Federal Highway Administration in order to determine locations that may be feasible.

#### Limits

State highways, (e.g., I-5, I-405, SR 518 and SR 167), including access points, within the Sound Transit district and that carry current and future bus services.

#### Phase

Planning/Feasibility Study

#### Budget

\$3.7M for Planning Phase.

#### Schedule

Revenue Service: All projects funded through program to be in service by 2024.



*Examples of Bus-on-Shoulder facilities*

### Key Project Activities

- Sound Transit Capital Committee approved executing two task orders with WSDOT - for the Bus-on Shoulder (BOS) Feasibility Study and for the I-5 southbound Lynnwood to Mountlake Terrace BOS project - followed by full board approval of overall program budget, in December 2017. Task Order were executed in January 2018.
- WSDOT, with ST assistance, selected Feasibility Study consultant in March 2018, with NTP anticipated within next month.
- WSDOT placing I-5 southbound BOS project out for bid on Small Works roster in April 2018.
- Initial Feasibility Study data collection/inventory tasks, including first meeting of technical advisory group, by June 2018.

### Project Cost Summary

The project cost is summarized below in accordance with Sound Transit's budget Work Breakdown Structure (WBS). The figures are shown in millions.

#### Cost Summary by Phase

Project Phase	Authorized Project Allocation	Commitment to Date	Incurred to Date	Estimated Final Cost (EFC)	Authorized Allocation vs. EFC
Administration	\$0.9	\$0.0	\$0.0	\$0.9	\$0.0
Preliminary Engineering	\$2.2	\$0.0	\$0.0	\$2.2	\$0.0
Final Design	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Construction Services	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
3rd Party Agreements	\$0.4	\$0.4	\$0.0	\$0.4	\$0.0
Construction	\$0.3	\$0.3	\$0.0	\$0.3	\$0.0
ROW	\$0.1	\$0.0	\$0.0	\$0.1	\$0.0
<b>Total</b>	<b>\$3.9</b>	<b>\$0.7</b>	<b>\$0.0</b>	<b>\$3.9</b>	<b>\$0.0</b>

### Project Schedule

All projects funded through program to be in service by 2024.

# Regional Express & Bus Rapid Transit Bus on Shoulder

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## Environmental

- All BOS program environmental documentation and other related activities will be conducted by WSDOT with oversight and assistance as necessary by ST staff.

## Sound Transit Board Actions

Board Action	Description	Date
	None to report.	

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