

Annual Report on Funding Recommendations

Proposed Allocations of Funds for Fiscal Year 2008

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



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New Starts
Small Starts
Alternative Transportation in
Parks and Public Lands

2007



U.S. Department
of Transportation
**Federal Transit
Administration**
www.fta.dot.gov

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New Starts, Small Starts, Alternative Transportation in
Parks and Public Lands

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2007

Prepared by:
Federal Transit Administration

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Alphabetical List of Acronyms

Acronym	Name
AA	Alternatives Analysis
ANPRM	Advance Notice of Proposed Rulemaking
ATPPL	Alternative Transportation in Parks and Public Lands
BRT	Bus Rapid Transit
CBD	Central Business District
CMAQ	Congestion Mitigation and Air Quality
DOT	Department of Transportation
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESWA	Early Systems Work Agreement
FONSI	Finding of No Significant Impact
FFGA	Full Funding Grant Agreement
FTA	Federal Transit Administration
FY	Fiscal Year
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
LPA	Locally-Preferred Alternative
LRT	Light Rail Transit
MIS	Major Investment Study
MOS	Minimum Operable Segment
NEPA	National Environmental Policy Act
NPRM	Notice of Proposed Rulemaking
PE	Preliminary Engineering
PCGA	Project Construction Grant Agreement
ROD	Record of Decision
ROW	Right-of-Way
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
TEA-21	Transportation Equity Act for the 21 st Century (1998)
STP	Surface Transportation Program
USC	United States Code
YOE	Year of Expenditure

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 21st 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
Totals by Phase							
Existing New Starts Full Funding Grant Agreements			\$2,557,382,247	\$1,005,000,000 (1)	\$863,744,197		
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	\$2,808,743,556	\$7,269,870,000
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		
Denial Commission			4,900,500	5,000,000	5,000,000		
GRAND TOTAL			\$2,926,629,125 (4)	\$1,456,521,601 (4,5)	\$1,399,818,000		
Existing New Starts Full Funding Grant Agreements							
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	55,192,985	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	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	70,000,000	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
Total Existing New Starts Full Funding Grant Agreements			\$2,557,382,247	\$1,005,000,000	\$863,744,197	\$2,808,743,556	\$7,269,870,000
Pending New Starts Full Funding Grant Agreements							
CO West Corridor LRT	Denver	Medium	\$4,900,500	\$35,000,000	40,000,000		
OR South Corridor I-205/Portland Mail LRT	Portland	Medium	0	80,000,000	80,000,000		
Total Pending New Starts Full Funding Grant Agreements			\$4,900,500	\$115,000,000	\$120,000,000		
Proposed New Starts Full Funding Grant Agreements							
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		
Total Proposed New Starts Full Funding Grant Agreements			\$33,418,049	\$0	210,000,000		
Other New Starts Projects							
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)			
Total Other New Starts Projects			\$284,391,399	\$0	\$72,075,623		
Proposed Small Starts Project Construction Grant Agreements							
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		
Total Proposed Small Starts Project Construction Grant Agreements			\$12,055,230	\$0	\$51,817,000		
Other Small Starts Projects			\$0	\$0	\$48,183,000		

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.

FY 2008 Funding Allocations and Recommendations

The President's Budget for FY 2008 proposes \$1,399.82 million for the capital investment grant program under Section 5309. A total of \$1,265.82 million is recommended for existing or pending FFGAs, proposed FFGAs, and several other projects. In addition, \$100 million is recommended for the new Small Starts program. Finally, \$33.99 million is recommended for specific ferry projects, statutory funding to support the work of the Denali Commission, and program management oversight activities.

Existing Full Funding Grant Agreements

Eleven projects have existing FFGAs that commit FTA to request from Congress a specified level of major capital investment funding in a given fiscal year, based on the budget and schedule for the project. The schedule of Federal funding over the span of the FFGA is listed in "Attachment 6" of each agreement. FTA has reviewed the progress of each of these 11 projects and is requesting \$863.74 million, which is the full amount reflected in the Attachment 6 for these projects for FY 2008. Descriptions of each of these projects can be found in Appendix A.

Pending Full Funding Grant Agreements

Two projects are currently pending issuance of an FFGA: the West Corridor LRT in Denver, Colorado and the South Corridor I-205 / Portland Mall LRT in Portland, Oregon.

For these two projects, FTA recommends a total of \$120.00 million in New Starts funding in FY 2008. The funding recommendations for these projects reflect the proposed funding level in the unexecuted FFGAs as currently drafted. Appendix A provides a detailed description of both projects, including their most recent New Starts rating.

Colorado: Denver/West Corridor LRT

The Regional Transportation District (RTD) is proposing the West Corridor project, a 12-station, 12.1-mile light rail transit (LRT) line extending from RTD's existing LRT system near Colfax Avenue and Interstate 25 (I-25), and following the former Associated Rail right-of-way and US 6, to US 6/US 40 in Jefferson County, Colorado. The proposed project connects with the Central Platte Valley light rail extension and the Central Corridor light rail line at the existing Auraria station adjacent to downtown Denver where it interlines to Denver Union Station (DUS). Service would operate at five-minute headways between DUS and the Federal Center station in Lakewood and 15-minute headways between Federal Center and Jeffco Government Center during weekday peak periods.

The West Corridor project parallels West 6th Avenue, which carries the second highest traffic volume in the region. Regional projections indicate that local auto travel times will increase by almost 30 percent by 2030 in an already congested corridor. Neither the Colorado Department of Transportation nor the Denver Regional Council of Governments has included widening of this roadway in their long range transportation plans. Intended as a high-capacity transit alternative to West 6th Avenue, the West Corridor LRT project is designed to improve transit travel times in the corridor and to increase transit connectivity to regional employment centers currently underserved by public transportation.

RTD completed a Final Environmental Impact Statement (EIS) in October 2003 and FTA issued a NEPA Record of Decision (ROD) in April 2004. In November 2004, Denver-area voters passed RTD's FasTracks funding plan, which increases RTD's sales tax revenues and is

anticipated to support the construction of over 100 miles of new rail transit (including the Denver West LRT project) and a 24 percent increase in local bus service. FTA approved the West Corridor LRT project into final design in August 2005, and recommended the project for an FFGA in the FY 2007 President's Budget. Since that time, the project has experienced cost growth, some of which has been mitigated through modest scope changes. Despite these changes, the project continues to rate *Medium* against the New Starts criteria. FTA expects to execute an FFGA for the project in late 2007 or early 2008. Revenue operations are scheduled to begin in 2013.

SAFETEA-LU Section 3043(b)(7) authorizes the Denver West Corridor LRT project for final design and construction. The capital cost for the 12.1-mile West Corridor LRT project is estimated to be \$574.18 million, of which RTD is seeking \$290.55 million, or 51 percent, in New Starts funding. Through FY 2006, Congress has appropriated \$4.90 million in New Starts funding for this project. FTA recommends \$40.00 million in New Starts funds for this project in FY 2008.

Oregon: Portland/South Corridor I-205/Portland Mall LRT

The Tri-County Metropolitan Transportation District (TriMet) and Portland Metro, the region's metropolitan planning organization, are proposing to construct 8.3 miles of new LRT guideway consisting of two segments connecting to the existing "MAX" LRT system along Interstate 84 (I-84). Long-range regional forecasts point toward increasing traffic congestion along the I-205 corridor, for trips both originating and terminating in the southeastern metropolitan Portland area. The intent of the South Corridor I-205/Portland Mall LRT project is to address increased travel demand in this rapidly growing corridor; to provide additional fixed guideway access between regional activity centers; and to help the Portland region achieve its land use, development, and growth management goals and objectives.

The first segment of the proposed project is a 6.5-mile double-track line that runs north/south and parallel to I-205, connecting the Clackamas Regional Center in southeast Portland with the Gateway Transit Center east of downtown on TriMet's existing LRT system. The second segment of the project is a 1.8-mile LRT spur which would begin at the existing Rose Quarter Transit Center and terminate at Portland State University in south downtown Portland. This new LRT alignment, which would run along the existing downtown bus mall on 5th and 6th Avenues, is needed because TriMet's existing downtown LRT line (to the region's west side) does not have the capacity to carry the additional eight trains per peak hour into the central business district (CBD) that will result from the I-205 extension.

Metro completed a Final EIS for the project in December 2004 and FTA issued a ROD in February 2005. FTA approved the project into final design in October 2005 and recommended the project for an FFGA in the FY 2007 President's Budget. FTA expects to execute an FFGA for the project in Spring 2007. Revenue operations are anticipated to commence in late 2009.

SAFETEA-LU Section 3043(b)(27) authorizes the South Corridor I-205/Portland Mall LRT project for final design and construction. The current capital cost for the 8.3-mile project is estimated at \$557.40 million, of which Tri-Met and Metro are requesting \$334.40 million, or 60 percent, in New Starts funding. However, in August 2006, TriMet informed FTA that the project cost estimate will increase because of unforeseen escalation in the costs of commodities. FTA is working with TriMet to determine the final FFGA cost and the amount of any increase in

commodity costs that FTA will participate in. The FFGA project cost and New Starts share is expected to be finalized in January 2007. Through FY 2006, Congress has not appropriated New Starts funding for this project. FTA recommends \$80.00 million in New Starts funding for this project in FY 2008.

Proposed Full Funding Grant Agreements

In addition to the funding recommendations for the existing and pending Federal commitments discussed above, FTA anticipates, with a high degree of certainty, that two projects will be ready for new FFGAs before the end of FY 2008: the Second Avenue Subway Phase I project in New York, New York, and the University Link LRT Extension in Seattle, Washington

In anticipation of these commitments, FTA recommends that a total of \$210.00 million be appropriated for these projects in FY 2008. Both of these projects are in an advanced state of project development, are rated *High* under the criteria specified by SAFETEA-LU, and have at least a *Medium* rating for cost effectiveness. The \$210.00 million funding recommendation is based on the anticipated capital needs of each of these projects in FY 2008. Each project was authorized in SAFETEA-LU for final design and construction. The summary descriptions provided in the following pages are presented alphabetically by State. More detailed descriptions of these projects are included in Appendix A.

New York: New York/Second Avenue Subway Phase I

The Metropolitan Transportation Authority and New York City Transit (MTA/NYCT) are proposing to construct 2.3 miles of new subway on Manhattan's East Side from 96th to 63rd Streets, connecting with the Broadway Line at the 63rd Street station. The Second Avenue Subway Phase 1 project would include construction of three new stations at 96th, 86th, and 72nd Streets and modification of the existing 63rd Street station. New tunnels would be built from 92nd to 63rd Streets. The project would also include construction of ancillary facilities and the procurement of 68 rail cars. The Phase 1 project is the first part of a planned 8.5-mile subway line extending the length of Manhattan's East Side from 125th Street in East Harlem to Hanover Square in the Financial District.

The project will relieve overcrowded conditions and improve service reliability on the Lexington Avenue Line (LAL), and improve current mobility and meet future demand for commuters throughout New York City and the metropolitan area. LAL currently is the only full north-south passenger rail line serving Manhattan's east side and is the busiest transit line in North America. This heavy passenger load (approximately 3,000 passengers at one station during a 15-minute period of the morning peak hour) causes significant delays in service due to the excessive overcrowding along station platforms and queuing on stairways.

MTA/NYCT completed an MIS/Draft EIS on the Manhattan East Side Corridor in September 1999. The MIS/Draft EIS covered the northern portion of the corridor from 63rd Street to East 125th Street. The full 8.5-mile Second Avenue Subway was selected as the locally preferred alternative (LPA) in May 2001. FTA approved the LPA into PE in December 2001.

Anticipating the financial difficulties in implementing the entire project at once, MTA/NYCT contemplated the development of minimum operable segments (MOS) within the corridor. A Final EIS covering the full alignment, but including a strategy for the implementation of four distinct operable segments within the corridor, was completed in April 2004. In July 2004, FTA issued an environmental ROD for the full-length project. FTA included the Second Avenue

Subway Phase I project in the “other projects” category in the FY 2007 President’s Budget. FTA approved the project into final design in April 2006. FTA is working with the MTA to execute an Early Systems Work Agreement to continue project advancement until an FFGA can be executed, which is expected in late 2007. Revenue operations for the project are planned to commence in 2013.

SAFETEA-LU Section 3043(b)(21) authorizes the New York Second Avenue Subway for final design and construction. The capital cost for the 2.3-mile project is estimated to be \$4,655.42 million. MTA is seeking \$1,300.00 million, or approximately 28 percent of total project costs, in New Starts funding. FTA notes that MTA’s New Starts funding request is higher than what has historically been provided by FTA to other major transit capital investment projects, but the New Starts share of 28 percent is significantly lower than any other project in the New Starts pipeline. In addition, Second Avenue Subway Phase I is one of only two projects in the FY 2008 *Annual Report on Funding Recommendations* to be rated *High*. Through FY 2006, Congress has appropriated \$33.42 million in New Starts funding for this project. FTA recommends \$200.00 million in New Starts funding for the project in FY 2008.

Washington: Seattle/University Link LRT Extension

The Central Puget Sound Regional Transit Authority, commonly known as Sound Transit, is proposing to implement an all-tunnel extension of the Central Link 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. University Link 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 the Central Puget Sound region 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 University Link 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. The steep grades and limited crossing points of I-5 exacerbate congestion between downtown and the First Hill/Capitol Hill urban center. Farther to the north, the University District is separated from the rest of the corridor by Portage Bay and the Lake Washington Ship Canal; only three water 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 morning inbound and evening 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.

The University Link LRT Extension is part of the Central Link LRT system that has been in planning for more than two decades. Due to financial constraints, Sound Transit is implementing the Central Link LRT system in segments. 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 locally preferred alternative for North Link in July 2005, and the following month selected the 3.1-mile University Link Extension as the first phase of the implementation of North Link. 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 PE in December 2005. The University Link LRT Extension was included in the “other projects” category in the FY 2007 President’s Budget. FTA issued a ROD on the project in June 2006, and is expected to approve it into final design in December 2007. Revenue operations for University Link are scheduled for 2016.

SAFETEA-LU Section 3043(c)(231) authorizes the Seattle Link LRT Extensions project for alternatives analysis and preliminary engineering. Section 3043(e)(3)(A) of SAFETEA-LU further makes all projects in subsection 3043(c) eligible for final design and construction effective October 1, 2007. The capital cost of the University Link is estimated to be approximately \$1,645.88 million of which Sound Transit is seeking \$750.00 million, or 46 percent, in New Starts funding. Through FY 2006, Congress has not appropriated New Starts funding for the University Link LRT Extension. FTA recommends \$10.00 million in New Starts funding for the project in FY 2008.

Other Projects

The President’s Budget for FY 2008 includes six other projects for funding under the New Starts program. These projects include: the New Britain – Hartford Busway in Hartford, Connecticut; the Northstar Corridor Rail project in Minneapolis-Big Lake, Minnesota; the North Corridor BRT project in Houston, Texas; the Southeast Corridor BRT project, also in Houston, Texas; the Norfolk LRT project in Norfolk, VA; and the Dulles Corridor Metrorail Project – Extension to Wiehle Avenue in Northern Virginia. A total of \$72.08 million in New Starts funding is being reserved in the FY 2008 President’s Budget for these six projects.

Each of these projects is currently rated *Medium* or higher and possesses a *Medium* or better cost effectiveness rating, or is exempted from the requirement for a *Medium* or better cost effectiveness rating. Three of these projects – the New Britain-Hartford Busway, Northstar Corridor Rail, and Norfolk LRT - are in final design, but remaining uncertainties related to their scopes, schedules, and/or budgets do not provide FTA with the necessary confidence - at the time of the preparation of the FY 2008 President’s budget - that the projects will maintain their *Medium* New Starts ratings and/or achieve the necessary cost effectiveness rating to be recommended for an FFGA. FTA is working closely with each of these project sponsors to ensure, to the extent possible, that sufficient ratings are maintained. The remaining three projects – the two Houston BRT projects and the Dulles Corridor Metrorail Extension to Wiehle Avenue – are expected to be in final design by Spring 2007, assuming satisfactory resolution of any outstanding issues. It is worth noting that each of these three projects would be constructed

following a design-build approach to project implementation, and each is expected to have a firm and final scope, schedule, and budget at the time of their approval for final design.

FTA intends to monitor each of these “other projects” very carefully over the coming months. By reserving funds for this group of projects without specifying a specific amount for any single project at this time, project sponsors will be able to better align their project development process with the Congressional appropriations cycle. This will also allow FTA to take advantage of its project oversight and risk management activities to make project-specific recommendations as uncertainties are mitigated and as Congress is contemplating its appropriations decisions. As appropriate, FTA may execute FFGAs for any of these projects before the end of FY 2008. Summary descriptions of these six projects are presented alphabetically by state below, while more detailed descriptions are provided in Appendix A.

Connecticut: Hartford/New Britain-Hartford Busway

The Connecticut Department of Transportation (ConnDOT) is proposing to construct the New Britain-Hartford Busway, an 11-station, 9.4-mile exclusive BRT system operating primarily in an existing and abandoned railroad right-of-way on a new two-way roadway between downtown New Britain and downtown Hartford’s Union Station. The busway would run parallel to Interstate 84 (I-84), the primary transportation link between New Britain, West Hartford, and downtown Hartford. The project’s operating plan calls for a number of bus routes to operate on the Busway, including services that enter and exit the facility to reach destinations well outside of the immediate corridor without the need for a transfer.

I-84 is currently, and is forecast to remain, the region’s most congested highway. The proposed busway project is intended to provide faster transit travel times between major activity centers throughout the corridor, improve mobility and accessibility for the corridor’s relatively large transit-dependent population, and promote redevelopment opportunities in older urban centers along the project alignment. The New Britain-Hartford Busway project is anticipated to result in travel-time benefits not only to residents living within the corridor, but to suburban commuters who take advantage of the flexibility of BRT service.

In 1994 the Capitol Region Council of Governments’ regional transportation plan identified the I-84 corridor west of Hartford as one of the metropolitan area’s high priority corridors in need of improvement. A major investment study for the corridor was completed in 1999, resulting in the selection of a BRT system between New Britain and Hartford as the locally preferred alternative. In 2000 FTA approved the project into preliminary engineering. A Final EIS for the project was completed in December 2001, and an environmental ROD was issued in March 2002. A re-evaluation to the EIS documenting minor scope changes to the project was submitted to FTA in April 2006, and FTA issued a letter of concurrence on it in June 2006. FTA approved final design for the project in October 2006. Prior to FTA consideration of the project for an FFGA, ConnDOT must resolve outstanding design and right-of-way issues, gain full commitments of non-New Starts funding, and maintain sufficient New Starts ratings. The project is scheduled to open in 2012.

SAFETEA-LU Section 3043(b)(18) authorized the New Britain-Hartford Busway for final design and construction. The capital cost for the 9.4-mile exclusive BRT system is estimated at \$458.78 million, of which ConnDOT is seeking \$275.27 million, or 60.0 percent, in New Starts

funding. Through FY 2006, Congress has appropriated \$7.37 million in New Starts funding for this project.

Minnesota: Minneapolis-Big Lake/Northstar Corridor Rail

The Minnesota Department of Transportation (MnDOT), in cooperation with the Northstar Corridor Development Authority (NCDA), is proposing a 40.5-mile minimum operable segment (MOS) commuter rail line that would connect the Minneapolis CBD with the town of Big Lake. The commuter rail line would operate on Burlington Northern Santa Fe (BNSF) Railway's Chicago-to-Seattle transcontinental mainline and includes a vehicle maintenance facility, layover facility, and requisite track and signal upgrades. The project also includes a four-block extension of the existing Hiawatha LRT line from its current terminus at 1st Avenue North (Warehouse District) in the CBD to a proposed multimodal station at 5th Avenue North, where the commuter rail line would terminate. The commuter rail line would operate 12 weekday trips with 30-minute headways during peak periods. Four of the proposed five stations include park-and-ride lots that would provide over 1,800 parking spaces. The MOS is part of a larger proposal to construct an 82-mile commuter rail line from Minneapolis to Rice, Minnesota.

The Northstar Corridor is one of the fastest growing areas in the Twin Cities metropolitan region. It includes the fully developed urban core and several rapidly growing suburban areas. Major highway routes (Interstate 94, Trunk Highway 10) into the CBD are at capacity during peak periods for commuters from the north and northwest. Increasing the capacity of the roadways to meet growing travel demand in the corridor is constrained by geography and existing development. The Mississippi River is a natural barrier along the southwest edge of the corridor, and the limited river crossings restrict options for travelers. By 2025, travel along the corridor's main arterials is projected to increase significantly, with the number of trips in the corridor expected to grow by over 30 percent and the number of inbound trips to the Minneapolis CBD estimated to increase by almost 75 percent. By avoiding roadway congestion surrounding downtown Minneapolis, the project is expected to provide improved mobility for peak period commuters.

MnDOT and NCDA completed a major investment study (MIS) in December 1999, for an 82-mile commuter rail project between Minneapolis and Rice, Minnesota, which FTA approved into preliminary engineering in June 2000. A Draft EIS was completed in November 2000. A Final EIS was completed in March 2002. An environmental ROD was issued in December 2002. In an effort to reduce the project's estimated capital cost and improve its cost effectiveness, MnDOT developed a 40.5-mile MOS in early 2004. An Environmental Assessment on the project was completed in December 2005. FTA issued a Finding of No Significant Impact in March 2006.

FTA approved the project into final design in September 2006. Prior to FTA consideration of the project for an FFGA, MnDOT must address several cost and scope uncertainties, finalize heretofore unexecuted railroad agreements, develop an acceptable risk management plan (including mitigation strategies) to effectively manage project risks, and maintain sufficient New Starts ratings. The project is currently scheduled to open for service in 2009.

SAFETEA-LU Section 3043(b)(15) authorized the Northstar Corridor project for final design and construction. The capital cost for the 40.5-mile MOS is estimated to be \$307.32 million, of

which MnDOT is seeking \$151.82 million, or 49.4 percent, in New Starts funding. Through FY 2006, Congress has appropriated \$31.50 million in New Starts funding for this project.

Texas: Houston/North Corridor BRT

The Metropolitan Transit Authority of Harris County (METRO) is proposing a 5.4-mile BRT line extending from a planned intermodal facility north of downtown Houston to the Northline Mall Transit Center. The project also includes a 0.6-mile LRT extension from the existing University of Houston-Downtown (UH-D) LRT Station to the planned intermodal terminal. BRT service in the North Corridor would operate in an exclusive guideway except at intersections, where buses would receive priority treatment. The guideway would be shared by both the North Corridor BRT line which would operate with six-minute peak-period headways and planned (and locally-funded) “East End” BRT service operating between neighborhoods east of downtown and the Northline Mall. The BRT project is a first phase of a planned 24-mile LRT line from the CBD to George H. Bush Intercontinental Airport.

In the CBD, most of the travel to/from major arterials surrounding the CBD occurs on downtown streets that are aligned in a north-south direction. Constrained operations and reduced bus speeds for current METRO bus service in the corridor produce schedule delays and service reliability problems that are compounded as traffic volumes increase and METRO adds more buses to accommodate demand. The North Corridor BRT project is intended to result in greater transit capacity and improved transit service to the CBD.

METRO completed an alternatives analysis study on the North-Hardy Corridor in 2003. LRT was selected as the locally preferred alternative (LPA). The North Corridor is included in the *2025 METRO Solutions Plan* that was passed by Houston-area voters in 2003. The *Plan* allows METRO to issue up to \$640 million in bonds to fund transit system expansion projects. FTA approved the North Corridor LRT into PE in April 2005. In August 2005, METRO notified FTA of its intent to build and operate a BRT line in the North Corridor as an interim step toward LRT implementation, with BRT designed for conversion to LRT by 2030. In June 2006 METRO issued a Draft EIS, including a “convertible” BRT alternative, and adopted BRT as the preferred alternative in August 2006. After an evaluation of the project’s benefits and costs and confirmation that all local and Federal requirements were met, FTA conferred PE status to the North Corridor BRT project in October 2006. METRO is developing a Final EIS and is expected to request entry into final design in late Spring 2007. Revenue operations are scheduled to commence by 2010.

SAFETEA-LU Section 3043(b)(10) authorized the Houston Advanced Transit Program for final design and construction. The capital cost for the Houston North Corridor BRT project is estimated to be \$275.34 million, of which METRO is seeking \$137.39 million, or 50 percent, in New Starts funding. Through FY 2006, Congress has appropriated \$8.50 million in New Starts funding for this project.

Texas: Houston/Southeast Corridor BRT

METRO is also proposing a 6.0-mile BRT system from the current Bagby/Smith LRT Station in downtown Houston to the Palm Center park-and-ride lot near Dr. Martin Luther King (MLK), Jr. Boulevard. The project would link with METRO’s existing Main Street LRT in the CBD. The BRT would provide fixed guideway service to the University of Houston-Downtown, Texas Southern University and the Texas Medical Center. BRT service would operate with peak-hour

headways of six minutes. The project is the first phase of a planned 13-mile LRT line from the CBD to the William P. Hobby Airport.

The corridor extends from downtown Houston to the vicinity of MLK Jr. Boulevard at Palm Center and is bounded by Interstate Highway 45 (IH-45) on the east, US Route 59/State Highway 288 on the west, and Almeda-Genoa Road on the south. Congested arterials impede bus service to and from the corridor's major activity centers. The Southeast Corridor constitutes only five percent of METRO's service area, but includes 25 percent of METRO's local bus riders. The area has a high proportion of zero-car households and persons under 18 and over 64 years of age – indicators of transit-dependent populations. The project is intended to result in improved transit service and reliability for these travel markets.

METRO completed an alternatives analysis study on the Southeast-Universities-Hobby Corridor in 2003. LRT was selected as the LPA. The Southeast Corridor is included in the *2025 METRO Solutions Plan* that was passed by Houston-area voters in 2003. The *Plan* allows METRO to issue up to \$640 million in bonds to fund transit system expansion projects. In April 2005 FTA approved the Southeast Corridor LRT into PE. In August 2005, METRO notified FTA of its intent to build and operate a BRT line in the Southeast Corridor as an interim step toward LRT implementation, with BRT designed for conversion to LRT by 2030. METRO issued a Draft EIS, including a "convertible" BRT alternative, in July 2006, and formally adopted BRT as the revised LPA in September 2006. After an evaluation of the project's benefits and costs and confirmation that all local and Federal requirements were met, FTA conferred PE status to the Southeast Corridor BRT project in October 2006. METRO is developing a Final EIS and is expected to request entry into final design in late Spring 2007. Revenue operations are scheduled to commence by 2010.

SAFETEA-LU Section 3043(b)(10) authorized the Houston Advanced Transit Program project for final design and construction. The capital cost for the 6.0-mile BRT project is estimated to be \$169.84 million, of which METRO is seeking \$84.75 million, or 50 percent, in New Starts funding. Through FY 2006, Congress has appropriated \$8.50 million in New Starts funding for this project.

Virginia: Norfolk/Norfolk LRT

Hampton Roads Transit (HRT) is proposing to construct and operate an 11-station, 7.4-mile LRT line within the city of Norfolk that is intended to serve as the initial segment of a regional rapid transit system. The project alignment would begin at the Eastern Virginia Medical Center, move eastward as a dedicated in-street guideway through downtown Norfolk to Norfolk State University, and continue along an abandoned Norfolk Southern Railroad right-of-way (ROW) parallel to Interstate 264 (I-264), to the eastern terminus at Newtown Road. Park-and-ride access to the system would be provided by the construction of new facilities at Newtown Road, Military Highway, and Ballantine Boulevard, as well as shared use of existing parking facilities at the Harbor Park baseball stadium on the southeastern fringe of downtown, where a station is planned.

Travel forecasts indicate worsened congestion on I-264 and major arterials (Brambleton Avenue, Virginia Beach Boulevard, Tidewater Drive) within the project corridor through 2025. Options for improving mobility within the area are limited by geographic constraints (numerous waterways) and the absence of transportation rights-of-way. The Norfolk LRT project takes

advantage of an abandoned rail ROW and is intended to help meet future travel demand to downtown Norfolk and throughout the corridor, provide improved mobility for transit-dependent populations, and achieve local land use goals. The project is further intended to provide a rapid transit connection from Harbor Park and other fringe park-and-ride facilities to destinations within the downtown area.

In 1997, FTA first approved an 18-mile LRT system extending between the cities of Norfolk and Virginia Beach into PE. The Draft EIS for the project was completed in April 1999. In November 1999, Virginia Beach voters did not approve a local funding measure for the project, resulting in the truncation of the project at Kempsville Road within the city limits of Norfolk. FTA approved the abridged project into PE in October 2002. A Supplemental Draft EIS was completed in January 2003. In October 2005, the Norfolk City Council adopted a parking policy in anticipation of the LRT project which is intended to put limits on the downtown parking supply. These limits are further intended to result in a measurable parking deficit in the future, which was assumed in the project's forecast of travel-time benefits. The project was included in the "other projects" category in the FY 2007 President's Budget when issued in February 2006. FTA issued an environmental ROD for the project in April 2006. The following month, FTA completed an assessment of the risk associated with the project's scope, schedule, and budget that identified needed scope and budget enhancements to improve the reliability of the cost estimate and ensure that the project meets FTA design standards. The Norfolk LRT was approved into final design in September 2006. The project is scheduled to open for revenue service in 2010.

FTA notes that the sufficiency of the project's cost effectiveness is vulnerable to any increase in the project's cost estimate. HRT will need to develop and implement a project execution strategy which effectively manages the use of project contingencies and major project risks, as well as continued achievement of sufficient New Starts ratings, before FTA considers an FFGA for the Norfolk LRT project.

SAFETEA-LU Section 3043(b)(22) authorizes the Norfolk LRT project for final design and construction. The capital cost for the 7.4-mile Norfolk LRT is estimated to be \$232.10 million, of which HRT is seeking \$127.98 million, or 55 percent, in New Starts funding. Through FY 2006, Congress has appropriated \$12.90 million in New Starts funding for this project.

Virginia: Northern Virginia/Dulles Corridor Metrorail Project – Extension to Wiehle Avenue

The Virginia Department of Rail and Public Transportation (DRPT) in cooperation with the Washington Metropolitan Area Transit Authority (WMATA) is proposing to construct an 11.6-mile extension of the region's Metrorail system from the existing East Falls Church Metrorail station through the large Tysons Corner employment and retail center to Wiehle Avenue in the Reston area of Fairfax County. The project will be operated as a separate Metrorail line under a new service configuration that terminates in Washington DC at the existing Stadium Armory Metrorail station. The proposed project scope includes construction of five new stations, a major park-and-ride lot at Wiehle Avenue, and expanded storage capacity at WMATA's West Falls Church rail yard. The extension would be operated by WMATA, with trains operating at seven minute peak frequencies from the Wiehle Avenue station through East Falls Church, continuing along the existing Metrorail Orange Line track east through Arlington County, downtown Washington DC, Capitol Hill, and terminating at Stadium Armory. The 11.6-mile extension is

the first phase of a proposed 23.1-mile extension of Metrorail west to Dulles International Airport and Loudoun County.

The Tysons Corner area contains over 25 million square feet of office space and 110,000 employees. Redevelopment and expansion of the major retail and office development is underway. The Reston area also contains significant mixed-use development, with a substantial employment base and large residential population, many of whom commute to employment sites in Washington D.C. The primary transportation arteries that serve this rapidly growing area are Routes 267 (the Dulles Toll Road) and 7, both of which experience significant congestion during peak hours. The proposed Metrorail extension would expand transportation capacity to and from Reston and the Tysons Corner regional activity centers, (including reverse commute trips) while providing a direct rail link for commuters from northwest Fairfax and Loudoun Counties to employment opportunities in Tysons Corner, the Rosslyn - Ballston corridor, downtown Washington DC, and other locations adjacent to stations along the 106-mile Metrorail system.

In November 2002, a 23.1-mile Metrorail extension to Route 772 in Loudoun County replaced a previously-identified bus rapid transit system as the LPA in the Dulles Corridor. Based upon FTA and local concerns that the full LPA would be too costly to implement at one time, VDRPT and WMATA identified a project terminating at Wiehle Avenue as the first phase of implementing the LPA. FTA approved a Supplemental Draft EIS in October 2003 reflecting the Wiehle Avenue termini, and approved DRPT's request to initiate PE for the Extension to Wiehle Avenue project in June 2004. DRPT received a ROD on the Final EIS that covers both the first phase project and Loudoun County extension in April 2005. In March 2006, the Commonwealth of Virginia accepted the Metropolitan Washington Airports Authority's (MWAA) proposal to assume control of the Dulles Toll Road and responsibility for construction of the project. Such authority is intended to enable MWAA to accelerate implementation of not only the Metrorail Extension to Wiehle Avenue but the full LPA, using toll road revenues. In mid-2006, project development activities were put on hold while the Commonwealth considered implementation of a large-bore tunnel for a 4.5-mile segment of the project through Tysons Corner. In September 2006, the Commonwealth decided to retain the original project configuration. DRPT has re-initiated further design work and completed an environmental assessment in November 2006 to accommodate other minor scope changes. The process for transferring the control of the project to MWAA is underway, and the Dulles Transit Partner's - the project's design-build consortium - cost estimate for the project is expected in early 2007. Final design approval is anticipated in Spring 2007. Revenue operations for the Dulles Corridor Metrorail Project - Extension to Wiehle Avenue are scheduled to commence in 2012.

SAFETEA-LU Section 3043(b)(23) authorizes the Dulles Corridor Extension to Wiehle Avenue project for final design and construction. The capital cost for the 11.6-mile project is estimated to be \$2,065.00 million, of which VDRPT is seeking \$900.00 million, or 44 percent, in New Starts funding. Through FY 2006, Congress has appropriated \$215.63 million in New Starts funding for this project.

Small Starts

FTA is requesting \$100.00 million in the FY 2008 President's Budget for projects which qualify under the Small Starts program, which is defined in SAFETEA-LU as transit capital investment projects with a total capital cost of less than \$250 million and a Section 5309 Small Starts share of less than \$75 million. FTA expects to issue a joint Small Starts/New Starts *Notice of*

Proposed Rulemaking (NPRM) in April 2007, with a *Final Rule* to be published in Early 2008. As a first step, FTA published an *Advance Notice of Proposed Rulemaking* (ANPRM) on the Small Starts subprogram in early 2006. The ANPRM acted as a testing document to raise pertinent issues for discussion with stakeholders. In July 2006, FTA issued *Interim Guidance and Instructions for Small Starts*, which presented the simplified Small Starts evaluation process that FTA will follow for the FY 2008 evaluation cycle, and which will be in effect until the aforementioned *Final Rule* is issued. The *Interim Guidance* further established the eligibility parameters for “Very Small Starts” projects, a subset of the lowest-cost Small Starts which may follow an even more simplified project development and evaluation process.

The publication of these guidance documents (as well as the forthcoming NPRM) was preceded by extensive outreach to stakeholders from around the country through both formal and informal listening sessions and a formal public comment period. Shortly after publication of the *Interim Guidance and Instructions for Small Starts*, FTA received requests for “project development” approval from several candidate Small Starts project sponsors. Of the requests received, the following four projects demonstrated eligibility and provided sufficient information for FTA to find that they were both ready for project development and could be evaluated against the Small Starts criteria per the rating process specified in the *Interim Guidance*: the Metro Rapid Bus System Gap Closure project in Los Angeles, California; the Troost Corridor BRT project in Kansas City, Missouri; the Pioneer Parkway EmX BRT project in Springfield, Oregon; and the Pacific Highway South BRT project in King County, Washington. Each of these projects were rated *Medium* against the Small Starts project justification and local financial commitment criteria. FTA notified Congress of its intent to approve these projects into project development in November 2006, with formal approval anticipated in December 2006.

The FY 2008 President’s Budget recommends \$51.82 million in Small Starts funding, to be obligated through the PCGA instrument, for these four projects. This level of funding fulfills the Small Starts requests of the two projects – the Los Angeles Gap Closure project and the King County Pacific Highway South BRT - which have proposed to overmatch the statutory 20 percent local share of capital costs. It also provides the remaining two projects which proposed an 80 percent Small Starts share of project costs – the Kansas City Troost Corridor and Springfield Pioneer Parkway EmX BRT projects – with one-half of the requested Small Starts funding amount. The remaining Small Starts funding for these projects would be provided in FY 2009.

FTA notes that the Los Angeles and King County projects have not yet received a statutory authorization for construction, as required by Section 5309(e)(8) of Title 49 USC. Such an authorization must be in place before a PCGA for either of these projects can be executed.

FTA further proposes to reserve the remaining \$48.18 million in FY 2008 Small Starts funding for other Small Starts projects that are expected to request entry into project development in the next few months and which further demonstrate readiness for a PCGA by the end of FY 2008. Given that Small Starts - and in particular, Very Small Starts - are expected to be less complex, exhibit less risk, and be more quickly implemented than traditional New Starts projects, FTA believes with a high level of confidence that emerging demand for Small Starts funding will be more than sufficient to consume this reserved but not yet committed FY 2008 Small Starts funding. Just as with the “other projects” funding category for New Starts described earlier in this report, FTA intends to monitor emerging Small Starts very carefully over the

coming months and make project-specific funding recommendations - and execute PCGAs - as such projects advance.

The following summarizes each of the Small Starts projects recommended for a PCGA in the FY 2008 President's Budget.

California: Los Angeles/Metro Rapid Bus System Gap Closure

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is proposing to construct and operate eight street-running BRT lines that would connect existing Metro Rapid Bus routes, effectively completing a regional arterial BRT network. The proposed lines have been identified for their potential to reduce end-to-end travel times throughout the existing Metro Rapid Bus system. The project includes eight BRT routes with a total of 247 new stations spread over 120 miles. The proposed service would operate at-grade with ten-minute headways during the peak period.

Each of the eight project corridors contain high population density, and nearly 20 percent of residents that live within one-half mile of the proposed corridors do not have access to an automobile. The project will supplement existing local bus service with BRT featuring fewer stops and traffic signal priority, resulting in significantly faster transit travel times.

In 1999, LACMTA initiated its Metro Rapid Bus Demonstration Program, which included the construction and implementation of Rapid Bus routes in two heavily used transit corridors. The Demonstration Program was successful and LACMTA approved the implementation of 22 additional Metro Rapid Bus lines in September 2002. Fourteen of the proposed 22 routes have been implemented and are currently operating. The remaining eight Metro Rapid Bus routes are the topic of this proposal. Four of these routes are scheduled to open by December 2007, with the remaining four lines opening in June 2008.

The capital cost for the eight street-running BRT corridors which make up the Gap Closure project is estimated to be \$25.66 million, of which LACMTA is seeking \$16.68 million, or 65.0 percent, in Small Starts funding. FTA recommends this amount in Small Starts funding for the project in FY 2008.

Missouri: Kansas City/Troost Corridor BRT

The Kansas City Area Transportation Authority (KCATA) is proposing to construct and operate an approximately nine-mile long, street-running BRT line along Troost Avenue, terminating in downtown Kansas City, Missouri. The Troost Corridor BRT project includes 25 new stations with a real-time passenger information system, signal prioritization, and the purchase of 15 low-floor, branded vehicles. The proposed service would operate with ten-minute headways during the peak period. The project qualifies as a Very Small Start, as defined in the *Interim Guidance and Instructions for Small Starts*.

The Troost Avenue corridor contains the greatest population density in the Kansas City region, as well as major employment and entertainment centers such as the CBD, the Hospital Hill Medical Complex, Stower's Medical Institute, the University of Missouri at Kansas City, Rockhurst University, and the Federal/Honeywell complex.

In 2001, KCATA and the City of Kansas City, Missouri, completed planning activities and identified two main corridors in need of transit improvement. The first corridor ran north-south along Main Street, and the second along Troost Avenue. LRT was proposed as a transportation solution for each of these corridors, while identifying BRT as an alternative improvement strategy should light rail prove to be financially infeasible. Light rail was rejected by area voters in 2001 as too costly; subsequently, BRT was selected as the preferred alternative for each corridor.

SAFETEA-LU Section 3043(b)(11) authorized the Southtown BRT project for final design and construction. The capital cost for the nine-mile, street-running BRT line along Troost Avenue is estimated to be \$30.73 million, of which KCATA is seeking \$24.58 million, or 80.0 percent, in Small Starts funding. Congress has appropriated \$12.06 million for the project through FY 2006. FTA recommends \$6.26 million in Small Starts funding for the project in FY 2008.

Oregon: Springfield/Pioneer Parkway EmX BRT

The Lane Transit District (LTD) is proposing to construct and operate a 7.8-mile extension of the Franklin corridor Emerald Express (EmX) BRT currently under construction in Eugene, Oregon. The proposed project would extend service from the eastern terminus of the Franklin corridor route north along the Pioneer Parkway to existing and new residential and employment areas in Springfield. The project includes 14 new stations, traffic signal priority, and the purchase of four low-floor, branded, hybrid-electric vehicles. The proposed service would operate at-grade with ten-minute headways during the weekday peak and off-peak period.

Major employment centers along the Pioneer Parkway BRT route include Symantec, Royal Caribbean, PeaceHealth, and the North Gateway Mall. Total employment within one-half mile of the BRT route is expected to be 15,500 jobs by 2010, over 10 percent of the metropolitan area's total forecasted employment.

In 2001, BRT was identified as a strategy to combat congestion in the adopted Eugene-Springfield Regional Transportation Plan. LTD completed an environmental assessment on the Pioneer Parkway EmX BRT project in November 2006.

SAFETEA-LU Section 3043(c)(98) authorizes the Lane County Bus Rapid Transit Phase 2 project for alternatives analysis and preliminary engineering. Section 3043(e)(3)(A) of SAFETEA-LU further makes all projects in subsection 3043(c) eligible for final design and construction effective October 1, 2007. The capital cost for the 7.8-mile extension Pioneer Parkway EmX BRT line is estimated to be \$36.99 million, of which LTD is seeking \$29.59 million, or 80.0 percent, in Small Starts funding. FTA recommends \$14.80 million in Small Starts funding for the project in FY 2008.

Washington: King County/Pacific Highway South BRT

The King County (Washington) Department of Transportation, Metro Transit Division (King County Metro) is proposing to construct and operate a 10.9-mile BRT route extending from the City of Tukwila to the City of Federal Way, south of Seattle. The project includes 14 new stations, traffic signal priority, and the purchase of 16 low-floor, branded, diesel-hybrid vehicles. The proposed service would operate at-grade with ten-minute headways during the peak period. The project qualifies as a Very Small Start, as defined in the *Interim Guidance and Instructions for Small Starts*.

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 SeaTac International Airport. Current bus service in the corridor makes frequent stops to accommodate passenger demand. The project would provide improved transit service and amenities for a large number of existing transit riders, as well as attract new riders.

In 2002, King County Metro identified three potential BRT corridors in its 2002 *Six-Year Transit Development Plan*. After local commitments were made to provide basic operational and physical improvements in the corridor to support BRT service, the Pacific Highway South project was selected as the first BRT line in the county for implementation.

The capital cost for the 10.9-mile BRT route is estimated to be \$25.07 million, of which King County Metro is seeking \$14.08 million, or 56.2 percent, in Small Starts funding. FTA recommends this amount of Small Starts funding for the project in FY 2008.

Other Funding

The President's FY 2008 Budget also includes funding in the amount of \$34.99 million for other statutorily-required purposes. Funding for the Denali Commission was provided for in Section 3011(a) of SAFETEA-LU (49 USC 5309(m)(6)(C)), with \$5.00 million authorized for each fiscal year from 2006 to 2009. The Commission is designed to provide critical utilities, infrastructure, and economic support throughout Alaska, particularly in remote communities. As directed by Section 307(e) of Pub.L. 105-277 div. C, title III, as amended (42 USC 3121 note), "The Secretary of Transportation is authorized to make direct lump sum payments to the Commission to construct docks, waterfront development projects, and related transportation infrastructure, provided the local community provides a ten percent non-Federal match in the form of any necessary land or planning and design funds."

SAFETEA-LU also reauthorized funds for Ferry Capital Projects in Alaska and Hawaii, with \$15.00 million in funding authorized each fiscal year from 2006 to 2009 for fixed guideway ferry systems and extension projects utilizing ferry boats, ferry boat terminals, or approaches to ferry boat terminals (49 USC 5309(m)(6)(B)).

Finally, \$13.99 million – one percent of the Section 5309 New Starts/Small Starts program – is included for Federal oversight of the planning, development, and construction of candidate projects.

Transportation in Parks and Public Lands Program

SAFETEA-LU Section 3021, which added Section 5320 to Title 49 USC, established a new program to fund alternative transportation projects in national parks and public lands. The program is to be implemented by the Department of Transportation in consultation with the Department of the Interior and other Federal land management agencies.

Section 5320 stipulates that the Secretary of Transportation annually submit a report on the allocation of amounts made available to assist qualified projects under this section, and that this information is to be included in the *Annual Report on Funding Recommendations* submitted under Section 5309(k)(1). In December 2005, Congress appropriated \$21.78 million for the Alternative Transportation in Parks and Public Lands (ATPPL) program for FY 2006, generally

consistent with funding levels authorized in SAFETEA-LU. In August 2006, FTA and the Department of the Interior selected 42 capital and planning projects for funding under the ATPPL program. Appendix C of this *Annual Report on Funding Recommendations* describes FTA's overall progress in developing this new program, details the 42 alternative transportation projects funded in the program's first year, and notes the technical assistance activities sponsored thus far.

FY 2008 New Starts Projects and Ratings Contained in this Report

As noted previously, the *FY 2008 Annual Report on Funding Recommendations*, as with all previous annual reports, provides information on New Starts projects in different stages of development. For projects under an FFGA, the report includes a summary profile of the project scope, expected ridership, and implementation status. The report also includes detailed information, evaluations, and ratings for all candidate projects which have been approved by FTA for, and are actively engaged in, PE and final design and which are seeking more than \$25 million in New Starts funding. The report includes summary information on several projects approved by FTA for, and actively engaged in, PE which are exempt from project evaluation because they are requesting less than \$25 million in New Starts funding. Finally, the report includes Small Starts projects which have been approved into project development. The maps on pages 26 and 27 present the location of existing and pending FFGAs, and projects in PE, final design, and Small Starts project development, respectively.

In the past year, 14 proposed New Starts projects which had been included in the *FY 2007 Annual Report on New Starts* no longer meet the conditions for inclusion in this year's report. Sponsors of these projects have either a) fully implemented the project scope described in last year's report; b) received the entirety of the New Starts funding requested to implement said scope; c) terminated or suspended project development activities; d) withdrawn from formal inclusion in the New Starts "pipeline" while they address outstanding issues which prevent their projects from advancing in development; or e) decided to no longer pursue New Starts funding.

At the time that this report went to print, Congress had not yet passed the FY 2007 Transportation appropriations bill that funds the New Starts program. However, 10 FFGA projects reported in last year's *Annual Report on New Starts* are assumed to receive their final New Starts appropriation in FY 2007 and are thus not included in this year's report: the ***Mission Valley East Light Rail Transit Extension*** in San Diego, California; the ***Oceanside-Escondido Rail Corridor*** project in north San Diego County, California; the ***BART Extension to San Francisco Airport*** in California; the ***Douglas Branch Reconstruction*** project in Chicago, Illinois; the ***Union-Pacific West Line Extension*** in suburban Chicago; the ***Central Light Rail Transit Double-Track*** project in Baltimore, Maryland; the ***South Corridor Light Rail Transit*** project in Charlotte, North Carolina; the ***Euclid Corridor Transportation Project*** in Cleveland, Ohio; the ***Interstate MAX Light Rail Transit Extension*** in Portland, Oregon; and ***Tren Urbano*** in San Juan, Puerto Rico. An eleventh project – the ***Wilsonville to Beaverton Commuter Rail*** project – was reported as being in final design in last year's report. FTA recommended the project for an FFGA in the *FY 2007 Annual Report on New Starts* and executed the agreement on October 16, 2007. FY 2007 Congressional appropriations are assumed to fulfill FTA's funding commitment to this project and it is therefore not included in this report. One project which was requesting less than \$25 million in New Starts funding and was thus exempt from both FTA's evaluation and consideration for an FFGA – the ***East Corridor Commuter Rail***

project in Nashville, Tennessee – received the entirety of its requested New Starts funding with the FY 2006 appropriations and opened for revenue service in July 2006.

One project reported in final design and one project reported in preliminary engineering in last year's report are not included in the *FY 2008 Annual Report on Funding Recommendations*. In the FY 2007 *Annual Report*, FTA noted that the **Regional Rail System** in the Raleigh-Durham area of North Carolina, "is rated *Low* at this time.....(the project's sponsor, the Triangle Transit Authority (TTA)) must submit reliable information on the costs and benefits of a project scope that results in a *Medium* overall project rating by September 30, 2006, or be removed from final design status." TTA did not submit the requested information, and instead withdrew the project from final design status.

Similarly, FTA noted in last year's report that the Southeastern Pennsylvania Transportation Authority (SEPTA) "did not submit information to FTA for evaluation in the *FY 2007 Annual Report on New Starts*. The **Schuylkill Valley MetroRail** project, as currently scoped, is rated *Low*SEPTA must identify a revised project with sufficient cost effectiveness and reasonable financial plan by September 30, 2006 and produce the information necessary to rate the project or be removed from PE status." SEPTA did not provide FTA with a revised project scope or the requested information and the project has been removed by FTA from preliminary engineering.

Tables 2 A-B present the ratings for all projects currently advancing through the New Starts and Small Starts development process. Projects are rated against a number of measures which reflect the project justification and local financial commitment criteria established by statute. The FY 2008 project evaluation process for New Starts is similar to the process used in the evaluation of projects included in the FY 2004-2007 *Annual Reports on New Starts*, and is consistent with FTA's *Final Rule on Major Capital Investment Projects* issued on December 7, 2000; this process is further documented in Appendix B of this report. Appendix B has been expanded this year to reflect the evaluation process used to evaluate the Small Starts projects contained in the FY 2008 *Annual Report*. This evaluation process is consistent with the *Interim Guidance and Instructions for Small Starts* issued in July 2006.

Table 2-A
Summary of FY2008 New Starts Ratings

Phase State, City, Project	Total Capital Cost (millions)		Total New Starts Funding Requested (millions)	New Starts Funds Share of Capital Costs	Overall Project Rating	Local Financial Commitment Rating	Project Justification Rating
Pending FY2008 FFGA							
CO Denver, West Corridor LRT	\$574.20	YOE	\$290.55	51%	Medium	Medium-High	Medium
OR Portland, South Corridor I-205 / Portland Mall LRT	\$557.40	YOE	\$334.43	60%	Medium	Medium	Medium-High
Final Design							
CT Hartford, New Britain - Hartford Busway	\$458.78	YOE	\$275.27	60%	Medium	Medium	Medium
MN Minneapolis-Big Lake, Northstar Corridor Rail	\$307.31	YOE	\$151.81	49%	Medium	Medium	Medium
NY New York, Second Avenue Subway Phase I	\$4,655.40	YOE	\$1,300.00	28%	High	Medium-High	High
VA Norfolk, Norfolk LRT	\$232.10	YOE	\$127.98	55%	Medium	Medium	Medium
WA Seattle, University Link LRT Extension	\$1,645.90	YOE	\$750.00	46%	High	Medium-High	Medium-High
Preliminary Engineering							
CA Sacramento, South Corridor LRT Extension	\$226.25	YOE	\$113.13	50%	Medium	Medium	Medium
CA San Francisco, Central Subway	\$1,410.80	YOE	\$762.20	54%	Medium	Medium	Medium-High
CT Stamford, Urban Transitway Phase II (1)	\$40.00	YOE	\$22.00	55%	Exempt	Exempt	Exempt
DE Wilmington, Wilmington to Newark Commuter Rail Improvements (1)	\$68.67	YOE	\$24.90	36%	Exempt	Exempt	Exempt
FL Jacksonville, Downtown Transit Service Enhancement Project (1)	\$15.61	YOE	\$9.36	60%	Exempt	Exempt	Exempt
FL Miami, North Corridor Metrorail Extension	\$1,372.20	YOE	\$839.10	61%	Medium	Medium	Medium
MA Boston, Silver Line Phase III	\$1,167.32	YOE	\$699.23	60%	Medium	Medium	Medium-High
MN St. Paul-Minneapolis – Central Corridor LRT	\$932.30	YOE	\$465.20	50%	Medium	Medium	Medium
NJ Northern New Jersey, Access to the Region's Core	\$7,380.90	YOE	\$3,608.67	49%	Medium	Medium	Medium-High
PA Harrisburg, CORRIDORone Rail (1)	\$19.40	YOE	\$13.50	69%	Exempt	Exempt	Exempt
RI Providence, South County Commuter Rail (1)	\$42.27	YOE	\$24.90	59%	Exempt	Exempt	Exempt
TX Houston, North Corridor BRT	\$275.30	YOE	\$137.40	50%	Medium	Medium	Medium
TX Houston, Southeast Corridor BRT	\$169.80	YOE	\$84.80	50%	Medium	Medium	Medium-High
VA No.Virginia, Dulles Corridor Metrorail Project - Extension to Wiehle Ave.	\$2,065.00	YOE	\$900.00	44%	Medium	Medium	Medium
Small Starts Project Development							
CA Los Angeles, Metro Rapid Bus System Gap Closure	\$25.66	YOE	\$16.68	65%	Medium	Medium	Medium
MO Kansas City, Troost Corridor BRT	\$30.73	YOE	\$24.58	80%	Medium	Medium	Medium
OR Springfield, Pioneer Parkway EmX BRT	\$36.97	YOE	\$29.59	80%	Medium	Medium	Medium-High
WA King County, Pacific Highway South BRT	\$25.07	YOE	\$14.08	56%	Medium	Medium	Medium

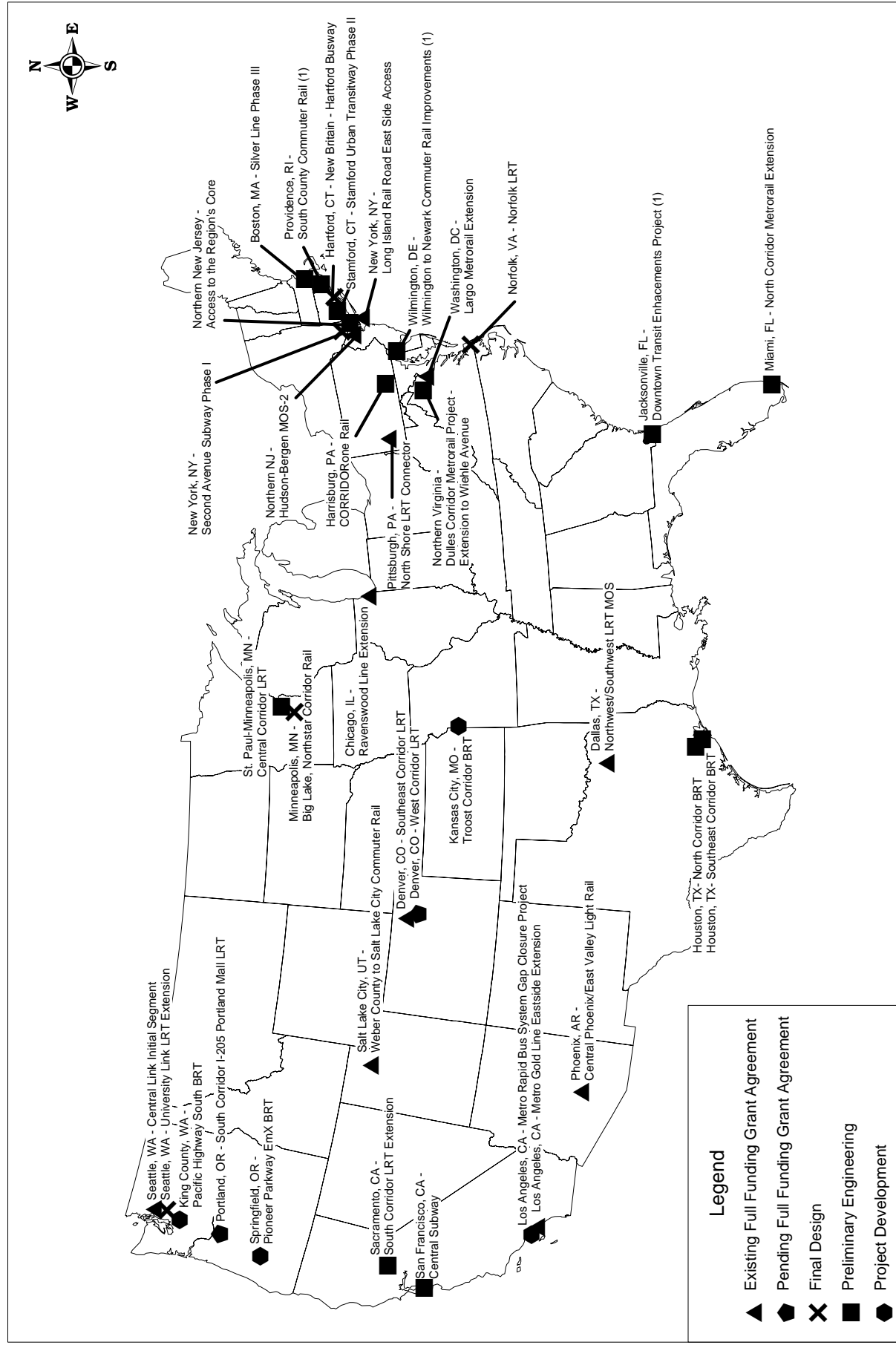
(1) This project has not been rated; under §5309(e)(8)(A), proposed New Starts projects requiring less than \$25.00 million in §5309 New Starts funding are exempt from the project evaluation and rating process.

Table 2-B
Summary of FY2008 New Starts Ratings

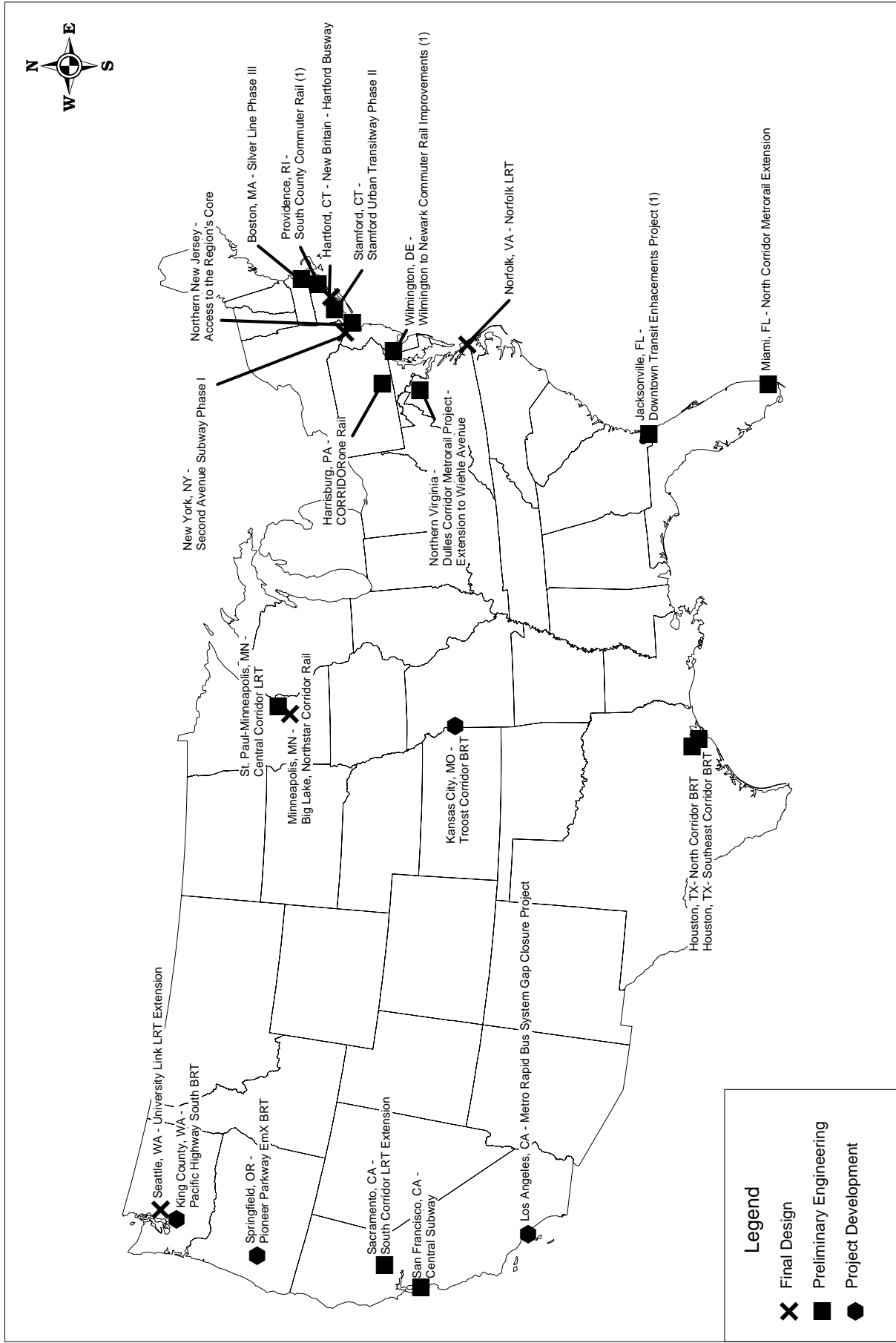
Phase State, City, Project	Overall Project Rating	Local Financial Commitment Rating	Local Financial Commitment Rating			Project Justification Rating	Project Justification				
			New Starts Share Rating	Capital Plan Rating	Operating Plan Rating		Mobility Improvement Rating	Environment Benefits Rating	Operating Efficiency Rating	Cost Effectiveness Rating	Land Use Rating
Pending FY2008 FFGA											
CO Denver, West Corridor LRT	Medium	Medium-High	Medium	Medium-High	Medium-High	Medium	Medium	High	Medium	Medium	Medium
OR Portland, South Corridor I-205 / Portland Mall LRT	Medium	Medium	Medium	Medium	Medium	Medium-High	Medium	Medium	Medium	Medium	Medium-High
Final Design											
CT Hartford, New Britain - Hartford Busway	Medium	Medium	Medium	Medium	Medium	Medium	Medium-High	High	Medium	Medium	Medium
MN Minneapolis-Big Lake, Northstar Corridor Rail	Medium	Medium	Medium-High	Medium	Medium	Medium	Medium-Low	Medium	Medium	Medium-Low	Medium
NY New York, Second Avenue Subway Phase I	High	Medium-High	High	Medium-High	Medium-High	High	Medium-High	High	Medium	Medium-High	High
VA Norfolk, Norfolk LRT	Medium	Medium	Medium	Medium-High	Medium	Medium	Medium	High	Medium	Medium	Medium
WA Seattle, University Link LRT Extension	High	Medium-High	Medium-High	Medium-High	Medium-High	Medium-High	Medium-High	Medium	Medium	Medium	Medium-High
Preliminary Engineering											
CA Sacramento, South Corridor LRT Extension	Medium	Medium	Medium	Medium	Medium-High	Medium	Medium	High	Medium	Medium	Medium-Low
CA San Francisco, Central Subway	Medium	Medium	Medium	Medium	Medium	Medium-High	Medium-High	Medium	Medium	Medium-Low	High
CT Stamford, Urban Transitway Phase II (1)	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
DE Wilmington, Wilmington to Newark Commuter Rail Improvements (1)	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
FL Jacksonville, Downtown Transit Service Enhancement Project (1)	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
FL Miami, North Corridor Metrorail Extension	Medium	Medium	Low	Medium	Medium	Medium	Medium-High	Medium	Medium	Medium	Medium
MA Boston, Silver Line Phase III	Medium	Medium	Medium	Medium	Medium	Medium-High	Medium-High	High	Medium	Medium	High
MN St. Paul-Minneapolis – Central Corridor LRT	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium-Low	Medium-High
NJ Northern New Jersey, Access to the Region's Core	Medium	Medium	Medium-High	Medium	Medium	Medium-High	Medium-High	High	Medium	Medium-Low	High
PA Harrisburg, CORRIDORone Rail (1)	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
RI Providence, South County Commuter Rail (1)	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt	Exempt
TX Houston, North Corridor BRT	Medium	Medium	Medium	Medium	Medium-High	Medium	Medium-High	High	Medium	Medium	Medium
TX Houston, Southeast Corridor BRT	Medium	Medium	Medium	Medium	Medium-High	Medium-High	Medium-High	High	Medium	High	Medium
VA No. Virginia, Dulles Corridor Metrorail Project - Extension to Wiehle Ave.	Medium	Medium	Medium-High	Medium	Medium-High	Medium	Medium-Low	High	Medium	Medium-Low	Medium
Small Starts Project Development											
CA Los Angeles, Metro Rapid Bus System Gap Closure	Medium	Medium				Medium				Medium	Medium
MO Kansas City, Troost Corridor BRT	Medium	Medium				Medium				Medium	Medium
OR Springfield, Pioneer Parkway EmX BRT	Medium	Medium				Medium-High				High	Medium-Low
WA King County, Pacific Highway South BRT	Medium	Medium				Medium				Medium	Medium

(1) This project has not been rated; under §5309(e)(8)(A), proposed New Starts projects requiring less than \$25.00 million in §5309 New Starts funding are exempt from the project evaluation and rating process.

