

Extract of pages that pertain to Seattle-area projects.

# Annual Report on Funding Recommendations Proposed Allocations of Funds for Fiscal Year 2008 New Starts, Small Starts, Alternative Transportation in Parks and Public Lands

Report of the Secretary of Transportation  
to the United States Congress  
Pursuant to 49 U.S.C. 5309(k)(1)

**2007**

Prepared by:  
Federal Transit Administration

Pursuant to:  
Title 49, United States Code, Section 5309(k)(1)

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## **Executive Summary**

This report provides the U.S. Department of Transportation's recommendations to Congress for the allocation of funds for the design and construction of fixed guideway New Starts and Small Starts capital investments for fiscal year (FY) 2008. These programs are part of the Capital Investment Grant Program provisions of 49 USC 5309, most recently reauthorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in August 2005. As required by SAFETEA-LU, this report also contains a summary of the allocation of funds made available in FY 2006 to assist qualified projects under the Alternative Transportation in Parks and Public Lands program under 49 USC 5320.

The Federal Transit Administration's (FTA) discretionary New Starts program is the Federal government's primary financial resource for supporting locally-planned, implemented, and operated major transit capital investments. From heavy to light rail transit (LRT), from commuter rail to bus rapid transit (BRT) systems, the New Starts program has helped to make possible hundreds of new or extended transit fixed guideway systems across the country. These rail and bus investments, in turn, have improved the mobility of millions of Americans, have helped to reduce congestion and improve air quality in the areas they serve, and have fostered the development of more viable, safe, and livable communities.

The President's Budget for FY 2008 proposes \$1,399.82 million for the capital investment grant program under Section 5309. A total of \$1,193.74 million is recommended for 11 existing, two pending, and two proposed Full Funding Grant Agreements (FFGA). The pending and proposed FFGAs are all projects which meet the New Starts criteria, are at an advanced stage of development with few remaining uncertainties, and will likely be eligible and ready for an FFGA prior to or during FY 2008. A total of \$72.08 million is proposed for six "other projects" that meet the New Starts criteria and are either a) in final design but have additional work to do to address cost and scope uncertainties or b) expected to be in final design by Spring 2007. FTA may recommend specific amounts of funding for these projects over the next several months if they continue to demonstrate progress; moreover, FTA may develop and execute an FFGA for any of these projects which achieve a final scope, schedule, and budget prior to FY 2008 and which continue to meet the New Starts criteria. A total of \$51.82 million is recommended for four Small Starts Project Construction Grant Agreements (PCGA), while \$48.18 million in Small Starts funding is proposed to be reserved for other candidate projects that emerge over the next several months. Finally, a total of \$33.99 million is recommended for specific ferry projects, statutory funding to support the work of the Denali Commission, and New Starts/Small Starts oversight activities.

The pending and proposed FFGAs, as well as the "other (New Starts) projects" and Small Starts projects recommended for funding are presented below:

### Pending FFGAs

- West Corridor LRT, Denver, Colorado
- South Corridor I-205/Portland Mall LRT, Portland, Oregon

#### Proposed FFGAs

- Second Avenue Subway Phase I, New York, New York
- University Link LRT Extension, Seattle, Washington

#### Other Projects

- New-Britain – Hartford Busway, Hartford, Connecticut
- Northstar Corridor Rail, Minneapolis-Big Lake, Minnesota
- North Corridor BRT, Houston, Texas
- Southeast Corridor BRT, Houston, Texas
- Norfolk LRT, Norfolk, VA
- Dulles Corridor Metrorail Project - Extension to Wiehle Avenue, Northern Virginia

#### Small Starts PCGAs

- Metro Rapid Bus System Gap Closure, Los Angeles, California
- Troost Corridor BRT, Kansas City, Missouri
- Pioneer Parkway EmX BRT, Springfield, Oregon
- Pacific Highway South BRT, King County, Washington

Detailed summaries of these projects, as well as other major investment transit projects in the New Starts and Small Starts “pipeline,” are presented in this report. Project funding recommendations, as well as the funding reserved for Small Starts, ferry projects, the Denali Commission, and project management oversight, form the basis of the President’s FY 2008 budget submission for the New Starts/Small Starts program. All funding for the New Starts/Small Starts program is subject to the annual Federal appropriations process.

Finally, as required by SAFETEA-LU Section 3021(a), which amended Section 5320 to Title 49 of the United States Code, this report also includes information on the allocation of the \$21.78 million appropriated in FY 2006 for the new Alternative Transportation in Parks and Public Lands program. Forty-two capital and planning projects were selected for funding under the program. This report summarizes these projects and describes FTA’s progress in developing this new program.

## Introduction

This report provides the U.S. Department of Transportation's recommendations to Congress for the allocation of funds for the construction of new fixed guideway systems and extensions (49 USC 5309(d) – Major Capital Investment Grants of \$75,000,000 or More, or “New Starts,” and 49 USC 5309(e) – Capital Investment Grants of Less Than \$75,000,000 or “Small Starts”) for fiscal year (FY) 2008. The *Annual Report on Funding Recommendations* for FY 2008 is a collateral document to the President's annual budget submission to Congress. It is important in the administration of the Federal transit assistance program, and improves the information exchange between the Executive and Legislative branches at the beginning of an appropriations cycle for the next fiscal year.

The mandate for the *Annual Report on Funding Recommendations* is a continuation of detailed provisions first established by the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) in 1998 and reauthorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), signed into law on August 10, 2005. SAFETEA-LU made some changes to New Starts, including the creation of a Small Starts program for capital investment grants of less than \$75 million.

The President's Budget for FY 2008 proposes \$1,399.82 million for the capital investment grant program under Section 5309. A total of \$1,193.74 million is recommended for 11 existing, two pending, and two proposed Full Funding Grant Agreements (FFGA). The pending and proposed FFGAs are all projects which meet the New Starts criteria, are at an advanced stage of development with few remaining uncertainties, and will likely be eligible and ready for an FFGA prior to or during FY 2008. A total of \$72.08 million is proposed for six “other projects” that meet the New Starts criteria and are either a) in final design but have additional work to do to address cost and scope uncertainties or b) expected to be in final design by Spring 2007. FTA may recommend specific amounts of funding for these projects over the next several months if they continue to demonstrate progress; moreover, FTA may develop and execute an FFGA for any of these projects which achieve a final scope, schedule, and budget prior to FY 2008 and which continue to meet the New Starts criteria. A total of \$51.82 million is recommended for four Small Starts Project Construction Grant Agreements (PCGA), while \$48.18 million in Small Starts funding is proposed to be reserved for other candidate projects that emerge over the next several months. Finally, a total of \$33.99 million is recommended for specific ferry projects, statutory funding to support the work of the Denali Commission, and New Starts/Small Starts oversight activities. See Table 1 on page 6 for funding details on these recommendations.

