

SR 522/NE 145th

Bus Rapid Transit Project

Phase 1 Executive Summary

February 2019



CONTENTS

- 1 Background
- 2 History of the Project and Inclusion in Sound Transit 3
- 7 Station Design and Branding
- **8 Phase 1 Project Refinement and Screening Process**
- 10 Project Goals and Objectives
- 11 Project Refinements Considered, Feedback Obtained, and Key Findings from this Phase
- 12 Summary of Refinements Considered
- 13 Evaluating the Refinements
- **14 Refined Project**
- 19 Next Steps

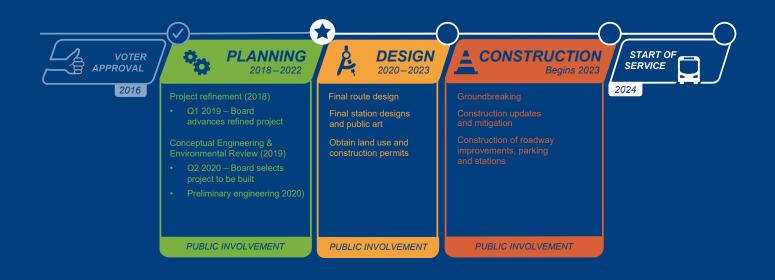
Background ___

This Executive Summary (Summary) augments the full SR 522/NE 145th Bus Rapid Transit (BRT) Phase 1 Report.



The Summary provides project background from Phase 1 work on the SR 522/NE 145th BRT project (the Project). During 2018, the Sound Transit (ST) BRT team and its consultants (the BRT Team) started the Project's first phase, identified as Phase 1. Prior to Phase 1, Sound Transit, as part of its ST3 ballot initiative, had created a broad project definition and supporting templates for the Project. After the regional vote in favor of ST3, Phase 1 included technical and conceptual design analyses and also considered and evaluated stakeholder and community input regarding the Project. Phase 1 shaped the ST3 project (defined later in this summary as "the representative project") into a more refined Project. The Sound Transit Board (the Board) can, then, advance the refined Project into further design, analysis, environmental review, and stakeholder and community input during 2019.

ST's plans are based on the following project schedule, leading to the start of service in 2024.



History of the Project and Inclusion in ST3

Sound Transit plans, builds and operates regional transit systems and services to improve mobility in urban areas of King, Pierce and Snohomish counties. A BRT system is being planned as part of ST's system expansion program.



BRT will be part of ST's high-capacity transit (HCT) service and is being designed for fast and reliable service, including frequent arrivals and departures. BRT will include features such as:



Transit speed and reliability



Transit priority improvements, including business access and transit lanes, bus queue bypasses, and transit signal priority



Entry and exit through multiple doors, level with the station platform



Off-board fare payment



Frequent, all day service



Real-time rider information



Innovative station design



Unique brand identity for buses and stations



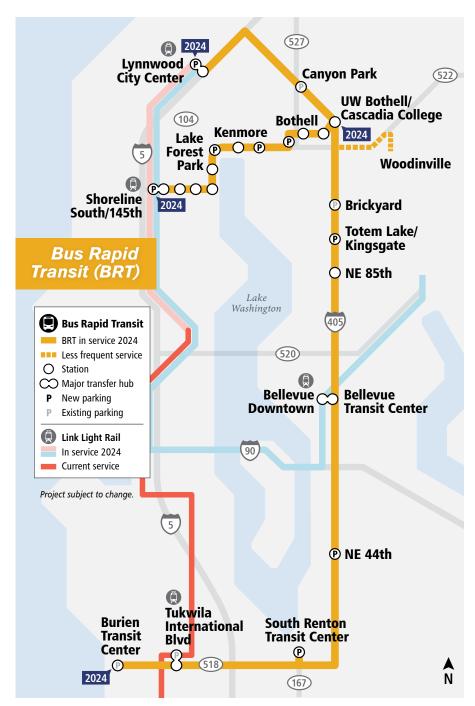
Dedicated fleet of BRT buses

These features will help riders avoid traffic congestion and enjoy more frequent and reliable service.

The ST3 Plan included two BRT projects, the I-405 BRT and this SR 522/NE 145th BRT. Both ST3 BRT projects were based on high-level project scopes, cost estimates and ridership forecasts. ST3 also established transit mode, general corridor, number of stations and representative station locations for both BRT projects.