New Starts Projects FY 2008 Overview



Project Development, Preliminary Engineering & Final Design



Appendix A

New Starts Project Profiles

As of November 2006

Alphabetical List of Projects by Development Phase and State

Full Funding Grant Agreements

AZ, Phoenix, Central Phoenix / East Valley Light Rail	A-11
CA, Los Angeles, Metro Gold Line Eastside Extension	A-15
CO, Denver, Southeast Corridor LRT	A-19
D.C. Washington Area, Largo Metrorail Extension	A-23
IL, Chicago, Ravenswood Line Extension	A-27
NJ, Northern New Jersey, Hudson-Bergen MOS-2	A-31
NY, New York, Long Island Rail Road East Side Access	A-35
PA, Pittsburgh, North Shore LRT Connector	A-39
TX, Dallas, Northwest/Southeast LRT MOS	A-43
UT, Salt Lake City, Weber County to Salt Lake City Commuter Rail	A-47
WA, Seattle, Central Link Initial Segment.....	A-51

Pending Full Funding Grant Agreements

CO, Denver, West Corridor LRT	A-57
OR, Portland, South Corridor I-205 / Portland Mall LRT	A-65

Final Design

CT, Hartford, New Britain - Hartford Busway.....	A-75
MN, Minneapolis-Big Lake, Northstar Corridor Rail	A-83
NY, New York, Second Avenue Subway Phase I	A-91
VA, Norfolk, Norfolk LRT	A-99
WA, Seattle, University Link LRT Extension	A-107

Preliminary Engineering

CA, Sacramento, South Corridor LRT Extension	A-117
CA, San Francisco, Central Subway	A-125
CT, Stamford, Urban Transitway Phase II	A-133
DE, Wilmington, Wilmington to Newark Commuter Rail Improvements.....	A-137
FL, Jacksonville, Downtown Transit Service Enhancement Project.....	A-141
FL, Miami, North Corridor Metrorail Extension.....	A-145
MA, Boston, Silver Line Phase III	A-153
MN, St. Paul-Minneapolis, Central Corridor LRT	A-161
NJ, Secaucus, Access to the Region's Core	A-169
PA, Harrisburg, CORRIDORone Rail.....	A-177
RI, Providence, South County Commuter Rail	A-181
TX, Houston, North Corridor BRT	A-185
TX, Houston, Southeast Corridor BRT	A-193
VA, Northern Virginia, Dulles Corridor Metrorail Project – Extension to Wiehle Avenue ..	A-201

Project Development

CA, Los Angeles Metro Rapid Bus System Gap Closure	A-211
MO, Kansas City, Troost Corridor BRT	A-215
OR, Springfield, Pioneer Parkway EmX BRT	A-219
WA, King County, Pacific Highway South BRT	A-223

Alphabetical List of Projects by State and City

Arizona

AZ, Phoenix, Central Phoenix / East Valley Light Rail..... A-11

California

CA, Los Angeles Metro Rapid Bus System Gap Closure A-211

CA, Los Angeles, Metro Gold Line Eastside Extension A-15

CA, Sacramento, South Corridor LRT ExtensionA-117

CA, San Francisco, Central Subway A-125

Colorado

CO, Denver, Southeast Corridor LRT..... A-19

CO, Denver, West Corridor LRT A-57

Connecticut

CT, Hartford, New Britain - Hartford Busway..... A-75

CT, Stamford, Urban Transitway Phase II A-133

Delaware

DE, Wilmington, Wilmington to Newark Commuter Rail Improvements..... A-137

District of Columbia

DC, Washington Area, Largo Metrorail Extension A-23

Florida

FL, Jacksonville, Downtown Transit Service Enhancement Project..... A-141

FL, Miami, North Corridor Metrorail Extension..... A-145

Illinois

IL, Chicago, Ravenswood Line Extension A-27

Massachusetts

MA, Boston, Silver Line Phase III A-153

Minnesota

MN, Minneapolis-Big Lake, Northstar Corridor Rail A-83

MN, St. Paul-Minneapolis, Central Corridor LRT A-161

Missouri

MO, Kansas City, Troost Corridor BRT A-215

New Jersey

NJ, Northern New Jersey, Access to the Region's Core A-169

NJ, Northern New Jersey, Hudson-Bergen MOS-2 A-31

New York

NY, New York, Long Island Rail Road East Side Access A-35

NY, New York, Second Avenue Subway Phase I	A-91
Oregon	
OR, Portland, South Corridor I-205 / Portland Mall LRT	A-65
OR, Springfield, Pioneer Parkway EmX BRT	A-219
Pennsylvania	
PA, Pittsburgh, North Shore LRT Connector.....	A-39
PA, Harrisburg, CORRIDORone Rail.....	A-177
Rhode Island	
RI, Providence, South County Commuter Rail	A-207
Texas	
TX, Dallas, Northwest/Southeast LRT MOS	A-43
TX, Houston, North Corridor BRT	A-185
TX, Houston, Southeast Corridor BRT	A-193
Utah	
UT, Salt Lake City, Weber County to Salt Lake City Commuter Rail	A-47
Virginia	
VA, Norfolk, Norfolk LRT	A-99
VA, Northern Virginia, Dulles Corridor Metrorail Project – Extension to Wiehle Avenue ..	A-201
Washington	
WA, Seattle, Central Link Initial Segment.....	A-51
WA, Seattle, University Link LRT Extension	A-107
WA, King County, Pacific Highway South BRT	A-223

Background

The project profiles presented in this Appendix provide background information supporting the Department of Transportation's New Starts and Small Starts Program funding recommendations for FY 2008. The Department's funding recommendations are being provided to Congress pursuant to 49 USC 5309(k)(1). The funding recommendations are based on the decision criteria defined in 49 USC 5309(d) and (e).

Under 49 USC 5309(d), major capital investment grants for the construction of a new fixed guideway system or the extension of an existing system seeking \$75 million or greater in Federal New Starts funds may be made only if the Secretary determines that the proposed project is:

- (A) based on the results of an alternatives analysis and preliminary engineering;
- (B) justified based on a comprehensive review of its mobility improvements, environmental benefits, cost effectiveness, and operating efficiencies, economic development effects and public transportation supportive land use policies and future patterns and
- (C) supported by an acceptable degree of local financial commitment (including evidence of stable and dependable funding sources) to construct, maintain, and operate the system or extension, and maintain and operate the entire public transportation system without requiring a reduction in existing public transportation services or level of service to operate the proposed project.

49 USC 5309(e) establishes new requirements for "Small Starts" projects seeking no more than \$75 million in New Starts funding with a total project cost of not greater than \$250 million. Grants for such projects can only be made if the Secretary finds that the project is:

- (A) based on the results of planning and alternatives analysis;
- (B) justified based on a review of its public transportation supportive land use policies, cost effectiveness, and effect on local economic development; and
- (C) supported by an acceptable degree of local financial commitment.

This *Annual Report on Funding Recommendations* presents FTA's evaluation of New Starts and Small Starts projects as provided for under 49 USC 5309(d) and (e). The *Annual Report* includes profiles for each project under, or recommended for, a Full Funding Grant Agreement (FFGA) as well as proposed projects undergoing final design, preliminary engineering, or Small Starts project development. In addition to providing information to Congress, the document serves as guidance to project sponsors so that improvements can be made. Since projects can be expected to continue to change as they progress through the development process, the ratings for projects that are not yet recommended for FFGAs should not be construed as a statement about the ultimate merit of the project. Rather, the ratings provide an assessment of the projects' current strengths and weaknesses as of November 2006.

Profiles for projects that are under construction – or, in a few cases, in revenue operation – are also included in this report if additional funds are needed in FY 2008 to fulfill the FFGA.

In general, the profiles for projects in final design, preliminary engineering, and Small Starts project development include the following sections:

- (1) **Description:** This section briefly describes a project's physical characteristics (scope) and operating characteristics. This section also summarizes the transportation problem or problems the proposed project is intended to address. A project's summary rating of *High*, *Medium-High*, *Medium*, *Medium-Low*, or *Low* is presented in this section, as are areas of concern or action items which the project sponsor must address prior to subsequent evaluations.
- (2) **Project Development History and Current Status:** This section identifies where the project is in the development process. It indicates, for example, when the project was approved into preliminary engineering (and final design, if appropriate), as well as when it completed – or is anticipating completion of – Federal environmental review requirements.
- (3) **Significant Changes Since FY 2007 Evaluation:** For projects reported in the FY 2007 *Annual Report*, this section describes significant changes in the project scope, capital cost, travel demand forecasts, or financial plan since the previous evaluation. The changes provide an understanding of why the information and/or rating reported in the FY 2008 *Annual Report on Funding Recommendations* may be different from last year.
- (4) **Project Justification:** This section presents an evaluation of each project's merit based on: the criteria cited in 49 U.S.C. 5309(d) and (e); FTA's *Final Rule* on New Starts project evaluation and rating, which became effective April 6, 2001; and FTA's *Interim Guidance and Instructions for Small Starts*, which became effective on July 31, 2006. Information on transit supportive land use and project cost effectiveness is summarized. For cost effectiveness, issues related to the estimate of project costs and benefits are identified. For New Starts projects, ratings and data are also reported for the other project justification criteria, including mobility improvements, environmental benefits, operating efficiencies, and other factors (where appropriate).
- (5) **Local Financial Commitment:** This section presents the evaluation of each project's financial plan and local financial commitment for the New Starts share, capital financial plan, and operating financial plan.

Profiles of projects which are “exempt” from evaluation under the New Starts criteria include only the description and status sections. Additionally, profiles for projects covered by existing FFGAs include only the information contained under the description and status sections, because projects are not re-evaluated once a funding agreement is in place.

Projects with Full Funding Grant Agreements

Central Phoenix/East Valley Light Rail

Phoenix, Arizona

(November 2006)

Description

The City of Phoenix and Valley Metro Rail, Inc. (VMR), a nonprofit corporation and the sub-recipient of Federal funds awarded under this Full Funding Grant Agreement (FFGA), are constructing a 19.6-mile light rail system, with track alignment located mostly in street median from 19th Avenue and Bethany Home Road in north central Phoenix, through the City of Tempe, to Main Street and Sycamore Street in the City of Mesa. The project includes 27 stations, seven new surface parking lots, a bridge over Town Lake in Tempe, and a bridge at 48th Street in Phoenix. The project scope will also include 36 light rail vehicles, and a maintenance and storage facility. In 2020, the project is expected to serve 49,900 riders.

The total project cost under the FFGA is \$1,412.12 million. The Section 5309 New Starts funding share is \$587.20 million.

Status

After completing a major investment study in February 1997, the Maricopa Association of Governments adopted light rail transit (LRT) for the Central Phoenix/East Valley corridor into its financially constrained long range plan. FTA granted Valley Metro Rail permission to enter preliminary engineering (PE) on a 13-mile segment of the corridor in September 1998. FTA subsequently approved PE on 20.3 miles of the proposed system the following year. On March 14, 2000, city of Phoenix voters passed a sales tax referendum that increased the local sales tax rate by 0.4 percent, all of which is dedicated to transit development. VMR completed the NEPA process and received a Record of Decision on the Central Phoenix/East Valley Light Rail project in February 2003. The project was approved for entry into final design in July 2003, and recommended for funding in the President's FY 2005 Budget. FTA and the City of Phoenix entered into an FFGA in January 2005, with revenue operations scheduled for December 2008. Construction started in January 2005 and is projected to be completed within budget and on schedule. In May 2006 VMR advised FTA of their intent to construct an additional station and acquire fourteen additional vehicles outside of the FFGA project scope, to be paid for with local funds.

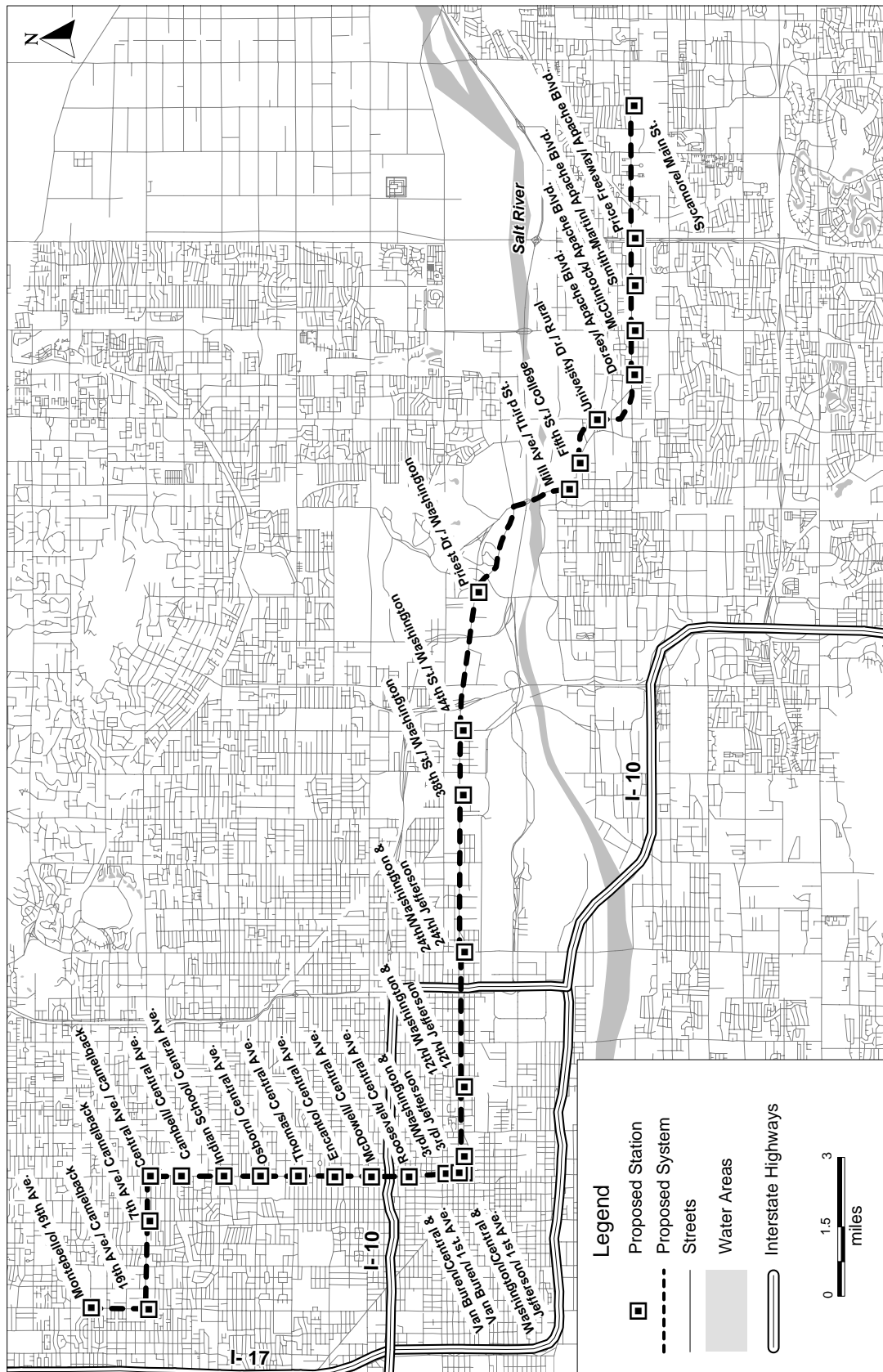
SAFETEA-LU Section 3043(a)(19) authorized the Central Phoenix/East Valley LRT for final design and construction. Through FY 2006, Congress has appropriated \$220.87 million in Section 5309 New Starts funds for the project.

Reported in Year of Expenditure Dollars		
<u>Source of Funds</u>	<u>Total Funding (million)</u>	<u>Appropriations to Date</u>
Federal: Section 5309 New Starts FFGA Commitment Flexible Funds (CMAQ)	\$587.20 \$59.75	\$220.87 million appropriated through FY 2006
Non-Federal Funds:	\$765.17	
TOTAL	\$1,412.12	

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

Central Phoenix / East Valley Light Rail

Phoenix, Arizona



Metro Gold Line Eastside Extension

Los Angeles, California

(November 2006)

Description

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is constructing a 5.9-mile, dual-track light rail system with eight new stations and one station modification in the Eastside Corridor, connecting downtown Los Angeles with low- to moderate-income communities in East Los Angeles. The alignment is primarily at-grade, with a 1.7-mile mid-section tunnel. The Metro Gold Line Eastside Extension originates at Union Station in downtown Los Angeles, where it serves as an extension to the Metro Gold Line to Pasadena. It continues generally eastward along Alameda Street, 1st Street, and 3rd Street through Little Tokyo, Pico Aliso, Boyle Heights, and East Los Angeles communities of unincorporated Los Angeles County including Belvedere, and terminates just before the intersection of Pomona and Atlantic Boulevards.

The Eastside Corridor has among the highest residential densities and largest transit-dependent populations in Los Angeles. Over 60 bus routes currently serve the corridor, many of which are at capacity during peak travel times and suffer delays due to traffic congestion. The Metro Gold Line Eastside Extension will improve public transportation services and provide travel-time savings for the Eastside communities and their residents accessing jobs in downtown Los Angeles and other employment destinations along LACMTA's rail and rapid bus network. Average daily ridership in the year 2020 is estimated to be 23,000 riders.

The total project cost under the Full Funding Grant Agreement (FFGA) is \$898.81 million. The Section 5309 New Starts funding share is \$490.70 million.

Status

In 1998, LACMTA undertook an alternatives analysis to evaluate feasible alternatives for the Eastside and Mid-City corridors. FTA approved the Eastside project into preliminary engineering in August 2000. LACMTA completed the NEPA process and received a Record of Decision in June 2002. FTA approved the project's entry into final design in October 2002. FTA and LACMTA entered into an FFGA in June 2004, with revenue operations scheduled for December 2009. Construction started in July 2004 and is projected to be completed within budget and on schedule.

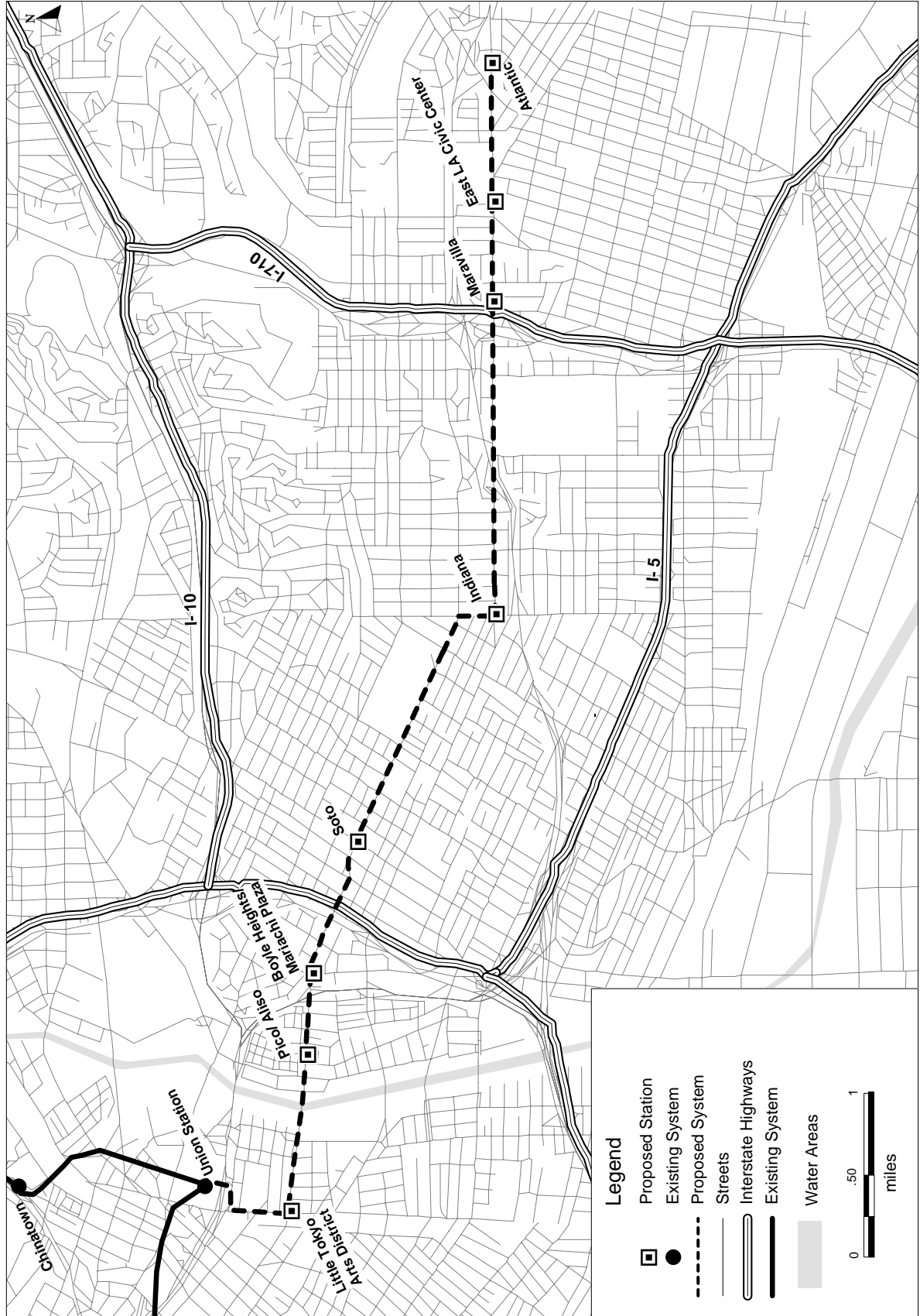
SAFETEA-LU Section 3043(a)(9) authorized the Los Angeles Metro Gold Line Eastside Extension for final design and construction. Through FY 2006, Congress has appropriated \$155.19 million for the Metro Gold Line Eastside Extension project.

Reported in Year of Expenditure Dollars		
<u>Source of Funds</u>	<u>Total Funding (million)</u>	<u>Appropriations to Date</u>
Federal: Section 5309 New Starts FFGA Commitment Section 5309 Fixed Guideway Modernization Flexible Funds (STP and CMAQ)	\$490.70 \$23.10 \$189.88	\$155.19 million appropriated through FY 2006
Local: Sales Tax Revenue	\$195.13	
TOTAL	\$898.81	

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

Metro Gold Line East Side Extension

Los Angeles, California



Southeast Corridor LRT

Denver, Colorado

(November 2006)

Description

The Regional Transportation District (RTD) and the Colorado Department of Transportation (CDOT) are constructing the Southeast Corridor project (known locally as T-REX). T-REX is a 19.1-mile double-track light rail transit (LRT) system extending from the existing LRT station at Interstate 25 (I-25) and Broadway in Denver, along I-25 to Lincoln Avenue and I-25 in Douglas County, with an LRT spur line along Interstate 225 to Parker Road in Arapahoe County. The project includes 13 new stations, 34 light rail vehicles, 12 park-and-ride lots, a maintenance facility and system upgrades. The double-track system will operate in an exclusive, grade-separated right-of-way and connect with the existing 5.3-mile Central Corridor LRT in downtown Denver at the existing Broadway station. At I-25 and Broadway, the Southeast Corridor LRT will also connect with RTD's 8.7-mile Southwest Corridor LRT. Ridership is estimated to be 38,100 average weekday boardings by 2020.

The total project cost under the Full Funding Grant Agreement (FFGA) for this project is \$879.27 million. The Section 5309 New Starts funding share is \$525.00 million.

Status

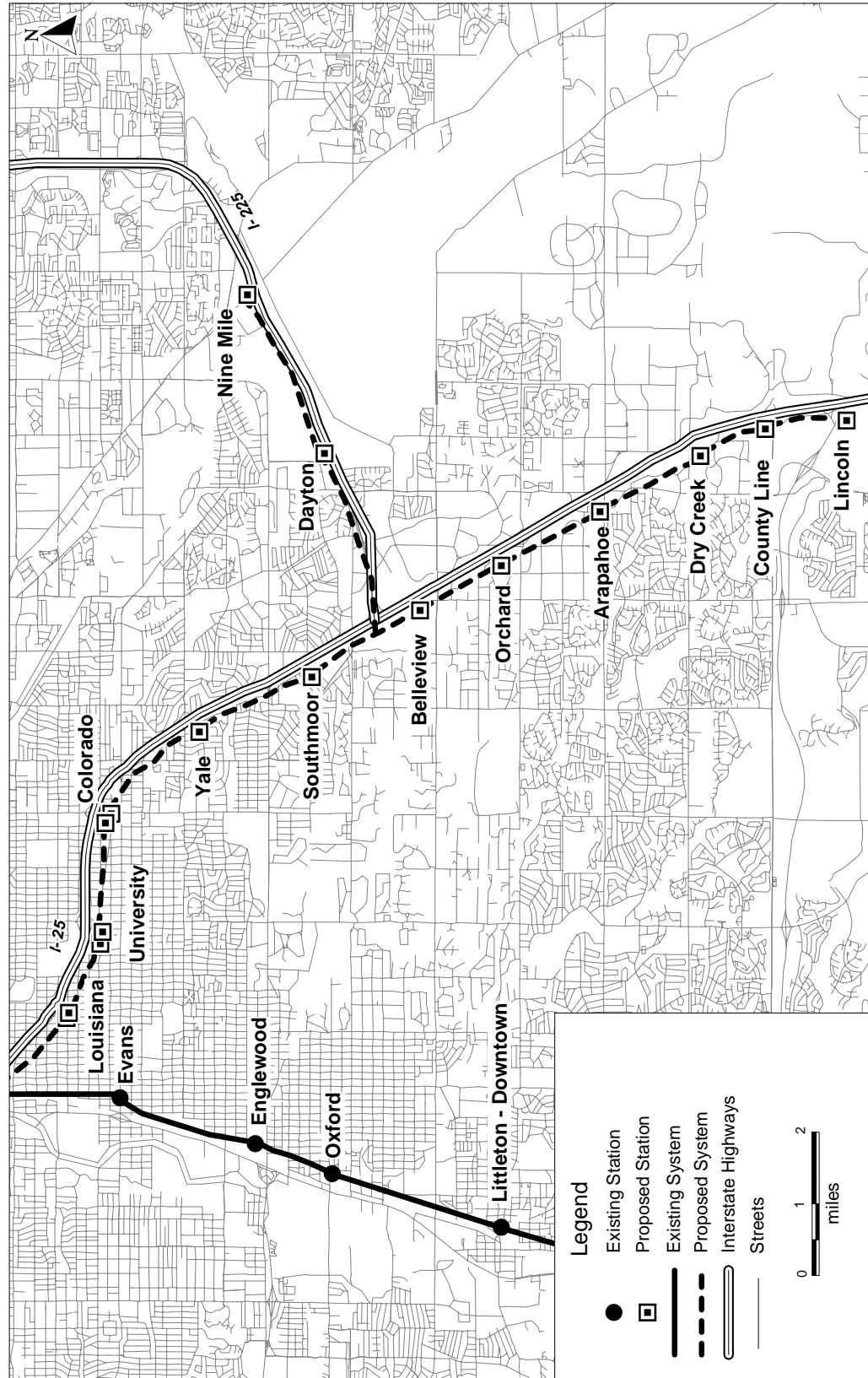
CDOT, in cooperation with the Denver Regional Council of Governments and the RTD, completed a major investment study on the Southeast Corridor in July 1997. In February 1998, FTA approved the project into preliminary engineering. FTA and the Federal Highway Administration issued a Final Environmental Impact Statement for the project in December 1999 and a Record of Decision in March 2000. In May 2000, FTA approved the project into final design. RTD and FTA entered into an FFGA in November 2000, with revenue operations scheduled for June 2008. RTD is constructing T-REX through a design-build contract that was awarded in June 2001. Construction started in September 2001 and revenue operations started in November 2006, 22 months ahead of schedule.

SAFETEA-LU Section 3043(a)(7) authorized the Denver Southeast Corridor LRT for final design and construction. Through FY 2006, Congress has appropriated \$366.22 million in Section 5309 New Starts funds for the project.

Reported in Year of Expenditure Dollars		
<u>Source of Funds</u>	<u>Total Funding (million)</u>	<u>Appropriations to Date</u>
Federal: Section 5309 New Starts FFGA Commitment	\$525.00	\$366.22 million appropriated through FY 2006
Local: Sales Tax Revenue-Based Bond Proceeds	\$354.27	
TOTAL	\$879.27	

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

Southeast Corridor LRT Denver, Colorado



Largo Metrorail Extension

Washington, D.C. Metropolitan Area

(November 2006)

Description

The Maryland Mass Transit Administration (MTA) and the Washington Metropolitan Area Transit Authority (WMATA) were joint lead agencies in the construction of a 3.1-mile heavy rail extension of WMATA Metro's Blue Line. The project extends the Blue Line from its previous terminus at the Addison Road Station to Largo Town Center, located just beyond the Capital Beltway in Prince George's County, Maryland. The 3.1-mile alignment includes tunnel and surface segments. The project includes two new stations at Morgan Boulevard and Largo Town Center and the purchase of 14 heavy rail vehicles. The stations provide 2,700 park-and-ride spaces, as well as "kiss-and-ride" spaces and bus bays. The project provides direct walking access to a new Boulevard Cap Center retail development, and walking access and shuttle bus service to the sports complex at FedEx Field. Average weekday boardings are estimated at 20,040, including 15,310 daily new riders by 2020. A July 31, 2006, amendment to the Largo Extension Full Funding Grant Agreement will provide an additional 52 rail cars and upgrades to traction power equipment on the Orange and Blue Lines to support the operation of eight-car trains.

Total amended capital costs of the project are \$607.20 million. The Section 5309 New Starts funding share for the project is \$364.30 million. The amended costs were \$173.30 million, including \$104.00 million in Section 5309 New Starts funding.

Status

Revenue operations started in December 2004.

Preliminary engineering for the Largo Metrorail Extension was initiated in July 1997 and completed in April 2000. A Draft Environmental Impact Statement (EIS) was completed in October 1996. A Final EIS was completed in December 1999. FTA issued a Record of Decision for the Largo Extension in February 2000 and approved the project into final design in July 2000. WMATA and FTA entered into an FFGA in December 2000. The non-Federal share for the original FFGA project was provided by the State of Maryland through a funding agreement executed on May 26, 2000.

WMATA used a design-build contracting method with construction starting in March 2001. The third and final contract was initiated in October 2002 for the stations and parking facilities. In September 2002, Prince George's County and the Maryland Department of Transportation authorized an additional \$13.60 million for the project to add a parking structure at the Largo Station and a day care center at the Morgan Boulevard Station. The WMATA Board approved \$9 million from their Transit Infrastructure Investment Fund (TIIF) to be applied to this project on September 19, 2002. Revenue operations started in December 2004. In July 2006, the FFGA was amended to add \$173.3 million (including \$104 million in Section 5309 New Starts funds) of Congressionally directed funding for additional rail car and traction power upgrades to support eight-car train operations on the Blue and Orange lines. Local funding for the amended FFGA comes from WMATA compact jurisdictions.

TEA-21 Section 3030(a)(93) authorized the Washington, DC – Largo Extension for final design and construction. Through FY 2006, Congress has appropriated \$260.30 million in Section 5309 New Starts funds for the project, not including \$5.65 million that is not included in the FFGA.

SAFETEA-LU Section 3043(a)(31) and 3043(j) directed the Federal Transit Administration (FTA) to amend its Full Funding Grant Agreement (FFGA) with the Washington Metropolitan Area Transit

Authority (WMATA) for the Largo Metrorail Extension to add 52 rapid rail cars and “project scope changes.”

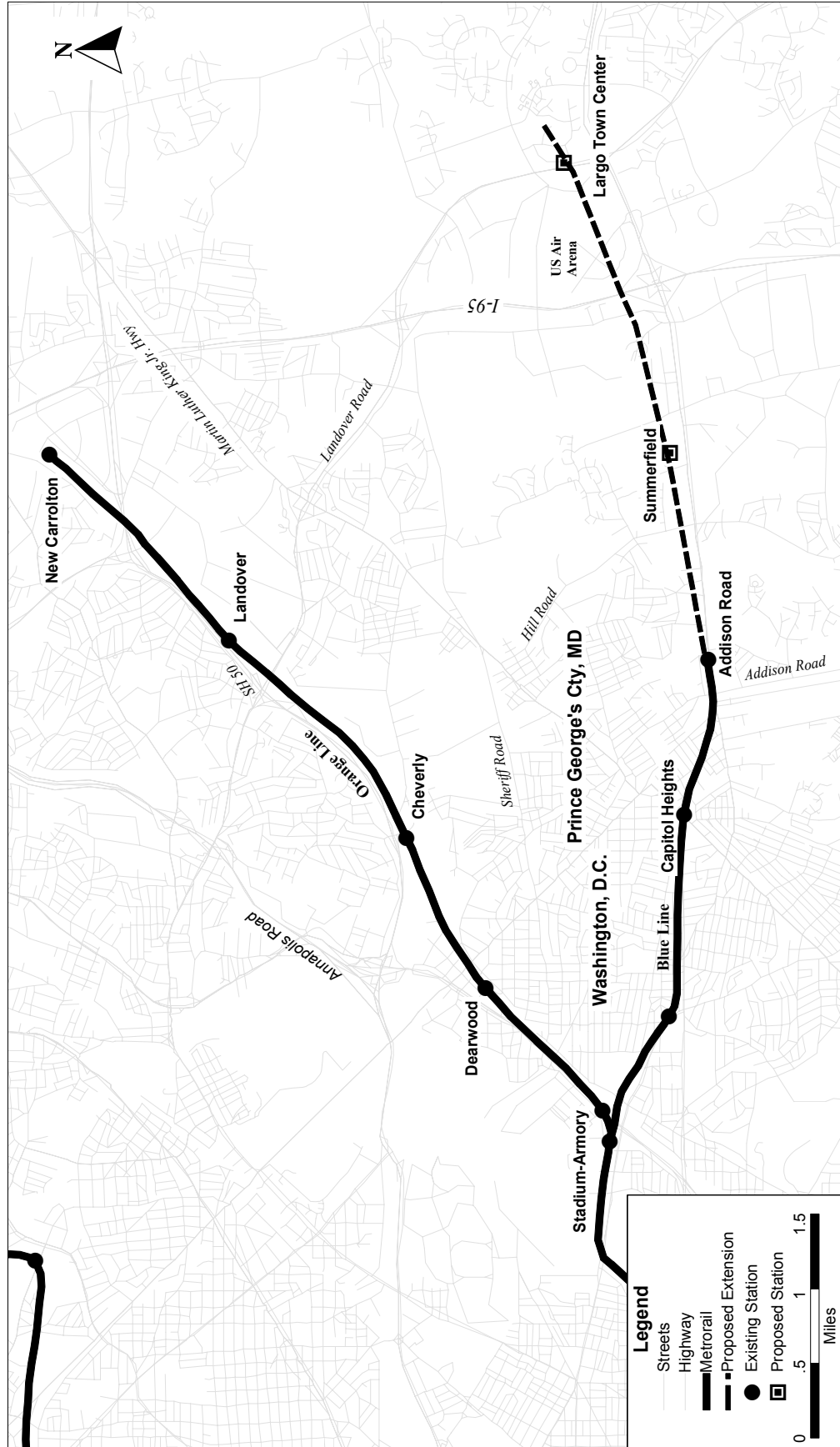
Reported in Year of Expenditure Dollars		
<u>Source of Funds</u>	<u>Total Funding (million)</u>	<u>Appropriations to Date</u>
Federal: Section 5309 New Starts FFGA Commitment	\$364.30	\$260.30 million appropriated through FY 2006 ¹
Local: WMATA Compact Jurisdictions	\$69.30	
State: Maryland Transportation Trust Fund	\$173.60	
TOTAL	\$607.20	

NOTE: Sum of figures may differ from total as listed due to rounding.

¹ Total does not include \$5.65 million awarded to Maryland MTA that is not included in the FFGA.

Largo Metrorail Extension

Washington, DC Metropolitan Area



Federal Transit Administration, 2002

Ravenswood Line Extension

Chicago, Illinois

(November 2006)

Description

The Chicago Transit Authority (CTA) is proposing to reconstruct existing platforms and stations on the existing Ravenswood (Brown) Line to accommodate eight-car trains, along with other related capital improvements. The Ravenswood Line extends approximately 9.1 miles from the Kimball Terminal on the north side of Chicago through the "Loop Elevated" in downtown Chicago, and includes 19 stations. The majority of the line operates on an elevated structure (8.0 miles), except for a portion near the northern end of the line that operates at grade (1.1 miles).

The proposed project includes the modernization of stations and other rail infrastructure improvements, including compliance with the Americans with Disabilities Act regulations for improved station accessibility, resulting in an enhancement of passenger safety and convenience. CTA is also upgrading several highway grade crossings to reduce inconvenience to vehicular traffic and improve pedestrian safety along the line. CTA also expects the modernization of the Brown Line's signal/communication controls to improve train performance and reliability. It will optimize operations along the line via a reduction or elimination of current "slow zones" of, in some areas, less than 15 miles per hour due to the line's deterioration. CTA estimates that average daily ridership in 2020 will total 68,000 passengers.

The total project cost under the Full Funding Grant Agreement (FFGA) is \$529.91 million. The Section 5309 New Starts funding share is \$245.52 million.

Status

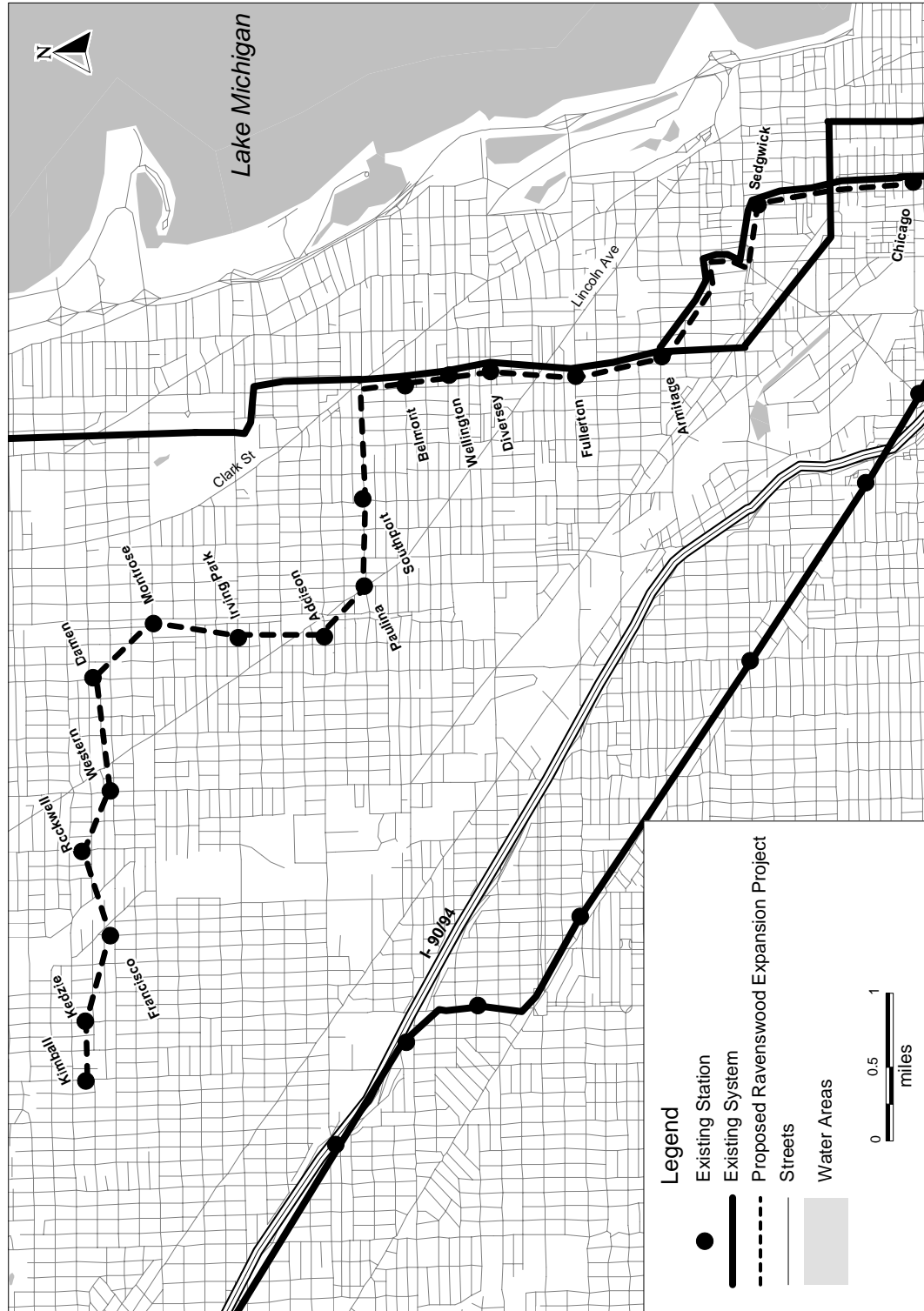
In November 1997, the Chicago Area Transportation Study (the local Metropolitan Planning Organization) included the Ravenswood Expansion Project in the region's financially-constrained long-range transportation plan. CTA completed preliminary engineering in early 2000. In February 2002, CTA completed an Environmental Assessment. FTA issued a Finding of No Significant Impact on the project in July 2002, and approved the project into final design in August 2002. CTA and FTA entered into an FFGA in January 2004, with revenue operations scheduled for December 2009. CTA has successfully repackaged the bid packages to address earlier construction bids above the engineer's estimate. This has resulted in most of the construction contracts being awarded, with the project maintaining the original budget and schedule. Construction started in late 2004, and is projected to be completed within budget and schedule.

SAFETEA-LU Section 3043(a)(5) authorized the Ravenswood Line Extension for final design and construction. Through FY 2006, Congress has appropriated \$99.57 million in Section 5309 New Starts funds for the project.

Reported in Year of Expenditure Dollars		
<u>Source of Funds</u>	<u>Total Funding (million)</u>	<u>Appropriations to Date</u>
Federal:		
Section 5309 New Starts FFGA Commitment	\$245.52	\$99.57 million appropriated through FY 2006
Section 5307 Urbanized Area Formula	\$35.51	
Section 5309 Fixed Guideway Modernization	\$142.05	
Local:		
Illinois Department of Transportation	\$49.72	
Regional Transit Authority/Chicago Transit Authority	\$57.10	
TOTAL	\$529.91	

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

Ravenswood Line Extension Chicago, Illinois



Hudson-Bergen MOS-2

Northern New Jersey

(November 2006)

Description

The New Jersey Transit Corporation (NJT) is constructing a second minimum operable segment (MOS-2) for the Hudson-Bergen Waterfront Light Rail Transit System. The MOS-2 project includes a 5.1-mile, 6 station extension from Hoboken Terminal to the Tonnelle Avenue park-and-ride lot in North Bergen and a one-mile, one-station extension south from 34th Street to 22nd Street in Bayonne. NJT expects MOS-2 to serve 34,900 average weekday boardings in 2010.

The total cost of MOS-2 under the Full Funding Grant Agreement (FFGA) is \$1,215.40 million. The Section 5309 New Starts funding share for the project is \$500.00 million.

Status

The final segment of the project was opened for revenue service in February 2006.

The Final Environmental Impact Statement for the full Hudson-Bergen Waterfront Light Rail Transit project was issued in August 1996. An Environmental Assessment was completed on a re-alignment and submitted to FTA in August 1998. FTA issued a Finding of No Significant Impact in June 1999.

FTA and NJT entered into an FFGA in November 2000, with revenue operations scheduled for 2005. MOS-2, like the completed initial minimum operable segment (MOS-1), is a design/build/operate/maintain project. Construction on MOS-2 began in September 2000 under a Letter of No Prejudice and is expected to be completed within budget and on schedule. Revenue service began in November 2003 for the segment from 34th Street to 22nd Street in Bayonne. In September 2004, revenue service began at three stations between Hoboken Terminal and Weehawken. The final segment from Lincoln Harbor to Tonnelle Avenue was opened for revenue service in February 2006.

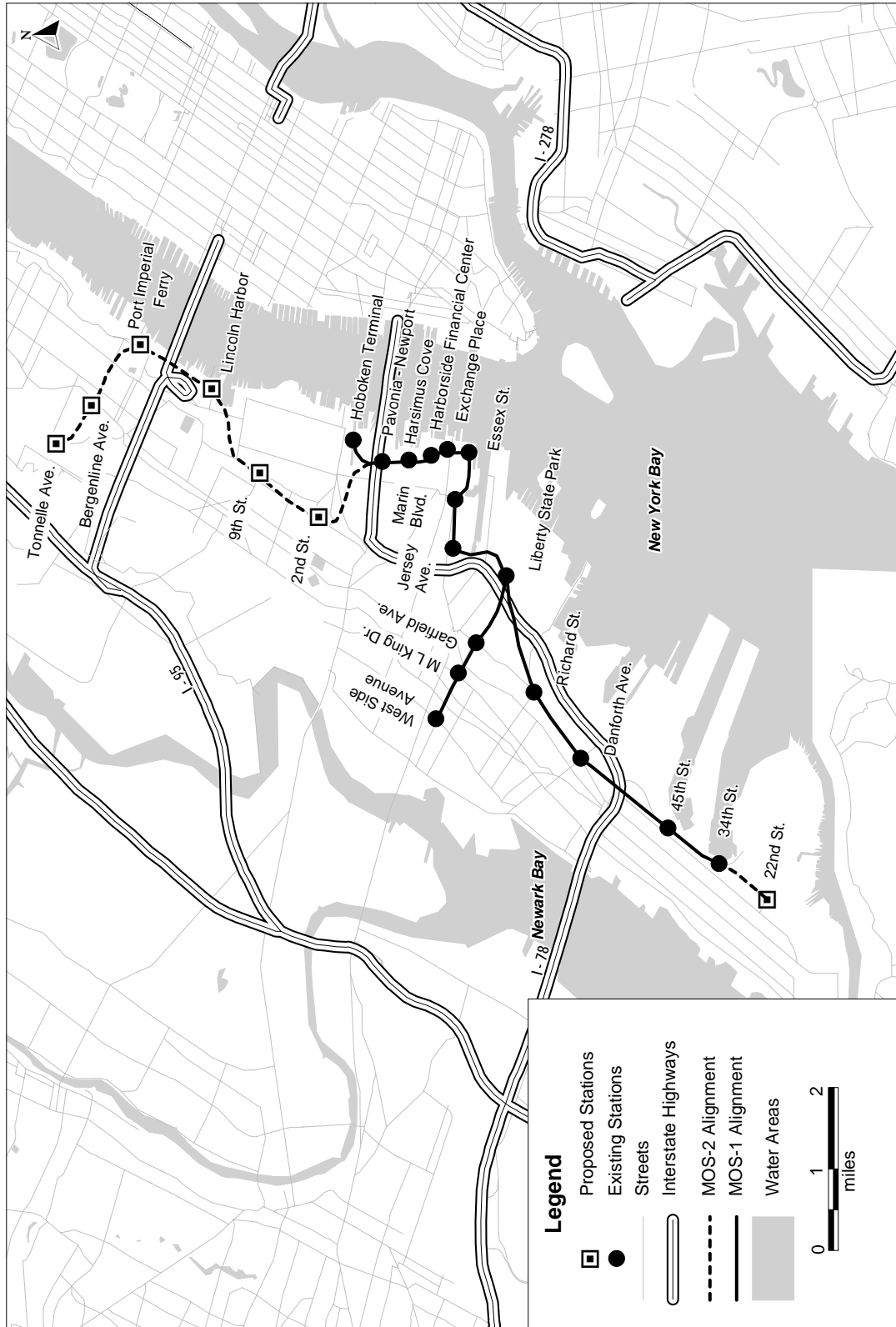
SAFETEA-LU Section 3043 (a)(16) authorized the Hudson-Bergen MOS-2 for final design and construction. Through FY 2006, Congress has appropriated \$344.81 million in Section 5309 New Starts funds for the project.

Reported in Year of Expenditure Dollars		
<u>Source of Funds</u>	<u>Total Funding (million)</u>	<u>Appropriations to Date</u>
Federal: Section 5309 New Starts FFGA Commitment Section 5307 Urbanized Area Formula Funds	\$500.00 \$153.70	\$344.81 million appropriated through FY 2006
State: New Jersey Transportation Trust Fund Port Authority of NY & NJ and Utility Reimbursements	\$530.40 \$31.30	
TOTAL	\$1,215.40	

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

Hudson-Bergen MOS-2

Northern New Jersey



Long Island Rail Road East Side Access

New York, New York

(November 2006)

Description

The Metropolitan Transportation Authority's (MTA) Long Island Rail Road (LIRR) is constructing a new direct 3.5-mile commuter rail extension from LIRR's Main and Port Washington Branch Lines in Long Island and Queens, to Grand Central Terminal (GCT) on Manhattan's East Side. The project includes the construction new tunnels beneath Sunnyside Yard connecting to the currently unused lower level of the 63rd Street Tunnel beneath the East River. In Manhattan, the project will continue west beneath 63rd Street and toward Park Avenue under the Lexington Avenue subway, turning south beneath the existing MTA-Metro North Railroad tracks under Park Avenue to a new LIRR passenger concourse in the lower level of GCT. At GCT, the project will provide new tracks, platforms, entrances, waiting areas, ticket windows, and other services.

The current highway system and East River crossings (bridges and tunnels) to Manhattan from Nassau/Suffolk (and parts of eastern Queens) are at capacity and subject to severe congestion and long delays. Expansion of the highway network is not feasible due to lack of available rights-of-way, high costs, and potentially adverse environmental impacts in a "severe" non-attainment area for ozone. The LIRR operates at capacity in this area with peak service of 37 trains per hour into its only Manhattan terminal at Penn Station. Nearly half of LIRR's 106,000 existing daily riders have destinations on Manhattan's East Side, and currently spend approximately 20 minutes "doubling back" from Penn Station on the island's West Side. Without the project, future LIRR trains to Penn Station will be severely congested, and are projected to operate at 27 percent over their passenger-carrying capacity. This level of crowding and discomfort would discourage or prevent new riders from using the LIRR to reach Manhattan. By redirecting trains to GCT, this congestion would be relieved and added capacity for Amtrak and New Jersey Transit service would be created at Penn Station.

The total project cost under the Full Funding Grant Agreement (FFGA) is \$7,386.00 million. The Section 5309 New Starts funding share is \$2,632.10 million.

Status

MTA completed a major investment study for the project corridor in April 1998. FTA approved MTA's request to advance the project into preliminary engineering in September 1998. A Draft Environmental Impact Statement (EIS) was completed in May 2000; a Final EIS was completed in March 2001; and an environmental Record of Decision was issued by FTA in May 2001. Under a Letter of No Prejudice (LONP) authority MTA began construction in late 2001. The LONP authority approved was \$1,080.04 million, which was liquidated upon FFGA execution. FTA approved the project into final design in February 2002. FTA issued a supplemental environmental Finding of No Significant Impact in July 2006, due to the redesign of a vent facility at 50th Street. MTA and FTA entered into an FFGA in December 2006, with revenue operations scheduled for December 2013.

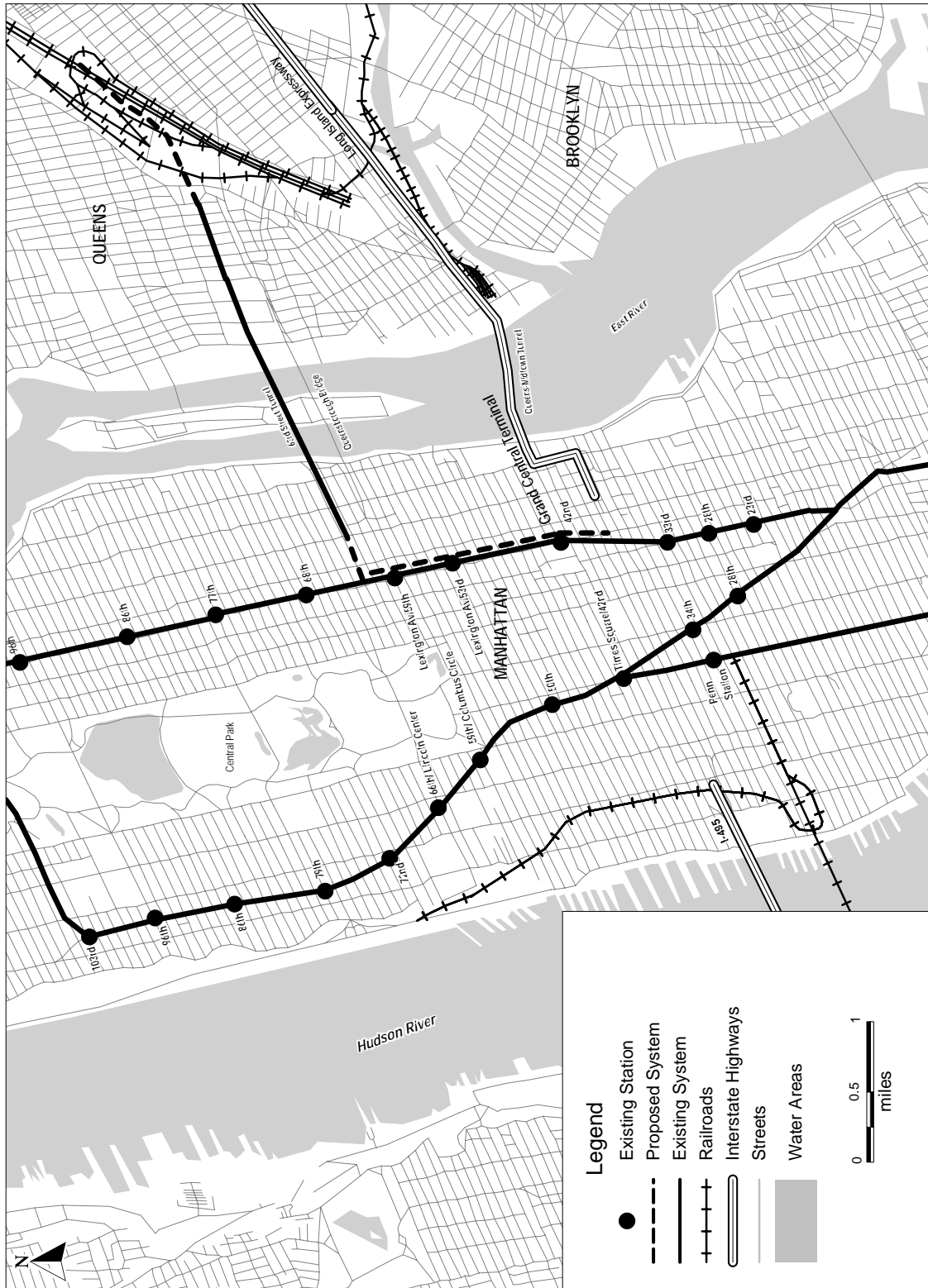
SAFETEA-LU Section 3043(b)(20) authorized the LIRR East Side Access project for final design and construction. Through FY 2006, Congress has appropriated \$587.77 million in Section 5309 New Starts funds for the project.

Reported in Year of Expenditure Dollars		
<u>Source of Funds</u>	<u>Total Funding (million)</u>	<u>Appropriations to Date</u>
Federal: Section 5309 New Starts FFGA Commitment Flexible Funds (CMAQ) Section 5309 Fixed Guideway Modernization Funds Section 5307 Urbanized Area Formula Funds	\$2,632.11 \$11.20 \$22.98 \$16.26	\$587.77 million appropriated through FY 2006
State: State Transportation Bond Act of 2005	\$450.00	
Local: MTA Dedicated Sources (bonds, surplus toll revenues, etc.) MTA Operating Budget	\$3,217.35 \$1,036.10	
TOTAL	\$7,386.00	

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

Long Island Rail Road East Side Access

New York, New York



North Shore LRT Connector

Pittsburgh, Pennsylvania

(November 2006)

Description

Port Authority of Allegheny County (Port Authority) is constructing a 1.2-mile double tracked light rail transit (LRT) extension to its existing 25-mile system connecting the Golden Triangle area of downtown Pittsburgh across the Allegheny River to the rapidly developing North Shore area. The project includes two bored tunnels below the Allegheny River. Three stations will be constructed as a part of the project. A new Gateway Station will be constructed adjacent to the current Gateway Station to facilitate the tie-in to the existing system. Two new stations will be constructed on the North Shore. The North Side Station will be located underground in the vicinity of PNC Park, with the aerial Allegheny Station located above Allegheny Avenue. Port Authority expects the North Shore LRT Connector to serve 14,300 average weekday boardings by 2025.

The total project cost under the FFGA for the North Shore LRT Connector is \$435.00 million. The Section 5309 New Starts funding share is \$235.70 million.

Status

In 1997, the city of Pittsburgh and the Southwestern Pennsylvania Commission (local metropolitan planning organization) conducted a major investment study to evaluate transportation linkages within the North Shore central business district. The Draft Environmental Impact Statement was completed in 2000. FTA approved the North Shore LRT Connector project for preliminary engineering in January 2001. The project was approved for entry into final design in April 2003. In 2005, the project scope was changed to remove the Convention Center line and four vehicles from the proposed FFGA budget. Port Authority completed the supplemental NEPA process and received an amended Record of Decision in June 2006. FTA and Port Authority entered into an FFGA in September 2006, with revenue operations scheduled for June 2011.

SAFETEA-LU Section 3043(a)(20) authorized the North Shore LRT Connector for final design and construction. Through FY 2006, Congress has appropriated \$148.89 million in Section 5309 New Starts funds for the project.

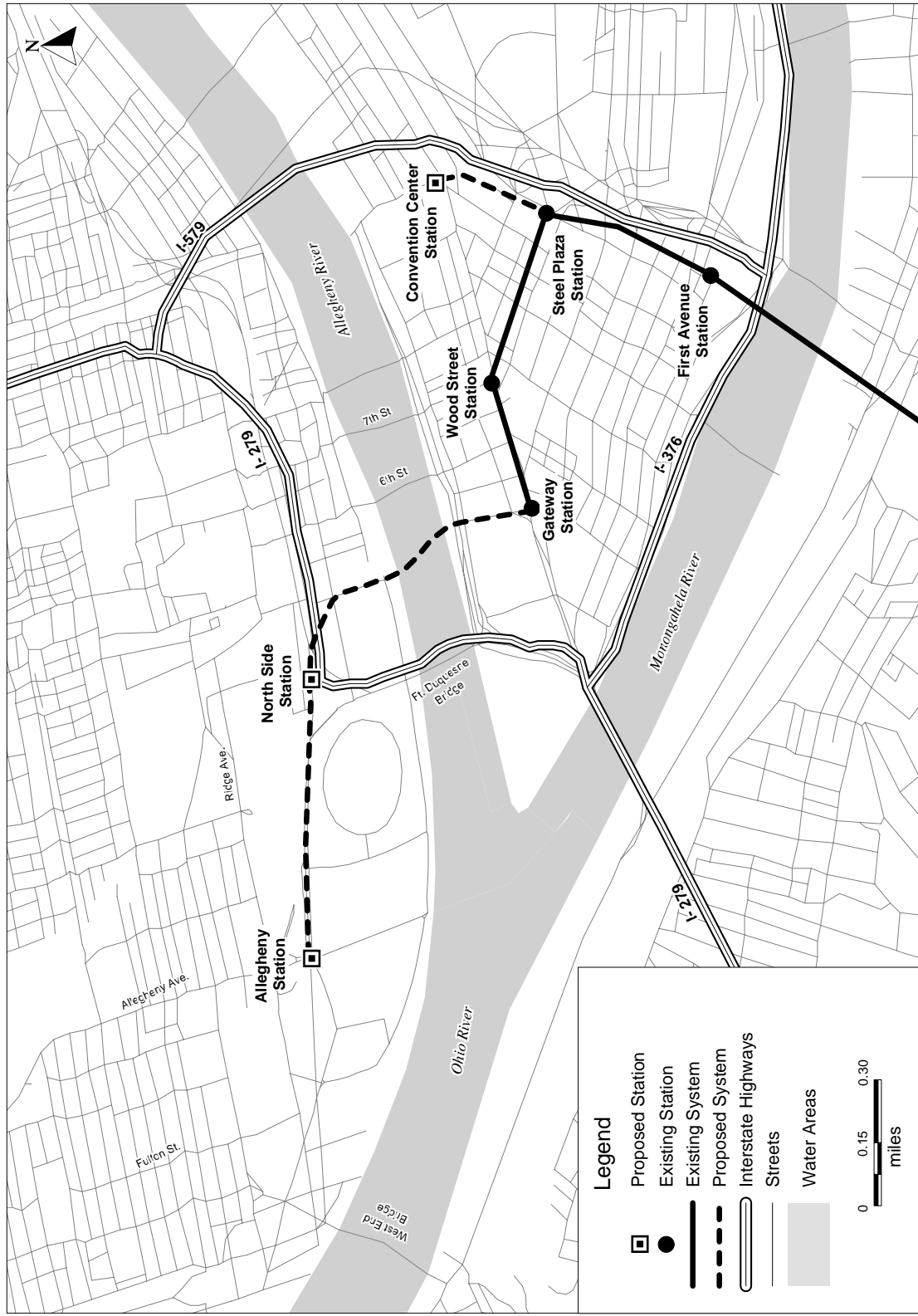
Reported in Year of Expenditure Dollars		
<u>Source of Funds</u>	<u>Total Funding (million)</u>	<u>Appropriations to Date</u>
Federal: Section 5309 New Starts FFGA Commitment	\$235.70	\$148.89 million appropriated through FY 2006 ¹
Section 5309 Fixed Guideway Modernization	\$25.50	
Flexible Funds (STP/CMAQ)	\$86.80	
State: Commonwealth of Pennsylvania – State Bonds	\$72.50	
Local: Allegheny County – Capital Improvement Bonds	\$14.50	
TOTAL	\$435.00	

NOTE: Sum of figures may differ from total as listed due to rounding.

¹ The appropriations to date reported above include \$1.71 million in prior year Section 5309 New Starts funds that are not included in the FFGA commitment.

North Shore LRT Connector

Pittsburgh, Pennsylvania



Northwest/Southeast LRT MOS

Dallas, Texas

(November 2006)

Description

Dallas Area Rapid Transit (DART) is constructing a 21-mile, two segment extension of its light rail transit (LRT) system. The Southeast (SE) segment extends 10.1 miles from the Dallas central business district (CBD) to Buckner Boulevard. The Northwest (NW) segment extends 10.9 miles from the existing Victory Station to the City of Farmers Branch. A locally funded extension of the NW line to Frankford Road in Carrollton is also being advanced by DART. The NW and SE LRT alignments would be connected through the existing four-station CBD Transitway Mall. Each segment would operate in an exclusive right-of-way, with no mixed traffic operations. A total of 16 stations would be constructed, approximately 2,700 parking spaces, 18 Super light rail vehicles (LRV), approximately 38 “C” car retrofits, and a rail operating facility. The project is expected to serve 45,900 average weekday boardings in the year of 2025.