In addition to funding recommendations, Appendix A of the *FY 2008 Annual Report on Funding Recommendations* provides the status of the 11 FFGA projects; detailed results of FTA's evaluation of the project justification and local financial commitment of 16 proposed major capital investments in preliminary engineering (PE) or final design; results of FTA's streamlined evaluation for four Small Starts projects in “project development;” and brief summaries of the status of five projects in PE or final design which are requesting less than \$25 million in New Starts funding and are therefore exempt from the New Starts or Small Starts evaluation process. Appendix B describes the measures, rating breakpoints, and overall process followed by FTA for evaluating New Starts projects currently in PE and final design which are pursuing an FFGA, and Small Starts projects in project development which are pursuing a PCGA. Finally, Appendix C describes FTA's progress in implementing the new Alternative

Transportation in Parks and Public Lands program, which was established by Section 3021 of SAFETEA-LU.

## Principles for Funding Recommendations

The funding recommendations in this report are the result of an extensive project development and evaluation process, which is described in detail in Appendix B to this report. To be eligible for an FTA funding recommendation, proposed New Starts and Small Starts projects must complete the appropriate steps in the planning and project development process and, per SAFETEA-LU, receive an overall project rating of *Medium* or higher.

SAFETEA-LU replaced the three-level project rating scale of “Highly Recommended,” “Recommended,” and “Not Recommended” established by TEA-21 with a five-level scale of “*High*,” “*Medium-High*,” “*Medium*,” “*Medium-Low*,” and “*Low*.” SAFETEA-LU further requires that only those projects rated *Medium* or higher may be recommended for funding. However, it must be noted that project ratings are intended only to reflect the “worthiness” of each project, not the “readiness” of a project for an FFGA, PCGA, or any other funding recommendation. Proposed projects that are rated *Medium* or higher will be eligible for multi-year funding recommendations in the President’s budget if funding is available and the candidate project’s proposed scope, cost estimate, and budget are considered final. In addition, notwithstanding their overall project rating, FTA will not generally recommend for funding any project which does not achieve a rating of at least *Medium* for cost effectiveness.

FTA and sponsors of New Starts/Small Starts projects enter into a multi-year contractual agreement that formally establishes the maximum level of Federal financial assistance and outlines the terms and conditions of Federal financial participation. For projects requiring \$75 million or more in New Starts funding, the requisite agreement is the FFGA. For projects requiring less than \$75 million in Small Starts funding with a total project cost of less than \$250 million, the agreement is the PCGA. The FFGA/PCGA defines the project, including cost, scope, and schedule; commits to a maximum level of New Starts or Small Starts financial assistance (subject to appropriation); establishes the terms and conditions of Federal financial participation; defines the period of time for completion of the project; and helps FTA and the project sponsor manage the project in accordance with Federal law.

The FFGA/PCGA assures the grantee of predictable Federal financial support for the project (subject to Congressional appropriations), while placing a limitation on the amount of this support. Thus, an FFGA/PCGA limits the exposure of the Federal government to cost increases that may result if project design, engineering, and/or project management is not adequately performed at the local level. While FTA is responsible for ensuring that planning projections are based on realistic assumptions and that design and construction follow acceptable industry practices, it is the responsibility of project sponsors to properly manage, design, engineer and construct projects. FTA is not directly involved in the design and construction of New Starts/Small Starts projects but does utilize its Project Management Oversight Program to obtain independent feedback on project status and progress, including the establishment of scope, budget, and schedule, as well as provide guidance on management, construction, and quality assurance practices.

Additional information and guidance on developing FFGAs is contained in further detail in FTA Circular 5200.1A, Full Funding Grant Agreements Guidance, dated December 5, 2002, and the FTA Rule on Project Management Oversight (49 CFR Part 633).

When recommending annual funding allocations among proposed New Starts and Small Starts projects, FTA applies the following general principles:

- Any project recommended for new funding commitments should meet the project justification, local financial commitment, and process criteria established by Sections 5309(d) and 5309(e) and be consistent with Executive Order 12893, *Principles for Federal Infrastructure Investments*, issued January 26, 1994.
- Existing FFGA commitments should be honored before any additional funding recommendations are made, to the extent that funds can be obligated for these projects in the coming fiscal year.
- The FFGA and PCGA define the terms of the Federal commitment to a specific project, including funding. Upon completion of an FFGA or PCGA, the Federal funding commitment has been fulfilled. Additional project funding will not be recommended. Any additional costs beyond the scope of the Federal commitment are the responsibility of the grantee, although FTA works closely with grantees to identify and implement strategies for containing capital costs at the level included in the FFGA or PCGA at the time it was executed.
- Funding for initial planning efforts such as alternatives analysis is no longer eligible for Section 5309 funding under SAFETEA-LU, but may be provided through grants under the Section 5303 Metropolitan Planning or Section 5307 Urbanized Area Formula programs; from Title 23 “flexible funding” sources; or from the newly created Section 5339 Alternatives Analysis program.
- Firm funding commitments, embodied in FFGAs or PCGAs, will not be made until projects demonstrate that they are ready for such an agreement, i.e. the project’s development and design has progressed to the point where its scope, costs, benefits, and impacts are considered firm and final.
- Funding should be provided to the most worthy investments to allow them to proceed through the process on a reasonable schedule, to the extent that funds can be obligated to such projects in the upcoming fiscal year. Funding decisions will be based on the results of the project evaluation process and resulting project justification, local financial commitment, and overall project ratings.
- For FY 2008, the specific Small Starts projects identified in this *Annual Report* which have demonstrated an overmatch of the statutory 20 percent local share are proposed to be funded under a one-year PCGA. Projects proposing a 20 percent share of local funding are proposed to be funded through a PCGA that will cover at least two years. FTA encourages overmatch of New Starts/Small Starts funding as a means of funding more projects and leveraging state, local, and other Federal financial resources.

FTA emphasizes that project evaluation and rating is an on-going process. As proposed New Starts projects proceed through the project development process, information concerning costs, benefits, and impacts is refined and the ratings may be reassessed to reflect new information.

