

CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE: Sound Transit State Route 522/SR523 Bus Rapid Transit Project Update

DEPARTMENT: Public Works, Transportation Division

PRESENTED BY: Nytasha Sowers, Transportation Services Manager

ACTION: ☐ Ordinance ☐ Resolution ☐ Motion
 ☒ Discussion ☐ Public Hearing

PROBLEM/ISSUE STATEMENT:

On November 27, 2017 Sound Transit (ST) staff provided an update on the Sound Transit 3 (ST3) Plan with a focus on initiating Phase 1 of the planned bus rapid transit (BRT) line operations and capital improvements on State Route 522/State Route 523 (NE 145th Street) from Shoreline to Woodinville. The ST presentation included a presentation of the SR 522/NE 145th Representative Project. The Representative Project includes a project scope, high-level project cost estimates, ridership forecasts, the number and location of BRT stations as well as roadway capital improvements to support frequent and reliable transit service. A map of the Representative Project is included as Attachment A.

In 2018, ST utilized stakeholder input and additional technical analyses to further evaluate and refine the Representative Project with the intention of incorporating the collective modifications into an updated set of project improvements to be carried into Phase 2, the Conceptual Engineering and Environmental Review phase of the project. This updated project is entitled the Refined Project. In March of 2019, ST staff will ask its Board of Directors to advance the consultant contract for the Refined Project into Phase 2. A map of the draft Refined Project is included as Attachment B.

ST's project includes a signal improvement to the 5th Avenue and 145th intersection and associated new bus and right turn only lanes. The City is also in the process of designing multi-modal access improvements for this intersection as part of its 145th and I-5 Interchange project. WSDOT has design approval for the interchange and asked the City to evaluate roundabouts as one of its improvement alternatives for this intersection. The City's traffic analysis determined that construction of a roundabout (with transit sharing general purpose lanes) resulted in delays generally less than (LOS B) or equal to the ST3 proposal with significantly less property impacts. The City is therefore requesting ST to consider a roundabout to improve transit performance at this intersection instead of the signal improvement and new bus lane it currently has identified as part of its draft Refined Project.

As Sound Transit transitions from Phase 1 to Phase 2 of the project, it is asking the City of Shoreline to enter into a Partnership Agreement that will memorialize the Refined Project and outline the City's requirements to streamline its permitting of ST's roadway improvements within the City's jurisdiction. City staff is currently in the process of reviewing ST's draft agreement and will ensure it addresses the City's interests and concerns. Given the issues under discussion, including ST's evaluation of a roundabout to provide Sound Transits' desired intersection performance improvements, it is likely that this agreement will not be executed before ST staff ask its Board of Directors to advance the consultant contract of the Refined Project into Phase 2, Conceptual Engineering and Environmental Review phase of the project. The City of Shoreline and Sound Transit have been working productively together and are expecting to develop a Refined Project that can be supported by agencies during Phase 2 of the project.

Tonight, staff from Sound Transit, will provide an update on the ST3 Plan implementation and then on the SR 522/523 BRT project's proposed Refined Project and next steps to implement the project.

RESOURCE/FINANCIAL IMPACT:

Staff will work with Sound Transit to further the design of the SR 522/523 BRT project along the 145th Street corridor (SR 523). The ultimate design of Sound Transit's project may not include all the elements of the City's adopted 145th Street Multi-modal Corridor Study Preferred Design Concept. If future improvements are desired, reflective of the City's Preferred Design Concept, then capital dollars would need to be sought by the City of Seattle, King County, Metro and/or the City of Shoreline.

RECOMMENDATION

There is no action required with this agenda item as this report is for discussion purposes only. Council should provide feedback on the Refined Project and any modifications that Council would like considered as the project moves to Phase 2. Council is encouraged to ask questions of Sound Transit staff regarding the ST3 Plan and SR 522/523 BRT project.

Approved By: City Manager **DT** City Attorney **MK**

BACKGROUND

On November 27, 2017 Sound Transit (ST) staff provided an update on the Sound Transit 3 (ST3) Plan with a focus on initiating Phase 1 of the planned bus rapid transit (BRT) line operations and capital improvements on State Route 522/State Route 523 (NE 145th Street) from Shoreline to Woodinville. The staff report for this discussion can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2017/staffreport112717-8a.pdf>.

In 2018 the City Council also met with the cities of Lake Forest Park and Kenmore and sent a five-city joint letter to the ST Board regarding the ST alternatives being considered. This letter is included with this staff report as Attachment C.

The Representative Project, as approved by the voters as part of ST3, included new left turn lanes, bus queue jumps, and new bus only or right turn lanes (BAT lane). The Representative Project has a western terminus at the future Shoreline South/145th Link Light Rail station (serving the SR 523/I-5 interchange). The Project continues along SR 523 to the intersection with SR 522 (Bothell Way NE) and continues along SR 522, 98th Avenue NE, NE 185th Street and Beardslee Blvd to the University of Washington (UW) Bothell campus and then to NE 195th Street and the Woodinville Park and Ride. The Project includes nine bus station pairs, three 300-stall parking garages, and a transit center planned at UW Bothell/Cascadia College as part of the project. A description of the Representative Project is included in Attachment A.

DISCUSSION

Comparison of Sound Transit's Representative and Refined Projects in Shoreline

In 2018, ST utilized stakeholder input and additional technical analyses to further evaluate and refine the Representative Project with the intention of incorporating the collective modifications into an updated set of project improvements entitled the draft Refined Project. A comparison of ST's Representative Project and ST's Refined Project on 145th are summarized below.

- **The 145th and 5th Avenue NE Intersection.** There is no change in proposed improvements from the Representative Project to the draft Refined Project for the segment of 145th between 5th Avenue NE and approximately 17th Avenue NE. Like the Representative Project, the draft Refined Project proposes signal improvements at the 145th and 5th Avenue NE intersection and the extension of a westbound bus and right only turn lane from the between 5th Avenue NE and 8th Avenue NE all the way back to approximately 17th Avenue NE and eastbound from the Jackson Park golf course to 17th Avenue NE. Please note that Sound Transit is reviewing an alternative Improvement concept proposed by the City of Shoreline for this intersection (a roundabout) as described below.
- **145th and 25th Avenue NE.** The Representative Project identified new bus queue jumps for several blocks east and west of the planned 25th Avenue BRT stations on the north and south side of NE 145th Street. The Refined Project proposes a new left turn pocket at 25th Avenue NE instead of new bus lane improvements

and identifies these stations as “subject to further evaluation in Phase 2” before they are selected to be part of the final project to be constructed.

145th and Bothell Way. The Representative Project identified a pair of BRT stations on the north and south side of 145th to the east of Bothell Way. The Refined Project states that the location of the BRT stations will be determined in future phases of the project and only shows a new bus lane eastbound between 30th Avenue NE and Bothell Way/SR 522. Currently the proposed station locations for the eastbound direction is on Bothell Way/SR522 just north of the 145th/SR522 intersection and for the westbound direction on 145th – just west of the 145th/SR522 intersection.

ST has stated that sidewalk improvements will only be made where ST is rebuilding the roadway and does not plan to include an off-corridor bike network as was defined as a key component of the City of Shoreline’s Preferred Design Concept. A map of ST’s Refined Project is included as Attachment B.

Roundabouts at the 145th and I-5 Interchange

As Sound Transit is developing their Refined Project, the City of Shoreline has also continued design of the 145th and I-5 Interchange Project. The City received \$ 3.89 million dollars in federal funding to complete the design and environmental phase of the 145th and I-5 interchange project (<http://www.shorelinewa.gov/our-city/145th-street-corridor/sr-523-n-ne-145th-street-i-5-interchange-project>).

The preferred multi-modal improvements for the interchange have progressed since Council’s adoption of the 145th Preferred Design Concept in April 2016 (<http://www.shorelinewa.gov/home/showdocument?id=29399>). The initial proposed improvements included a new northbound on ramp from eastbound 145th that looped south under the existing 145th bridge deck and then merged into I-5 northbound. As part of WSDOT’s design review process for proposed interchange improvements the state required the City to evaluate roundabouts. Through this evaluation the City determined that three roundabouts could be constructed instead of the interchange improvements proposed as part of Shoreline’s Preferred Design Concept at a lower cost and with as good if not better access and performance for buses, other vehicles, bikes and pedestrians.

An overview of the initially proposed 145th and I-5 interchange improvements and the new proposed roundabouts to replace the initial design concept is presented as Attachment D. As noted earlier, both the City’s *initial* Preferred Design Concept and Sound Transit’s draft Project identify bus and right turn only lanes from the 5th Avenue and 145th intersection back to approximately 17th Avenue NE. The proposed roundabouts provide a significant improvement in traffic performance (most operating at LOS B) and are expected to eliminate the need for a new dedicated bus and right turn only lane in addition to the existing general-purpose lanes.

Although there is a perceived safety risk to pedestrians and cyclists with roundabouts this perception is not substantiated by accident data from roundabouts across the state and country – and that the level of pedestrian service at roundabouts is significantly better than a signalized counterpart, even if some added walking distance is required

(see Attachment E for a staff white paper addressing safety and access concerns regarding roundabouts).

In addition to access and performance benefits the roundabouts could substantially reduce significant property impacts on the north side of 145th between 5th Avenue NE and 17th Avenue NE (see description above) than would be required under ST's Refined Project improvements. Given the performance benefits, reduction in property impacts and cost savings the City of Shoreline is requesting ST to evaluate a roundabout at 145th and 5th Avenue as part of their design and environmental review phase of the project. As the intersection is part of a state route, the Washington State Department of Transportation (WSDOT) will have final design approval for the proposed round about. WSDOT has had a favorable reaction to the concept to date and is anticipated to approve this design as the project progresses.