The total project cost under the Full Funding Grant Agreement (FFGA) for the NW/SE LRT is \$1,406.22 million. The Section 5309 New Starts funding share is \$700.00 million.

Status

DART completed major investment studies on the SE Corridor and NW Corridor in January 2000 and February 2000. FTA approved the combined NW/SE LRT minimum operable segment (MOS) into preliminary engineering in July 2001. DART completed separate Final Environmental Impact Statements for each project in October 2003 (including the locally funded NW segment extension). FTA issued Records of Decision completing the environmental review process for both projects in February 2004. FTA approved the NW/SE LRT MOS project into final design in June 2005. FTA and DART entered into an FFGA in July 2006, with a revenue operation date of June 2011.

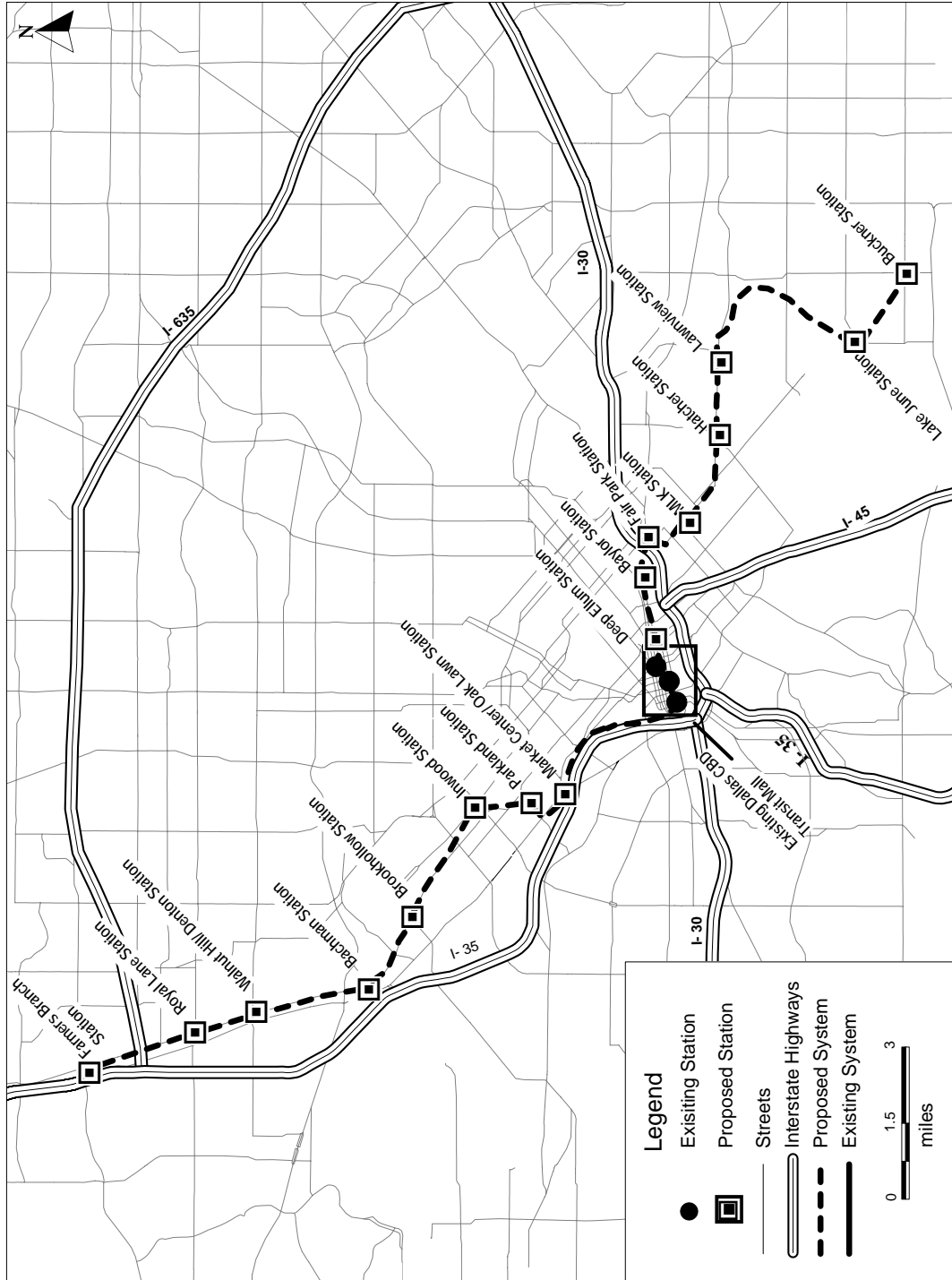
SAFETEA-LU Section 3043(b)(5) authorized the Northwest-Southeast LRT for final design and construction. Through FY 2006, Congress has appropriated \$21.19 million in Section 5309 funds for this project.

Reported in Year of Expenditure Dollars		
<u>Source of Funds</u>	<u>Total Funding (million)</u>	<u>Appropriations to Date</u>
Federal: Section 5309 New Starts FFGA Commitment	\$700.00	\$21.19 million through FY 2006
Local: Sales Tax Revenue	\$ 706.22	
TOTAL	\$1,406.22	

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

Northwest / Southeast Light Rail MOS

Dallas, Texas



Weber County to Salt Lake City Commuter Rail

Salt Lake City, Utah

(November 2006)

Description

The Utah Transit Authority (UTA) is constructing a 44-mile Weber County to Salt Lake City Commuter Rail project. The project includes eight stations to serve the areas of Pleasant View, Ogden, Clearfield, Layton, Bountiful and downtown Salt Lake City. The commuter rail line would operate within an existing railroad corridor parallel to Interstate 15 (I-15), utilizing right-of-way (ROW) previously acquired by UTA under a rail corridor preservation plan with certain facilities already in place. Approximately 6,300 park-and-ride spaces would be built at corridor stations to expand the transit catchment area beyond the immediate corridor. Bus and light rail transit connections are intended to provide further service to other travel markets, including Weber State University, Hill Air Force Base, Freeport Center, the University of Utah, the Medical Center, and to the areas of Sandy and Draper in the southern part of Salt Lake City. The commuter rail project would operate at 20-minute frequencies during peak periods. The Weber County to Salt Lake City Commuter Rail project is the northern segment of a planned commuter rail system extending south of Salt Lake City to Provo. The project is expected to serve 11,800 average weekday boardings in the year of 2025.

The total project cost under the Full Funding Grant Agreement (FFGA) is \$611.68 million. The Section 5309 New Starts funding share is \$489.35 million.

Status

The commuter rail project is a part of a local multimodal transportation “shared solution” strategy proposed in several studies developed since the 1980s to meet projected travel demand in the I-15 corridor. Completed in January 2002, the *Inter-Regional Corridor Alternatives Analysis* considered a number of transit alternatives for the project corridor, and identified commuter rail as the locally preferred alternative. The project was approved for entry into preliminary engineering (PE) in December 2003. A Draft Environmental Impact Statement (EIS) was completed in April 2004. A Final EIS was issued in February 2005 and a NEPA Record of Decision was issued in April 2005. The project was approved into final design in June 2005. On June 16, 2006, FTA and UTA entered into an FFGA, with revenue operations scheduled for 2008.

SAFETEA-LU Section 3043(b)(30) authorized the Weber County to Salt Lake City Commuter Rail for final design and construction. Through FY 2006, Congress has appropriated \$31.73 million for the project.

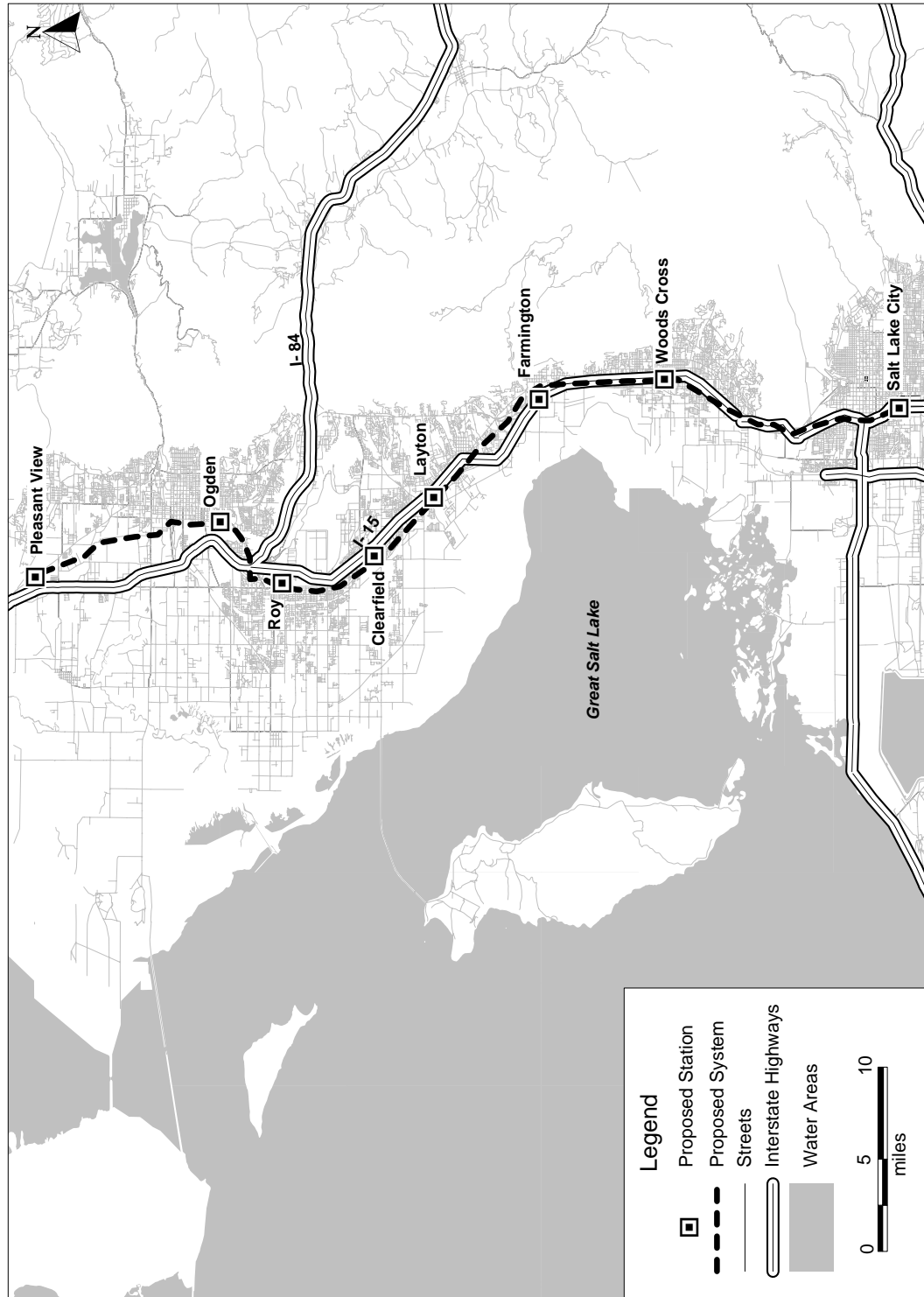
Reported in Year of Expenditure Dollars		
<u>Source of Funds</u>	<u>Total Funding (million)</u>	<u>Appropriations to Date</u>
Federal: Section 5309 New Starts FFGA Commitment	\$489.35	\$31.73 appropriated through FY 2006
Local: Sale Tax Revenues and Right-of-Way	\$82.33 \$40.00	
TOTAL	\$611.68	

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

Division H of the Consolidated Appropriations Act, 2005, permits UTA to count completed and future highway and transit expenditures to meet the local financial share requirements for the Weber County to Salt Lake City Commuter Rail project. UTA's latest financial plan does not fully utilize the provisions contained in the Act, proposing instead an 80 percent share of New Starts funding matched by the value of project ROW and local revenues.

Weber County to Salt Lake City Commuter Rail

Salt Lake City, Utah



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 154th 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 154th 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 200th 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 45th Street at the University of Washington to South 200th 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 45th 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 154th 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.

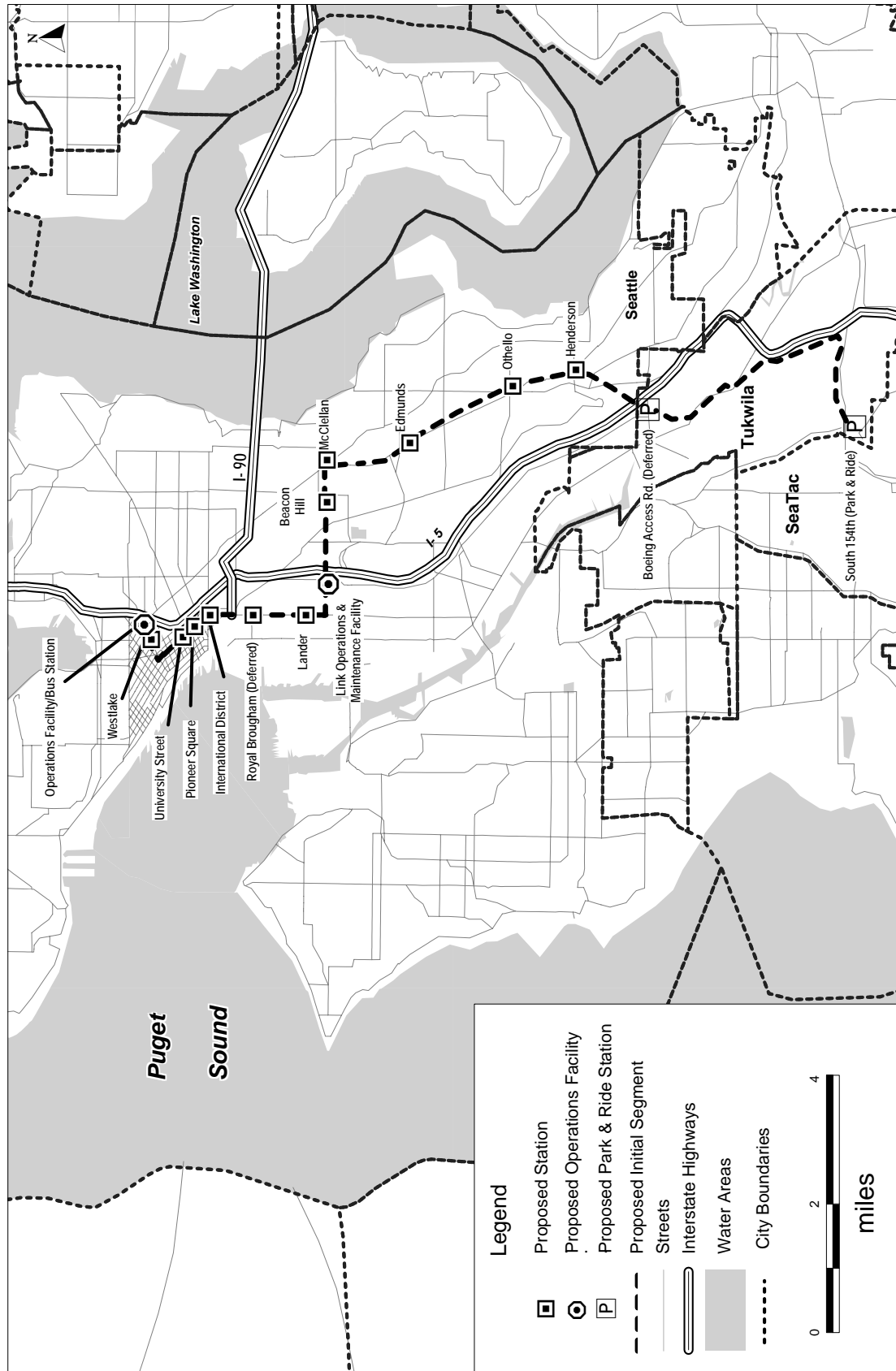
SAFETEA-LU Section 3043(a)(30) authorized the Central Link Initial Segment for final design and construction. Through FY 2006, Congress has appropriated \$322.55 million in Section 5309 New Starts funds for the project.

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

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

Central Link Initial Segment

Seattle, Washington



Pending Full Funding Grant Agreements

West Corridor LRT

Denver, Colorado

(November 2006)

The Regional Transportation District (RTD) is proposing the West Corridor project, a 12-station, 12.1-mile light rail transit (LRT) line extending from RTD's existing LRT system near Colfax Avenue and Interstate 25 (I-25), and following the former Associated Rail right-of-way and US 6, to US 6/US 40 in Jefferson County, Colorado. The proposed project connects with the Central Platte Valley light rail extension and the Central Corridor LRT line at the existing Auraria station adjacent to downtown Denver where it interlines to Denver Union Station (DUS). The project scope includes 32 vehicles. Service on the proposed project would operate at five-minute peak-period headways between DUS and the Federal Center station in Lakewood and 15-minute peak-period headways between Federal Center and Jeffco Government Center during weekday peak periods.

The West Corridor project parallels West 6th Avenue, which carries the second highest traffic volume in the region. Regional projections indicate that local auto travel times will increase by almost 30 percent by 2030 in an already congested corridor. Neither the Colorado Department of Transportation (CDOT) nor the Denver Regional Council of Governments (DRCOG) has included widening of this roadway in their long range transportation plans. Intended as a high-capacity transit alternative to West 6th Avenue, the West Corridor LRT project is designed to improve transit travel times in the corridor and to increase transit connectivity to regional employment centers currently underserved by public transportation.

Summary Description

Proposed Project:	Light Rail Transit 12.1 Miles 12 Stations
Total Capital Cost (\$YOE):	\$574.18 Million (includes \$ 51.87 million in finance charges)
Section 5309 New Starts Share (\$YOE):	\$290.55 Million (50.6%)
Annual Forecast Year Operating Cost:	\$36.1 Million
Ridership Forecast (2030):	28,300 Average Weekday Boardings 5,900 Daily New Riders
Opening Year Ridership Forecast (2013):	19,500 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium-High
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

Assuming continued effective management of the cost estimate and maintenance of the project's cost effectiveness rating, FTA expects to execute a Full Funding Grant Agreement (FFGA) for the Denver West Corridor LRT project in late 2007 or early 2008.

Project Development History and Current Status

The West Corridor has been the focus of study for over 30 years. Recognizing its strategic importance to the region, RTD purchased the rail right-of-way in 1988. RTD, in cooperation with DRCOG and CDOT, completed a major investment study on the corridor in July 1997, which resulted in the selection of a locally preferred alternative that included both LRT and roadway transportation management improvements. The selection of LRT was partially based on the inability to widen West 6th Avenue to respond to ongoing population and employment growth within the corridor. FTA approved RTD's request to enter preliminary engineering on the West Corridor LRT project in March 2001. A Final Environmental Impact Statement was completed in October 2003, and a NEPA Record of Decision was issued in April 2004. In November 2004, Denver-area voters passed RTD's FasTracks funding plan, which increases RTD's sales tax revenues and is anticipated to support the construction of over 100 miles of new rail transit (including the Denver West Corridor LRT project) and a 24 percent increase in local bus service. FTA approved the project into final design in August 2005, and recommended the project for an FFGA in the FY 2007 President's Budget.

Significant Changes Since FY 2007 Evaluation (November 2005)

The project cost estimate was reduced by \$19 million dollars since last year. Faced with escalating commodity costs, RTD initiated a series of cost containment/reduction strategies in 2006, including an acceleration of project construction; the leasing of park-and-ride structures at three locations; some track realignment; and the elimination of a tunnel between Oak Street and Federal Center. RTD also submitted revised estimates of the project's transportation benefits based upon changes to its proposed operating plan; updated population and employment forecasts; and a new regional travel model set.

Project Justification Rating:

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

Cost Effectiveness Rating: Medium

The *Medium* cost effectiveness rating reflects the level of travel-time benefits (6,100 hours each weekday, plus special events) relative to the project's annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$21.97*
Incremental Cost per Incremental Trip	\$22.14

* Indicates that measure is a component of Project Justification rating.

Over one-half of travel-time benefits are attributable to trips destined for downtown Denver. Lakewood, and in particular the Federal Center complex, also attracts a significant market that would benefit from the faster and more reliable travel speeds generated by the proposed West Corridor LRT. Lower-income households are forecast to receive over 10 percent of project travel-time benefits; passengers traveling to events at Denver sports and entertainment venues are expected to account for approximately five percent of transportation benefits.

FTA considers the project schedule to be reasonable. Attainment of the current cost estimate is dependent on the successful implementation of RTD's proposed cost containment efforts, realization of optimistic assumptions regarding future price escalation, and the outcome of further environmental review of proposed scope changes. RTD has demonstrated the capacity to plan, design and complete technically complex major capital projects.

Transit-Supportive Land Use Rating: Medium

The *Medium* land use rating is based upon the *Medium-Low* rating assigned to existing land use, the *Medium-High* rating for transit-supportive plans and policies in the project corridor, and the *Medium* rating for performance and impacts of land use policies.

Existing Land Use: Medium-Low

- The West Corridor LRT line would follow the route of an old interurban transit line through the western suburbs of Denver. Station area residential densities are low to moderate, averaging roughly 5,000 people per square mile. Employment located within ½ mile of proposed station areas is approximately 37,100. Employment in the Denver CBD, to which the project provides a direct connection, is about 130,000.
- Neighborhoods in the eastern half of the corridor are characterized by small-lot single-family and duplex residences, and some pockets of multi-family development, on a grid street system. The western part of the corridor includes an industrial and office park, community college, and county government center. Pedestrian access in these areas is relatively poor.
- There are approximately 0.35 parking spaces per employee in the CBD, suggesting a moderately restricted parking supply. Average parking costs are a low to moderate \$7 per day.

Transit-Supportive Plans and Policies: Medium-High

- A regional vision plan adopted in 1997, *Metro Vision 2020*, calls for adoption of an urban growth boundary and concentration of development in transit-oriented activity centers. A compact to implement *Metro Vision* policies has been endorsed by jurisdictions covering 87 percent of the region's population. Significant actions to protect open space have been undertaken in recent years, as have some major infill and redevelopment projects. In 2005, the metropolitan planning organization (MPO) initiated a regional work program to promote transit-oriented development.
- Comprehensive plans for Denver and Lakewood (covering most station areas) contain policies favoring transit-supportive development, including higher densities, mixed uses, and pedestrian-oriented design. Denver and Lakewood are actively taking steps to implement these policies in seven station areas, through more detailed corridor and station area planning, zoning changes, and identifying needed capital improvements.
- Existing station area zoning supports moderate residential densities (typically seven to 14 units per acre) and moderately high commercial densities (typically 1.5 to 2.0 floor area ratio) but generally does not permit mixed-use development. Denver has recently created "transit-mixed use" and "main street" zoning districts that provide for higher densities, pedestrian-friendly design, and reduced parking requirements, and is considering these for application in some West Corridor station areas.
- RTD adopted a Transit-Oriented Development (TOD) Policy and Strategic Plan in 2006 to define the roles and responsibilities of various stakeholders, and held a corridor-wide TOD workshop with municipalities to initiate station area planning efforts.

Performance and Impacts of Policies: Medium

- No transit-supportive developments have been constructed yet in any West Corridor station areas, although one major redevelopment project is in the planning stages. Existing light rail lines in the Denver area are attracting new development. A number of projects currently underway and proposed in both Denver and Lakewood exhibit strong pedestrian-oriented design features.
- Forecasts continue to indicate a strong economic climate in the Denver region as well as growth in the West Corridor. Market studies show that residential development has the greatest potential in most station areas, while commercial opportunities are more limited. In many station areas, fragmented land ownership poses a barrier to large-scale redevelopment.

Other Project Justification Criteria

Mobility Improvements Rating: Medium		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	37,100 36,800 3,200 (7 %)	
	2,200* 300*	
	<u>New Start vs. Baseline</u>	
	2.01*	
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide (CO) 8-Hour Ozone (O ₃) 1-Hour Ozone (O ₃) Particulate Matter (PM ₁₀)	<u>New Start vs. Baseline</u>	
	203	
	9	
	11	
	1	
	10,806	
	<u>EPA Designation</u>	
	Maintenance Area*	
	Subpart 1*	
	Subpart 1*	
Maintenance Area*		
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.550*	\$0.551*

* 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 the *Medium* rating for the New Starts share of project costs and *Medium-High* ratings for both the capital and operating finance plans.

Section 5309 New Starts Share of Total Project Costs: 50%

Rating: Medium

RTD is requesting an approximately 51 percent New Starts share of total project costs, which results in a *Medium* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funding (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$290.55	50.6%
Flexible Funds (CMAQ)	\$9.50	1.7%
Local:		
Bond Proceeds	\$172.09	30.0%
Sales & Use Tax	\$63.28	11.0%
COPS	\$26.00	4.5%
Government Contributions	\$12.76	2.2%
Total:	\$574.18	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 the ratings assigned to each of the subfactors listed below. The project received a *High* rating for capital funding capacity; *Medium-High* ratings for completeness of capital plan and commitment of capital funds, and *Medium* ratings for the capital condition and capital cost estimates and planning assumptions subfactors.

Agency Capital Condition: Medium

- The average age of RTD's bus fleet is six years, which is younger than the industry average.
- RTD's good bond ratings, which were issued in 2006, are as follows: Moody's Investors Service A1; Standard & Poor's Corporation AA-; and Fitch A+.

Completeness of Capital Plan: Medium-High

- The capital plan was complete and included a detailed 25-year cash flow statement, identification of key assumptions, more than five years of historical data, and a sensitivity analysis.

Commitment of Capital Funds: Medium-High

- Approximately 96 percent of non-New Starts funding is committed or budgeted. The primary sources of local funds for the project are revenues derived from the local sales and use tax, and bond proceeds backed by a one-cent sales and use tax, as provided for by FasTracks.

Capital Funding Capacity: High

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit that would allow RTD to cover cost increases or funding shortfalls equal to 100 percent of project costs.

Capital Cost Estimate and Planning Assumptions: Medium

- Assumptions included in the capital plan are generally consistent with RTD's historic experience.
- Capital costs were developed using unit costs consistent with historical and current costs in the Denver area.

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. The commitment of operating funds and operating funding capacity were rated *High*; operating condition was rated *Medium-High*; and the completeness and operating cost estimates and planning assumptions subfactors were rated *Medium*.

Agency Operating Financial Condition: Medium-High

- RTD is in excellent financial condition, demonstrating no historical cash flow shortages and no recent service cutbacks.
- RTD's current ratio of assets to liabilities as reported in its most recent audited financial statement is 1.87.

Completeness of Operating Plan: Medium

- The operating plan was complete and included a 25-year cash flow statement, historical data, and key assumptions. The plan is missing some explanatory detail and a sensitivity analysis.

Commitment of Operating Funds: High

- All operating funding is committed, including fare revenues and increased sales and use tax revenues.

Operating Funding Capacity: High

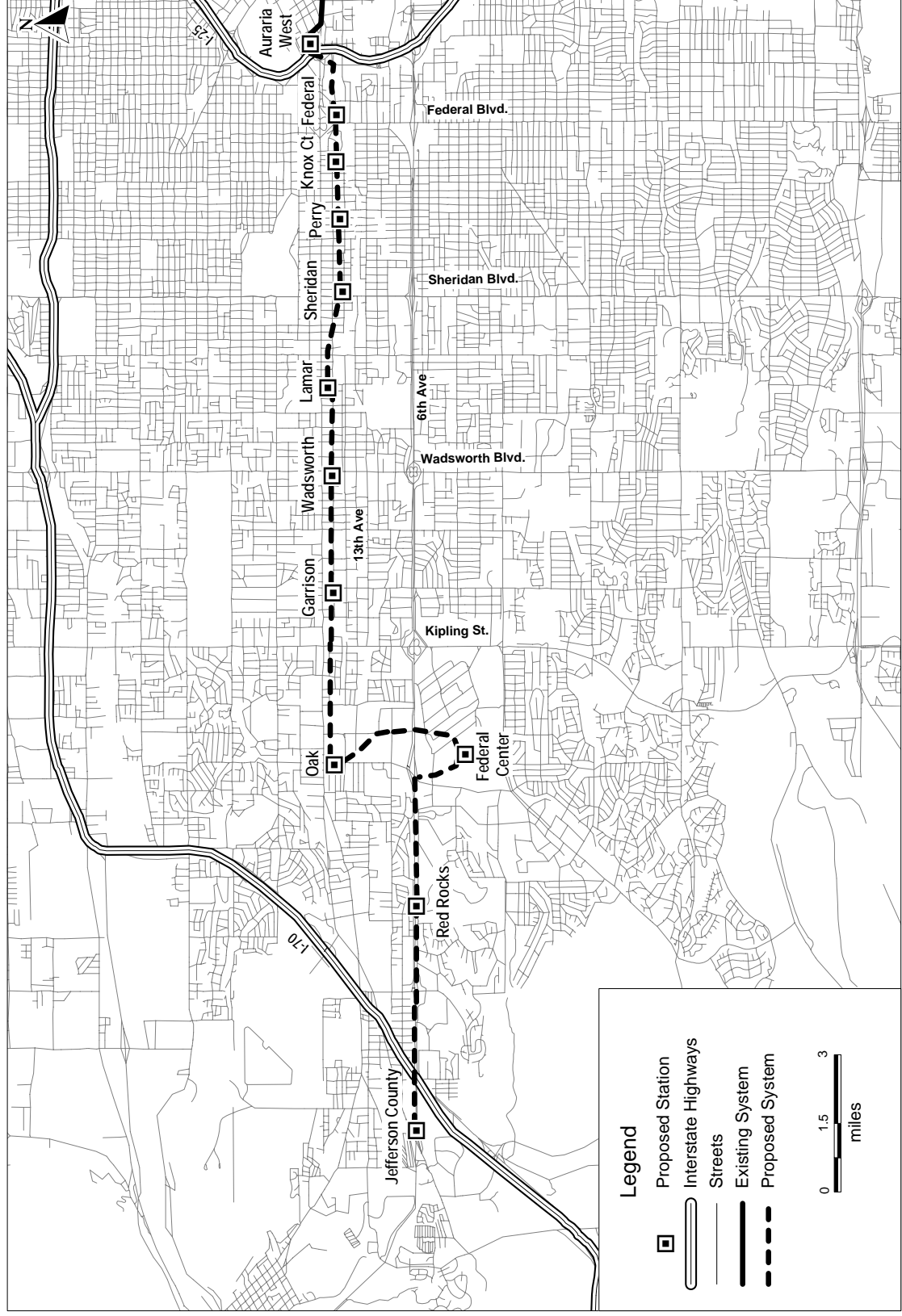
- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit exceeding 50 percent of annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium

- Operating cost estimates and revenue forecasts are consistent with historical experience.

West Corridor LRT

Denver, Colorado



South Corridor I-205 / Portland Mall LRT

Portland, Oregon

(November 2006)

The Tri-County Metropolitan Transportation District (TriMet) and Portland Metro, the region's metropolitan planning organization, are proposing to construct 8.3 miles of new light rail transit (LRT) guideway consisting of two segments connecting to the existing "MAX" LRT system along Interstate 84 (I-84). The project scope also includes the procurement of 21 new vehicles. Long-range regional forecasts point toward increasing traffic congestion along the I-205 corridor for trips both originating and terminating in the southeastern metropolitan Portland area. The intent of the South Corridor I-205/Portland Mall LRT project is to address increased travel demand in this rapidly growing corridor; to provide additional fixed guideway access between regional activity centers; and to help the Portland region achieve its land use, development, and growth management goals and objectives.

The first segment of the proposed project is a 6.5-mile double-track line that runs north/south and parallel to I-205, connecting the Clackamas Regional Center in southeast Portland with the Gateway Transit Center east of downtown on TriMet's existing LRT system. The I-205 alignment will also include eight new stations with approximately 2,100 park-and-ride spaces which are intended to draw commuters from throughout the southeastern metropolitan Portland area to downtown and other major employment centers located along the regional MAX system. The second segment of the project is a 1.8-mile LRT spur which would begin at the existing Rose Quarter Transit Center and terminate at Portland State University in south downtown Portland. This new LRT alignment, which would run along the existing downtown bus mall on 5th and 6th Avenues, is needed because TriMet's existing downtown LRT line (to the region's west side) does not have the capacity to carry the additional eight trains per peak hour into the central business district (CBD) that will result from the I-205 extension.

Summary Description

Proposed Project:	Light Rail Transit
	8.3 Miles
	15 Stations
Total Capital Cost (\$YOE):	\$557.40 Million (includes \$25.37 million in finance charges)
Section 5309 New Starts Share (\$YOE):	\$334.43 Million (60.0%)
Annual Forecast Year Operating Cost:	\$26.70 Million
Ridership Forecast (2025):	46,500 Average Weekday Boardings
	9,400 Daily New Riders
Opening Year Ridership Forecast (2009):	25,300 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium-High
FY 2008 Overall Project Rating:	Medium

While the final cost estimate and New Starts amount may increase slightly, FTA expects to execute a Full Funding Grant Agreement (FFGA) for the South Corridor I-205/Portland Mall LRT project in Spring 2007.

Project Development History and Current Status

The *South/North Major Investment Study* covering the travel shed connecting the cities of Oregon City and Milwaukie, the Clackamas Regional Center area, downtown, north, and southeast Portland, and the city of Vancouver, Washington, was initiated in 1993 and completed in 1995. In 1998, Metro issued a Draft Environmental Impact Statement (EIS) and adopted LRT as the locally preferred alternative (LPA). The failure of a November 1998 ballot measure that would have provided local funding for the LPA triggered the need to re-evaluate the potential improvements, including a separate analysis of the I-205 corridor within the southern portion of the study area. A Supplemental Draft EIS that focused on transportation alternatives in the I-205 corridor was completed in December 2002. In October 2003, TriMet completed an Amendment to the Supplemental Draft EIS that examined the potential impacts of a downtown LRT spur, an improvement that had not been included in the previous environmental work. A revised LPA that included the downtown spur alignment was approved by FTA into preliminary engineering in March 2004. Metro completed the Final EIS in December 2004 and FTA issued a Record of Decision in February 2005. FTA approved final design for the project in October 2005, and proposed it for an FFGA in the FY 2007 President's Budget.

Significant Changes Since FY 2007 Evaluation (November 2005)

In August 2006, TriMet informed FTA that the project cost estimate will increase because of unforeseen escalation in the costs of commodities. FTA is working with TriMet to determine the final FFGA cost and the amount of any increase in commodity costs that FTA will participate in. The FFGA project cost and New Starts share is expected to be finalized in January 2007.

Project Justification Rating: Medium-High

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

Cost Effectiveness Rating: Medium

The *Medium* cost effectiveness rating reflects the level of travel-time benefits (7,700 hours each weekday) relative to the project's annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$15.69*
Incremental Cost per Incremental Trip	10.43

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

The implementation of fixed guideway transit in a congested regional transportation corridor is expected to improve travel times between the southeastern metropolitan Portland area and downtown Portland. Approximately 80 percent of total project boardings and 60 percent of travel-time benefits will result from trips with at least one end in the I-205 corridor. Downtown Portland is the primary destination for trips originating in the corridor. The second downtown LRT alignment will penetrate areas in the southern part of the CBD not presently served by MAX and will provide over 30 percent of the project's travel-time benefits. Less than ten percent of travel-time benefits are attributable to increased service frequencies along the existing I-84 MAX alignment resulting from the South Corridor I-205/Portland Mall LRT project.

The construction cost estimate is comparable to those of other LRT at-grade projects at the same stage of development. TriMet has a good track record of constructing LRT projects on schedule and within budget.

Transit-Supportive Land Use Rating: Medium-High

The *Medium-High* rating reflects the *Medium-High* ratings assigned to transit-supportive plans and policies and their performance and impacts, and the *Medium* rating for existing land use in the project corridor.

Existing Land Use: Medium

- The I-205 South segment of the corridor currently is characterized by auto-oriented development in the form of detached, single-family homes and low-density commercial and light industrial development. Population density is low to moderate, averaging 4,200 persons per square mile.
- The proposed new downtown segment serves a high-density, mixed-use, pedestrian-friendly environment, and proposed station areas contain over 150,000 jobs.
- Portland encourages alternatives to auto trips to its downtown by limiting the supply of surface parking lots; however, ample parking for auto-oriented uses exists along the I-205 segment. Including monthly discounts, the average daily rate for parking in the central city is \$7.43.

Transit-Supportive Plans and Policies: Medium-High

- Oregon's comprehensive planning system has been in place for more than 25 years, and the Portland urban growth boundary has effectively constrained development to designated areas. Metro (the regional government) has unparalleled authority to establish and enforce land use policy. Its *Urban Growth Management Functional Plan* identifies growth centers and requires that local jurisdictions require minimum densities in these centers as well as policies that support pedestrian and transit access.
- Numerous State, regional, and local plans and policies strongly emphasize corridor and station area development. Three stations in the I-205 segment of the corridor serve designated local or regional centers, where a mix of land uses and high-density, transit-oriented development is specified in planning documents. Other stations largely include established single-family neighborhoods.
- As required by regional policies, local jurisdictions have adopted transit-supportive zoning ordinances. Minimum and maximum parking requirements in South Corridor station areas are lower than those generally found in suburban areas, and include allowances for reduced parking based on proximity to transit.
- Metro's Transit-Oriented Development Program provides technical and financial assistance to support transit-oriented development activities throughout the region. Three proposed stations on the I-205 segment and all proposed stations along the downtown segment would be located within areas targeted for pedestrian improvements in regional and local plans; tax increment finance (TIF) revenues are being used to fund pedestrian improvements in these areas.

Performance and Impacts of Policies: Medium-High

- Portland's urban growth boundary has helped protect open space from rapid, low-density development, while a variety of infill projects and new transit-oriented developments have occurred in existing LRT station areas. In one South Corridor station area, a mall owner has submitted plans to redevelop surface parking as multi-story, mixed-use development.
- The light rail expansion project is expected to help promote more mixed-use, transit-oriented development in the station areas over time and may spur redevelopment in both Clackamas Regional Center and Lents Town Center. The amount of vacant land available for new development is minimal in most station areas, though, so the project's impact on regional land use may be modest.

Other Project Justification Criteria

Mobility Improvements Rating: Medium		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2025) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	150,400 231,200 3,800 (21%) 10,000* 250* <u>New Start vs. Baseline</u> 1.97*	
Environmental Benefits Rating: Medium		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide (CO) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 195 6 6 N/A 7,898 <u>EPA Designation</u> Maintenance Area* 91,669	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.346*	\$0.340*

* 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

The local financial commitment rating of *Medium* reflects the FY 2007 New Starts evaluation and rating. The rating will be updated at the time of the FFGA based on a revised financial plan that reflects anticipated increases in the project cost and New Starts share. The current *Medium* local financial commitment rating is based on *Medium 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: 60%***Rating: Medium***

TriMet is requesting a 60 percent New Starts share of total project costs, which results in a *Medium* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$334.43	60.0%
Flexible Funds (STP-Regional)	\$54.56	9.8%
Flexible Funds (STP-Oregon DOT)	\$23.00	4.1%
FTA Section 5309 Bus Discretionary	\$2.49	0.4%
Local:		
TriMet	\$32.55	5.8%
Clackamas County	\$38.82	7.0%
City of Portland	\$46.34	8.3%
Portland Development Comm.	\$22.10	4.0%
Private land donation	\$3.12	0.6%
Total:	\$557.40	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

The capital finance plan is rated *Medium*, based upon the average of the ratings assigned to each of the subfactors listed below. The commitment of funds subfactor and the completeness subfactor each received a *Medium-High* rating; the remaining subfactors received *Medium* ratings.

Agency Capital Condition: Medium

- The average age of TriMet's bus fleet is 8.3 years, which is older than the industry average.
- TriMet's good bond ratings, which were issued in March 2005, are as follows: Moody's Investors Service Aa3 and Standard & Poor's Corporation AA+.

Completeness of Capital Plan: Medium-High

- The capital plan was complete and included a detailed 20-year cash flow statement, levels of commitment of project funds and supporting evidence, fleet management plans, financial statements, a contingency plan to cover funding shortfalls and cost increases, and more than 20 years of historical information. It also included a limited sensitivity analysis.

Commitment of Capital Funds: Medium-High

- Ninety-seven percent of non-New Starts funding is committed or budgeted. Committed funds deriving from existing sources include federal flexible funds, Clackamas County urban renewal funds, TriMet general funds from payroll taxes, City of Portland funds, and Portland Development Commission urban development funds.

Capital Funding Capacity: Medium

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit that would allow TriMet to cover cost increases or funding shortfalls equal to approximately 10 percent of project costs.

Capital Cost Estimate and Planning Assumptions: Medium

- All material assumptions affecting the capital plan are consistent with past trends.
- The capital cost estimate includes a sufficient contingency for a project in final design, and the allowance for finance charges is current and reliable.

Operating Finance Plan Rating: Medium

The operating finance plan is rated *Medium*, based upon the average of the ratings of the five subfactors listed below. The commitment of funds subfactor received a *High* rating, the completeness subfactor received a *Medium-High* rating, and the current operating condition subfactor was rated *Medium-Low*. The remaining subfactors were rated *Medium*.

Agency Operating Condition: Medium-Low

- TriMet has struggled the past four years in maintaining its service levels while payroll tax revenues stagnated.
- TriMet's current ratio of assets to liabilities as reported in its most recent audited financial statement (June 2004) is 1.04.

Completeness of Operating Plan: Medium-High

- The operating plan submission was complete and included an identification of all sources and uses of funds; evidence of commitment of operating funds for the project; detailed assumptions on which the operating plan was based; historical data on service levels, operating costs, and revenues dating to the early 1980s; and a sensitivity analysis.

Commitment of Operating Funds: High

- All operating funding is committed. The principal sources of operating and maintenance funds include TriMet payroll tax revenue, passenger fares, and FTA Section 5307 formula funds.

Operating Funding Capacity: Medium

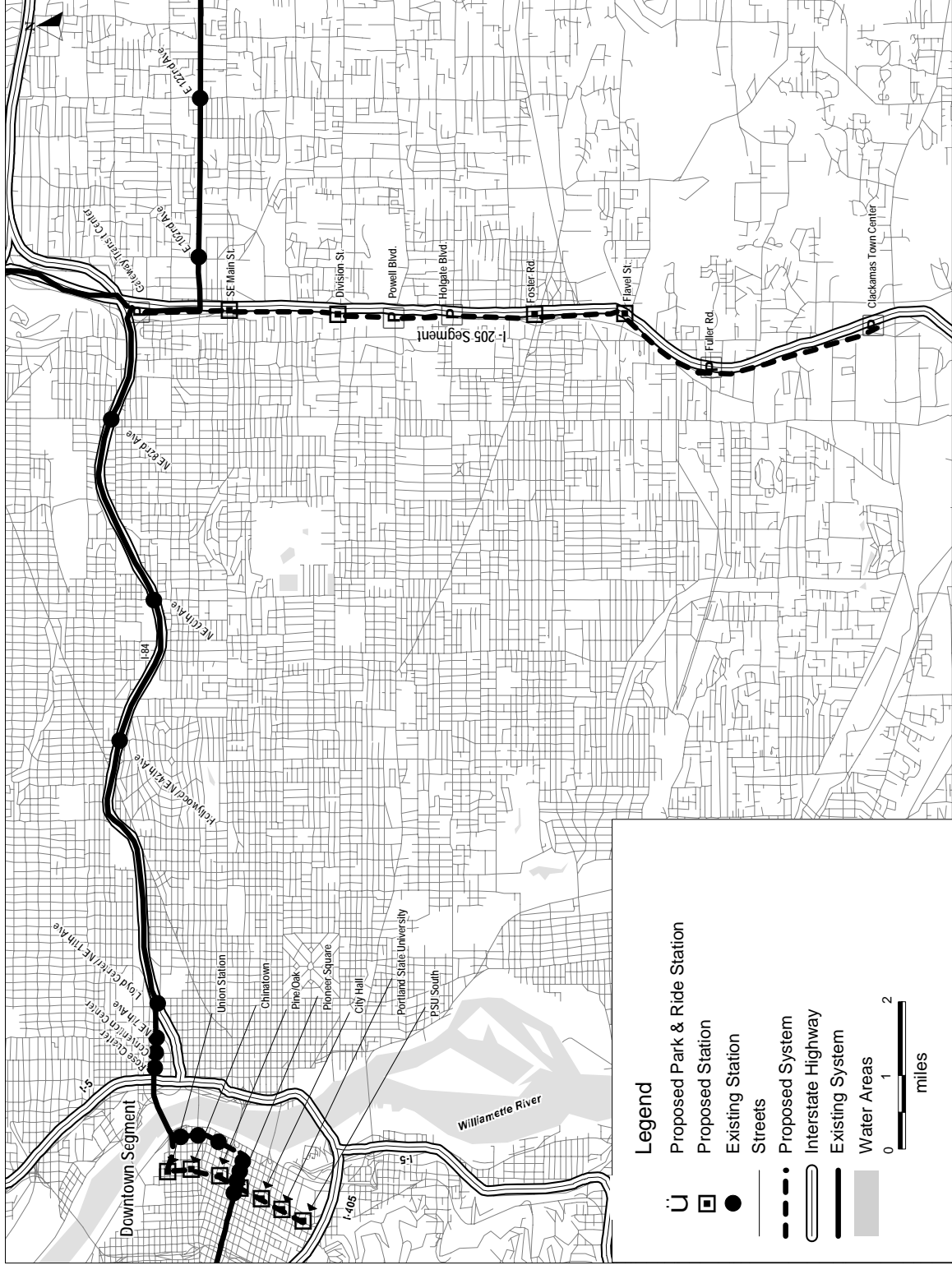
- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit exceeding 12 percent of annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium

- Operating cost growth assumptions are conservative with respect to historical experience, while operating revenue assumptions are in line with historical experience.

South / Corridor I-205 Portland Mall LRT

Portland, Oregon



Projects in Final Design

New Britain – Hartford Busway

Hartford, Connecticut

(November 2006)

The Connecticut Department of Transportation (ConnDOT) is proposing to construct the New Britain-Hartford Busway, an 11-station, 9.4-mile exclusive bus rapid transit (BRT) system operating primarily in an existing and abandoned railroad right-of-way (ROW) on a new two-way roadway between downtown New Britain and downtown Hartford's Union Station. The busway would run parallel to Interstate 84 (I-84), the primary transportation link between New Britain, West Hartford, and downtown Hartford. The project's operating plan calls for a number of bus routes to operate on the Busway, including services that enter and exit the facility to reach destinations well outside of the immediate corridor without the need for a transfer. The project scope includes the procurement of 30 new buses and construction of five small park-and-ride lots along the alignment.

I-84 is currently, and is forecast to remain, the region's most congested highway. In addition, the combined population of New Britain and Hartford account for just under 50 percent of the entire metropolitan area's zero-car households. The proposed busway project is intended to provide faster transit travel times between major activity centers throughout the corridor, improve mobility and accessibility for the corridor's relatively large transit-dependent population, and promote redevelopment opportunities in older urban centers along the project alignment.

Summary Description	
Proposed Project:	Bus Rapid Transit 9.4 Miles 11 Stations
Total Capital Cost (\$YOE):	\$458.78 Million (includes \$11.16 million in finance charges)
Section 5309 New Starts Share (\$YOE):	\$275.27 Million (60.0%)
Annual Forecast Year Operating Cost:	\$10.0 Million
Ridership Forecast (2030):	15,200 Average Weekday Boardings 4,500 Daily New Riders
Opening Year Ridership Forecast (2012):	13,700 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

ConnDOT has demonstrated significant progress over the last year. ConnDOT must resolve outstanding design and ROW issues, gain full commitments of non-New Starts funding, and maintain sufficient New Starts ratings before FTA considers a Full Funding Grant Agreement (FFGA) for the New Britain-Hartford Busway project.

Project Development History and Current Status

The 1994 regional transportation plan prepared by the Capitol Region Council of Governments identified the I-84 corridor west of Hartford as one of the metropolitan area's high priority corridors in need of improvement. A major investment study in the corridor was completed in 1999; it resulted in the selection of a BRT system between New Britain and Hartford as the locally preferred alternative. FTA approved the New Britain - Hartford Busway's entrance into preliminary engineering (PE) in January 2000. The project received a NEPA Record of Decision (ROD) in March 2002. In order to address changes in project scope since issuance of the ROD, ConnDOT completed supplementary environmental work, which FTA approved in June 2006. FTA approved final design for the project in October 2006.

Significant Changes Since FY 2007 Evaluation (November 2005)

ConnDOT prepared and submitted an updated cost estimate (reflecting an increase of \$120 million) and financial plan reflecting anticipated sources and uses of capital and operating funds for transit.

ConnDOT's updated capital cost estimate reflects revised finance costs, construction unit price and quantity increases, a higher contingency percentage, new work elements, and a revised annual escalation factor. The updated cost also reflects a revised project implementation schedule which delays revenue operations from December 2011 to January 2012. Minor updates were made to the project travel forecasts to exclude tangential trips (riders who use a busway station, but do not actually travel over a segment of the busway).

Project Justification Rating: Medium

The project is rated *Medium* based on the *Medium* rating for cost effectiveness and the *Medium* rating for transit-supportive land use.

Cost Effectiveness Rating: Medium

The *Medium* cost effectiveness rating reflects the level of travel time-benefits (3,800 weekday hours) relative to the project's annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$22.07*
Incremental Cost per Incremental Trip	\$19.63

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

The New Britain-Hartford Busway project is anticipated to result in travel-time benefits not only to residents living within the corridor, but to suburban commuters who take advantage of the flexibility of BRT service. Specifically, ConnDOT's operating plan for the Busway allows several routes to exit the facility and circulate through neighborhoods to reach destinations far removed from the alignment. This reduces the number of transfers required, allows more riders access to more trip origins and destinations with a single-seat ride, and contributes to higher ridership levels. Approximately 40 percent of travel-time benefits accrue to suburban travel markets, with Hartford and New Britain residents splitting the remainder of time savings. In addition, zero-car households generate nearly 40 percent of the project's travel-time benefits.

Based on a cost review and risk assessment conducted by FTA, several risk factors were identified that must be mitigated in order to maintain the current cost. These factors include both the lack of agreements with Amtrak and a detailed assessment of contamination associated with the Amtrak ROW; the need for more sufficient ROW plans; and the need for detailed utility surveys and utility relocation plans. Resolution of these issues will be the focus of ongoing FTA oversight of the project.

Transit-Supportive Land Use Rating: Medium

The *Medium* project rating is based on the *Medium-Low* rating assigned to existing land use combined with *Medium* ratings for plans and policies and their performance.

Existing Land Use: Medium-Low

- The project spans four jurisdictions between the downtown areas of Hartford and New Britain. Intermediate stations serve residential neighborhoods of varying urban and suburban character, with low to medium densities, as well as a mix of auto-oriented commercial and industrial development and undeveloped land. The busway is in a transportation corridor and the stations are adjacent to I-84, additional major roadways, Amtrak ROW, and large, formerly industrial buildings.
- Average population density for all station areas is 5,600 per square mile. A total of 64,800 employees work in areas to be served by the system.
- Parking rates are modest in downtown Hartford and New Britain, while parking is free and generally available at other station areas.

Transit-Supportive Plans and Policies: Medium

- The State of Connecticut has established Transportation Investment Areas, including the area to be served by this project, in which to focus development and investment in transportation infrastructure. State legislation passed over the last year requires designation of areas for compact, transit accessible, pedestrian-oriented mixed-use development and permits the use of several state sources to fund transit-oriented development. The State of Connecticut's 2005 Master Transportation Plan reinforces these principles.
- A rigorous land use planning effort, the *New Britain-Hartford Station Planning Project*, was conducted for the busway and has produced conceptual transit-oriented station area plans, although progress in implementation has been slow. The City of Hartford is implementing infrastructure improvements to enhance pedestrian circulation.
- All municipalities are in the process of adopting transit-oriented overlay zoning in response to the project. The Town of West Hartford and the City of Hartford have adopted overlay zones that support various aspects of transit-supportive development. An additional TOD Overlay District that would remove restrictions on residential density, height, and lot occupancy was proposed in 2003 but has not yet been adopted.

Performance and Impacts of Policies: Medium

- Significant redevelopment is under way in downtown Hartford, reflecting recovery from a long period of economic decline. Major components have been completed of the 30-acre Adriaen's Landing site project, which includes a new Connecticut Convention Center, Downtown Marriott Hotel, an entertainment district, residential development, and the Connecticut Center for Science and Exploration.
- Multiple development projects are either newly completed or under construction in downtown Hartford station areas and rehabilitation of existing structures to support new uses is under way at two additional stations.
- The project is conceived as a linchpin for the economic revival of urban areas in Hartford and New Britain, as well as growth throughout the entire corridor.

Other Project Justification Criteria

Mobility Improvements Rating: Medium-High			
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	64,800 80,900 4,600 (27)% 5,900* 420*		
	<u>New Start vs. Baseline</u>		
	3.60*		
	Environmental Benefits Rating: High		
	<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> 8-Hour Ozone (O ₃) Carbon Monoxide (CO) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 254 5 5 N/A 13,850 <u>EPA Designation</u> Moderate Non-Attainment Area* Maintenance Area*	
179,124			
Operating Efficiencies Rating: Medium			
System Operating Cost per Passenger Mile (current year dollars)		<u>Baseline</u>	<u>New Start</u>
		\$0.732*	\$0.663*

* 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

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

Section 5309 New Starts Share of Total Project Costs: 60%

Rating: Medium

ConnDOT is requesting a 60 percent New Starts share of total project costs, which equates to a *Medium* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$275.27	60.0%
Section 5307 Urbanized Area Formula Funds	\$12.98	2.8%
Section 5309 Fixed Guideway Modernization Funds	\$13.06	2.9%
Section 5309 Bus Discretionary Flexible Funds (CMAQ and STP)	\$22.06	4.8%
	\$38.85	8.5%
FHWA NHS Funds	\$6.00	1.3%
State:		
Special Transportation Fund (STF)	\$38.56	8.4%
STF/Public Act 06-136	\$52.00	11.3%
Total:	\$458.78	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

The capital finance plan is rated *Medium*. This reflects a *Medium* rating each subfactor.

Agency Capital Condition: Medium

- The average age of ConnDOT's Statewide bus fleet is 7.1 years; the average age of the Hartford Division's bus fleet is 6.6 years, which is younger than the industry average.
- ConnDOT's Special Tax Obligation bond ratings, which were issued in December 2005, are as follows: Moody's Investors Service A1 and Fitch AA-.

Completeness of Capital Plan: Medium

- The capital plan was reasonably complete and included cash flow statements specifying the sources and uses of capital funds for transit and highway projects Statewide, five years of historical data, bus fleet replacement schedules, and a limited sensitivity analysis.
- The plan was missing some explanatory details. The sensitivity analysis examined the potential for project cost increases, but did not include an accompanying analysis demonstrating how ConnDOT would address such cost increases.

Commitment of Capital Funds: Medium

- Almost 60 percent of non-New Starts funding is committed or budgeted. Federal funding sources include Section 5307 Formula funds, Section 5309 Fixed Guideway Modernization funds, Section 5309 Bus Discretionary funds, flexible funds including CMAQ and STP, and FHWA National Highway System funds. State funding sources include revenues from the State Transportation Fund and the funds newly-committed in Public Act 06-136.

Capital Funding Capacity: Medium

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit based on the State Transportation Fund that would allow ConnDOT to cover cost increases or funding shortfalls equal to approximately 10 percent of project costs.

Capital Cost Estimate and Planning Assumptions: Medium

- Most assumptions in the capital plan are generally consistent with historical experience, although a few are slightly optimistic.
- The capital cost estimate of the project is considered current and reliable.

Operating Finance Plan Rating: Medium

The operating finance plan is rated *Medium*, based upon the average of the ratings of the five subfactors listed below. The operating condition subfactor received a *High* rating; the completeness subfactor received a *Medium* rating; the commitment of funds and operating cost estimates and planning assumptions subfactors received *Medium-Low* ratings; and the operating capacity subfactor received a *Low* rating.

Agency Operating Condition: High

- The ratio of current assets to liabilities as reported in the most recent financial statements for the Special Transportation Fund is 5.8.
- ConnDOT is in good condition with no bus service cutbacks in recent years and a history of being able to draw funds as required from the State Transportation Fund.

Completeness of Operating Plan: Medium

- The operating plan was reasonably complete and included a 20-year cash flow statement for the project, the Hartford Bus Division and for transportation Statewide, historical data, identification of key assumptions, and a limited sensitivity analysis. The plan was missing some explanatory detail including a description of how busway operating costs were estimated. The sensitivity analysis did not address how ConnDOT would cover unexpected cost increases.

Commitment of Operating Funds: Medium-Low

- Less than 50 percent of operating funding is committed. Planned sources of funds include the State Transportation Fund and farebox revenues.

Operating Funding Capacity: Low

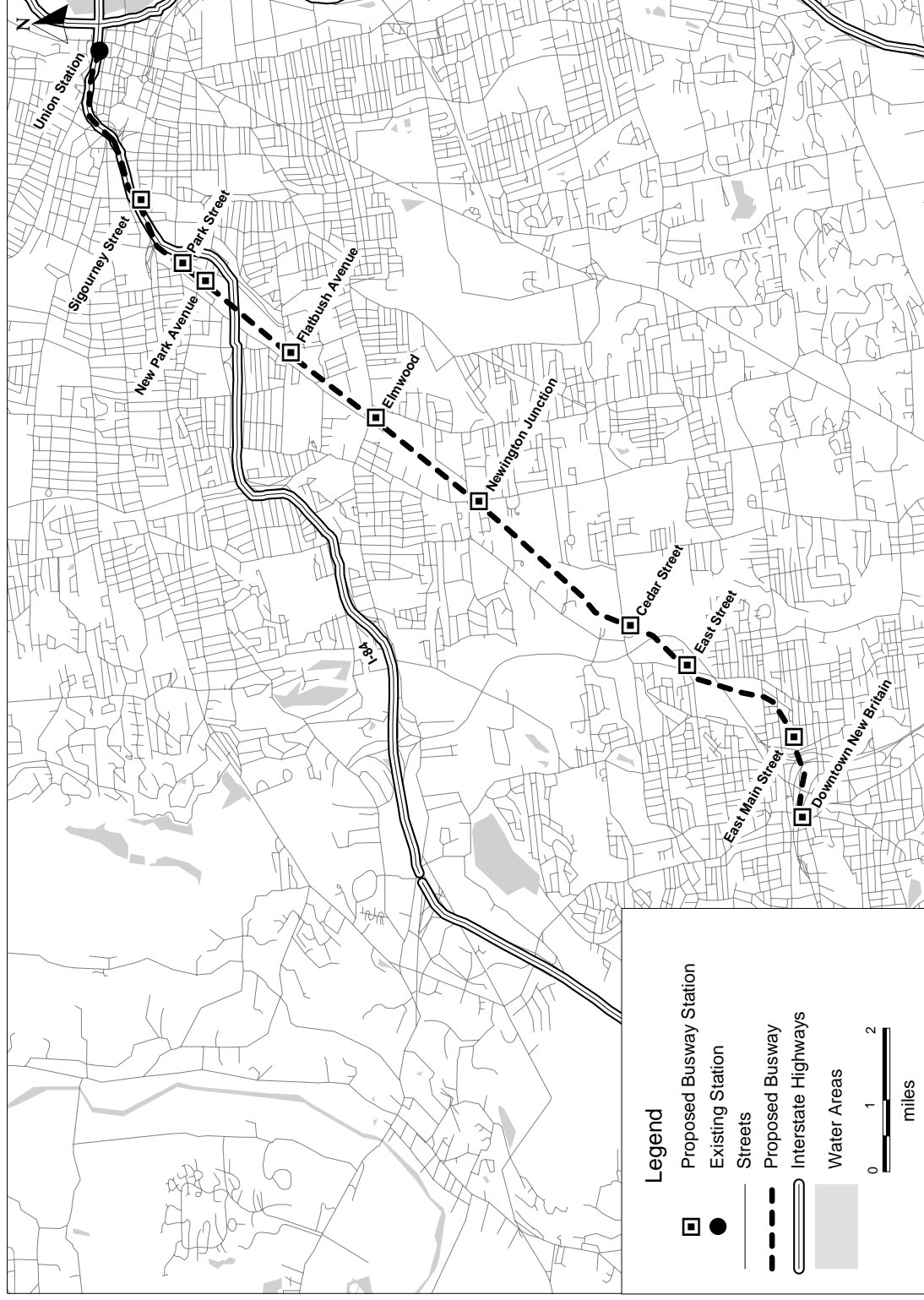
- The project's financial plan shows annual deficits in the State Transportation Fund beginning in 2010, and a negative fund balance beginning in 2019. Although the Legislature is compelled to maintain a minimum positive fund balance for a rolling five-year horizon, the financial plan did not describe any means by which these deficits would be eliminated.

Operating Cost Estimates and Planning Assumptions: Medium-Low

- Assumptions regarding the sources of operating funds tend to be conservative, while the assumptions regarding operating costs, uses of funds, and subsidy needs appear optimistic.

New Britain - Hartford Busway

Hartford, Connecticut



Northstar Corridor Rail

Minneapolis-Big Lake, Minnesota

(November 2006)

The Minnesota Department of Transportation (MnDOT), in cooperation with the Northstar Corridor Development Authority (NCDA), is proposing a 40.5-mile commuter rail line that would connect the Minneapolis central business district (CBD) with the town of Big Lake. The commuter rail line would operate on Burlington Northern Santa Fe (BNSF) Railway's Chicago-to-Seattle transcontinental mainline and includes a vehicle maintenance facility, layover facility, and requisite track and signal upgrades. The project also includes a four-block extension of the existing Hiawatha light rail transit (LRT) line from its current terminus at 1st Avenue North (Warehouse District) in the CBD to a proposed multimodal station at 5th Avenue North, where the commuter rail line would terminate. The commuter rail line would operate 12 weekday trips with 30-minute headways during peak periods. Four of the proposed five stations include park-and-ride lots that would provide over 1,800 parking spaces. Twenty-six vehicles would be procured as part of the project scope. The project is considered the first phase of a larger proposal to construct an 82-mile commuter rail line from Minneapolis to Rice, Minnesota.

The Northstar Corridor is one of the fastest growing areas in the Twin Cities metropolitan region. It includes the fully developed urban core and several rapidly growing suburban areas. Major highway routes into the CBD are at capacity during peak periods for commuters from the north and northwest. By 2025, travel along the corridor's main arterials is projected to increase significantly, with the number of trips in the corridor expected to grow by over 30 percent and the number of inbound trips to the Minneapolis CBD estimated to increase by almost 75 percent. This growth in travel is anticipated to result in longer automobile travel times in the corridor. Increasing roadway capacity to meet growing travel demand is constrained by geography and existing development; the Mississippi River limits the number of access points to the CBD from the north. By avoiding roadway congestion surrounding downtown Minneapolis, the project is expected to provide improved mobility for peak period commuters.

Summary Description	
Proposed Project:	Commuter Rail; Light Rail Transit 40.5 Miles Commuter Rail; 0.3 Miles LRT 5 Stations
Total Capital Cost (\$YOE):	\$307.32 Million
Section 5309 New Starts Share (\$YOE):	\$151.82 Million (49.4%)
Annual Forecast Year Operating Cost (\$YOE):	\$16.34 Million
Ridership Forecast (2025):	5,100 Average Weekday Boardings 1,300 Daily New Riders
Opening Year Ridership Forecast (2009):	3,600 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

MnDOT has demonstrated significant progress on the project in the last year. However, the project's current cost estimate reflects several cost and scope uncertainties, unexecuted railroad agreements, and an implementation schedule which is considered aggressive. MnDOT must develop an acceptable risk management plan (including mitigation strategies) to effectively manage project uncertainties while maintaining sufficient New Starts ratings, prior to FTA's consideration of a Full Funding Grant Agreement (FFGA) for the project.