Table 1 - FY 2008 Funding for New Starts and Small Starts Projects

Project	Area	Overall Project Rating	FY 2006 and Previous Funding	FY 2007 Estimate	FY 2008 President's Budget	Remaining FFGA Funding	Total FFGA Funding
<b>Totals by Phase</b>							
Existing New Starts Full Funding Grant Agreements			\$2,557,382,247	\$1,005,000,000 (1)	\$863,744,197	\$2,808,743,556	\$7,269,870,000
Pending New Starts Full Funding Grant Agreements			4,900,500	115,000,000 (1)	120,000,000		
Proposed New Starts Full Funding Grant Agreements			33,418,049	0 (1)	210,000,000		
Other New Starts Projects			284,391,399	300,861,601 (2)	72,075,623		
Proposed Small Starts Project Construction Grant Agreements			12,055,230	0	51,817,000		
Other Small Starts Projects			0	0 (3)	48,183,000		
Oversight Activities			14,879,700	15,660,000	13,998,180		
Ferry Capital Projects (AK or HI)			14,701,500	15,000,000	15,000,000		
Denali Commission			4,900,500	5,000,000	5,000,000		
<b>GRAND TOTAL</b>			<b>\$2,926,629,125 (4)</b>	<b>\$1,456,521,601 (4,5)</b>	<b>\$1,399,818,000</b>		
<b>Existing New Starts Full Funding Grant Agreements</b>							
AZ Central Phoenix/East Valley Light Rail	Phoenix	FFGA	\$220,868,097	\$90,000,000	90,000,000	\$186,331,903	\$587,200,000
CA Metro Gold Line Eastside Extension	Los Angeles	FFGA	155,193,449 (6)	100,000,000	80,000,000	155,506,551	490,700,000
CO Southeast Corridor LRT	Denver	FFGA	366,215,242	80,000,000	78,784,758	0	525,000,000
DC Largo Metrorail Extension	Washington	FFGA	260,300,000 (7)	N/A (2)(7)	35,000,000	34,000,000	364,300,000
IL Ravenswood Line Extension	Chicago	FFGA	99,571,385	40,000,000	40,000,000	65,948,615	245,520,000
NJ Hudson-Bergen MOS-2	Northern NJ	FFGA	344,807,005	100,000,000	55,192,995	0	500,000,000
NY Long Island Railroad East Side Access	New York	FFGA	587,766,826	300,000,000	215,000,000	1,529,333,174	2,632,100,000
PA North Shore LRT Connector	Pittsburgh	FFGA	147,183,556 (8)	55,000,000	33,516,444	0	235,700,000
TX Northwest/Southeast LRT MOS	Dallas	FFGA	21,191,000	80,000,000	86,250,000	512,559,000	700,000,000
UT Weber County to Salt Lake City Commuter Rail	Salt Lake City	FFGA	31,732,422	80,000,000	80,000,000	297,617,578	489,350,000
WA Central Link Initial Segment	Seattle	FFGA	322,553,265	80,000,000	70,000,000	27,446,735	500,000,000
<b>Total Existing New Starts Full Funding Grant Agreements</b>			<b>\$2,557,382,247</b>	<b>\$1,005,000,000</b>	<b>\$863,744,197</b>	<b>\$2,808,743,556</b>	<b>\$7,269,870,000</b>
<b>Pending New Starts Full Funding Grant Agreements</b>							
CO West Corridor LRT	Denver	Medium	\$4,900,500	\$35,000,000	40,000,000		
OR South Corridor I-205/Portland Mall LRT	Portland	Medium	0	80,000,000	80,000,000		
<b>Total Pending New Starts Full Funding Grant Agreements</b>			<b>\$4,900,500</b>	<b>\$115,000,000</b>	<b>\$120,000,000</b>		
<b>Proposed New Starts Full Funding Grant Agreements</b>							
NY Second Avenue Subway Phase I	New York	High	33,418,049	N/A (2)	200,000,000		
WA University Link LRT Extension	Seattle	High	0	N/A (2)	10,000,000		
<b>Total Proposed New Starts Full Funding Grant Agreements</b>			<b>\$33,418,049</b>	<b>\$0</b>	<b>210,000,000</b>		
<b>Other New Starts Projects</b>							
CT New Britain-Hartford Busway	Hartford	Medium	\$7,369,430	\$0			
MN Northstar Corridor Rail	Minneapolis-Big Lake	Medium	31,495,371	0			
TX North Corridor BRT	Houston	Medium	\$8,496,601	0			
TX Southeast Corridor BRT	Houston	Medium	8,496,599	0			
VA Norfolk LRT	Norfolk	Medium	12,899,034	N/A (2)			
VA Dulles Corridor Metrorail Project-Extension to Wiehle Avenue	Northern Virginia	Medium	215,634,364	N/A (2)			
<b>Total Other New Starts Projects</b>			<b>\$284,391,399</b>	<b>\$0</b>	<b>\$72,075,623</b>		
<b>Proposed Small Starts Project Construction Grant Agreements</b>							
CA Metro Rapid Bus System Gap Closure	Los Angeles	Medium	\$0	\$0	\$16,681,000		
MO Troost Corridor BRT	Kansas City	Medium	12,055,230 (9)	0	6,260,000		
OR Pioneer Parkway EmX BRT	Springfield	Medium	0	0	14,800,000		
WA Pacific Highway South BRT	King County	Medium	0	0	14,076,000		
<b>Total Proposed Small Starts Project Construction Grant Agreements</b>			<b>\$12,055,230</b>	<b>\$0</b>	<b>\$51,817,000</b>		
<b>Other Small Starts Projects</b>			<b>\$0</b>	<b>\$0</b>	<b>\$48,183,000</b>		

1. FY 2007 President's Budget lists five projects as "Proposed Full Funding Grant Agreements". In this table, those projects that were proposed and approved for FY 2007 are included in the sections for Existing FFGAs and Pending FFGAs.
2. President's Budget for FY 2007 does not allocate specific funds for these projects; funds will be allocated from \$300,861,601.
3. No funding is provided for Small Starts in FY2007 per House bill H.R. 5576 and House Report 109-195.
4. Total does not reflect total FY 2007 Estimate of \$1,566,000,000 which includes projects not recommended for FY 2008 funding.
5. Funding for oversight has been deducted from each listed project in FY2006 and previous funding.
6. Does not include \$3,873,958 in prior year funds not included in FFGA.
7. Project completed original FFGA funding in FY2005. The FFGA was amended on June 22, 2006 to include a total of \$104,000,000 over FYs 2007 through 2009. FFGA as amended includes \$35,000,000 for FY2007.
8. Does not include \$1,710,057 in prior year funds received for FEIS.
9. Does not include \$3,467,251 designated for the Southtown Corridor Project in FY2001 that was used for the MAX BRT final design.