Next Steps

In March of 2019 Sound Transit staff will ask its Board of Directors to advance the consultant contract of the Refined Project into Phase 2, Conceptual Engineering and Environmental Review phase of the project.

Prior to completion the first phase of this project (Phase 1) Sound Transit would like to enter into an agreement with the City to both memorialize its Board adopted Refined Project and establish a commitment to streamline the permitting process. This agreement is anticipated to build on the Partners' Concurrence Document signed by Sound Transit and the City of Shoreline in October of 2017 that broadly outlined the approach that ST will take to work collaboratively with the City of Shoreline to deliver the Project on time. A copy of the Partner's Concurrence Document is included as Attachment F.

City staff is currently in the process of reviewing ST's draft agreement and will ensure it addresses the City's interests and concerns. Given the issues under discussion, including ST's evaluation of a roundabout to provide Sound Transits' desired intersection performance improvements, it is likely that this agreement will not be executed before the ST Board action in March to move into Phase 2 of the project. However, the City of Shoreline and Sound Transit have been working productively together and are expecting to develop a Refined Project that can be supported by agencies soon after the March ST Board action.

During Phase 2, Sound Transit will complete environmental review of the Project, review City's development regulations and identify and document any actions necessary. After the Sound Transit Board identifies the Project to be built, Sound Transit will begin the Implementation Phase. If appropriate, the Parties may negotiate and execute agreements necessary to complete right-of-way acquisition, permitting, construction, and/or ownership and maintenance of infrastructure constructed with the Project. A current schedule for the Project is included as Attachment G. As project development proceeds, updated schedules will be developed by Sound Transit and shared with project partners for review and input.

Tonight's Council Meeting

Tonight, staff from Sound Transit, will provide an update on the ST3 Plan implementation and then on the SR 522/523 BRT project's proposed Refined Project and next steps to implement the project.

COMMUNITY ENGAGEMENT

Sound Transit hosted ten community workshops from May 2018 through January 2019 including community workshops in Shoreline in May 2018, October 2018 and January 2019. At these workshops Sound Transit shared information on project refinement options that were developed based on technical analysis and community feedback during its Phase 1 outreach from May 2018 to January 2019. The workshops provided opportunities for specific, localized feedback to further inform the recommended project refinement options. Sound Transit identified the following overall key themes from these community engagement activities:

- Support for BRT service, BAT lanes and transit service integration,
- Support for bike racks and bike storage facilities at and near BRT stations,
- Support for keeping existing direct transit connections to downtown Seattle, and
- Concerns about traffic congestion and impacts.

In addition to the themes identified above, Sound Transit also identified business access, property impacts and pedestrian safety as concerns for the north Seattle and Shoreline communities.

In addition to holding multiple community workshops, ST has also engaged a staff level Interagency Work Group, a City Managers group and an Elected Leadership Group to review and discuss potential project refinements. These groups met multiple times in 2018 through the end of February 2019 to inform Sound Transit's development of their Refined Project. The last Sound Transit presentation to the Interagency Work Group, which includes an overview of community engagement activities over the last year, key elements of the Refined Project, and Next Steps, is included as Attachment H.

RESOURCE/FINANCIAL IMPACT

Staff will work with Sound Transit to further the design of the SR 522/523 BRT project along the 145th Street corridor (SR 523). The ultimate design of Sound Transit's project may not include all the elements of the City's adopted 145th Street Multi-modal Corridor Study Preferred Design Concept. If future improvements are desired, reflective of the City's Preferred Design Concept, then capital dollars would need to be sought by the City of Seattle, King County, Metro and/or the City of Shoreline.

COUNCIL GOALS ADDRESSED

This project is addressing the following City Council Goals:

- Council Goal 2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public service.
- Council Goal 3: Continue preparation for regional mass transit in Shoreline.

RECOMMENDATION

There is no action required with this agenda item as this report is for discussion purposes only. Council should provide feedback on the Refined Project and any modifications that Council would like considered as the project moves to Phase 2. Council is encouraged to ask questions of Sound Transit staff regarding the ST3 Plan and SR 522/523 BRT project.

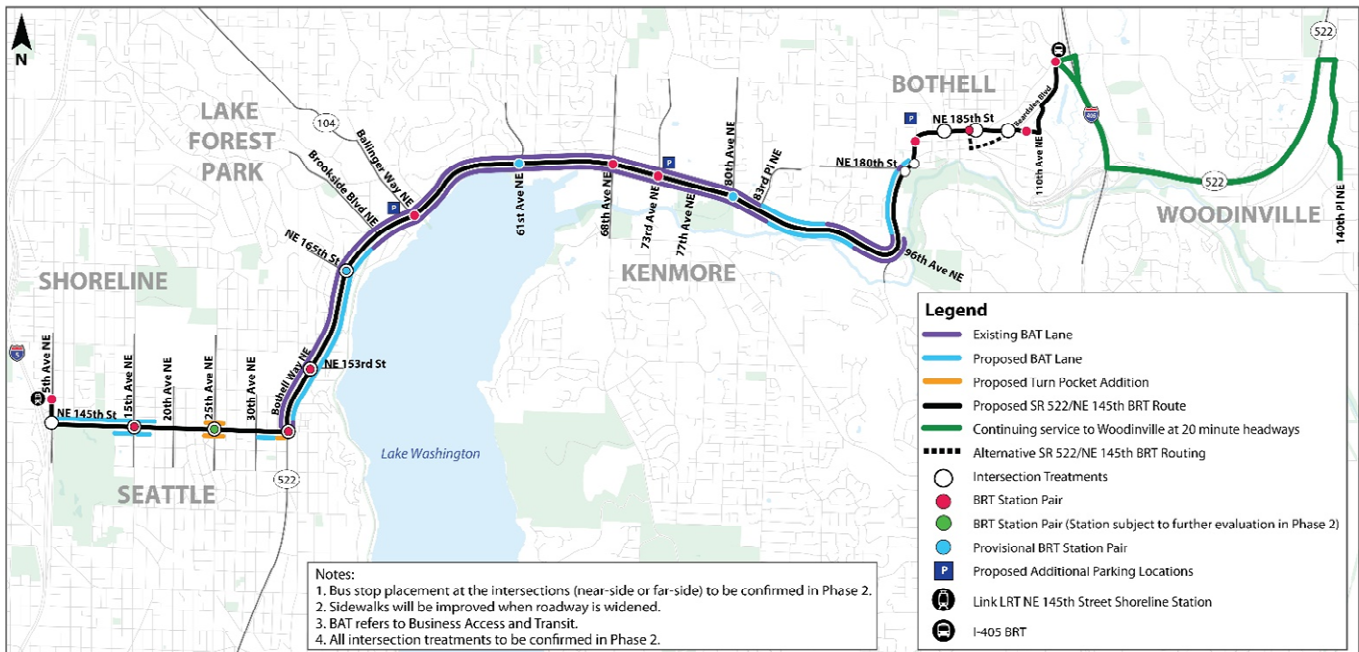
ATTACHMENTS

- Attachment A – SR 522/SR 523 BRT Representative Project
- Attachment B – SR 522/SR 523 BRT Refined Project
- Attachment C – City of Shoreline Letter to ST Board
- Attachment D – 145th and I-5 Interchange Improvement Options
- Attachment E – Multilane Roundabouts: Pedestrian Safety, Accessibility and Level of Service
- Attachment F – SR 522/SR 523 BRT Partners Concurrence Document
- Attachment G – SR 522/SR 523 BRT Project Schedule
- Attachment H – SR 522/NE 145th BRT Project Update for the Interagency Group

Attachment B

Sound Transit SR %22/NE 145th BRT Refined Project

SR 522/NE 145th BRT - Refined Project



Date: 2/13/2019



Key features of SR 522/NE 145th BRT

- Service every 10 minutes to Bothell; every 20 minutes to Woodinville.
- Up to 19 hours of service Monday – Saturday; up to 17 hours of service on Sunday.
- 30-minute travel time from UW Bothell/Cascadia Community College to South Shoreline.
- 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: dual-bus platform length, level boarding, and off-board fare payment.
- Approximately 900 new parking stalls in the corridor.
- Increased transit ridership.
- Consistent [BRT](#) station branding.

Key project refinements

- Four BRT station pairs (including one subject to further evaluation in Phase 2) at:
 - Shoreline South/145th LRT Station.
 - NE 145th Street and 15th Avenue NE.
 - NE 145th Street and 25th Avenue NE (subject to further evaluation).
 - SR 522 and NE 145th Street.
- Westbound business access and transit (BAT) lane on NE 145th Street from 17th Avenue NE to 5th Avenue NE.
- Sidewalk along the north side of NE 145th Street between 17th Avenue NE and 5th Avenue NE.
- Left turn pockets at 25th Avenue NE.
- Transit priority lanes at SR 522/NE 145th Street intersection; sidewalk improvements where lanes added.
- General purpose lanes utilization from approximately 17th Avenue NE to 32nd Avenue NE.
- Transit signal priority at signalized intersections.

Shoreline & Seattle refinements



ATTACHMENT C



November 13, 2018

Chairman Dave Somers and Sound Transit Board
Sound Transit
401 South Jackson Street
Seattle, WA 98104

Dear Chairman Somers and Members of the Board:

The cities of Bothell, Kenmore, Lake Forest Park, Shoreline, and Woodinville look forward to 2024 when the SR522/523 Bus Rapid Transit (BRT) project will start service. Our cities came together to advocate for this project as part of the Sound Transit 3 (ST3) ballot measure. The representative project included in the ballot measure reflected our collective vision of bus rapid transit connecting our cities to the Shoreline South Light Rail Station and to the I-405 BRT services in Bothell. In essence, it gives our 150,000 residents integrated transit service linked to the regional light rail system.