Project Development History and Current Status

MnDOT and NCDA completed a major investment study in December 1999. FTA approved an 82-mile commuter rail project between Minneapolis and Rice, Minnesota, into preliminary engineering in June 2000. Subsequent Federal environmental work on the 82-mile alignment concluded with a Record of Decision in December 2002. In an effort to reduce costs and improve cost effectiveness, MnDOT developed a 40.5-mile first phase of the full project in 2004. An Environmental Assessment on the 40.5-mile project was completed in December 2005. FTA issued a Finding of No Significant Impact in March 2006. In May 2006 MnDOT executed a Memorandum of Understanding with BNSF for a perpetual easement to facilitate the execution of subsequent agreements (joint use, operations) which would allow for commuter rail service in its right-of-way (ROW). FTA approved the project into final design in September 2006. An updated project cost estimate is anticipated in January 2007.

Significant Changes Since FY 2007 Evaluation (November 2005)

The project budget increased by over \$42 million to reflect increased contingencies and ROW costs. In May 2006 the Minnesota legislature passed legislation which completes its financial commitment to the project. MnDOT has deferred the planned Fridley station from the current project scope until the future.

Project Justification Rating: Medium

The project is rated *Medium* for project justification based on a *Medium-Low* rating for cost effectiveness and a *Medium* rating for the project's transit-supportive land use.

Cost Effectiveness Rating: Medium-Low

The *Medium-Low* cost effectiveness rating reflects the level of estimated travel-time benefits (3,200 hours each weekday, plus special events) relative to the project's annualized costs. The project's cost effectiveness is expected to change prior to further FTA consideration of an FFGA based on an updated cost estimate and revised travel forecasts reflecting modifications to the project's operating plan.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$25.48*
Incremental Cost per Incremental Trip	\$60.60

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

Nearly two-thirds of projected travel-time benefits accrue to travelers bound for the Minneapolis CBD from northwestern suburbs because the commuter rail line provides a time-competitive alternative to congested arterials (Interstate 94) and Mississippi River choke points (Interstate 35 West and Trunk Highway 10) north of downtown. Other benefiting markets include transit riders from outlying Ramsey County and Hennepin County. Less than 20 percent of benefits result from riders making non-work trips on the commuter rail line to sports stadiums, the Mall of America, cultural events, and other destinations. Estimated benefits to zero-car households and reverse commuters are negligible.

There remains concern that project costs will increase. The project's schedule reflects an unrealistically short duration for both final design and construction. Design is not completed on the downtown terminal station (including pedestrian connections to both the Hiawatha LRT system and proposed major league baseball stadium adjacent to the station) and proposed maintenance facility. Primary project risks include lack of occupancy and use agreements with BNSF and an uncertain approach to vehicle procurement and real estate acquisition. Additionally, current unallocated contingencies are insufficient for this stage of development. MnDOT and FTA have jointly developed a Project Development Agreement that provides a framework for the resolution of these issues and for subsequent execution of an FFGA. The total project cost does not include the entirety of the costs of financing state and local debt on the project, although this does not affect its cost effectiveness.

Transit-Supportive Land Use Rating: Medium

The *Medium* land use rating reflects a *Medium-Low* rating for existing land use, a *Medium-High* rating for transit-supportive plans and policies, and a *Medium* rating for performance and impacts of land use policies.

Existing Land Use: Medium-Low

- The rating for existing land use was downgraded from *Medium* to *Medium-Low* based on the deferment of the Fridley station, which reduced the corridor's station area population, employment, and housing density estimates.
- The average population density for the five station areas is 2,000 persons/square mile.
- Including the entire CBD, the commuter rail would serve approximately 150,000 employees – 146,000 in the Minneapolis CBD and 4,000 outside of downtown Minneapolis. The average employment density is 11,500 jobs/square mile.
- Downtown Minneapolis has 63,000 parking spaces, which is 0.45 spaces per employee. Off-street parking costs an average of \$11/day.
- Beyond the Minneapolis CBD, the corridor's land use character is a mixture of smaller mixed use, town-scale, and main street areas, with moderate-to-low density residential and industrial uses. Several proposed station areas are located near redevelopable land and lower density housing in need of rejuvenation.

Transit-Supportive Plans and Policies: Medium-High

- The Metropolitan Council's 2030 Regional Development Framework provides for a "growth boundary" where urban services are provided and policies encouraging clustered, mixed-use growth along transportation corridors are in place.
- The Downtown East/North Loop Master Plan guides development in the Minneapolis CBD station area. The plan calls for primarily high and medium density mixed-use development.
- The *Northstar Commuter Rail Corridor Station Neighborhood Development Principles and Guidelines* assist corridor communities with concepts and guidelines to support mixed uses, enhanced station-area environment and higher-intensity development.
- Local zoning regulations allow the densest development within and near Minneapolis. Outside of the city, residential densities range from low to medium-high. The downtown Minneapolis station is the only station with commercial floor area ratio regulations that range from four-to-eight in the areas adjacent to the station.
- Each of the municipalities is in the process of adopting transit-oriented zoning regulations to permit mixed uses and medium-to-high density residential development in station areas based on the *Neighborhood Development Principles and Guidelines*.
- Outside of Minneapolis, there has been little demonstrated progress towards implementing station area plans addressing the character of development over the past year. Now that the project has advanced into final design, significant progress in revising local comprehensive plans and identifying needed capital improvements is expected.

Performance and Impacts of Policies: Medium

- Corridor growth, as estimated for 2025, is robust with population growth estimated at 36 percent and employment growth at 13 percent.
- Private developers have proposed transit-supportive redevelopment projects at three key stations: downtown Minneapolis, Coon Rapids, and Elk River.
- The success of the Hiawatha LRT – which began operations in 2004 – demonstrates market support for higher density and transit/pedestrian-oriented development.

Other Project Justification Criteria

Mobility Improvements Rating: Medium-Low		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2025) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	45,100 50,000 300 (9%) 8,800* 50* <u>New Start vs. Baseline</u> 1.30*	
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide (CO) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 742 78 41 3 18,955 <u>EPA Designation</u> Maintenance Area* 247,866	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.405*	\$0.401*

* 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

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

Section 5309 New Starts Share of Total Project Costs: 49%

Rating: Medium-High

MnDOT is requesting slightly higher than a 49 percent New Starts share of total project costs, which equates to a *Medium-High* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$151.82	49.4%
Flexible Funds (CMAQ and STP)	\$5.18	1.7%
State:		
General Obligation Bonds	\$98.56	32.1%
Local:		
NCDA Capital Partners	\$49.28	16.0%
Metropolitan Council	\$2.47	0.8%
Total:	\$307.32	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 total as listed due to rounding.

Capital Finance Plan Rating: Medium

The capital finance plan is rated *Medium*. The commitment of capital funds subfactor is rated *High*. The agency capital condition and completeness of capital plan subfactors received *Medium-High* ratings, while the capital cost estimates and planning assumptions subfactor received a *Medium-Low* rating. The capital funding capacity subfactor received a *Medium* rating. These ratings average to a *Medium-High*, but the rating was lowered to *Medium* due to the *Medium-Low* rating for the capital cost estimate and planning assumptions subfactor, based on the uncertainty of the current cost estimate.

Agency Capital Condition: Medium-High

- The average age of Metro Transit's bus fleet is 5.7 years, which is younger than the industry average.
- MnDOT's excellent bond ratings, which were issued in 2004, are as follows: Moody's Investors Service Aa1, Standard & Poor's Corporation AAA, and Fitch AAA.

Completeness of Capital Plan: Medium-High

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

Commitment of Capital Funds: High

- All non-New Starts funds are committed. Federal funding sources include CMAQ and STP funds. State funding sources include General Obligation Bonds. Local funding sources include funds from the NCDA Capital Partners and the Metropolitan Council.

Capital Funding Capacity: Medium

- The project's financial plan shows no projected cash balances or reserve accounts, but access to the large additional debt capacity of the State of Minnesota would allow MnDOT to cover cost increases or funding shortfalls equal to approximately 20 percent of project costs.

Capital Cost Estimate and Planning Assumptions: Medium-Low

- The project's current implementation schedule is overly optimistic. Current capital cost estimates do not include sufficient contingencies to cover major uncertainties (lack of executed railroad agreements, lack of reliable pricing data for vehicle procurement, unreliable real estate estimates).
- Inflation and bond rate assumptions included in the capital plan are optimistic.

Operating Finance Plan Rating: Medium

The operating finance plan is rated *Medium*, based upon the average of the ratings of the five subfactors listed below. The commitment of operating funds subfactor received a *High* rating. The operating funding capacity subfactor received a *Medium-High* rating; the agency operating condition and completeness subfactors received *Medium* ratings; and the planning assumptions subfactor received a *Medium-Low* rating.

Agency Operating Condition: Medium

- MnDOT's current ratio of assets to liabilities, as reported in its most recent audited financial statements, is 1.5.
- Although MnDOT has a history of being able to draw funds as required from the Minnesota General Fund, there have been minor budget driven cutbacks in transit service over the past year.

Completeness of Operating Plan: Medium

- The operating plan was reasonably complete and included a 20-year cash flow for both the project and for all MnDOT operations, eight years of historical data, and key assumptions. The plan was missing a sensitivity analysis.

Commitment of Operating Funds: High

- All operating funding is committed. Sources of operating funds include farebox revenues, federal Section 5307 formula funding (preventive maintenance), the Minnesota General Fund and funds from the NCDA Capital Partners.

Operating Funding Capacity: Medium-High

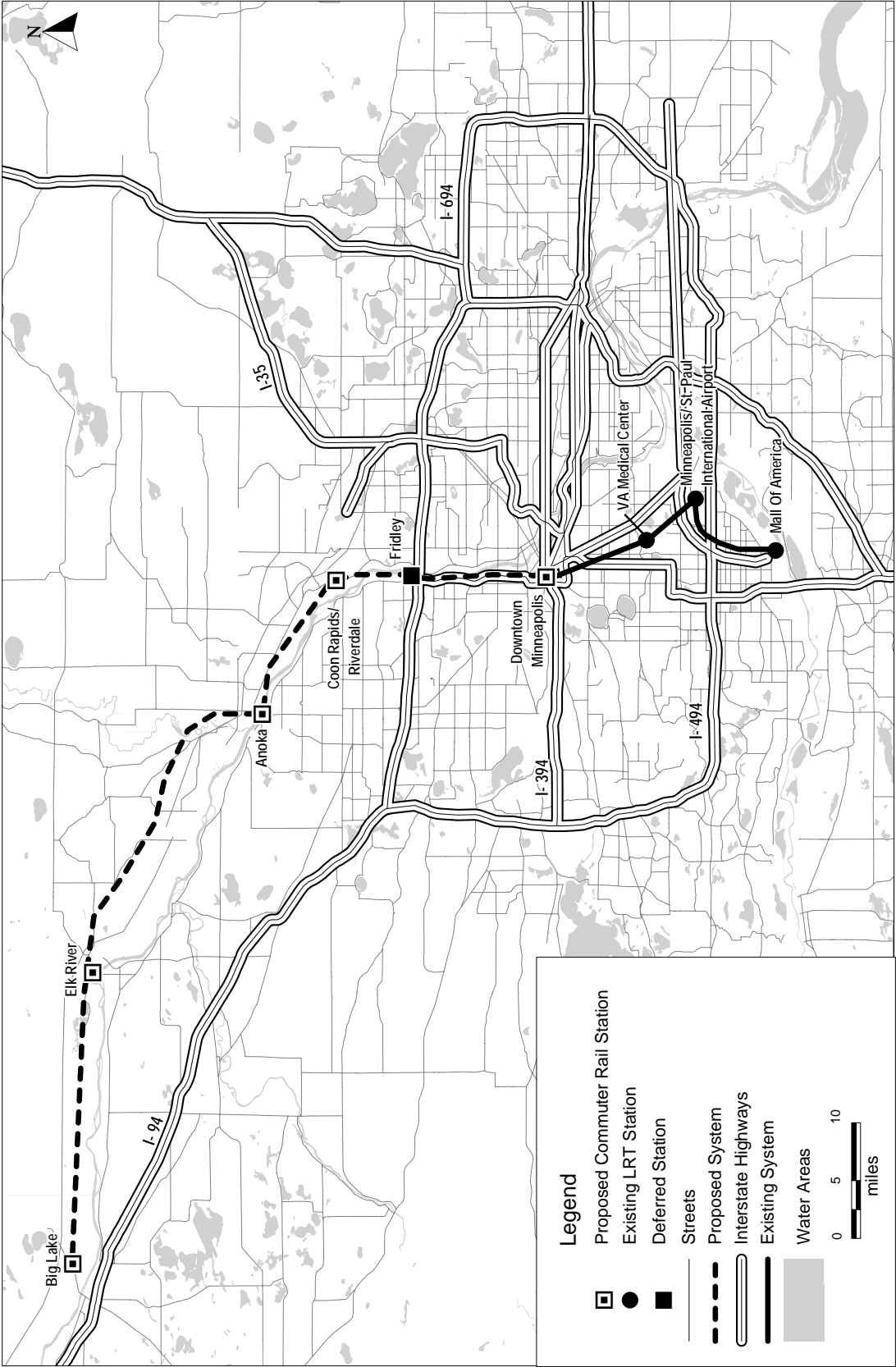
- MnDOT's operating plan shows no projected cash balances or reserve accounts, but available taxing capacity exceeds 25 percent of annual systemwide operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium-Low

- As the project sponsors do not possess experience in commuter rail operations, the operating financial plan does not include any historical basis of comparison.
- The operating plan includes several optimistic assumptions including the projected growth in commuter rail operating costs, state and local subsidy contributions, and fare revenues.

Northstar Corridor Rail

Minneapolis-Big Lake, Minnesota



Second Avenue Subway Phase I

New York, New York

(November 2006)

The Metropolitan Transportation Authority and New York City Transit (MTA/NYCT) are proposing to construct 2.3 miles of new subway on Manhattan's East Side from 96th Street to 63rd Street, connecting with the existing Broadway Line at the 63rd Street Station. The Second Avenue Subway Phase I project would also include construction of three new stations at 96th, 86th, and 72nd Streets, modification of the existing 63rd Street station, new tunnels from 92nd to 63rd Streets, station/ancillary facilities, and track, signal and power systems, and the procurement of 68 rail cars. The Phase I project is a minimum operable segment (MOS) of a planned 8.5-mile subway line extending the length of Manhattan's East Side from 125th Street in East Harlem to Hanover Square in the Financial District.

The project will relieve overcrowded conditions and improve service reliability on the Lexington Avenue Line (LAL), and improve current mobility and meet future demand for commuters throughout New York City and the metropolitan area. LAL is currently the only full north-south passenger rail line serving Manhattan's east side and is the busiest transit line in North America. This heavy passenger load (approximately 3,000 passengers at one station during a 15-minute period of the morning peak hour) causes significant delays in service due to the excessive overcrowding along station platforms and queuing on stairways.

Summary Description	
Proposed Project:	Heavy Rail 2.3 Miles 3 Stations
Total Capital Cost (\$YOE):	\$4,655.42 Million (includes \$816.61 million in finance charges)
Section 5309 New Starts Share (\$YOE):	\$1,300.00 Million (27.9%)
Annual Forecast Year Operating Cost:	\$276.95 Million
Ridership Forecast (2030):	213,000 Average Weekday Boardings 5,200 Daily New Riders
Opening Year Ridership Forecast (2012):	191,000 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium-High
FY 2008 Project Justification Rating:	High
FY 2008 Overall Project Rating:	High

FTA expects to execute a Full Funding Grant Agreement (FFGA) for the New York Second Avenue Subway Phase I project in early FY 2008. FTA notes that although MTA's New Starts funding request of \$1.3 billion for the Second Avenue Subway Phase I project is higher than typical, it reflects the lowest New Starts share (less than 28 percent) of any project in the New Starts pipeline. Furthermore, the project is one of only two projects in the pipeline which is rated *High* against the statutory New Starts project justification and local financial commitment criteria.

Project Development History and Current Status

MTA/NYCT completed a major investment study/Draft Environmental Impact Statement (MIS/Draft EIS) on the Manhattan East Side Corridor in September 1999. The MIS/Draft EIS covered the northern portion of the corridor from 63rd Street to East 125th Street. The full 8.5-mile Second Avenue Subway was selected as the locally preferred alternative (LPA) in May 2001. FTA approved the LPA into preliminary engineering in December 2001. Anticipating the financial difficulties in implementing the entire project at once, MTA/NYCT contemplated the development of minimum operable segments within the corridor. A Final EIS covering the full alignment, but including a strategy for the implementation of four distinct operable segments within the corridor, was completed in April 2004. In July 2004, FTA issued an environmental Record of Decision for the full-length project. FTA included the Phase I MOS in the “other projects” category in the FY 2007 President’s Budget. FTA approved entry into final design for the Second Avenue Subway Phase I project in April 2006. FTA expects to execute an Early Systems Work Agreement (ESWA) in January 2007 to enable MTA to advance critical elements of the project pending execution of an FFGA.

Significant Changes Since FY 2007 Evaluation (November 2005)

Continuing engineering and design has resulted in better definition of project elements and modifications to reduce the overall construction impacts and estimated cost of the project by over \$290 million. In March 2006, the Capital Program Review Board of New York State declared and affirmed the provision of the full local share of project costs spanning future capital plan periods, including \$450 million in State bonds.

Project Justification Rating: High

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

Cost Effectiveness Rating: Medium-High

The *Medium-High* cost effectiveness rating reflects the level of travel-time benefits (62,300 hours each weekday) relative to the project’s annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$14.16*
Incremental Cost per Incremental Trip	\$170.32

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

The first phase of the Second Avenue Subway would result in a more efficient ride between the Upper East Side, southern East Harlem, and West Midtown by providing a cross-platform transfer to the F Line at the LAL/63rd Street station. With the project, crowding on the LAL is expected to decrease by as much as 13 percent, with 23,500 fewer riders entering the Manhattan central business district on southbound express and local LAL trains on an average weekday. Nearly 72,000 riders traveling between the Upper East Side or East Harlem and employment centers in West Midtown are expected to experience approximately 15 percent of the project’s travel-time benefits. The remaining travel-time benefits would accrue to riders traveling from other areas (Upper West Side, West Harlem, Bronx, etc.) to the corridor under less crowded conditions. In addition, morning peak hour boardings on the southbound LAL would decrease by 48 percent at 86th Street, improving passenger circulation at the station and contributing to better train throughput and reliability on the LAL.

A tunneling contract will be executed in January 2007 under the ESWA. FTA has initiated a risk analysis/mitigation program to manage uncertainties in scope, schedule and cost. Further risk mitigation strategies are expected to be developed in early 2007. Based on these efforts, the project cost estimate is considered to be reliable.

Transit-Supportive Lane Use Rating: High

The project's *High* land use rating reflects a *High* rating for each component of the land use evaluation.

Existing Land Use: High

- The project will serve the highly urbanized section of Manhattan that includes the Upper East Side and a portion of East Harlem. A portion of East Midtown's CBD is within the 63rd Street station area at the southern terminus of the Phase I project. Within the three new and reconstructed 63rd Street station areas in Phase I, residential neighborhoods are home to approximately 255,000 people and businesses employ nearly 286,000 workers.
- Population density is very high in the proposed station areas, with 67,600 households per square mile and 109,600 residents per square mile. Parking availability is limited and high parking costs serve as an effective disincentive to automobile use.
- The predominantly residential land use in station areas incorporates mixed uses arrayed in compact development patterns. Sidewalks and storefronts line virtually all streets, creating an environment that is highly supportive of pedestrian activity and transit use. Numerous major institutions also contribute to the varied high-density land use mix.

Transit-Supportive Plans and Policies: High

- New York City policies and market conditions promote the continued development and restoration of older buildings to accommodate growth in high-density, transit-supportive land use patterns. By 2030, an additional 20,100 residents are expected to live within station areas and employment is anticipated to increase by 42,000. The NYC region, however, does not have any formal inter-jurisdictional growth management policies.
- Development densities in the corridor, among the highest in the world, result in part from long-range policies to promote transit and discourage use of the automobile. Policies and tools are in place that will promote continued transit-supportive development.
- The city's Comprehensive Zoning Resolution contains a Special Transit Land Use District along the project corridor, requirements for sidewalks and other pedestrian-friendly amenities, and parking restrictions and disincentives, including an 18 percent parking tax. The project corridor includes some of the city's highest-density zoning districts. Recent zoning changes in East Harlem support increased development in the neighborhood that includes the station area. Densities permitted under this zoning are high according to FTA guidelines.
- A variety of tools are used by the city to promote development and encourage transit-supportive land use characteristics; these include direct subsidies, property tax incentives, reduced mortgage interest rates, housing development, and urban renewal. Neighborhoods have been active participants in designating the special zoning district for the corridor.

Performance and Impacts of Policies: High

- The intensive development, pedestrian-friendly character, and high rates of transit usage in the corridor reflect the impact of land use policies and the application of such tools as zoning, floor area bonuses, and tax incentives. Several large-scale buildings recently have been constructed and numerous development and renovation projects are proposed or underway in station areas.
- The project can be expected to have a beneficial impact on regional land use by increasing transit system capacity and promoting economic development in the core of the New York metropolitan area. The concentration of activity in an area with exceptionally high rates of transit usage is key to the management of regional growth and creation of sustainable land use patterns.

Other Project Justification Criteria

Mobility Improvements Rating: Medium-High		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)		
	286,000	
	328,000	
	11,900 (8%)	
101,800*		
3,600*		
<u>New Start vs. Baseline</u>		
1.92*		
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide (CO) 8-Hour Ozone (O ₃) Particulate Matter (PM ₁₀) Particulate Matter (PM _{2.5}) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u>	
	148	
	4	
	8	
	5	
	27,200	
	<u>EPA Designation</u>	
	Maintenance Area*	
	Moderate Non-Attainment Area*	
	Moderate Non-Attainment Area*	
Non-Attainment Area*		
420,400		
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.401*	\$0.402*

* 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 the *High* rating for the New Starts share of project costs and the *Medium-High* ratings for both the capital and operating finance plans.

Section 5309 New Starts Share of Total Project Costs: 28%

Rating: High

MTA/NYCT is requesting an approximately 28 percent New Starts share of total project costs, which results in a *High* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$1,300.00	27.9%
Flexible Funds (CMAQ)	\$45.30	1.0%
State:		
State Transportation Bond Act of 2005	\$450.00	9.7%
Local:		
MTA Dedicated Sources (bonds, surplus toll revenues, etc.)	\$2,043.51	43.9%
MTA Operating Budget (finance costs)	\$816.61	17.5%
Total:	\$4,655.42	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 the ratings assigned to each of the subfactors listed below. The completeness of capital plan and commitment of capital funds subfactors were rated *High*; the capital funding capacity was rated *Medium-High*; and the capital condition and the capital cost estimate and planning assumptions subfactors were rated *Medium*.

Agency Capital Condition: Medium

- The average age of MTA's bus fleet is 6.1 years, which is younger than the industry average. The average age of the MTA's rail fleet is 19.8 years for NYCT and 19.9 years and 19.0 years for the Long Island Rail Road and Metro-North Railroad, respectively.
- MTA's good bond ratings, which were issued in 2006, are as follows: Standard & Poor's Corporation AA- and Fitch A+.

Completeness of Capital Plan: High

- The capital plan was complete and included a 20-year cash flow statement, more than five years of historical data, a high level of detail, a substantial amount of supporting documentation, identification of key assumptions, and an extensive sensitivity analysis.

Commitment of Capital Funds: High

- One hundred percent of non-New Starts funding is committed or budgeted. Primary funding sources include bond proceeds, State and local capital support, and other dedicated tax revenues.

Capital Funding Capacity: Medium-High

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit that would allow MTA cover cost increases or funding shortfalls equal to at least 25 percent of the project costs. However, while MTA has the legal authority to issue more debt, MTA would need to identify new or additional revenues to service that debt.

Capital Cost Estimate and Planning Assumptions: Medium

- Assumptions in the capital plan are consistent with historical experience.
- The project cost estimate is considered to be very comprehensive and well thought out.

Operating Finance Plan Rating: Medium-High

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

Agency Operating Condition: Low

- MTA's current ratio of assets to liabilities as reported in its most recent audited financial statement is 0.94.

Completeness of Operating Plan: High

- The operating plan was very thorough and included a 20-year cash flow statement, more than five years of historical data, a high level of detail, substantial documentation, clear explanations of the assumptions, and an extensive sensitivity analysis.

Commitment of Operating Funds: High

- One hundred percent of operating funding is committed. Funding sources include fares, other operating revenues, and dedicated State and local taxes.

Operating Funding Capacity: Medium-High

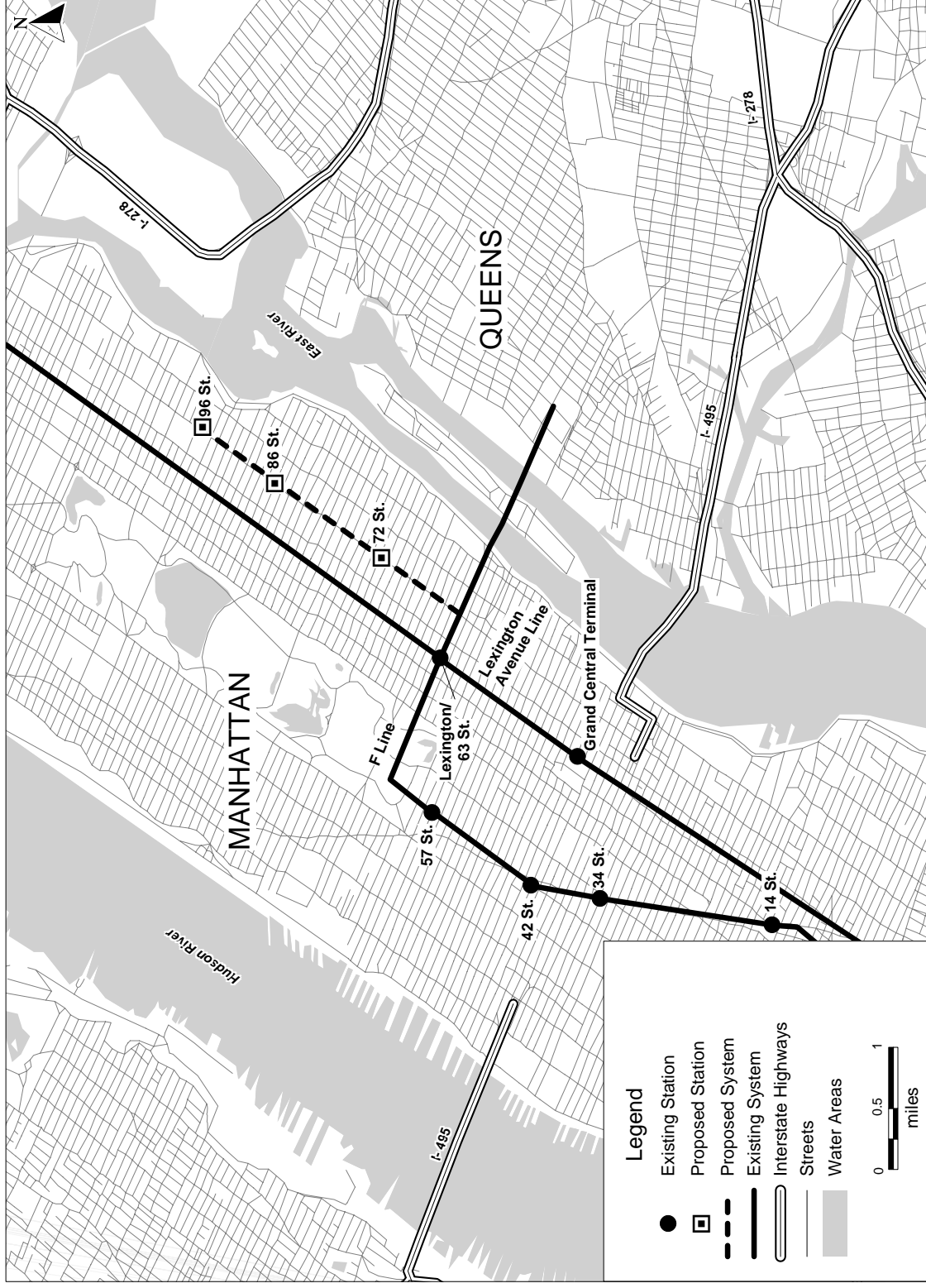
- The project's financial plan shows reserve accounts and access to a line of credit that exceeds 25 percent of systemwide annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium-High

- Operating revenue assumptions are conservative compared to historical experience, while operating cost estimates are slightly optimistic relative to historical experience.

Second Avenue Subway Phase I

New York, New York



Norfolk LRT

Norfolk, Virginia

(November 2006)

Hampton Roads Transit (HRT) is proposing to construct and operate an 11-station, 7.4-mile light rail transit (LRT) line within the city of Norfolk that is intended to serve as the initial segment of a regional rapid transit system. The project alignment would begin at the Eastern Virginia Medical Center, move eastward as a dedicated in-street guideway through downtown Norfolk to Norfolk State University, and continue along an abandoned Norfolk Southern Railroad right-of-way (ROW) parallel to Interstate 264 (I-264) to the eastern terminus at the Norfolk/Virginia Beach city line at Newtown Road. Park-and-ride access to the system would be provided by the construction of new facilities at Newtown Road, Military Highway, and Ballantine Boulevard, as well as shared use of existing parking facilities at the Harbor Park baseball stadium on the southeastern fringe of downtown, where a station is planned. The project scope also includes an LRT maintenance facility and the purchase of nine vehicles. The project will use line-of-sight operations with advanced vehicle location systems. Service would operate at 7.5-minute frequencies during peak periods.

Travel forecasts indicate worsened congestion on I-264 and major arterials (Brambleton Avenue, Virginia Beach Boulevard, Tidewater Drive) within the project corridor through 2025. Options for improving mobility within the area are limited by geographic constraints (numerous waterways) and the absence of transportation rights-of-way. The Norfolk LRT project takes advantage of an abandoned rail ROW and is intended to help meet future travel demand to downtown Norfolk and throughout the corridor, provide improved mobility for transit dependent populations, and achieve local land use goals. The project is further intended to provide a rapid transit connection from Harbor Park and other fringe park-and-ride facilities to destinations within the downtown area.

Summary Description	
Proposed Project:	Light Rail Transit 7.4 Miles 11 Stations
Total Capital Cost (\$YOE):	\$232.10 Million (includes \$5.6 million in finance charges)
Section 5309 New Starts Share (\$YOE):	\$127.98 Million (55.1%)
Annual Forecast Year Operating Cost:	\$10.50 Million
Ridership Forecast (2025):	6,500 Average Weekday Boardings 1,600 Daily New Riders
Opening Year Ridership Forecast (2010):	2,900 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

HRT has demonstrated significant progress on the project in the last year. However, the sufficiency of the project's cost effectiveness is vulnerable to any increase in the project's cost estimate. HRT will need to develop and implement a project execution strategy which effectively manages the use of project contingencies and major project risks, as well as continued achievement of sufficient New Starts ratings, before FTA considers a Full Funding Grant Agreement (FFGA) for the Norfolk LRT project.

Project Development History and Current Status

In 1997, FTA approved into preliminary engineering (PE) an 18-mile LRT system extending between the cities of Norfolk and Virginia Beach. The Draft Environmental Impact Statement (EIS) for the project was completed in April 1999. In November 1999, Virginia Beach voters failed to approve a local funding measure for the project, resulting in the truncation of the project at Kempsville Road within the city limits of Norfolk. FTA approved the abridged project into PE in October 2002. A Supplemental Draft EIS was completed in January 2003. HRT undertook subsequent scope and cost reductions resulting in the current 7.4-mile alignment. In October 2005, the city of Norfolk passed an ordinance intended to limit the availability of parking downtown, which was a key assumption in HRT's travel forecasts for the project. FTA included the Norfolk LRT in the "other projects" category in the FY 2007 President's Budget, issued in February 2006. FTA issued a Record of Decision for the project in April 2006. The following month, FTA completed an assessment of the risk associated with the project's scope, schedule, and budget that identified needed scope and budget enhancements to improve the reliability of the cost estimate. The Norfolk LRT project was approved into final design in September 2006.

Significant Changes Since FY 2007 Evaluation (November 2005)

The project's budget increased by over \$28 million as a result of the findings of the May 2006 risk assessment. HRT increased the requested New Starts funding amount to cover this increase, resulting in a change in the New Starts share from 49 percent to 55 percent of total project costs. In addition, HRT expanded the scope and cost of the baseline alternative against which the cost effectiveness of the project is measured, which contributed to the estimate reported below.

Project Justification Rating: Medium

The project is rated *Medium* for project justification based on its *Medium* ratings for cost effectiveness and transit-supportive land use.

Cost Effectiveness Rating: Medium

The *Medium* cost effectiveness rating reflects the level of travel-time benefits (2,100 weekday hours) relative to the project's annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$22.77*
Incremental Cost per Incremental Trip	\$29.56

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

HRT's travel forecasts indicate that the project will predominantly benefit downtown-bound commuters. The forecasts assume the existence of a significant parking deficit in downtown Norfolk by 2025. This parking deficit would be relieved, in part, by the connection of the proposed LRT system to parking facilities located on the fringe of the central business district (CBD). Seventy-five percent of projected travel-time benefits are consequently attributable to this park-and-ride market, assuming the projected parking deficit is realized. FTA has accepted the City of Norfolk's downtown parking ordinance as the basis for realization of its travel forecasts, but notes that such a policy-driven estimate carries some risk.

The project is modest compared to most other LRT systems. The scope includes single car operations and "line of sight" signalization; therefore, its cost estimate is significantly lower than any other LRT system currently under construction. Attainment of the current cost estimate requires very close monitoring of the project schedule and market data. This is HRT's first undertaking of a major capital guideway project.

Transit-Supportive Land Use Rating: Medium

The *Medium* land use rating is based upon the *Medium-High* rating assigned to transit-supportive plans and policies and performance and impacts of policies, and the *Medium-Low* rating for existing land uses in the project corridor.

Existing Land Use: Medium-Low

- Employment and population levels in the area served by the project are modest. Station area employment is estimated at approximately 53,800 employees. Total CBD employment is 42,000, and population densities average 4,200 persons per square mile in station areas.
- Pedestrian access in the CBD and redeveloping waterfront neighborhoods has improved considerably within the past few years. Elsewhere, neighborhoods are generally walkable, but some developments at each end of the alignment have considerable surface parking.
- Downtown Norfolk generally maintains an adequate parking supply, although some areas suffer from parking shortages. Parking costs in the CBD range from \$4 to \$14 per day.

Transit-Supportive Plans and Policies: Medium-High

- Jurisdictions in the Hampton Roads area have adopted and applied various tools for growth management, primarily oriented toward the preservation of natural areas.
- The City of Norfolk has adopted and implemented redevelopment plans for the downtown area that focus on creating a mixed-use, pedestrian-scaled environment that builds on historic architecture and amenities such as the waterfront.
- Residential densities in corridor neighborhoods typically range from six to 15 units per acre but are much higher for some newer downtown developments. Redevelopment plans are also being implemented to rebuild residential neighborhoods in the corridor.
- Pedestrian-oriented design guidelines have been adopted for a number of areas in the corridor, especially near downtown, and are being enforced.
- Some downtown and adjacent districts do not require off-street parking and allow provisions for shared parking. The city has adopted a transit-oriented parking policy that sets a goal of maintaining overall parking ratios for office development at or below current levels of 3.7 spaces per 1,000 square feet.
- The city is considering the adoption of a transit overlay district that could be applied to station areas to restrict uses, establish design standards, and restrict parking.
- The City of Norfolk has been a strong leader in planning initiatives to redevelop downtown and many residential neighborhoods of the city. City agencies have a number of financial and regulatory incentives at their disposal and have aided with land acquisition and assembly in redevelopment areas.

Performance and Impacts of Policies: Medium-High

- Significant redevelopment activities have occurred in downtown Norfolk in recent years, and these developments have been consistent with pedestrian-oriented design principles.
- Vacant and underutilized properties are being transformed into mixed-use, urban-scale developments with residential, retail, and office uses.
- Development in the easternmost station areas continues to be auto-oriented.
- There is a moderate amount of redevelopment potential in transit station areas. A market for both new commercial and residential development in the downtown area has been demonstrated and is likely to continue.

Other Project Justification Criteria

Mobility Improvements Rating: Medium		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2025) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	53,800 62,200 1,800 (24%) 4,900* 200* <u>New Start vs. Baseline</u> 7.84*	
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> 8-Hour Ozone (O ₃) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 36 1 1 0 1,149 <u>EPA Designation</u> Marginal Non-Attainment Area* 15,017	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.439*	\$0.433*

* Indicates that measure is a component of rating for each criterion.

Local Financial Commitment Rating: Medium

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

Section 5309 New Starts Share of Total Project Costs: 55%

Rating: Medium

HRT is requesting 55 percent in New Starts funding to cover total project costs, which results in a *Medium* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$127.98	55.1%
Flexible Funds (STP)	\$35.47	15.3%
FHWA FY 2003 Earmark	\$1.00	0.4%
State:		
General Assembly Appropriations	\$2.26	1.0%
Virginia Mass Transit Fund	\$15.38	6.6%
Virginia Transportation Trust Fund	\$2.49	1.1%
MPO Flexible Funds (STP)	\$8.87	3.8%
Local:		
City of Norfolk Bonds	\$38.65	16.7%
Total:	\$232.10	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*. The project received a *High* rating on completeness, commitment of capital funds, and capital funding capacity, a *Medium* rating on capital cost estimates and assumptions, and a *Medium-Low* rating on capital condition. The average of these ratings is *Medium-High*.

Agency Capital Condition: Medium-Low

- The average age of HRT's bus fleet is 9.3 years, which is older than the industry average.
- HRT does not have bond ratings.

Completeness of Capital Plan: High

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

Commitment of Capital Funds: High

- All non-New Starts funding is either committed or budgeted. Local funding sources include City of Norfolk bonds, Federal flexible funds, and State capital grants.

Capital Funding Capacity: High

- The project's financial plan shows no projected cash balances or reserve accounts, but the City of Norfolk can cover cost increases or funding shortfalls through additional bonding equal to more than twice the project cost.

Capital Cost Estimate and Planning Assumptions: Medium

- Assumptions in the capital financial plan are consistent with historical experience.
- Capital cost estimates for the project's modest scope are considered reasonable.

Operating Finance Plan Rating: Medium

The operating finance plan is rated *Medium* based upon the average of the ratings assigned to each of the subfactors listed below. Completeness of the operating plan is rated *High*; a *Medium-High* rating is assigned to commitment of operating funds; *Medium* ratings were assigned to the operating cost estimates and planning assumptions and operating funding capacity subfactors; and a *Medium-Low* rating was assigned to the operating condition subfactor.

Agency Operating Condition: Medium-Low

- HRT's current ratio of assets to liabilities as reported in its most recent audited financial statement (FY 2005) is 1.16.
- HRT has not had any service cutbacks in the last five years.

Completeness of Operating Plan: High

- The operating plan was very thorough and contained all required elements including a 20-year cash flow statement, identification of all key assumptions with an extensive level of detail, more than five years of historical data, and an extensive sensitivity analysis.

Commitment of Operating Funds: Medium-High

- Seventy-nine percent of operating funding is committed. The City of Norfolk will fund project operating and maintenance costs that are not covered by fare revenues and State operating assistance.

Operating Funding Capacity: Medium

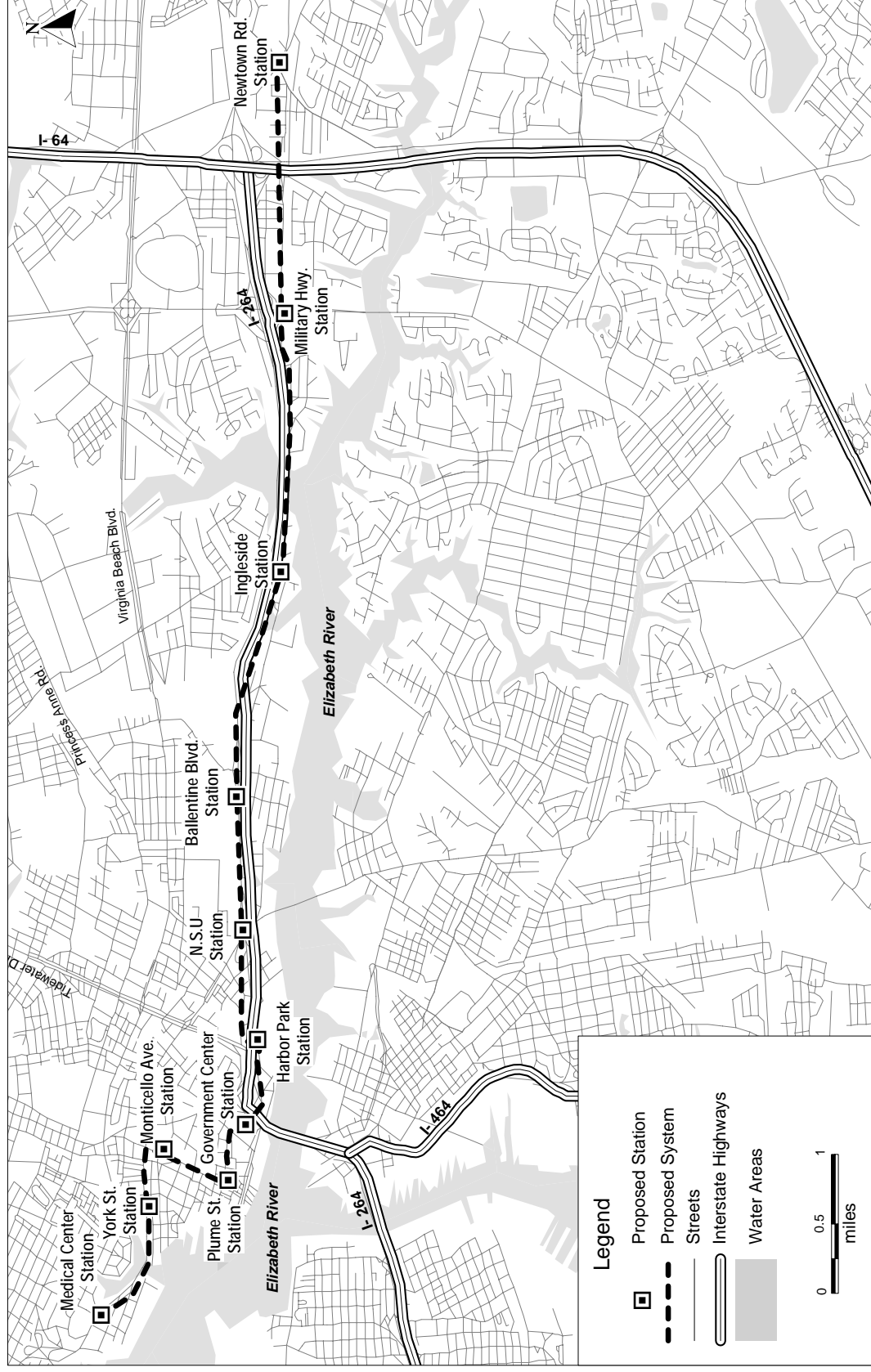
- The project's financial plan shows cash balances, reserve accounts, and/or access to credit exceeding 12 percent of systemwide annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium

- Assumptions in the operating plan are generally consistent with historical experience.

Norfolk LRT

Norfolk, Virginia



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

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

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 200th Street in the city of SeaTac to North 103rd 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.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
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

Mobility Improvements Rating: Medium-High		
<u>Within ½-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	23,700 35,000 1,990 (15%) 11,800* 1,000*	
	<u>New Start vs. Baseline</u>	
	2.82*	
Environmental Benefits Rating: Medium		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide (CO) Particulate Matter (PM ₁₀) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 603 52 46 1 11,816 <u>EPA Designation</u> Maintenance Area Maintenance Area 151,198	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$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.

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

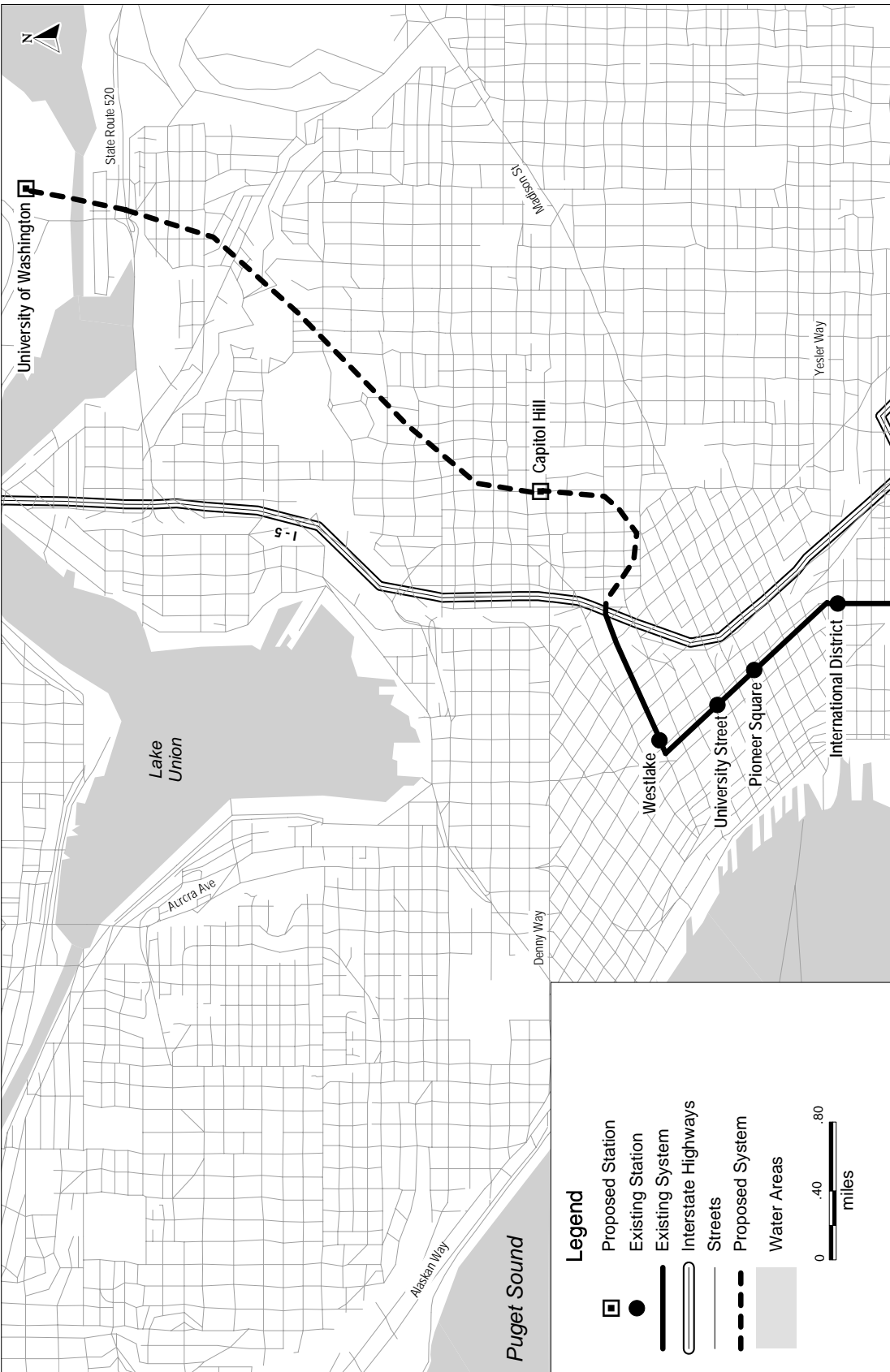
- The project's financial plan shows cash balances, reserve accounts and/or access to credit exceeding 100 percent of annual operating expenses.

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



Projects in Preliminary Engineering

South Corridor LRT Extension

Sacramento, California

(November 2006)

The Sacramento Regional Transit District (RT) is proposing to implement an extension of its existing South Corridor light rail transit (LRT) line from its current terminus at Meadowview Road south and east to Cosumnes River College (CRC), near the intersection of State Highway 99 and Calvine Road. The four-station, 4.3-mile project would operate in an exclusive, primarily at-grade right-of-way requiring six street crossings along the alignment. No additional vehicles or yard improvements would be necessary to operate the proposed service, which features 10-minute peak-period frequencies. Approximately 2,700 park-and-ride spaces would be constructed at three of the four proposed stations as part of the project.

The South Corridor LRT Extension is located within one of the fastest growing areas of Sacramento County. Additional development anticipated to the south along Route 99 and Interstate 5, and a high rate of employment growth forecasted for downtown Sacramento, have created the need for additional peak-period transportation capacity between the Sacramento region's southern communities and its central business district (CBD). By extending existing LRT service south and providing new park-and-ride opportunities in the corridor, the South Corridor LRT Extension project is intended to provide an attractive alternative to private automobiles for trips destined for downtown and other areas served by the LRT system. Further, the project is anticipated to help the region meet its air quality goals, as well as facilitate economic development opportunities along the alignment.

Summary Description

Proposed Project:	Light Rail Transit 4.3 Miles 4 Stations
Total Capital Cost (\$YOE):	\$226.25 Million
Section 5309 New Starts Share (\$YOE):	\$113.13 Million (50.0%)
Annual Forecast Year Operating Cost:	\$12.10 Million
Ridership Forecast (2030):	11,300 Average Weekday Boardings 2,600 Daily New Riders
Opening Year Ridership Forecast (2010):	7,400 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

Project Development History and Current Status

The South Sacramento Corridor was identified as a candidate for a future extension of LRT during RT's 1991 *Sacramento Systems Planning Study*. Following completion of a Draft Environmental Impact Statement (EIS) in 1995, the RT Board adopted a locally preferred alternative for LRT improvements in the South Sacramento Corridor. In response to funding constraints, RT decided to implement the South Corridor LRT in two phases. A minimum operable segment from downtown Sacramento to Meadowview was advanced first and opened for service in September 2003.

RT re-evaluated candidate corridors for additional LRT extensions in its 2000 *Multi-Corridor Study*. This study confirmed the South Corridor as the highest priority corridor for further LRT extension. Following a reduction in project scope and cost, work with local stakeholders to further identify transit-oriented development opportunities in the corridor, improvements to the project's baseline alternative against which to measure the benefits of the proposed extension, and refinements to the project's management plan, RT submitted a complete PE request for the South Corridor LRT Extension project in August 2004. The project was approved into PE in February 2005. An environmental Record of Decision is anticipated in mid-2007.

Significant Changes Since FY 2007 Evaluation (November 2005)

The capital cost of the project has increased by nearly \$30 million, as a result of greater detail obtained during preliminary engineering and refinement of real estate and utility requirements. RT also updated the project's travel forecast to reflect a 2030 design year.

Project Justification Rating: Medium

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

Cost Effectiveness Rating: Medium

The *Medium* rating reflects the level of travel-time benefits (2,300 hours each weekday) relative to the project's annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$15.36*
Incremental Cost per Incremental Trip	\$13.59

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

Travel forecasts show that nearly three-quarters of all travel time benefits generated by the South Corridor LRT Extension project are attributable to commuters destined for downtown Sacramento, with LRT providing service that is competitive with express bus travel times on congested highway facilities for such trips. Given the provision of park-and-ride facilities along the alignment (particularly the 2,000-space lot at Cosumnes River College just off of Route 99, a major parallel facility for travel downtown), a significant level of travel-time benefits are attributable to this market. Approximately 10 percent of travel-time benefits are for trips destined for the corridor itself, with reverse-commute trips ending at Cosumnes River College representing the largest single corridor market.

Project costs are relatively modest, owing to the short distance of the line and the absence of need for additional vehicles or maintenance facilities. The project cost increase is primarily attributable to inclusion of a parking structure, a three month shift in the schedule, and more refined cost estimation. Further project development and assessment of risk in the project's scope, schedule, and budget, scheduled for early 2007 may result in additional corrections to the project schedule and to assumptions regarding environmental mitigation, commodity prices, financing methods and inflation rates.

Transit-Supportive Land Use Rating: Medium-Low

The *Medium-Low* land use rating is based upon the *Medium* rating for transit-supportive land use policies, the *Medium* rating assigned to the performance of these policies, and the *Low* rating for existing land use.

Existing Land Use: Low

- Regional development is centered around downtown Sacramento, where 40 percent of regional employment is located. The northern end of the South Corridor project serves this area.
- The South Corridor LRT Extension would connect Cosumnes River College to downtown Sacramento. Station area residential densities are low to moderate, averaging approximately 5,100 people within ½ mile of proposed stations. The current number of employees within ½ mile of proposed station areas is approximately 1,800. Employment in the Sacramento CBD, to which the project provides a direct connection, is about 103,600.
- There are significant pockets of vacant land in the station areas. Station areas currently have limited pedestrian connectivity, with circuitous pedestrian routes and large lots between adjacent uses and proposed stations.
- Parking is generally available in the corridor. Institutional and retail developments are on or adjacent to large parking lots.

Transit-Supportive Plans and Policies: Medium

- SACOG, the metropolitan planning organization, has led a multiyear public-oriented regional visioning process called “Blueprint” to educate the public about smart growth initiatives. The city of Sacramento is beginning to implement policies to encourage infill development.
- Two stations highlight renewed commitment to focus development around stations. The plan for the College Square development near the proposed CRC station has incorporated neighborhood retail and housing linked by pedestrian pathways and plazas. The proposed Morrison Creek station provides a significant development opportunity. Transit-supportive site plans and community plans are being initiated. The light rail project would incorporate new pedestrian bridges and paths to link other corridor stations with existing residential neighborhoods.
- The city of Sacramento has adopted transit-oriented overlay zoning, which provides for higher densities near transit stations, a minimum of 0.4 floor area ratio, and 15 dwelling units per acre, that supports transit-oriented uses and design principles.
- RT’s joint development program has demonstrated progress in recent years. Several requests for proposals are being initiated. Studies for additional projects along the existing South Sacramento Corridor LRT line are currently being performed. Reports of the development review process indicate rejection of some non-transit-supportive projects near the proposed stations.

Performance and Impacts of Policies: Medium

- Some impacts of transit-oriented policies are beginning to be demonstrated. The College Square development has incorporated internal pedestrian paths, neighborhood-oriented retail, and housing, and is under construction at the Cosumnes River College Station.
- Growth is occurring in the general vicinity of the corridor. The proposed Morrison Creek station highlights the strongest potential for linking the proposed investment with new development opportunities planned adjacent to the station.

Other Project Justification Criteria

Mobility Improvements Rating: Medium		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2025) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	1,800 3,100 650 (15%) 450* 200* <u>New Start vs. Baseline</u> 3.38*	
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide (CO) Particulate Matter (PM ₁₀) 8-Hour Ozone (O ₃) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 6 2 3 0 773 <u>EPA Designation</u> Maintenance Area* Moderate Non-Attainment Area* Serious Non-Attainment Area* 11,542	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$1.121*	\$1.077*

* 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

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

Section 5309 New Starts Share of Total Project Costs: 50%

Rating: Medium

RT is requesting a 50 percent New Starts share of total project costs, which results in a *Medium* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$113.13	50.0%
Flexible Funds (CMAQ)	\$7.10	3.1%
STIP Funds*	\$4.31	1.9%
State:		
Traffic Congestion Relief Program	\$66.00	29.2%
Local:		
Laguna Community Facilities District (LCFD)	\$0.80	0.4%
Vineyard Public Facilities Financing Plan	\$3.99	1.8%
Measure A Sales Tax Developer Fee	\$30.93	13.7%
Total:	\$226.25	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.

*STIP funds are state-administered Federal flexible funds augmented by state gas tax and other revenues. These funds are passed from the state to local transportation agencies as STIP funds, but all Federal requirements apply.

Capital Finance Plan Rating: Medium

The capital finance plan is rated *Medium*, based upon the average of the ratings assigned to each of the subfactors listed below. The completeness of the capital plan and the commitment of capital funds subfactors are rated *Medium-High*. The remaining subfactors are rated *Medium*.

Agency Capital Condition: Medium

- The average age of RT's bus fleet is 6.4 years, which is younger than the industry average.
- RT's good bond ratings, which were issued in December 2003, are as follows: Moody's Investors Service Aaa.

Completeness of Capital Plan: Medium-High

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

Commitment of Capital Funds: Medium-High

- Approximately 33 percent of the non-New Starts funding is committed or budgeted, and the remaining sources are planned. Sources of non-New Starts funding include Federal Flexible Funds (CMAQ), State Transportation Improvement Program (STIP) funds, State Traffic Congestion Relief Program funds, and funds from the Elk Grove/West Vineyard Transit Development Fee, the Laguna Community Facilities District, and the Measure A Developer fee.

Capital Funding Capacity: Medium

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit that would allow RT to cover cost increases or funding shortfalls equal to or greater than 25 percent of the project costs.

Capital Cost Estimate and Planning Assumptions: Medium

- Assumptions in the capital plan are generally in line with historical experience.
- Capital cost estimates are in line with similar, recently constructed projects.

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. The commitment of operating funds subfactors is rated *High*; current operating condition and plan completeness are rated *Medium-High*; and the operating funding capacity and operating cost estimates and planning assumptions subfactors are rated *Medium*.

Agency Operating Condition: Medium-High

- RT's current ratio of assets to liabilities as reported in its most recent audited financial statement is 1.53.
- RT is in good operating condition, with no recent service cutbacks or cash flow shortages.

Completeness of Operating Plan: Medium-High

- The operating plan was complete and included a 20-year cash flow statement, eleven years of historical data, a sensitivity analysis and identification of all key assumptions.

Commitment of Operating Funds: High

- More than 75 percent of the funds needed to operate and maintain the proposed transit system is committed or budgeted, and the remainder is planned. Sources of funds include fare revenues, State transit assistance, and dedicated sales tax revenues.

Operating Funding Capacity: Medium

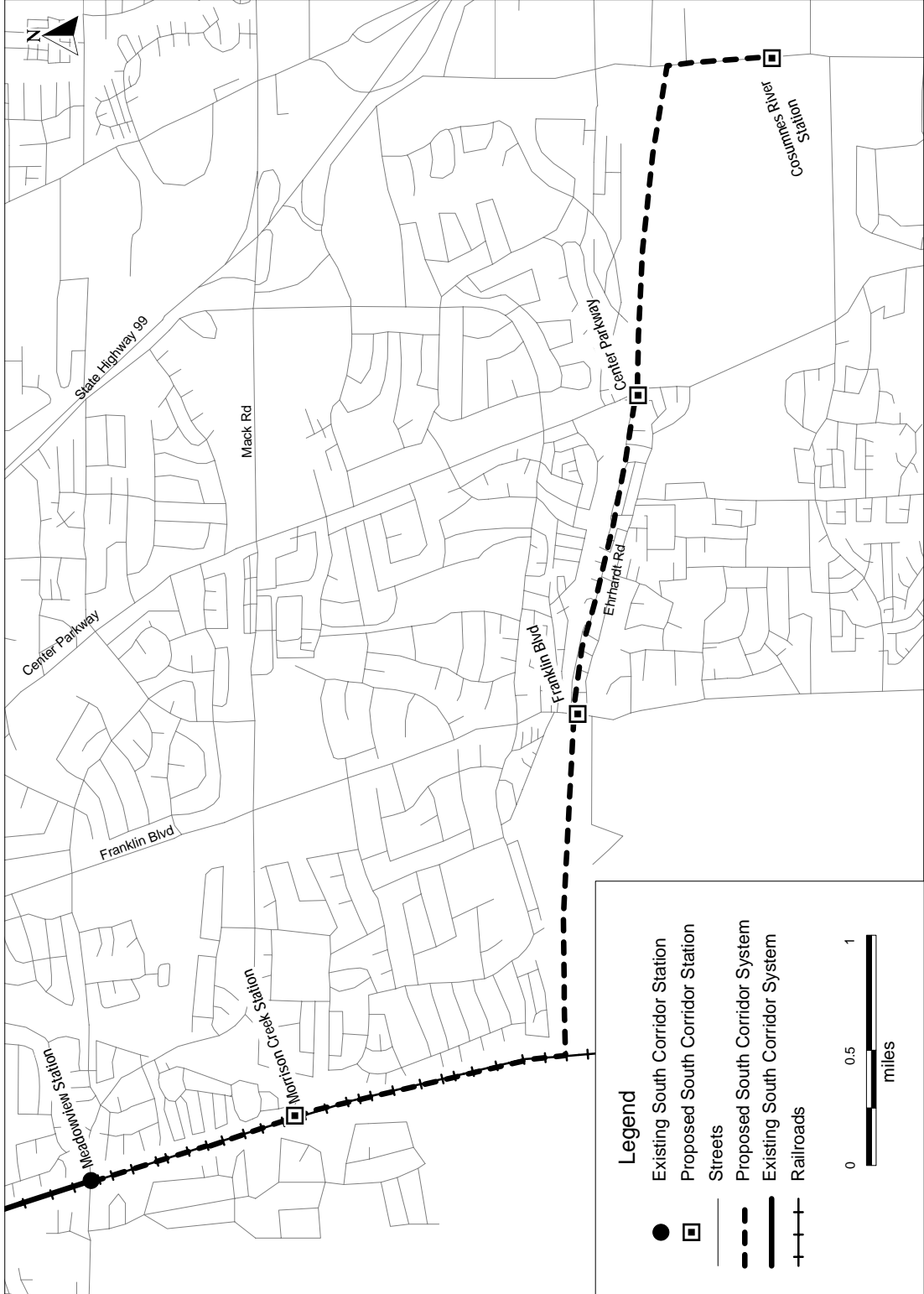
- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit exceeding 12 percent of annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium

- RT's assumptions regarding fare revenues, sales tax revenue growth, and operating costs are consistent with historical experience.

South Corridor LRT Extension

Sacramento, California



Central Subway

San Francisco, California

(November 2006)

The San Francisco Municipal Railway (Muni) and the San Francisco County Transportation Authority (SFCTA) are planning the Central Subway project, a 1.7-mile extension of the Third Street light rail transit (LRT) line (currently under construction) from its termini at Fourth and King Streets, north under Market Street and into Chinatown in the San Francisco central business district (CBD). Three new stations would be constructed along the Central Subway alignment and four light rail vehicles would be purchased to augment the existing fleet. When completed, the combined Third Street LRT / Central Subway project would provide a continuous 7-mile light rail system connecting the heavily transit-dependent communities of Bayshore in the south with Chinatown in the north, restoring a continuous transportation link that was lost when the Embarcadero Freeway was destroyed by the Loma Preita earthquake in 1989.

The Financial District, Union Square, and Chinatown have a very high level of existing transit service. Bus routes that serve the project corridor operate on two-minute headways during peak hours and typically carry passenger loads which are at or above capacity. Currently, commuter rail passengers from the south must board these crowded buses operating on congested roadways or walk over a mile from the CalTrain Station to reach the CBD. The Central Subway project would provide a high-capacity rapid transit link between these areas. Implementation of the Central Subway project is further expected to help carry large crowds attending events at the Moscone Center and SBC Park (home of the San Francisco Giants) and support redevelopment opportunities in the South of Market area (SOMA).

Summary Description	
Proposed Project:	Light Rail Transit 1.7 Miles 3 Stations
Total Capital Cost (\$YOE):	\$1,410.75 Million (includes \$152.5 million in finance charges)
Section 5309 New Starts Share (\$YOE):	\$762.20 Million (54.0%)
Annual Forecast Year Operating Cost:	Not Available
Ridership Forecast (2030):	44,700 Average Weekday Boardings 21,500 Daily New Riders
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium-High
FY 2008 Overall Project Rating:	Medium

Division H of the Consolidated Appropriations Act, 2005, includes language directing FTA to permit Muni to use local funding expended for the construction of the Third Street LRT project as match for the Central Subway. This action reduces the overall New Starts share from 54 percent for the Central Subway project alone to less than 38 percent of the cost of the combined projects.

