

CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Discussion of the 145 th Street / I-5 Interchange Project Delivery Strategy		
DEPARTMENT:	Public Works		
PRESENTED BY:	Nytasha Walters, Transportation Services Manager		
ACTION:	<input type="checkbox"/> Ordinance	<input type="checkbox"/> Resolution	<input type="checkbox"/> Motion
	<input checked="" type="checkbox"/> Discussion	<input type="checkbox"/> Public Hearing	

PROBLEM/ISSUE STATEMENT:

The City of Shoreline is implementing improvements to support the goals identified in the 145th Street Multimodal Corridor Study to improve access and safety for all travel modes using the corridor and to improve access to the future Sound Transit Shoreline South/145th Light Rail Station. The recommended improvements from the Corridor Study for the 145th Street / I-5 interchange area included a new northbound on-ramp and separate pedestrian bridge. Through a design evaluation required by the Washington State Department of Transportation (WSDOT), the City found that the construction of two roundabouts at the I-5 interchange (on the west and east sides adjacent to the freeway overpass) provided greater multi-modal access and mobility than the interchange improvements proposed in the City's initial study at relatively the same cost. Based on this design evaluation, the City is moving forward with the design of two roundabouts with a wide multi-use pathway on the north side of the 145th Street / I-5 overpass bridge deck, which WSDOT supports.

The 145th Street / I-5 Interchange Project (Project) has received a federal grant, via the USDOT Federal Highway Administration (FHWA) Surface Transportation Program (STP) to complete the design phase of the Project. The Project is currently approaching completion of 10% design and is on a schedule for construction to be completed before the opening of the Shoreline South/145th Light Rail Station in 2024. If the Project were delayed and constructed after the opening of light rail in 2024, it is anticipated construction would significantly disrupt access to the station for all modes of travel. The construction phase of this Project is not fully funded; insufficient funds could affect maintaining the current desired schedule to complete the project before 2024.

The City is currently working on a funding strategy to ensure that the funds required to construct the Project are obtained within the desired time frame and financial risks to the City are minimized. In the near term, there are key funding issues as the Project transitions from 10% design to 30% design and ultimately past the 30% design milestone to final design and the construction phase. The purpose of tonight's Council discussion is to provide an update on the status of the Project, with a focus on its

funding status, and to confirm Council support for staff's recommended approach to project delivery.

RESOURCE/FINANCIAL IMPACT:

The City has received a \$3,892,500 grant award from the FHWA Surface Transportation Program to complete environmental review and final design of the Project. This requires a 13.5% local match or \$607,500 in other non-federal funding. The City is currently using Roads Capital Funds to provide the required match to complete the design phase. To date, the City has not secured funds required to complete the construction phase of the Project. If the City is unable to complete each phase of the Project (Design, ROW, and Construction) within the FHWA required time frame, the City will be required to pay back all federal grant dollars reimbursed to the City.

RECOMMENDATION

Staff recommends pursuing Project Delivery Option 2, as described in this staff report, which includes confirming formal WSDOT approval for this approach and entering into an agreement with Sound Transit to provide \$1 million to support the Project design to 30% design. This will allow the City and our partners to continue to seek funding for the construction phase of the Project. Staff will provide Council with a project funding update and seek additional guidance in the last quarter of 2020.

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

BACKGROUND

In 2016, the City completed the 145th Street Multimodal Corridor Study, which included identifying multi-modal improvements for the 145th Street / I-5 interchange area.

Proposed improvements for the I-5 interchange included traffic signal optimization, a new non-motorized bridge, and a new northbound I-5 on-ramp. On May 1, 2017, the City Council authorized the City Manager to enter into a contract with HW Lochner for the design and environmental services for the 145th Street / I-5 Interchange Project (Project). The current contract with HW Lochner is to 30% design and environmental review. The staff report for this contract award can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2017/staffreport050117-7c.pdf>.