SR 522/NE 145th **BRT** will connect communities from Shoreline to Woodinville via NE 145th Street, SR 522 and the transit center at UW Bothell/Cascadia College. The route has nine BRT stations and an expanded transit center at UW Bothell/Cascadia College. It will connect to Link light rail at the Shoreline South/145th Station and to I-405 BRT in Bothell. I-405 BRT will have two lines connecting communities along I-5, I-405

I-405 BRT will have two lines connecting communities along I-5, I-405 and SR 518 from Lynnwood to Bellevue and Bellevue to Burien with a new transit center in South Renton, 11 BRT stations and a new bus base. Connections to Link light rail will be available at Lynnwood, Bellevue and Tukwila. Connections to the SR 522/145th BRT will be available in Bothell.



Map of the SR 522/ NE 145th and I-405 BRT representative projects.

SR 522/NE 145th BRT Project History

The SR 522/NE 145th BRT Project was first proposed by the cities of Shoreline, Lake Forest Park, Kenmore, Bothell and Woodinville elected officials and staff, as well as the community coalition 522 Transit NOW! The coalition's continued advocacy helped to ensure that the Project was included on the ST3 ballot for the voters' consideration.



2015 community efforts

- Spring // City Managers Group started working together to support SR 522/NE 145th BRT Project.
- June/July // 522 Transit NOW! Coalition formed.
- August 27 // Sound Transit added SR 522/NE 145th BRT Project to the list of ST3 candidate projects.



2016 community efforts

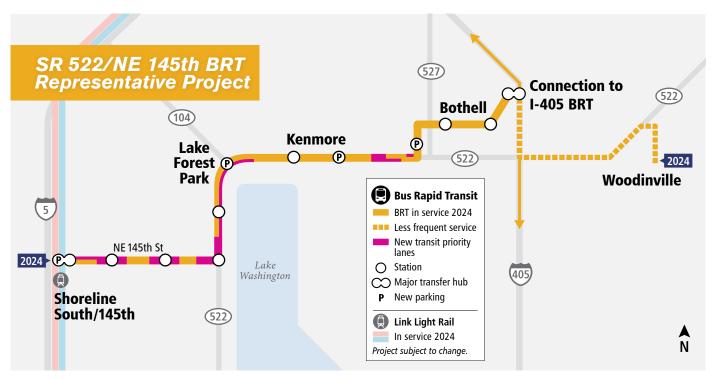
- January 12 // Joint City Council meeting held to show support for the SR 522/NE 145th BRT Project.
- March // SR 522/NE 145th BRT Project added to Draft ST3 Plan.
- June // Sound Transit Board released ST3 Plan.
- November 8 // Voters approved ST3, including SR 522/NE 145th BRT Project.



Coalition members and supporters turn out in 2016 to support adding the project to the ST3 Plan.

The ST3 plan documents, in 2016, included the following statements:

- This SR 522/NE 145th BRT project (the Project) will run along NE 145th Street and SR 522 from the South Shoreline Link light rail station near 1-5 and NE 145th Street in Shoreline to Bothell and Woodinville (the Corridor).
- Service will run every 10 minutes, all day between Shoreline and Bothell. Service continuing to Woodinville will run
 every 20 minutes.
- Riders will be able to connect to Link light rail at the Shoreline South / 145th Station, and to I-405 BRT in Bothell, as well as to King County Metro and Community Transit's extensive bus services throughout the Corridor.



SR 522/NE 145th BRT representative project map. The project refinement process in 2018 led to some changes explained later in this report.

The representative project included:

- On NE 145th Street, transit signal priority and bus queue bypasses to facilitate BRT travel through corridor traffic bottlenecks.
- On SR 522, new business access and transit (BAT) lanes through most of Lake Forest Park, Kenmore and Bothell,
 with transit-supportive improvements on arterials from downtown Bothell to UW Bothell/Cascadia College.
- Nine BRT station pairs along the route, plus an expansion of the existing transit center at UW Bothell/Cascadia College.
- Additional parking in Lake Forest Park, Kenmore and Bothell.
- New curbs and sidewalks in many locations along the corridor.

Station Design and Branding

Part of creating a new line of service is developing a new brand to accompany it. Sound Transit calls our region's commuter rail system Sounder and light rail Link. Sound Transit is excited to welcome bus rapid transit to the family and announce its name – Stride.

Sound Transit interviewed stakeholders inside and outside the organization to help develop a BRT brand. Common themes heard included a desire for the name to be memorable, short, easy to pronounce and integrate well with the overall Sound Transit brand.

The Stride name will be integrated with the design of the BRT system, including vehicles, stations, signage and marketing materials.

