South Sounder Capital Improvements Program

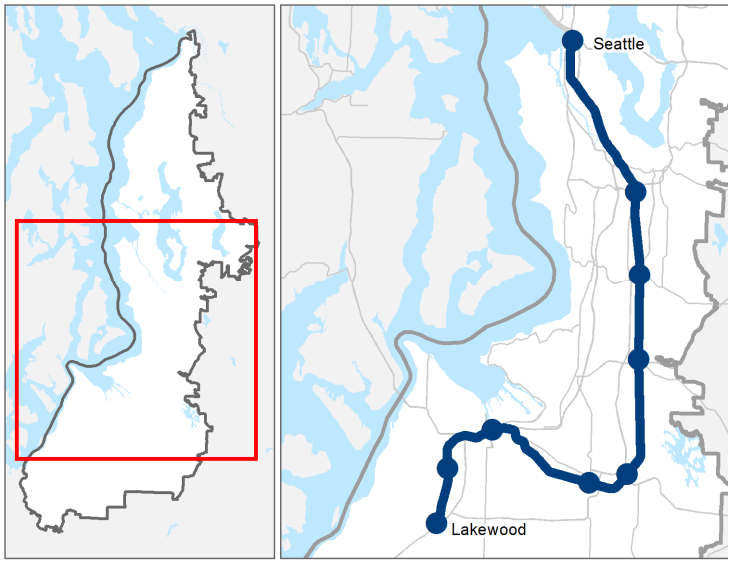
Subarea	South King/Pierce
Primary Mode	Commuter Rail
Facility Type	Infrastructure Improvement
Length	N/A
Version	Draft ST3 Plan
Date Last Modified	March 28, 2016

SHORT PROJECT DESCRIPTION

This project would establish a program of capital elements that would be used to improve South Sounder access, capacity, and services in response to increases in demand. Program elements could include platform extensions, track and signal upgrade and other related infrastructure to facilitate additional capacity, and access elements such as improvements for pedestrians, bicyclists, buses, and private vehicles, prioritized per Sound Transit's System Access Policy.

Note: The elements included in this representative project will be refined during future phases of project development and are subject to change.

PROJECT AREA AND REPRESENTATIVE ALIGNMENT



KEY ATTRIBUTES	
REGIONAL LIGHT RAIL SPINE *Does this project help complete the light rail spine?*	No
CAPITAL COST *Cost in Millions of 2014 $*	$243 — TBD
RIDERSHIP *2040 daily project riders*	TBD – subject to further analysis

PROJECT ELEMENTS	Capital investments to improve South Sounder access, capacity, and services may include, but are not limited to:
	• Platform extensions to accommodate 8 car train sets which include:
	  ○ Extend boarding platforms at existing Sounder stations to accommodate 8-car train lengths
	  ○ Platforms will be extended by up to 85 feet at all stations, where necessary
	  ○ Relocate Kent Station platform features to prevent blockage of nearby street(s) during boarding/deboarding
	  ○ Modifications, where needed, to allow platform extensions such as signals, sidewalks, relocation of existing platform elements, signage, and illumination
	  ○ Raise existing platforms to height closer to level boarding
	  ○ Special traffic control to address confined site and working near active railroad
	  ○ Purchase of 12 vehicles
	• System access improvements such as:
	  ○ Pedestrian improvements within one-quarter mile of the stations
	  ○ Bicycle storage infrastructure for station users, and bicycle access improvements within one-half mile of the stations
	  ○ Transit speed and reliability improvements on routes connecting to the stations
	  ○ Off-site parking along bus routes with frequent connections to South Sounder stations during peak periods

South Sounder Capital Improvements Program

	KEY ATTRIBUTES
PROJECT ELEMENTS	○ Expanded or new drop off/pick up areas at the stations ○ Additional bus/transfer facilities at the stations ○ Expanded parking capacity ○ Non-motorized access facilities (bicycle/pedestrian, including bicycle storage) (See separate document titled "Common Project Elements") • Elements to support potential expanded service levels, which would be determined by the ST Board in collaboration with partner agencies and organizations, could include, but not be limited to: ○ Acquisition of operating rights and real property rights ○ Related track and signal improvements between Tacoma and Seattle ○ Up to 3 Sounder stations modified at platforms to accommodate additional train volumes ○ Replacement of gated signal crossings as needed ○ Roadway improvements associated with track • 1 percent for art per Sound Transit policy
NOT INCLUDED	• Extensions to Tacoma Dome Station platforms • Stormwater requirements for leased temporary stalls • Payments to jurisdictions for use of existing jurisdiction-owned parking stalls for temporary parking during construction • Retail uses in new structures; transit-oriented development • Track improvements funded by ST2 • See separate document titled "Common Project Elements"
ISSUES & RISKS	• Determination by FRA, FTA, and BNSF (for platforms on BNSF ROW) regarding retrofit of existing platforms to height closer to level boarding • Auburn Station may have significant challenges to construct platform extension due to the junction immediately south of the existing station • The overall station area development agreements with jurisdictions, King County Metro, and/or BNSF may need to be amended • Poor soil conditions are present in the study area and hazardous materials remediation may be required • Special traffic control to address confined site and working near an active rail line • Future freight and other passenger rail trains on the BNSF corridor between Tacoma and Seattle • Agreement(s) with BNSF to operate Sounder service at certain levels would be necessary and could be affected by expectations of future freight markets and operations • BNSF agreement will be needed to construct necessary improvements or to purchase necessary real property and operating rights