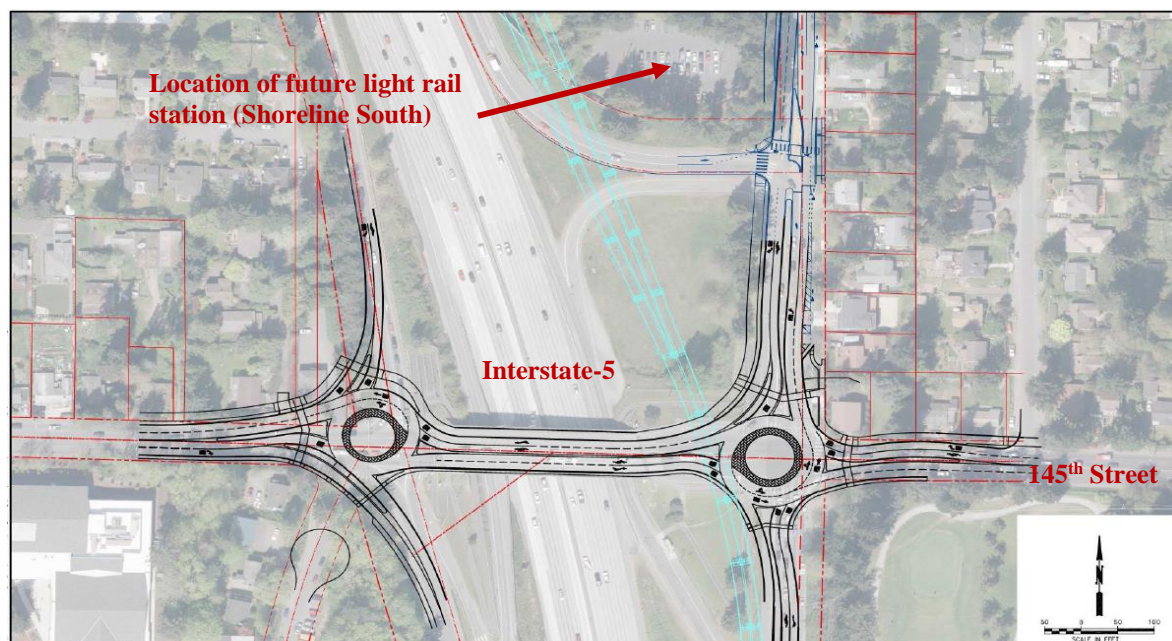
In 2018, WSDOT asked the City to evaluate construction of two roundabouts instead of the City-proposed improvements from the Corridor Study to address interchange congestion. Upon review of the roundabout design and the significant travel time savings for both buses and vehicles, overall safety benefits, and cost, the City of Shoreline has identified roundabouts as its preferred option for interchange improvements, which WSDOT supports. The roundabouts concept for the Project was initially introduced at a February 25, 2019 Council update on the Sound Transit Bus Rapid Transit (BRT) project. The staff report for this Council discussion can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2019/staffreport022519-8a.pdf>.

Project Overview

As depicted in Figure 1 below, the roundabout concept for the I-5 interchange includes two, multi-lane roundabouts at the north/south-bound on/off ramps of the 145th Street/ I-

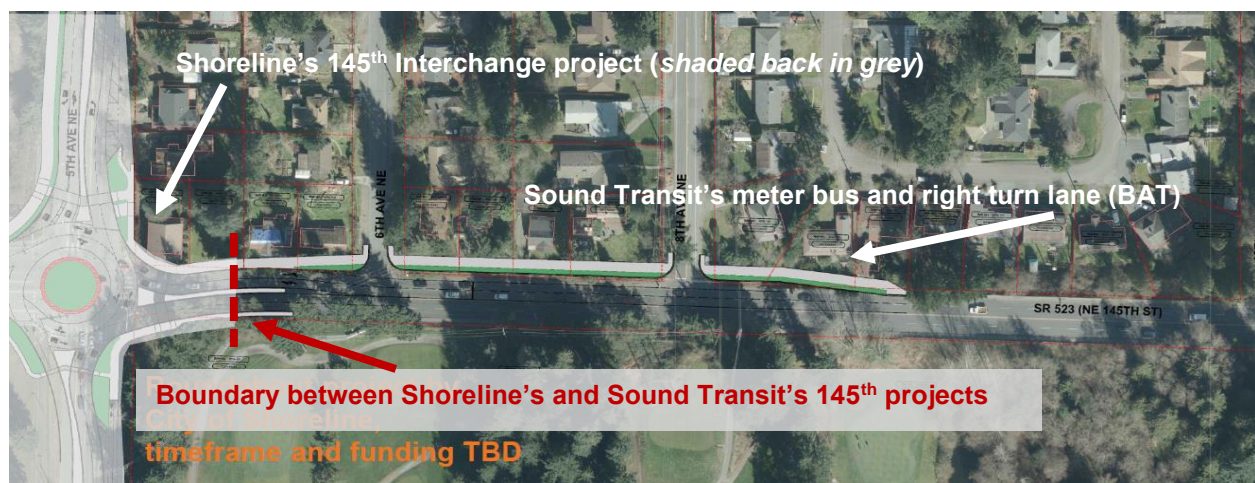
Figure 1. 145th Interchange Roundabouts Concept