# Central Link Initial Segment

## Seattle, Washington

(November 2006)

### Description

Central Puget Sound Regional Transit Authority (Sound Transit) is implementing a 13.9-mile double track light rail for the Initial Segment of the Central Link Light Rail Transit (LRT) project. The Initial Segment runs from Convention Place through downtown Seattle to South 154<sup>th</sup> Street in the City of Tukwila. The system will use the existing 1.3-mile Downtown Seattle Transit Tunnel (DSTT), a new one-mile long Beacon Hill tunnel, and a new 0.1-mile tunnel (the Pine Street stub tunnel) in the vicinity of the Convention Place station. The stub tunnel will be used for crossover and turnback operations. The scope of work includes seven new stations, renovation of four stations in the DSTT, a maintenance and operations facility, and a park-and-ride lot at the southern terminus at South 154<sup>th</sup> Street. A fleet of 31 low-floor, articulated, 90- to 95-foot vehicles will be procured for the Initial Segment. Sound Transit estimates that average daily ridership in 2020 will total 42,500 passengers.

The total project cost under the Full Funding Grant Agreement (FFGA) is \$2,436.90 million. The Section 5309 New Starts funding share is \$500.00 million.

### Status

FTA approved the initiation of preliminary engineering for the Central Link LRT project (Northgate to South 200<sup>th</sup> Street) in July 1997. A Draft Environmental Impact Statement (EIS) on Central Link was published in December 1998. In February 1999, Sound Transit identified a 20-mile light rail system from Northeast 45<sup>th</sup> Street at the University of Washington to South 200<sup>th</sup> Street in the city of SeaTac as the locally preferred alternative (LPA).

The Final EIS was completed in November 1999, and FTA issued a Record of Decision in January 2000 for the entire proposed system. The Sound Transit Board formally adopted a 7.2-mile initial minimum operable segment (MOS-1) in November 1999. This original MOS-1 ran from NE 45<sup>th</sup> Street at the University of Washington to the maintenance base at South Lander Street in the industrial area south of downtown Seattle. Approximately 4.5 miles of this MOS was new tunnel under Capitol Hill, Portage Bay, and the University of Washington. FTA approved the project into final design in February 2000.

Based on increased costs for tunneling, right-of-way, mitigation, and other factors, Sound Transit increased the total project cost for MOS-1 and rescheduled the revenue operations date. After review and evaluation of the revised information, FTA executed an FFGA for MOS-1 in January 2001.

In April 2001, the Secretary of Transportation put the project on hold until significant concerns raised by the Office of the Inspector General were resolved. The Sound Transit Board then re-examined the entire project to determine if a portion of the 20-mile LPA could be identified as a new initial segment, or if MOS-1 could be redefined to reduce risks and better meet budget limitations.

In November 2001, the Sound Transit Board formally adopted the current Initial Segment from Convention Place to the South 154<sup>th</sup> Street Station as the revised MOS. An additional environmental review assessed the impacts of project changes, including the new termini and joint bus-rail operations in the DSTT and a new alignment through the City of Tukwila. A Supplemental Final EIS on the Tukwila segment was published in November 2001, and FTA issued an amended Record of Decision in May 2002. Based upon supplemental environmental and financial review, FTA approved the project's entry into final design in August 2002, and issued an FFGA in October 2003. At the same time, FTA rescinded



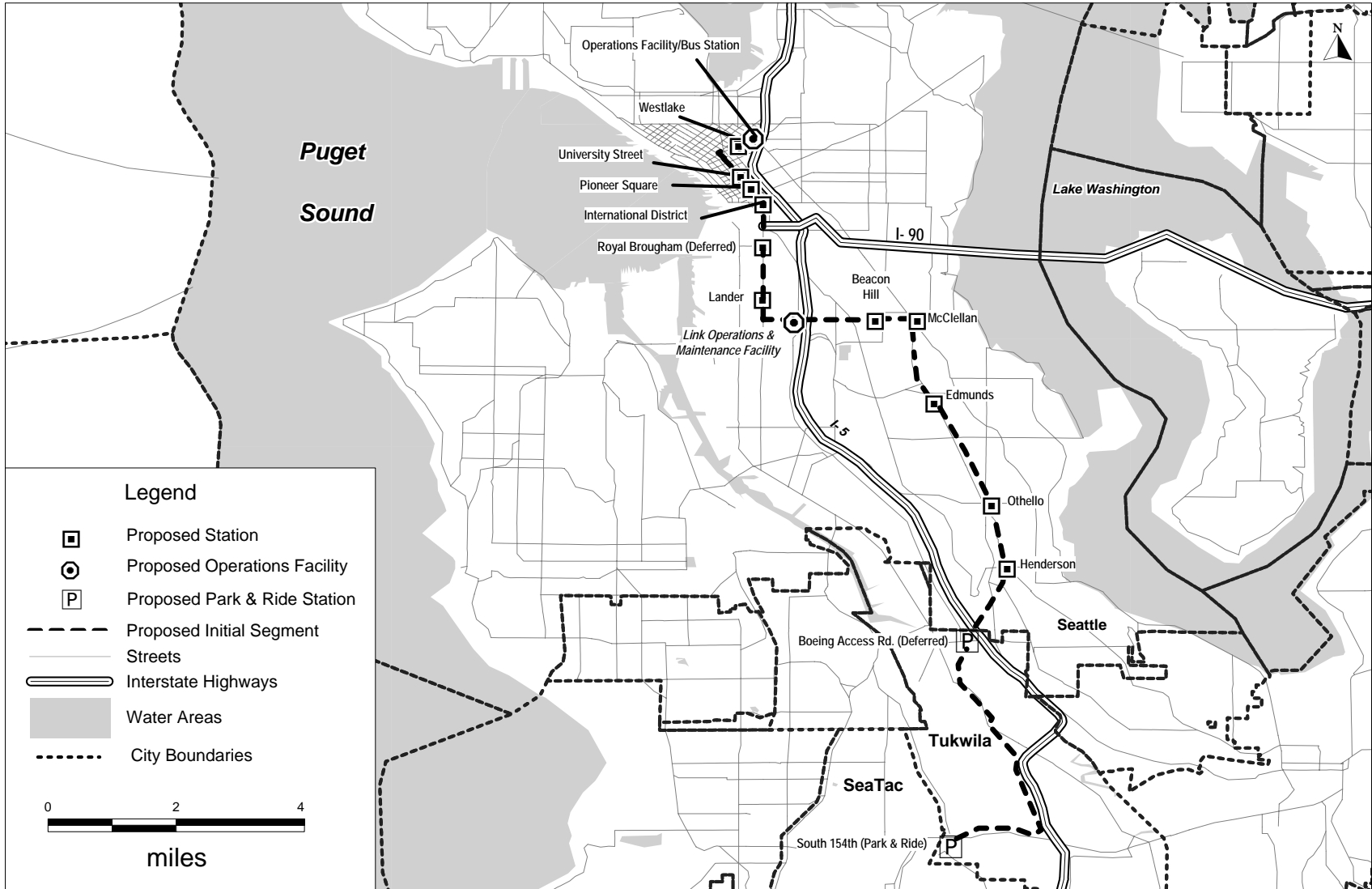
the FFGA executed in January 2001. Construction started in November 2003 and is projected to be completed within budget and on schedule.