In order to meet this vision our cities understood that it would require our political support to implement improvements in a timely manner, including those with impacts to private property owners, in order to ensure that this “early win” project would be in place by the opening of the Lynnwood Link Extension in 2024. We are still committed to providing this support to Sound Transit so that a successful project can be delivered to our communities and the region.

In light of this we are writing to express our concerns regarding some proposed “refinements” being considered by Sound Transit for the SR 522/523 Bus Rapid Transit (BRT) project. We feel strongly that these refinements will compromise key elements of the project as was set out in the Sound Transit 3 plan including 10-minute headways between the Shoreline South/NE 145th Street Light Rail Station and UW Bothell, 20-minute headways between UW Bothell and Woodinville, and coordinated connections to the I-405 BRT service. Ultimately travel times along the project are to be 28 minutes to/from Bothell to the Shoreline South Light Rail Station and 45 minutes to/from Woodinville. Maintaining these key elements are an important part of

the package supported by the voters and 150,000 residents of our five cities and attracting the projected 10,000 ridership.

Specifically, the representative project stated that the project would build Business Access and Transit (BAT) lanes that “fill in existing ‘gaps’ along SR 522 between NE 145th Street and 96th Avenue NE in Bothell...” Proposed refinements to the representative project move away from this objective, specifically with consideration of not fully implementing BAT lanes on SR522 through Lake Forest Park. Project staff have also shared that a refinement under consideration is the repurposing of two existing general purpose lanes on SR523/NE 145th Street to BAT lanes. The significant modification to the operation of a major east/west corridor would need to be borne out by a thorough technical analysis and accompanied by meaningful improvements that ensure the corridor works well for all modes of transportation. Bottom line: we must arrive at a project that meets the intent of the representative project approved by the voters for ballot measure so that we work together to achieve success of this BRT corridor.

A BRT project along SR522 and SR523 will be neither workable nor acceptable if it fails to honor the vision first articulated by our cities and captured in the Sound Transit 3 Plan. Time is of the essence, as the Sound Transit Board is scheduled to approve a preferred design concept in the first quarter of 2019, and we cannot afford to sacrifice project elements that are needed to make this project a success. Continuous BAT lanes on SR 522 are essential to the ability of the system to operate with reliable travel times and predictable headways. We must also be certain that the project will successfully address the most significant single constraint in the system—the intersection of 145th and Bothell Way. Resolving traffic issues in this intersection along with addressing NE 145th will be critical to the long-term success of this project.

The SR522/523 BRT project represents a visible and valuable early win for our latest round of regional transit investments. In addition, transit-oriented development (TOD) is a high priority for Sound Transit, as it is for our north-end cities, and a high-performing BRT system is essential to the long-term viability of both existing and planned TOD along the entire corridor. Bothell, for instance, is designated as a regional growth center that needs strong transit to ensure its long-term sustainability. The hundreds of millions of dollars being spent on light rail extensions and other BRT services (such as I-405) won’t be most effectively used if the SR522/523 BRT system, which will feed these other parts of the network, does not perform well.

In closing we want to reiterate that we share Sound Transit’s strong commitment to creating a lasting and high-performing regional transit system. As Sound Transit’s first-ever BRT system and one of its first ST3 deliverables, we want this project to be seen as a major success, and we want to stand by you as your most enthusiastic supporters. This BRT project is a key part of the network and a prime connection for our five cities to the rest of the system. We cannot afford to be penny wise and pound foolish when making this crucial investment in our future.

We are committed to continuing the robust partnership that began well before the creation and passage of the ST3 package that brought this project to life. So that we may continue to grow our spirit of collaboration, we request that the Sound Transit Board and staff make every effort to

ensure that the SR522/523 BRT project is planned, funded and delivered in alignment with the Sound Transit 3 plan and in a manner that ensures the long-term success of this key piece of the regional transit system.

Sincerely,

A handwritten signature in black ink that reads "Will Hall". The signature is fluid and cursive, with the first and last names clearly legible.

Will Hall, Mayor
City of Shoreline

A handwritten signature in blue ink. It consists of several sharp, upward strokes followed by a horizontal line, making it somewhat abstract but recognizable as "Jeff Johnson".

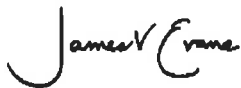
Jeff Johnson, Mayor
City of Lake Forest Park

A handwritten signature in black ink that reads "Nigel Herbig". The signature is cursive and somewhat stylized, with the first and last names being the most prominent.

Nigel Herbig, Deputy Mayor
City of Kenmore

A handwritten signature in black ink. It features a series of loops and flourishes, with the first few letters appearing to be "Andrew".

Andrew J. Rheaume, Mayor
City of Bothell

A handwritten signature in black ink that reads "James Evans". The signature is cursive, with the first and last names clearly visible.

James Evans, Mayor
City of Woodinville

Attachment D

Sound Transit SR 522/NE 145th BRT

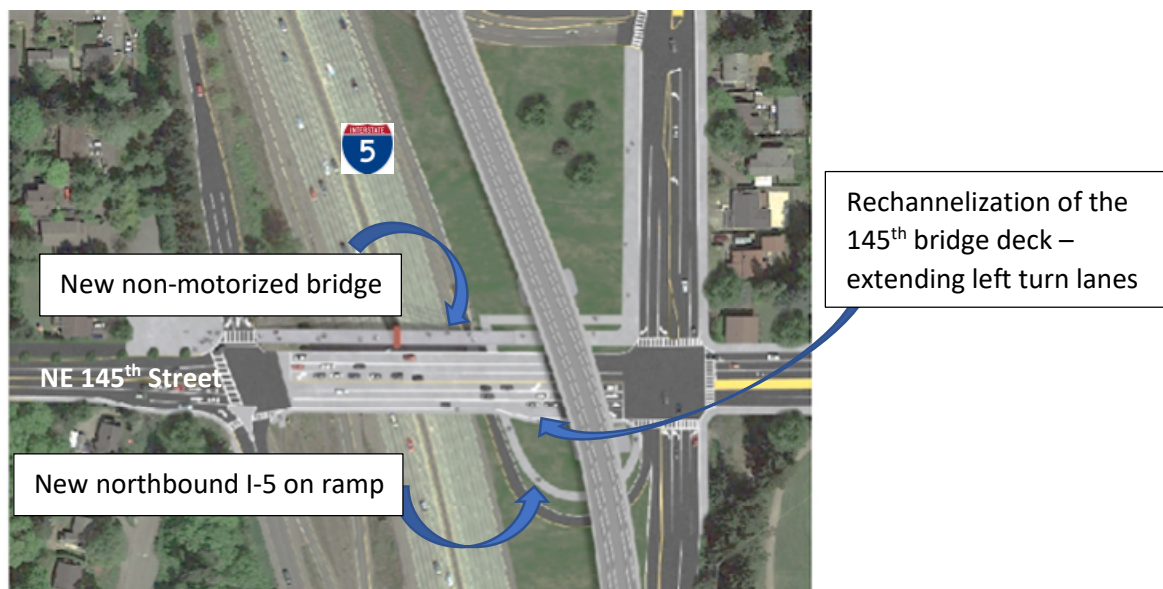
145th and I-5 Improvement Options

The following is in overview of the initial and revised concept the City of Shoreline is considering for the 145th and I-5 interchange. Recognizing that 145th and I-5 interchange is severely congested with limited access for pedestrian and bicycles, the City of Shoreline developed a set of mobility and multi-modal access improvements for the interchange as part of the 145th Street Multi-modal Corridor Study Preferred Design Concept (<http://www.shorelinewa.gov/home/showdocument?id=29399>).

145th and I-5 Interchange Improvements from the Preferred Design Concept

Figure 1 below depicts the initial concept for the 145th and I-5 interchange improvements, as outlined in the 145th Street Multi-modal Corridor Study (the Study). This concept consisted of the addition of a non-motorized bridge spanning I-5 to the north of the existing bridge, providing for an additional lane of traffic on the existing bridge, adding a new northbound loop on-ramp to I-5, modifications to adjacent intersections at 4th Avenue and 5th Avenue, and making non-motorized connections between the interchange area and Sound Transit's proposed light rail station north of NE 145th.

Figure 1. Initial 145th and I-5 interchange improvements



The City of Shoreline was awarded federal funds to design the 145th interchange in 2017 and began design in 2018. As 145th is also a state route the Washington State Department of Transportation is required to review and approve any changes to the interchange. As part of this agency's design review process, WSDOT required the City of Shoreline to evaluate roundabouts.

A WSDOT design review was not required for the City to develop its initial Preferred Design Concept. The City's traffic modeling of its initial design concept and the WSDOT required roundabout design

concept led to the determination that roundabouts could be constructed at lower cost and results in a higher level of both transit and general purpose traffic performance along the 145th corridor with improved access for pedestrian and bicycle access over existing conditions.

An overview of the proposed roundabout design and its performance in comparison to the City's initial improvements from the Preferred Design Concept is presented below.

145th and I-5 Interchange Roundabouts

As shown in Figure 2 below, under the roundabout improvement concept, the intersections east and west of I-5 will be converted to roundabouts as well as the intersection of 5th Avenue NE at the northbound I-5 on-ramp. The existing bridge configuration will be revised by eliminating the left turn lanes and repurposing the excess roadway width by constructing a non-motorized pathway along the north side of the structure and a standard sidewalk along the south.

Figure 2. 145th and I-5 Interchange Roundabouts



Performance and Cost Comparison

As noted previously, a performance analyses of both options demonstrated the three roundabouts operating at LOS D or better while the City's initial concept operated at LOS E or better. This alternative can handle greater traffic volumes than the traffic signal option, reduces traffic queues, improves safety, does not require widening of the NE 145th Street bridge over I-5, has a lower capital cost and only requiring slightly more right of way.

