

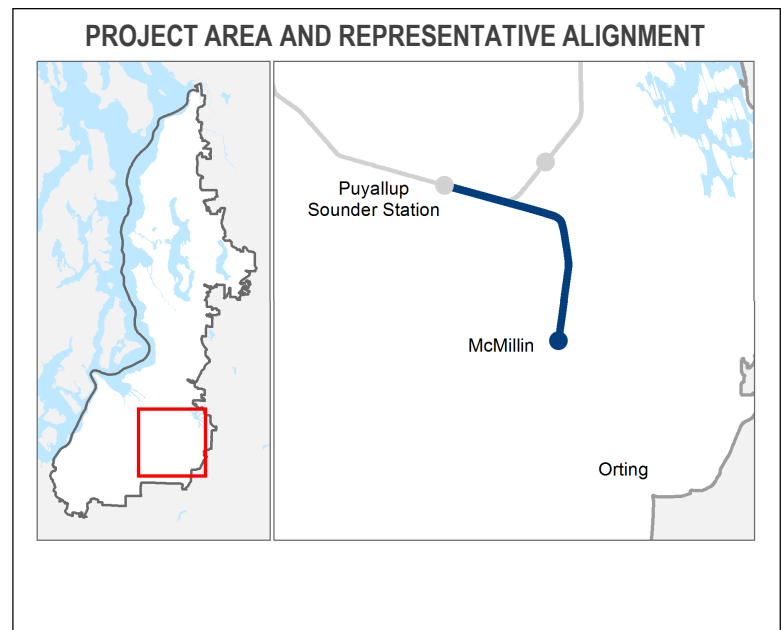
S-16: Sounder Rail Extension from Puyallup to Orting

Project Number	S-16
Subarea	Pierce
Primary Mode	Commuter Rail
Facility Type	Corridor
Length	5.7 miles
Version	ST Board Workshop
Date Last Modified	11-25-2015

SHORT PROJECT DESCRIPTION

This project would establish commuter rail service from McMillin (near Orting) to the Puyallup Sounder station.

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



KEY ATTRIBUTES	
REGIONAL LIGHT RAIL SPINE <i>Does this project help complete the light rail spine?</i>	No
CAPITAL COST <i>Cost in Millions of 2014 \$</i>	\$207 — \$222
RIDERSHIP <i>2040 daily boardings</i>	<1,000
PROJECT ELEMENTS	<ul style="list-style-type: none"> • One at-grade station located near Orting, in McMillin, sized to accommodate a diesel multiple unit (DMU) • One at-grade side platform station located across N Meridian Avenue • A third track will be added from the transfer station in Puyallup to the Meeker Railroad junction • Replacement of existing tracks with new tracks to accommodate passenger rail service from Meeker Railroad Junction to 128th Street E at the southern terminus • 125-car surface parking at proposed station location in McMillin • One train car layover and siding area, with an operator relief facility • Operational leases with BNSF and Meeker Southern Railroad • 2 new vehicles (DMUs) • Peak headways: 30 minutes • 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”)
NOT INCLUDED	<ul style="list-style-type: none"> • Additional maintenance facility capacity; Holgate Yard assumed for maintenance • See separate document titled “Common Project Elements”
ISSUES & RISKS	<ul style="list-style-type: none"> • Land use in the Orting to Puyallup corridor is characterized by low-density residential developments with most of the existing travel market located west of a potential rail station; future development to the east of McMillin and south of Bonney Lake could utilize this service; existing access to the station area is limited; the residents in this area also have access to the existing Puyallup and Sumner Sounder Stations

S-16: Sounder Rail Extension from Puyallup to Orting

KEY ATTRIBUTES

ISSUES & RISKS

- The Orting-Puyallup line is a single track; the line is currently classified as excepted; this rating allows the track to be excepted from regulations and safety rules of the Federal Railroad Administration; the excepted rating allows some use of the track but at low operating speeds; the classification is not generally sufficient to allow passenger rail service
- This project would require negotiations with the railroad owner and operator (Meeker Southern Railroad)
- This project may require a new agreement with BNSF

S-16: Sounder Rail Extension from Puyallup to Orting

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, number of stations, 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 provide a transit connection between the Puyallup Sounder Station and McMillin (near Orting) using existing track owned by Meeker Southern Railroad. Service would be provided via Diesel Mobile Units (DMUs).