5 interchange with a 13-foot shared use path on the north side of the bridge deck and a 4-foot sidewalk on the south side of the bridge deck.

Additionally, Sound Transit is planning to provide BRT service on SR 523/145th Street from SR 522 (Lake City/Bothell Way) to the Shoreline South/145th Street Light Rail Station. Sound Transit supports the roundabout concepts developed by the City and is assuming its operation in relation to their project's design and environmental review. In order to ensure reliable bus service along the 145th Street corridor, Sound Transit is planning to add a metered "bus only and right turn" lane traveling westbound along 145th Street and then northbound on 5th Avenue NE as part of their project (see Figure 2). Sound Transit's metered "bus only" lane, will be constructed by the Sound Transit BRT project and is not considered an element of the Shoreline-led I-5 interchange project.

Figure 2. Westbound 145th Interchange Roundabout and Sound Transit Metered Bus Lane



Project Funding Strategy to Date

The Project has received a federal grant, via the USDOT Federal Highway Administration (FHWA) Surface Transportation Program (STP) to complete the design phase of the Project. Over the last several years, staff have also been actively working with federal, state and regional grant providers to secure full funding for the construction phase of the Project.

In 2018, the City applied for a USDOT BUILD grant for the Right-of-Way and Construction phases of the Project, and a federal STP grant for the Construction phase. Although the City did not receive an award from either of these grant programs, the Project placed relatively high on the STP funding contingency list and was a finalist for the BUILD grant.

In 2019, the City reapplied to the BUILD program and applied for a Transportation Improvement Board (TIB) grant. Although the City still did not receive any grant awards in 2019, Sound Transit provided a letter to the state TIB committing to provide up to \$5 million in funding match in support of a 2019 \$5 million TIB grant application submitted by Shoreline (included as Attachment A). The TIB informed the City that the

2019 grant application for the Project was competitive but did not demonstrate enough committed funding for the construction phase to receive a grant award. The TIB encouraged the City to reapply for grant funds in 2020.

The City continues to actively work with its government agency partners (WSDOT, City of Seattle, King County, and Sound Transit) and other funding organizations to secure the additional required funds for the Project. Additional information on the City's Project funding approach is provided in the following Discussion section of this staff report under the heading "Project Funding".

DISCUSSION

The following section provides an overview of the City's approach to delivering the project – including the City's planned partnership with WSDOT for final design and construction of the Project; the Project's schedule; the funding approach; perceived risks; and potential Project delivery approaches given the identified Project risks.

Partnering Approach to Final Design and Construction

WSDOT has been very supportive of the Project and shares the City's interest in constructing the Project's improvements before Light Rail opens in 2024. In support of this effort and the desired timeframe for completion, WSDOT has offered to complete final design and construction for the Project if full funding is confirmed in 2020. WSDOT proposes to take over design of the Project from the City after the City completes 30% design and the environmental review process for the Project (see Attachment B). With the assumption that funding will be obtained to complete the Project, the City is planning to accept this offer and enter into an interlocal agreement with WSDOT to support this effort.