STRIDE

The BRT system will have a unique design that helps riders identify buses and stations. The Stride brand will:

- Differentiate BRT as premium transit service.
- Help riders navigate the system by making BRT easily identifiable and distinguishing it from other services.
- Allow Sound Transit to more effectively reach existing and new customers.
- Create a sense of place at our transit facilities.
- Generate excitement for public transportation and endure for generations.

BRT station features

- All-door entry and exit
- Off-board fare payment
- Level boarding at the platforms
- Lighting and directional signage
- Real-time rider information
- Sheltered and comfortable stations
- Unique brand identity
- Artwork



BRT station design

Sound Transit will continue to develop the BRT station design during the next few years. The rendering, left, shows the general station design concept. While stations will have a consistent look and feel throughout the Sound Transit BRT system, station design at each station location will vary based on ridership and site conditions.

Phase 1 Project Refinement and Screening Process

During Phase 1 in 2018, the BRT Team used the following process to develop Project refinements, review and evaluate those refinements, and share the refinements throughout the Corridor:



Start with the ST3 representative project

The representative project included in the ST3 Plan approved by voters provided the starting point for potential parking locations, station locations, roadway improvements and more.



Develop potential project refinements

Sound Transit took the representative project out to the community and to stakeholder groups, including the Elected Leadership Group, City Managers Group and Interagency Group, to determine which elements of the representative project could benefit from possible refinements.



Review project refinements

The BRT Team reviewed all potential project refinements, with additional input from stakeholder groups to determine which refinements appeared to support the project goals. Those options that did not appear to support the project goals were not carried forward.



Evaluate refinements

Sound Transit evaluated the remaining refinement options using the identified evaluation criteria and technical analysis. The BRT Team then further narrowed down potential project refinements with additional feedback from the community and stakeholder groups to develop a refined project for the full corridor.

5 After

Share refined project

After determining which project refinements best serve the community and meet the project goals, Sound Transit incorporated the refinements into a preliminary refined project. Sound Transit, then, shared the preliminary refined project, as a recommendation, with the community, Interagency Group and Elected Leadership Group for further input. In the spring of 2019, Sound Transit will request that the Sound Transit Board of Directors advance the refined project into the next project phase of conceptual engineering and environmental review.

A community engagement process involving four Corridor leadership and working groups facilitated the five steps.



Sound Transit Board

The Sound Transit Board oversees the implementation and delivery of the project, and has final authority to confirm the refined project and other major decisions. The Board will consider recommendations and feedback from the Elected Leadership Group, Interagency Group and the public when making decisions.



Interagency Group

Sound Transit is working closely to coordinate with agencies and governments as this project moves forward at a technical level, ensuring consistency with other city and agency plans and projects. This group is meeting monthly to provide technical expertise and input on the project refinement process. This group is comprised of the following agencies and governments: WSDOT, King County Metro, Community Transit, UW Bothell, Cascadia College, and the cities of Woodinville, Bothell, Kenmore, Lake Forest Park, Shoreline and Seattle.



Elected Leadership Group

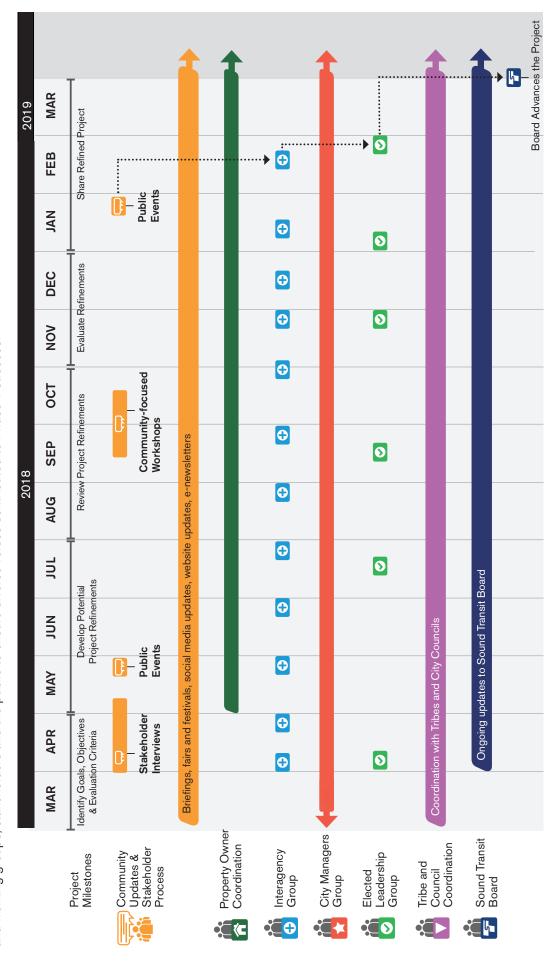
Made up of elected officials who represent the six cities along the project corridor, the Sound Transit Board and Washington State Department of Transportation (WSDOT), this group is focusing on reaching local agreement around key decisions, working through project issues, and making recommendations on the refined project.