Assumptions:

- One or more DMUs would serve the Sounder station in Puyallup
- A siding will be provided for access to the McMillin Station
- A transfer station platform will be provided in Puyallup
- A train layover and operator relief facility would be constructed with this project
- Modifications to the existing single track to allow for passenger rail service
- Service would be provided in the am and pm peak periods to connect with Sounder service; it is uncertain that all connections to and from Orting could be timed to coincide with Sounder arrivals and departures
- For non-motorized station access allowances, both stations are characterized as Suburban stations
- For bus/rail integration, facilities have been assumed at the McMillin 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.

Right-of-Way and Property Acquisition:

- Right-of-way acquisition would be required for the station, and the layover facility
- Property acquisition for bus/rail integration facility

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)
- FRA approval to allow for passenger rail service
- All required local, state, and federal environmental permits
- NEPA/SEPA and related regulations

Project Dependencies:

- Agreement with Meeker Southern Railroad
- Agreement with BNSF

Potential Project Partners:

- | | |
|--|--------|
| • Cities of Puyallup, Orting | • BNSF |
| • Meeker Southern Railroad | • FTA |
| • Transit partners serving project: Pierce Transit | • FRA |

S-16: Sounder Rail Extension from Puyallup to Orting

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, number of stations, 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	\$10.98	\$11.75
Preliminary Engineering & Environmental Review	\$6.81	\$7.28
Final Design & Specifications	\$13.23	\$14.15
Property Acquisition & Permits	\$3.85	\$4.12
Construction	\$134.91	\$144.36
Construction Management	\$11.90	\$12.74
Third Parties	\$2.85	\$3.04
Vehicles	\$9.43	\$10.09
Contingency	\$13.23	\$14.15
Total	\$207.18	\$221.68

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	\$0.39	\$0.42
Sustainability	\$5.28	\$5.65
Parking access	\$1.29	\$1.38
Non-motorized (bicycle/pedestrian) access	\$17.57	\$18.81
Bus/rail integration facilities	\$2.75	\$2.95

S-16: Sounder Rail Extension from Puyallup to Orting

Evaluation Measures:

MEASURE	MEASUREMENT/RATING	NOTES	
 Regional Light Rail Spine <i>Does project help complete regional light rail spine?</i>	No		
 Ridership <i>2040 daily station boardings</i>	<1,000		
 Capital Cost <i>Cost in Millions of 2014 \$</i>	\$207 — \$222		
 Annual O&M Cost <i>Cost in Millions of 2014 \$</i>	\$4.44		
 Travel Time <i>In-vehicle travel time along the project (segment)</i>	11 min		
 Reliability <i>Quantitative/qualitative assessment of alignment/route in exclusive right-of-way</i>	Medium-High	Some at-grade crossings	
 System Integration <i>Qualitative assessment of issues and effects related to connections to existing local bus service and potential future integration opportunities</i>	Low	Integration opportunities in Puyallup; Limited opportunities from the Orting area; Peak-our service only	
	Ease of Non-motorized Access <i>Qualitative assessment of issues and effects related to non-motorized modes</i>	Medium	Low to medium intersection density with some barriers to non-motorized access (open space a barrier to McMillin station)
	Percent of Non-motorized Mode of Access <i>Percent of daily boardings</i>	25-35%	
 Connections to PSRC-designated Regional Centers <i>Number of PSRC-designated regional growth and manufacturing/industrial centers served</i>	1 center	Regional Growth Center: Puyallup Downtown	
	Land Use and Development/TOD Potential <i>Quantitative/qualitative assessment of adopted Plans & Policies and zoning compatible with transit-supportive development within 0.5 mile of potential stations</i>	Low	Very limited support in local and regional plans; approx. 25% land is compatibly zoned
	<i>Qualitative assessment of real estate market support for development within 1 mile of potential corridor</i>	Low	Very limited market support
	<i>Density of activity units (population and employment for 2014 and 2040) within 0.5 mile of potential station areas</i>	Pop/acre = 2014: 2; 2040: 2 Emp/acre = 2014: 0; 2040: 0 Pop + Emp/acre = 2014: 3; 2040: 3	
 Socioeconomic Benefits <i>Existing minority / low-income populations within 0.5 mile of potential station areas</i>	19% Minority; 3% Low-Income		
<i>2014 and 2040 population within 0.5 mile of potential station areas</i>	Pop: 2014: 1,100; 2040: 1,100		
<i>2014 and 2040 employment within 0.5 mile of potential station areas</i>	Emp: 2014: 200; 2040: 200		

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