Project Schedule

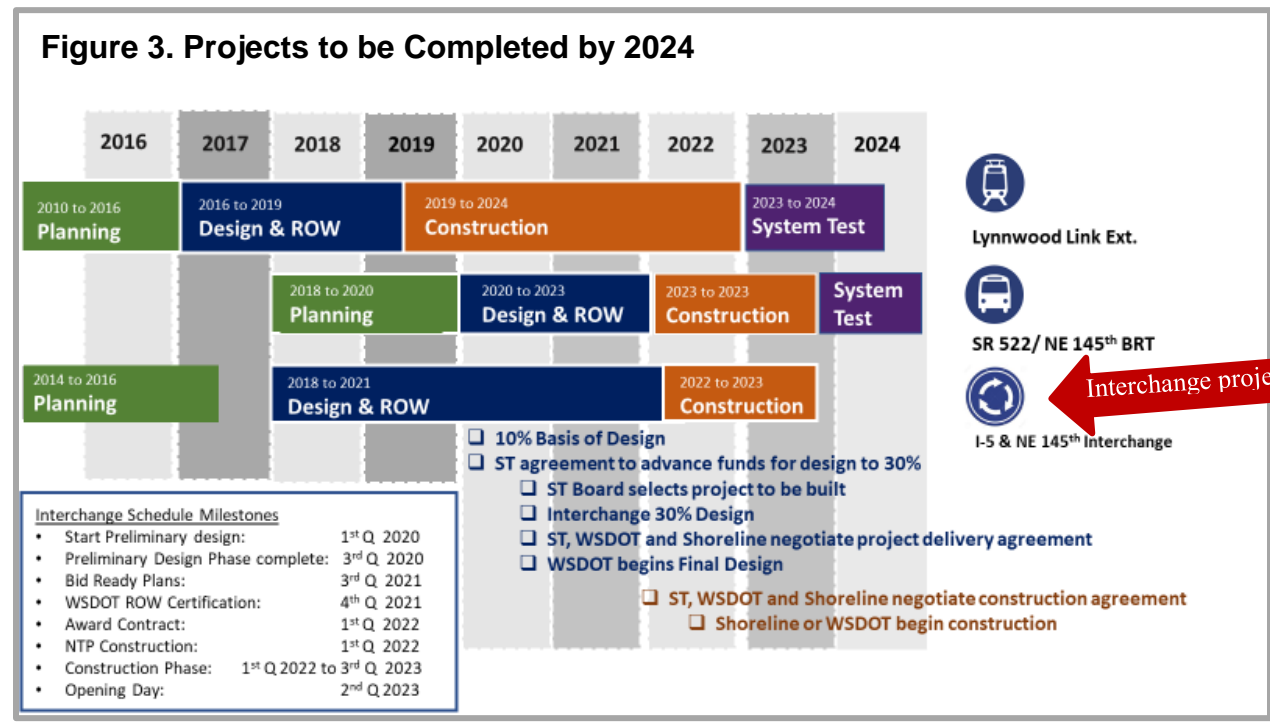
The Project is one of several capital projects that is scheduled to be operational by the time the Shoreline South / 145th Street Light Rail Station opens in 2024. It has been recognized by WSDOT, and other agencies delivering projects in the interchange vicinity, that completion of the Project work will significantly increase accessibility to the Shoreline South/145th Light Rail Station for pedestrians, bicycles, vehicles, and buses. If the Project were to be delayed until after this station is operational, the construction activity would significantly impede access to the station.

Shoreline is close to completing 10% of the Project design and is expecting to complete its National Environmental Policy Act (NEPA) environmental documentation by fall 2020. Property rights need to be acquired from fewer than five property owners. Acquisition is expected to begin in 2020, following completion of NEPA, with Right of Way Certification expected by the end of 2021.

Permitting will begin immediately after NEPA is completed and is expected to be complete by 2021. With this schedule, the Project would go out to bid for construction in early 2022. A construction contract would be awarded and begin in early-mid 2022. Substantial and physical completion would be in 2023, meeting the goal of having

improvements in place and construction completed prior to the opening of the Shoreline South/145th Light Rail Station in 2024.

Figure 3 below presents a schedule for the Project and key upcoming milestones as well as the schedules for the two Sound Transit projects that are being completed in comparable time frames. The schedule assumes the Project is transferred to WSDOT at 30% design and includes development of agreements to support WSDOT's assumption of final design and construction of the Project.



Project Cost

The current planning and design costs for the interchange roundabouts are estimated to be \$4,500,000 (funding secured). Right-of-way costs are currently estimated at \$2,500,000 and construction costs are estimated at \$18,500,000 for a total cost to complete of \$25,500,000 (both right-of-way and construction costs include contingencies).