City Managers Group

Made up of city managers representing Shoreline, Lake Forest Park, Kenmore, Bothell and Woodinville, this group has been working together since 2015 and helped ensure the project was included in the ST3 Plan for voter's consideration. They are continuing to meet at key project milestones to keep all jurisdictions focused on a corridor-wide perspective and make sure their respective councils are informed and involved.

The schedule below shows the Phase 1 timeline and activities for 2018 and into early 2019. The Project engaged the preceding leadership and working groups, stakeholders and the public to ensure diverse voices contributed to Phase 1 success.



The ST Board can, at the end of Phase 1, choose to advance the refined Project into Phase 2 for further analysis and community input during conceptual engineering and environmental review, starting in 2019.

Project Goals and Objectives

The Project began with the voter approved ST3 representative project. In order to refine the Project, the BRT Team developed a draft set of goals to guide refinement development, review, evaluation and recommendation. The BRT Team shared this draft set of goals with the Corridor leadership and working groups, with stakeholders and with the public. The BRT Team obtained input, comment and guidance from the Interagency Group (IAG), the City Managers Group (CMG), the Elected Leadership Group (ELG), property owners, stakeholders and the public during community engagement events during March, April and May of 2018. This feedback helped guide this final Phase 1 set of goals:

- 1. Deliver the Project on time and within the assigned budget.
- 2. Expand fast, frequent and reliable BRT service to the communities along the corridor, enhancing overall transit service for these communities and the region.
- Increase transit capacity and enhance connectivity to meet growing demand.
- 4. Make recommendations that are technically and financially feasible and sustainable.
- Maximize ridership, improve mobility and provide access for multiple modes and users.
- 6. Promote a healthy and sustainable environment.
- 7. Consider input from stakeholders, communities along the corridor and the public.
- Make recommendations that are consistent with local plans.

Throughout Phase 1, the BRT Team used these goals to review and evaluate the effectiveness of the various refinements that were considered for the Project.





Project Refinements Considered, Feedback Obtained, and Key Findings from this Phase

Phase 1 began with the Representative Project and the Project Goals. Based on technical analysis and feedback obtained from the outreach and engagement process, the BRT Team developed a range of refinements, including the following elements:

- Station locations.
- Parking locations within Lake Forest Park, Kenmore and Bothell.
- Roadway improvements for BRT priority, including business access and transit lanes, lanes re-purposed for transit, bus queue bypasses and transit signal priority.
- Sidewalk improvements as required to support BRT access and as found consistent with Sound Transit's system access policy.
- Service integration with King County Metro,
 Community Transit, ST Express and I-405 BRT.
- Connection to I-405 BRT and into Woodinville.
- Access for pedestrians and bicyclists (non-motorized access).



Summary of Refinements Considered

The list below summarizes the types of project refinements that were presented to each of the communities along the Corridor. These concepts were illustrated in planning phase documents that included exhibits, roll plots, and project goals and objectives evaluation summaries. ST presented all of the concepts and documentation for review and comment at Community and Stakeholder workshops and at Interagency Group, Elected Leadership Group and City Managers Group meetings.

NE 145th Street in Shoreline and Seattle, including:

- Five (5) BRT-focused roadway refinements
- Four (4) station refinement options

SR 522 in Lake Forest Park, including:

- Three (3) BRT-focused roadway refinements
- Four (4) station refinement options
- One (1) park and ride location

SR 522 in Kenmore, including:

- Four (4) station refinement options
- Two (2) park and ride location options

SR 522, local streets, I-405 and SR 522 in Bothell and Woodinville, including:

- Eleven (11) BRT-focused roadway refinements
- Eleven (11) station refinement options
- Three (3) park and ride location options

In addition, for each of these communities, the Phase 1 work began to examine sidewalks and access improvements needed for stations and to accommodate BRT-focused roadway improvements. This work will continue into Phase 2.