SAFETEA-LU Section 3043(a)(30) authorized the Central Link Initial Segment for final design and construction. Through FY 2006, Congress has appropriated \$322.55 million in Section 5309 New Starts funds for the project.

<b>Reported in Year of Expenditure Dollars</b>		
<b><u>Source of Funds</u></b>	<b><u>Total Funding (million)</u></b>	<b><u>Appropriations to Date</u></b>
<b>Federal:</b> Section 5309 New Starts FFGA Commitment	\$500.00	\$322.55 million appropriated through FY 2006
<b>Local:</b> Retail Sales and Vehicle Excise Taxes	\$779.20	
Long-Term Bonds	\$1,157.70	
<b>TOTAL</b>	<b>\$2,436.90</b>	

**NOTE:** The sum of the figures may differ from the total as listed due to rounding.

# Central Link Initial Segment Seattle, Washington



# University Link LRT Extension

## Seattle, Washington

(November 2006)

The Central Puget Sound Regional Transit Authority, commonly known as Sound Transit, is proposing to implement an extension of the Central Link light rail transit (LRT) Initial Segment currently under construction from the Segment's northern terminus at Westlake Station in downtown Seattle to the University of Washington, 3.1 miles to the northeast. The all-tunnel alignment also includes a station at Capitol Hill. Thirty vehicles would be procured as part of the project, which would permit 5-minute peak-period operations throughout the entire Central Link line. University Link itself is the first phase of Sound Transit's planned North Link LRT extension to the Northgate Transit Center in North Seattle.

The University Link corridor is the most densely developed residential and employment area in both Seattle and the state of Washington. The three largest urban centers in the state – downtown Seattle, Capitol Hill/First Hill, and the University District – are located along the alignment. However, travel by private vehicle and bus between these areas is extremely congested due to high traffic volumes and the corridor's unique physical geography. First Hill and Capitol Hill rise sharply northeast of downtown Seattle, and Interstate 5 (I-5) – the region's primary north-south freeway corridor – runs along the base of these hills, separating them from downtown. Farther to the north, the University District is separated from Capitol Hill and downtown by Portage Bay and the Lake Washington Ship Canal; only three crossings (two of them drawbridges) connect the University with the southern portion of the corridor.

Furthermore, while I-5 north of downtown features reversible express lanes to accommodate AM inbound and PM outbound travel, the significant and growing reverse-commute market between downtown (and points south) and Capitol Hill/First Hill and the University District enjoys no such advantage, resulting in a substantial disparity between northbound and southbound transit travel times during peak periods. The University Link LRT Extension is intended to provide more reliable and faster bi-directional transit service to and between these urban centers, while supporting local land use goals and contributing to the maintenance of 1990 traffic levels at the University of Washington, which, by prior agreement, is necessary for the City of Seattle to approve any new campus development.

### Summary Description

<b>Proposed Project:</b>	Light Rail Transit 3.1 Miles 2 Stations
<b>Total Capital Cost (\$YOE):</b>	\$1,645.88 Million (includes \$131.80 million in finance charges)
<b>Section 5309 New Starts Share (\$YOE):</b>	\$750.00 Million (45.6%)
<b>Annual Forecast Year Operating Cost:</b>	\$21.28 Million
<b>Ridership Forecast (2030):</b>	40,200 Average Weekday Boardings 17,400 Daily New Riders
<b>Opening Year Ridership Forecast (2016):</b>	28,600 Average Weekday Boardings
<b>FY 2008 Local Financial Commitment Rating:</b>	<b>Medium-High</b>
<b>FY 2008 Project Justification Rating:</b>	<b>Medium-High</b>
<b>FY 2008 Overall Project Rating:</b>	<b>High</b>

FTA expects to execute a Full Funding Grant Agreement (FFGA) for the University Link LRT Extension in late FY 2008. FTA notes that the project is one of only two projects in the New Starts pipeline which is rated *High* against the statutory New Starts project justification and local financial commitment criteria.

**Project Development History and Current Status**

The University Link LRT Extension is part of the Central Link LRT system that has been in planning for more than two decades. In 1999, Sound Transit published an Environmental Impact Statement (EIS) for a Central Link alignment which extended from South 200<sup>th</sup> Street in the city of SeaTac to North 103<sup>rd</sup> Street in the City of Seattle. Due to financial constraints, Sound Transit identified three operable segments for implementation, the first of which extended from just south of downtown Seattle to the University of Washington. FTA awarded an FFGA for this project in January 2001.

Due to cost increases, the FFGA was suspended later that year. Sound Transit subsequently redefined the Central Link project. An “Initial Segment” of the project runs from the Westlake Station of the existing Downtown Seattle Transit Tunnel south to Tukwila; this project alignment is currently being constructed under an FFGA executed by FTA in October 2003. The North Link segment would connect the Initial Segment’s northern terminus with the Northgate Transit Center. Sound Transit completed a Supplemental Draft EIS for North Link in December 2003. The Sound Transit Board selected the 3.1-mile University Link Extension as the first phase of the implementation of North Link in August 2006. FTA issued a limited-scope Supplemental Draft EIS in October 2005 to address changes in the preferred alternative, including an alternative route through the University of Washington. FTA approved the project into preliminary engineering in December 2005. FTA included the project in the “other projects” category in the FY 2007 President’s Budget. FTA issued a Final EIS in April 2006 and Record of Decision in June 2006. FTA notified Congress of its intent to approve the University Link LRT Extension into final design in November 2006; formal approval is expected in December 2006.

**Significant Changes Since FY 2007 Evaluation (November 2005)**

Sound Transit re-estimated the costs necessary to finance local bonding for project construction, and increased its requested New Starts amount by \$50 million.