South Sounder Capital Improvements Program

Sound Transit has developed a conceptual scope of work for this candidate project for the purpose of generating a representative range of costs, both capital and operating; and benefits, including ridership forecasts, TOD potential, multi-modal access and others. This information is being developed to assist the Sound Transit Board as it develops an ST3 system plan, including phasing of investments and financial plan, for voter consideration. Final decisions on project elements (e.g., alignment, profile, station locations, and number of parking stalls) will be determined after completion of system planning, project level environmental review, and preliminary engineering during which additional opportunities for public participation will be provided. Therefore, this scope definition should not be construed as a commitment that all representative features will be included in the final developed project.

Long Description:
This project will establish a program of capital elements that would be used to improve South Sounder access, capacity, and services. Elements of the project may include, but are not limited to, expanding existing south Sounder station platforms to accommodate 8-car train sets, planning and implementation of investments to improve access to the South Sounder train stations, including improvements for pedestrians, bicyclists, buses, and private vehicles, expanding Seattle-Tacoma-Lakewood Sounder service beyond current service levels. Funds included for system access improvements would be prioritized per Sound Transit's System Access Policy. Track improvements for the purpose of accommodating additional service will also be implemented. Track improvements may include elements such as additional main line track, turnouts, gated signals, station platform rebuilds, and associated roadway improvements.

Assumptions:
- Extended platforms at King Street, Tukwila, Kent, Auburn, Puyallup, Sumner, South Tacoma, and Lakewood
- Tacoma Dome platform extension would occur as part of the Tacoma Trestle Track and Signal and Amtrak Station relocation projects
- Costs associated with extending the existing platform one car length and raising it from its current height (8 inches above top of rail) to approximately 15 inches above top of rail and constructing an extension at the same height; platform heights will be determined through coordination with FRA, FTA, and BNSF
- System operation requires placement of a mini-high at the same car location at every station
- Sounder platform function would remain open during the construction period and users will be protected during construction
- Construction of access improvements should be phased to maintain operation of the stations, including alternate routing of Metro, Pierce Transit, and ST buses
- Special traffic control during construction of access improvements to address confined sites and working near an active railroad
- Potential track improvements along sections of the corridor from Bay Street/TR Junction in Tacoma to King Street Station in Seattle
- Track improvements from Ellingson Road in Auburn to S 277th Street in Kent were included as part of ST2, and are excluded
- Track improvements from James Street in Kent to Black River in Seattle were included as part of ST2, and are excluded
- For non-motorized station access allowances, the Tacoma Dome Station is categorized as an Urban station and an Intermodal Transit Center, the Tukwila station is categorized as a Suburban station and an Intermodal Transit Center, the Auburn station is categorized as an Urban station, and all other stations are categorized as Suburban stations

Environmental:

Sound Transit will complete project-level state and federal environmental reviews as necessary; provide mitigation for significant impacts; obtain and meet the conditions of all required permits and approvals; and strive to exceed compliance and continually improve its environmental performance.

Utilities:
Utility relocation as needed to complete the project, including fiber optics, sewer, water, overhead electric/communications, etc.

Right-of-Way and Property Acquisition:
- BNSF agreement and possible local jurisdiction agreements for right-of-way use
- Purchase of nearby properties for new parking facilities and/or other access improvements
- Costs associated with obtaining waiver(s) of jurisdictions' zoning requirements related to height of parking structures and inclusion of other uses in parking structures, such as street-level retail

Potential Permits/Approvals Needed:
- Building permits: Electrical, Mechanical, Plumbing
- Utility connection permits
- Construction-related permits (clearing and grading, stormwater management, street use, haul routes, use of city right-of-way)
- Master use

- Land use approvals (Conditional use, design review, site plans, Comprehensive Plan or development code consistency, Special Use Permits)
- BNSF
- All required local, state, and federal environmental permits
- NEPA/SEPA and related regulations

Project Dependencies:

- BNSF agreement needed to permit construction
- Tacoma Trestle project and Point Defiance Bypass project completion
- Determination by FRA, FTA, and BNSF regarding retrofit of existing platforms
- Amendments may be required to existing agreements with the jurisdictions, BNSF, King County Metro and/or Pierce Transit to facilitate construction
- Sound Transit will need to acquire real property and operating rights from BNSF.