Service integration with King County Metro, Community Transit, ST Express and I-405 BRT was an underlying principle for all refinements. Several principles emerged from Phase 1 work with the transit agencies. These include:

- Fast, frequent, and reliable service.
- Customer focus: ease of navigation and transfers.
- Complimentary service.
- Common, dual-length station platforms should be used to the greatest extent possible.
- Short dwell time practices (e.g., off-board fare collection, all-door level boarding).

King County Metro, Community Transit, and ST are expected to be developing agreements during Phase 2 to incorporate these principles into their operations.

As a result of the transit integration work, the BRT Team identified potential additional stations, dual-length platforms and shared approaches to park and ride locations that were not part of the ST3 representative project. The BRT Team also recommended adjustments to the Project's service plan so that all Project trips in Bothell (versus the representative project's "every other trip" plan) would meet the I-405 BRT service.

Evaluating the Refinements

The refinements described, generally, in the preceding section entitled, "Summary of Refinements Considered" for each of the communities were evaluated for performance relative to the eight goals defined in Section 1.3. These evaluations were presented for review and comment during the Community Workshops in September and October 2018, at IAG, CMG and ELG meetings, and in individual community meetings throughout the Corridor. The evaluations that were presented during those various meetings are included as exhibits within this Executive Summary. (See the Appendix at the end of this Executive Summary for evaluations as shared with the public at the workshops.)

Feedback about the refinements and the evaluations reflected the following themes:

From the communities and agencies who make up the IAG, CMG and ELG:

- Supportive of BRT and transit priority improvements.
 - Support for full BAT lane implementation on SR 522.
 - Support for additional parking in Lake Forest Park, Kenmore and Bothell.
 - Desire for transit-oriented development (TOD) coordination with stations and park and rides.
- Seeking transit service integration, including east of navigation and transfers, as well as complimentary service.
- Recognition of cost constraints, but tempered by the desire to incorporate local and agency plans into the Project to the greatest extent possible. Requests for:
 - Improvements beyond BRT alone on NE 145th Street.
 - Non-motorized access improvements, such as sidewalks and bicyclist/pedestrian accommodations, beyond that required for BRT alone.

From the general public:

- General support for transit priority improvements throughout the project corridor to keep BRT service fast and reliable.
- Questions about property impacts.
- Request for extended hours of operation and increased frequency of BRT service.
- Desire for more parking options.

- Access to BRT stations and parking locations should be improved by creating better options for walking, biking, rideshare and shuttle services.
- Questions about how the new SR 522/NE 145th BRT line might affect existing service.

From the transit agencies and bus drivers:

- Support for full transit integration between the various transit agencies.
- Support for the full BAT lane implementation on SR 522.
- Support for in-lane stops (vs. pull-outs and queue bypass lanes).

From technical analyses:

In addition, the BRT Team conducted extensive technical analyses that are documented in the full SR 522/NE 145th BRT Phase 1 Report. This included:

- Traffic analyses that support extensive use of BAT lanes on NE 145th Street and SR 522 to mitigate the effects of existing and 2042 forecast traffic queueing.
- Ridership analyses projecting 8,800 riders in 2042, including strong locations (like UW Bothell and Cascadia College (UWB/CC) and along SR 522.
- Environmental considerations, including lower-income housing along NE 145th Street, streams such as Littles Creek and Lyons Creek, and the heron rookery at the Kenmore Park & Ride.

Refined Project

The BRT Team has identified a Refined Project based on the analyses and the feedback obtained to date. The Refined Project is a Corridor-wide hybrid derived from the most effective refinements highlighted in the Exhibits that are contained within this Executive Summary. The map identifies the project elements that make up the Refined Project.



^{*} Station pairs are stations on either side of the roadway for inbound and outbound service.

Key features of SR 522/NE 145th BRT



Service every 10 minutes to Bothell; every 20 minutes to Woodinville

30-minute travel time from UW Bothell/Cascadia Community College to South Shoreline



Up to 19 hours of service Monday – Saturday; up to 17 hours of service on Sunday



Connections to Link light rail in Shoreline and I-405 BRT in Bothell



Shared stations with King County Metro where feasible



Short dwell time features at stations including: dualbus platform length, level boarding, and off-board fare payment



Approximately 900 new parking stalls in the corridor



Increased transit ridership



Consistent station branding

^{**} The Sound Transit Board may implement provisional station pair(s) based upon the results of Phase 2 assessments in 2019 and identification of funding for station design, construction and operation. The Phase 2 assessment will include land use and zoning, ridership potential, transit integration with King County Metro, non-motorized access and community input.