**Project Justification Rating: Medium-High**

The *Medium-High* rating for project justification is based on a *Medium* rating for cost effectiveness and a *Medium-High* rating for transit-supportive land use.

***Cost Effectiveness Rating: Medium***

The *Medium* rating is based on the level of travel-time benefits (14,500 average weekday hours) relative to the project’s annualized costs.

<b>Cost Effectiveness</b>	
	<b><u>New Start vs. Baseline</u></b>
Cost per Hour of Transportation System User Benefit	\$21.14*
Incremental Cost per Incremental Trip	\$17.87

\* Indicates that measure is a component of Cost Effectiveness rating.

The University Link LRT Extension is intended to provide improved bi-directional transit access and faster travel times between Capitol Hill, the University District, downtown Seattle, and points south. Over one-half of project travel-time benefits accrue to travelers destined for the University District or Capitol Hill, while 25 percent of benefits are for trips originating in these station areas destined for other parts of the region. Over 20 percent of travel-time benefits accrue to trips internal to the project corridor. Approximately 10 percent of project benefits are the result of improved LRT frequencies throughout the entire Central Link line necessitated by the higher passenger loads caused by the extension.

FTA’s initial risk assessment work reveals that the project scope is well developed and reflects Sound Transit’s experience with the Central Link project, especially in such areas as tunneling, communications, signaling, and power. The cost estimate and schedule appear to be reliable and achievable.

**Transit-Supportive Land Use Rating: Medium-High**

The *Medium-High* land use rating is based upon the *High* rating assigned to transit-supportive policies and the *Medium-High* ratings assigned to existing land use and the performance of policies.

**Existing Land Use: Medium-High**

- The University Link connects the densely developed Seattle CBD to the Capitol Hill neighborhood and the University of Washington (UW) campus. Employment in the Seattle CBD was a relatively high 183,200 in 2000. Capitol Hill, a mixed-use urban neighborhood with the most dense residential development in the Puget Sound Region, is also home to two colleges and four large medical facilities. The University of Washington is home to 35,000 students and 20,000 faculty and staff. The two project station areas have a combined population of nearly 21,000 and 23,700 jobs, with an average population density of 16,400 persons per square mile.
- Parking in the CBD is relatively expensive, up to \$26 daily. Total parking provided for the UW campus is capped at a restrictive 12,300 which is roughly one space for every five students, faculty, and staff. In the Capitol Hill neighborhood, most parking is on-street or in small off-street lots, and is highly utilized.

**Transit-Supportive Plans and Policies: High**

- Growth management policies are strong at all levels of government. The state's Growth Management Act requires establishment of an urban growth boundary, reflected in local comprehensive plans. King County's planning policies established this boundary and designated urban centers, including downtown Seattle, Capitol Hill, and the University District. Seattle's comprehensive plan identifies both the Capitol Hill and University of Washington station areas as urban centers or villages, in which new growth will be concentrated. The region's Vision 2020 land use plan identifies policies used to guide development and control urban sprawl.
- Seattle's Comprehensive Plan and neighborhood plans for the Capitol Hill and University District call for the concentration of growth in compact walkable neighborhoods known as urban villages. Station area planning processes have been completed and resulted in recommendations including changes to zoning, parking policies, development opportunities, and other actions. Many of these recommendations have been implemented. For example, station area overlay districts and rezones have been accomplished to prohibit auto-oriented uses, increase densities, and reduce parking requirements in the Capitol Hill station area. The UW Campus Master Plan defines opportunities for building expansion, provides design guidelines, and recommends pedestrian improvements.
- A range of tools exists to implement policies that are not otherwise mandated by law. These include tax increment financing, multi-family tax abatement and exemption programs, a location efficient mortgage program, and funding provided through the Washington State Commute Trip Reduction Act. Regional, county, and city agencies have all implemented outreach activities, technical assistance, and financial incentives to promote transit-oriented development.

**Performance and Impacts of Policies: Medium-High**

- Regional monitoring of growth targets in 2002 by the Puget Sound Regional Council indicates that growth is in fact occurring in targeted areas, with King County the most aggressive in targeting this growth in its urban centers. Some instances exist of coordination of development with the LRT Initial Segment planning and construction.
- There is not a significant amount of land available for development in either of the two University Link station areas. However, redevelopment and infill development is expected to be supportive of transit, based on policies and zoning adopted in each area.

**Other Project Justification Criteria**

<b>Mobility Improvements Rating: Medium-High</b>			
<b>Within 1/2-mile radius of boarding areas:</b> Existing Employment Projected Employment (2030) Low Income Households (% of total HH)  <b>Average Per Station:</b> Employment Low Income Households  <b>Transportation System User Benefit Per Project Passenger Mile (Minutes)</b>			
		23,700	
		35,000	
		1,990 (15%)	
		11,800*	
		1,000*	
	<b><u>New Start vs. Baseline</u></b>		
	2.82*		
<b>Environmental Benefits Rating: Medium</b>			
<b><u>Criteria Pollutant (Reduction in tons)</u></b> Carbon Monoxide (CO) Nitrogen Oxide (NO <sub>x</sub> ) Volatile Organic Compounds (VOC) Particulate Matter (PM <sub>10</sub> ) Carbon Dioxide (CO <sub>2</sub> )  <b><u>Criteria Pollutant Status</u></b> Carbon Monoxide (CO) Particulate Matter (PM <sub>10</sub> )  <b>Annual Energy Savings (million British Thermal Units)</b>	<b><u>New Start vs. Baseline</u></b>		
		603	
		52	
		46	
		1	
		11,816	
		<b><u>EPA Designation</u></b>	
		Maintenance Area	
		Maintenance Area	
		151,198	
<b>Operating Efficiencies Rating: Medium</b>			
<b>System Operating Cost per Passenger Mile (current year dollars)</b>	<b><u>Baseline</u></b>	<b><u>New Start</u></b>	
	\$0.421*	\$0.400*	

\* Indicates that measure is a component of rating for each criterion.  
N/A indicates information was not available for this entry.

## **Local Financial Commitment Rating: Medium-High**

The *Medium-High* local financial commitment rating is based on *Medium-High* ratings for the New Starts share of project costs and for both the capital and operating finance plans.

### ***Section 5309 New Starts Share of Total Project Costs: 46%***

#### ***Rating: Medium-High***

Sound Transit is requesting a less than 46 percent New Starts share of total project costs, which equates to a *Medium-High* rating for this measure.