Potential Project Partners:

- WSDOT
- Amtrak
- BNSF
- Cities of Lakewood, Tacoma, Puyallup, Sumner, Auburn, Kent, Tukwila, Seattle
- FTA
- FRA
- Transit Partners Also Serving Project: King County Metro, Pierce Transit

South Sounder Capital Improvements Program

Cost:
Sound Transit has developed a conceptual scope of work for this candidate project for the purpose of generating a representative range of costs, both capital and operating; and benefits, including ridership forecasts, TOD potential, multi-modal access and others. This information is being developed to assist the Sound Transit Board as it develops an ST3 system plan, including phasing of investments and financial plan, for voter consideration. Final decisions on project elements (e.g., alignment, profile, station locations, and number of parking stalls) will be determined after completion of system planning, project level environmental review, and preliminary engineering during which additional opportunities for public participation will be provided. Therefore, this scope definition should not be construed as a commitment that all representative features will be included in the final developed project.

In Millions of 2014$

ITEM	COST
Agency Administration	
Preliminary Engineering & Environmental Review	
Final Design & Specifications	
Property Acquisition & Permits	
Construction	
Construction Management	
Third Parties*	
Vehicles	
Contingency	
Total	**$243 — TBD**

Design Basis: Conceptual

*Permitting and Startup costs included

South Sounder Capital Improvements Program

Evaluation Measures:

MEASURE		MEASUREMENT/RATING	NOTES
	**Regional Light Rail Spine** *Does project help complete regional light rail spine?*	No	
	**Ridership** *2040 daily project riders*	TBD – subject to additional analysis	
	**Capital Cost** *Cost in Millions of 2014 $*	$243 — TBD	
	**Annual O&M Cost** *Cost in Millions of 2014 $*	TBD – subject to additional analysis	
	**Travel Time** *In-vehicle travel time along the project (segment)*	TBD – subject to additional analysis	
	**Reliability** *Quantitative/qualitative assessment of alignment/route in exclusive right-of-way*	Medium-High	Some at grade crossings
	**System Integration** *Qualitative assessment of issues and effects related to connections to existing local bus service and potential future integration opportunities*	N/A	
	**Ease of Non-motorized Access** *Qualitative assessment of issues and effects related to non-motorized modes*	N/A	
	Percent of Non-motorized Access *Percentage of daily boardings*	N/A	
	**Connections to PSRC-designated Regional Centers** *Number of PSRC-designated regional growth and manufacturing/industrial centers served*	10 centers	Manufacturing and Industrial Centers: Kent, North Tukwila and Port of Tacoma Regional Growth Centers: Auburn, Kent, Lakewood, Puyallup Downtown, Seattle CBD, Tacoma Downtown and Tukwila
	**Land Use and Development/TOD Potential** *Quantitative/qualitative assessment of adopted Plans & Policies and zoning compatible with transit-supportive development within 0.5 mile of potential stations* *Qualitative assessment of real estate market support for development within 1 mile of potential corridor* *Density of activity units (population and employment for 2014 and 2040) within 0.5 mile of potential stations*	N/A N/A N/A	
	**Socioeconomic Benefits** *Existing minority / low-income populations within 0.5 mile of potential stations* *2014 and 2040 population within 0.5 mile of potential stations* *2014 and 2040 employment within 0.5 mile of potential stations*	N/A	

For additional information on evaluation measures, see http://soundtransit3.org/document-library

SOUND TRANSIT 3 DRAFT SYSTEM PLAN

SoundTransit

SOUNDER EXPANSION TO DUPONT

Alignments and stations shown are representative and are identified for purposes of cost estimating, ridership forecasting and other evaluation measures.