The project has been in preliminary engineering (PE) for over four years. The project's opening year has slipped by nearly the same amount of time, while significant uncertainties regarding the project's scope and financial plan remain. Muni must identify an implementable project scope and realistic schedule for completing PE and securing necessary local funding commitments, and further clarify the operations and maintenance (O&M) cost assumptions used to calculate project cost effectiveness, by September 30, 2007 or be removed from PE status.

Project Development History and Current Status

In October 1996, Muni began preparation of a Draft Environmental Impact Statement (EIS) for the Third Street/Central Subway light rail line. Because of their phased implementation, the two segments are considered separate projects, and FTA issued a Record of Decision on the Third Street alignment in 1998. FTA approved the Central Subway project into PE in July 2002. Since then, Muni has modified the project alignment and examined alternative tunneling scenarios. Muni is currently undertaking a value engineering study to examine ways to lower the project's total capital cost, which is likely to result in further scope changes that are not reflected in this evaluation. NEPA work had been suspended, but a Supplemental Draft EIS is expected to be initiated in late 2006, with completion anticipated by mid-2008.

Significant Changes Since FY 2007 Evaluation (November 2005)

Muni revised the project's capital cost estimate to reflect increased finance costs; a revised construction schedule; added contingencies; a higher inflation rate; and a more comprehensive construction cost estimate. Muni further changed the operating plans for the project and its baseline alternative to reflect anticipated operation of the Third Street LRT opening in 2007. The systemwide O&M cost estimate used in calculating project cost effectiveness and operating efficiencies has changed significantly as a result of the new operating plans, and has not been fully justified. Muni also used updated 2030 regional land use forecast to support the project's travel forecast.

Project Justification Rating: Medium-High

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

Cost Effectiveness Rating: Medium-Low

The *Medium-Low* cost effectiveness rating reflects the level of travel-time benefits (7,800 hours each weekday) relative to the project's annualized costs. Given the uncertainty of the project scope and the assumed systemwide O&M costs, this estimate of project cost effectiveness carries considerable risk.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$25.12*
Incremental Cost per Incremental Trip	\$9.78

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

The Central Subway provides a new direct transit link between the San Francisco CBD and southeastern San Francisco, and provides an improved connection between these areas and CalTrain and other commuter services from the region's South Bay area. Without the Central Subway, commuters from Mission Bay, Bayview, and the South Bay destined for Chinatown and Union Square must travel along the circuitous Embarcadero alignment to reach Market Street on the far eastern end of the CBD, or transfer to local bus service at King Street. The proposed project provides a more direct connection to downtown and eliminates transfers for riders originating within the City; fully one-third of work trip benefits are attributable to this market. The project also generates a significant level of travel time benefits for reverse commute trips to industrial areas in the Third Street corridor. Approximately 85 percent of forecast benefits are attributable to San Francisco residents; the remainder of benefits accrue to residents from other jurisdictions in the region taking advantage of improved LRT connections to CalTrain and BART. Over 40 percent of benefits accrue to low-income households.

The current capital cost estimate is considered reliable and includes sufficient contingencies provided that identified cost reduction measures are realized. These measures are expected, however, to result in significant scope changes and the need for additional environmental review.

Transit-Supportive Land Use Rating: High

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

Existing Land Use: High

- Population density is approximately 53,600 people per square mile in the corridor, and total employment in project station areas is approximately 217,600 jobs.
- The San Francisco CBD is the densest and most transit accessible downtown on the west coast. Union Square is the primary retail district in the city with dense pedestrian and transit-oriented development. Chinatown has extremely dense concentrations of residential units, retail, and some office and small-scale industrial uses.
- Available parking in the corridor is generally on-street, with some off-street parking for commuters and city-owned parking garages for commuters and shoppers. The daily cost to park in city-owned lots in the corridor is high, ranging from \$20 to \$30 per day.

Transit-Supportive Plans and Policies: Medium-High

- While the city and entire Bay Area have a number of physical constraints to growth such as topographical limitations, it does not have a unified or enforceable growth management policy.
- San Francisco's *General Plan* has long encouraged higher-density and transit-oriented development. The city is undertaking additional planning initiatives to focus higher-intensity growth in transit corridors. The city is considering zoning changes that would require residential community-oriented retail development near transit nodes.
- The city's zoning regulations are intended to maintain a medium to high-density profile and scale, with a mixture of land uses in many areas. The city's plan generally supports transit-supportive densities. There are no minimum parking requirements or off-street parking provisions in the CBD and other major employment areas.
- The City of San Francisco Redevelopment Agency employs a number of special tools to help implement land use policies contained in the city's *General Plan* such as tax increment financing, special land acquisition rules, and special land assembly abilities.
- San Francisco's existing land use pattern includes the densest development along its major transportation corridors. The objective of the City Planning Department and directing codes and ordinances is to reinforce this pattern of development along corridors that have high transit capacity such as the Central Subway corridor. Thus, land use planning in the Central Subway corridor is focused more on the corridor and neighborhood level than around individual stations or stops.

Performance and Impacts of Policies: High

- The existing high-density development and pedestrian accessibility in the City of San Francisco demonstrates the strength of city policies and market forces at achieving transit-oriented intensities and urban design. The number of jobs in the San Francisco CBD has doubled since the 1970s with no increase in the volume of traffic entering the area.
- The South of Market area within the New Central Subway corridor is expected to experience strong growth over the next two decades, with high density residential, high-tech office, and a variety of retail uses continuing to fill in sites formerly occupied by industrial uses.

Other Project Justification Criteria

Mobility Improvements Rating: Medium-High		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	217,600 350,500 6,400 (19%) 72,500* 2,100* <u>New Start vs. Baseline</u> 2.68*	
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide (CO) 8-Hour Ozone (O ₃) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 1 9 3 0 429 <u>EPA Designation</u> Maintenance Area* Marginal Non-Attainment Area* 4,079	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.773*	\$0.773*

* 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

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

Section 5309 New Starts Share of Total Project Costs: 54%

Rating: Medium

Division H of the Consolidated Appropriations Act, 2005, permits Muni to use non-New Starts funds expended for the Third Street LRT project as match to the Central Subway. While the New Starts share rating reflects the Central Subway project alone (\$1,410.7 million), the legislative language lowers the New Starts share to approximately 38 percent of the total costs of the combined Third Street/Central Subway project (\$2,010.7 million).

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$762.20	54.0%
STIP Funds	\$92.20	6.5%
State:		
Traffic Congestion Relief Plan	\$14.00	1.0%
Local:		
Proposition B/K Sales Tax Funds	\$126.00	8.9%
Other Local Sources	\$416.35	29.5%
Total:	\$1,410.75	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.

*STIP funds are state-administered Federal flexible funds augmented by state gas tax and other revenues. These funds are passed from the state to local transportation agencies as STIP funds, but all Federal requirements apply.

Capital Finance Plan Rating: Medium

The capital finance plan is rated *Medium* based upon the average of the subfactor ratings. The commitment of capital funds subfactor was rated *High*; the capital condition was rated *Medium-High*; the completeness subfactor was rated *Medium*; and the capital funding capacity subfactor was rated *Low* and the capital cost estimates and planning assumptions was rated *Medium-Low*.

Agency Capital Condition: Medium-High

- The average age of Muni's bus fleet is 5.4 years, which is younger than the industry average.
- Muni's good bond ratings, which were issued in June 2005, are as follows: Moody's Investors Service Aa3, Standard & Poor's Corporation AA, and Fitch AA-.

Completeness of Capital Plan: Medium

- The capital plan was reasonably complete and included a 20-year cash flow statement, a fleet management plan, five years of historical data, and a sensitivity analysis. However, the capital plan omitted some explanatory details such as identification of a funding source for \$418 million of the non-New Starts share of project costs.

Commitment of Capital Funds: High

- Over 50 percent of the Non-Section 5309 New Starts funds (Muni Third Street Light Rail and New Central Subway) have been committed and budgeted. Sources of funds include state transportation improvement program funding, traffic congestion relief funding and proposition B and K sales tax revenues.

Capital Funding Capacity: Low

- The project's financial plan does not specify how Muni intends to pay for the \$416.4 million local funding shortfall and, therefore, does not provide for any additional funding capacity to cover additional cost increases or funding shortfalls.

Capital Cost Estimate and Planning Assumptions: Medium-Low

- Several revenue assumptions are considered optimistic compared to historical data including Federal Section 5307, Section 5309 fixed guideway modernization, and CMAQ funds. Proposition K revenue assumptions are shown inconsistently throughout the plan, sometimes as YOE dollars and sometimes as current year dollars.
- Assumptions regarding project financing were lacking detail. The availability of recently-passed statewide bonding revenues for the project was not substantiated with supporting documentation.
- Despite the project being in preliminary engineering for over four years, there remains substantial uncertainties regarding the project's scope.

Operating Finance Plan Rating: Medium

The operating finance plan is rated *Medium*, based upon the averaged ratings of the five subfactors listed below. The commitment of operating funds subfactor was rated *High*; completeness of the operating plan rated *Medium-High*; operating condition was rated *Medium*; the operating cost estimates and planning assumptions subfactor was rated *Medium-Low*; operating funding capacity was rated *Low*.

Agency Operating Condition: Medium

- Muni's current ratio of assets to liabilities as reported in its most recent audited financial statement is 1.55.
- Muni is undergoing experienced some service cuts in 2005 and 2006.

Completeness of Operating Plan: Medium-High

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

Commitment of Operating Funds: High

- Over 75 percent of operating funding is committed. The main revenue sources are fares, parking fees, General Fund contributions, and sales tax and fuel assistance revenues.

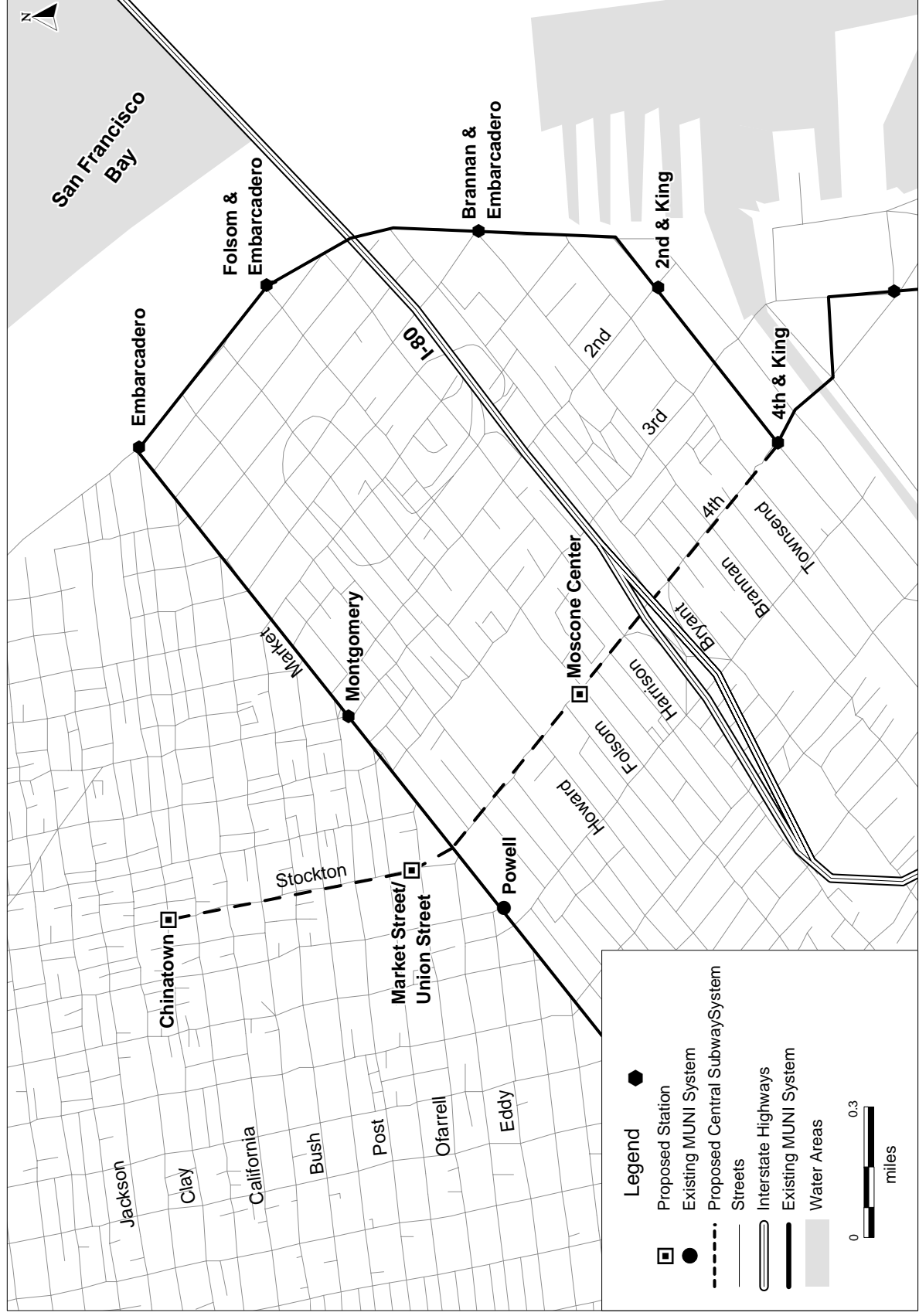
Operating Funding Capacity: Low

- The project's financial plan does not show projected reserve accounts and/or access to credit that could help fund operating funding shortfalls. The plan projects operating deficits in years 2011 to 2025.

Operating Cost Estimates and Planning Assumptions: Medium-Low

- The operating plan assumes that the systemwide operating cost will decrease with the implementation of the project, and this has not been substantiated. The operating plan assumes frequent fare increases that differ from history. However, the project has only a minimal impact on overall system-wide operating costs.
- Other assumptions are generally in line with historical experience.

San Francisco, California



Stamford Urban Transitway Phase II

Stamford, Connecticut

(November 2006)

The City of Stamford, Connecticut is proposing to extend Phase I of its Urban Transitway, currently under construction, for 0.6 miles along Myrtle Avenue to US Route 1. The facility will accommodate new dedicated bus-priority/High Occupancy Vehicle (HOV) lanes in both directions, bike pathways, sidewalks, and landscaping. Signal priority treatments at intersections will provide for local and commuter buses priority, reducing total average trip times and improving reliability for passengers. High amenity bus stops in the corridor will include real-time passenger displays. The dedicated lanes will be for the exclusive use of buses and other HOV vehicles seven days-per-week/twenty-four hours-per-day. The new facility will also accommodate direct access to Connecticut Transit's (CTTransit) bus maintenance facility from Myrtle Avenue, thereby reducing deadhead miles and improving overall system operating efficiency.

The City of Stamford has identified the need to improve bus and HOV access between the Stamford Intermodal Transportation Center (SITC), at the eastern end of the Phase I Transitway, and US Route 1. The Phase II Urban Transitway will extend the benefits of Phase I from its current Elm Street terminus to US Route 1, relieving congestion on local streets and providing fast, direct bus rapid transit-like levels of service between the SITC and the Myrtle Avenue Corridor, as well as the Glenbrook, Cove, and Shippan neighborhoods of Stamford. As with the Phase I Transitway, the City and CTTransit are committed to providing regular service along the full Transitway at peak hour headways of 10 minutes or less, stopping at high-amenity bus stops at locations to be identified following broad community consultation.

The total capital cost for the Stamford Urban Transitway Phase II project is estimated at \$40.0 million, with a proposed Section 5309 New Starts share of \$22.0 million. *Because the proposed New Starts share is less than \$25 million, the project is exempt from the New Starts criteria and is thus not subject to FTA's evaluation and rating (49 U.S.C 5309(e)(1)(B)).*

Summary Description	
Proposed Project:	Busway/HOV Extension 3,000 Feet
Total Capital Cost (\$YOE):	\$40.00 Million
Section 5309 New Starts Share (\$YOE):	\$22.00 Million (55.0%)
Ridership Forecast (2020):	N/A

Project Development History and Current Status

The need for direct access between the SITC and residential and commercial areas in the eastern and northeastern sections of the City emerged out of the *City of Stamford's 2002 Master Plan*, as well as the South Western Region metropolitan planning organization's long range transportation plan (2004-2030). The City of Stamford and CTTransit have developed a *Stamford Urban Transitway Operations Plan* to identify agency commitments and responsibilities agreed to during the design phase of the Phase I Transitway. Phase I is anticipated to open in May 2009, and the two parties will update the document to reflect operating responsibilities associated with opening of the Phase II Transitway.

FTA approved the project into preliminary engineering in May 2006, and issued a Finding of No Significant Impact for the project's Environmental Assessment in September 2006.

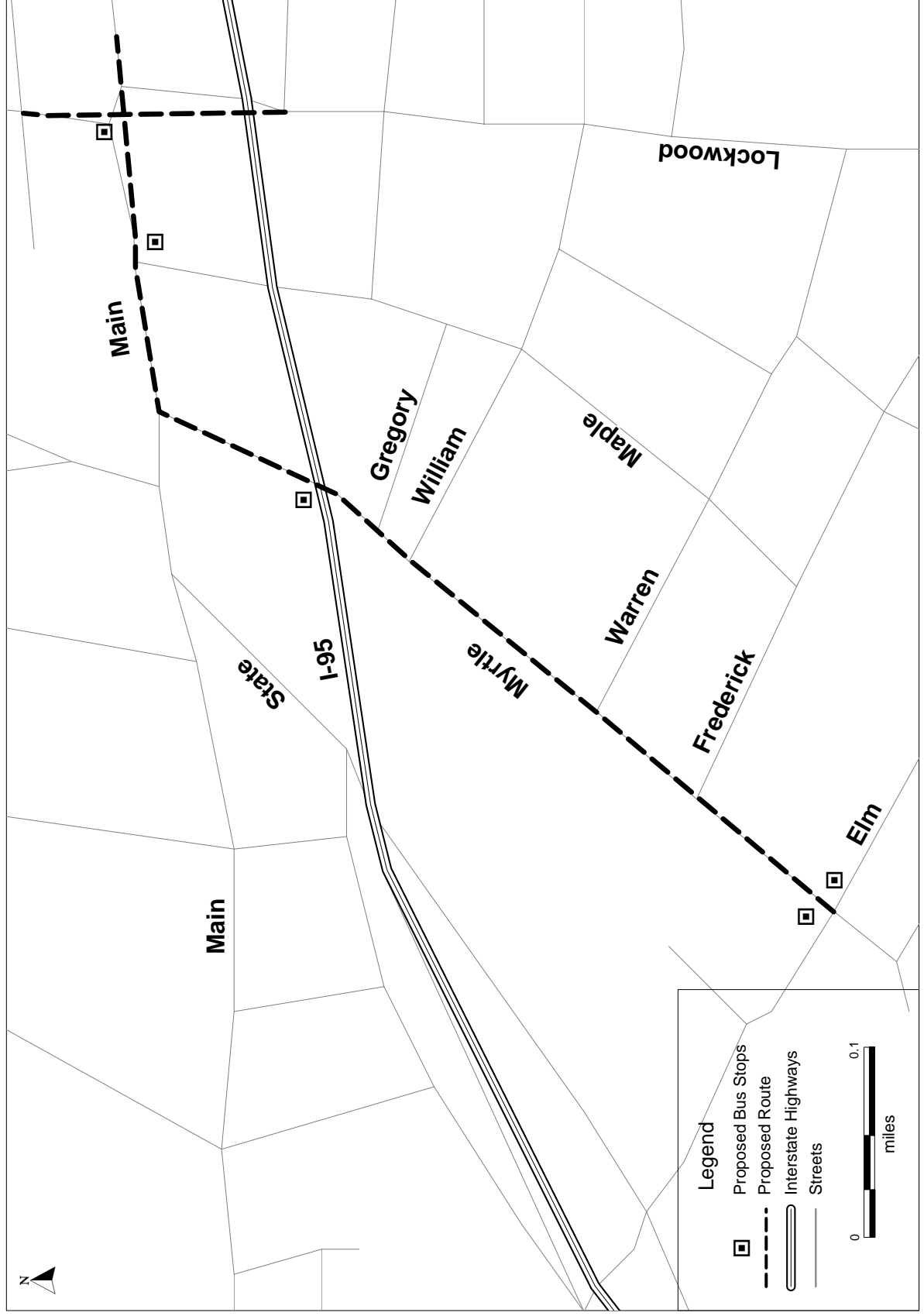
Locally Proposed Financial Plan		
<u>Proposed Source of Funds</u>	<u>Total Funding (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$22.00	55.0%
Section 5309 Bus Discretionary	\$8.80	22.0%
FHWA ITS Earmark	\$0.90	2.2%
Local:		
City of Stamford General Fund	\$8.30	20.8%
Total:	\$40.00	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.

NOTE: Report millions of dollars to the hundredths place (new requirement).

Stamford Urban Transitway Phase II

Stamford, Connecticut



Wilmington to Newark Commuter Rail Improvements

Wilmington, Delaware

(November 2006)

The Delaware Transit Corporation (DTC) proposes to implement several commuter rail improvements in the segment of the Northeast Corridor between Wilmington and Newark. The proposed Wilmington to Newark Commuter Rail Improvements project consists of three improvements intended to significantly enhance existing Southeastern Pennsylvania Transportation Authority (SEPTA) commuter rail service along the Northeast Corridor in Delaware. The proposed improvements include: (1) addition of a third track along a 1.5-mile segment, allowing for more movement along the corridor by commuter trains that must share the tracks with Amtrak and freight operations; (2) relocation of the Newark rail station to a location one-half mile east of the main line, allowing for more flexibility for trains that enter and exit the station; and (3) the purchase of two 2-car train sets, providing additional train capacity between the Wilmington and Newark stations and allowing for increased frequency and shorter headways. The changes are expected to increase ridership, improve schedule reliability, and reduce travel time.

The current estimated capital cost of the project is \$68.67 million, which includes \$24.9 million in Section 5309 New Starts funds. *Because the proposed Section 5309 New Starts amount is less than \$25 million, the project is exempt from FTA's New Starts evaluation and rating process (49 USC 5309(e)(1)(B)).*

Summary Description	
Proposed Project:	Commuter Rail Improvements 1.5 Miles, 1 Station Relocation
Total Capital Cost (\$YOE):	\$68.67 Million
Section 5309 New Starts Share (\$YOE):	\$24.90 Million (36.3%)
Ridership Forecast (2020):	5,000 Average Weekday Boardings

Project Development History and Current Status

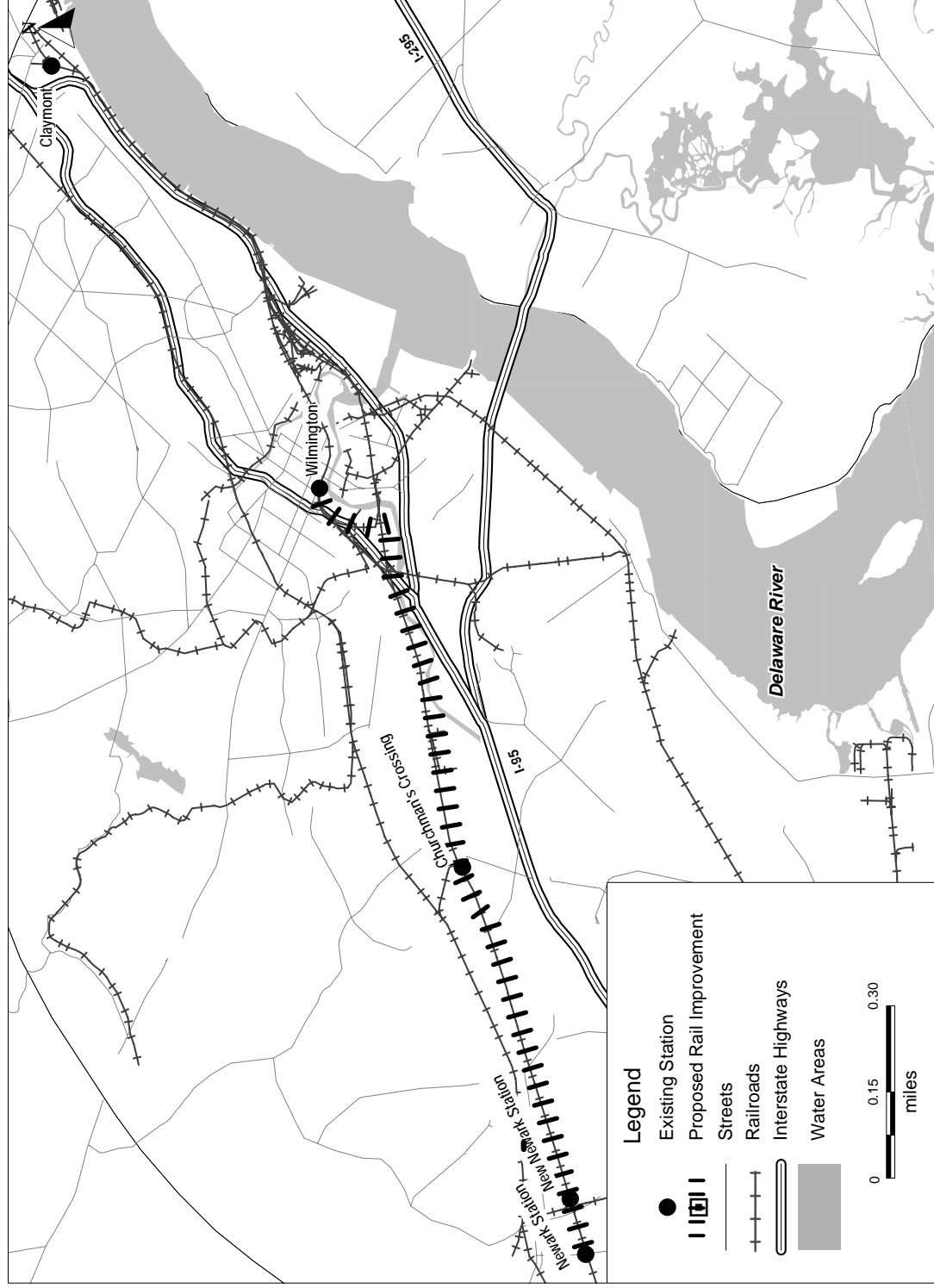
FTA approved DTC's request to enter preliminary engineering for the Wilmington to Newark Commuter Rail Improvements in April 2004. Based on additional scope and costs identified during preliminary engineering, DTC has redefined the project budget. Environmental review for the project was completed in September 2006. Start-up of the enhanced service provided for by the project is anticipated in 2010.

Locally Proposed Financial Plan		
<u>Proposed Source of Funds</u>	<u>Total Funding (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$24.90	36.3 %
FHWA Earmarks	\$9.90	14.4 %
State:		
Delaware State Transportation Trust Fund	\$33.87	49.3%
Total:	\$68.67	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.

Wilmington to Newark Commuter Rail Improvements

Wilmington, Delaware



Downtown Transit Service Enhancement Project

Jacksonville, FL

(November 2006)

The Jacksonville Transit Authority (JTA) is planning a regional bus rapid transit (BRT) system for the entire Jacksonville metropolitan area. The Downtown Transit Service Enhancement Project is the first phase to be developed and will serve as the center hub of the system. The 8.4-mile project includes increased bus service, semi-exclusive reserved bus lanes, 22 enhanced stations/stops, traffic signal priority, and real time traveler information. The project also includes the purchase of five vehicles.

The project is intended to improve transportation mobility and connectivity by increasing bus operating speeds downtown. Much of the downtown residential population and many residents of areas adjacent to the downtown are low-income and transit dependent. The project is expected to result in a 15 percent increase in bus speeds in the project corridor.

The project is estimated to cost \$15.61 million (escalated dollars), which includes a proposed Section 5309 New Starts share of \$9.36 million (60.0 percent). *Because the proposed New Starts share is less than \$25 million, the project is exempt from the New Starts criteria and is not subject to FTA's evaluation and rating (49 U.S.C 5309(e)(1)(B)).*

Summary Description

Proposed Project:	Bus Rapid Transit 8.4 Miles, 22 Stations
Total Capital Cost (\$YOE):	\$15.61 Million
Section 5309 New Starts Share (\$YOE):	\$9.36 Million (60.0%)
Annual Operating Cost (\$YOE):	\$831,600
Ridership Forecast (2025):	12,400 Average Weekday Boardings

Project Development History and Current Status

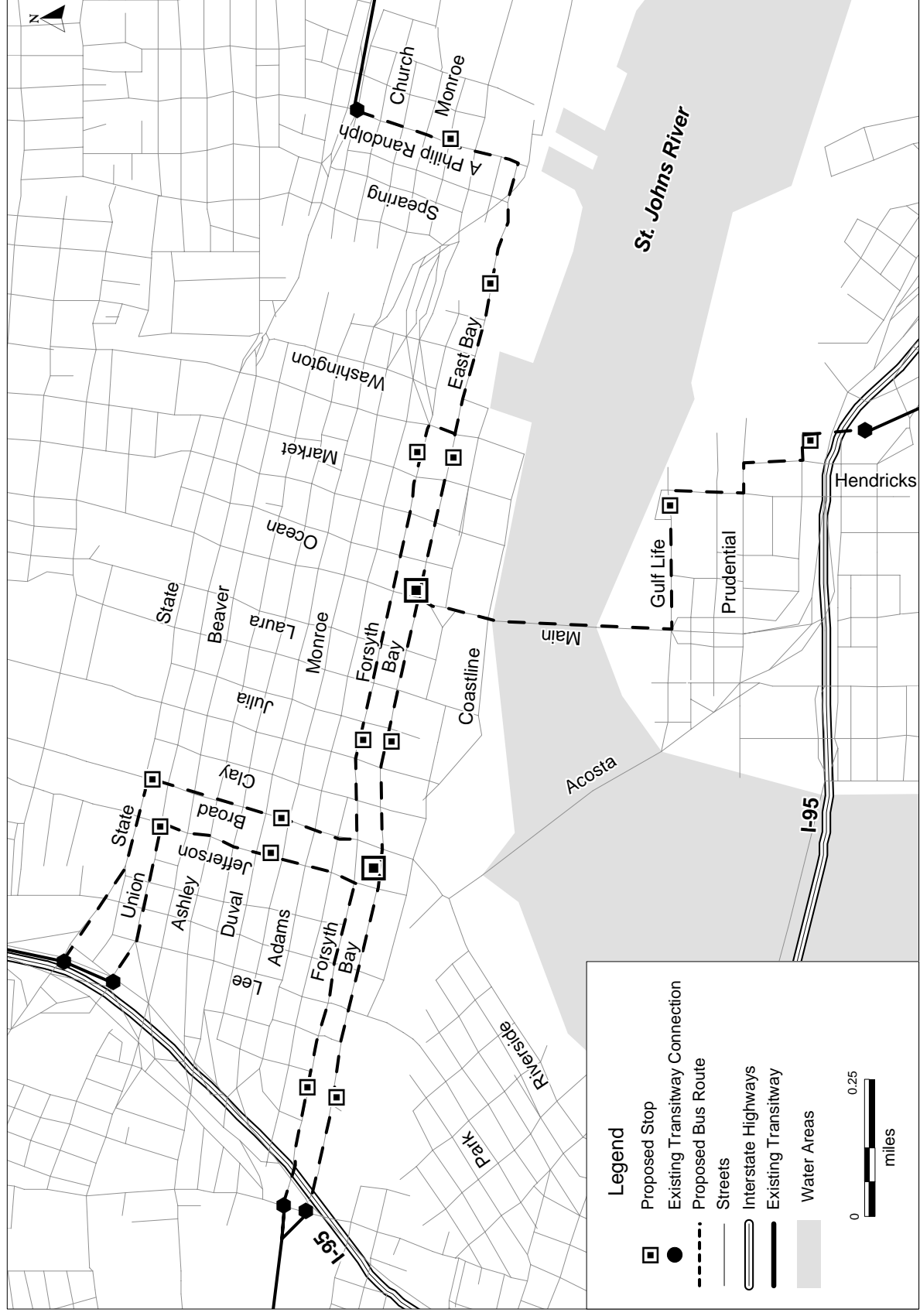
In 1999, JTA began a *Transportation Alternatives Study* which evaluated a number of corridors without regard or preference for alignment, mode, or technology. The corridors recommended for further study radiated outward from downtown but included two corridors carrying cross-town traffic. In 2000, the *Better Jacksonville Plan*, which included \$100 million for purchase of right-of-way for a rapid transit system, was approved by voters. Based on the prioritizations outlined in the *Transportation Alternatives Study*, JTA began alternatives analyses on the North/Southeast and East/Southwest corridors in 2000 and 2002, respectively. In 2005, JTA selected a regional bus rapid transit system as the locally preferred alternative that combines the two corridors. The Downtown Transit Service Enhancement Project was chosen as the first phase of the system to be developed.

JTA initiated an Environmental Assessment of the project in October 2006. FTA notified Congress of its intent to approve preliminary engineering (PE) for the project in late November 2006, and anticipates making the formal approval in December.

Locally Proposed Financial Plan		
<u>Proposed Source of Funds</u>	<u>Total Funding (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 New Starts	\$9.36	60.0%
State: Florida Department of Transportation	\$3.12	20.0%
Local: JTA Local Funds	\$3.12	20.0%
Total:	\$15.61	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.

Jacksonville, Florida



North Corridor Metrorail Extension

Miami, Florida

(November 2006)

Miami-Dade Transit (MDT) is proposing the construction of a 9.5-mile Metrorail extension along NW 27th Avenue between the existing Dr. Martin Luther King Jr. Metrorail station and the Broward County line. The project includes seven stations, seven park-and-ride lots providing a total of 4,300 spaces, and 36 railcars. Peak period Metrorail service along the North Corridor would operate at 6.5-minute frequencies.

NW 27th Avenue is one of the few continuous north-south arteries in Miami-Dade County and serves as an alternative to the severely congested north-south I-95 and State Route 826. The proposed project will provide an additional travel alternative in the corridor that will have direct connections with the existing Metrorail system, Tri-Rail (regional commuter rail), the Miami Intermodal Center, and the Miami International Airport. The project is further intended to provide direct service to the Miami central business district (CBD) and Medical Center, as well as Miami-Dade Community College-North Campus and Dolphins Stadium. The North Corridor project would provide fixed guideway rapid transit in an area with a high percentage of households with low incomes that are transit-dependent. According to 2000 Census data, 26 percent of households in the corridor have incomes below the poverty level.

Summary Description	
Proposed Project:	Heavy Rail 9.5 Miles 7 Stations
Total Capital Cost (\$YOE):	\$1,372.19 Million (includes \$56.6 million in finance charges)
Section 5309 New Starts Share (\$YOE):	\$839.09 Million (61.1%)
Annual Forecast Year Operating Cost:	\$36.84 Million
Ridership Forecast (2030):	20,300 Average Weekday Boardings 14,200 Daily New Riders
Opening Year Ridership Forecast (2012):	16,700 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

SAFETEA-LU Section 3011(e) states that FTA, "shall credit funds provided by the Florida department of transportation for the extension of the Miami Metrorail System from Earlington Heights to the Miami Intermodal Center to satisfy the matching requirements of section 5309(h)(4) of title 49, United States Code, for the Miami North Corridor and Miami East-West Corridor projects." MDT has decided to apply \$50 million of the Florida Department of Transportation's \$100 million contribution to the Earlington Heights project as credit towards the North Corridor Metrorail extension. This credit reduces the New Starts share from 61.1 percent to 59.0 percent.

MDT increased the New Starts share of project costs by over \$380 million since last year, which is of some concern to FTA. In addition, MDT updated its travel forecasts since last year. While reasonable in the aggregate, the revised forecasts exhibit a significant shift in benefiting transit markets from previous estimates of the project's transportation benefits. FTA is continuing its review of the project's travel forecasts and the underlying forecasting procedures to confirm their reliability. Finally, MDT did not

provide adequate justification for its future operating revenue assumptions. MDT must address these concerns by the time of its next evaluation or risk being rated *Low*.

Project Development History and Current Status

The project has gone through several changes, starting out as a heavy rail extension when it was approved by FTA into preliminary engineering in 1998; changing to a lower cost bus rapid transit project when a one-cent sales tax referendum was rejected by voters in 1999; and finally reverting back to a Metrorail extension when a ½-cent sales tax referendum passed in November 2002. The referendum, known as the *People's Transportation Plan* (PTP), included a list of specific projects to be funded with the additional revenues, including the North Corridor Metrorail Extension, a number of other fixed guideway projects, and a significant expansion of bus service. MDT issued a Draft Environmental Impact Statement (EIS) for the North Corridor in January 1998. A Supplemental Draft EIS was published in May 2006. The current project schedule assumes completion of NEPA and issuance of a Record of Decision in January 2007.

Significant Changes Since FY 2007 Evaluation (November 2005)

The capital cost of the project increased by nearly \$460 million due to completion of more precise preliminary engineering documents and the addition of 20 vehicles to the project scope; MDT is proposing that New Starts funding cover approximately 83 percent of this increase. The Metrorail service plan for the forecast year was also altered significantly from last year. Lastly, MDT prepared and submitted updated ridership estimates and projections of the project's travel time benefits based on a 2030 forecast year (rather than 2025).

Project Justification Rating: Medium

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

Cost Effectiveness Rating: Medium

The *Medium* cost effectiveness rating reflects the level of travel-time benefits (12,000 hours each weekday) relative to the project's annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$20.91*
Incremental Cost per Incremental Trip	\$17.78

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

Travel forecasts show that the project will significantly improve transit travel times between Broward County, north Miami-Dade County, and downtown Miami, due to faster speeds and the elimination of, or reduction in, the number of transfers currently required for travel through the corridor. A trip during the peak period from the northern terminus of the project to downtown Miami is projected to take 80 minutes by bus versus only 43 minutes on the rail project. As a result, 40 percent of the travel-time benefits of the project accrue to Broward County residents destined for locations in Miami-Dade County.

Approximately 15 percent of travel-time benefits are realized by people whose trips originate in the project corridor. Twenty-five percent of travel-time benefits of the project are experienced by the transit dependent population (those owning no automobiles).

The current capital cost estimate for the North Corridor Metrorail Extension is considered reasonable at this stage of development. However, the construction schedule is aggressive and should be reviewed closely as work continues. An extension to the schedule could result in an increase in the capital cost.

Transit-Supportive Land Use Rating: Medium

The *Medium* land use rating is based upon the *Medium-High* rating assigned to transit-supportive plans and policies, the *Medium* rating assigned to performance and impacts of the policies, and the *Medium-Low* rating for existing land use in the project corridor.

Existing Land Use: Medium-Low

- Population density within ½ mile of the North Corridor station areas is approximately 4,500 persons per square mile. The North Corridor has approximately 9,800 jobs within ½ mile of the proposed stations. The project provides direct service to the central business district (CBD), which contains approximately 69,600 jobs.
- The corridor is lined with strip commercial uses. The area immediately east and west of the strip development consists mostly of low- and medium-density residential uses. There is a high volume of pedestrian activity in the corridor despite the lack of existing pedestrian amenities.
- Parking in downtown Miami averages \$10 per day and is relatively constrained in many areas.

Transit-Supportive Plans and Policies: Medium-High

- The State of Florida Growth Management Act (SB 360) amended on June 24, 2005, establishes growth management laws to ensure critical transportation infrastructure and services are in place to accommodate future urban growth and redevelopment. The act promotes regional planning through an incentive program and provides funding for transportation investments that support growth management.
- *Miami-Dade County's Comprehensive Development Master Plan* (CDMP) incorporates policies to ensure consistency between land use plans and transportation plans. An Urban Development Boundary constrains the extension of urban services, facilities, and development to a 12-mile wide swath of land. Restoration of the Everglades appears to make the boundary binding.
- The CDMP encourages transit-oriented development and designates each station area as either a Metropolitan Urban Center or a Community Urban Center. The CDMP requires that average floor area ratios (FAR) for Metropolitan Urban Centers should not be less than 3.0 at the core adjacent to transit stations and should taper to not less than 0.75 FAR at the edge. The 199th Street Station is designated as a Metropolitan Center.
- The 1978 Transit Development Ordinance established two overlay zones. The Rapid Transit Zone applies incentives for joint development with the private sector for all land owned and controlled by the rapid transit system.
- The county is in the final stages of rewriting its zoning code to include supportive zoning regulations near transit stations and standards from its *Urban Design Manual*.
- In an effort to implement the CDMP, the county has engaged in a series of planning efforts that have resulted in new zoning ordinances for transit stations.
- Tools to implement land use policies include Community Development Block Grant neighborhood target areas, Miami-Dade County's Enterprise Zone, the Miami Smart Commute Initiative, and the Florida Brownfield Redevelopment Program.
- Several efforts have been made to reach out to stakeholders, including the development of citizen-based plans for four station areas, an intergovernmental agreement to change zoning codes for the City of Miami Gardens and Opa-locka, and a Request for Expressions of Interest for a Master Developer.

Performance and Impacts of Policies: Medium

- MDT described seven joint developments that demonstrate the effectiveness of the Transit Development Zone Ordinance and Joint Development Policy.
- More than 1.6 million square feet of development have occurred and over 380 medium- and high-density units have been built adjacent to Metrorail.

Other Project Justification Criteria

Mobility Improvements Rating: Medium-High		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)		
	<u>New Start vs. Baseline</u>	
	3.65*	
Environmental Benefits Rating: Medium		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u>	
	750	
	52	
	67	
	96	
18,913		
	<u>EPA Designation</u>	
	Attainment for all pollutants	
	215,242	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.991*	\$0.926*

* 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

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

Section 5309 New Starts Share of Total Project Costs: 61%

Rating: Low

SAFETEA-LU Section 3011(e) states that FTA, “shall credit funds provided by the Florida department of transportation for the extension of the Miami Metrorail System from Earlington Heights to the Miami Intermodal Center to satisfy the matching requirements of section 5309(h)(4) of title 49, United States Code, for the Miami North Corridor and Miami East-West Corridor projects.” MDT has decided to apply \$50 million of the Florida Department of Transportation’s \$100 million contribution to the Earlington Heights project as credit towards the North Corridor Metrorail extension. While the New Starts share rating reflects the North Corridor project alone (\$1,372.19 million), application of the \$50 million credit allowed for in the legislative language lowers the New Starts share to approximately 59.0 percent.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 New Starts	\$839.09	61.1%
State: Florida Department of Transportation	\$266.55	19.4%
Local: ½ Cent Sales Tax	\$266.55	19.4%
Total:	\$1,372.19	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

The capital finance plan is rated *Medium*, based upon the average of the ratings assigned to each of the subfactors listed below. The project received a *High* score for commitment of capital funds, a *Medium-High* score for capital condition, *Medium* scores for the completeness and capital cost estimates and planning assumptions subfactors, and a *Medium-Low* score for capital funding capacity.

Agency Capital Condition: Medium-High

- The average age of MDT’s bus fleet is five years, which is significantly younger than the industry average.
- MDT’s good sales tax revenue bond ratings, which were issued in July 2006, are as follows: Moody’s Investors Service A-1, Standard & Poor’s Corporation AA-, and Fitch A+.

Completeness of Capital Plan: Medium

- The capital plan was reasonably complete and included a 20-year cash flow statement, more than five years of historical data, identification of key assumptions, and a moderate level of detail. The plan included only a limited sensitivity analysis, was missing some explanatory detail, and had inconsistencies between the written text and the cash flow statement.

Commitment of Capital Funds: High

- Approximately 97 percent of non-New Starts funding is committed. Half of the non-Section 5309 New Starts share comes from a ½-cent sales tax dedicated to transit. The remaining funds are expected to come from the Florida Department of Transportation.

Capital Funding Capacity: Medium-Low

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit that would allow MDT to cover cost increases or funding shortfalls equal to approximately 10 percent of project costs.

Capital Cost Estimate and Planning Assumptions: Medium

- Assumptions regarding the cost of replacement buses for the system are optimistic based on past trends. All other assumptions are reasonable and in line with historical experience.

Operating Finance Plan Rating: Medium

The operating finance plan is rated *Medium*, based upon the average of the ratings of the five subfactors listed below. A *High* rating was assigned to the commitment of operating funds; a *Medium* rating was assigned to completeness; *Medium-Low* ratings were assigned to the operating funding capacity and operating cost estimates and planning assumptions subfactors; and a *Low* rating was assigned to agency operating condition.

Agency Operating Condition: Low

- MDT's current ratio of assets to liabilities as reported in its most recent audited financial statement is 0.47.
- MDT has not had any recent service cutbacks. To the contrary, with the passage of the PTP, MDT has expanded service significantly over the last several years.

Completeness of Operating Plan: Medium

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

Commitment of Operating Funds: High

- Approximately 96 percent of operating funding is committed. In addition to fare revenues and other non-fare revenues generated by MDT, the agency levies a ½-cent sales tax, which is dedicated to its capital and operating programs. Other revenue sources include county and State operating assistance, and revenues from a local option gas tax.

Operating Funding Capacity: Medium-Low

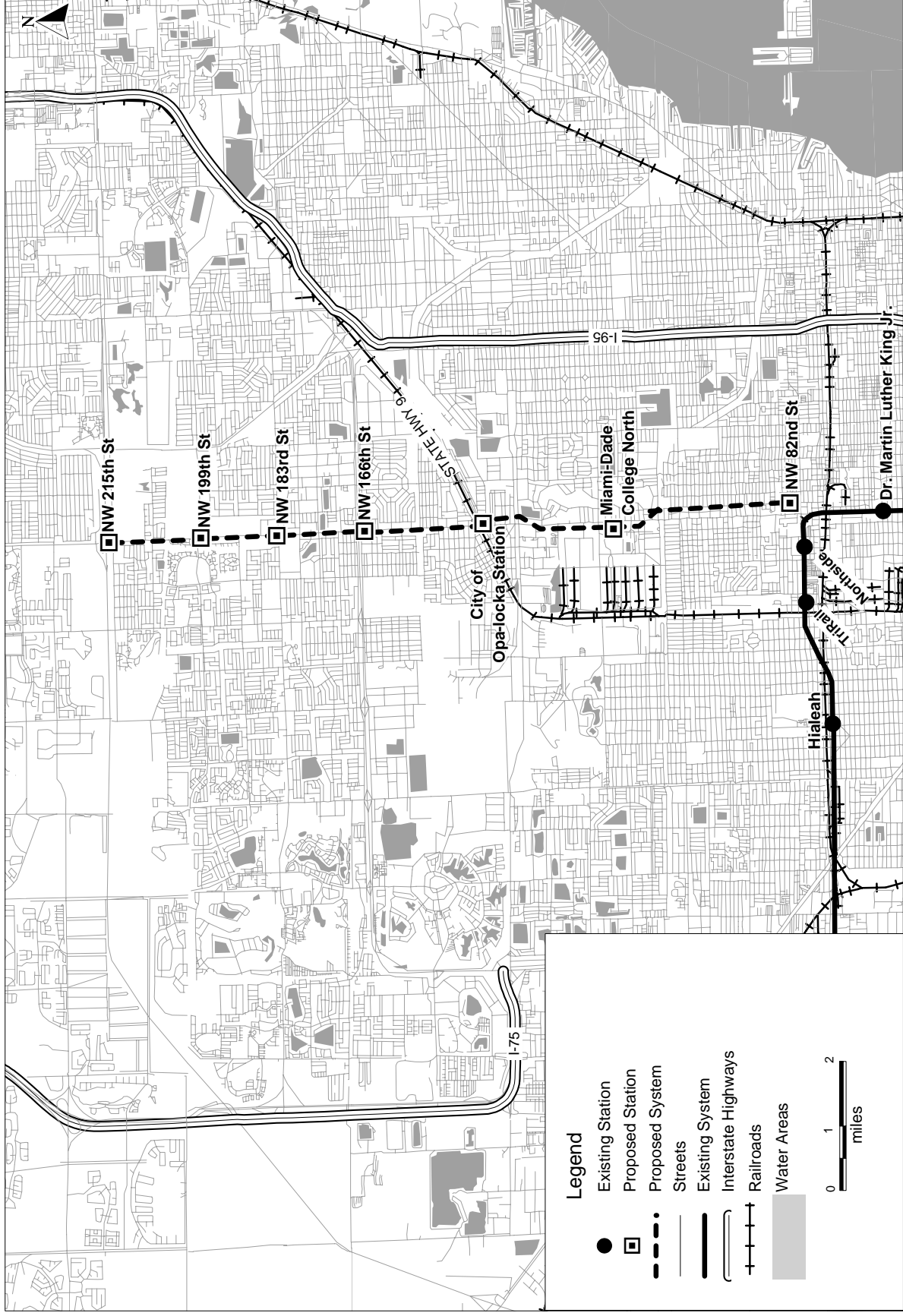
- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit of less than eight percent of annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium-Low

- Assumptions on the growth in fare revenues are very optimistic compared to historic trends. The financial plan assumes significant, frequent fare increases, but does not include a fare elasticity factor to account for the loss of ridership that occurs when fares are raised. This results in a near doubling of the farebox recovery ratio (fares as a percent of operating expenses) for the system.
- Assumptions regarding general fund subsidies are optimistic compared to historic trends.
- All other assumptions are generally in line with historical experience.

North Corridor Metrorail Extension

Miami, Florida



Silver Line Phase III

Boston, Massachusetts

(November 2006)

The Massachusetts Bay Transportation Authority (MBTA) is proposing to implement Phase III of its Silver Line bus rapid transit (BRT) system in downtown Boston. The Phase III project consists of two tunnel segments and a tunnel portal, new platforms at two existing underground rapid transit stations, and surface bus contra-flow lanes. The 0.7-mile core tunnel segment lies between the existing South Station (which connects to the Silver Line Phase II service that opened in December 2004) and Boylston Station, under Essex and Boylston Streets. This core segment includes new passenger platforms to interface with existing subway lines at the Chinatown (Orange Line) and Boylston (Green Line) Stations. The 0.4-mile portal segment extends under Charles Street to a portal at Tremont Street between Jefferson and Church Streets. From Tremont Street, the Phase III project runs east-west on surface bus contra-flow lanes on Marginal Road and Herald Street, parallel to the Massachusetts Turnpike, with a dedicated bus lane on the Tremont Street Bridge. The project links with Silver Line Phase I service on Washington Street. Thirty-seven dual-mode BRT buses would also be procured for the project. Once Phase III is implemented, the completed Silver Line would feature seven BRT routes operating at 3- to 10-minute peak-period headways.

Planned development in the Waterfront area adjacent to downtown Boston is expected to result in significant growth in travel. In addition, the opening of the Ted Williams tunnel between the Waterfront and East Boston provides for an alternative crossing from downtown and points south, east, and west to Logan Airport. By connecting the Silver Line Phase I and II projects, the proposed Phase III project would result in a one-seat ride from the South End to these destinations. The project is further intended to provide more direct east-west connections between MBTA's Green, Orange, and Red rapid transit lines (which essentially run north-south through Boston's Financial District), as well as improved mobility for a largely transit-dependent population in the Chinatown area of downtown Boston.

Summary Description

Proposed Project:	Bus Rapid Transit
	1.4 Miles
	2 Stations (add platforms at existing stations)
Total Capital Cost (\$YOE):	\$1,167.32 Million (includes \$106.75 million in finance charges)
Section 5309 New Starts Share (\$YOE):	\$699.23 Million (59.9%)
Annual Forecast Year Operating Cost:	\$24.42 Million
Ridership Forecast (2030):	147,500 Average Weekday Ridership 15,100 Daily New Riders
Opening Year Ridership Forecast (2016):	82,600 Average Weekday Ridership
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium-High
FY 2008 Overall Project Rating:	Medium

Project Development History and Current Status

In February 1993, MBTA completed an alternatives analysis/Draft Environmental Impact Statement (EIS) in the South Boston Piers corridor resulting in the selection of a 1.5-mile underground transit tunnel from Boylston Station to the World Trade Center as the locally preferred alternative (LPA). FTA issued a NEPA Record of Decision on the LPA in May 1994, and executed a Full Funding Grant Agreement on a portion of the LPA from South Station to the World Trade Center later that year. The Silver Line Phase III project is the remaining part of the 1994 LPA, combined with a continuation of a tunnel under Tremont Street to connect with Washington Street BRT service at the NEMC. FTA first approved the Phase III project into preliminary engineering (PE) in July 2002. Subsequent modifications to the underground alignment resulted in the initiation of a Supplemental Draft EIS in June 2004, which was completed in May 2005. However, continued local disagreement about the preferred portal location and project alignment prompted the MBTA to remove the Silver Line Phase III project from formal PE status in August 2005. After additional local outreach on, and analysis of, several candidate alignments, the MBTA selected the current project alignment and portal location in March 2006. Congress was notified of FTA's intent to re-approve the modified project into PE in November 2006, with formal approval expected in December. A Supplemental Final EIS is anticipated in Spring 2007, and a request to enter final design assumed in Spring 2008.

Project Justification Rating: Medium-High

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

Cost Effectiveness Rating: Medium

The *Medium* rating reflects the good level of travel-time benefits (10,100 weekday hours) generated by the project relative to its annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$21.97*
Incremental Cost per Incremental Trip	\$14.74

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

Implementation of the project would close the physical gap between Phase I and Phase II BRT service and would provide a new east-west connection between several downtown rapid transit stations. These new connections reduce the need for transfers, reduce in-vehicle travel time, and decrease walk times for many trips destined for, or through, stations along the Phase III alignment, all of which contribute to significant travel-time savings as compared to surface bus operations in the same area. Specifically, better rapid transit connections to the Financial District and the Waterfront area are each forecast to account for over 20 percent of travel-time benefits resulting from Phase III implementation. Another 15 percent of benefits are estimated to be generated by transit riders connecting to downtown and points south and east from the Green Line, who would substitute a circuitous transfer to the Red Line for a direct Silver Line connection at Boylston Station.

The current project cost estimate carries much uncertainty. While the estimate includes approximately over \$250 million in capital cost contingency, FTA has noted several errors and omissions which must be addressed early in PE. Further project definition and examination of escalation assumptions is expected to result in a more reliable, and possibly higher, cost estimate.

Transit-Supportive Land Use Rating: High

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

Existing Land Use: High

- The current number of employees within the Phase III corridor is approximately 184,600. Population density within the corridor is high, with approximately 15,500 persons per square mile.
- Downtown Boston contains major concentrations of office employment, the city's retail shopping core, most of the city's major hotels, tourist destinations, major transportation facilities and residential areas. The South Boston Waterfront features an increasing number of mixed use developments. Multiple distinct neighborhoods are linked together by Washington Street with a variety of high-density residential and commercial uses.
- Parking supply is limited in the CBD, South Boston, and Waterfront area. The typical parking rate is over \$30 per day, which is among the most expensive in the country.

Transit-Supportive Plans and Policies: High

- The Silver Line is located in an established urban environment limited to redevelopment and infill opportunities. Development in suburban areas and the urban fringe of Boston is limited in many areas by local land conservation policies and a general lack of developable land.
- The Boston Redevelopment Authority (BRA) is working to encourage greater density in commercial and residential development near public transportation. Its Transit Oriented Housing Program assists developers in the creation of high-density housing developments in areas easily accessible to transit. BRA has adopted prototype standards for transit-oriented development, which will enhance the transit-friendly characteristics of the station and surrounding neighborhoods.
- The city of Boston has deliberately constrained automobile parking over the last 50 years to encourage transit use. Boston has instituted a freeze on commercial public parking spaces in the central business district, limiting the number of public spaces in the downtown to 35,500.

Performance and Impacts of Policies: High

- The high transit and walking mode share to downtown provides strong incentives for developers to locate buildings convenient to transit. Recently completed developments within the Silver Line corridor illustrate both the density and pedestrian-orientation of new development.
- In the vicinity of the Phase III project, new development is tightly constrained by the availability of developable sites. Development proposals are already under BRA review for most of the currently feasible sites within the section. Of the total 7.44 million square feet of proposed development in the corridor, more than half are located within the downtown section of the Silver Line.

Other Project Justification Criteria

Mobility Improvements Rating: Medium-High		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2025) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	184,600 208,500 1,700 (19%) 92,300* 850* <u>New Start vs. Baseline</u> 9.45*	
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide 8-Hour Ozone Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 39 2 2 N/A 6,034 <u>EPA Designation</u> Maintenance Area* Moderate Non-Attainment Area* 78,438	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.584*	\$0.581*

* 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

The *Medium* rating for local financial commitment is based on *Medium* 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: 60%

Rating: Medium

MBTA is requesting a 60 percent New Starts share of total project costs, which results in a *Medium* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 New Starts	\$699.23	59.9%
Local: Bond Proceeds	\$361.35	31.0%
Dedicated Tax Revenues	\$106.75	9.1%
Total:	\$1,167.32	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.

Capital Finance Plan Rating: Medium

The capital finance plan is rated *Medium*, based upon the average of the ratings assigned to each of the subfactors listed below. The commitment and completeness subfactors are rated *High*; the capital condition is rated *Medium*; and the capital funding capacity and capital cost estimate and planning assumptions subfactors are rated *Medium-Low*.

Agency Capital Condition: Medium

- The average age of MBTA's bus fleet age is six years, which is younger than the industry average.
- MBTA's very good sales tax and assessment tax bond ratings, which were issued in June and August 2006, are as follows: Moody's Investors Service Aa2 and Aa1 and Standard & Poor's Corporation AAA.

Completeness of Capital Plan: High

- The capital plan was complete and contained a 20-year cash flow statement, identification of key assumptions, more than five years of historical data, supporting documentation, and an extensive sensitivity analysis.

Commitment of Capital Funds: High

- All non-New Starts funding is committed. Local funding will be derived from bond proceeds backed by dedicated sales tax revenues and assessments paid by the municipalities served by MBTA.

Capital Funding Capacity: Medium-Low

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit that would allow MBTA to cover cost increases or funding shortfalls equal to approximately 10 percent of project costs.

Capital Cost Estimate and Planning Assumptions: Medium-Low

- Some of the revenue growth assumptions included in the capital plan are optimistic compared to historical experience, particularly local assessment revenue growth.
- The capital cost estimate includes a 31 percent unallocated contingency, which is fairly conservative. However, the project scope is not well-defined and inflationary assumptions used to develop the capital cost estimate appear optimistic.

Operating Finance Plan Rating: Medium

The operating finance plan is rated *Medium*, based upon the average of the ratings of the five subfactors listed below. The commitment of operating funds is rated *High*; completeness is rated *Medium-High*; the agency operating condition and operating cost estimates and planning assumptions subfactors are rated *Medium*; and operating funding capacity is rated *Medium-Low*.

Agency Operating Condition: Medium

- MBTA's current ratio of assets to liabilities as reported in its most recent audited financial statement is 1.44.
- MBTA's operating condition is good, with no recent service reductions.

Completeness of Operating Plan: Medium-High

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

Commitment of Operating Funds: High

- All operating funding is committed. Operating funding will be derived from existing sources, including sales tax revenues and local assessments.

Operating Funding Capacity: Medium-Low

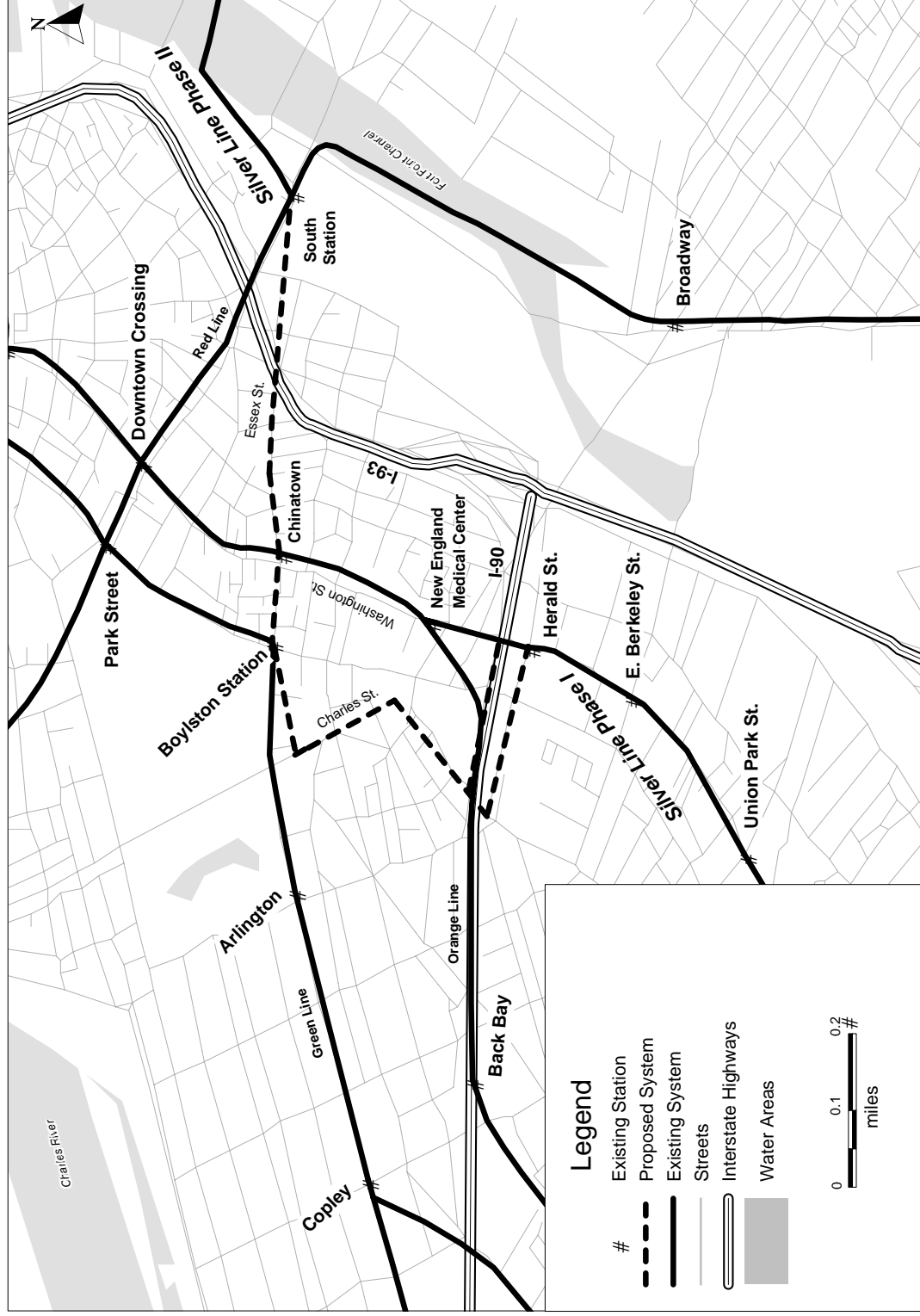
- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit of less than 8 percent of annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium

- Operating assumptions are generally in line with historical experience and, in some cases, are even more conservative than historical experience.

Silver Line Phase III

Boston, Massachusetts



Central Corridor LRT

St. Paul-Minneapolis, Minnesota

(November 2006)

The Metropolitan Council/Metro Transit (Met Council), in cooperation with the Ramsey and Hennepin Counties Regional Rail Authorities (RCRRA and HCRRA), is proposing an 11-mile, double-tracked light rail transit (LRT) line that would connect the downtowns of St. Paul and Minneapolis, while serving a number of other significant activity centers such as the University of Minnesota, the State Capitol, and major event venues (Target Center, Metrodome). From Minneapolis, the proposed Central Corridor LRT service would operate along 1.2-miles of the existing Hiawatha LRT in downtown before turning east in its own right-of-way, crossing the Mississippi River on the existing Washington Avenue Bridge to St. Paul, and following University Avenue to the State Capitol area, finally terminating at Union Depot in downtown St. Paul. The project scope includes a 0.6-mile tunnel through the University of Minnesota campus. The alignment would operate in an exclusive guideway with no mixed traffic operations. Metro Transit plans to procure 31 light rail vehicles for service which would operate at 7.5-minute peak-period frequencies.