<b>Locally Proposed Financial Plan</b>		
<b><u>Source of Funds</u></b>	<b><u>Total Funds (\$million)</u></b>	<b><u>Percent of Total</u></b>
<b>Federal:</b> Section 5309 New Starts	\$750.00	45.6%
<b>Local:</b> Local Option Tax Revenues	\$420.88	25.6%
Bond Proceeds	\$463.60	28.2%
Additional Revenues	\$11.40	0.7%
<b>Total:</b>	<b>\$1,645.88</b>	100.0%

**NOTE:** The financial plan reflected in this table has been developed by the project sponsor and does not reflect a commitment by DOT or FTA. The sum of the figures may differ from the total as listed due to rounding.

### ***Capital Finance Plan Rating: Medium-High***

The capital finance plan is rated *Medium-High*, based upon the average of ratings assigned to each of the subfactors listed below. The commitment of capital funds subfactor was rated *High*. Capital condition and completeness of the capital plan were rated *Medium-High*. The capital cost estimates and planning assumptions and capital funding capacity subfactors were rated *Medium*.

#### **Agency Capital Condition: Medium-High**

- The average age of Sound Transit's bus fleet is just over six years, which is younger than the industry average. The age of the agency's light rail and commuter rail fleet is also very young at three and six years respectively.
- Sound Transit's good bond ratings, which were issued in March 2005, are as follows: Moody's Investors Service Aa3 and Standard and Poor's Corporation AA-.

#### **Completeness of Capital Plan: Medium-High**

- The capital plan was complete and included a 20-year cash flow statement, key assumptions, a moderate level of detail, a fleet management plan, more than five years of historical data, and a sensitivity analysis.

#### **Commitment of Capital Funds: High**

- One hundred percent of non-New Starts funding is committed. The non-Section 5309 capital funds are comprised of Sound Transit cash provided by local option sales and use taxes, existing or new bond proceeds, and additional local resources.

**Capital Funding Capacity: Medium**

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit that would allow Sound Transit to cover cost increases or funding shortfalls equal to approximately 13 percent of project costs.
- Sound Transit has ample debt capacity as an agency. However, Sound Transit's financial policies impose local/internal constraints that limit the amount of funds available for this project.

**Capital Cost Estimate and Planning Assumptions: Medium**

- The assumptions in the capital plan are conservative compared to historical experience.
- The cost estimate is considered current and reliable, although unallocated contingencies and cost escalation assumptions may be low.

***Operating Finance Plan Rating: Medium-High***

The operating finance plan is rated *Medium-High*, based upon the average of the ratings of the five subfactors listed below. Completeness of the operating plan was rated *Medium*; the operating cost estimates and planning assumptions subfactor was rated *Medium-Low*; and the remaining subfactors were rated *High*.

**Agency Operating Condition: High**

- Sound Transit's current ratio of assets to liabilities as reported in its most recent audited financial statement is 4.1.
- Sound Transit is very good condition and has not experienced any recent service cutbacks. On the contrary, Sounder commuter rail service continues to ramp up as additional round-trips are added, while Regional Express bus service increases gradually.

**Completeness of Operating Plan: Medium**

- The operating plan was reasonably complete and included a 20-year cash flow statement, a limited sensitivity analysis, and a moderate level of detail. While key assumptions regarding the operating plan and eight years of historical data were provided, the data was provided at only a highly summarized level.

**Commitment of Operating Funds: High**

- All operating funding is committed. Sound Transit's operating expenses are entirely funded by dedicated local option (sales and use/motor vehicle excise (MVET)/car rental) taxes, fares and other system-generated revenue, especially investment income and advertising.

**Operating Funding Capacity: High**

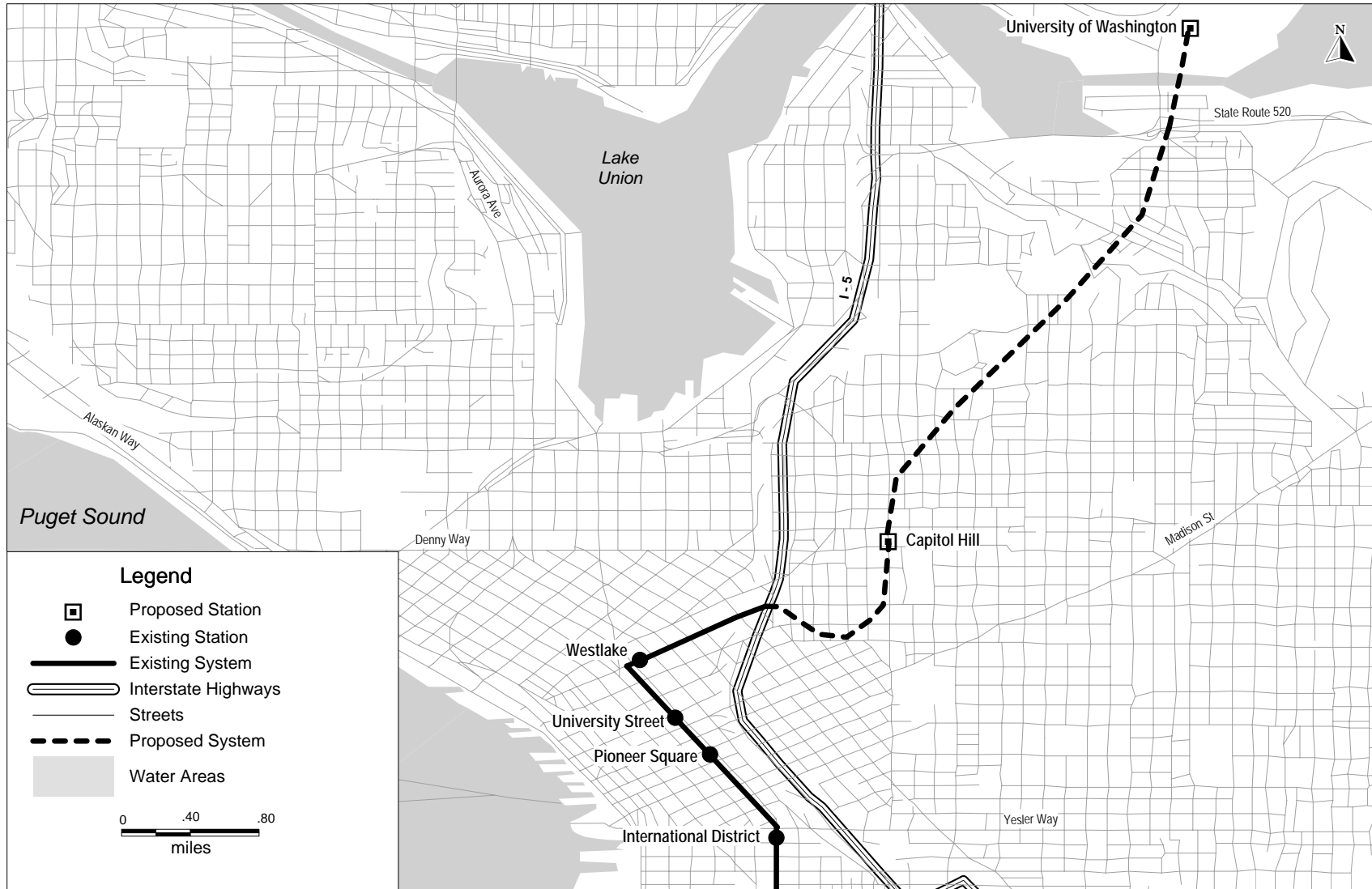
- The project's financial plan shows cash balances, reserve accounts and/or access to credit exceeding 100 percent of annual operating expenses.