LENGTH (MILES)			7.8
REGIONAL LIGHT RAIL SPINE			NO
RIDERSHIP (DAILY PROJECT RIDERS)			1,000—1,500
CAPITAL COST (2014 $ M)			$293—$314
ANNUAL O&M COST (2014 $ M)			$3
TRAVEL TIME (MIN)			11
RELIABILITY			MEDIUM-HIGH
SYSTEM INTEGRATION			MEDIUM-LOW
EASE OF NON-MOTORIZED ACCESS			LOW
PERCENT OF NON-MOTORIZED ACCESS			25—35%
CONNECTION TO PSRC-DESIGNATED REGIONAL CENTERS			1 CENTER
LAND USE AND DEVELOPMENT/ TOD POTENTIAL	PLANS AND POLICIES		LOW
	MARKET SUPPORT		MEDIUM-LOW
	ACTIVITY UNITS	POP PER ACRE (2014/2040)	2 / 2
		EMP PER ACRE (2014/2040)	1 / 1
		POP+EMP PER ACRE (2014/2040)	2 / 4
SOCIOECONOMIC BENEFITS	MINORITY/LOW-INCOME		42% / 23%
	POPULATION (2014/2040)		1,600 / 2,300
	EMPLOYMENT (2014/2040)		700 / 1,200

Date Last Modified: 03-26-2016

For additional information on evaluation measures, see http://soundtransit3.org/document-library

Sounder Extension to DuPont

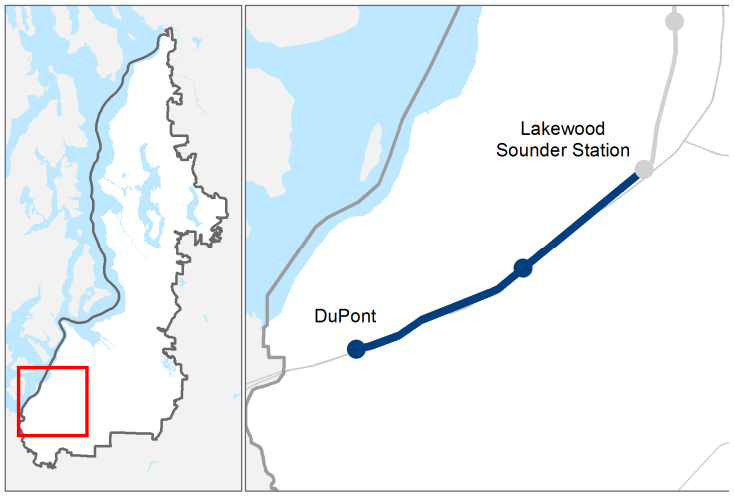
Subarea	Pierce
Primary Mode	Commuter Rail
Facility Type	Station
Length	7.8 miles
Version	Draft ST3 Plan
Date Last Modified	March 28, 2016

SHORT PROJECT DESCRIPTION

This project would extend Sounder commuter rail service from Lakewood to Tillicum and DuPont with two new stations.

Note: The elements included in this representative project will be refined during future phases of project development and are subject to change.

PROJECT AREA AND REPRESENTATIVE ALIGNMENT



KEY ATTRIBUTES	
REGIONAL LIGHT RAIL SPINE *Does this project help complete the light rail spine?*	No
CAPITAL COST *Cost in Millions of 2014 $*	$293 — $314
RIDERSHIP *2040 daily project riders*	1,000 — 1,500
PROJECT ELEMENTS	• One at-grade station: Tillicum neighborhood of Lakewood near the intersection of I-5 and Berkeley Avenue SW • Pedestrian plaza at Tillicum Station • Surface parking at the Tillicum with approximately 125 stalls; the scope of the transit parking components included in this project could be revised to include a range of strategies for providing rider access to the transit facility; along with, or instead of, parking for private vehicles or van pools, a mix of other investments could be accomplished through the budget for this project • One at-grade station: Sound Transit's existing DuPont Station on Wilmington Drive, just northeast of the intersection of I-5 and Center Drive in DuPont • A second mainline track from Bridgeport Way SW to the DuPont Station • One new layover and train storage facility southwest of the proposed DuPont station with a capacity for five trains • Operator welfare building and security equipment • 4 trains in the a.m. and p.m. peak periods • 1 percent for art per Sound Transit Policy • Non-motorized access facilities (bicycle/pedestrian), transit-oriented development (TOD)/planning due diligence, bus/rail integration facilities, and sustainability measures (see separate document titled "Common Project Elements") • The operational plan for this project assumes that every other Sounder train that reaches Lakewood will continue south to DuPont
NOT INCLUDED	• See separate document titled "Common Project Elements"

Sounder Extension to DuPont

	KEY ATTRIBUTES
ISSUES & RISKS	• WSDOT project work with the Point Defiance Bypass project • Ongoing coordination with WSDOT project to expand I-5 between Lakewood and DuPont (JBLM) • Impacted by inclusion of the South Sounder Capital Improvements Program project in ST3 system plan (could result in different station platform lengths, system access and/or additional Sounder service beyond assumptions listed)