Project Funding

As noted previously, only the design phase of the Project is fully funded. The following is an overview of the current funding status, funding strategy to date, and potential project delivery options given the Project's funding status.

To date, the City has received \$3,892,500 of FHWA Surface Transportation Program (STP) grant funding for the design and environmental review phase of the project. The grant requires a 13.5% local match, with the City having 10 years to complete this phase of the project or the grant funds will need to be returned. After completion of the design phase, the City will have a subsequent 10 years to complete the right-of-way phase and then another 10 years to complete the construction phase of the Project.

Each phase has 10 years to complete the phase or all federal funding for the Project on all phases will need to be reimbursed. The City has used local funds as a match to STP funds to complete 10% design of the Project and has eight (8) years left to complete design before any penalties.

The City has also been awarded a total of \$25 million in Washington State Connecting Washington funding for the entire 145th Street corridor (Aurora Avenue N to SR 522/Lake City/Bothell Way). Of that funding, the City plans to allocate approximately \$3 million to the Project in order to fund the right-of-way phase with any balance from the \$3 million to be used in the construction phase. The majority of the Connecting Washington funds (\$22 million) are needed to build another critical segment of the 145th corridor, from Corliss Avenue to just west of the Project, which is also important to construct before the opening of the Shoreline South light rail station. It should be noted that after the passing of I-976, access to the Connecting Washington funds has been put on hold for a number of projects including the 145th Street corridor. To date, WSDOT has not provided a timeframe for when these projects will be taken off hold and the Connecting Washington funds allocated for these projects made accessible.

With current secured design and right-of-way funds for the Project, there is still an approximately \$18 million-dollar gap to fill, which is largely the construction cost for the Project. The City is actively working with its agency project partners and grant funding agencies to secure the needed funding to construct the Project prior to light rail opening in 2024. Grant funding programs that will be pursued in 2020 that the Project is expected to be highly competitive for include the Transportation Improvement Board, WSDOT's Regional Mobility grant program and the BUILD grant program.

Addressing Project Risks

If the City does not complete the Project or complete the Project phases in the time frames discussed above, the City is at risk to return the expended federal funds. As the City continues with Project development and utilizes federal funds, the amount of funds to be returned increases. The funding gap increases this risk as the Project may be delayed to seek funding or terminated if total funding is not secured.

To date, the City has been reimbursed for approximately \$700,000 of the \$3.89 million STP grant award for the Project. If it were determined that it was too large of a risk to continue efforts in securing funding to complete the Project and the City had to return these federal funds today, the City has about \$500,000 of Roads Capital funding that could go toward this payback and would need to provide an additional \$200,000 (approximately) to cover the \$700,000 of current federal reimbursements.

Sound Transit has recognized the benefits of the proposed Project roundabouts for the success of their adjacent SR 522/145th Street BRT project as well as the benefits of completing the Project before light rail opens in 2024. Sound Transit is also aware of the City's concerns about expending federal grant dollars that will have to be returned if the Project is not funded and completed. In order to provide more time for the City to acquire additional funding for the Project and reduce some of the risk for possible pay back of funding, Sound Transit has offered to provide the City up to \$1 million to progress the design to 30% and complete the environmental review process. Sound

Transit is not requiring the City to return these funds if the project is not completed. The City's design consultant on the Project has confirmed that \$1 million should be adequate funding to cover both City administration and consultant services required to progress to 30% design.

The exact approach to utilizing the \$1 million of Sound Transit funds needs to be determined in cooperation with WSDOT and Sound Transit. Introducing an additional funding source to progress the design potentially in-lieu of using federal grant dollars is a unique and atypical approach for WSDOT and USDOT administrators of the STP funds. Initial conversations with WSDOT regarding the use of Sound Transit funds to progress design have been favorable but additional conversations are required with WSDOT and USDOT to obtain formal approval.

Alternative Project Delivery Approaches

Given staff's concern regarding the continued expenditures of federal grant dollars that would need to be returned if the Project is not completed within the desired time frame, staff are currently asking for Council guidance on one of two project delivery options:

Option 1

Stop the project at 10% design and return the federal grant awarded for design to date. The advantages and disadvantages of this option are as follows:

- The advantage of this approach is the City minimizes the risk of paying back any additional federal dollars beyond what has been reimbursed to date.
- The disadvantage of this approach is a relatively high likelihood that the Project will not be constructed. The City would be less competitive and less likely to secure full funding at a future date if the project is halted and the funds are returned.