The Central Corridor is unique among major metropolitan areas in that it links two central business districts (CBD). Residential development has surged recently in downtown Minneapolis with the addition of approximately 10,000 residential units over the last five years. The St. Paul portion of the corridor has also experienced a significant increase (300 percent) in housing densities (60-90 units/acre). Nearly 28 percent of corridor households do not own a car. The corridor also includes 6,400 persons with specialized needs and 24,700 low-income residents and persons of color. Metro Transit currently operates three bus routes within the corridor that provide local, limited stop, and express service. Corridor ridership is 25,000 daily riders today; current transit service features reverse-flow lanes in downtown Minneapolis, bus-only freeway shoulder lanes, and freeway entrance bypass ramps. But major intersections along University Avenue typically encounter Level of Service "E" and "F" conditions during peak periods. Moreover, forecast travel demand would require two-minute headways with articulated buses on an increasingly constrained transportation network; roadway expansion for the corridor is not included in the region's long-range plans. The Central Corridor Light Rail project is expected to provide better transit accessibility and faster travel times to corridor residents and employers, particularly for intracorridor trips.

Summary Description	
Proposed Project:	Light Rail Transit 11 Miles 16 Stations
Total Capital Cost (\$YOE):	\$932.30 Million
Section 5309 New Starts Share (\$YOE):	\$465.20 Million (49.9%)
Annual Forecast Year Operating Cost (\$YOE):	\$26.20 Million
Ridership Forecast (2030):	43,300 Average Weekday Boardings 6,000 Daily New Riders
Opening Year Ridership Forecast (2014):	34,300 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

Project Development History and Current Status

The RCRRA, in cooperation with the Met Council, completed an alternatives analysis/Draft Environmental Impact Statement (AA/Draft EIS) in the Central Corridor linking downtown Minneapolis and St. Paul in April 2006. LRT was selected as the locally preferred alternative. FTA notified Congress of its intent to approve the Central Corridor LRT into preliminary engineering (PE) in November 2006 and took formal approval action in December 2006. A Final EIS is scheduled for completion in 2008.

Project Justification Rating: Medium

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

Cost Effectiveness Rating: Medium-Low

The *Medium-Low* cost effectiveness rating reflects the level of estimated travel-time benefits (7,800 hours each weekday, plus special events) relative to the project's annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$24.84*
Incremental Cost per Incremental Trip	\$31.97

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

The project is intended to provide fast and reliable bi-directional transit travel times in the rapidly developing Central Corridor. Travel-time benefits accrue to three primary travel markets. The first is travelers bound for the Minneapolis CBD from St. Paul, the University, and other corridor areas. These transit riders generate nearly 40 percent of travel-time benefits because the project would provide a one-seat ride to downtown Minneapolis and, by operating in its own guideway, avoid recurring choke points along University Avenue. About half of these benefits are attributable to persons traveling to and from work. The second benefiting market includes transit riders traveling to/from the University (80,000 students, faculty and staff). Over 20 percent of project travel-time benefits are attributable to this market because the LRT would provide more direct transit access from the University to corridor areas. The majority of these benefits are expected to occur during non-peak periods. The third benefiting market includes LRT riders traveling to and from St. Paul which today commute via auto or express bus along University Avenue and Interstate 94 (both roadways run parallel between the two CBDs). Nearly 10 percent of travel-time benefits accrue to this market since transit riders would have improved access from St. Paul to Minneapolis and intra-corridor destinations. The remaining benefits include improved service to transit-dependent areas and zero-car households and LRT riders traveling to special events (sports stadia, cultural attractions, etc).

The project's cost estimate, while reasonable at this stage of development, is based on early project design documents that are only minimally developed. While the current cost estimate carries several uncertainties, the project sponsor has identified a number of cost reduction strategies that will be explored in PE. The cost estimate does not include the entirety of the costs of financing state and local debt on the project, although this does not affect its cost effectiveness.

Transit-Supportive Land Use Rating: Medium-High

The *Medium-High* rating reflects the *Medium-High* ratings assigned to existing land use, transit-supportive plans and policies and their performance and impacts in the corridor.

Existing Land Use: Medium-High

- Current total employment within a ½-mile of all station areas is estimated at 280,100 and is projected to increase to 374,300 by 2030. In 2000, CBD employment in Minneapolis was 146,500 and is expected to increase to 193,600 by 2030. CBD employment in St. Paul was estimated at 47,500 and is anticipated to increase to 77,900 by 2030. The corridor serves the largest employment centers in the region (Minneapolis and St. Paul CBDs, Target Center, State Capitol complex, University of Minnesota-St. Paul, among others).
- The current number of persons per square mile in the corridor is estimated at 8,600 persons/square mile.
- In both CBDs, virtually all streets are fully equipped with curb cuts and ADA-compliant sidewalks. Most major streets, including those with bridges, include pedestrian accommodations. The majority of major streets also have designated bicycle and pedestrian lanes.

Transit-Supportive Plans and Policies: Medium-High

- Throughout the corridor numerous station area, small area, and neighborhood plans have been adopted and contain numerous growth management strategies as a result of the 2030 Regional Development Framework Plan.
- Established regional growth boundaries (known locally as urban service boundaries), including regional investments in programs such as Livable Communities, have helped to encourage investment in higher intensity, mixed-use transit-supportive land development.
- The adopted Regional Development and Transportation Plan, the Regional Transit-Oriented Development (TOD) Handbook, the Metropolitan Council's land use grant program, and the LRT/Land Use Coordination process all support increased corridor and station area development, including pedestrian facilities and transit-friendly character.
- Numerous regulatory and financial incentives also promote transit-supportive development throughout the corridor.

Performance and Impacts of Policies: Medium-High

- There are numerous projects planned or under construction in the station areas, including mixed uses and urban villages that include increased housing densities and other transit-supportive elements.
- In 2002 a study was completed that assessed the potential for redevelopment within a ¼-mile of each proposed station area along the corridor. The report detailed redevelopment and infill development opportunities station by station. The findings revealed that the majority of planned station areas have strong TOD potential.

Other Project Justification Criteria

Mobility Improvements Rating: Medium		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	280,100 374,300 8,000 (24%) 17,800* 400* <u>New Start vs. Baseline</u> 2.24*	
Environmental Benefits Rating: Medium		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide (CO) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 49 3 1 0 1,910 <u>EPA Designation</u> Attainment* 35,920	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.454*	\$0.455*

* 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

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

Section 5309 New Starts Share of Total Project Costs: 50%

Rating: Medium

The Metropolitan Council/Metro Transit is requesting an approximately 50 percent New Starts share of total project costs, which equates to a *Medium* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 New Starts	\$465.20	49.9%
State: General Obligation Bonds	\$311.60	33.4%
Local: Ramsey County Regional Rail Auth. Hennepin County Regional Rail Auth.	\$108.90 \$46.60	11.7% 5.0%
Total:	\$932.30	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 total as listed due to rounding.

Capital Finance Plan Rating: Medium

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

Agency Capital Condition: Medium-High

- The average age of Metro Transit's bus fleet is 6.6 years, which is younger than the industry average.
- The excellent bond ratings of the funding partners (State of Minnesota, RCRRA and HCRRA), which were issued in the last two years, are as follows: Moody's Investors Service AAA, Standard & Poor's Corporation AAA, and Fitch AAA.

Completeness of Capital Plan: Medium

- The capital plan was reasonably complete and included a 25-year cash flow statement, more than five years of historical data, identification of key assumptions, and a moderate level of detail. A sensitivity analysis for the capital plan was not provided.

Commitment of Capital Funds: Medium

- Only 2.8 percent of capital funds are considered committed and the rest are considered planned. Capital funding sources include general obligation bond revenues from the State, as well as property tax bond revenues from RCRRA and HCRRA.

Capital Funding Capacity: Medium-High

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit that would allow the Met Council to cover cost increases or funding shortfalls equal to at least 50 percent of project costs.

Capital Cost Estimate and Planning Assumptions: Medium-Low

- Inflation assumptions used for the capital plan are optimistic compared to historical experience.
- The capital cost estimate is considered reasonable at this stage of development. However, more definition of scope is needed to improve cost and schedule reliability.

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. The current operating condition and the commitment of operating funds were rated *High*; completeness of the operating plan was rated *Medium-High*; the operating cost estimates and planning assumptions subfactor received a *Medium* rating; and operating funding capacity was rated *Medium-Low*.

Agency Operating Condition: High

- The Met Council's current ratio of assets to liabilities, as reported in its most recent audited financial statements, is 2.3.

Completeness of Operating Plan: Medium-High

- The operating plan was complete and included a 25-year cash flow statement, more than five years of historical data, identification of key assumptions, a moderate level of detail, and a sensitivity analysis.

Commitment of Operating Funds: High

- All operating funding is considered committed. Sources of operating funds include fare revenues, State general fund revenues, Motor Vehicle Sales Tax revenues, funds from the HCRRA and the RCRRA, Federal Section 5307 funds, and other miscellaneous sources including interest income.

Operating Funding Capacity: Medium-Low

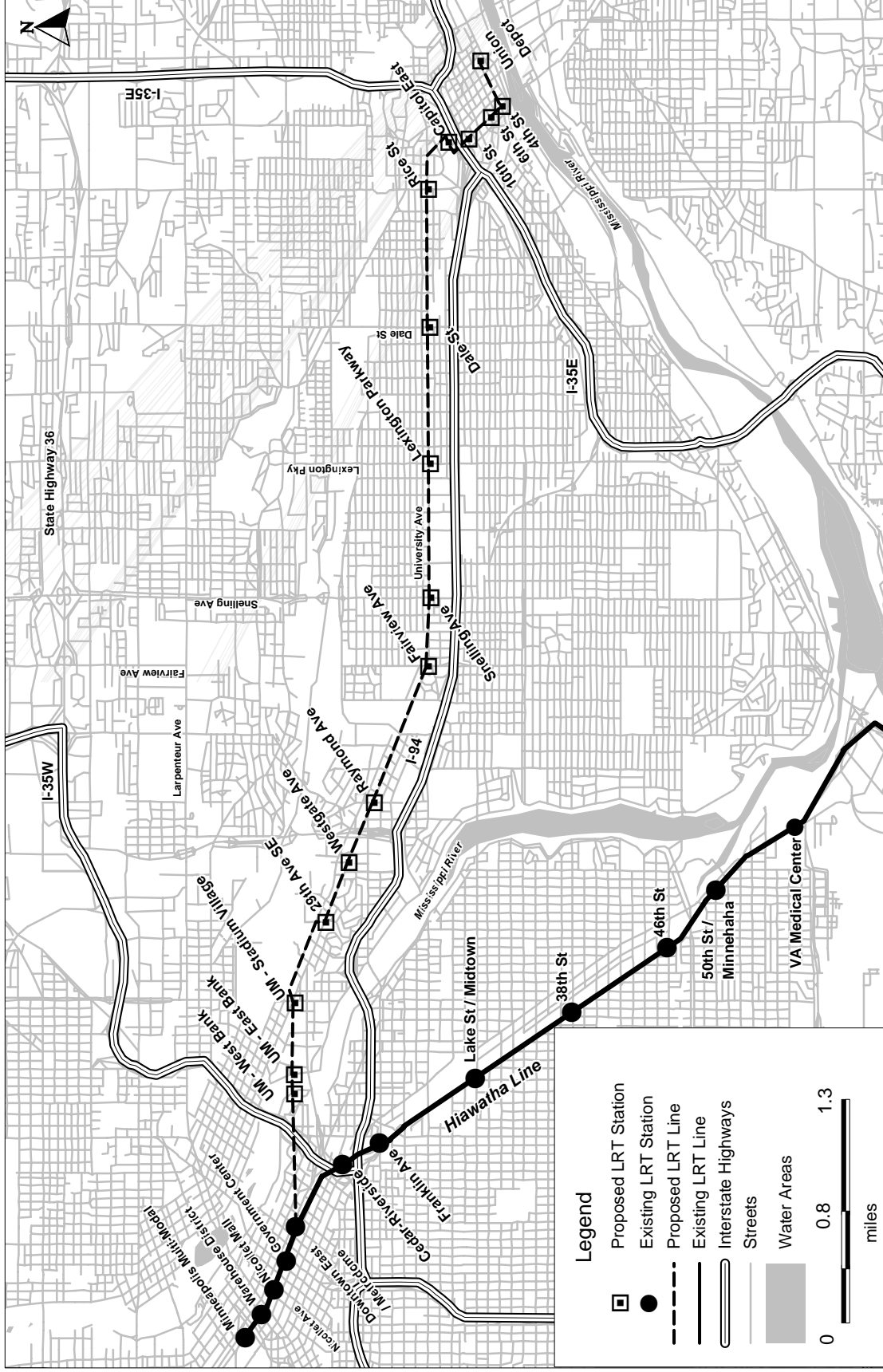
- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit of less than eight percent of annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium

- Assumptions in the operating plan with regards to inflation, fare revenues, and operating cost growth are in line with historical experience.

Central Corridor LRT

St. Paul-Minneapolis, Minnesota



Access to the Region's Core

Northern New Jersey

(November 2006)

The New Jersey Transit Corporation (NJT) is proposing to construct a new 9.3-mile commuter rail line along the existing Northeast (Rail) Corridor (NEC) between Secaucus, New Jersey and Manhattan. The Trans Hudson Express Tunnel, also known as Access to the Region's Core (ARC), includes the construction of two new tunnels under the Hudson River; new rail tracks between Secaucus Junction and New York Penn Station (NYPS); a new six-track rail station underneath 34th Street in midtown Manhattan (with pedestrian linkages to NYPS); a storage yard in Kearny, New Jersey; and the purchase of 20 rail locomotives and 200 bi-level coaches.

The Northeast Corridor (NEC) is the only Hudson River commuter rail crossing into midtown Manhattan. Already near capacity, the NEC currently experiences significant travel-time delays whenever there is a train malfunction incident; one train disruption of 15 minutes, for example, can delay as many as 15 other NJTransit and Amtrak trains. As passenger demand increases – trips between midtown Manhattan and areas west of the Hudson River are forecast to grow by 27 percent by 2030 – congestion and service reliability are expected to worsen. In addition, commuter rail passengers on NJT's Bergen County, Main, Pascack Valley, Port Jervis, and Raritan Valley commuter rail lines today must transfer at either Secaucus Junction or in Hoboken to reach New York City. The purpose of the ARC project is to double rail capacity between New Jersey and New York City, thereby relieving congestion and transit delays, while providing for more direct, one-seat service to midtown Manhattan.

Summary Description

Proposed Project:	Commuter Rail 9.3 Miles 1 Station
Total Capital Cost (\$YOE):	\$7,380.86 Million
Section 5309 New Starts Share (\$YOE):	\$3,608.67 Million (48.9%)
Annual Forecast Year Operating Cost:	\$117.8 Million
Ridership Forecast (2030):	261,000 Average Weekday Boardings 40,000 Daily New Riders
Opening Year Ridership Forecast (2016):	204,000 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium-High
FY 2008 Overall Project Rating:	Medium

FTA notes that NJT's New Starts funding request of \$3.61 billion for ARC is higher than what has ever been provided by FTA to any New Start in the history of the program. In addition, implementation of the project is contingent upon other significant but unfunded infrastructure improvements in the NEC, including the Portal Bridge over the Hackensack River, as well as the introduction of an untested vehicle technology. NJT must develop a more reasonable financial plan and schedule for the ARC project by the time of its next evaluation or risk being rated *Low*.

Project Development History and Current Status

NJT completed a major investment study on the ARC corridor in 2003. A new Hudson River rail tunnel and expanded Penn Station capacity alternative was selected as the locally preferred alternative (LPA) in early 2006. FTA approved the LPA into preliminary engineering in August 2006. Federal environmental review of the project is underway and a Draft Environmental Impact Statement is anticipated to be published in late 2006 or early 2007.

Project Justification Rating: Medium-High

The project is rated *Medium-High* for project justification based on a *Medium-Low* rating for cost effectiveness and a *High* rating for the project's strong transit-supportive land use.

Cost Effectiveness Rating: Medium-Low

The *Medium-Low* cost effectiveness rating reflects the level of travel-time benefits (84,100 hours each weekday) relative to the project's annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$24.35*
Incremental Cost per Incremental Trip	\$51.21

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

By doubling train throughput into midtown Manhattan, the Access to the Region's Core project would result not only in expanded one-seat service, but improved reliability of, and significantly reduced congestion on, NJT's commuter rail system. This added capacity – and use of dual-mode locomotives on existing diesel lines to eliminate forced transfers at Secaucus Junction and Newark – will also improve transit travel times. Over 25 percent of the project's travel time benefits accrue to Manhattan-bound passengers on NJT's Bergen County rail lines and MetroNorth's Port Jervis Line who, in the absence of ARC, would need to transfer trains at Secaucus. The outlying non-electrified portions of the Morris & Essex Line, the Montclair-Boonton Line, and the North Jersey Coast Line also benefit from additional one-seat ride service; Manhattan-bound passengers on these lines account for over one-third of the project's travel time benefits. As a result of less congestion and increased train frequency, Manhattan-bound Northeast Corridor Line passengers account for just under 20 percent of the project's travel time benefits. Approximately 10 percent of the project's benefits accrue to Manhattan-bound passengers on NJT's Raritan Valley line, which is extended beyond its current terminus at Newark Penn Station to NYPS. Finally, another 10 percent of the project's travel time benefits accrue to reverse commuters and New Jersey intra-state riders who take advantage of increased frequency of train service throughout NJT's commuter rail network.

NJT has put together an experienced design team and performed a thorough analysis of project requirements. The project scope is complex, and some uncertainties remain. However, at this early stage of project development, scope and cost are considered reliable. NJT has an optimistic and aggressive schedule for project implementation. Significant Federal environmental review and local funding decisions lie ahead for both this project and other infrastructure improvements upon which the ARC project is dependent. Agreements with Amtrak and local utilities are also potential sources of schedule uncertainty and possible delays, which may result in project cost increases. The dual-mode locomotives assumed in the project scope and operating plan have never before been used in the United States or by any passenger or commuter rail service in the world. The current project cost estimate does not include finance costs incurred by the Port Authority of New York and New Jersey (PANYNJ), the primary local funding partner; however, this does not affect the cost effectiveness of the project.

Transit-Supportive Land Use Rating: High

The project's *High* land use rating reflects the *High* rating assigned to existing land use and transit supportive land use plans and policies and the *Medium-High* rating assigned to the performance and impacts of land use policies.

Existing Land Use: High

- The terminus station area has a total population of approximately 44,000. Almost 409,000 employees worked in proposed station areas in 2000. Thus, the number of residents and workers within walking distance of the stations is supportive of very high rates of transit usage.
- Employment density is very high in the station area with over 340,000 jobs per square mile and population density exceeds 36,000 persons per square mile.
- Development throughout the station area is pedestrian-oriented with multi-story and mixed-use buildings and minimal or no setbacks.
- Numerous commercial uses, both retail and office, are major trip generators within the station area.
- Parking policies discourage parking in the area and parking costs are high, which serve as an effective disincentive to automobile use.

Transit-Supportive Plans and Policies: High

- New York City policies and market conditions continue to encourage dense office development, which is among the highest densities in the world.
- The State of New Jersey emphasizes in-fill development near transit and several communities with NJT stations participate in the state's Transit Village Initiative that provides technical and financial assistance to those communities which demonstrate that their zoning codes and redevelopment plans support the density to maximize transit usage.
- NJT has devoted significant resources to improving pedestrian access to the commuter rail system, rehabilitating aging stations, and building new facilities.

Performance and Impacts of Policies: Medium-High

- The intensive development, pedestrian-friendly character, and high rates of transit usage in the corridor reflect the impact of land use policies and the application of such tools as zoning, floor area bonuses, and tax incentives. These measures have worked collectively with market forces to create existing, highly transit-supportive development patterns in the corridor.
- New York City's zoning regulations have achieved improvements to the pedestrian environment in dense areas and resulted in street-level retail, as well as clustered street-level commercial uses near transit stations.

Other Project Justification Criteria

Mobility Improvements Rating: Medium-High		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)		
		408,900
		535,900
		3,500 (12%)
		408,900*
		3,500*
		<u>New Start vs. Baseline</u>
		3.10
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide (CO) 8-Hour Ozone (O ₃) Particulate Matter (PM _{2.5}) Annual Energy Savings (million British Thermal Units)		
		<u>New Start vs. Baseline</u>
		2,632
		132
		74
		11
		123,795
		<u>EPA Designation</u>
		Maintenance Area*
		Moderate Non-Attainment Area*
		Non-Attainment Area*
		1,578,180
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.309*	\$0.308*

* 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

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

Section 5309 New Starts Share of Total Project Costs: 49%

Rating: Medium-High

NJT is requesting a 49 percent New Starts share of total project costs, which results in a *Medium* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$3,608.67	48.9%
FTA Section 5307	\$267.14	3.7%
FHWA CMAQ	\$194.68	2.6%
State:		
Transportation Trust Fund	\$410.38	5.5%
Port Authority of New York and New Jersey	\$2,900.00	39.3%
Total:	\$7,380.86	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

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

Agency Capital Condition: Medium-High

- The average age of NJT's bus fleet is 5.5 years, which is significantly younger than the industry average. The average ages of the LRT and commuter rail fleet are 3.5 and 23.3 years, respectively.
- NJT's good bond ratings, which were issued in September 2005, are as follows: Standard & Poor's Corporation A- and Moody's Investor Service A2.

Completeness of Capital Plan: Medium

- The capital plan was reasonably complete and included a 20-year cash flow statement, documentation of key assumptions, fleet management plans, more than five years of historical data, and a sensitivity analysis that included only a minimal amount of detail.

Commitment of Capital Funds: Medium

- Over 17 percent of non-New Starts funding is committed. Funding sources for the non-New Starts share include CMAQ, FTA formula funds, New Jersey Transportation Trust Funds, and PANYNJ funding. PANYNJ is expected to provide the majority of the non-New Starts funding for the ARC project.

Capital Funding Capacity: Low

- The financial plan shows a balanced budget, but with no cash reserves throughout the 20-year plan to cover cost increases or funding shortfalls without deferring other capital investments. The New Jersey Transportation Trust Fund does not have the capacity to issue additional bonds to cover any state transportation funding needs, including NJT.
- NJT can only cover cost increases or funding shortfalls equal to less than five percent of project costs.

Capital Cost Estimate and Planning Assumptions: Medium-Low

- The project financial plan assumes over \$3.6 billion in total New Starts funding and nearly \$300 million a year over eleven years, both of which are unprecedented for the program. NJT further assumes \$112 million in FY 2007 New Starts funding even though the project is expected to still be in PE.
- The current project cost estimate is considered reliable at this stage of development. However, its implementation schedule is extremely aggressive, especially given the complexity of the project and other infrastructure improvements outside of the ARC scope upon which the project depends.

Operating Finance Plan Rating: Medium

The operating finance plan is rated *Medium*, based upon the average rating of the five subfactors listed below, which are weighted equally. *Medium-High* ratings were assigned for the completeness of the operating plan and commitment of operating funds subfactors. The capacity to operate and maintain the system and the operating cost estimates and planning assumptions subfactors were both rated *Medium-Low*. NJT's operating condition was rated *Low*.

Agency Operating Condition: Low

- NJT's current ratio of assets to liabilities as reported in its most recent audited financial statement is 0.72.

Completeness of Operating Plan: Medium-High

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

Commitment of Operating Funds: Medium-High

- Over 63 percent of operating funding is committed. Funding sources include fare revenues, capital transfers and project cost reimbursement from state and Federal funds, state operating assistance, and other operating revenues.

Operating Funding Capacity: Medium-Low

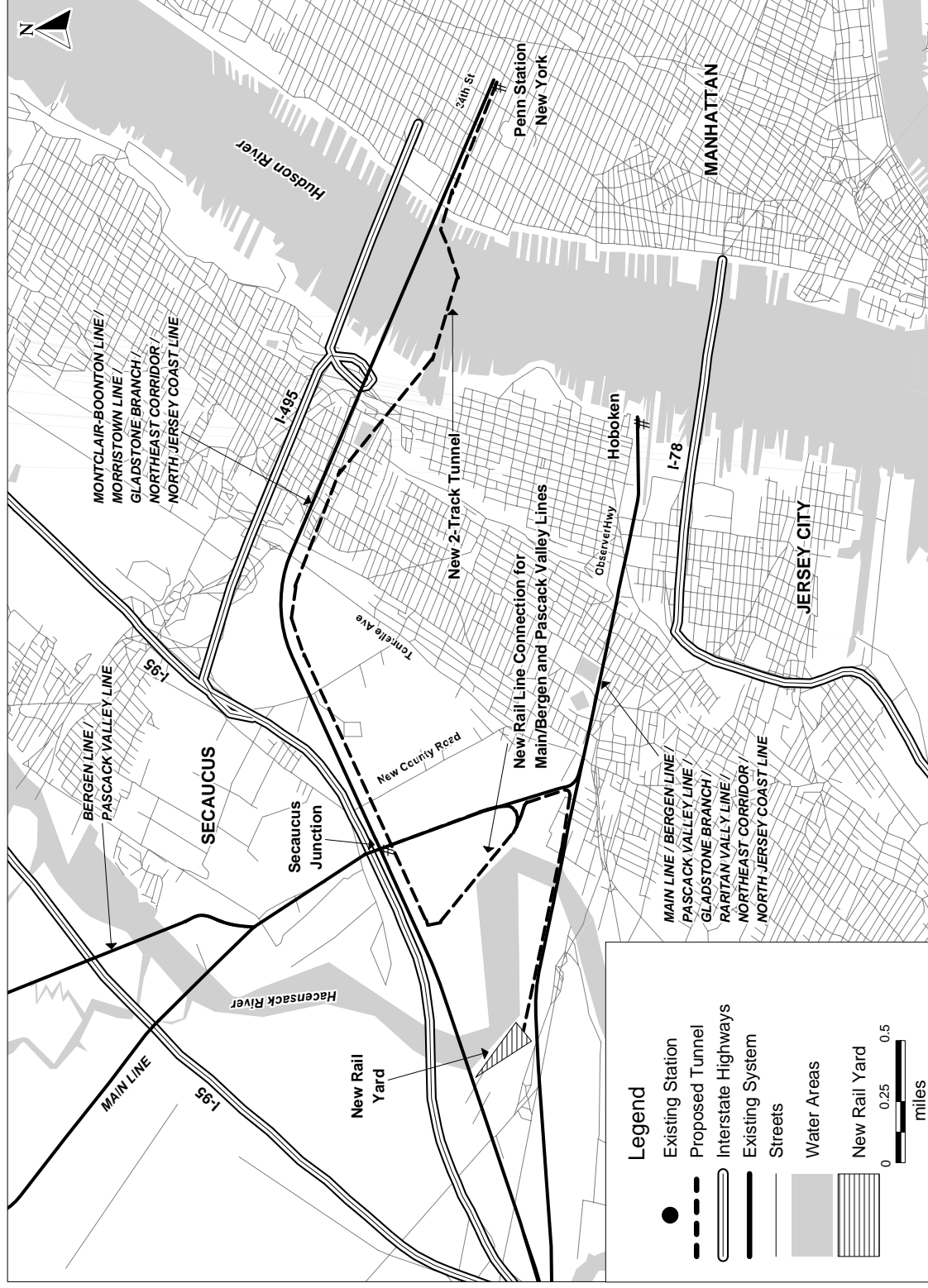
- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit of between five and 16 percent of annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium-Low

- Operating and maintenance costs, inflation, state capital transfers, and baseline ridership assumptions seem reasonable compared to historical trends.
- However, assumptions for fare increases, state operating assistance, and Federal funding are considered optimistic.

Access to the Region's Core

Northern New Jersey



CORRIDORone Rail

Harrisburg, Pennsylvania

(November 2006)

Capital Area Transit (CAT) of Harrisburg, Pennsylvania proposes to develop a 37.4-mile initial segment of a regional rail system that would run along central Pennsylvania's major transportation corridor. The corridor currently accommodates both Amtrak and Norfolk Southern Railroad lines. The proposed project would provide rail service between Lancaster and Harrisburg, supported by significant upgrades to CAT and Red Rose Transit (Lancaster, Pennsylvania) bus services. The project alignment would follow Amtrak's Keystone Corridor between Harrisburg and Lancaster. The project is intended to provide an improved transit link to Harrisburg International Airport and its intermodal facilities and leverage the investment made by the Commonwealth of Pennsylvania and Amtrak in upgrading the Keystone Corridor to improve transit service.

The project is estimated to cost \$19.4 million (escalated dollars), which includes a proposed Section 5309 New Starts share of \$13.5 million (69.3 percent). *Because the proposed New Starts share is less than \$25 million, the project is exempt from the New Starts criteria and is not subject to FTA's evaluation and rating (49 U.S.C 5309(e)(1)(B)).*

Summary Description	
Proposed Project:	Commuter Rail 37.4 Miles, 7 Stations
Total Capital Cost (\$YOE):	\$19.42 Million
Section 5309 New Starts Share (\$YOE):	\$13.45 Million (69.3%)
Annual Operating Cost (\$YOE):	\$11.66 Million
Ridership Forecast:	1,600 Average Weekday Boardings

Project Development History and Current Status

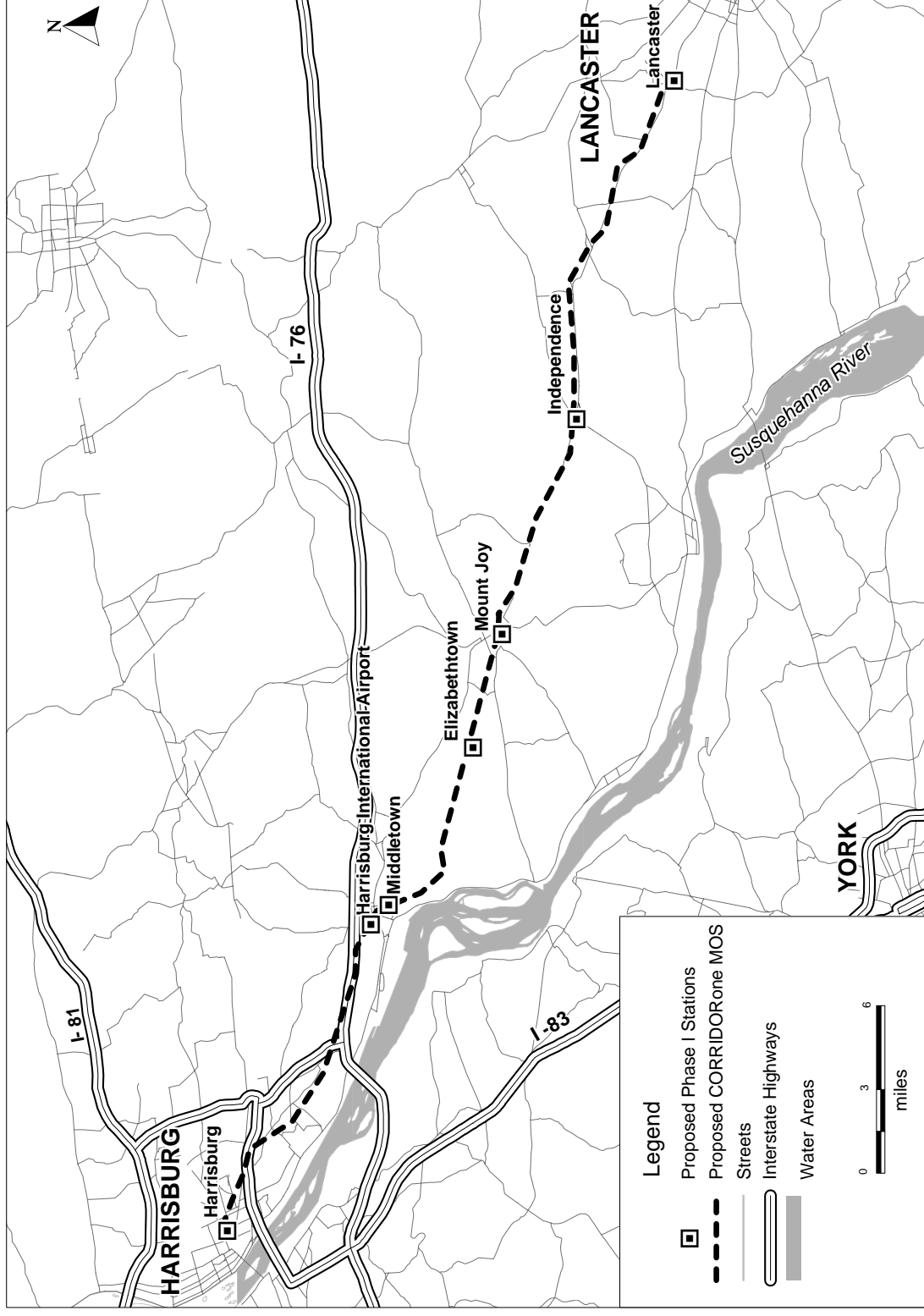
FTA approved CAT's initiation of preliminary engineering (PE) and NEPA review in August 2002. CAT completed subsequent transitional analysis to refine the evaluation of potential alternative project segments and defined a minimum operable segment in May 2003. In the FY 2007 *Annual Report on New Starts* FTA requested that CAT identify an implementable project scope and submit to FTA a supporting financial plan by September 30, 2006 or be removed from PE status. CAT submitted a reduced scope as described above and revised financial plan in August 2006. The project now terminates in Harrisburg, which is 5.7 miles less than the previously proposed project scope. CAT is continuing the environmental assessment on the project as currently defined; this work is anticipated to be completed in early 2007. A request to enter into final design is anticipated later in 2007, and FTA will assess the project's ability to advance at that time.

Locally Proposed Financial Plan		
<u>Proposed Source of Funds</u>	<u>Total Funding (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$13.45	69.3%
Section 5309 Bus Discretionary	\$0.53	2.7%
Section 5309 Fixed Guideway Modernization Funds	\$1.00	5.1%
FRA Earmark	\$0.55	2.8%
State:		
Annual Capital Budget	\$3.24	16.7%
Transportation Funding Reform Commission	\$0.65	3.3%
Total:	\$19.42	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.

CORRIDORone Rail

Harrisburg, Pennsylvania



South County Commuter Rail

Providence, Rhode Island

(November 2006)

The Rhode Island Department of Transportation (RIDOT) is proposing to extend commuter rail service 20 miles along the Northeast Corridor from Providence to Wickford Junction/North Kingston to the South County region of the State. This section of the Northeast Corridor is currently used only for Amtrak and freight operations; therefore, the extension of commuter rail service represents a new passenger service in the corridor.

RIDOT has identified the need to extend commuter rail service to meet demand for travel in the South County area. More specifically, the locally stated goals of the transit improvement are to reduce congestion, improve safety, and provide intermodal connections in the Interstate 95 and Route 1/Route 4 corridors; provide needed intermodal connections to T.F. Green Airport via RIDOT's Warwick Intermodal Station; support RIDOT's ongoing commitment to maintain and improve the existing highway and rail infrastructure rather than invest in additional roadway capacity; and support the State's objectives of using transportation to attain regional economic development goals by providing opportunities to attract new commercial development, including the Warwick Station Redevelopment District at T.F. Green Airport.

The proposed project includes a new station, a new 1,000-car parking garage, and a mainline interlocking at Wickford Junction. The proposed eight round-trip commuter rail trains daily (Monday through Friday) would augment the fifteen trains operating between Providence and Boston today. The Massachusetts Bay Transportation Authority (MBTA) has been identified as the service operator for this commuter rail service extension.

The total capital cost for this commuter rail extension project is estimated at \$43.7 million, with a proposed Section 5309 New Starts share of \$24.9 million. *Because the proposed New Starts share is less than \$25 million, the project is exempt from the New Starts criteria and is thus not subject to FTA's evaluation and rating (49 U.S.C 5309(e)(1)(B)).*

Summary Description	
Proposed Project:	Commuter Rail Extension 20 Miles, 1 Station
Total Capital Cost (\$YOE):	\$42.27 Million
Section 5309 New Starts Share (\$YOE):	\$24.99 Million (59.1%)
Ridership Forecast (2020):	2,300 Average Weekday Boardings

Project Development History and Current Status

In an effort to increase mobility in southeastern New England, the State of Rhode Island, in cooperation with the Commonwealth of Massachusetts, entered into a cooperative agreement in 1989 known as the Pilgrim Partnership Agreement. The central tenet of the Pilgrim Partnership Agreement is that RIDOT will sub-allocate Federal formula funding to MBTA in exchange for commuter rail service to Providence. The South County Commuter Rail Project is a continuation of a bi-state goal to improve mobility within a shared corridor.

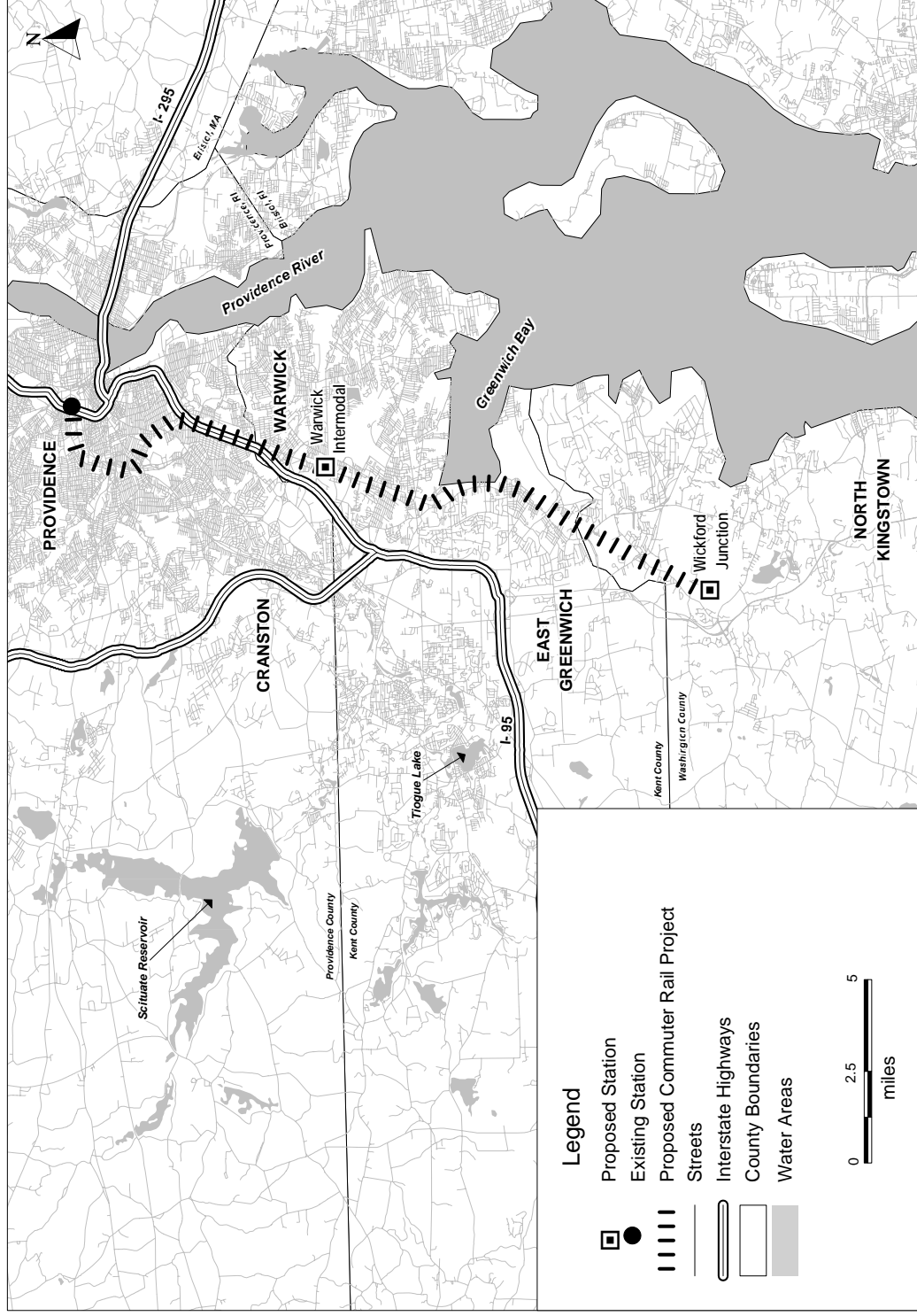
FTA approved the project into preliminary in March 2004. Since then, five commuter rail coaches with independent utility were taken out of the project scope to support the existing Providence to Boston service. The current project schedule anticipates advancement into final design in early 2007.

Locally Proposed Financial Plan		
<u>Proposed Source of Funds</u>	<u>Total Funding (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$24.99	59.1%
Flexible Funds (CMAQ)	\$1.93	4.6%
Section 5309 Fixed Guideway Modernization	\$6.90	16.3%
Local:	\$8.45	20.0%
Total:	\$42.27	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.

South County Commuter Rail

Providence, Rhode Island



North Corridor BRT

Houston, Texas

(November 2006)

The Metropolitan Transit Authority of Harris County (METRO) is proposing a 5.4-mile bus rapid transit (BRT) line extending from a planned intermodal terminal at the existing Hardy rail yard north of the Houston central business district (CBD) to the Northline Mall Transit Center. The project also includes a 0.6-mile light rail transit (LRT) extension from the University of Houston-Downtown LRT Station to the planned terminal. BRT service in the North Corridor would operate in an exclusive guideway except at intersections, where buses would receive priority treatment. The guideway would be shared by both the North Corridor BRT line which would operate with six-minute peak-period headways and planned (and locally-funded) “East End” BRT service operating between neighborhoods east of downtown and the Northline Mall. The BRT project is a first phase of a planned 24-mile rapid transit line from the CBD to George H. Bush Intercontinental Airport.

The North Corridor extends from the CBD along Interstate Highway 45 (IH-45) and is bounded by IH-45 on the west and the Hardy Toll Road (IH-610) on the east. Currently, a total of 100 buses per hour operate in mixed traffic in the North Corridor to the CBD. Eighty-six peak-hour buses operate on routes that serve the CBD via North Main Street. Buses traveling along Main Street pass under the Hardy Rail Yard using the Main Street Tunnel – a facility that funnels traffic from two lanes to one lane in each direction. In the CBD, most of the travel to/from major arterials occurs on downtown streets that are aligned in a north-south direction. Much of METRO’s bus service that provides access to downtown job centers from outlying areas board/alight riders from lanes on north-south streets. Although METRO uses “skip-stop” operations on these streets, curbside-loading areas limit the number of buses that board/alight passengers, while queuing of peak hour buses causes extended clearance times for buses using the same loading areas in the CBD. Constrained operations and reduced bus speeds produce schedule delays and service reliability problems that are compounded as traffic volumes increase and METRO adds more buses to accommodate demand. The North Corridor BRT project is intended to result in greater transit capacity and improved transit service in the CBD and through the Main Street Tunnel.

Summary Description

Proposed Project:	Bus Rapid Transit; Light Rail Transit 5.4 Miles BRT; 0.6 Miles LRT 8 Stations
Total Capital Cost (\$YOE):	\$275.34 Million
Section 5309 New Starts Share (\$YOE):	\$137.39 Million (49.9%)
Annual Forecast Year Operating Cost (\$YOE):	\$8.51 Million
Ridership Forecast (2030):	11,400 Average Weekday Boardings 3,100 Daily New Riders
Opening Year Ridership Forecast (2012):	6,900 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

METRO intends to utilize a hybrid project delivery method. A Facility Provider team of engineering, construction management and vehicle firms will complete design, finalize the construction phasing

approach, and expedite construction of a number of rapid transit improvements throughout Houston. METRO and FTA are working closely to facilitate this unique project implementation approach.

Project Development History and Current Status

METRO completed an alternatives analysis study on the North-Hardy Corridor in November 2003. LRT was the locally preferred alternative (LPA). The North Corridor is included in the 2025 METRO Solutions Plan that was passed by Houston-area voters in November 2003. The Plan allows METRO to issue up to \$640 million in bonds to fund transit system expansion projects. FTA approved the North Corridor LRT into PE in April 2005. In August 2005, METRO notified FTA of its intent to build and operate a BRT line in the North Corridor as an interim step towards LRT implementation, with BRT designed for conversion to LRT by 2030. METRO issued a Draft Environmental Impact Statement (EIS), including a “convertible” BRT alternative, in June 2006, and formally adopted BRT as the preferred alternative in August 2006. After an evaluation of the project’s benefits and costs and confirmation that all local and Federal requirements were met, FTA conferred PE status to the North Corridor BRT project in October 2006. METRO is developing a Final EIS and is expected to request final design entry in late Spring 2007.

Significant Changes Since FY 2007 Evaluation (November 2005)

In addition to the change of scope from LRT to BRT, METRO completed a series of travel model and transportation network enhancements and developed a 2030 travel forecast, resulting in a revised estimate of the project’s user benefits.

Project Justification Rating: Medium

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

Cost Effectiveness Rating: Medium

The *Medium* cost effectiveness rating reflects the level of travel-time benefits (4,400 hours each weekday, plus special events) relative to the project’s annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$15.59*
Incremental Cost per Incremental Trip	\$21.42

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

Travel forecasts demonstrate travel-time benefits to three key markets. The first is travelers bound for the CBD and the Texas Medical Center areas (TMC). These transit riders generate over 40 percent of travel-time benefits because the BRT guideway would provide faster service to the CBD and TMC areas, and avoid congested downtown streets and corridor choke points. About half of these benefits accrue to persons traveling to/from work. The second benefiting market includes transit riders from the corridor’s outer and inner IH-610 areas, many of which currently commute via auto and buses to the CBD. Approximately 25 percent of benefits are attributable to this market since BRT would eliminate or reduce much of the transfers that riders currently endure to reach the CBD, TMC and Uptown areas. The third market includes East End BRT riders traveling to/from points on the North Corridor guideway since the interlined service would provide a one-seat ride for trips between the two corridors. Eight percent of benefits accrue to this market. The North Corridor BRT also offers travel-time benefits to riders traveling to sports stadia and cultural events near the CBD’s southern edge via transfer to the existing LRT.

The capital cost estimate, including contingencies, is considered reliable at this stage of development. However, the project’s development schedule is aggressive, and may be difficult to achieve.

Transit-Supportive Land Use Rating: Medium

The rating is based upon the *Medium* ratings assigned to existing land use and the performance and impacts of land use policies which offset the *Medium-Low* rating for transit-supportive policies.

Existing Land Use: Medium

- Current total employment within a ½-mile of all station areas is approximately 22,800.
- Current total employment for the Houston CBD is estimated at over 156,000.
- Existing population density within the entire corridor, the number of persons per square mile, is moderate (7,300 persons/square mile).
- The land use character of the North Corridor is primarily auto-oriented, featuring commercial strips with large parking lots, underutilized industrial areas, and many vacant parcels. Exceptions include some pre-World War II neighborhoods built on a grid pattern of streets.

Transit-Supportive Plans and Policies: Medium-Low

- There are no coordinated regional growth management policies. The Houston-Galveston Area Council's (local MPO) policy documents include goals related to denser, more transit-oriented development patterns. The Houston area's rapid population increases and sprawl have contributed to an interest in growth planning, but specific initiatives have not been undertaken at the regional level.
- Neighborhood plans covering the North Corridor define general objectives for increasing the pedestrian-friendliness and transit-orientation of development. Two areas adjacent to the Houston CBD have undergone more detailed planning to support high-density, transit-oriented development. Otherwise, subarea plans have not been developed yet, and implementation tools are generally weak.
- The city of Houston is not zoned. Private deed restrictions are often used to ensure that standards for land use are maintained. Much of the North Corridor is designated as "urban" allowing reductions in setbacks and in the size of single-family lots. The city may choose to reduce parking requirements in areas where demand can be met through means other than off-street parking, and will consider reductions in the North Corridor. There are no parking requirements for downtown projects.
- METRO initiated station area planning activities with stakeholders and design teams as part of preliminary engineering for the North Corridor to ensure that station designs, area land uses, and area plans are complementary, following a similar public outreach effort that was used for the current Main Street LRT. Parts of the North Corridor are within city or State-designated districts that provide funding mechanisms for infrastructure improvements.

Performance and Impacts of Policies: Medium

- Changes to development patterns, including pedestrian- and transit-oriented design features, are evident in the downtown Houston and Midtown areas along the existing Main Street LRT. Many projects (mostly small) have been proposed in the North Corridor, but it is unclear to what extent they will be built on transit-supportive principles.
- The Houston region and CBD are expecting strong growth, but the Northside area is not currently one of the more economically active parts of the region. The extent to which the CBD development activity will spread north from the CBD and support revitalization of corridor neighborhoods remains to be seen. There are ample vacant lots available for development in the corridor.

Other Project Justification Criteria

Mobility Improvements Rating: Medium		
<u>Within ½-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	22,800 27,200 2,200 (26%) 3,400* 275* <u>New Start vs. Baseline</u> 8.32*	
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> 8-Hour Ozone (O ₃) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 15 1 1 0 3,500 <u>EPA Designation</u> Moderate Non-Attainment Area* 44,700	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.195*	\$0.197*

* 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

The *Medium* rating for local financial commitment is based on *Medium* 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: 50%

Rating: Medium

METRO is requesting just under a 50 percent New Starts share of total project costs, which results in a *Medium* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 New Starts	\$137.39	49.9%
Local: METRO Dedicated Sales Tax	\$137.94	50.1%
Total:	\$275.34	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 total as listed due to rounding.

Capital Finance Plan Rating: Medium

The capital finance plan is rated *Medium*. The capital condition, commitment of capital funds, and capital funding capacity subfactors received *High* ratings. The completeness of the capital plan was rated *Medium*, while the capital cost estimates and planning assumptions subfactor received a *Medium-Low* rating. The average of these ratings is *Medium-High*, but the rating has been lowered to *Medium*, because of the *Medium-Low* rating for the capital cost estimates and planning assumptions subfactor.

Agency Capital Condition: High

- The average age of METRO's bus fleet is six years, which is younger than the industry average.
- METRO has no outstanding debt. Therefore, no bond ratings have been issued.

Completeness of Capital Plan: Medium

- The capital plan was reasonably complete and included a 25-year cash flow statement, more than five years of historical data, identification of key assumptions, a moderate level of detail, and a sensitivity analysis. The plan was missing some explanatory details, including a breakdown of capital revenues and costs by source and project. These items were shown only in the aggregate.

Commitment of Capital Funds: High

- METRO's sales tax revenues, which are existing and committed, will cover the entire non-New Starts share of the North Corridor BRT project.

Capital Funding Capacity: High

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit that would allow METRO to cover cost increases or funding shortfalls equal to at least 50 percent of project costs.

Capital Cost Estimate and Planning Assumptions: Medium-Low

- Assumptions on sales tax growth and Federal funding are optimistic compared to historical experience.
- The capital cost estimate is considered current and reliable. The project's contingency is adequate for this stage of development. METRO's project delivery approach is innovative but assumes an aggressive schedule which carries some risk.

Operating Finance Plan Rating: Medium

The operating finance plan is rated *Medium*, based upon the average of the ratings of the five subfactors listed below. The current operating condition and the commitment of operating funds were rated *High*; operating funding capacity was rated *Medium-High*; completeness of the operating plan was rated *Medium*; and the operating cost estimates and planning assumptions subfactor received a *Medium-Low* rating.

Agency Operating Condition: High

- METRO's current ratio of assets to liabilities, as reported in its most recent audited financial statements, is 2.2.
- METRO's transit services have increased in the last five years, despite a decline in ridership due to a downturn in regional economic growth.

Completeness of Operating Plan: Medium

- The operating plan was reasonably complete and included a 25-year cash flow statement, more than five years of historical data, identification of key assumptions, a moderate level of detail, and a sensitivity analysis. The plan was missing explanatory detail related to existing versus new services.

Commitment of Operating Funds: High

- All operating funding, includes fare revenues, sales tax revenues, operating grants, miscellaneous revenue (advertising and ID card fees), and interest income, is considered committed.

Operating Funding Capacity: Medium-High

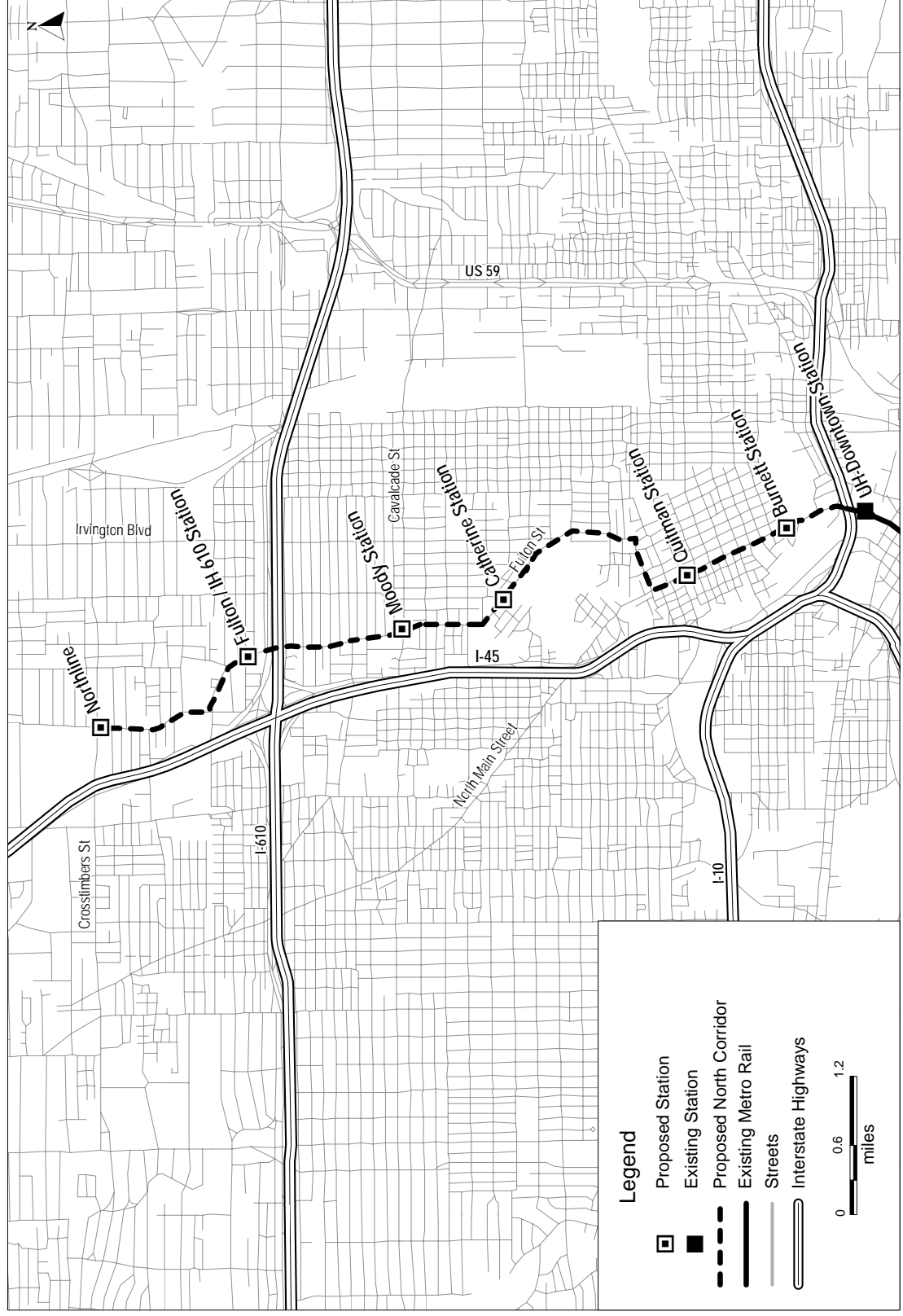
- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit exceeding 25 percent of annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium-Low

- Assumptions on operating cost growth, ridership growth, and farebox revenues are optimistic compared to historical experience.

North Corridor BRT

Houston, Texas



Southeast Corridor BRT

Houston, Texas

(November 2006)

The Metropolitan Transit Authority of Harris County (METRO) is proposing a 6.0-mile bus rapid transit (BRT) system from the current Main Street light rail transit (LRT) system in Houston's central business district (CBD) to the Palm Center park-and-ride near Dr. Martin Luther King Jr. (MLK) Boulevard. The BRT line would provide fixed guideway transit service to the University of Houston-Downtown, Texas Southern University, and the Texas Medical Center (TMC). Approximately 4.1 miles would operate at-grade in exclusive guideway and 0.1 miles of aerial guideway; the remainder would be in a reserved lane and mixed traffic at intersections where buses would get priority treatment. BRT service would operate with peak-hour headways of six minutes. The project is the first phase of a 13-mile rapid transit line from the CBD to William P. Hobby Airport.

The corridor extends from the CBD to the vicinity of MLK Boulevard at Palm Center and is bounded by Interstate Highway 45 on the east, US Route 59/State Highway 288 on the west, and Almeda-Genoa Road on the south. Existing freeways, particularly north of IH-610, require "out of direction" travel adding to the length of the trip. Travel in the corridor is focused on the few existing north-south and east-west arterials. Current transit service operates on the same network of arterials. Traffic congestion impedes bus service to/from the corridor's major activity centers. Bus service is often circuitous and the number of stops so frequent that bus travel times are not competitive with auto travel. The volume of METRO buses operating in downtown compounds traffic problems. During peak periods, buses queue to load/unload riders, causing severe service reliability problems, increased travel times for CBD commuters, and constrained METRO operations in the CBD. Projected travel demand growth would exacerbate these conditions if planned transit improvements are not implemented. The corridor constitutes only five percent of METRO's service area, but includes 25 percent of METRO's local bus riders. The area has a high proportion of zero-car households and persons under 18 and over 64 years of age – transit-dependent populations. The project is intended to result in improved transit service and reliability for these travel markets.

Summary Description

Proposed Project:	Bus Rapid Transit 6.0 Miles 11 Stations
Total Capital Cost (\$YOE):	\$169.84 Million
Section 5309 New Starts Share (\$YOE):	\$84.75 Million (49.8%)
Annual Forecast Year Operating Cost (\$YOE):	\$7.75 Million
Ridership Forecast (2030):	13,900 Average Weekday Boardings 3,300 Daily New Riders
Opening Year Ridership Forecast (2012):	8,300 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium-High
FY 2008 Overall Project Rating:	Medium

METRO intends to utilize a hybrid project delivery method. A Facility Provider team of engineering, construction management and vehicle firms will complete design, finalize the construction phasing

approach, and expedite construction of a number of rapid transit improvements throughout Houston. METRO and FTA are working closely to facilitate this unique project implementation approach.

Project Development History and Current Status

METRO completed an alternatives analysis study on the Southeast-Universities-Hobby Corridor in November 2003. LRT was the locally preferred alternative (LPA). The Southeast Corridor is included in the 2025 METRO Solutions Plan that was passed by Houston-area voters in November 2003. The Plan allows METRO to issue up to \$640 million in bonds to fund transit system expansion projects. In April 2005 FTA approved the Southeast Corridor LRT into preliminary engineering (PE). In August 2005, METRO notified FTA of its intent to build and operate a BRT line in the Southeast Corridor as an interim step towards LRT implementation, with BRT designed for conversion to LRT by 2030. METRO issued a Draft Environmental Impact Statement (EIS), including a “convertible” BRT alternative, in July 2006, and formally adopted BRT as the preferred alternative in September 2006. After an evaluation of the project’s benefits and costs and confirmation that all local and Federal requirements were met, FTA conferred PE status to the Southeast Corridor BRT project in October 2006. METRO is developing a Final EIS and is expected to request final design entry in late Spring 2007.

Significant Changes Since FY 2007 Evaluation (November 2005)

In addition to the change of scope from LRT to BRT, METRO completed a series of travel model and transportation network enhancements and developed a 2030 travel forecast, resulting in a revised estimate of the project’s user benefits.

Project Justification Rating: Medium-High

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

Cost Effectiveness Rating: High

The *High* cost effectiveness rating reflects the level of travel-time benefits (3,800 hours each weekday, plus special events) relative to the project’s annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$11.38*
Incremental Cost per Incremental Trip	\$16.46

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

Nearly 25 percent of Southeast Corridor households do not have access to an automobile. While the existing transit system provides the corridor’s transit-dependent population with access to the CBD, the universities, and the TMC areas, the service operates at low speeds and is subject to the same delays as auto traffic. The limited service levels and reliability restrict mobility and reduce residents’ access to jobs. Travel forecasts demonstrate travel-time benefits to three key markets. The first includes transit riders commuting mostly within the IH-610 area, the CBD, TMC, and universities’ areas from the corridor’s heavily transit-dependent population (households with incomes less than \$15,000). These riders generate approximately 45 percent of travel-time benefits. The second market includes other corridor transit riders taking advantage of improved access to the CBD and core activity centers. About 25 percent of benefits are attributable to this market. The remaining benefits accrue to riders from the north and northwest within IH-610 whose travel times to the universities’ area are improved via BRT service. The BRT would also provide travel-time benefits for riders traveling to sports stadia and cultural attractions on the CBD’s southern edge via transfer to the existing Main Street LRT.

The capital cost estimate, including contingencies, is considered reliable at this stage of development. However, the project’s development schedule is aggressive, and may be difficult to achieve.

Transit-Supportive Land Use Rating: Medium

The rating is based upon the *Medium* ratings assigned to existing land use and the performance and impacts of land use policies which offset the *Medium-Low* rating for transit-supportive policies.

Existing Land Use: Medium

- The corridor penetrates downtown Houston. Current total employment within a ½-mile of all station areas is 147,900.
- Current total employment for the entire Houston CBD is estimated at over 156,000.
- Existing population density within the entire corridor, the number of persons per square mile, is low to moderate (4,300 persons/square mile).
- The majority of station areas exhibit moderate to low population densities. The land use character of the Southeast Corridor ranges from an intensive mixed-use downtown – with several of the nation’s tallest buildings – to a much more auto-oriented, suburban style of development around the corridor’s two outermost stations.
- Many jobs located in the CBD are near planned station areas. Two major universities (Texas Southern University and the University of Houston-Downtown) with a combined enrollment of 44,000 students are served by the corridor.

Transit-Supportive Plans and Policies: Medium-Low

- There are no coordinated regional growth management policies. The Houston-Galveston Area Council’s (local MPO) policy documents include goals related to denser, more transit-oriented development patterns. The Houston area’s rapid population increases and sprawl have contributed to an interest in growth planning, but specific initiatives have not been undertaken at the regional level.
- Plans for the downtown and east downtown areas have focused on pedestrian improvements and increasing the mix of residential and other non-office uses. Neighborhood plans define general objectives for increasing the pedestrian friendliness and transit orientation of development, but implementation mechanisms other than funding for infrastructure are limited. Local university-area land use plans will increase density in two planned station areas.
- The city of Houston is not zoned. Private deed restrictions are often used to ensure that standards for land use are maintained, although enforcement has lapsed in some Southeast Corridor neighborhoods. The city may choose to reduce parking requirements in areas where demand can be met through means other than off-street parking, and will consider reductions in the Southeast Corridor. There are no parking requirements for downtown projects.
- METRO initiated station area planning activities with stakeholders and design teams as part of preliminary engineering for the Southeast Corridor to ensure that station designs, area land uses, and area plans are complementary, following a similar public outreach effort that was used for the existing Main Street LRT. The entire corridor is within city or State-designated districts that provide funding mechanisms for infrastructure improvements.