**Operating Cost Estimates and Planning Assumptions: Medium-Low**

- Light rail fare revenue assumptions are much higher than national experience.
- It is difficult to compare the growth in operating and maintenance expenses to historical trends because Sound Transit is a relatively new and emerging transit agency, with no experience operating light rail. Sound Transit's estimates of light rail operating costs place its future system near the middle of costs experienced by other light rail operations in the United States.



# University Link LRT Extension Seattle, Washington



# Pacific Highway South BRT

## King County, Washington

(November 2006)

The King County (Washington) Department of Transportation, Metro Transit Division (King County Metro) proposes to construct and operate a 10.9-mile bus rapid transit (BRT) route extending from the City of Tukwila to the City of Federal Way, south of Seattle. The proposed line runs primarily along International Boulevard, from S 154<sup>th</sup> Street in the City of Tukwila to S 216<sup>th</sup> Street, where International Boulevard becomes Pacific Highway South, onto S 316<sup>th</sup> Street where the line turns east to the Federal Way Transit Center. The project includes 14 new stations, traffic signal priority, and the purchase of up to 16 low-floor, branded, diesel-hybrid vehicles. The proposed service would operate at grade with 10 minute headways during the peak-period, with 15 minute headways during the weekday off-peak. The project qualifies as a Very Small Start.

Two transit routes comprise the existing service in the corridor. The first, Route 174, provides 24 hour a day local service between Federal Way and Downtown Seattle. The second, Route 191, operates weekday only service during the peak period. Together, these routes carry approximately 5,000 passengers each weekday. The project corridor contains significant employment and residential nodes in the region such as the Duwamish Manufacturing/Industrial Center, as well as major attractions such as the SeaTac International Airport. Current bus service in the corridor makes frequent stops to accommodate passenger demand. This project presents an opportunity to provide improved transit service and amenities for a large number of existing transit riders as well as attract new riders.

### Summary Description

<b>Proposed Project:</b>	Bus Rapid Transit
	10.4 Miles
	14 Stations
<b>Total Capital Cost (\$YOE):</b>	\$25.07 Million
<b>Section 5309 New Starts Share (\$YOE):</b>	\$14.08 Million (56.2%)
<b>Annual Operating Cost (\$YOE):</b>	\$6.50 Million
<b>Ridership Forecast (2015):</b>	8,200 Average Weekday Boardings
<b>FY 2008 Finance Rating:</b>	Medium
<b>FY 2008 Project Justification Rating:</b>	Medium
<b>FY 2008 Overall Project Rating:</b>	Medium

### Project Development History and Current Status

In 2002, King County Metro identified three potential BRT corridors in its 2002 *Six-Year Transit Development Plan*. One of the three corridors would be chosen for implementation based on the commitment by local jurisdictions to establish the following BRT-related improvements by 2005: 1) provide roadway operational improvements such as bus-only lanes, transit signal priority, or on-street parking restrictions; 2) support and permit the placement of BRT stations on the far side of intersections where possible to support effective transit signal priority 3) fund elements that will make BRT distinctive from other bus transit service such as security enhancements, art, or marketing programs; and 4) accept branding of the BRT service and facilities along the entire corridor. The City of Federal Way was the first jurisdiction in the County to make such commitments and the Pacific Highway South project was selected as the first BRT line for implementation. King County voters approved a sales tax increase of one-tenth of one percent to fund a variety of transit improvements, including the Pacific Highway South

BRT project. FTA notified Congress of its intent to approve the Pacific Highway South BRT project into project development in November 2006, and is expected to take formal approval action in December 2006.

### **Project Justification Rating: Medium**

The project is rated *Medium* for project justification based on a *Medium* rating for both cost effectiveness and transit-supportive land use. King County Metro did not provide evidence of the anticipated economic development impacts of the project.

### ***Cost Effectiveness Rating: Medium***

The Pacific Highway South BRT project qualifies as a Very Small Start. The project includes low-cost elements such as service branding, low-floor buses operating at improved frequencies, transit stations with real-time passenger information, and traffic signal priority, all of which FTA has determined to be cost-effective by their very nature, and therefore receive a *Medium* rating for cost-effectiveness.

### ***Transit-Supportive Land Use Rating: Medium***

FTA considers Very Small Starts projects which meet the minimum existing ridership threshold of 3,000 daily boardings to be in corridors with transit-supportive land use appropriate to the proposed level of investment. Therefore, FTA has assigned the project a *Medium* rating for transit supportive land use plans and policies.

### **Local Financial Commitment Rating: Medium**

The project is rated *Medium* for local financial commitment, based upon King County's acceptable financial condition; a reasonable plan for funding for the non-New Starts share of capital costs; and evidence that operations and maintenance costs of the proposed project is less than five percent of the agency's operating budget.

<b>Locally Proposed Financial Plan</b>		
<b><u>Source of Funds</u></b>	<b><u>Total Funds (\$million)</u></b>	<b><u>Percent of Total</u></b>
<b>Federal:</b>		
Section 5309 New Starts	\$14.08 million	56.1%
Section 5307	\$0.80 million	3.2%
<b>Local:</b>		
Local Sales Tax	\$10.20 million	40.7%
<b>Total:</b>	<b>\$25.07 million</b>	100.0%

**NOTE:** The financial plan reflected in this table has been developed by the project sponsor and does not reflect a commitment by DOT or FTA. The sum of figures may differ from total as listed due to rounding.

# Pacific Highway South BRT

## King County, Washington