SR 522 / NE 145th Street BRT Roadway Selections

Shoreline / Seattle

NE 145th Street from 5th Avenue NE to 17th Avenue NE (North Side)

ROADWAY REFINEMENT SELECTION	REASON SELECTED	
 BAT lane / queue bypass on north side of 145th from 5th Avenue to approximately 17th Avenue NE. Station pair at 15th Avenue NE. 	 Reliable BRT service on the western part of NE 145th Street from approximately 17th Avenue NE to 5th Avenue NE. 	
Multi-use path on north side of NE 145th Street from 5th Avenue NE to approximately 17th Avenue NE.	 Allows BRT to bypass the traffic queues that affect westbound traffic flow approaching the I-5 interchange. 	
Power line relocation, where necessary.	 Leverages the Lynnwood Link right-turn lane westbound at 5th Avenue NE. 	
	 Per traffic flow simulation (Vissim), provides AM peak westbound BRT travel time savings of approximately five minutes relative to general purpose traffic in 2042. 	

NE 145th Street from 5th Avenue NE to 17th Avenue NE (South Side)

ROADWAY REFINEMENT SELECTION	REASON SELECTED	
 Queue bypass lane from approximately 12th Avenue NE to 17th Avenue NE, including the NE 145th Street / 15th Avenue NE intersection. 	Reliable BRT service on the western part of NE 145th Street from 5th Avenue NE to 17th Avenue NE.	
Station pair at 15th Avenue NE.	 Leverages the Lynnwood Link southbound intersection improvement on 5th Avenue NE. 	
 Sidewalk on south side of NE 145th Street from 12th Avenue NE to 17th Avenue NE to facilitate station access. Power line relocation, where necessary. 	 Per Vissim, provides PM peak eastbound BRT travel time savings of 53 seconds relative to general purpose traffic in 2042. 	

NE 145th Street from 17th Avenue NE to approximately 25th Avenue NE

ROADWAY REFINEMENT SELECTION	REASON SELECTED	
BRT runs in general purpose lanes, within existing curb lines from 17th Avenue NE to and beyond the NE 145th Street and 25th Avenue NE intersection.	 Reliable BRT service is predicted through 2042 based on Vissim modeling, except for the NE 145th Street / 25th Avenue NE intersection, where intersection treatments are 	
 Station pair at 25th Avenue NE to be further evaluated in Phase 2. King County Metro will provide frequent service from this location to the light rail station. 	 being evaluated. Intersection improvements may provide improved BRT service and improved pedestrian access. 	
 Provide intersection treatments at 25th Avenue NE to facilitate safe, reliable BRT movement through the signalized intersection in order to improve BRT travel time. 		
Provide sidewalks where roadway widening is required.		

NE 145th Street from approximately 25th Avenue NE eastward through 30th Avenue NE

ROADWAY REFINEMENT SELECTION	REASON SELECTED
BRT runs in general purpose lanes, within exist lines from the east side of the 25th Avenue NE treatment to 30th Avenue NE.	· ·

Shoreline / Seattle / Lake Forest Park

NE 145th Street and SR 522 intersection – along NE 145th Street from 30th Avenue NE to 400 feet north of the NE 145th Street/SR 522 intersection

_			
ROADWAY REFINEMENT SELECTION		REASON SELECTED	
	 BRT runs in eastbound BAT lane that is added between 30th Avenue NE and 32nd Avenue NE to allow bus 	 Reliable BRT service, based on the listed refinements, is predicted through 2042 based on Vissim modeling. 	
	movement into the through / bus left-turn-only lane between 32nd Avenue NE and SR 522.	 Station provides service for the community and connections to King County Metro service. 	
	 BRT makes the eastbound left turn via a through general purpose / bus left-turn-only lane located between 32nd Avenue NE and SR 522. 	 Intersection improvements will provide improved BRT service and pedestrian access. 	
	Sidewalks, associated with widening.	Right-turn pocket addition facilitates safe, reliable BRT movement through the SR 522 / NE 145th	
	 Provide right-turn pocket addition eastbound on NE 145th Street. 	Street intersection.	
	 Provide station pair at the SR 522 / NE 145th Street intersection. Further refinements to this intersection, including station location, will be evaluated in Phase 2. 	 Sidewalks, associated with widening, will allow pedestrian bicycle access to BRT. 	