Performance and Impacts of Policies: Medium

- Changes to development patterns, including pedestrian- and transit-oriented design features, are evident in the downtown Houston and Midtown areas along the existing Main Street LRT. In contrast, several projects under construction or planned near the outermost Southeast Corridor stations appear less transit-supportive, with auto-oriented suburban-style designs.
- The station areas within the Southeast Corridor offer plentiful sites for development, especially on the eastern side of the CBD. Small and large vacant lots are available in proximity to other proposed transit stations and major roadway corridors.

Other Project Justification Criteria

Mobility Improvements Rating: Medium-High		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	147,900 189,800 2,600 (36%) 17,300* 200* <u>New Start vs. Baseline</u> 7.30*	
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> 8-Hour Ozone (O ₃) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u> 15 1 1 0 3,500 <u>EPA Designation</u> Moderate Non-Attainment Area* 44,700	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.182*	\$0.182*

* 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

The *Medium* rating for local financial commitment is based on *Medium* 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: 50%

Rating: Medium

METRO is requesting just under a 50 percent New Starts share of total project costs, which results in a *Medium* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 New Starts	\$84.75	49.8%
Local: METRO Dedicated Sales Tax	\$85.09	50.2%
Total:	\$169.84	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 total as listed due to rounding.

Capital Finance Plan Rating: Medium

The capital finance plan is rated *Medium*. The capital condition, commitment of capital funds, and capital funding capacity subfactors received *High* ratings. The completeness of the capital plan was rated *Medium*, while the capital cost estimates and planning assumptions subfactor received a *Medium-Low* rating. The average of these ratings is *Medium-High*, but the rating has been lowered to *Medium*, because of the *Medium-Low* rating for the capital cost estimates and planning assumptions subfactor.

Agency Capital Condition: High

- The average age of METRO's bus fleet is six years, which is younger than the industry average.
- METRO has no outstanding debt. Therefore, no bond ratings have been issued.

Completeness of Capital Plan: Medium

- The capital plan was reasonably complete and included a 25-year cash flow statement, more than five years of historical data, identification of key assumptions, a moderate level of detail, and a sensitivity analysis. The plan was missing some explanatory details, including a breakdown of capital revenues and costs by source and project. These items were shown only in the aggregate.

Commitment of Capital Funds: High

- METRO's sales tax revenues, which are existing and committed, will cover the entire non-New Starts share of the North Corridor BRT project.

Capital Funding Capacity: High

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit that would allow METRO to cover cost increases or funding shortfalls equal to at least 50 percent of project costs.

Capital Cost Estimate and Planning Assumptions: Medium-Low

- Assumptions on sales tax growth and Federal funding are optimistic compared to historical experience.
- The capital cost estimate is considered current and reliable. The project's contingency is adequate for this stage of development. METRO's project delivery approach is innovative but assumes an aggressive schedule which carries some risk.

Operating Finance Plan Rating: Medium

The operating finance plan is rated *Medium*, based upon the average of the ratings of the five subfactors listed below. The current operating condition and the commitment of operating funds were rated *High*; operating funding capacity was rated *Medium-High*; completeness of the operating plan was rated *Medium*; and the operating cost estimates and planning assumptions subfactor received a *Medium-Low* rating.

Agency Operating Condition: High

- METRO's current ratio of assets to liabilities, as reported in its most recent audited financial statements, is 2.2.
- METRO's transit services have increased in the last five years, despite a decline in ridership due to a downturn in regional economic growth.

Completeness of Operating Plan: Medium

- The operating plan was reasonably complete and included a 25-year cash flow statement, more than five years of historical data, identification of key assumptions, a moderate level of detail, and a sensitivity analysis. The plan was missing explanatory detail related to existing versus new services.

Commitment of Operating Funds: High

- All operating funding, includes fare revenues, sales tax revenues, operating grants, miscellaneous revenue (advertising and ID card fees), and interest income, is considered committed.

Operating Funding Capacity: Medium-High

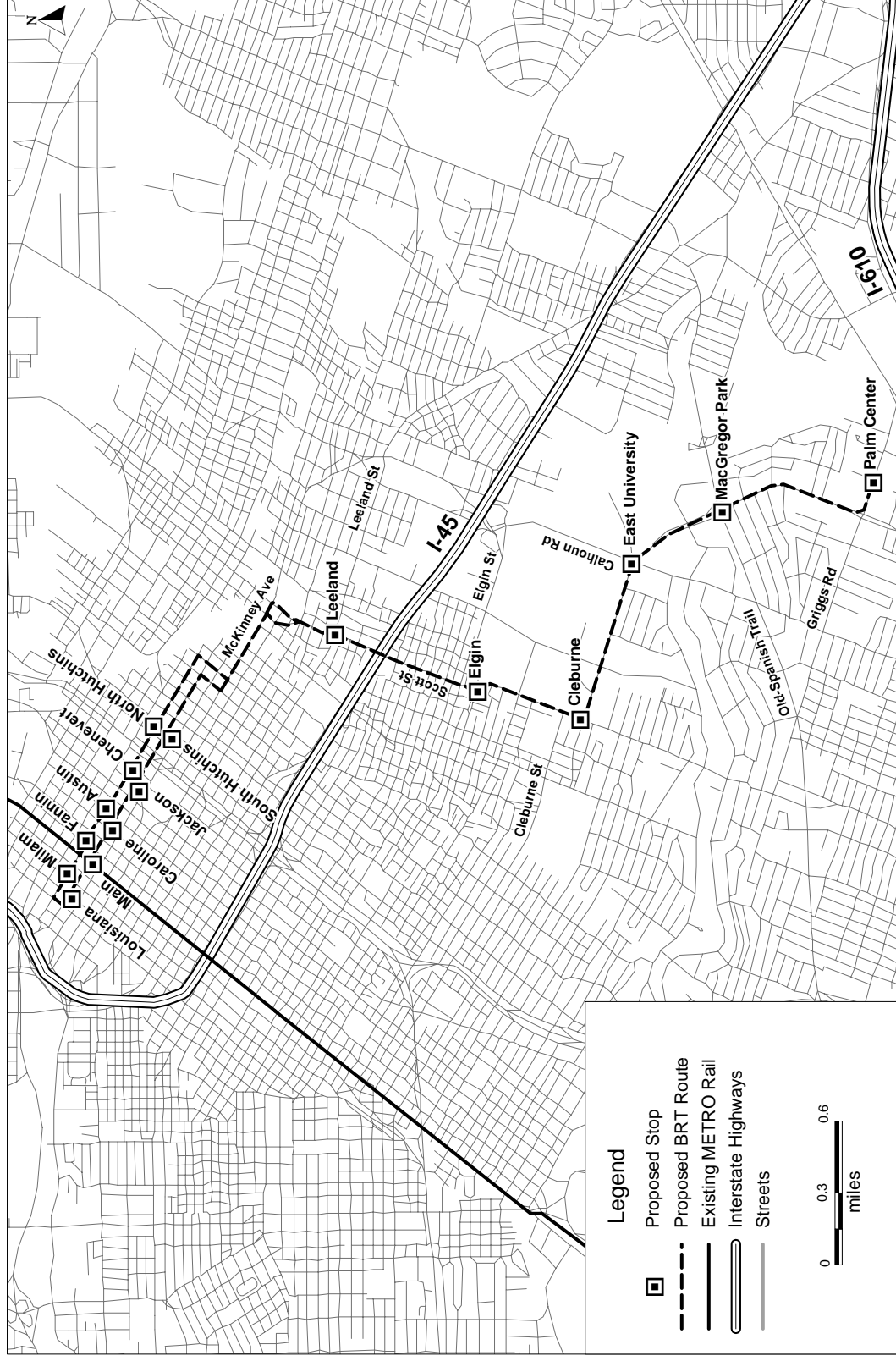
- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit exceeding 25 percent of annual operating expenses.

Operating Cost Estimates and Planning Assumptions: Medium-Low

- Assumptions on operating cost growth, ridership growth, and farebox revenues are optimistic compared to historical experience.

Southeast Corridor BRT

Houston, Texas



Dulles Corridor Metrorail Project – Extension to Wiehle Avenue

Northern Virginia

(November 2006)

The Virginia Department of Rail and Public Transportation (DRPT) in cooperation with the Washington Metropolitan Area Transit Authority (WMATA) is proposing to construct an 11.6-mile extension of the region's Metrorail system from west of the existing East Falls Church Metrorail station through the large Tysons Corner employment and retail center to Wiehle Avenue in the Reston area of Fairfax County. The project will be operated as a separate Metrorail line under a new service configuration that terminates in Washington DC at the existing Stadium Armory Metrorail station. The proposed project scope includes construction of five new stations, a major park-and-ride lot at Wiehle Avenue, and expanded storage capacity at WMATA's West Falls Church rail yard. The project also includes the purchase of 64 heavy rail vehicles. The extension would be operated by WMATA, with trains operating at seven minute peak frequencies from the Wiehle Avenue station through East Falls Church, continuing along the existing Metrorail Orange Line track east through Arlington County, downtown Washington DC, Capitol Hill, and terminating at Stadium Armory. The 11.6-mile extension is the first phase of a proposed 23.1-mile extension of Metrorail west to Dulles International Airport and Loudoun County.

The Tysons Corner area contains over 25 million square feet of office space and 110,000 employees. Redevelopment and expansion of the major retail and office development is underway. The Reston area also contains significant mixed-use development, with a substantial employment base and large residential population, many of whom commute to employment sites in Washington D.C. The primary transportation arteries that serve this rapidly growing area are Routes 267 (the Dulles Toll Road) and 7, both of which experience significant congestion during peak hours. The proposed Metrorail extension would expand transportation capacity to and from Reston and the Tysons Corner regional activity centers, (including reverse commute trips) while providing a direct rail link for commuters from northwest Fairfax and Loudoun Counties to employment opportunities in Tysons Corner, the Rosslyn - Ballston corridor, downtown Washington DC, and other locations adjacent to stations along the 106-mile Metrorail system.

Summary Description	
Proposed Project:	Heavy Rail 11.6 Miles 5 Stations
Total Capital Cost (\$YOE):	\$2,065.00 Million (includes \$50.00 million in finance costs)
Section 5309 New Starts Share (\$YOE):	\$900.00 Million (43.6%)
Annual Forecast Year Operating Cost:	\$83.58 Million
Ridership Forecast (2030):	85,700 Average Weekday Boardings 18,400 Daily New Riders
Opening Year Ridership Forecast (2012):	69,600 Average Weekday Boardings
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

The project's final cost estimate is dependent upon negotiations between DRPT and Dulles Transit Partners (DTP), the design-build consortium which is preparing the final cost estimate and would construct the project. These negotiations may result in changes to the project's cost, financial plan, and project rating.

Project Development History and Current Status

Following years of study, a phased bus/rail system in the Dulles corridor was adopted into the region's long range plan in October 1999. In March 2000, FTA approved initiation of preliminary engineering (PE) for the Dulles Corridor Bus Rapid Transit Project. Upon completion of a Draft Environmental Impact Statement (EIS) in November 2002, a 23.1-mile Metrorail extension to Route 772 in Loudoun County replaced BRT as the locally preferred alternative (LPA). Due to funding concerns, DRPT and WMATA identified a project terminating at Wiehle Avenue as the first phase of implementation of the LPA. FTA approved a Supplemental Draft EIS in October 2003 reflecting this terminus. FTA approved DRPT's request to initiate PE for the Extension to Wiehle Avenue project in June 2004. DRPT received a Record of Decision on the Final EIS for both this project and the full LPA in April 2005.

In March 2006, the Commonwealth of Virginia accepted the Metropolitan Washington Airports Authority's (MWAA) proposal to assume control of the Dulles Toll Road and responsibility for construction of the project. Such authority is intended to enable MWAA to accelerate implementation of not only the Metrorail Extension to Wiehle Avenue but the full LPA, using toll road revenues. In mid-2006, project development activities were put on hold while the Commonwealth considered implementation of a large-bore tunnel for a 4.5-mile segment of the project through Tysons Corner. In September 2006, the Commonwealth decided to retain the original project configuration. DRPT has re-initiated further design work and completed an environmental assessment in November 2006 to accommodate other minor scope changes. The process for transferring the control of the project to MWAA is underway, and DTP's cost estimate for the project expected in early 2007. Final design approval is anticipated in Spring 2007.

Significant Changes Since FY 2007 Evaluation (November 2005)

The capital cost of the project has increased by \$224 million, as a result of greater detail obtained during preliminary engineering, the addition of finance costs, and the refinement of real estate and utility requirements. The Washington Metropolitan Council of Governments adopted a new regional land use forecast that assumes higher-density future land use in the Tyson's Corner area, and the project's updated travel forecasts reflect this increased density.

Project Justification Rating: Medium

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

Cost Effectiveness Rating: Medium-Low

The *Medium-Low* cost effectiveness rating reflects the level of travel-time benefits (19,700 hours each weekday) relative to the project's annualized costs.

Cost Effectiveness	
	<u>New Start vs. Baseline</u>
Cost per Hour of Transportation System User Benefit	\$24.96*
Incremental Cost per Incremental Trip	\$26.80

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

Over 50 percent of project travel-time benefits result from additional off-peak rail service provided between the East Falls Church and Stadium Armory Metrorail stations. Substantial travel-time benefits are also attributable to trips originating in Reston destined for downtown Washington DC and other destinations adjacent to the regional Metrorail system, as well as reverse commute trips to Tysons Corner.

The project's current level of cost contingency is considered low, as is the assumed inflation rate and estimate of finance costs. Under the project's current design-build approach, the capital cost estimate for the project will be finalized prior to its advancement into final design.

Transit-Supportive Land Use Rating: Medium

The *Medium* land use rating reflects the *Medium-High* ratings assigned to transit-supportive land use plans and policies and the performance of those plans and policies, and the *Medium-Low* rating assigned to existing land use.

Existing Land Use: Medium-Low

- Land use around proposed stations is highly oriented toward large office and retail developments designed for automobile commuting. Just under 76,000 jobs are located within ½ mile of the proposed stations and approximately 12,500 residents live within ½ mile of the stations.
- The project provides direct rail access to the region's central business district, which contains over 670,000 jobs.
- Existing developments within Tysons Corner generally feature large setbacks with minimal walkways. Sidewalks are provided at about 60 percent of approaches to intersections, and all stations are located on major auto routes.
- Daily parking rates have gradually been instituted in the core of Tysons Corner, but remain rare and run only as high as \$5 a day, while parking in Reston is typically free. Parking in the Washington, DC CBD costs up to \$15 per day.

Transit-Supportive Plans and Policies: Medium-High

- Tysons Corner is an attractive area for commercial development, and is expecting up to 40 percent increases in development over the next 25 years. Fairfax County has established a special tax district to support the rail system, and is permitting higher development densities in areas surrounding proposed stations. Higher density development allowed in rail station areas is considered an incentive for transit-oriented development on the few remaining vacant parcels and for redevelopment of some of the existing low-density strip malls in the corridor.
- Fairfax County has begun the planning process needed to make the area more transit-supportive. Both regional and local plans focus high-density development in Tysons Corner and, specifically, adjacent to the proposed rail stations.
- Fairfax County uses the proffer system and bonus/incentive zoning to control and direct development. Additional densities of floor area ratios (FAR) of 1.0 – 2.5 are allowed within 1000 feet of station platforms compared to allowed FARs of 0.6 – 1.0 beyond 1,600 feet of proposed stations.
- Policies also support more mixed-use and residential development with a 3:1 density bonus for developments with at least one third residential use. Parking reductions are also offered to development adjacent to transit.
- Adopted urban design guidelines require new developments to be designed with a pedestrian-friendly layout and to provide streetscape amenities. They include provisions to minimize building setbacks and parking in front of buildings, to develop and enlarge a pedestrian network of sidewalks and plazas, and to provide pedestrian lighting and street furniture. Enforcement of requirements for transit-supportive layouts and improvements to pedestrian infrastructure by developers will be key to attaining high rates of transit use in the corridor.

Performance and Impacts of Policies: Medium-High

- Several aging office buildings near the proposed Tysons East station have been demolished, and construction is underway for office/mixed use around the proposed station site. The developer will provide improved access to the station site and is orienting the development layout towards the station.
- Areas adjacent to Metrorail stations throughout WMATA's system have experienced dense, mixed-use development, including the Rosslyn-Ballston corridor, Crystal City, Bethesda, and Silver Spring.

Other Project Justification Criteria

Mobility Improvements Rating: Medium-Low		
<u>Within 1/2-mile radius of boarding areas:</u> Existing Employment Projected Employment (2030) Low Income Households (% of total HH) <u>Average Per Station:</u> Employment Low Income Households Transportation System User Benefit Per Project Passenger Mile (Minutes)	75,900	
	119,000	
	200 (4%)	
	15,200*	
	50*	
	<u>New Start vs. Baseline</u>	
	1.88*	
Environmental Benefits Rating: High		
<u>Criteria Pollutant (Reduction in tons)</u> Carbon Monoxide (CO) Nitrogen Oxide (NO _x) Volatile Organic Compounds (VOC) Particulate Matter (PM ₁₀) Carbon Dioxide (CO ₂) <u>Criteria Pollutant Status</u> Carbon Monoxide (CO) Particulate Matter (PM _{2.5}) 8-Hour Ozone (O ₃) Annual Energy Savings (million British Thermal Units)	<u>New Start vs. Baseline</u>	
	265	
	41	
	20	
	13	
	19,500	
	<u>EPA Designation</u>	
	Maintenance Area*	
	Non-Attainment Area*	
	Moderate Non-Attainment Area*	
	193,500	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	0.196*	\$0.198*

* 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

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

Section 5309 New Starts Share of Total Project Costs: 44%

Rating: Medium-High

DRPT is requesting an approximately 44 percent New Starts share of total project costs, which results in a *Medium-High* rating for this measure.

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal:		
Section 5309 New Starts	\$900.00	43.6%
TIFIA Direct Loan Revenues	\$145.00	7.0%
State:		
Virginia Transportation Act 2000	\$51.70	2.5%
Dulles Toll Road Revenues	\$386.03	18.7%
Local:		
Fairfax County Transportation Improvement District	\$400.00	19.4%
Fairfax County General Fund Revenues or Tax Proceeds	\$182.73	8.8%
Total:	\$2,065.00	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

The capital finance plan is rated *Medium*, based upon the average of the ratings assigned to each of the subfactors listed below. The commitment of capital funds is rated *High*; the completeness subfactor is rated *Medium-High*, the capital cost estimate and planning assumptions subfactor is rated *Medium-Low*; and the remaining subfactors are rated *Medium*.

Agency Capital Condition: Medium

- The average age of WMATA's bus fleet is 8.7 years, which is significantly older than the industry average.
- The Commonwealth of Virginia's excellent bond ratings are as follows: Moody's Investors Service AAA.

Completeness of Capital Plan: Medium-High

- The capital plan was complete and included a 20-year cash flow statement, more than five years of historical data, identification of key assumptions, a moderate level of detail, a sensitivity analysis, and a long-term forecast of capital costs and funding for the WMATA system.

Commitment of Capital Funds: High

- Over 70 percent of non-New Starts funding is committed or budgeted. Sources of funds include a property tax levied in a Transportation Improvement District (TID) that encompasses the corridor served by the project, toll revenue from the Dulles Toll Road, general fund revenues from Fairfax County, and the Commonwealth's Transportation Act of 2000.

Capital Funding Capacity: Medium

- The project's financial plan shows projected cash balances, reserve accounts, and/or access to credit through the Commonwealth of Virginia that would allow DRPT to cover cost increases or funding shortfalls of about one-third of project costs. However, because this reflects the Commonwealth's entire net debt capacity, it is not reasonable to expect it would all be available to the project. Nonetheless, there is sufficient capacity to warrant a *Medium* rating.

Capital Cost Estimate and Planning Assumptions: Medium-Low

- Capital cost contingencies are low for a project at this stage of development.
- The financial plan shows WMATA's infrastructure renewal needs being met over the long-term, but relies on a tripling of annual local capital funds.

Operating Finance Plan Rating: Medium-High

WMATA will operate the project. The operating finance plan is rated *Medium-High*, based upon the average of the ratings of the five subfactors listed below. The operating condition and commitment of operating funds subfactors are rated *High*; the remaining subfactors are rated *Medium*.

Agency Operating Condition: High

- WMATA's current ratio of assets to liabilities as reported in the 2004 audited financial statement is 2.3.
- WMATA is in very good operating financial condition. In the past five years there have been no cash flow shortages in the operating plan, while service has expanded.

Completeness of Operating Plan: Medium

- The operating plan was reasonably complete and included a 20-year cash flow projection, limited historical data, and a moderate level of detail. Operating subsidies that are forecast to be paid by each WMATA pact jurisdiction are not separately identified in the financial plan.

Commitment of Operating Funds: High

- All operating funding is considered committed. This reflects a requirement of the WMATA compact that each jurisdiction pay a share of operating costs based on an explicit formula.

Operating Funding Capacity: Medium

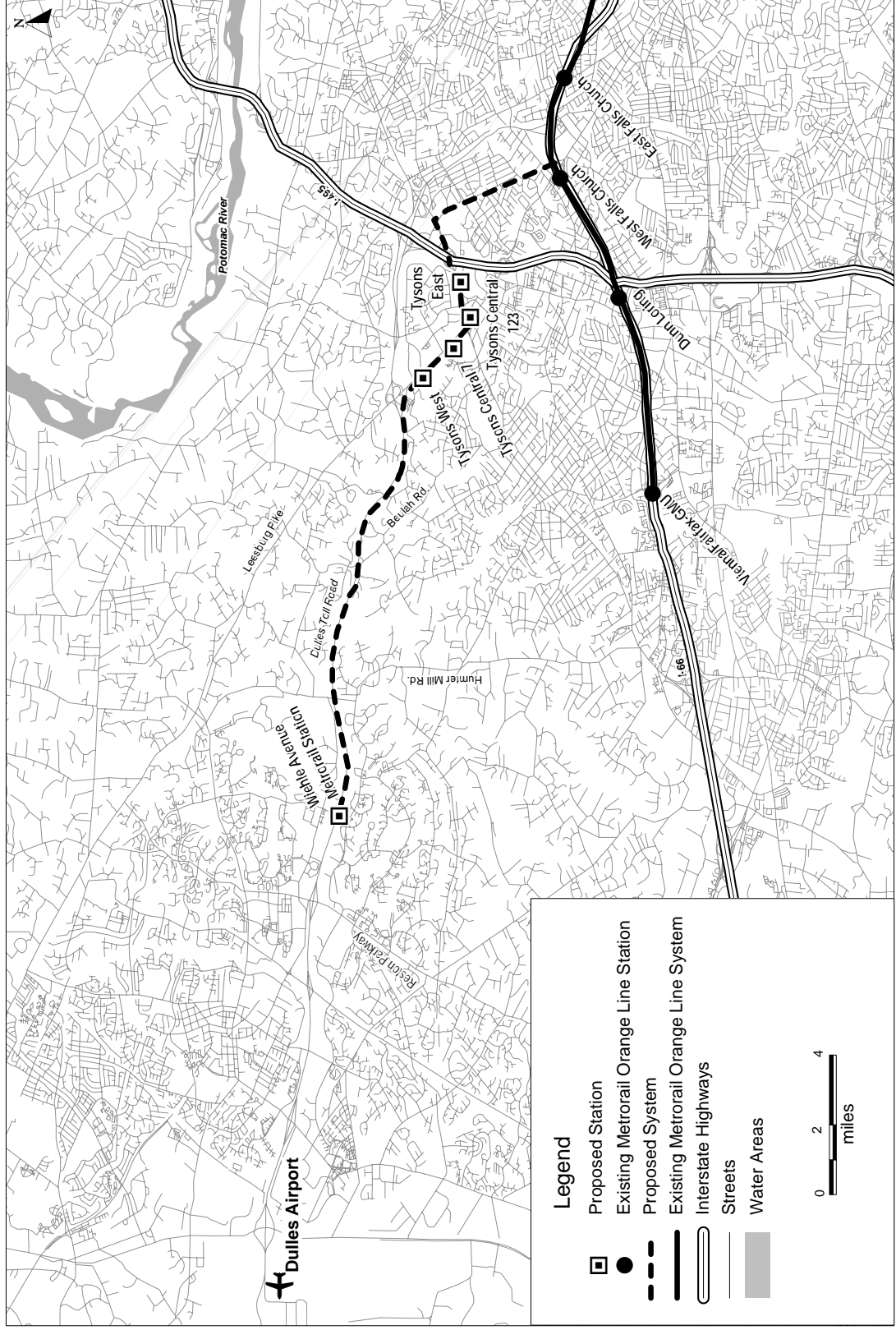
- The project's financial plan does not show projected cash balances, reserve accounts, and/or access to credit. Because the operating plan is fiscally balanced (i.e., no operating surpluses or shortfalls), the agency's current working capital would not be diminished and would be sufficient to fund 50 percent of operating cost.

Operating Cost Estimates and Planning Assumptions: Medium

- Although the forecasts of operating and maintenance costs and passenger revenues are slightly conservative, they are offset by greater-than-historical growth in the operating subsidy to be provided by local jurisdictions.

Dulles Corridor Metrorail Project - Extension to Wiehle Avenue

Northern Virginia



Project Development

Metro Rapid Bus System Gap Closure

Los Angeles, California

(November 2006)

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is proposing to construct and operate eight street-running bus rapid transit (BRT) lines that would connect existing Metro Rapid Bus routes, effectively completing a regional arterial BRT network. The proposed lines have been identified for their potential to reduce end-to-end travel times throughout the existing Metro Rapid Bus system. In total, the project includes 247 new stations spread over 120 miles. The proposed service would operate with existing buses at 10 minute headways during the peak period, and an average of 15 minute headways during off-peak hours. Each of the eight corridors meets the eligibility definition of a Very Small Start, but is presented here as a single project (which also meets the definition of a Very Small Start). The following table summarizes the service characteristics and current ridership of each of the proposed eight routes:

Corridor Characteristics			
	Route Length (mi)	Weekday Ridership	Stations/Stops
West Olympic	12.1	32,555	36
Garvey-Chavez	14.7	21,100	32
Manchester	13.5	12,890	27
Atlantic	25.1	16,403	51
San Fernando	13.6	15,600	25
South Sepulveda	12.8	6,890	19
Torrance	16.8	7,812	38
Central Avenue	11.2	13,387	19

Each project corridor contains high population and employment density. Nearly 20 percent of residents within one-half mile of the eight proposed corridors do not have access to an automobile. Current bus service in these corridors make frequent stops to accommodate passenger demand. According to an evaluation performed by the Los Angeles Department of Transportation, nearly 50 percent of all transit delay was associated with buses stopping at traffic signals and bus stops. Service provided under the Metro Rapid Bus System Gap Closure project will achieve reduced delay, supplementing existing local bus service with BRT featuring fewer stops and traffic signal priority. This project is intended to improve transit service and amenities for a large number of existing transit riders, as well as attract new riders. The 14 Metro Rapid Bus lines currently in operation have improved transit travel times by approximately 20 percent as compared to local bus service.

Summary Description	
Proposed Project:	Bus Rapid Transit
	119.8 Miles
	247 Stations
Total Capital Cost (\$YOE):	\$25.66 Million
Section 5309 New Starts Share (\$YOE):	\$16.68 Million (65.0%)
Annual Operating Cost (\$YOE):	\$39.8 Million
Opening Year Ridership Forecast (2008):	123,100 Average Weekday Boardings
	40,000 Daily New Riders
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

Project Development History and Current Status

In 1999, the LACMTA initiated its Metro Rapid Bus Demonstration Program. This program included the construction and implementation of Rapid Bus routes in two heavily patronized transit corridors: Line 720 on Wilshire and Whittier Boulevards and Line 750 on Ventura Boulevard. Due to the Demonstration Program's success, the LACMTA approved the implementation of 22 additional Metro Rapid Bus lines. in September 2002. Fourteen of the proposed 22 routes have been implemented and are currently operating. The remaining eight Metro Rapid Bus routes are the topic of this proposal. The first four of these routes are scheduled to open by December 2007. The remaining lines would open in June 2008.

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

Project Justification Rating: Medium

Each of the Gap Closure corridors are rated *Medium* for project justification based on a *Medium* rating for both cost effectiveness and transit-supportive land use. LACMTA did not provide evidence of the anticipated economic development impacts of the Gap Closure project.

Cost Effectiveness Rating: Medium

The Metro Rapid Bus System Closure project – and each of the specific corridor improvements which constitutes the project - qualify as a Very Small Start. Each of the corridors proposed for improvement would include low-cost elements such as service branding, 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. Each of the eight Metro Rapid Bus corridors that would be implemented as part of the Gap Closure project meets this threshold. Therefore, FTA has assigned the project a *Medium* rating for transit supportive land use plans and policies.

Local Financial Commitment Rating: Medium

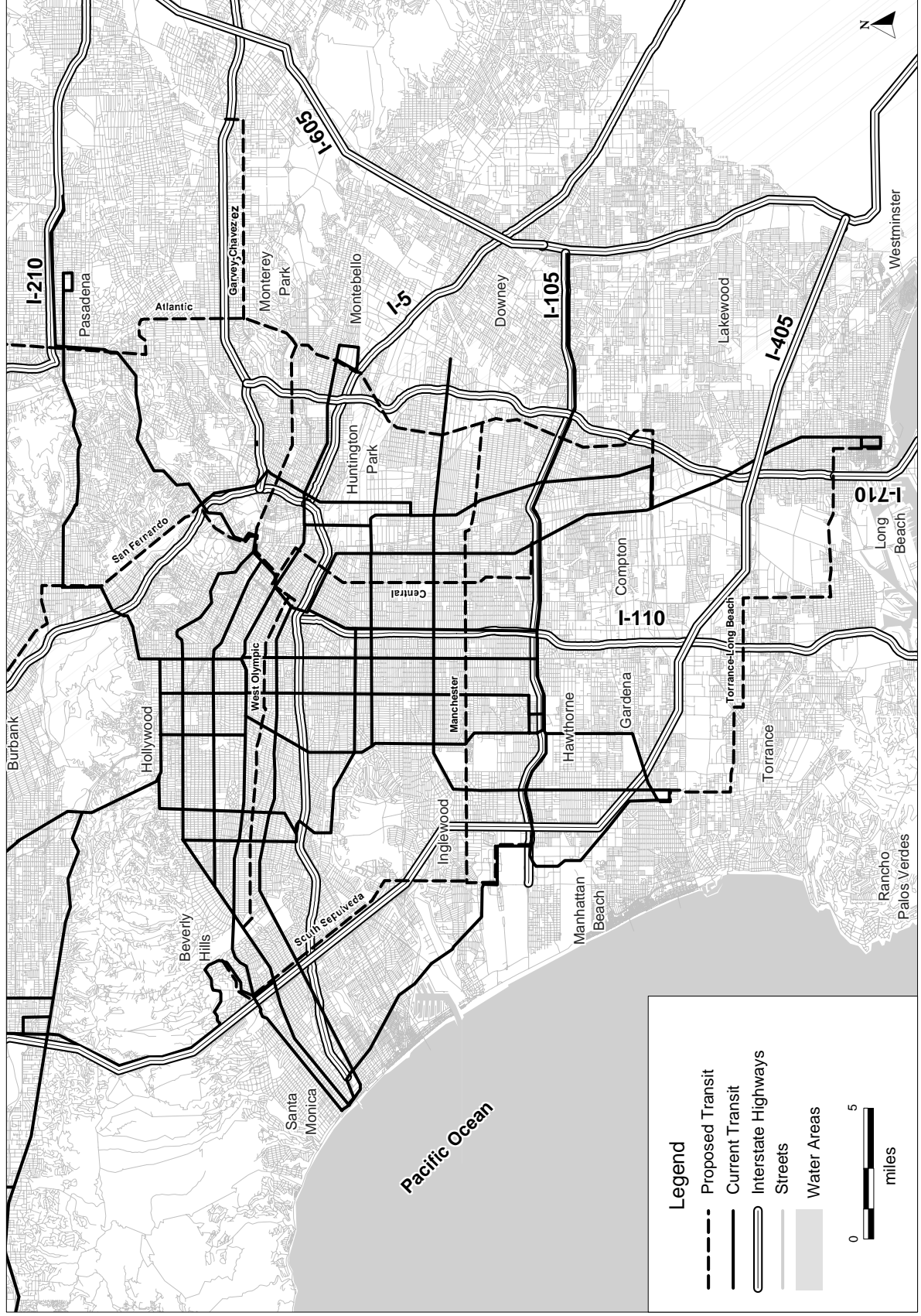
The project is rated *Medium* for local financial commitment, based upon LACMTA's acceptable financial condition; a reasonable plan for funding for the non-New Starts share of capital costs; and evidence that operations and maintenance costs of the proposed project is less than five percent of the agency's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

Locally Proposed Financial Plan		
Source of Funds	Total Funds (\$million)	Percent of Total
Federal: Section 5309 New Starts	\$16.68 million	65.0%
Local: Proposition C Revenues	\$8.98 million	35.0%
Total:	\$25.66 million	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.

Metro Rapid Bus System Gap Closure

Los Angeles, California



Troost Corridor BRT

Kansas City, Missouri

(November 2006)

The Kansas City Area Transportation Authority (KCATA) is proposing to construct and operate an approximately 9-mile long street-running bus rapid transit (BRT) line along Troost Avenue, terminating in downtown Kansas City, Missouri. The proposed line runs roughly one mile west and parallel to the existing six-mile "MAX" BRT route that opened for service in July 2005. The Troost Corridor BRT project includes 25 new stations with a real-time passenger information system, signal prioritization, and the purchase of 15 low-floor, branded vehicles. The proposed service would operate with 10 minute headways during the peak-period and 15 minute headways during the weekday off-peak. The project qualifies as a Very Small Start.

Existing transit service in the Troost Avenue corridor carries approximately 7,800 passengers each weekday, which is the highest ridership of any corridor in the region. The project corridor contains the greatest population density in the Kansas City region, as well as major employment and entertainment centers such as downtown, the Hospital Hill Medical Complex, Stower's Medical Institute, the University of Missouri at Kansas City, Rockhurst University, and the Federal/Honeywell complex. Moreover, nearly 20 percent of the population within one mile of Troost Avenue does not have access to an automobile. Current bus service in the corridor makes frequent stops along its routing to accommodate passenger demand. The Troost Corridor BRT project will supplement existing transit service with BRT service that features fewer stops and signal priority.

This project is intended to provide improved transit service and amenities for a large number of existing transit riders, as well as to attract new riders. The existing Main Street MAX BRT project resulted in ridership gains of over 20 percent in the corridor. If BRT service on Troost Avenue results in a comparable ridership gain, as expected, transit ridership in the corridor is expected to exceed 9,000 per day.

Summary Description	
Proposed Project:	Bus Rapid Transit
	9.0 Miles
	25 Stations
Total Capital Cost (\$YOE):	\$30.73 Million
Section 5309 New Starts Share (\$YOE):	\$24.58 Million (80.0%)
Annual Operating Cost (\$YOE):	\$350,000
Opening Year Ridership Forecast (2010):	9,000 Average Weekday Boardings 1,200 Daily New Riders
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium
FY 2008 Overall Project Rating:	Medium

Project Development History and Current Status

In 2001, KCATA and the City of Kansas City, Missouri completed the *Central Business Corridor (CBC) Plan* and identified two main corridors in need of transit improvement. The first corridor ran north-south along Main Street, and the second along Troost Avenue. The *CBC Plan* proposed light rail transit (LRT) as a transportation solution for each of these corridors, while identifying BRT as an alternative

improvement strategy should light rail prove to be financially infeasible. LRT was rejected by area voters in 2001 as too costly; subsequently, BRT was selected as the preferred alternative for each corridor.

BRT implementation efforts culminated with the concurrent construction of the Main Street MAX BRT line and the development of the *Smart Moves Regional Transit Plan* in 2004. The *Plan* includes implementation of BRT service on Troost Avenue. Congress appropriated \$12.06 million in New Starts funding in FY 2006 for Kansas City area BRT projects. FTA notified Congress of its intent to approve the Troost Corridor 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. KCATA did not provide evidence of the anticipated economic development impacts of the project.

Cost Effectiveness Rating: Medium

The Troost Corridor 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 to speed service, 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

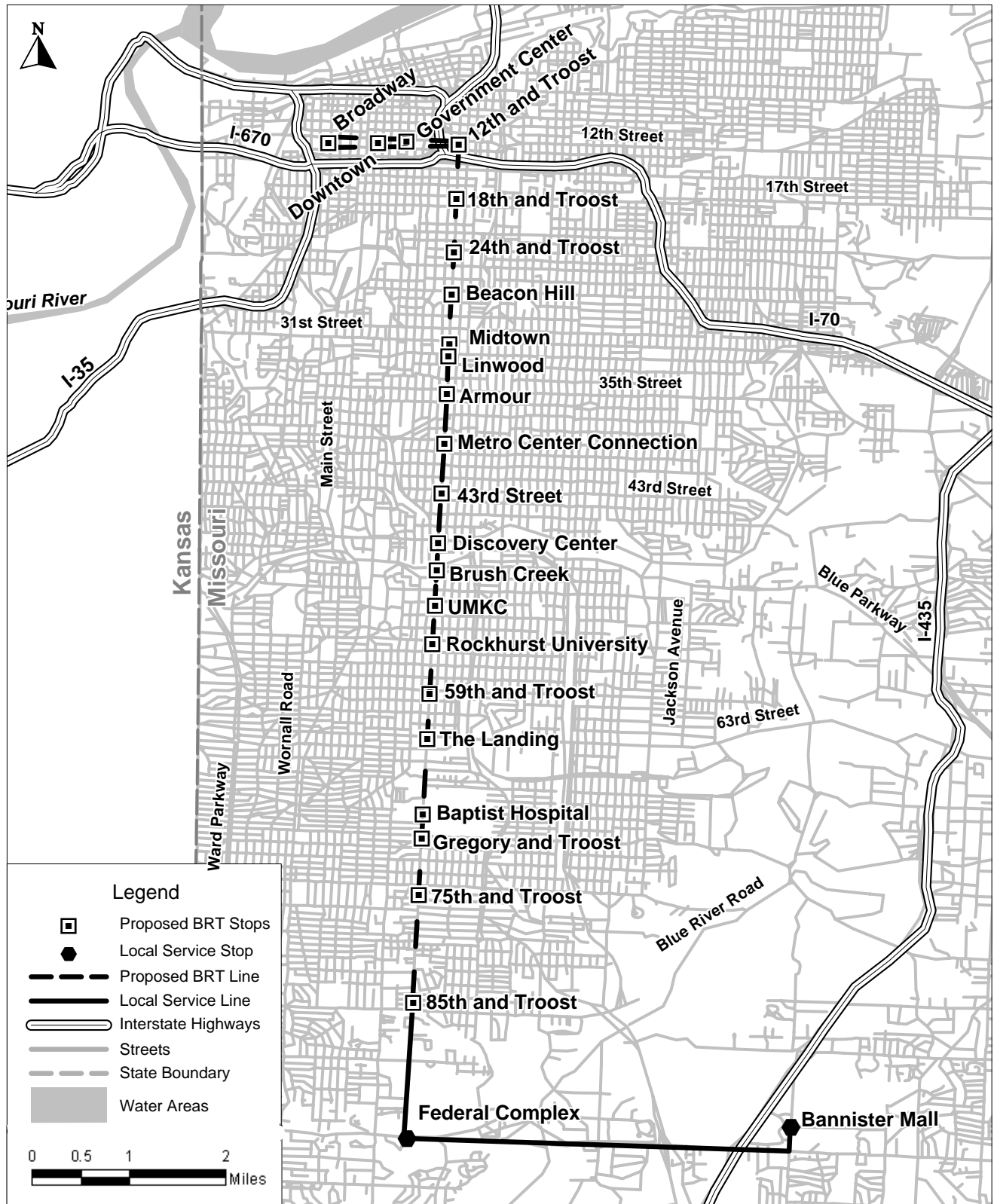
The project is rated *Medium* for local financial commitment, based upon KCATA's acceptable financial condition; a reasonable plan for funding for the non-New Starts share of capital costs; and evidence that operations and maintenance costs of the proposed project is less than five percent of the agency's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

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 New Starts	\$24.58 million	80.0%
Local: Existing Local Sales Tax	\$6.15 million	20.0%
Total:	\$30.73 million	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.

Troost Corridor BRT

Kansas City, Missouri



Pioneer Parkway EmX BRT

Springfield, Oregon

(November, 2006)

The Lane Transit District (LTD) proposes to construct and operate a 7.8-mile extension of the Franklin corridor Bus Rapid “EmX” Transit (BRT) “Green Line” currently under construction in Eugene Oregon. The proposed Pioneer Parkway EmX BRT project extends service from the eastern terminus of the Franklin corridor route north along the Pioneer Parkway to existing and new residential and employment areas in Springfield. The project includes 14 new stations, traffic signal priority, and the purchase of four low-floor, branded, hybrid-electric vehicles. The proposed service would operate at-grade with 10-minute headways during weekday peak- and off-peak periods.

The primary employment center in the Eugene-Springfield region is downtown Eugene, with employment of approximately 15,000. While downtown Eugene is not part of the Pioneer Parkway corridor, it will be served with a direct connection to transit service via the Franklin corridor BRT. The Franklin BRT line will also serve the 295-acre campus of the University of Oregon and its total enrollment of just over 20,000 students. Major employment centers along the Pioneer Parkway BRT route include Symantec, Royal Caribbean, PeaceHealth, and the North Gateway Mall. Total employment within one-half mile of the BRT route is expected to be 15,500 jobs by 2010, over 10 percent of the metropolitan area’s total forecasted employment.

Summary Description	
Proposed Project:	Bus Rapid Transit
	7.8 Miles
	14 Stations
Total Capital Cost (\$YOE):	\$36.99 Million
Section 5309 New Starts Share (\$YOE):	\$29.59 Million (80.0%)
Annual Operating Cost (\$YOE):	\$1.07 Million
Opening Year Ridership Forecast (2010):	3,700 Average Weekday Boardings
	450 Daily New Riders
FY 2008 Local Financial Commitment Rating:	Medium
FY 2008 Project Justification Rating:	Medium-High
FY 2008 Overall Project Rating:	Medium

Project Development History and Current Status

A study of the feasibility of urban rail in the Eugene/Springfield area conducted in 1995 concluded that projected ridership in the region over a 20-year period was too low to be competitive for New Starts funding. Instead, the study identified BRT as a less capital-intensive way to provide efficient transit service for the region. In 2001, BRT was identified as a strategy to combat congestion in the adopted *Eugene-Springfield Regional Transportation Plan*. In this plan, the initial Franklin Boulevard BRT route was identified as the first phase of a potential 60-mile regional BRT system. BRT service in the Franklin corridor is scheduled to begin in January 2007.

LTD completed an environmental assessment on the Pioneer Parkway EmX BRT project in November 2006. FTA notified Congress of its intent to approve the project into project development in November 2006, and is expected to take formal approval action in December 2006.

Project Justification Rating: Medium-High

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

Cost Effectiveness Rating: High

The *High* rating is based on the level of travel-time benefits (650 average weekday hours) relative to the project's annualized costs.

Cost Effectiveness	
Cost per Hour of Transportation System User Benefit	<u>New Start vs. Baseline</u> \$7.52*

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

Transit-Supportive Land Use Rating: Medium-Low

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

Existing Land Use: Low

- The Eugene-Springfield metropolitan area has a forecast population of 261,000 and employment of 132,000 in 2010. Total employment served by the BRT project is low at 15,300, including the small downtown of Springfield which contains 1,300 jobs. The Pioneer Parkway project will indirectly serve downtown Eugene (15,000 employees) and the University of Oregon (20,000 students) via the Franklin Boulevard. BRT, which is under construction as of 2006.
- Downtown Springfield is a traditional downtown with street-fronting mixed-use buildings typically of one- to three-stories in height. Elsewhere, development in the corridor includes a mix of single-family homes and apartment complexes at densities ranging up to 20 to 30 units per acre, as well as low-density neighborhood commercial, a regional shopping mall, light industrial uses, and some one- and two-story office buildings.
- Most development includes sidewalks although some pedestrian connections are missing in the outer portions of the corridor. There is some undeveloped land in the northern section of the corridor. Parking is free in all locations.

Transit-Supportive Plans and Policies: Medium

- Per state planning law, the cities in the Eugene-Springfield region have adopted urban growth boundaries. A jointly developed regional plan as well as municipal planning documents call for concentrating development in pedestrian-friendly, mixed-use "nodes." Three of the six nodes designated in the City of Springfield are in the proposed BRT corridor, and small area planning has been undertaken for each node. However, only the two downtown nodes would be truly "urban" in character, and the third node, at the RiverBend suburban location, is being developed with a more campus-like environment. The other major employment and growth area in the corridor, the Gateway area, has not been identified as a node and has not undergone transit-supportive planning.
- Refinement plans for downtown Springfield and the Glenwood Urban Renewal District (directly across the river from downtown) call for a fine-grained mix of uses in two- to four-story, street-fronting buildings. There are no parking requirements in downtown Springfield, and reduced parking requirements are proposed for the Glenwood district.
- Zoning in downtown Springfield has recently been revised to eliminate height restrictions and require a minimum of two-story development, and there are no off-street parking requirements in this area. Mixed use and nodal overlay zoning districts are available in city code and have been applied to downtown Springfield as well as the RiverBend area.

- Zoning elsewhere in the corridor typically allows for residential development of up to 10 units per acre (“low density”) or 10 to 20 units per acre (“medium density”), with some pockets of 20 to 30 units per acre (“high density”). In commercial areas, height limits vary from 20 feet to unrestricted while lot coverages are typically restricted to 35 percent. Minimum setbacks of 10 to 30 feet apply. Parking requirements are on the low side compared to typical U.S. suburban areas.
- Planning at all levels, as is typical in Oregon, has included a significant focus on growth management and other land use issues. The City of Springfield and LTD have reached out to some developers to increase the transit-supportiveness of new development and add pedestrian improvements to existing development in the corridor. The city has recently adopted financial tools and incentives to promote redevelopment in the downtown area, although their effectiveness remains to be demonstrated.

Performance and Impacts of Policies: Medium-Low

- Recent examples of transit-supportive development in the corridor are limited to one mixed-use project downtown and two or three smaller redevelopment projects, all involving public support. The PeaceHealth complex, the most significant corridor development, is an improvement over traditional suburban development but nonetheless mixed in terms of its transit-supportive character. With the exception of pedestrian access improvements, efforts have not been made in the Gateway area to create a more transit-supportive environment.
- Some opportunities for infill and redevelopment exist in downtown Springfield and a major opportunity for mixed-use, pedestrian-friendly development exists in the adjacent Glenwood redevelopment area. There is some vacant land in the north part of the corridor but for the most part it is not yet being planned for transit-supportive development. While the Eugene-Springfield region is growing, a strong market for transit-oriented development has not yet been demonstrated in this relatively small metropolitan area.

Local Financial Commitment Rating: Medium

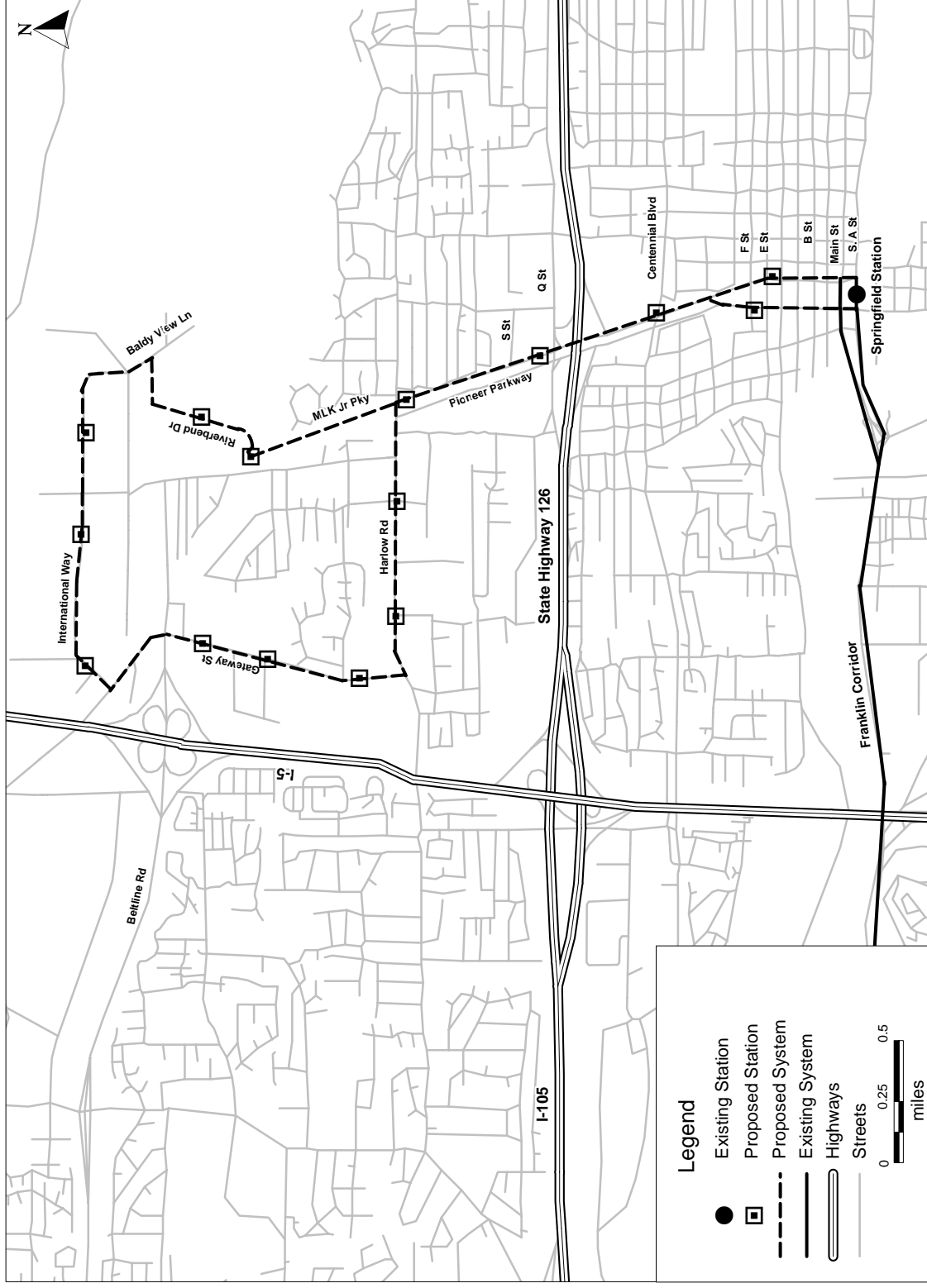
The project is rated *Medium* for local financial commitment, based upon LTD’s acceptable financial condition; a reasonable plan for funding for the non-New Starts share of capital costs; and evidence that operations and maintenance costs of the proposed project is less than five percent of the agency’s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

Locally Proposed Financial Plan		
<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 New Starts	\$29.59 million	80.0%
State: ConnectOregon – Lottery Bond	\$5.40 million	14.6%
Local: LTD Capital Fund	\$2.00 million	5.4%
Total:	\$36.99 million	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.

Pioneer Parkway EmX BRT

Springfield, Oregon



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 154th Street in the City of Tukwila to S 216th Street, where International Boulevard becomes Pacific Highway South, onto S 316th 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

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

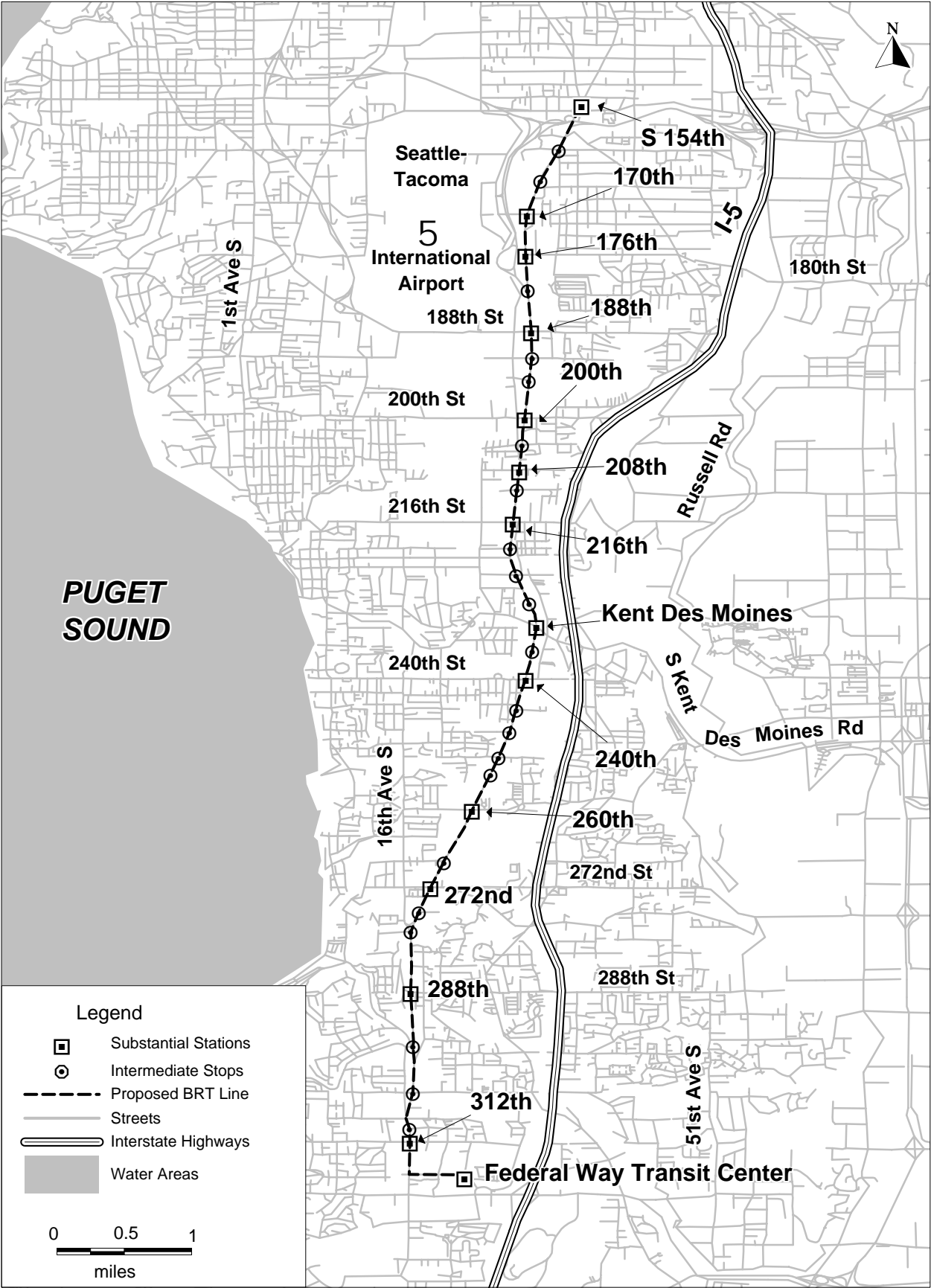
The project is rated *Medium* for local financial commitment, based upon King County's acceptable financial condition; a reasonable plan for funding for the non-New Starts share of capital costs; and evidence that operations and maintenance costs of the proposed project is less than five percent of the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

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



Appendix B

FY 2008 Evaluation and Rating Process

FY 2008 New Starts and Small Starts Evaluation and Rating Process

This document describes the methodology that the Federal Transit Administration (FTA) will use to evaluate, rate, and recommend funding for candidate New Starts and Small Starts projects beginning May 2006, including FTA's evaluations for the *FY 2008 Annual Report on Funding Recommendations*. This methodology is similar to the process used in the evaluation of projects included in the *FY 2004-2007 Annual Reports on New Starts*, and is generally consistent with FTA's *Final Rule on Major Capital Investment Projects* issued on December 7, 2000, but includes some of the changes found in the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and incorporates interim procedures for the evaluation and rating of proposed Small Starts projects.

FTA intends that the FY 2008 project evaluation process will continue to reflect two changes established in SAFETEA-LU which FTA had implemented in time for the FY 2007 evaluation cycle. Specifically, SAFETEA-LU replaced a three-point rating scale with a five-point scale, with the overall project rating designations of *Highly Recommended*, *Recommended*, and *Not Recommended* replaced with *Low*, *Medium-Low*, *Medium*, *Medium-High*, and *High*. In addition, SAFETEA-LU, while continuing to require that a project's overmatch be evaluated, added a clause that nothing in the Act shall be construed as authorizing the Secretary to require a non-Federal financial commitment for a project that is more than 20 percent of the net capital project cost. As noted in *Section III.A* of this document, projects still receive higher ratings depending upon the extent of non-New Starts overmatch, and project sponsors are still encouraged to request the lowest New Starts share possible given limited fund availability and the overall funding demand of projects in the New Starts pipeline.

In addition, SAFETEA-LU added a subsection containing a new capital investment program category for projects requesting Section 5309 Capital Investment Grant funding of less than \$75,000,000 with a total project cost of less than \$250,000,000, and expanded the eligibility requirements for these smaller projects to allow for certain corridor-based bus projects that do not include a physical "fixed guideway." That new capital investment program category, referred to as "Small Starts" is to be funded beginning in FY 2007. The final rule describing the project evaluation and rating process for New Starts and Small Starts is still being developed; however, in the interim, FTA issued in July 2006 *Interim Guidance and Instructions for Small Starts* to evaluate and rate these projects and recommend them for funding. This appendix also summarizes the interim Small Starts evaluation process, and identifies where it differs from the New Starts process.

Section I of this appendix introduces the legislative background of FTA's project evaluation and rating responsibilities; identifies each of the statutory criteria used by FTA in its evaluation process; and summarizes the overall project evaluation and rating process. *Sections II* and *III* describe the specific project justification and local financial commitment measures and ratings, respectively, including an explanation of the rating ranges and thresholds for each individual measure, and how they are rolled up into aggregate criteria ratings. *Section IV* concludes with a summary of what the overall project rating will mean for funding recommendations in the President's Budget for FY 2008. All funding recommendations in the President's Budget are subject to the availability of appropriations.

This document is supplemented by two additional documents. *Guidelines and Standards for Assessing Transit-Supportive Land Use* and *Guidelines and Standards for Assessing Local Financial Commitment* provide additional detail on the process FTA uses to evaluate these two criteria. These materials are posted on FTA's website under *New Starts Project Planning and Development*: http://www.fta.dot.gov/planning/newstarts/planning_environment_2620.html.

FTA reminds the audience of this appendix that project evaluation is an on-going process. It is based on an analysis of the documentation submitted to FTA by local agencies to support their proposed project. As New Starts and Small Starts projects proceed through project development, the estimates of costs, benefits, and impacts are refined. The FTA ratings and recommendations are updated at least annually to reflect new information, changing conditions, and refined financing plans.

I. LEGISLATIVE BACKGROUND

SAFETEA-LU continues the evaluation process provisions first established by the Transportation Equity Act for the 21st Century (TEA-21) in 1998. SAFETEA-LU requires the U.S. Department of Transportation to submit an annual report to Congress (*Annual Report on Funding Recommendations*) that includes the Secretary's evaluation, ratings, and a proposal on the allocation of funds among applicants for amounts to be made available to finance grants and loans for capital projects for new fixed guideway systems and extensions to existing fixed guideway systems and the new Small Starts projects.

Like TEA-21, SAFETEA-LU mandates that proposed New Starts projects must receive FTA approval to advance from "alternatives analysis" to "preliminary engineering," and from "preliminary engineering" to "final design." This approval is based, in large part, on an evaluation of the proposed project's New Starts criteria. Likewise, Small Starts projects must receive FTA approval to advance from "alternatives analysis" to "project development"; a single project development phase that incorporates the features of preliminary engineering and final design. FTA also evaluates and rates projects for this *Annual Report* and uses these ratings in the preparation of the President's Budget recommendations contained within.

FTA's evaluation includes a review of the information submitted to support each proposed project and the assignment of a rating to each evaluation criterion. Based on these criteria-specific ratings, FTA assigns candidate New Starts projects summary ratings for project justification and local financial commitment, and develops an overall project rating. FTA also assigns ratings to Small Starts projects on a subset of the New Starts evaluation criteria and develops a summary rating for each project. Sections 1.A and 1.B below present the criteria used by FTA in its New Starts and Small Starts evaluation process; Section 1.C provides an overview of how these criteria fit into the overall evaluation process; and Section 1.D summarizes how overall project ratings are derived.

1.A Project Justification Criteria

Similar to TEA-21, SAFETEA-LU Section 3011(a) (49 USC 5309(d)) requires that projects proposed for New Starts funding be justified based on a comprehensive review of the criteria presented on the following page:

- Mobility Improvements;

- Environmental Benefits;
- Operating Efficiencies;
- Cost Effectiveness; and
- Transit Supportive Land Use Policies and Future Patterns

SAFETEA-LU also continues the TEA-21 requirement of considering “other factors.” SAFETEA-LU further requires that FTA consider in its review the economic development effects of New Starts projects. FTA desires through the rulemaking process to work with the industry on the development of appropriate factors for measuring the economic development effects of candidate projects, and therefore will not consider economic development explicitly in the FY 2008 evaluation cycle as a specific criteria for evaluation. However, FTA does encourage candidate New Starts project sponsors to submit information which they believe demonstrates the economic development impacts of their proposed transit investments as an “other factor.” FTA will consider this information per the process used for rating other factors as described in *Section II.G* of this document.

In the interim period before issuance of a final rule governing Small Starts, Small Starts will be evaluated on the basis of the following project justification criteria:

- Cost Effectiveness; and
- Transit Supportive Land Use Policies and Future Patterns.

The development of this information is intended to be less complex than required for New Starts. In addition, FTA will also consider “other factors,” which FTA will use to evaluate the anticipated economic development impacts of proposed Small Starts projects.

A subset of very simple and low cost transit projects, termed “Very Small Starts” projects, will be evaluated and rated using an even more simplified process. These Very Small Starts have the following features:

- Substantial transit stations,
- Traffic signal priority/pre-emption, to the extent, if any, that there are traffic signals on the corridor,
- Low-floor vehicles or level boarding,
- “Branding” (distinguishing through marketing and physical characteristics) of the proposed service,
- 10 minute peak/15 minute off peak frequencies or better while operating at least 14 hours per weekday (not required for commuter rail or ferries),
- Are in corridors with existing riders who will benefit from the proposed project that exceed 3,000 per average weekday and
- Have a total capital cost less than \$50 million (including all project elements) and less than \$3 million per mile, exclusive of rolling stock.

Very Small Starts projects that meet these criteria, adequately documented in the Small Starts project submission to FTA, will receive a rating of *Medium* for project justification. FTA finds that projects which meet these characteristics are by their nature cost effective and have transit supportive land-use appropriate to the proposed level of investment.

Section III of this appendix presents the specific measures FTA will use in the FY 2008 evaluation cycle to represent each of the project justification criteria, and how FTA will evaluate them.

I.B Local Financial Commitment

Similar to TEA-21, SAFETEA-LU Section 3011(a) (49 USC 5309(d)) requires that proposed projects also be supported by an acceptable degree of local financial commitment, including evidence of stable and dependable financing sources to construct, maintain and operate the transit system. Section 5309(d) further allows for an evaluation of the extent to which the project proposes a local financial commitment that exceeds the required non-Federal share of the cost of the project.

The measures for the evaluation of the local financial commitment to a proposed project to be used in the FY 2008 evaluation cycle are:

- The proposed share of total project costs from sources other than the Section 5309 New Starts or Small Starts program, including Federal formula and flexible funds, the local match required by Federal law, and any additional capital funding;
- The strength of the proposed capital financial plan; and
- The ability of the sponsoring agency to fund operation and maintenance of the entire system as planned once the guideway project is built.

Section IV describes how FTA will use these measures in its evaluation of candidate New Starts projects.