Sounder Extension to DuPont

Sound Transit has developed a conceptual scope of work for this candidate project for the purpose of generating a representative range of costs, both capital and operating; and benefits, including ridership forecasts, TOD potential, multi-modal access and others. This information is being developed to assist the Sound Transit Board as it develops an ST3 system plan, including phasing of investments and financial plan, for voter consideration. Final decisions on project elements (e.g., alignment, profile, station locations, and number of parking stalls) will be determined after completion of system planning, project level environmental review, and preliminary engineering during which additional opportunities for public participation will be provided. Therefore, this scope definition should not be construed as a commitment that all representative features will be included in the final developed project.

Long Description:
This project would construct an extension of Sounder commuter rail from the Lakewood station to DuPont. The extension would include a second mainline track from Bridgeport Way SW to the terminus at DuPont station. The project includes the construction of two commuter rail stations; Tillicum and DuPont. The station near Tillicum will include 125 parking stall, bus loop and pedestrian plaza. The station near DuPont will include a track layover and train storage facility at the terminus. The station at DuPont is located near the existing Wilmington Drive Park and Ride lot.

Assumptions:

- Two at-grade commuter rail stations: Tillicum and DuPont
- The proposed station platform would be designed to match the lengths of existing South Sounder platforms; if platform lengths are extended as part of an associated ST3 project, then the proposed platforms should be modified to match
- A second track will be included from Bridgeport Way SW to the DuPont station to expand the track capacity and facilitate operations
- The project includes a new layover and train storage facility that would accommodate five trains
- New parking at Tillicum of approximately 125 stalls
- Retention of the existing surface parking lot at DuPont (126 stalls)
- The assumed operating concept is that four of the trips that currently serve Lakewood Station would also serve Lakewood's Tillicum neighborhood and DuPont; these trips would start and end in DuPont
- Sound Transit currently owns the rail line between Tacoma and Nisqually, with BNSF being the designated operator
- WSDOT is upgrading the existing mainline rail line between Nisqually and Tacoma as part of their Point Defiance Bypass Project to accommodate Amtrak trains; based on WSDOT's plans, as many as 14 Amtrak intercity passenger trains (seven in each direction) would operate daily on this rail line segment between about 9 am and 10 pm; the mainline is generally used by four freight trains per day (two in each direction), and the existing freight train service would continue, although the times of day that freight trains operate could change; WSDOT will completely rebuild the mainline track with new wood or concrete ties and continuously welded rail (CWR), but the yard tracks across from the existing DuPont Station would remain mostly unchanged; the mainline would be double-tracked between S. 66th Street in Tacoma to Bridgeport Way SW in Lakewood; the Point Defiance Bypass Project is not a part of this project and is not included in the cost estimate
- Improvements by WSDOT to expand capacity to I-5 between Lakewood and DuPont could be constructed prior to this project; the improvements to some interchanges would eliminate current at-grade train crossings at these locations
- The project's proposed service would operate four trains during the a.m. and p.m. peak periods
- No additional vehicles will be needed to operate the four weekday roundtrips serving DuPont due to adequate fleet available through ST2 program
- For non-motorized station access allowances, both stations are categorized as Suburban stations
- For bus/rail integration, facilities have been assumed at the DuPont station

Environmental:
Sound Transit will complete project-level state and federal environmental reviews as necessary; provide mitigation for significant impacts; obtain and meet the conditions of all required permits and approvals; and strive to exceed compliance and continually improve its environmental performance.

Utilities:

- Utility relocation as needed to complete the project, including fiber optics, sewer, water, overhead electric/communications, etc.
- It is likely that two fiber optic communication lines would need to be relocated as part of the project

Right-of-Way and Property Acquisition:

- Minimal right-of-way acquisition, approximately 3 acres of WSDOT property at the I-5 and Center Drive intersection, would be required for the layover facility
- Additional ROW would be needed at I-5 and Berkley Avenue NW for the Tillicum Station
- Property acquisition for bus/rail integration facility

Sounder Extension to DuPont

Potential Permits/Approvals Needed:

- Building permits: Electrical, Mechanical, Plumbing
- Utility connection permits
- Construction-related permits (clearing and grading, stormwater management, street use, haul routes, use of city right-of-way)
- Master use
- Land use approvals (Conditional use, design review, site plans, Comprehensive Plan or development code consistency, Special Use Permits)
- All required local, state, and federal environmental permits
- FHWA approvals for work within the I-5 ROW
- NEPA/SEPA and related regulations