The roundabouts also have lowest estimated construction cost with slightly higher (0.25 acres vs 0.34 acres) right of way impacts compared to the initial design with a minor impact to the west border of the Jackson Golf Course. The total cost for the initial 145th Interchange concept is \$27 M while the cost of the roundabouts concepts is estimated at approximately \$23M.

Multilane Roundabouts: Pedestrian Safety, Accessibility and Level of Service Performance Review

Safety

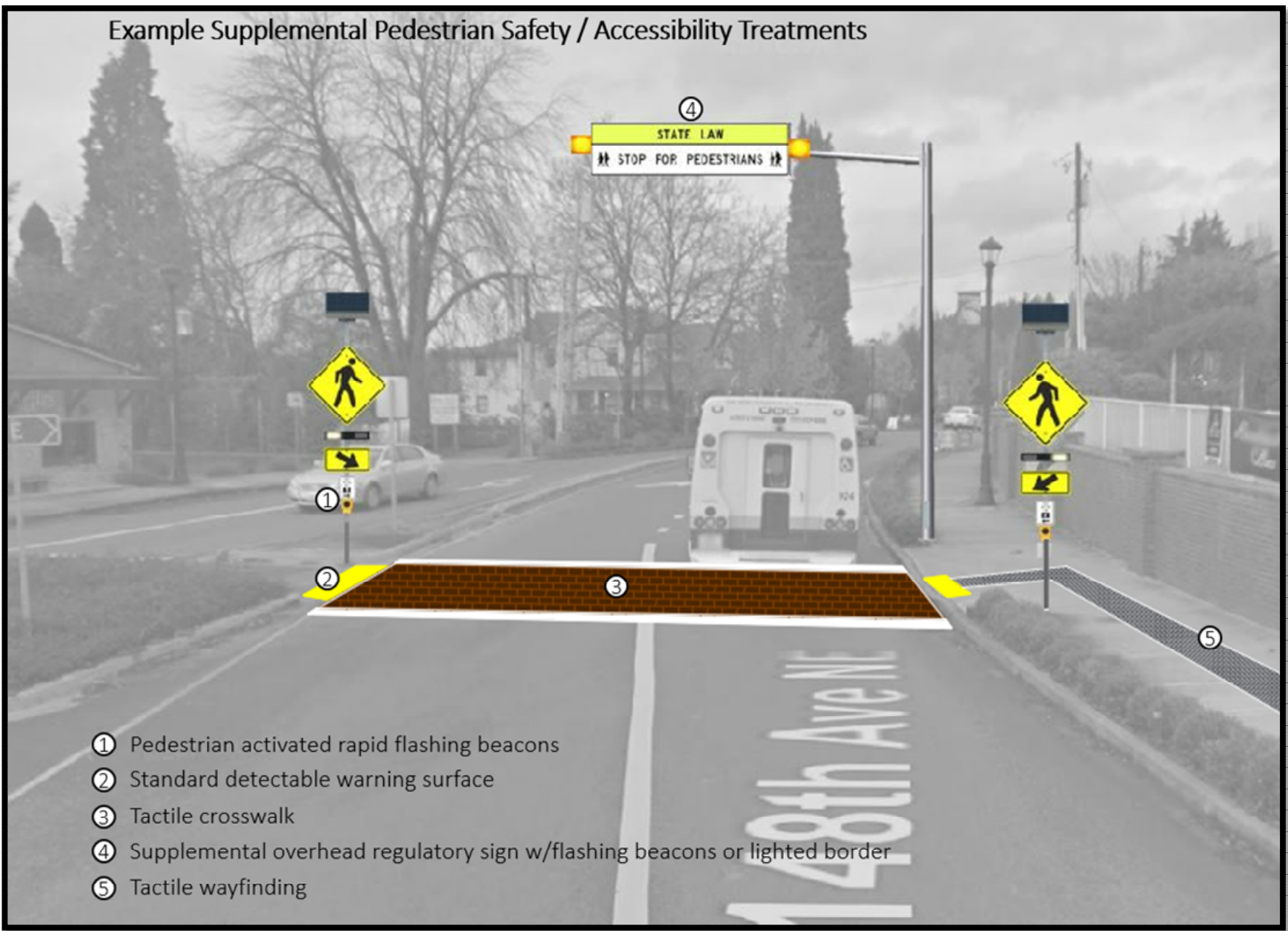
In response to concerns raised regarding pedestrian safety and accessibility crossing multi-lane roundabouts, the City of Shoreline has conducted a review of multi-lane roundabouts in various cities throughout Washington. The City used WSDOT's State Crash Data Portal to review collision history from 2013 through 2017, which maps pedestrian collision data. (<https://remoteapps.wsdot.wa.gov/highwaysafety/collision/data/portal/public/>)

In reviewing five years of collision data for each of these 11 locations, only 2 pedestrian collisions were found. In one of these instances, the pedestrian crossing lacked any signs or supplemental treatments. See Appendix A for information about review locations, context, pedestrian treatments, and collision history.

Accessibility

The US Access Board has raised concerns about accessibility of roundabouts (<https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/guidance-and-research/pedestrian-access-to-modern-roundabouts/crossing-at-roundabouts>). One of the primary challenges to impaired pedestrians navigating roundabouts is gauging and selecting an appropriate time to cross. Visually impaired pedestrians often rely on sound cues (stopping and starting) to supplement their decision on when to cross which is a challenge at roundabouts. The Access Board indicated that yielding behavior was poor at 3 reviewed crosswalks, however it is not clear what supplemental pedestrian features were in place (i.e. pedestrian activated rectangular rapid flashing beacons), if any.

There are many supplemental accessibility features that can be used to enhance safety and accessibility for pedestrians at roundabouts. Some examples are shown in the diagram below. FHWA has indicated that Rectangular Rapid Flashing Beacons (RRFBs) result in yield rates of 88% if median RRFB displays are used (https://safety.fhwa.dot.gov/intersection/conventional/unsignalized/tech_sum/fhwasa09009/). RRFBs are generally equipped with vibrotactile feedback and can further be modified for audible messages similar to signalized locations.



Signalized crossing locations face similar driver yield behavior, and therefore accessibility, challenges. At most signalized intersections, the pedestrian phase is concurrent with the corresponding through vehicle phase which means the pedestrian is reliant on the driver yield compliance to safely cross. For example, the northbound movement at 5th Ave NE and NE 145th Street would be given a green indication at the same time the northbound/southbound east leg pedestrian crossing has the walk indication. In this scenario the pedestrian is reliant on the northbound right turning driver to yield the right of way (and at some intersections the opposing left turning driver as well). The turning driver's only indications of conflicting pedestrian movement are the small pedestrian signal head (which is not always clearly visible for the driver) and the pedestrian in the crosswalk. In consideration of this, the ability to supplement roundabouts with RRFB's may provide greater pedestrian safety and accessibility in comparison to standard signalized intersection treatments which permit right turns across the concurrent pedestrian movement.

Level of Service

All traffic simulation models will be updated to account for significant increase in future pedestrian volumes. There are no (between interchanges), or insignificant (SE side of interchange) pedestrian generators on the south side of the corridor currently and into the future. Even under the assumption of a trail along 5th Ave NE, pedestrian and bike arrival rates are likely to be somewhat low.

Quantitatively, pedestrian level of service has not been analyzed and is not required to be. That said, it is worth noting that the level of pedestrian service at roundabouts is significantly better than a signalized counterpart, even if some added walking distance is required. Based on relatively high signal cycle lengths that would be required at the interchange to manage traffic volumes, average pedestrian delay would generally be greater than 30 seconds, and would range

from about 30-50 seconds on average. The 2010 Highway Capacity Manual states, “*In general, pedestrians become impatient when they experience delays in excess of 30 seconds/pedestrian and there is a high likelihood of their not complying with the signal indication.*” This is a risk we see taken by pedestrians quite frequently on larger corridors in the City of Shoreline, such as Aurora Avenue. With respect to pedestrian delay, the on-demand pedestrian service nature of roundabout crossings outperform signalized crossings

Appendix A: Multilane Roundabout Review Locations (Washington State)



1. Woodinville - SR 202 / NE 145th Street

Context: high retail area / approximately 20 wine tasting rooms and a few restaurants directly adjacent to this roundabout. Multi-lane pedestrian crossings on all legs but one.

Pedestrian Crossing Treatments: No supplemental pedestrian safety features.

Pedestrian / Bike Collision History: 5-year history, zero pedestrian collisions

Map: <https://goo.gl/maps/byrgMgCHCvn>



2. Olympia – Jefferson St SE & 14th Ave NW

Context: In the heart of State Department buildings. NW Quadrant: WA State DSHS, Attorney General, Fish & Wildlife. NE Quadrant: Association of WA business. SE Quadrant: WA State Dept of Enterprise Services. SW Quadrant: WA State Dept of Transportation.

Pedestrian Crossing Treatments: Rectangular Rapid Flashing Beacons.

Pedestrian / Bike Collision History: 5-year history, zero pedestrian collisions

Map: <https://goo.gl/maps/P7AC6XAZpiF2>



3. Olympia – Harrison Ave NW & Olympic Way

Context: Near the Capitol Lake/Puget Sound slough/bridge, link between downtown Olympia and west Olympia (retail, residential, etc). Works in tandem with roundabout to the south.

Pedestrian Crossing Treatments: One multi-lane approach/departure crossing with Rectangular Rapid Flashing Beacons.

Pedestrian / Bike Collision History: 5-year history, zero pedestrian collisions

Map: <https://goo.gl/maps/z6sdbqFAtHM2>



4. Olympia – 4th Ave W & Olympic Way

Context: Highly traveled pedestrian connection; connects west Olympia to Downtown. Retail and residential on both sides. Scenic walk – bridge over Capitol Lake slough/Puget Sound.

Pedestrian Crossing Treatments: Supplemented by Rectangular Rapid Flashing Beacons.