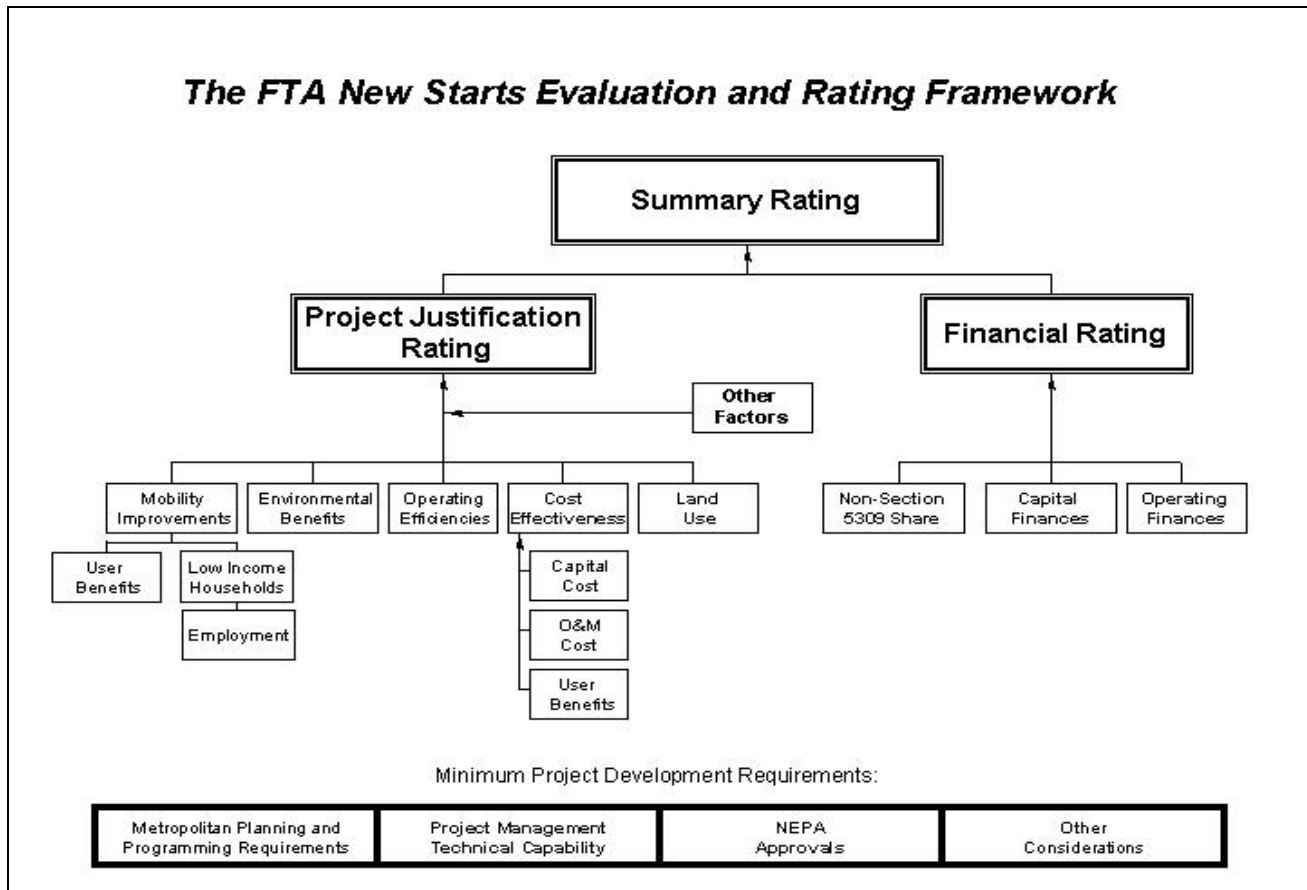
Small Starts projects may qualify for a highly simplified financial evaluation if the project sponsor can demonstrate the following:

- A reasonable plan to secure funding for the local share of capital costs or sufficient available funds for the local share (all non-New Starts funding must be committed before receiving a Project Construction Grant Agreement);
- The additional operating and maintenance cost to the agency of the proposed Small Starts project is less than 5 percent of the agency's operating budget; and
- The agency is in reasonably good financial condition.

Small Starts projects that meet these criteria will receive a local financial commitment rating of *Medium*. Small Starts projects which cannot qualify for this highly simplified financial evaluation will be evaluated and rated in the same manner as other New Starts projects.

I.C The Evaluation Process

FTA evaluates proposed New Starts projects against the full range of criteria for both project justification and local financial commitment, as described in Figure I-1 on the following page. Small Starts are evaluated against a subset of these measures including cost effectiveness, land use, other factors (including economic development impacts), and local financial commitment. The specific project justification and local financial commitment measures included in Figure I-1 are described in detail in Sections II and III of this appendix, respectively.

Figure I-1 New Starts Evaluation Process

I.D Overall Project Ratings

TEA-21 required that an overall project rating of *Highly Recommended*, *Recommended* or *Not Recommended* be assigned to each proposed project, based on the results of FTA's evaluation of each of the criteria for project justification and local financial commitment. However, SAFETEA-LU Section 5309(d) and (e) requires that FTA assign overall ratings on a 5-point scale of *High*, *Medium-High*, *Medium*, *Medium-Low*, or *Low* to each New Starts or Small Starts project subject to evaluation.

To assign overall project ratings to each proposed project, FTA considers the individual ratings for each of the local financial commitment measures and project justification criteria. FTA combines this information into summary "local financial commitment" and "project justification" ratings for each project.

For both project justification and local financial commitment, summary ratings are assigned as one of the following: *High*, *Medium-High*, *Medium*, *Medium-Low* or *Low*. These summary ratings are then combined into an overall project rating. Table I-1 on the following page summarizes the decision rules used to reach overall project ratings under both TEA-21 and SAFETEA-LU. As the table demonstrates, the decision rules remain unchanged from TEA-21; only the designation assigned to the project's overall rating is different from prior practice.

While FTA anticipates that it will use the full range of ratings, from *High*, *Medium-High*, *Medium*, *Medium-Low* to *Low* in making this determination, it intends to use the simpler designations of *High*, *Medium* and *Low* used in FY 2007 until the completion of rulemaking. FTA desires to receive input from the transit community before using the five-point rating system.

Table I-1 FY 2007 Overall Rating Decision Rules

Summary Ratings	Overall Ratings TEA-21 (FY 2000 -FY 2006)	Overall Ratings SAFETEA-LU (FY 2007-FY 2008)
At least Medium-high for local financial commitment and project justification	Highly Recommended	High
At least Medium for local financial commitment and project justification	Recommended	Medium
Not rated at least Medium for local financial commitment and project justification	Not Recommended	Low

FTA reminds project sponsors that candidate projects will no longer receive a designation of **Not Rated** if they receive a *Medium* or higher rating for local financial commitment but cannot produce acceptable information in support of their project justification criteria. In cases where such information is either not submitted or submitted but deemed to be unreliable, FTA will assign a rating of *Low* to the affected project justification criteria.

I.E Ratings: An On-going Process

Again, it is important to emphasize that project evaluation is an on-going process. FTA evaluation and rating occurs annually in support of budget recommendations presented in the *Annual Report on Funding Recommendations* and when a project sponsor requests FTA approval to advance their proposed New Starts project into preliminary engineering and final design or Small Starts projects into project development. Consequently, as proposed New Starts and Small Starts projects proceed through the project development process, information concerning costs, benefits, and impacts is refined and the ratings are updated to reflect new information.

II. SUMMARY PROJECT JUSTIFICATION RATING

The following summarizes FTA's process for evaluating the project justification criteria of proposed New Starts projects.

II.A Project Justification Rating

FTA assigns a summary project justification rating of *High*, *Medium-High*, *Medium*, *Medium-Low* or *Low* to each project based on consideration of the ratings applied to the project justification criteria presented in *Section I.A* and each of the specific measures identified in Table II-1 on the following page:

Table II-1 New Starts and Small Starts Project Justification Criteria and Supporting Measures and Categories

Criterion	Measures/Categories
Cost Effectiveness (New Starts and Small Starts)	<ul style="list-style-type: none"> Incremental Cost per Hour of Transportation System User Benefit
Transit Supportive Land Use and Future Patterns (New Starts and Small Starts)	<ul style="list-style-type: none"> Existing Land Use Transit Supportive Plans and Policies Performance and Impacts of Policies
Mobility Improvements (New Starts only)	<ul style="list-style-type: none"> Normalized Travel Time Savings (Transportation System User Benefit per Project Passenger Mile) Low-Income Households Served Employment Near Stations
Operating Efficiencies (New Starts only)	<ul style="list-style-type: none"> System Operating Cost per Passenger Mile
Environmental Benefits (New Starts only)	<ul style="list-style-type: none"> Change in Regional Pollutant Emissions Change in Regional Energy Consumption EPA Air Quality Designation

For mobility improvements and transit supportive land use, projects are aligned for each measure and category in a continuum of values from *Low* to *High* and broken into five groups, with each group assigned a numerative rating of 1 (*Low*) to 5 (*High*). The thresholds that distinguish the five groups are not pure quintiles (that is, 20 percent each of the total number of projects being evaluated for the measure) but rather logical break points in the aligned data that separate one group from another. Where criteria are represented by more than one measure, ratings for each measure are rolled up and averaged into criterion-specific ratings, where the numerative rating is converted into a corresponding *High*, *Medium-High*, *Medium*, *Medium-Low* or *Low* rating. The mobility improvements and land use rating process are described in greater detail in *Sections II.C* and *II.D* below.

For the cost effectiveness criterion, specific dollar breakpoints are defined for *High*, *Medium-High*, *Medium*, *Medium-Low* and *Low* ratings (these breakpoints are presented in *Section II.B* below). Decision rules for the operating efficiencies and environmental benefits criteria are described in *Sections II.E* and *II.F* below.

Criterion-specific ratings are subsequently combined to form the summary *High*, *Medium-High*, *Medium*, *Medium-Low* or *Low* justification ratings for each project presented in *Section I.E*.

FTA assigns a weight of 50 percent each to the cost effectiveness and land use criteria in order to establish a summary project justification rating. For New Starts, when the average of the cost effectiveness and land use rating falls equally between two ratings (say, between a *Medium* and a *Medium-High* rating), the mobility improvements rating is introduced as a “tiebreaker.” Specifically, when mobility improvements are rated *Low*, the summary rating will “round down” to the lower of the two ratings; for all other mobility improvement ratings (and for all Small Starts projects, which are not rated for mobility improvements), the rating is “rounded-up” to establish the summary project justification rating. For example, a New Starts project with a cost effectiveness rating of *Medium-High* and a land use rating of *Low* - along with a mobility improvements rating of *Medium* - would receive a summary project justification rating of *Medium*.

Based upon its prior experience in evaluating New Starts projects, FTA has determined that locally-generated and reported information in support of the operating efficiencies and environmental benefits criteria does not distinguish in any meaningful way differences between competing major transit capital investments. Consequently, while ratings for these criteria are assigned by FTA and reported in (among other places) the *Annual Report on Funding Recommendations*, they are not considered in the determination of an overall project justification rating.

If well documented, and considered by FTA to be a significant benefit to a proposed project that is not otherwise captured in the other evaluation criteria, “other factors” may increase a summary project justification rating by no more than one step (for example, from *Medium-Low* to *Medium* or from *Medium-High* to *High*). Consistent with SAFETEA-LU, FTA will give particular attention to well-documented and justified economic development impacts in its evaluation of “other factors” for candidate New Starts and Small Starts projects. The evaluation and rating of individual project justification criteria is discussed below.

Failure to submit acceptable information (for example, reliable travel forecasts to support the cost effectiveness, mobility improvements, and operating efficiencies criteria) will result in a *Low* rating for the affected project justification criteria.

II.B Cost Effectiveness

In its evaluation of the cost effectiveness of a proposed project, FTA considers the incremental cost per hour of transportation system user benefits in the forecast year. Transportation system user benefits reflect the improvements in regional mobility - as measured by the weighted in- and out-of-vehicle changes in travel-time to users of the regional transit system – caused by the implementation of the proposed New Starts project. The cost effectiveness measure is calculated by (a) estimating the incremental “base-year” annualized capital and operating costs of the project (over a lower cost “baseline” of transit service), and then (b) dividing these costs by the projected user benefits. The result of this calculation is a measure of project cost per hour of projected user (i.e. travel-time) benefits expected to be achieved if the project is added to the regional transit system. Proposed projects with a lower cost per hour of projected travel-time benefits are evaluated as more cost effective than those with a higher cost per hour of projected travel-time benefits.

FTA believes that the cost per hour of transportation system user benefits is a sound measure for cost effectiveness - and preferable to the prior measure of incremental cost per new rider -

because it (1) captures the benefits which accrue to *all* transit users (including existing transit riders); (2) better reflects the *cause* of ridership increases – improvements in travel time – rather than simply the patronage *outcome*; (3) reflects the nature of the service being provided by the candidate project (for example, the measure distinguishes the benefits of long vs. short trips); and (4) does not penalize those agencies which are already providing a high level of transit service in a corridor for which a major capital investment is proposed.

Table II-2 below presents the thresholds FTA will use in FY 2008 for assigning a *High, Medium-High, Medium, Medium-Low* or *Low* cost effectiveness rating for each proposed project. FTA publishes updates to these breakpoints annually to reflect the impact of inflation:

Table II-2 Cost Effectiveness Breakpoints

High	\$11.49 and under
Medium-High	\$11.50- \$14.99
Medium	\$15.00-\$22.99
Medium-low	\$23.00-\$28.99
Low	\$29.00 and over

Very Small Starts include 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. Therefore, Very Small Starts projects automatically receive a *Medium* rating for cost effectiveness.

II.C Transit-Supportive Existing Land Use and Future Patterns

In its evaluation of the land use for New Starts projects, FTA explicitly considers the following transit supportive land use categories and factors:

1. **Existing Land Use**
2. **Transit Supportive Plans and Policies**, including the following factors:
 - Growth management;
 - Transit supportive corridor policies;
 - Supportive zoning regulations near transit stations; and
 - Tools to implement land use policies.
3. **Performance and Impacts of Policies**, including the following factors:
 - Performance of land use policies; and
 - Potential impact of transit project on regional land use.

FTA also permits project sponsors to submit information in support of an optional “other land use considerations” category.

The evaluation of transit supportive existing land use and future patterns is similar for Small Starts projects, but eliminates the growth management and “other land use considerations” factors and simplifies the reporting of information supporting the remaining factors. More information on the land use evaluation process for Small Starts projects can be found in Appendix A of the *Interim Guidance and Instructions for Small Starts*.

FTA considers 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, Very Small Starts projects automatically receive a *Medium* rating for transit supportive land use plans and policies.

Based on information submitted to FTA by local agencies, FTA gauges each category by the factors identified above. FTA assigns one of five numerical ratings (“1” to “5”) to each project for each of these factors. Each factor is weighted equally within its category, averaged, and combined into category-specific ratings. These category ratings are then combined equally (that is, each land use category rating contributes one-third of the value) and converted to a descriptive rating of *High*, *Medium-High*, *Medium*, *Medium-Low* or *Low* to determine the overall land use rating. In rare cases, when based on unusually compelling “other” land use considerations, FTA may increase the land use rating by one point.

Additional detail on FTA’s land use rating process is contained in *Guidelines and Standards for Assessing Transit-Supportive Land Use*. Table II-3 on the following pages summarizes the ratings applied by FTA in the assessment of each land use category and supporting factor at each stage of project development.

Table II-3 Ratings Applied in Assessment of Land Use Criterion

I. EXISTING LAND USE		
<i>Existing Land Use</i>		
Phase of Project Development	Land Use Assessment Ratings	
Preliminary Engineering and Final Design	HIGH (5)	Current levels of population, employment, and other trip generators in station areas are sufficient to support a major transit investment. Most station areas are pedestrian-friendly and fully accessible.
	MEDIUM (3)	Current levels of population, employment, and other trip generators in station areas marginally support a major transit investment. Some station areas are pedestrian-friendly and accessible. Significant growth must be realized.
	LOW (1)	Current levels of population, employment, and other trip generators in station areas are inadequate to support a major transit investment. Station areas are not pedestrian-friendly.
Ratings based on assessment of the following: <ul style="list-style-type: none"> Existing corridor and station area development; Existing corridor and station area development character; Existing station area pedestrian facilities, including access for persons with disabilities; and Existing corridor and station area parking supply. 		
II. TRANSIT-SUPPORTIVE PLANS AND POLICIES		
<i>Growth Management (DOES NOT APPLY TO SMALL STARTS)</i>		
Phase of Project Development	Land Use Assessment Ratings	
Preliminary Engineering and Final Design	HIGH (5)	Adopted and enforceable growth management and land conservation policies are in place throughout the region. Existing and planned densities, along with market trends in the region and corridor are strongly compatible with transit.
	MEDIUM (3)	Significant progress has been made toward implementing growth management and land conservation policies. Strong policies may be adopted in some jurisdictions but not others, or only moderately enforceable policies (e.g., incentive-based) may be adopted regionwide. Existing and/or planned densities and market trends are moderately compatible with transit.
	LOW (1)	Limited consideration has been given to implementing growth management and land conservation policies; adopted policies may be weak and apply to only a limited area. Existing and/or planned densities and market trends are minimally or not supportive of transit.
Ratings based on assessment of the following: <ul style="list-style-type: none"> Concentration of development around established activity centers and regional transit; and Land conservation and management. 		

Table II-3 Ratings Applied in Assessment of Land Use Criterion (cont.)

II. TRANSIT-SUPPORTIVE PLANS AND POLICIES		
<i>Transit-Supportive Corridor Policies</i>		
Final Design	HIGH (5)	Conceptual plans for the corridor and station areas have been developed. Local jurisdictions have adopted or drafted revisions to comprehensive and/or small area plans in most or all station areas. Land use patterns proposed in conceptual plans and local and institutional plan revisions are strongly supportive of a major transit investment.
	MEDIUM (3)	Conceptual plans for the corridor and station areas have been developed. Local jurisdictions have initiated the process of revising comprehensive and/or small area plans. Land use patterns proposed in conceptual plans and local and institutional plan revisions are at least moderately supportive of a major transit investment.
	LOW (1)	Limited progress, to date, has been made toward developing station area conceptual plans or revising local comprehensive or small area plans. Existing station area land uses identified in local comprehensive plans are marginally or not transit-supportive.
Preliminary Engineering	HIGH (5)	Conceptual plans for the corridor and station areas have been developed. Discussions have been undertaken with local jurisdictions about revising comprehensive plans. Land use patterns proposed in conceptual plans for station areas (or in existing comprehensive plans and institutional master plans throughout the corridor) are strongly supportive of a major transit investment.
	MEDIUM (3)	Conceptual plans for the corridor and station areas are being developed. Discussions have been undertaken with local jurisdictions about revising comprehensive plans. Land use patterns proposed in conceptual plans for station areas (or existing in local comprehensive plans and institutional master plans) are at least moderately supportive of a major transit investment.
	LOW (1)	Limited progress, to date, has been made toward developing station area conceptual plans or working with local jurisdictions to revise comprehensive plans. Existing station area land uses identified in local comprehensive plans are marginally or not transit-supportive.
Ratings based on assessment of the following: <ul style="list-style-type: none"> • Plans and policies to increase corridor and station area development; • Plans and policies to enhance transit-friendly character of corridor and station area development; • Plans to improve pedestrian facilities, including facilities for persons with disabilities; and • Parking policies. 		

Table II-3 Ratings Applied in Assessment of Land Use Criterion (cont.)

II. TRANSIT-SUPPORTIVE PLANS AND POLICIES		
<i>Supportive Zoning Regulations Near Transit Stations</i>		
Final Design	HIGH (5)	Local jurisdictions have adopted zoning changes that strongly support a major transit investment in most or all transit station areas.
	MEDIUM (3)	Local jurisdictions are in the process of adopting zoning changes that moderately or strongly support a major transit investment in most or all transit station areas. Alternatively: strongly transit-supportive zoning has been adopted in some station areas but not in others.
	LOW (1)	No more than initial efforts have begun to prepare station area plans and related zoning. Existing station area zoning is marginally or not transit-supportive.
Preliminary Engineering	HIGH (5)	A conceptual planning process is underway to recommend zoning changes for station areas. Conceptual plans and policies for station areas are recommending transit-supportive densities and design characteristics. Local jurisdictions have committed to examining and changing zoning regulations where necessary. Alternatively, a “high” rating can be assigned if existing zoning in most or all transit station areas is already strongly transit-supportive.
	MEDIUM (3)	A conceptual planning process is underway to recommend zoning changes for station areas. Local jurisdictions are in the process of committing to examining and changing zoning regulations where necessary. Alternatively, a “medium” rating can be assigned if existing zoning in most or all transit station areas is already moderately transit-supportive.
	LOW (1)	Limited consideration has been given to preparing station area plans and related zoning. Existing station area zoning is marginally or not transit-supportive.
Ratings based on assessment of the following: <ul style="list-style-type: none"> • Zoning ordinances that support increased development density in transit station areas; • Zoning ordinances that enhance transit-oriented character of station area development and pedestrian access; and • Zoning allowances for reduced parking and traffic mitigation. 		

Table II-3 Ratings Applied in Assessment of Land Use Criterion (cont.)

II. TRANSIT-SUPPORTIVE PLANS AND POLICIES		
<i>Tools to Implement Land Use Policies</i>		
Final Design	HIGH (5)	Transit agencies and/or regional agencies are working proactively with local jurisdictions, developers, and the public to promote transit-supportive land use planning and station area development. The transit agency has established a joint development program and identified development opportunities. Agencies have adopted effective regulatory and financial incentives to promote transit-oriented development. Public and private capital improvements are being programmed in the corridor and station areas which implement the local land use policies and which leverage the Federal investment in the proposed corridor.
	MEDIUM (3)	Transit agencies and/or regional agencies have conducted some outreach to promote transit-supportive land use planning and station area development. Regulatory and financial incentives to promote transit-oriented development are being developed, or have been adopted but are only moderately effective. Capital improvements are being identified that support station area land use plans and leverage the Federal investment in the proposed major transit corridor.
	LOW (1)	Limited effort has been made to reach out to jurisdictions, developers, or the public to promote transit-supportive land use planning; to identify regulatory and financial incentives to promote development; or to identify capital improvements.
Preliminary Engineering	HIGH (5)	Transit agencies and/or regional agencies are working proactively with local jurisdictions, developers, and the public to promote transit-supportive land use planning and station area development. Local agencies are making recommendations for effective regulatory and financial incentives to promote transit-oriented development. Capital improvement programs are being developed that support station area land use plans and leverage the Federal investment in the proposed major transit corridor.
	MEDIUM (3)	Transit agencies and/or regional agencies have conducted some outreach to promote transit-supportive land use planning and station area development. Agencies are investigating regulatory and financial incentives to promote transit-oriented development. Capital improvements are being identified that support station area land use plans and leverage the Federal investment in the proposed major transit corridor.
	LOW (1)	Limited effort has been made to reach out to jurisdictions, developers, or the public to promote transit-supportive land use planning; to identify regulatory and financial incentives to promote development; or to identify capital improvements.

Table II-3 Ratings Applied in Assessment of Land Use Criterion (cont.)

II. TRANSIT-SUPPORTIVE PLANS AND POLICIES		
<i>Tools to Implement Land Use Policies (Continued)</i>		
Ratings based on assessment of the following:		
<ul style="list-style-type: none"> • Outreach to government agencies and the community in support of land use planning; • Regulatory and financial incentives to promote transit-supportive development; and • Efforts to engage the development community in station area planning and transit-supportive development. 		
III. PERFORMANCE AND IMPACTS OF LAND USE POLICIES		
<i>Performance of Land Use Policies</i>		
Final Design	HIGH (5)	A significant number of development proposals are being received for transit-supportive housing and employment in station areas. Significant amounts of transit-supportive development have occurred in other, existing transit corridors and station areas in the region.
	MEDIUM (3)	Some development proposals are being received for transit-supportive housing and employment in station areas. Moderate amounts of transit-supportive development have occurred in other existing transit corridors and station areas in the region.
	LOW (1)	A limited number of proposals for transit-supportive housing and employment development in the corridor are being received. Other existing transit corridors and station areas in the region lack significant examples of transit-supportive housing and employment development.
Preliminary Engineering	HIGH (5)	Transit-supportive housing and employment development is occurring in the corridor. Significant amounts of transit-supportive development have occurred in other, existing transit corridors and station areas in the region.
	MEDIUM (3)	Station locations have not been established with finality, and therefore, development would not be expected. Moderate amounts of transit-supportive housing and employment development have occurred in other, existing transit corridors and station areas in the region.
	LOW (1)	Other existing transit corridors and station areas in the region lack significant examples of transit-supportive housing and employment development.
Ratings based on assessment of the following:		
<ul style="list-style-type: none"> • Demonstrated cases of development affected by transit-oriented policies; and • Station area development proposals and status. 		

Table II-3 Ratings Applied in Assessment of Land Use Criterion (cont.)

III. PERFORMANCE AND IMPACTS OF LAND USE POLICIES		
<i>Potential Impact of Transit Project on Regional Land Use</i>		
Preliminary Engineering and Final Design	HIGH (5)	A significant amount of land in station areas is available for new development or redevelopment at transit-supportive densities. Local plans, policies, and development programs, as well as real estate market conditions, strongly support such development.
	MEDIUM (3)	A moderate amount of land in station areas is available for new development or redevelopment at transit-supportive densities. Local plans, policies, and development programs, as well as real estate market conditions, moderately support such development.
	LOW (1)	Only a modest amount of land in station areas is available for new development or redevelopment. Local plans, policies, and development programs, as well as real estate market conditions, provide marginal support for new development in station areas.
Ratings based on assessment of the following: <ul style="list-style-type: none"> • Adaptability of station area land for development; and • Corridor economic environment. 		

As Table II-3 indicates, FTA takes into consideration the stage of development of a proposed project in its evaluation of land use information. For example, the planning and policy oriented factors (existing land use, containment of sprawl, and corridor policies) are relevant in evaluating projects in all stages of project development, but particularly useful for projects early in project development. On the other hand, the implementation-oriented factors (supportive zoning regulations, implementation tools, and performance of land use policies) are more applicable in evaluating projects more advanced in preliminary engineering or final design.

II.D Mobility Improvements

In its evaluation of the mobility improvements that would be realized by implementation of a proposed project, FTA reviews three measures:

1. **Normalized Travel Time Savings**, as measured by transportation system user benefits per project passenger mile;
2. Number of current **Low-income Households** which would be served by the proposed New Starts investment; and
3. Number of current **Jobs** served by the proposed New Starts project.

The normalized travel time savings of New Starts projects is weighted 50 percent in the development of the mobility improvements rating; the low-income households and employment measures *combined* account for the other 50 percent of the rating. The process FTA uses to establish measure-specific ratings and the overall mobility improvements rating is described below:

Transportation System User Benefits per Passenger Mile This measure reflects the travel time savings, as measured by minutes of transportation system user benefits in the forecast year anticipated from the proposed project compared to its baseline alternative. In order to rate projects in comparison to other proposed New Starts, this measure is normalized by the annual passenger miles traveled on the New Starts project in the forecast year.

As noted previously, projects are aligned in ascending order of user benefits per passenger mile and categorized into five groups, separated by the logical breakpoints indicated by the submitted data for the measure. Projects in the highest grouping (that is with the most user benefits per passenger mile) receive a “5,” while projects in the lowest grouping receive a “1.”

Number of Low-income Households and Jobs Served These two measures reflect the absolute number of low-income households (defined as below the poverty level) and jobs located within ½ mile of the "boarding points", or stations, associated with the proposed project. The total number of low-income households and jobs located within these ½ mile zones is then divided by the total number of stations to determine both the average number of low-income households and average number of jobs per station. Projects are aligned in ascending order of both low-income households per station and jobs per station, categorized into five groups, and assigned a numerical rating from “1” to “5.”

The numerical ratings assigned for both low-income households and jobs are compared for each project. FTA then considers the potential for connections of these two markets in assigning a single rating for both measures. In the case of projects which are new guideway systems in their regions, the lower of the low-income households or jobs rating is assigned as the combined rating for the two measures. For extensions to existing guideways, the higher of the low-income households and employment rating is utilized, unless the employment rating is higher and there are few low-income households living along the guideway. In this latter case, the low-income rating would be assigned as the combined rating of the two measures.

II.E Operating Efficiencies

FTA measures this criterion by evaluating the change in systemwide operating costs per passenger mile in the forecast year, comparing the Section 5309 New Start investment to the baseline alternative. FTA assigns a rating of *Medium* to all projects that have information submitted for this measure. As noted previously, FTA has found that information submitted in support of the operating efficiencies criterion does not distinguish with any meaning the merits of competing New Starts projects. While FTA reports the information submitted by project sponsors on operating efficiencies to Congress in the *Annual Report on Funding Recommendations*, it does not formally incorporate this measure into its evaluation.

II.F Environmental Benefits

In its evaluation of environmental benefits that would be realized through the implementation of a proposed project, FTA considers the current air quality designation by EPA. This measure is defined for each of the transportation-related pollutants (ozone, CO, and PM-10) as the current air quality designation by EPA for the metropolitan region in which the proposed project is located, indicating the severity of the metropolitan area’s noncompliance with the health-based EPA standard (NAAQS) for the pollutant, or its compliance with that standard. New Starts project sponsors submit information to FTA on the forecast reductions in emissions resulting from the New Starts project for each transportation-related pollutant.

Specifically, FTA follows the following decision rule when assigning ratings for environmental benefits:

- Projects in non-attainment areas for any transportation-related pollutants that demonstrate a reduction in that pollutant receive a *High* rating.
- Projects that are in attainment areas that demonstrate reductions in any transportation-related pollutant receive a *Medium* rating.
- All other projects are rated *Low*.

As noted previously, FTA has found that information submitted in support of the environmental benefits criterion does not distinguish with any meaning the merits of competing New Starts projects. While FTA reports the information submitted by project sponsors on environmental benefits to Congress in the *Annual Report on Funding Recommendations*, it does not formally incorporate this measure in its evaluation of New Starts projects.

II.G Other Factors

Consistent with Section 5309(d) and (e), FTA also includes a variety of other factors when evaluating project justification, including:

- The nature and extent of the transportation problem or opportunity in the project corridor;
- Environmental justice considerations and equity issues;
- Opportunities for increased access to employment for low-income persons, and welfare to work initiatives;
- Consideration of innovative financing, procurement, and construction techniques, including design-build turnkey applications;
- Any other factor which the project sponsor believes articulates the benefits of the proposed major transit capital investment but which is not captured within the other project justification criteria.

Consistent with SAFETEA-LU, FTA intends that economic development should be an “other factor” of particular significance for the FY 2008 evaluation cycle. Through its ongoing rulemaking process, FTA hopes to define specific measures for evaluating the economic development impacts of candidate New Starts projects. Until such measures are defined and subject to industry comment, FTA encourages project sponsors to submit information which they feel best justifies the anticipated economic development impacts of their proposed New Starts or Small Starts investments. FTA is particularly interested in quantifiable economic development benefits which can be clearly distinguished from a) the transportation system user benefits which comprise one variable of FTA’s measure for cost effectiveness, and b) land use impacts which are reported and evaluated in support of the transit supportive land use plans and policies criteria. Specifically, FTA desires to avoid both the double-counting of benefits *and* the crediting of benefits to projects which may be more appropriately attributable to other supporting local economic development initiatives, policies, and/or incentives by isolating the specific impacts resulting from the presence of fixed guideway transit in a given corridor. FTA’s objectives for measuring economic development are outlined in Part II of its January 11, 2006 *New Starts Policy Guidance*, and will be further articulated in a formal notice of proposed rulemaking.

In compelling cases, other factors may be formally assigned a rating. When they are rated, the other factors rating is introduced *after* the assignment of an initial summary project justification rating. If the other factors rating is higher than the summary project justification rating, FTA may increase this initial summary justification rating by a maximum of one step (i.e. from *Medium* to *Medium-High*). In less compelling cases, other factors may be reported alongside other project information in the *Annual Report on Funding Recommendations*, but not formally considered in the project's evaluation and rating. Where information in support of being considered as an other factor is not determined to be worthy of such recognition, it is neither considered in FTA's evaluation nor reported.

III. SUMMARY LOCAL FINANCIAL COMMITMENT RATING

The following provides a summary of FTA's process for evaluating the local financial commitment of proposed New Starts and Small Starts projects. Small Starts projects that meet the criteria described in *Section I.B* receive a summary local financial commitment rating of *Medium*. Those Small Starts projects that cannot meet those criteria must be evaluated and rated based on the criteria described in this section.

III.A Local Financial Commitment Rating

FTA assigns a summary local financial commitment rating of *High*, *Medium-High*, *Medium*, *Medium-Low* or *Low* to each project following consideration of individual ratings applied to the following measures for local financial commitment:

1. **Share of non-Section 5309 New Starts funding;**
2. Stability and reliability of the proposed project's **capital finance plan**, including the following factors:
 - Current capital condition;
 - Completeness of plan;
 - Commitment of capital funds;
 - Capital funding capacity; and
 - Reasonable capital planning assumptions and cost estimates.
3. Stability and reliability of the proposed project's **operating finance plan**, including the following factors:
 - Current operating financial condition;
 - Completeness of operating plan;
 - Commitment of operations and maintenance (O&M) funds;
 - O&M funding capacity; and
 - Operations planning assumptions and cost estimates.

These ratings are based on an analysis of the financial plans and documentation submitted to FTA by local agencies. FTA's evaluation takes into account the stage of project development, particularly when considering the stability and reliability of the capital and operating finance plans. Expectations for firm commitments of non-Federal funding sources become increasingly higher as projects progress further through development (preliminary engineering, followed by final design), and are rated accordingly.

The summary local financial commitment rating considers the non-Section 5309 New Starts funding share of project capital costs. The following ratings are assigned to this criterion:

- >60 percent = *Low* rating
- 50-60 percent = *Medium* rating
- 35-49 percent = *Medium-High* rating
- < 35 percent = *High* rating

FTA rates the capital and operating finance plans according to the standards defined in Tables III-1 and III-2 on the following pages. Additional detail on FTA's process for rating local financial commitment is contained in its *Guidelines and Standards for Assessing Local Financial Commitment*. However, it should be noted that those guidelines do not reflect the way that FTA treated the non-New Starts share of the project in FY 2007, nor how it intends to address the share in the FY 2008 evaluation cycle. Based on language in SAFETEA-LU, where there is any inconsistency between those guidelines and this appendix, the practices spelled out in this appendix supersede those guidelines.

Numerical ratings from 1 to 5 (*Low* to *High*) are assigned to each of the five factors under the capital and operating finance plan measures. These factors are usually averaged to arrive at a summary rating for the capital and operating finance plan measures. However, should the cost estimates and planning assumptions factor receive a *Low* (1) or *Medium-Low* (2) rating, FTA may, at its discretion, downgrade the summary capital or operating finance plan rating one level since the other factors are primarily based on the planning assumptions and cost estimates used in the analysis. FTA weighs the proposed non-New Starts share as 20 percent of the summary local financial commitment rating; the strength and reliability of the capital plan counts as 50 percent of the rating; and the strength and reliability of the operating plan accounts for 30 percent of the rating. These ratings are combined and converted by FTA into a summary local financial commitment rating of *High*, *Medium-High*, *Medium*, *Medium-Low* or *Low*.

Small Starts projects which do not qualify for the streamlined financial evaluation process presented in *Section 1.B* of this appendix are subject to the full financial evaluation and must meet the "PE" standards described in Tables III-1 and III-2 before entering project development and the final design criteria before receiving a Project Construction Grant Agreement.

Failure to submit either a capital or operating financial plan for evaluation will result in a *Low* rating for local financial commitment.

Table III-1 Capital Plan Rating Standards

	High (5)	Medium-High (4)	Medium (3)	Medium-low (2)	Low (1)
Current capital condition	<ul style="list-style-type: none"> - Average bus fleet age under 6 years. - Bond ratings less than 2 years old (if any) of AAA (Fitch/S&P) or Aaa (Moody's) or better 	<ul style="list-style-type: none"> - Average bus fleet age under 6 years. - Bond ratings less than 2 years old (if any) of A (Fitch/S&P) or A2 (Moody's) or better 	<ul style="list-style-type: none"> - Average bus fleet age under 8 years. - Bond ratings less than 2 years old (if any) of A- (Fitch/S&P) or A3 (Moody's) or better 	<ul style="list-style-type: none"> - Average bus fleet age under 12. - Bond ratings less than 2 years old (if any) of BBB+ (Fitch/S&P) or Baa3 (Moody's) or better 	<ul style="list-style-type: none"> - Average bus fleet age 12 years or more. - Bond ratings less than 2 years old (if any) of BBB (Fitch/S&P) or Baa3 (Moody's) or below
Completeness	Capital plan includes: <ul style="list-style-type: none"> - 20-year cash flow - All assumptions are clearly explained - High level of detail - Fleet Management Plan - Extensive Sensitivity analysis - More than 5 years of historical data 	Capital plan is complete, i.e. it includes: <ul style="list-style-type: none"> - 20-year cash flow - Key assumptions - Moderate level of detail - Fleet Management Plan - Sensitivity Analysis - More than 5 years of historical data 	Capital plan is complete, i.e. it includes: <ul style="list-style-type: none"> - 20-year cash flow - Key assumptions - Missing some explanatory details - Fleet Management Plan - 5 years historical data 	Capital plan is partially complete, i.e. it includes: <ul style="list-style-type: none"> - 20-year cash flow - Missing other items of supporting documentation (i.e. fleet management plan, key assumptions, historical data) 	Capital plan is incomplete. Missing some key components, including the 20-year cash flow.
Commitment of capital funds	For final design - 100% of Non-Section 5309 New Starts Funds are committed or budgeted. For PE – Over 50% of Non-Section 5309 New Starts Funds are committed or budgeted. The remaining funds are planned.	For final design - Over 75% of Non-Section 5309 New Starts Funds are committed or budgeted. For PE – Over 25% of Non-Section 5309 New Starts Funds are committed or budgeted. The remaining funds are planned.	For final design - Over 50% of Non-Section 5309 New Starts Funds are committed or budgeted. For PE - No Non-Section 5309 New Starts Funds are committed or budgeted, but the sponsor has a reasonable plan to secure all needed funding.	For final design – Between 25% and 50% of Non-Section 5309 New Starts Funds are committed or budgeted. For PE - No Non-Section 5309 New Starts funds are committed. The sponsor has no reasonable plan to secure the necessary funding.	For final design - Under 25% of Non-Section 5309 New Starts Funds are committed or budgeted. For PE - The sponsor has not identified any reasonable funding sources for the Non-Section 5309 New Starts funding share.
Capital funding capacity	The applicant has access to funds via additional debt capacity, cash reserves, or other committed funds to cover cost increases or funding shortfalls equal to at least 50% of estimated project costs.	The applicant has available cash reserves, debt capacity, or additional funding commitments to cover cost increases or funding shortfalls equal to at least 25% of estimated project costs.	For final design - The applicant has available cash reserves, debt capacity, or additional committed funds to cover cost increases or funding shortfalls equal to at least 10% of estimated project costs. For PE - The applicant has a reasonable plan to cover cost increases or funding shortfalls equal to at least 25% of project costs.	The applicant has a reasonable plan to cover only minor (under 10%) cost increases or funding shortfalls. For PE – The applicant has a reasonable plan to cover cost increases or funding shortfalls equal to at least 10% of estimated project costs.	The applicant has no reasonable plan to cover cost increases or funding shortfalls.
Reasonable capital planning assumptions	Financial plan contains very conservative capital planning assumptions and cost estimates when compared with recent historical experience.	Financial plan contains conservative capital planning assumptions and cost estimates when compared with recent historical experience.	Financial plan contains capital planning assumptions and cost estimates that are in line with historical experience.	Financial plan contains optimistic capital planning assumptions and cost estimates.	Financial plan contains capital planning assumptions and cost estimates that are far more optimistic than recent history suggests.

Table III-2 Operating Plan Rating Standards

	Medium-High (4)				Medium (3)	Medium-low (2)	Low (1)
Current Operating Financial Condition	- Historical and actual positive cash flow. No cash flow shortfalls. - Current operating ratio exceeding 2.0 - No service cutbacks in recent years.	- Historical and actual balanced budgets. Any annual cash flow shortfalls paid from cash reserves or other committed sources. - Current operating ratio is at least 1.5 - No service cutbacks in recent years.			- Historical and actual balanced budgets. Any annual cash flow shortfalls paid from cash reserves or annual appropriations. - Current operating ratio is at least 1.2 - No service cutbacks or only minor service cutbacks in recent years	- Historical and actual cash flow show several years of revenue shortfalls. Any annual cash flow shortfalls paid from short-term borrowing. - Current operating ratio is at least 1.0 - Major Service cutbacks in recent years	- Historical and actual cash flow show several years of revenue shortfalls, or historical information not provided. - Current operating ratio is less than 1.0 - Major Service cutbacks in recent years
Completeness	Operating plan includes: - More than 5 years of historical data - 20-year cash flow - Key assumptions identified - Extensive level of detail - Extensive Sensitivity Analysis	Operating plan is complete, including: - More than 5 years of historical data - 20-year cash flow - Key assumptions identified - Moderate level of detail - Sensitivity Analysis			Operating plan is complete, including: - 20-year cash flow - 5 years of historical data - Key assumptions identified - Missing some explanatory detail	Operating plan is missing no key components, i.e.: - 3 years or less of historical data - 20-year cash flow - Missing key assumptions	Operating plan is missing some key components, i.e.: - No cash flow - No historical data
Commitment of O&M Funds	For final design - 100% of the funds needed to operate and maintain the proposed transit project are committed or budgeted. For PE - Over 75% of the funds needed to operate and maintain the proposed transit system are committed or budgeted. The remaining funds are planned.	For final design - Over 75% of the funds needed to operate and maintain the proposed transit project are committed or budgeted. For PE - Over 50% of the funds needed to operate and maintain the proposed transit system are committed or budgeted. The remaining funds are planned.			For final design - Over 50% of the funds needed to operate and maintain the proposed transit system are committed or budgeted. For PE - While no additional O&M funding has been committed, a reasonable plan to secure funding commitments has been presented.	For final design - Sponsor has identified reasonable potential funding sources, but has received less than 50% commitments to fund transit operations and maintenance. For PE - Sponsor does not have a reasonable plan to secure O&M funding. No unspecified sources.	For final design - Sponsor has not yet received any funding commitments to fund transit operations and maintenance and has not identified any reasonable plan for securing funding commitments. For PE - Sponsor has not identified any reasonable funding sources for the operation and maintenance of the proposed project.
O&M Funding Capacity	- Projected cash balances, reserve accounts or access to line of credit exceeding 25 percent (3 months) of annual operating expenses. The assumptions supporting the operating and maintenance cost estimates and revenue forecasts are very conservative relative to historical experience.	- Projected cash balances, reserve accounts or access to line of credit exceeding 25 percent (3 months) of annual operating expenses.			- Projected cash balances, reserve accounts or access to line of credit exceeding 12 percent (1.5 months) of annual operating expenses.	- Projected cash balances, reserve accounts or access to line of credit are less than 8 percent (1 month) of annual operating expenses.	- Projected cash balances are insufficient to maintain balanced budgets.
Operating Planning Assumptions		The assumptions supporting the operating and maintenance cost estimates and revenue forecasts are conservative relative to historical experience.			The assumptions supporting the operating and maintenance cost estimates and revenue forecasts are consistent with historical experience.	The assumptions supporting the operating and maintenance cost estimates and revenue forecasts are optimistic relative to historical experience.	The assumptions supporting the operating and maintenance cost estimates and revenue forecasts are far more optimistic than historical experience suggests is reasonable.

III.B Local Financial Commitment Rating Decision Rules

In addition to the non-Section 5309 New Starts program share, capital and operating financial rating considerations and weights described above, FTA uses the following decision rules to calculate the overall local financial commitment rating.

- If the Section 5309 New Starts share, which accounts for 20 percent of the local financial commitment rating, brings the overall local financial commitment rating to less than *Medium*, it will be excluded from the calculation. In other words, a New Starts share of less than 80 percent can improve the project's rating but it cannot hurt it. This rule was applied for the first time in FY 2007 in order to respond to direction in SAFETEA-LU that FTA evaluate the percent of the Section 5309 New Starts program share, as required by Section 5309(d)(4)(B)(v), while ensuring that no project is required to provide more than the required 20 percent match as provided in Section 5309(h)(5). If and how this rule is applied in future years will be subject to rulemaking.
- If either of a proposed project's capital or operating finance plan receives a *Medium-Low* or *Low* rating, the summary local financial commitment rating for the project cannot be higher than a *Medium-Low*.
- To receive a summary local financial commitment rating of *Medium-High*, both the capital and operating finance plans must be rated at least *Medium-High*.

IV. RATINGS AND FUNDING RECOMMENDATIONS

Section 5309(d)(1)(B)(ii) directs FTA to consider proposed New Starts projects for Full Funding Grant Agreements (FFGA) and proposed Small Starts for Project Construction Grant Agreements (PCGA), only if they receive a *Medium*, *Medium-High*, or *High* overall project rating. (Note that for the FY 2007 funding recommendations FTA did not use the *Medium-High* overall rating; similarly, the FY 2008 evaluation cycle contemplates only using *High* and *Medium* as a basis for funding recommendations.) FTA notes, however, that project ratings are intended only to reflect the worthiness of each project, not the readiness of a project for an FFGA or PCGA. A rating of *High* or *Medium* does not translate directly into a funding recommendation in any given fiscal year. Proposed projects that are rated *High* or *Medium*, will be eligible for multi-year funding recommendations in the Administration's proposed budget if other requirements have been met (completion of the Federal environmental review process, demonstrated technical capability to construct and operate the project, development of a firm and final cost estimate and financial plan, etc.) and if funding is available. In addition, notwithstanding their overall project rating, as a general practice the Administration will target its funding recommendations in FY 2008 and beyond to those proposed New Starts projects able to achieve a *Medium* or higher rating for cost effectiveness, unless the project has been exempt from this policy.

When determining annual funding allocations among proposed New Starts and Small Starts, the following general principles are applied:

- 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 the specific Small Starts projects identified in the FY 2008 *Annual Report on Funding Recommendations*, those 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 both New Starts and Small Starts funding as a means of funding more projects and leveraging state, local, and other Federal financial resources.

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

Appendix C

Alternative Transportation in Parks and Public Lands Program

Alternative Transportation in Parks and Public Lands

Background

Section 3021 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) established the Alternative Transportation in Parks and Public Lands (ATPPL) program in August 2005. Codified in 49 USC 5320, the new program is administered by the Federal Transit Administration (FTA) in partnership with the Department of the Interior (DOI) and the U.S. Department of Agriculture Forest Service. In December 2005, Congress appropriated \$21,780,000 for the program's first year, fiscal year 2006.

The ATPPL program funds capital and planning expenses for alternative transportation systems such as shuttle buses in national parks and other federal lands. Federal land management agencies and State, local, and tribal governments are eligible recipients. The goals of the program are to conserve natural, historical, and cultural resources; reduce congestion and pollution; improve visitor mobility and accessibility; enhance visitor experience; and ensure access to all, including persons with disabilities.

Section 5320 stipulates that the Secretary of Transportation annually submit a report on the allocation of ATPPL program funds. The section further stipulates that this report be part of FTA's Annual Report on Funding Recommendations. As such, this section of the Annual Report on Funding Recommendations describes FTA's overall progress in developing this new program, details the 42 alternative transportation projects funded in the program's first year, and notes the technical assistance activities sponsored thus far.

Program Development

As this was the first year of the program, FTA and its interagency partners created the mechanisms for implementing the new program. FTA and the Department of the Interior (DOI) formed an interagency working group with representatives of the National Park Service (NPS), the U.S. Fish and Wildlife Service (FWS), the Bureau of Land Management (BLM), and the U.S. Department of Agriculture's Forest Service.¹ The working group jointly developed program structure, selection criteria, a solicitation and evaluation process for applications, a process for selecting applications for funding, and grant and reimbursable agreement funding mechanisms. In cooperation with inter-agency partners, FTA staff developed program requirements and an oversight program to ensure proper use of federal funds. Finally, FTA staff, working with inter-agency partners, developed initial technical assistance, research, and planning activities to support the program.

Project Evaluation and Funding

As demand far exceeded available funds, FTA's planning and policy staff worked closely with federal land management agency representatives to develop a process that would select the most meritorious projects – those that were both strong transportation projects and best met the

¹ The Bureau of Reclamation opted not to participate in the program for fiscal years 2006 and 2007.

unique needs of federal lands. A total of 78 proposals were received totaling \$40.5 million, approximately twice the amount available for projects, indicating high competition for funds. An interagency technical review committee carefully evaluated the project proposals based on the criteria defined in 49 USC 5320(g)(2). Then, as specified in Section 5320(g), the Secretary of the Interior's designee determined the final selection of projects after consultation with and in cooperation with the Secretary of Transportation's designee.²

On August 28, 2006, FTA and the Department of the Interior announced the first round of projects to receive funding through the program, which are listed in Table 1. The 42 alternative transportation projects selected for funding represent a diverse set of capital and planning projects across the country. For example, the awards will help finance the purchase of alternative-fuel trams for the Back Bay National Wildlife Refuge in Virginia, shuttle buses for California's San Joaquin Valley to Sequoia National Park, and the planning of an alternative transportation system for the Forest Service's Midewin National Tallgrass Prairie in Illinois.

FTA awarded the program's first grant on September 7, 2006. The grant funds a new shuttle service from a nearby town to the popular Sequoia National Park in California. The shuttle service will allow the thousands of visitors who pass through the valley on their way to the park to take public transportation rather than use private automobiles. Financial assistance through the program will also fund the lease of ten shuttle buses connecting key sites within Sequoia National Park – lodging, camping, food service facilities, popular day use trails, and features of the world-famous Giant Forest Sequoia grove. Shuttle ridership is estimated to reduce vehicular traffic by up to 925 cars daily, easing congestion in Level of Service D areas, and up to 47 percent within the popular Giant Forest / Generals Highway / Lodgepole area. An estimated 3,703 daily visitors (35% of the visitors) will use the Giant Forest shuttle, removing 50.3 tons of pollutants from the air in this air quality non-attainment area.

This illustrates the program's potential impact within just one of the federal land management units receiving funding through the ATPPL program. The information below gives a breakdown of the types of projects funded and Table 1 provides a complete breakdown of the allocation of fiscal year 2006 ATPPL funds.

Planning vs Capital Projects

Twenty-five of the projects (totaling \$16 million) are capital projects and 17 (totaling \$3.6 million) are planning projects. The bulk of the program dollars are used primarily to fund capital investments with a smaller amount devoted to planning for future projects, in order to ensure the wise use of federal dollars to fund additional capital projects in the future years of the 2006-2009 authorization period.

Distribution by Federal Land Management Agency

As predicted by the August 2001 DOT-DOI study on alternative transportation needs in public lands, the National Park Service had the highest need for alternative transportation. The National Park Service has the most existing alternative transportation systems and has had an alternative transportation program in place since 1997. Fifty-seven percent of project funds are

² The designees were the Department of the Interior's Deputy Assistant Secretary for Policy and the Department of Transportation's Federal Transit Administrator.

allocated towards projects serving National Parks, 35 percent are for projects serving National Forests, and 8 percent are for projects serving Fish and Wildlife Refuges.

Distribution by Type of Recipient

Fifteen projects were awarded through direct grants to individual State and local governments who are listed as funding recipients in Table 1. The other 27 projects are funded through reimbursable interagency agreements with each of the three Federal land management agencies that received funds.

Types of Projects

SAFETEA-LU allows a broad range of projects under this new program. The types of projects selected include purchase of buses for new transit service, replacement of old buses and trams, ferry dock replacement, infrastructure design, intelligent transportation system components, and planning studies.

New vs. Existing Systems

The awards include funding for both existing alternative transportation systems – through projects such as purchasing replacement buses – and funding for brand new systems. This enables the program to support the continued quality of existing alternative transportation systems such as those in Acadia National Park and Grand Canyon National Park, which were earlier pilot projects for DOT and DOI collaboration on alternative transportation. It also enables the program to fund brand new systems – such as the new tram system to the San Juan National Historic Site in Puerto Rico and planning for potential transit service in Mt. Hood National Forest.

As the program is in its first year, the majority of capital projects for fiscal year 2006 are for existing systems. The planning projects may develop capital projects for either existing or new systems in fiscal years 2007-2009.

Geographic Balance

The projects are located in 21 different states and in Puerto Rico. There are projects in all major geographic regions – northeast, south, mid-west, and west.

Urban vs. Rural Balance

The list includes projects in both rural and urban areas. Thirteen out of the 42 projects are located in urban or suburban areas, with the remainder in rural areas. The list also includes projects that provide transportation from urban areas to parks and public lands in outlying rural areas.

Project Size

The size of the projects varies considerably from \$40,000-\$80,000 planning studies to bus fleet purchases for \$400,000 to \$1,400,000. Dock replacement and rail projects are also large ticket items. Twenty-two projects are under \$250,000, 9 projects are between \$250,000 and \$500,000, and 11 projects are above \$500,000. By statute, no single project can receive more than 25 percent of the program funds in any given year.

Technical Assistance, Research, and Planning

49 USC 5320 allows the Department of Transportation, in consultation with the Department of the Interior, to use not more than ten percent of program funds for technical assistance, research, and planning activities to support the program as a whole. By November of 2006, FTA has used less than 1 percent of these funds to develop a program manual, host a “webinar”-style workshop, contract for support for the evaluation process, and provide technical assistance in transportation planning. FTA is developing comprehensive technical assistance for land management units and transit providers for FY 2007, using the remaining program funds.

Table 1: Allocation of Fiscal Year 2006 ATPPL Funds

Capital and Planning Alternative Transportation Projects

State	Public Land Unit	Agency	Funding Recipient	Type of Project	Project Description	FY 2006 Funding
AK	Chugach National Forest	Forest Service	Alaska Railroad	Railroad	Purchase Diesel Multiple Unit Rail vehicles to provide rail service to recreation areas in Chugach National Forest.	\$4,700,000
AK	Glacier Bay National Park and Preserve	National Park Service	State of Alaska	Boat Dock	Replace the existing passenger and freight dock.	\$1,200,000
AZ	Grand Canyon National Park	National Park Service	National Park Service	Bus	Rebuild the Hermits Road Shuttle Bus transfer area.	\$733,050
CA	Inyo National Forest, Devils Postpile National Monument	Forest Service	Forest Service	Planning Study	Feasibility study for implementation of a sustainable transportation system for Reds Meadow/Devils Postpile.	\$167,000
CA	Muir Woods National Monument/Golden Gate National Recreation Area	National Park Service	National Park Service	Intelligent Transportation System	Design and build electronic warning signs, traffic counters, highway advisory radio, web cameras, a centralized management software package, and other equipment as necessary.	\$490,000
CA	Muir Woods National Monument/Golden Gate National Recreation Area	National Park Service	National Park Service	Planning Study	Secure consultant services for planning effort to address visitor access issues at Muir Woods National Monument (managed by Golden Gate National Recreation Area).	\$500,000
CA	Point Reyes National Seashore	National Park Service	National Park Service	Planning Study	Fund an implementation feasibility study and financial plan for the upgrade of an existing park shuttle system to an alternate-fuel system for the heavily visited Point Reyes Headlands.	\$175,000
CA	San Francisco Maritime National Historical Park and Golden Gate National Recreation Area	National Park Service	National Park Service	Planning Study	Planning to extend San Francisco Municipal Railway's Historic streetcars from Fisherman's Wharf 0.85 mile to San Francisco Maritime National Historic Park and the Fort Mason Center at Golden Gate Nat'l Recreation Area.	\$300,000
CA	Sequoia and Kings Canyon National Park	National Park Service	National Park Service	Bus	Lease busses for the Giant Forest Shuttle and Gateway Shuttle Link to connect key sites within Sequoia National Park lodging, camping, food service facilities, popular day use trails, and features of the world-famous Giant Forest Sequoia grove.	\$165,000
CA	Sequoia and Kings Canyon National Park	National Park Service	City of Visalia	Bus	Purchase five shuttle busses for the City of Visalia to run a new service from the San Joaquin Valley to popular Sequoia National Park.	\$400,000
CA	Yosemite National Park	National Park Service	Yosemite Area Regional Transit System (YARTS)	Park and Ride Lot	Construct two park and ride lots to allow visitors to park and use the YARTS service to access the national park, mitigating congestion within the park.	\$582,579

State	Public Land Unit	Agency	Funding Recipient	Type of Project	Project Description	FY 2006 Funding
CA	Yosemite National park	National Park Service	National Park Service	Planning Study	Update traffic, transit, parking, and intersection counts; 2) update existing trip tables; 3) update and complete computer models; 4) evaluate the relationships between transportation and park experience; 5) correlate visitor experience with traffic data.	\$486,000
CO	Mesa Verde National Park	National Park Service	National Park Service	Planning Study	Fund the remaining planning tasks and allow the Transportation Plan to be completed in early 2007.	\$57,868
CO	Rocky Mountain Arsenal National Wildlife Refuge	Fish and Wildlife Service	City of Commerce City	Planning Study	Conduct a shuttle feasibility study that would determine if a shuttle is needed.	\$40,000
CO	The Maroon Bells - Snowmass Wilderness Area, White River National Forest, Colorado	Forest Service	Roaring Forks Transit Authority	Bus	Purchase four buses to expand transit service to visitors.	\$1,680,000
FL	Ding Darling National Wildlife Refuge	Fish and Wildlife Service	Lee County Transit	Planning Study	Planning, technical analyses, and coordination of transportation system.	\$700,000
HI	Hawaii Volcanoes National Park	National Park Service	National Park Service	Planning Study	Data collection/studies and resource surveys for potential alternative transportation system along two primary roads where congestion and over-crowding are causing resource damage and compromising visitor safety and experience.	\$120,000
ID, WY	Grand Teton National Park	National Park Service	National Park Service	Planning Study	Create a Public Transportation Business Plan for public transportation service in Grand Teton National Park.	\$99,934
IL	Midewin National Tallgrass Prairie	Forest Service	Forest Service	Planning Study	Develop an alternative transportation system plan for the prairie.	\$256,600
KS	Tall Grass Prairie National Preserve	National Park Service	National Park Service	Bus	Replace two existing buses used for park tours.	\$280,000
MA	Cape Cod National Seashore	National Park Service	Cape Cod Regional Transit Authority	Bus/Intelligent Transportation System	Purchase ITS communication equipment to allow timed transfers and coordination of local transit service.	\$175,000
MA	Cape Cod National Seashore	National Park Service	National Park Service	Planning Study	Define the needs and evaluate alternative satellite maintenance/storage sites for a transit service to be implemented.	\$200,000
MA	Cape Cod National Seashore	National Park Service	National Park Service	Tram	Replace three trailers for trams to transport visitors to destinations within and near the National Seashore.	\$400,000
MA	Lowell National Historical Park	National Park Service	National Park Service	Railroad	Address safety issues: 1) signalization of grade crossings, 2) rehabilitate trolley bridge, 3) replace deteriorated railroad ties and substandard rails.	\$338,000
MA	Parker River National Wildlife Refuge, Essex County National Heritage Area, MA DCR Sandy Point	Fish and Wildlife Service	Essex National Heritage Commission	Planning Study	Develop a plan to complete safe, off-road connections between the Newburyport MBTA Transit Center, the Refuge Headquarters and the Refuge.	\$95,000

State	Public Land Unit	Agency	Funding Recipient	Type of Project	Project Description	FY 2006 Funding
MD	Patuxent Research Refuge	Fish and Wildlife Service	Fish and Wildlife Service	Tram	Rehabilitate existing prototype electric tram and tram tour route.	\$108,639
ME	Acadia National Park	National Park Service	Maine Department of Transportation	Bus	Purchase two vans with trailers for bicycles for Acadia's Island Explorer transit system, allowing visitors to better access recreation opportunities in the park without private cars.	\$120,000
ME	Acadia National Park	National Park Service	Maine Department of Transportation	Bus	Replace eight propane powered buses for Acadia's Island Explorer transit system, which connects visitor destinations in the park with campgrounds, motels, and community business districts.	\$1,400,000
NJ	Gateway National Recreation Area - Sandy Hook	National Park Service	National Park Service	Planning Study	Fund a planning study to assess needs and establish a set of integrated intelligent transportation system (ITS) parking/traveling information systems requirements.	\$150,000
NY	Roosevelt-Vanderbilt National Historic Sites	National Park Service	National Park Service	Planning Study	Design a three-year phased field-test of an alternative transportation system that links the four park sites with the Town Center and the Poughkeepsie Train Station; structure a regional ATS partnership.	\$68,000
OH	Cuyahoga Valley National Park	National Park Service	National Park Service	Design	Prepare design documents to allow for upgrade of railroad signals at grade crossings of Cuyahoga Valley Scenic Railroad.	\$170,000
OH	Cuyahoga Valley National Park	National Park Service	National Park Service	Design	Develop plans to rehabilitate existing rail in Cuyahoga National Park.	\$185,000
OH	Cuyahoga Valley National Park	National Park Service	National Park Service	Maintenance Vehicle	Purchase a railroad maintenance vehicle to maintain 51 miles of railroad track.	\$170,000
OH	Cuyahoga Valley National Park	National Park Service	Cuyahoga Valley Scenic Railroad	Railroad	Purchase an additional ADA accessible railcar.	\$373,000
OR	Lewis and Clark National Historical Park	National Park Service	Sunset Empire Transportation District	Bus	Fund shuttle bus leasing from the park's partner, Sunset Empire Transit District.	\$50,000
OR	Mt. Hood National Forest	Forest Service	Oregon Department of Transportation	Planning Study	Planning for a new alternative transportation system to provide transportation to and within Mt. Hood National Forest in order to reduce congestion on US Highway 26.	\$100,000
PR	San Juan National Historic Site	National Park Service	Codevisa Transit with municipality of San Juan	Bus	Purchase two small trams that would be operated by the municipality of San Juan to provide transportation between the two forts.	\$640,000
TX	Santa Ana National Wildlife Refuge	Fish and Wildlife Service	Fish and Wildlife Service	Bus	Replace current tram at Santa Ana National Wildlife Refuge.	\$510,000

State	Public Land Unit	Agency	Funding Recipient	Type of Project	Project Description	FY 2006 Funding
VA	Back Bay National Wildlife Refuge	Fish and Wildlife Service	Fish and Wildlife Service	Tram	Purchase two alternative-fueled specialty trams that will replace the antiquated tram system presently used to transport visitors through Back Bay National Wildlife Refuge to adjoining False Cape State Park.	\$160,000
VA	Shenandoah National Park	National Park Service	National Park Service	Bus	Purchase an ADA accessible bus to replace existing leased vehicle.	\$60,000
VT	Marsh-Billing-Rockefeller National Historical Park and Town of Woodstock	National Park Service	National Park Service	Planning Study	Perform a fiscal analysis study that will investigate a system to shuttle visitors, including elderly and mobility impaired, from points within the Woodstock community to the park visitor center.	\$78,500
WA	North Cascades National Park	National Park Service	National Park Service	Bus	Purchase 4 buses to replace old buses that transport visitors within the Lake Chelan National Recreation Area.	\$947,000
	TOTAL					\$19,631,170

Oversight

Activity	FY 2006 Funding
FTA oversight of funded projects, reserved per 49 USC. 5327 c (1)(F) ³⁴	\$108,900

Technical Assistance, Research, and Planning

Activity	FY 2006 Funding
Contract with Volpe National Transportation Systems Center to provide the following technical assistance to support the program: <ul style="list-style-type: none"> Develop and publish a program manual Conduct a "webinar"-style workshop to provide information about the program to federal lands units and state, local, and tribal governments Assist in the project evaluation process Conduct on-site technical assistance in transportation planning at two pilot sites 	\$150,000
Reserved for other technical assistance, research, and planning activities	\$1,889,930
Total	\$2,039,930

Total

\$21,780,000

³ 49 USC 5327 c (1)(F) makes available 0.5% of ATPPL program funds for FTA oversight of the projects funded through the program.