Lake Forest Park

SR 522 in Lake Forest Park

ROADWAY REFINEMENT SELECTION		REASON SELECTED	
•	Replace the existing two-way-left-turn lane between approximately NE 147th Street and NE 170th Street	•	Delivers reliable BRT service via completion of the BAT lanes on SR 522.
	and widen, construct and complete the BAT lane on the eastbound / outbound portion of SR 522 between approximately NE 145th Street and NE 170th Street.	•	Stations provide service for the community and connections to King County Metro service.
	Existing left-turn lanes/pockets will be retained.	•	Stations and sidewalks will provide improved BRT service
	Add sidewalks on the lake side, associated with widening.		and pedestrian access.
-	Provide station pairs at NE 153rd Street and Lake Forest Park Town Center.	•	Right turns will be accommodated via U-turn provisions at signalized intersections.
-	Add a provisional station at NE 165th Street.	•	Sidewalks, associated with widening, will allow pedestrian / bicycle access to BRT.
-	Park & Ride will be added at Lake Forest Park Town Center.		

Kenmore

SR 522 in Kenmore

ROADWAY REFINEMENT SELECTION	REASON SELECTED	
 Utilize existing SR 522 BAT lanes in Kenmore. Provide station pairs at 68th Avenue NE and 73rd Avenue 	Delivers reliable BRT service via the existing Kenmore BAT lanes on SR 522.	
NE / Kenmore Park & Ride.	Stations provide service for the community and connections to King County Metro service.	
 Add provisional stations at 61st Avenue NE and 80th Avenue NE. 	Park & Ride location at the existing site leverages	
Park & Ride will be located at the existing Kenmore Park & Ride site.	existing investment and City TOD plans. Provisional stations support transit integration goals and	
 Includes Sound Transit contribution toward a pedestrian bridge near the Park & Ride. 	provide access to BRT.	

Bothell

SR 522 in Bothell

ROADWAY REFINEMENT SELECTION	REASON SELECTED	
 Construct Bothell's "Stage 3" project on SR 522 to add BAT lanes between Kenmore and Wayne Curve / 96th Avenue NE. 	 Delivers reliable BRT service via BAT lanes on SR 522. Sidewalks, associated with widening, will allow pedestrian / bicycle access to BRT. 	
Complete a westbound BAT lane between 98th Avenue NE and Wayne Curve.	 Intersection treatments at SR 522 and NE 180th Street and SR 522 and 98th Avenue NE will facilitate BRT 	
 Intersection treatments at SR 522 and NE 180th Street and SR 522 and 98th Avenue NE. 	movements into and out of downtown Bothell.	
 Sidewalks, on the west side (westbound) of SR 522, associated with widenings. 		

BRT in Downtown Bothell

ROADWAY REFINEMENT SELECTION	REASON SELECTED	
 BRT operates on Bothell city streets (98th Avenue NE, NE 185th Street, 110th Avenue NE, Beardslee Boulevard, and NE 195th Street) to the I-405 interchange. 	Delivers frequent BRT service to Downtown Bothell, UW-B/CC, and the connection to I-405 BRT. Intersection treatments will facilitate BRT movements in	
 Provide station pairs at 98th Avenue NE / NE 183rd Street, NE 185th Street / 103rd Avenue NE, NE 185th Street at UW-Bothell / Cascadia College (UW-B/CC), and NE 195th Street / I-405 interchange. 	downtown Bothell. Park & Ride location at Pop Keeney Stadium leverages existing investment, school district, and City plans.	
 Intersection treatments along NE 185th Street. 		
 Park & Ride will be located at the Pop Keeney Stadium surface parking lot site. 		

Bothell / Woodinville

BRT to Woodinville

ROADWAY REFINEMENT SELECTION	REASON SELECTED
 Every other BRT trip (i.e., 20-minute headways) continues from NE 195th Street in Bothell to Woodinville Park & Ride. 	Delivers BRT service to Woodinville via I-405 and SR 522.