Pedestrian / Bike Collision History: 5-year history, zero pedestrian collisions

Map: <https://goo.gl/maps/GtM6Ed5Ug2M2>



5. Hunts Point – 84th Ave NE & Hunts Point Road (SR 520 Interchange)

Context: Functions as SR-520 interchange. Connects residents on south to SR 520 Trail.

Pedestrian Crossing Treatments: Supplemented with Rectangular Rapid Flashing Beacons.

Pedestrian / Bike Collision History: 5-year history, zero pedestrian collisions

Map: <https://goo.gl/maps/bk9BcpMqyNo>



6. Lacey – Pacific Ave SE & Homann Dr SE

Context: In the middle of retail area including restaurant, coffee, general retail. Roundabout also intersects the Woodland Trail.

Pedestrian Crossing Treatments: Supplemented with Rectangular Rapid Flashing Beacons.

Pedestrian / Bike Collision History: 5-year history, zero pedestrian collisions

Map: <https://goo.gl/maps/vK5bEChcizK2>



7. Lacey – Pacific Ave SE & Golf Club Rd SE

Context: Residential and some minor retail. This roundabout also intersects Lacey’s Woodland Trail.

Pedestrian Crossing Treatments: Supplemented with Rectangular Rapid Flashing Beacons.

Pedestrian / Bike Collision History: 5-year history, 1 pedestrian collision.

Map: <https://goo.gl/maps/uLJBXBJQpsm>



8. Bellingham – Kellogg Rd & Cordata Pkwy

Context: Serves as entrance to Whatcom College. Links campus to food/retail on east side.

Pedestrian Crossing Treatments: None – crossings lack even basic warning signs.

Pedestrian / Bike Collision History: 5-year history, 1 pedestrian collision.

Map: <https://goo.gl/maps/7wc76aX7hBx>



9. Issaquah – E Lake Sammamish Pkwy & SE 43rd

Context: Dense residential adjacent to the roundabout. Scenic East Lake Sammamish Trail along SW side.

Pedestrian Crossing Treatments: Minimum warning signs (none in medians).

Pedestrian / Bike Collision History: 5-year history, 0 pedestrian collisions.

Map: <https://goo.gl/maps/JPGhpajduK2>



10. Ocean Shores – E Chance A La Mer & Pt Brown Ave NE

Context: A mostly rural environment, with some retail in the four quadrants of the roundabout. One block from the beach which likely generates pedestrian trips in the summer season.

Pedestrian Crossing Treatments: None, standard warning signs.

Pedestrian / Bike Collision History: 5-year history, 0 pedestrian collisions.

Map: <https://goo.gl/maps/DCGtoNm16ps>



11. Covington – 168th PI SE

Context: Retail in all quadrants, mostly car-oriented. Some residential and large employers nearby which likely access businesses on foot.

Pedestrian Crossing Treatments: None – crossings lack even basic warning signs.

Pedestrian / Bike Collision History: 5-year history, 0 pedestrian collisions.

Map: <https://goo.gl/maps/DNfLhqm83iy>

Attachment F

Sound Transit SR 522/523 Bus Rapid Transit (BRT) Project Partners' Concurrence Document GA 0176-17

I. INTRODUCTION

- A. The Sound Transit 3 (ST3) high capacity transit system expansion approved by the voters in November 2016 includes a wide variety of projects to be implemented over the next 25 years. Implementing ST3 consistent with the scope, budget, and schedule approved by the voters will require coordination and collaboration by Sound Transit and by its federal, state, and local partners.
- B. To meet the challenges of delivering the ST3 projects, Sound Transit developed a System Expansion Implementation Plan (SEIP) that embraces new alternative methods of working. Sound Transit has refined processes, policies, and organizational structures to support this streamlined project delivery model, and developed new approaches for working with project partners, stakeholders, and local jurisdictions. Additionally, Sound Transit will conduct a robust city and public outreach and stakeholder engagement effort to reach early and durable agreement on project definition, including station locations, access, branding, transit integration, and other project components. The public partner and stakeholder involvement process will be designed to reach key milestones earlier in the project development process, including early identification of the preferred alternative, to achieve the accelerated project delivery schedule.
- C. While the ST3 Plan adds Bus Rapid Transit (BRT) service in two corridors, Interstate 405 (1-405) and SR 522/SR 523, this Partners' Concurrence Document is applicable to the SR522/523 BRT Project only. BRT benefits to Sound Transit riders include:
- Reliable and frequent: Service every 10 minutes in the peak and off-peak periods from NE 145th Street to UW Bothell and every 20 minutes in the peak and off-peak between UW Bothell and Woodinville.
 - Dependable: Reliable headways with bidirectional service with up to 19 hours of service Monday through Saturday, and up to 17 hours on Sunday.
 - Accessible: Stations accessible for all persons including those with disabilities, providing shelter and information on schedules and routes with direct connections to local and regional destinations.
 - Easily identifiable: Distinct and consistent branding for stations and vehicles.
- D. This Concurrence Document has been developed to help facilitate the delivery of SR 522/523 BRT. It is intended to broadly describe roles, responsibilities, goals, and expectations for the public agencies participating in the Project. This document and subsequent agreements will help the Parties cooperate effectively, so that revenue service begins on schedule by the end of 2024. Specific roles and responsibilities will be defined in partnership agreements with individual agencies (see section VIII.B.).

II. PARTIES

The Parties are Sound Transit, the Washington State Department of Transportation (WSDOT), King County, and the cities of Bothell, Kenmore, Lake Forest Park, Seattle, Shoreline, and Woodinville.

III. PROJECT INFORMATION

- A. Sound Transit's BRT program development for the I-40S and SR522/523 BRT Projects will involve coordinated planning, design, and implementation of BRT elements, including routes, stations, a bus operations and maintenance facility, vehicle fleet, rider information/technology integration, and branding. The two Projects share several common elements including a bus operation and maintenance facility, BRT station design and functional elements, vehicles purchases, and branding. Other documents and agreements may be developed to separately address the 1-405 BRT Project and common elements shared between the two Projects.
- B. The SR 522/523 BRT Project will be developed along the SR 522 and SR 523 corridors, with a western terminus at the future Shoreline South/145th Link station (serving the SR 523/1-5 interchange), then east along SR 523 to the intersection with SR 522 (Bothell Way NE) and continuing along SR 522, 99th Ave. NE, NE 185th St, and Beardslee Blvd to the University of Washington (UW) Bothell campus. BRT service, with limited capital improvements, will be provided from UW Bothell to Woodinville. The cities along this corridor, WSDOT, and Sound Transit have each undertaken previous efforts to develop transit and BRT infrastructure such as Business Access and Transit (BAT) lanes in Kenmore and Bothell and the 145th Multi-modal Corridor Study led by the City of Shoreline in partnership with the parties to this document. Also, in 2016 the cities formed a coalition to promote adding the 522 BRT Project to the ST3 project list.
- C. The ST3 Plan included a "representative alignment" for SR 522/523 BRT, which is a conceptual scope of work and estimated costs for the Project for the purpose of generating preliminary cost and planning data. The representative alignment is attached as **Exhibit A**. The Project will use general purpose lanes, queue jumps, and existing and new BAT lanes and bus only lanes as well as operational improvements. There are nine station pairs, three 300-stall parking garages, and a transit center planned at UW Bothell/Cascadia College. Depending on location, improvements to rights-of-way will be owned and maintained by WSDOT or the applicable city. Sound Transit will be responsible for ownership and maintenance of transit facility elements (shelters, benches, garages, etc.).

IV. KEY ROLES AND RESPONSIBILITIES

- A. Sound Transit: Serves as the Project lead and is the lead agency for compliance with the State Environmental Policy Act . Sound Transit and its partners will collaborate to identify a preferred alternative prior to initiation of the environmental review process, and to refine it throughout the project development process. The Sound Transit Board of Directors makes final decisions regarding the Project based on environmental review and input from project partners, stakeholders, local jurisdictions, and other public comment. Sound Transit is responsible to fund the design and construction of the SR 522/523 BRT Project and ensure operation and maintenance of SR 522/523 BRT service.

- B. WSDOT: Will have design approval as appropriate for State Routes and may serve as potential construction agent¹.
- C. Cities: Local agencies have in some cases already made significant capital improvements to this corridor to accommodate BRT service. They also have regulatory authority for permitting decisions and design authority for city streets, will collaborate with Sound Transit on design, or may have design approval under agreement with Sound Transit, and may serve as potential design and construction agents. Specific roles and responsibilities will be described in subsequent partnership agreements.
- D. King County: A portion of SR 523 (NE 145th St.) is in unincorporated King County. As a state highway, WSDOT has regulatory authority and maintenance responsibility over King County's portion of the roadway. King County will provide input to design. King County Metro provides transit service along the corridor and will work with Sound Transit to integrate capital and service needs and improvements with the SR 522/523 BRT Project along the corridor.

V. GENERAL GOALS AND EXPECTATIONS

- A. Sound Transit plans to develop, build, and operate BRT in the SR 522/523 corridor.
- B. Sound Transit recognizes that transit facilities and services play an important role in helping communities achieve long-term land use and transportation goals including place-making and downtown planning.
 - 1. For example, Sound Transit recognizes that cities have an interest in the function and design of parking facilities to be developed in this Project in Lake Forest Park, Kenmore, and Bothell. All members of the Project team should collaborate and seek to achieve the best possible architectural and operational solutions.
- C. Sound Transit's services implemented for this Project will be of high quality, consistent with Sound Transit financial plans, and open for service on schedule.
- D. The SEIP establishes timelines for project delivery consistent with the ST3 Plan. To deliver projects within the established timelines, Sound Transit is embracing new ways of organizing internally, as well as new approaches for working with stakeholders, partners, jurisdictions, and the planning, design, and construction contracting communities. It is in the mutual interests of the Parties to meet timelines and deliver quality transit expansion projects on schedule and within budget.
- E. Transparent processes with clear goals, objectives, and decision-making milestones will help ensure success. The Parties will develop a schedule outlining key decision-making milestones, working collaboratively to develop the Project within scope, schedule, and budget.