Project Dependencies:

JBLM – I-5 Mounts Road to Thorne Ln I/C – Corridor Improvements Project

Potential Project Partners:

- WSDOT
- Cities of Lakewood and DuPont
- Camp Murry
- Joint Base Lewis-McChord
- FHWA
- Tacoma Rail
- FRA
- BNSF
- FTA
- Transit partners serving project: Pierce Transit and Intercity Transit

Sounder Extension to DuPont

Cost:
Sound Transit has developed a conceptual scope of work for this candidate project for the purpose of generating a representative range of costs, both capital and operating; and benefits, including ridership forecasts, TOD potential, multi-modal access and others. This information is being developed to assist the Sound Transit Board as it develops an ST3 system plan, including phasing of investments and financial plan, for voter consideration. Final decisions on project elements (e.g., alignment, profile, station locations, and number of parking stalls) will be determined after completion of system planning, project level environmental review, and preliminary engineering during which additional opportunities for public participation will be provided. Therefore, this scope definition should not be construed as a commitment that all representative features will be included in the final developed project.

In Millions of 2014$

ITEM	COST	COST WITH RESERVE
Agency Administration	$15.50	$16.58
Preliminary Engineering & Environmental Review	$10.01	$10.71
Final Design & Specifications	$19.48	$20.84
Property Acquisition & Permits	$8.31	$8.89
Construction	$198.66	$212.57
Construction Management	$17.53	$18.76
Third Parties	$4.30	$4.60
Vehicles	$0.00	$0.00
Contingency	$19.48	$20.84
Total	**$293.25**	**$313.78**

Design Basis: Conceptual

The costs expressed above include allowances for TOD planning and due diligence, Sustainability, Bus/rail integration facilities, and Non-Motorized Access. These allowances, as well as the costs for Parking Access included above, are reflected in the following table. Property acquisition costs are not included in the table below, but are included within the total project cost above.

ITEM	COST	COST WITH RESERVE
TOD planning and due diligence	$0.67	$0.71
Sustainability	$6.20	$6.63
Parking access	$1.29	$1.38
Non-motorized (bicycle/pedestrian) access	$17.57	$18.81
Bus/rail integration facilities	$2.75	$2.95

Sounder Extension to DuPont

Evaluation Measures:

MEASURE		MEASUREMENT/RATING	NOTES
	**Regional Light Rail Spine** *Does project help complete regional light rail spine?*	No	
	**Ridership** *2040 daily project riders*	1,000 — 1,500	
	**Capital Cost** *Cost in Millions of 2014 $*	$293 — $314	
	**Annual O&M Cost** *Cost in Millions of 2014 $*	$3	
	**Travel Time** *In-vehicle travel time along the project (segment)*	11 min	
	**Reliability** *Quantitative/qualitative assessment of alignment/route in exclusive right-of-way*	Medium-High	Some at-grade crossings
	**System Integration** *Qualitative assessment of issues and effects related to connections to existing local bus service and potential future integration opportunities*	Medium-Low	Low number of existing daily transit connections from Dupont to Tillicum; Peak-hour service only
	**Ease of Non-motorized Access** *Qualitative assessment of issues and effects related to non-motorized modes*	Low	Low intersection density providing non-motorized access, with I-5, Fort Lewis and open space as barriers
	Percent of Non-motorized Mode of Access *Percent of daily boardings*	25-35%	
	**Connections to PSRC-designated Regional Centers** *Number of PSRC-designated regional growth and manufacturing/industrial centers served*	1 center	Regional growth center: Lakewood
	**Land Use and Development/TOD Potential** *Quantitative/qualitative assessment of adopted Plans & Policies and zoning compatible with transit-supportive development within 0.5 mile of potential stations* *Qualitative assessment of real estate market support for development within 1 mile of potential corridor* *Density of activity units (population and employment for 2014 and 2040) within 0.5 mile of potential station areas*	Low Medium-Low Pop/acre = 2014: 2; 2040: 2 Emp/acre = 2014: 1; 2040: 1 Pop + Emp/acre = 2014: 2; 2040: 4	Very limited support in local and regional plans; approx. 15% land is compatibly zoned Limited market support
	**Socioeconomic Benefits** *Existing minority / low-income populations within 0.5 mile of potential station areas* *2014 and 2040 population within 0.5 mile of potential station areas* *2014 and 2040 employment within 0.5 mile of potential station areas*	42% Minority; 23% Low-Income Pop: 2014: 1,600; 2040: 2,300 Emp: 2014: 700; 2040: 1,200	

For additional information on evaluation measures, see http://soundtransit3.org/document-library