Option 2

Pursue WSDOT approval of this concept and enter into an agreement with Sound Transit to utilize \$1 million offered for the design phase of the Project. Proceed with Project design to 30% using the Sound Transit funds while continuing to seek funding for the construction phase of the project. In spending approximately \$1 million to reach 30% design utilizing the grant, the City will have requested an additional \$865,000 (86.5%) in federal funding for a total of approximately \$1,565,000 of federal funds reimbursed to the City. If the City is able to utilize the \$1 million from Sound Transit for this effort instead of federal funds, the City's liability to return the federal funds remains approximately \$700,000. By using Sound Transit funds instead of federal funds, we will have completed the 30% design without using all the federal funds. How these unused federal funds are distributed (remain with the Project or re-appropriated elsewhere) will be part of the conversation with WSDOT and USDOT funding managers. Again, this concept depends on successful discussion and agreements with WSDOT and Sound Transit.

The advantages and disadvantages of this option are as follows:

- The advantages of this approach are the risk of the having to return additional federal funding is reduced, the Project stays on a schedule that allows it to be built before Light Rail opens, and the Project partners can utilize an additional

grant cycle as well as seek funding partnership with other jurisdictions and agencies.

- A disadvantage of this approach is that the City could end up with \$1 million of unused STP design funding (the amount replaced by the Sound Transit funding) which the City would basically be leaving on the table. The USDOT does not typically look favorably on agencies that accept STP grant awards, utilize an award for multiple years, but do not ultimately complete a project. This could impact the City's competitiveness for future USDOT grants.

As the amount of federal funds that would need to be returned to the USDOT is comparable under both options, staff recommends pursuing Option 2 as the risk of the having to return additional federal funding is reduced, it allows the Project to progress to 30% design and stay on schedule to be constructed prior to the opening of the Light Rail station and provides additional time to determine if full funding of the Project can be achieved within the desired four-year time frame. Under Option 2, staff would provide Council with a Project funding update and seek additional guidance in the last quarter of 2020.

The purpose of tonight's Council discussion is to provide an update on the status of the Project, with a focus on its funding status, and to confirm Council support for staff's recommended approach to project delivery.

COUNCIL GOALS ADDRESSED

This project addresses 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.

RESOURCE/FINANCIAL IMPACT

The City has received a \$3,892,500 grant award from the FHWA Surface Transportation Program to complete environmental review and final design of the Project. This requires a 13.5% local match or \$607,500 in other non-federal funding. The City is currently using Roads Capital Funds to provide the required match to complete the design phase. To date, the City has not secured funds required to complete the construction phase of the Project. If the City is unable to complete each phase of the Project (Design, ROW, and Construction) within the FHWA required time frame, the City will be required to pay back all federal grant dollars reimbursed to the City.

RECOMMENDATION

Staff recommends pursuing Project Delivery Option 2, as described in this staff report, which includes confirming formal WSDOT approval for this approach and entering into an agreement with Sound Transit to provide \$1 million to support the Project design to 30% design. This will allow the City and our partners to continue to seek funding for the construction phase of the Project. Staff would provide Council with a project funding update and seek additional guidance in the last quarter of 2020.

ATTACHMENTS

Attachment A: Sound Transit Letter to the Transportation Improvement Board

Attachment B: Washington State Department of Transportation Letter to the
Transportation Improvement Board



October 11, 2019

Ashley Probart, Executive Director
Transportation Improvement Board
505 Union Ave SE, Suite 350
Olympia, WA 98501

RE: Sound Transit Contribution to Shoreline Interchange Project

Dear Mr. Probart:

I am writing to confirm Sound Transit's interest in providing a financial contribution to the City of Shoreline's SR 523 (N/NE 145th Street) & I-5 Interchange Improvements project (Interchange Project) that includes a design with roundabouts. This contribution would reflect the benefits of the roundabout project design to Sound Transit's riders and to our SR 522/NE 145th Stride Bus Rapid Transit project.