¹ Guidelines Reached by the Washington State Department of Transportation and the Association of Washington Cities on the Interpretation of Selected Topics of RCW 47.24 and Figures of WAC 468-18-050 for the Construction, Operations and Maintenance Responsibilities of WSDOT and Cities for Such Streets is available at: <http://www.wsdot.wa.gov/NR/rdonlyres/56224677-BSBE-41F4-96CI-01BC888052CB/0/CityStreets.pdf>

- F. The Parties agree to work cooperatively and in good faith toward resolution of issues in a timely manner.
- G. The Sound Transit financial plan includes funding for the Project representative alignments, including identified costs for preliminary engineering and environmental review, staffing, final design and specifications, planning for transit-oriented development, transit integration, sustainability, station access, property acquisition and relocation, permits, construction, mitigation, and contingencies. Future federal or other grant funding may also be secured.
- H. To ensure effective intergovernmental cooperation and efficient Project review, Sound Transit and the Parties shall each designate staff representative(s) responsible for communication and coordination regarding the Project and to review the work of assigned staff within their organization.
- I. The Parties will strive to ensure that all applicable local, state, and federal requirements are met. The Parties will review development regulations and permit review processes to identify potential code and process changes necessary to streamline the permit review process or resolve code conflicts as mutually agreed. The Parties will strive to identify the changes and actions requiring Executive or Council actions with sufficient lead time to implement the changes or actions before permitting begins.
- J. Recognizing the above principles and the complexities of the tasks involved, the Parties will take steps to provide efficient processes, including but not necessarily limited to:
 - 1. Organize functions to ensure effective communication between team representatives and between teams and the respective organizations.
 - 2. Provide executive oversight and direction to the assigned teams to ensure the performance of assigned elements.
 - 3. Give priority to the reviews and approvals related to the Project, as appropriate and mutually agreed by respective agencies.
 - 4. Evaluate task completion on an ongoing basis to minimize time required to design and construct Project elements.
 - 5. Monitor Project status and tasks on an ongoing basis to keep Project on-track.
 - 6. Identify and implement opportunities for conducting concurrent and streamlined activities to support efficient design and construction phases.
 - 7. Conduct meetings to follow timeline and encourage meaningful input by the Parties.
- K. Specific commitments by each Party may be identified in future agreements and plans (see section VIII.B.).
- L. The performance of the system as a whole depends on the performance of individual components such as travel lanes, stations, intersections, etc. Each jurisdiction has an interest in helping to individually and collectively ensure the system can meet performance goals.

VI. PROJECT SCHEDULE AND DELIVERY DATE

- A. The Project is scheduled to begin revenue service along the corridor before the end of 2024. An 18-month look ahead is attached to this document as **Exhibit B**. As project development proceeds, updated schedules will be developed by Sound Transit and shared among the parties for review and input.
- B. The Parties acknowledge the importance of meeting Project schedule milestones and objectives in order to begin BRT revenue service on time. Accordingly, the parties will work in good faith toward the target dates identified in the schedule by raising any concerns, potential conflicts, or other issues as early as possible, and by working collaboratively to solve problems.
- C. The Parties will coordinate their respective planning, capital development, and service programs to take advantage of opportunities to reduce costs and increase benefit for all partners.
- D. The Parties will coordinate to manage construction schedules in such a way to minimize public disruption whenever possible.

VII. COMMUNITY ENGAGEMENT AND COMMUNICATIONS

- A. Sound Transit will consult with the partners to develop a Community Engagement and Communications Plan that describes the process for convening and managing three community engagement groups as envisioned in the SEIP - an Elected Leadership Group, a Stakeholder Group, and an Interagency Group – as well as engaging with the public and the media. The Parties agree that the purpose of engaging with these groups is to offer opportunities for greater and sustained collaboration early in Project development. The Community Engagement and Communications Plan will further describe the roles and responsibilities of the groups generally comprised as follows:
 - 1. The Elected Leadership Group will be comprised of Sound Transit Board members and other local elected officials in the corridor.
 - 2. The Stakeholder Group will be comprised of transit riders, residents, business owners, major institutional representatives, community organizations and other members of the public.
 - 3. The Interagency Group will be comprised of senior staff from Sound Transit and the city, county, state, and federal permitting agencies empowered with technical decision-making authority.
 - i. As of the date of this writing, Sound Transit, City Managers, and senior agency staff along this corridor have already started meeting regularly. This group has helped to serve the collaboration goal of the SEIP and there is support for it to continue these regular meetings. Such a 'city managers' group could serve as the inter-agency group.
 - 4. These groups will be tailored to the needs of the Project, and will help advise and guide the Project as alternatives are analyzed, a preferred alternative is identified, and final decisions are made by the ST Board.

5. Sound Transit recognizes that:

- i. The groups described in this section will help to ensure the SR 522/523 BRT Project is designed and built to operate as a well-integrated system along the corridor. Such multi-jurisdictional groups are not a substitute for community-specific decision-making.
- ii. There will be issues and opportunities that are specific to individual cities or locations and that the relevant partner agencies should collaborate to address those issues.

- B. Each partner is encouraged to use their own communication and outreach infrastructure in support of the Project. For example, a city could use a planned event or its website to help notify and engage community members.

VIII. **ADDITIONAL AGREEMENTS**

- A. This Concurrence Document is the first of multiple agreements and concurrence actions that may be necessary to document shared understanding and commitments between Sound Transit and the other Parties over the life of the Project. This document may be signed in counterparts, and it is effective between Sound Transit and each of the signing Parties once signed. The Parties anticipate entering into future agreements as the Project advances through subsequent design and delivery phases. Future agreements may include a partnering agreement, preferred alternative concurrence document, permitting plan, permitting and development agreements, or other agreements as mutually determined by the Parties.
- B. Sound Transit will collaborate with its partners to propose to develop, negotiate, and execute future agreements on a case-by-case basis, consistent with the SEIP and this Concurrence Document. The parties acknowledge that timely consideration of those agreements will help facilitate the Project. The Partnering Matrix, included as an appendix in the SEIP (see **Exhibit C**), lists and describes the types of agreements that may be required to deliver the Project.

IX. **SIGNATURE PAGE**

Jennifer Phillips, City Manager
City of Bothell

Rob Karlinsey, City Manager
City of Kenmore

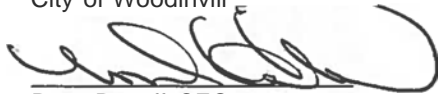
Pete Rose, City Manager
City of Lake Forest Park

Scott Kubly, SOOT Director
City of Seattle



Debbie Tarry, City Manager
City of Shoreline

Brandon Buchanan, City Manager
City of Woodinville



Peter Rogoff, CEO
Sound Transit

Harold Taniguchi, Director, King County DOT
King County

Patty Rubstello, Assistant Secretary, Urban Mobility and Access
WSDOT

EXHIBITS:

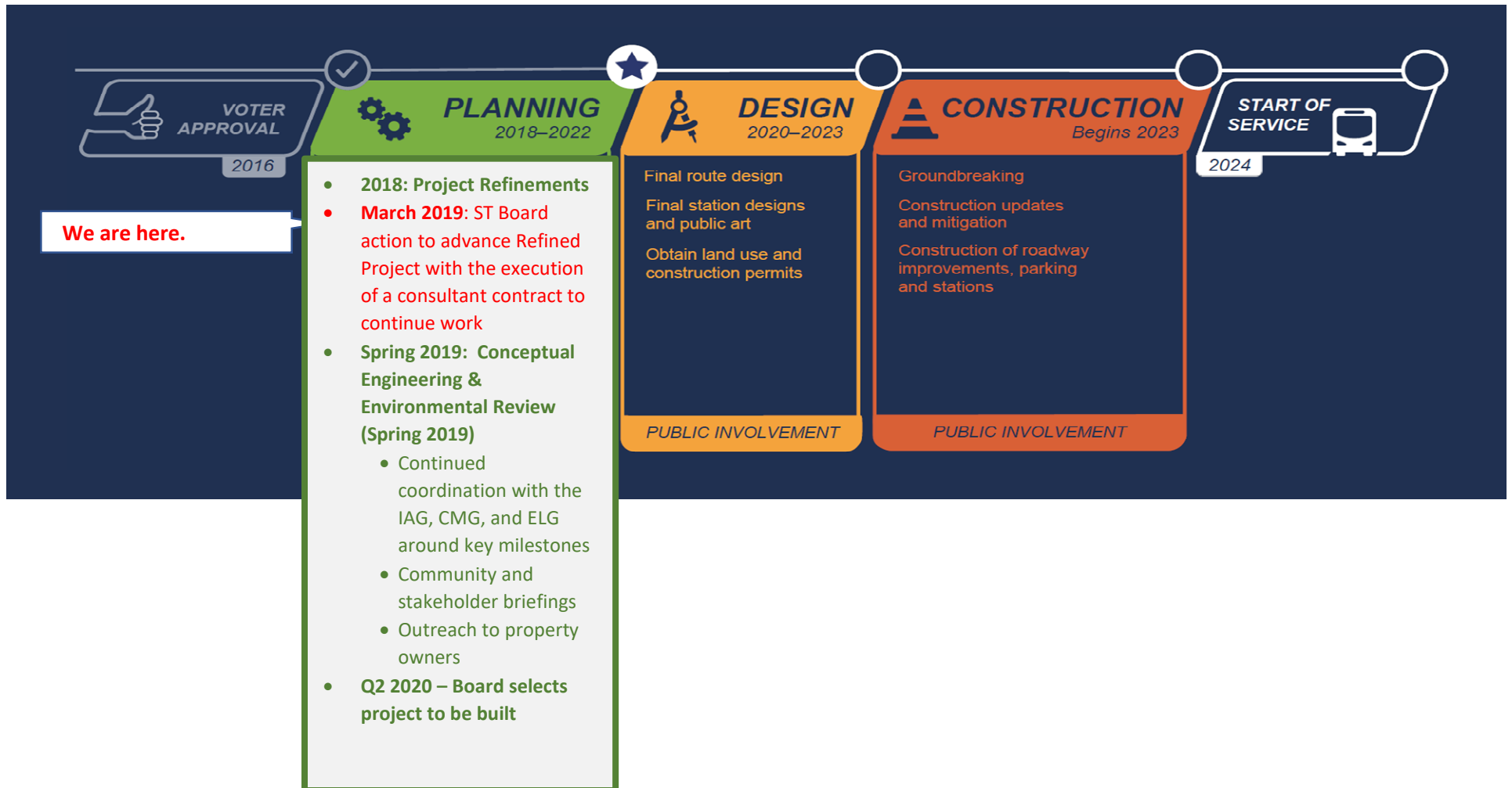
Exhibit A: SR 522 BRT Project Template

Exhibit B: 18-month Project look-ahead

Exhibit C: System Expansion Implementation Plan including Partnering Matrix

Attachment G

Sound Transit SR 522/NE 145th BRT Project Delivery Schedule





SR 522/NE 145th BRT Project Interagency Group Update

February 14, 2019

SR 522/NE 145th BRT Interagency Group
WebEx/Phone

Meeting Agenda

Meeting title:	SR 522/NE 145th Bus Rapid Transit: Interagency Group Meeting	
Date:	February 14, 2019	Time: 9:30 AM – 10:30 AM
Location:	WebEx (see link in invite) and phone 1-415-655-0002; access code: 285 344 348	
Members:	<div> <div> Alex Herzog, City of Woodinville Steven Morikawa, City of Bothell Nancy Ousley, City of Kenmore Neil Jensen, City of Lake Forest Park Nytasha Walters, City of Shoreline Ayelet Ezran, City of Seattle </div> <div> Lisa Ballard, WSDOT Brian Macik, King County Metro June DeVoll, Community Transit Kelly Snyder, UW Bothell Meagan Walker, Cascadia College </div> </div>	

Time	Agenda item	Lead
9:30	Welcome	Kathy
9:35	Update on Activities Since January 17 IAG Meeting	Kathy
9:40	Discussion Topics	Blake Jones, Karen Mesko, Kathy Leotta
	<ul style="list-style-type: none"> Input Received at Public Workshops January 30 and 31 Transit Integration Overview Preliminary Refined Project Update 	
	Upcoming Activities	Kathy
	<ul style="list-style-type: none"> I-405 BRT and SR 522/NE 145th BRT Workshops on the Bothell Connection, being rescheduled Continued coordination with WSDOT/Shoreline on 145th Interchange Elected Leadership Group Meeting Friday February 22nd, 2:00 to 3:30, location tbd Projected Board Action on Consultant Contract to Advance Into Phase 2 – March 14, 2019 	
10:30	Adjourn	8a-30



Outreach Update

8a-31

Outreach update

- Drop-In Sessions: Jan. 30 & 31,
1 – 8 p.m.
 - 165 attendees
 - 137 comments received
- Online open house: Jan. 28 – Feb. 11
 - 807 unique visitors
 - 84 comments received



Outreach update

- Key themes of what we heard:
 - Full corridor: Support for BRT service, BAT lanes, and transit integration
 - Full corridor: Support for bike racks and bike storage facilities at and near BRT stations
 - Full corridor: Support for keeping the existing direct transit connections to downtown Seattle
 - Full corridor: Concerns about traffic congestion and impacts



Outreach update

- Key themes of what we heard in specific areas:
 - *Woodinville*: Support for more frequent BRT service and local transit service in Woodinville
 - *Bothell*: Support for a bus-only lane on NE 185th St near 110th Ave NE
 - *Kenmore*: Support for additional parking and for provisional station at 61st; concerns about impacts to the heron nesting spots north of the Kenmore Park-and-Ride
 - *Lake Forest Park*: Support for a provisional station at 165th; support for BAT lanes along SR 522; interest in a pedestrian bridge to connect the parking garage with the Town Center
 - *North Seattle/Shoreline*: Support for BAT lanes and transit integration; concerns about business access, traffic, property impacts, and pedestrian safety



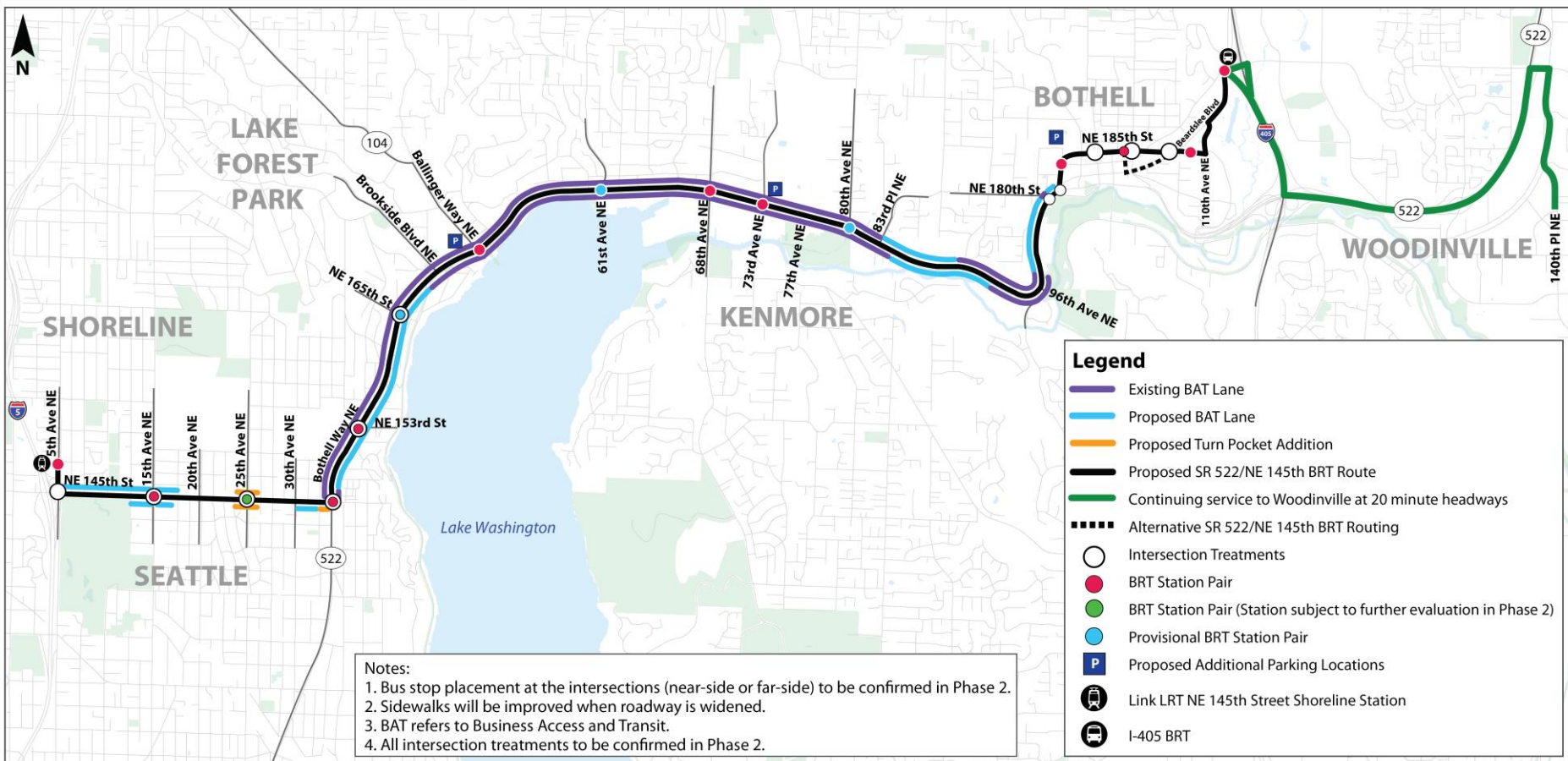
Transit Integration Update

8a-35



Preliminary Refined Project Update

SR 522/NE 145th BRT - Refined Project



Date: 2/13/2019

8a-37

NE 145th (Shoreline/Seattle)

Refined Project Elements



✓ BRT stations:

- At Shoreline South/NE 145th LRT station
- On NE 145th at 15th Ave NE
- On NE 145th at 25th Ave NE (*further study in Phase 2*)
- At SR 522/NE 145th intersection

✓ Roadway Improvements

- Westbound BAT lanes ~17th to 5th Ave NE and
- Eastbound ~12th Ave NE to 17th Ave NE
- Eastbound ~ 30th to SR 522
- Intersection at 25th

✓ Access Improvements

- New sidewalks where roadway is widened

8a-38

SR 522 (Lake Forest Park)

Refined Project Elements

✓ BRT stations

- On SR 522 at NE 153rd
- On SR 522 at NE 165th (provisional)
- On SR 522 at Lake Forest Park Town Center

✓ Roadway Improvements

- Continuous BAT Lanes through LFP
- Utilizes the existing two way left turn lane

✓ Access Improvements

- Sidewalk with new lake-side BAT Lane



SR 522 (Kenmore)