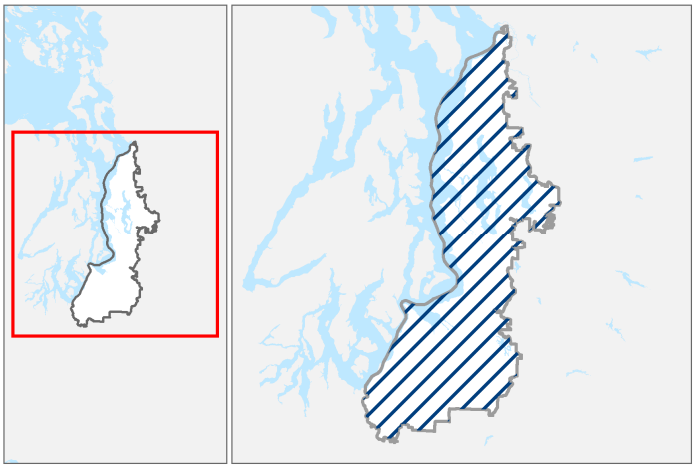
EARLY DELIVERABLES

Subarea	Systemwide
Primary Mode	N/A
Facility Type	N/A
Length	N/A
Version	Draft ST3 Plan
Date Last Modified	March 28, 2016

SHORT PROJECT DESCRIPTION

This program would implement a series of improvements designed to improve passenger access and amenities, existing transit services, travel time through bus on shoulder operations and other related transit priority elements. These projects would be implemented as early deliverables within the Draft ST3 System Plan.

PROJECT AREA AND REPRESENTATIVE ALIGNMENT



KEY ATTRIBUTES	
REGIONAL LIGHT RAIL SPINE *Does this project help complete the light rail spine?*	No
CAPITAL COST *Cost in Millions of 2014 $*	$232
RIDERSHIP *2040 daily project riders*	N/A
PROJECT ELEMENTS	• King County Metro Rapid Ride C and D Capital Improvements • Proposed Bus on Shoulder Program: Opportunities along I-5, I-405, SR 518, and SR 167 and related improvements • North Sounder Parking • Improved Passenger Amenities at Stations and Stops, which could be completed in coordination with the ST3 System Access Program and ST3 System Innovation and Research Fund.
NOT INCLUDED	• Funding for operations • Enhanced aesthetic surface treatments • Parking (aside from North Sounder parking) • Transit-oriented development planning/due diligence and sustainability measures • See “Common Project Elements”
ISSUES & RISKS	• Feasibility of bus on shoulder improvements on freeways and state routes has not been identified • Coordination and approval for bus on shoulder improvements and operations from the Federal Highway Administration • Coordination required with WSDOT, FTA, FHWA, and transit partners to determine feasible locations for bus on shoulder improvements • Risk to completing schedule for projects as early deliverables

EARLY DELIVERABLES

Sound Transit has developed a conceptual scope of work for this candidate project for the purpose of generating a representative range of costs, both capital and operating; and benefits, including ridership forecasts, TOD potential, multi-modal access and others. This information is being developed to assist the Sound Transit Board as it develops an ST3 system plan, including phasing of investments and financial plan, for voter consideration. Final decisions on project elements (e.g., alignment, profile, station locations, and number of parking stalls) will be determined after completion of system planning, project level environmental review, and preliminary engineering during which additional opportunities for public participation will be provided. Therefore, this scope definition should not be construed as a commitment that all representative features will be included in the final developed project.

Long Description:
This program would implement a series of improvements designed to improve passenger access and amenities, existing transit services, travel time through bus-on-shoulder and other related transit priority elements. These projects would be implemented as early deliverables within the ST3 System Plan. Program elements include:

- King County Metro Rapid Ride C and D Capital Improvements

This project would design and implement transit priority improvements along King County Metro's Rapid Ride C and D lines that provide service to Ballard and West Seattle as an early deliverable to provide improved speed and reliability, in advance of light rail starting operations to these areas. This project would be completed in coordination with King County Metro.

- Proposed Bus on Shoulder Program: Opportunities along I-5, I-405, SR 518, and SR 167

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

- North Sounder Parking and Access Improvements

This project would provide an early deliverable within the ST3 System Plan by providing additional parking at Mukilteo and Edmonds Sounder Stations and an opportunity for access improvements prioritized per Sound Transit's System Access Policy.

- Improved Passenger Amenities at Stations and Stops

This program would provide improved passenger amenities at stations and stops, including access improvements for bikes/pedestrian access, real time information expansion at stations/stops; Expanded use of ORCA and/or Mobile Pay options; Access for drop-off and pick-up capacity at stations, transit services, car share services, and private vehicles.