In the last few years, the cities of Shoreline and Seattle, WSDOT, King County Metro and Sound Transit have been collaborating on several capital planning and design projects that affect the I-5 Interchange area at NE 145th St (SR 523). These include Shoreline's Connecting Washington capital project on NE 145th St, Sound Transit's Lynnwood Link Extension (LLE) project and our SR 522 Stride BRT project. Other related projects include potential King County Metro service changes, potential land use and zoning changes by the city of Seattle and WSDOT's larger vision study for the corridor.

The multiple projects offer both opportunities and challenges for each agency to share data and analysis, align decision-making and collaborate to find cost-effective solutions. Sound Transit believes that the roundabout design for the interchange offers such a solution. The design will improve transit travel time and reliability, offer safer pedestrian and bicycle connections, and improve general traffic capacity. It also helps us manage cost for the Stride BRT project by reducing the likely footprint of that project further east. We appreciate each agency's cooperation to develop this win-win approach.

We intend our contribution to reflect the value of the project to Sound Transit and to help provide potential match for the Washington State Transportation Improvement Board (TIB) grant program. In support of this grant application, Sound Transit anticipates contributing \$5 Million to the Interchange Project.

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Victoria Woodards
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CHIEF EXECUTIVE OFFICER

Peter M. Rogoff

Important elements to note:

- Any contribution is subject to Sound Transit Board review and approval.
- Environmental review and permitting for the Interchange Project must be completed in a time sufficient to support final design and construction and align with 2024 opening of the LLE and Stride BRT projects.
- Sound Transit will not complete project development or construction. We understand that WSDOT Northwest Region has expressed their interest in doing so.
- Sound Transit is highly interested in seeing this project completed. We will continue to collaborate with all partners to resolve issues, identify funding options, and complete design and construction.

As a further example of collaboration, I also want to mention that our LLE team has been working with the City of Seattle to identify and acquire portions of Seattle Public Utility (SPU) properties on the north side of NE 145th St near an SPU pump house facility. Our BRT and LLE teams are working together to determine potential future property needs for the eastern roundabout in the Interchange Project, including potential additional land from SPU. If we can identify those needs, we can potentially modify the acquisition area, saving time and cost for the Interchange Project. Such multi-agency and inter-project coordination will help us all be successful.

We hope that the TIB Executive Committee recognizes this collaborative work across multiple jurisdictions and strongly considers the Interchange Project for funding. Partnerships like this will help make Sound Transit's investments in high capacity transit even more successful.

Sincerely,



Peter M. Rogoff
Chief Executive Officer



**Washington State
Department of Transportation**

Northwest Region
15700 Dayton Avenue North
P.O. Box 330310
Seattle, WA 98133-9710
206-440-4000
TTY: 1-800-833-6388
www.wsdot.wa.gov

October 10, 2019

Transportation Improvement Board (TIB)
505 Union Ave SE, Suite 350
Olympia, WA 98501

TIB Staff:

This letter supplements the letter of concurrence submitted by the Washington State Department of Transportation in support of the City of Shoreline TIB grant application for the SR 523 (N/NE 145th Street) & I-5 Interchange Project on August 12, 2019. Since that date, WSDOT has continued to coordinate with the City on a strategy for project delivery. Once funding has been secured, and an interlocal agreement has been executed between the agencies, WSDOT has offered to supply the staffing for final design and construction administration.

WSDOT staff have been working with Shoreline staff and other stakeholders including Sound Transit, King County Metro, and Seattle Department of Transportation and together have developed a preferred design that includes roundabouts on the east and west sides of the interchange. The City's traffic modeling results, as well as national empirical research, have demonstrated that roundabouts are safer and perform better for all modes of transportation at a lower cost than the initial standard proposed improvements.

WSDOT shares Shoreline's intention that construction of improvements to this interchange be completed in advance of the Sound Transit light rail station and BRT opening in 2024, and we will continue working closely with all stakeholders towards that goal. Funding support from the Transportation Improvement Board will help make this goal possible, improving mobility and safety through this regionally significant connection.

Sincerely,

A handwritten signature in black ink that reads "Mike Cotten".

Mike Cotten, PE, DBIA
Northwest Regional Administrator

cc: Dylan Counts, WSDOT