C-07: Transit Tunnel (International District to Northgate) improvements enabling increases in system frequency

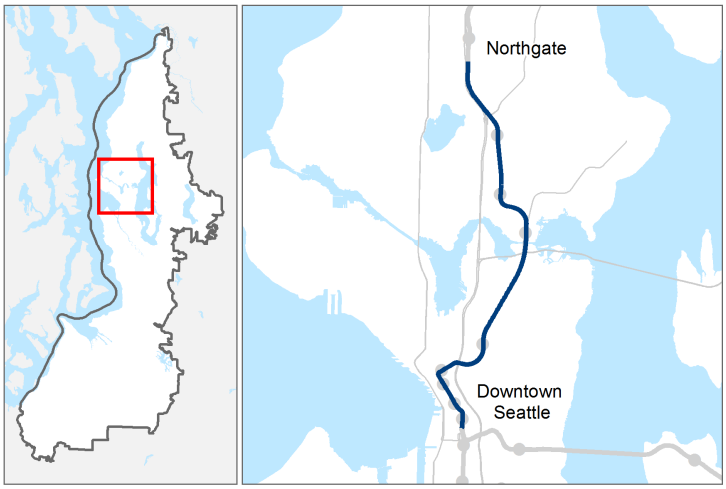
Project Number	C-07
Subarea	North King
Primary Mode	Light Rail
Facility Type	Corridor
Length	8.4 miles
Version	ST Board Workshop
Date Last Modified	11-25-2015

SHORT PROJECT DESCRIPTION

This project would study, identify, and evaluate capital and operating options in the Transit Tunnel (International District/Chinatown Station to Northgate Station) to potentially improve the frequency of trains to less than three minutes. This could include funding projects such as improved train operations, upgraded train control signal technology, ventilation, and access/egress improvements.

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?*	Yes
CAPITAL COST *Cost in Millions of 2014 $*	$20 — $21
RIDERSHIP *2040 daily boardings*	N/A
PROJECT ELEMENTS	• Study of potential system upgrades required to expand tunnel capacity • Fund for selected capital improvements as identified in the study
NOT INCLUDED	• Parking not included • See separate document titled "Common Project Elements"
ISSUES & RISKS	• This project should be coordinated with ridership forecasts related to Link planned and funded system expansion

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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 was created to define the system improvements and associated costs that may be required to allow for headways less than 3 minutes in the existing tunnel. The project would also fund selected capital improvements as identified in the study.

Assumptions:
- Study of potential system upgrades required to expand tunnel capacity
- Fund for selected capital improvements as identified in the study

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:
- Outcome of study may indicate property acquisition requirements

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
- NEPA/SEPA and related regulations

Project Dependencies:
- Expansion of the regional light rail system

Potential Project Partners:
- City of Seattle
- FTA
- King County

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Cost:
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In Millions of 2014$

ITEM	COST	COST WITH RESERVE
Agency Administration	$1.08	$1.16
Preliminary Engineering & Environmental Review	$1.00	$1.07
Final Design & Specifications		
Property Acquisition & Permits		
Construction	$17.92	$19.17
Construction Management		
Third Parties		
Vehicles		
Contingency		
Total	**$20.00**	**$21.40**

Design Basis: Conceptual

Note: The nature of this project does not require any allowances for TOD planning and due diligence, Sustainability, Bus/integration facilities, and Non-Motorized Access.

ITEM	COST	COST WITH RESERVE
TOD planning and due diligence	N/A	N/A
Sustainability	N/A	N/A
Parking access	N/A	N/A
Non-motorized (bicycle/pedestrian) access	N/A	N/A
Bus/rail integration facilities	N/A	N/A

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Evaluation Measures:

MEASURE		MEASUREMENT/RATING	NOTES
	**Regional Light Rail Spine** *Does project help complete regional light rail spine?*	Yes	
	**Ridership** *2040 daily station boardings*	N/A	
	**Capital Cost** *Cost in Millions of 2014 $*	$20 — $21	
	**Annual O&M Cost** *Cost in Millions of 2014 $*	N/A	
	**Travel Time** *In-vehicle travel time along the project (segment)*	N/A	
	**Reliability** *Quantitative/qualitative assessment 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 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*	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	
	**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