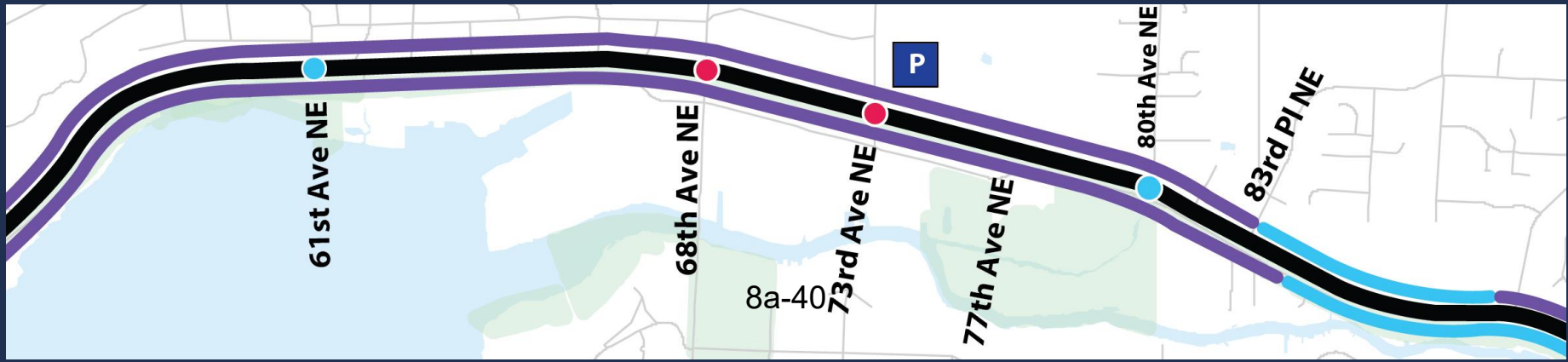
Refined Project Elements

✓ BRT stations:

- On SR 522 at 68th
- On SR 522 at 73rd/Kenmore Park & Ride
- On SR 522 at 61st (*provisional*)
- On SR 522 at 80th (*provisional*)

✓ Access Improvements

- 300-space parking garage at the Kenmore Park & Ride
- Contribution toward a pedestrian bridge near Park & Ride



SR 522 & City Streets (Bothell & Woodinville)

Refined Project Elements

✓ BRT stations:

- On 98th at 183rd
- On 185th at 103rd
- On 185th at UWB/CC
- On Beardslee Blvd. at I-405/195th

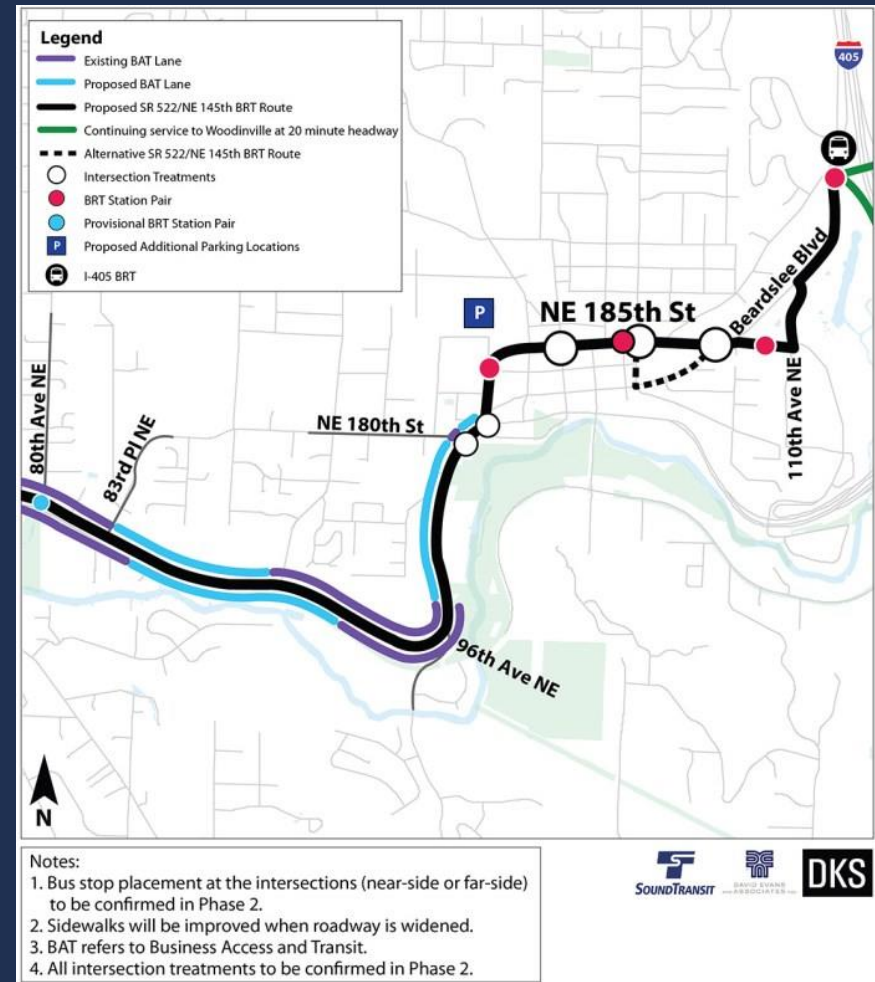
✓ Roadway Improvements

- BAT lanes on SR 522 and intersection treatments

✓ Access Improvements

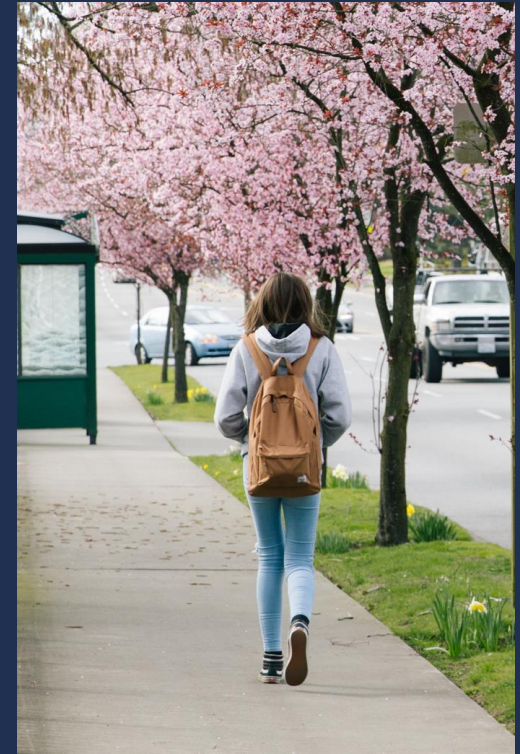
- 300-space parking garage at Pop Keeney
- New sidewalks with new BAT lanes
- Every SR 522 BRT bus connects to I-405 BRT (for further study in Phase 2)

✓ Woodinville Service (every other bus; further study with KCM in Phase 2)



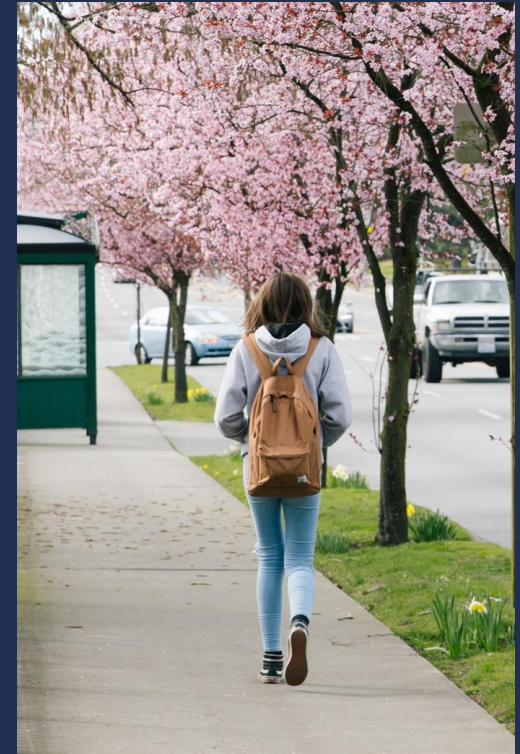
Next steps

- I-405 BRT and SR 522/NE 145th BRT Workshops on the Bothell Connection, being rescheduled
- Continued coordination with WSDOT/Shoreline on 145th Interchange
- Elected Leadership Group Meeting Friday February 22nd, 2:00 to 3:30, Kenmore
- Projected Board Action on Consultant Contract to Advance Into Phase 2 – March 14, 2019



Next steps, Continued

- Phase 2: Conceptual engineering and environmental review
 - Conceptual engineering feeds into environmental documentation
 - Continued coordination with the IAG, CMG, and ELG around key milestones
 - Outreach to property owners
 - Community and stakeholder briefings
 - Public events and other outreach opportunities

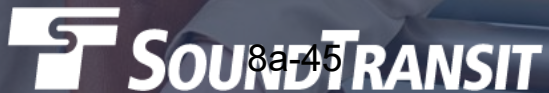


Phase 1 IAG Meetings Recap

- ✓ April 3, 2018: Introduction, Background, Goals, Challenges and Opportunities
- ✓ April 26, 2018: Evaluation Methodology, Parking and Station Locations
- ✓ May 24, 2018: Introduction to the Range of Concepts to be Evaluated
- ✓ June 28, 2018: Progress Update on Concept Evaluation
- ✓ July 26: How Access and Transit Oriented Development will be Considered during Project Development
- ✓ August 30, 2018: Transit Oriented Development 101
- ✓ September 27, 2018: Project Options Analysis: First Look
- ✓ December 6, 2018: Preliminary Refined Project
- ✓ January 17, 2019: Updated Preliminary Refined Project
- ✓ February 14, 2019: Public Outreach Overview; Phase 2 Look-Ahead



soundtransit.org/sr522brt ➔



8a-45