Assumptions:
- Coordination and study with WSDOT to determine feasible locations for bus on shoulder will be required. Specific locations within the opportunity areas have not yet been identified for these type of treatments
- Improvements along RapidRide C and D routes would enable faster travel time and reliability for these services
- The schedule for completing these project would be within the first 3-8 years of Sound Transit's System Plan
- North Sounder improvements include parking, but other access improvements can be considered depending on the prioritization per the ST System Access Policy and in coordination with local jurisdictions

Environmental:
Sound Transit will complete project-level state and federal environmental reviews as necessary to provide mitigation for significant impacts, obtain and meet the conditions of all required permits and approvals, and strive to exceed compliance and continually improve its environmental performance.

Utilities:
Utility relocation as needed to complete projects, including fiber options, sewer, overhead electric/communications, etc.

Right-of-Way and Property Acquisition:
Property acquisitions may be needed for transit capital improvements.

Potential Permits/Approvals Needed:
- WSDOT approvals for modifications to a state route
- Approval by FHWA for bus on shoulder operation
- Building permits: Electrical, Mechanical, Plumbing

EARLY DELIVERABLES

- Utility connection permits
- Right-of-way permits
- Construction-related permits (clearing and grading, stormwater management, street use, haul routes, use of city right-of-way)
- All required local, state, and federal environmental permits
- NEPA/SEPA and related regulations

Project Dependencies:

- Identification of locations where bus on shoulder operation is feasible
- Approval by FHWA and WSDOT for bus on shoulder operation
- Identification of improvements on Rapid Ride C and D lines that would improve travel time along these corridors

Potential Project Partners:

- Federal Highway Administration
- King County Metro
- Transit partners
- Washington Department of Transportation
- Cities and jurisdictions along the corridors
- Federal Transit Administration
- BNSF

EARLY DELIVERABLES

Cost:
Sound Transit has developed a conceptual scope of work for this candidate project for the purpose of generating a representative range of costs, both capital and operating; and benefits, including ridership forecasts, TOD potential, multi-modal access and others. This information is being developed to assist the Sound Transit Board as it develops an ST3 system plan, including phasing of investments and financial plan, for voter consideration. Final decisions on project elements (e.g., alignment, profile, station locations, and number of parking stalls) will be determined after completion of system planning, project level environmental review, and preliminary engineering during which additional opportunities for public participation will be provided. Therefore, this scope definition should not be construed as a commitment that all representative features will be included in the final developed project.

In Millions of 2014$

ITEM	COST
Agency Administration	$13
Preliminary Engineering & Environmental Review	
Final Design & Specifications	
Property Acquisition & Permits	
Construction	
Construction Management	
Third Parties	
Vehicles	
Early Deliverable Program	$219
Contingency	
Total	**$232**

Design Basis: N/A

EARLY DELIVERABLES

Evaluation Measures:

MEASURE		MEASUREMENT/RATING	NOTES
	**Regional Light Rail Spine** *Does project help complete regional light rail spine?*	N/A	
	**Ridership** *2040 daily project riders*	N/A	
	**Capital Cost** *Cost in Millions of 2014 $*	$232	
	**Annual O&M Cost** *Cost in Millions of 2014 $*	N/A	
	**Travel Time** *In-vehicle travel time along the project (segment)*	N/A	
	**Reliability** *Percentage of alignment/route in exclusive right-of-way*	N/A	
	**System Integration** *Qualitative assessment of issues and effects related to connections to existing local bus service*	N/A	
	**Ease of Non-motorized Access** *Qualitative assessment of issues and effects related to non-motorized modes*	N/A	
	Percent of Non-motorized Access *Percentage of daily boardings*	N/A	
	**Connections to PSRC-designated Regional Centers** *Number of PSRC-designated regional growth and manufacturing/industrial centers served*	N/A	
	**Land Use and Development/TOD Potential** *Quantitative/qualitative assessment of adopted Plans & Policies and zoning compatible with transit-supportive development within 0.5 mile of potential stations* *Qualitative assessment of real estate market support for development within 1 mile of potential corridor* *Density of activity units (population and employment for 2014 and 2040) within 0.5 mile of potential stations*	N/A N/A N/A	
	**Socioeconomic Benefits** *Existing minority / low-income populations within 0.5 mile of potential stations* *2014 and 2040 population within 0.5 mile of potential stations* *2014 and 2040 employment within 0.5 mile of potential stations*	N/A N/A N/A	

For additional information on evaluation measures, see http://soundtransit3.org/document-library