SR 522 / NE 145th Street BRT Station Selections

Station	City	2042 Boardings (8,800 Total)	Reason Selected
South Shoreline	Shoreline	3,800	Link light rail connectionRegional connections
15th Avenue NE	Shoreline / Seattle	200	Shoreline and Seattle connectionUpzone proximity
25th Avenue NE (Station to be evaluated further)	Shoreline / Seattle	200*	Neighborhood connectionsKing County Metro (KCM) connections
NE 145th Street & SR 522	Shoreline / Seattle	400	Neighborhood connectionsKCM connections
NE 153rd Street	Lake Forest Park	300	Neighborhood connections
NE 165th Street (Provisional Station)	Lake Forest Park	300*	Neighborhood connectionsKCM connections
Lake Forest Park Town Center	Lake Forest Park	600	Park & Ride stationKCM connections
61st Avenue NE (Provisional Station)	Kenmore	400*	Neighborhood connectionsKCM connections
68th Avenue NE	Kenmore	800	Connection to Kenmore's town center
73rd Avenue NE / Kenmore Park & Ride	Kenmore	1,000	Park & Ride stationKCM connections
80th Avenue NE (Provisional Station)	Kenmore	400*	Neighborhood connectionsKCM connections
98th Avenue NE & NE 183rd Street	Bothell	400	Park & Ride stationTOD proximity
NE 185th Street & 103rd Avenue NE	Bothell	400	 Community Transit (CT) connections Downtown Bothell connection
UW-Bothell / Cascadia College	Bothell	800	College Campus Transit CenterConnections to CT and KCM
Beardslee Boulevard / NE 195th Street / I-405	Bothell	400*	Neighborhood connectionsConnections to CT and KCM
Woodinville Park & Ride	Woodinville	100	Park & Ride station (existing Park & Ride)End of line station

Boardings are ridership forecasts for ST BRT service and do not include boardings for other routes that are planned for these stations. The increasing densities from Shoreline's upzoning and increased densities in Bothell may increase ridership.

The Board may implement a Provisional Station based upon the results of Phase 2 assessments in 2019 and identification of funding for station design, construction, and operation. The Phase 2 assessment will include ridership potential, transit integration with King County Metro, non-motorized access, and community input. Factors that will guide station location decisions include ridership, land use, zoning, population and employment density, consideration of complementary transit service, and stop spacing.

^{*} Boardings estimated, but not included in total boardings; will be updated in Phase 2.

Next Steps

Sound Transit's BRT Team will continue its work on all Refined Project elements with the communities and stakeholders, the other Transit Agencies, and the IAG, ELG, and CMG during the upcoming Phase 2 Conceptual Engineering and Environmental process during 2019 and in early 2020. In addition to conceptual engineering and environmental development of the Refined Project, the following next steps will also be part of Phase 2:

In Shoreline and Seattle, along NE 145th Street, 5th Avenue NE and other intersecting streets, Sound Transit will:

- Continue to work with WSDOT, Shoreline and Seattle to consider how BRT could potentially be modified to work with Shoreline / WSDOT's plans for roundabouts at the I-5 interchange. This may include an assessment of BRT trip time savings and reliability; and cost, environmental, and community impacts.
- Conceptually design station pair platform locations that meet rider, community and Transit Operator requirements.
- Evaluate the BRT station pair at 25th Avenue NE for continued inclusion in the Refined Project.
- Continue WSDOT Intersection Control Evaluation (ICE) analysis early in ST's Phase 2 in 2019.
- Continue to evaluate the design of improvements at the intersection of SR 522 and NE 145th Street.

In Lake Forest Park, along SR 522, at Lake Forest Park Town Center, and at other intersecting streets, Sound Transit will:

- Continue to assess BRT improvements with Lake Forest Park, King County Metro and WSDOT during ST's Phase 2 in 2019.
- Conceptually design station pair platform locations that meet rider, community and Transit Operator requirements.
- Evaluate the provisional station at NE 165th Street.
- Assess coordinated / joint development plans for Park & Ride.

Elements of the project design to be developed (2019-2022):

- Roadway crosssections, including BAT lanes, lanes and sidewalks
- Intersection improvements
- Station design, orientation, access, and circulation
- Parking structures
- Wayfinding and signage placement
- Environmental mitigation improvements
- Landscaping
- Public art elements

In Kenmore, along SR 522, at the Kenmore Park & Ride, and at other intersecting streets, Sound Transit will:

- Conceptually design station pair platform locations that meet rider, community and Transit Operator requirements.
- Evaluate the provisional stations at 61st Avenue NE and 80th Avenue NE.
- Assess coordinated / joint development plans for Park & Ride with King County Metro and the City of Kenmore.
- Assess pedestrian bridge plans during ST's Phase 2 in 2019.

In Bothell and Woodinville, along SR 522, at the proposed Pop Keeney Stadium Park & Ride, and along Bothell's and Woodinville's street networks, Sound Transit will:

- Continue to assess BRT improvements with Bothell, King County Metro and WSDOT.
- Assess Downtown Bothell routing and station location in conjunction with I-405 BRT.
- Conceptually design station pair platform locations that meet rider, community and Transit Operator requirements.
- Conduct additional traffic analysis to better assess BRT operations through downtown Bothell.
- Assess coordinated / joint development plans for Park & Ride.
- Analyze BRT service with Woodinville and King County Metro during ST's Phase 2 in 2019.