

# Annual Report on Funding Recommendations

## Fiscal Year 2002

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

**2001**

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## Foreword

This report is prepared annually for submission to the United States Congress by the Secretary of Transportation. Title 49, United States Code, Section 5309(o)(1) requires the Secretary of Transportation to submit to the Committee on Transportation and Infrastructure of the U.S. House of Representatives and the Committee on Banking, Housing and Urban Affairs of the Senate, a report that includes a proposal on the allocation of 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 (“new starts”) among applicants for those amounts. In addition to those committees, this report is also formally submitted to the Appropriations Committees of both the U.S. House and Senate. It is also provided to transit operators, metropolitan planning organizations (MPOs), State departments of transportation, and made generally available to the public at large.

This report is a companion document to the President’s annual budget request to Congress. It details the Administration’s recommendations for allocating new starts capital investment funding for Federal Fiscal Year 2002.

The report is organized into two sections: the main body of the report, which details the specific funding recommendations by project and provides background information on both the projects and the Federal Transit Administration (FTA) program and processes; and a series of appendices that provide more detailed information on the background, status and evaluation of each proposed project. Appendix A includes those proposed projects in the preliminary engineering, final design, or construction stages, and includes a complete profile (with map, where available) for each individual project. Appendix B briefly describes each proposed project that is undergoing early development and alternatives analysis.

Upon request, this report will be made available in alternative formats. It is also available via the Internet at the [FTA site](#) on the World Wide Web.

# Introduction

This report provides the U.S. Department of Transportation's recommendations to Congress for allocation of funds to be made available under 49 U.S.C. §5309 for construction of new fixed guideway systems and extensions (major capital investments or “new starts”) for Fiscal Year 2002. Section 5309(o)(1) requires an annual report to Congress “that includes a proposal on the allocation of 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 among applicants for those amounts.”

The *Annual Report on New Starts* is a collateral document to the President's annual budget submission to Congress. It is meant to be a constructive element in the administration of the Federal transit assistance program, enriching the information exchange between the Executive and Legislative branches at the beginning of an appropriations cycle for the next Fiscal Year.

The President's budget for FY 2002 proposes that \$1,136.40 million be made available for the §5309 major capital investment program. After setting aside one percent of these funds for oversight activities as proposed in the President's budget, and funding for ferry capital projects in Alaska or Hawaii as required by §5309(m)(5)(A), \$1,114.74 million is available for project grants. This report recommends funding for 31 projects in FY 2002; of these, 24 have existing Federal funding commitments in the form of Full Funding Grant Agreements (FFGAs); funding commitments are pending for two; and five are expected to be ready for funding commitments before the end of FY 2002 (i.e., September 30, 2002).

## **The New Starts Project Evaluation Regulation**

On December 7, 2000, FTA issued its Final Rule on new starts project evaluation and rating, published in the *Federal Register* at 65 FR 76864. This regulation is required by Section 3009 of TEA-21, and governs how FTA will evaluate and rate new fixed-guideway transit systems and extensions that are proposed for §5309 new starts funding. It replaces the procedures set forth in the December 19, 1996 policy statement [61 FR 67093], as amended on November 12, 1997 [62 FR 60756]. The regulation became effective on April 6, 2001<sup>[1]</sup>.

This regulation retains the familiar “multiple-measure method” of project evaluation used by FTA to evaluate proposed new starts since 1994. It describes how each of the statutory project evaluation criteria will be evaluated; defines the overall project ratings of “highly recommended,” “recommended,” and “not recommended;” and defines how these ratings will be used to approve entry into the preliminary engineering and final design stages of project development. It is important to note that the purpose of this Rule is to regulate how FTA will evaluate and rate proposed projects for purposes of the §5309 new starts program; it does *not* regulate the transit industry or other sponsors of new starts projects, though it may affect the type of information we request for evaluation purposes. As in the past, FTA will continue to issue guidance and work with project sponsors as we implement this Rule.

FTA published a notice of Proposed Rulemaking (NPRM) for this regulation in the *Federal Register* on April 7, 1999. The docket was open for public comment through July 6, 1999, though late-filed comments were accepted through July 19. Comments were received from a total of 41 individuals and organizations (not counting duplicates). FTA also held three public outreach workshops during the comment period to solicit comment on the proposed rule. All comments in the docket are matters of public record, and are available for inspection at the United States Department of Transportation Central Dockets Office (docket # FTA-99-5474).<sup>[2]</sup> The docket is also available online through DOT's Docket Management System (DMS), at: <http://regulations.gov/>.<sup>[3]</sup>

In response to public comment, the Final Rule incorporates a number of changes from the NPRM. The most significant changes involve the measure for cost effectiveness and the Transportation System Management (TSM) alternative. The NPRM retained the existing incremental cost per incremental rider measure for cost effectiveness, often described as "cost per new rider." Of the 41 individuals and organizations that submitted comments to the NPRM, 32 addressed this issue. All were unanimous in their assertion that the cost effectiveness measure should "roll up" additional benefits beyond incremental cost per incremental rider. The consensus was that focusing on new riders alone ignores benefits to other riders, and thus biases the measure against older cities with "mature" transit systems where the focus of a proposed new start would be on improving service, not attracting new riders.

In response, the Final Rule replaces the "cost per new rider" measure of cost effectiveness with a new measure of "transportation system user benefits" to more accurately address the criteria for cost effectiveness. This measure is based on the basic goals of any major transportation investment, which are to reduce the amount of travel time and out-of-pocket costs that people incur for taking a trip; i.e., the cost of mobility. The new Transportation System User Benefits measure of cost effectiveness measures the change in these costs, and accounts for changes to transit, highway, and other modes of travel. This approach de-emphasizes new riders and measures not only the benefits to people who change modes, but also accounts for benefits within modes (i.e., benefits to existing riders and highway users).

The retention of the TSM alternative in the NPRM was also the subject of substantial public comment. A total of 13 comments were submitted on this issue, all of them opposed. Most of the commenters felt that it was unnecessarily burdensome to maintain a TSM alternative for purposes of FTA's project evaluations under §5309(e), noting that certain incremental system improvements will occur whether the new start is constructed or not; i.e., it is no longer appropriate to view the no-build alternative as a "do nothing" scenario. The TSM alternative has been used as a consistent baseline to ensure a fair evaluation of proposed new starts projects, nationwide. However, the realities of modern urban and suburban planning, transportation, and economic development make it virtually impossible to assume that no improvements will occur if a proposed new start is not implemented. Therefore, the requirement that proposed new starts be evaluated against *both* a no-build and a TSM alternative has been eliminated in the Final Rule. Instead, proposed projects will be rated against a single "baseline alternative" agreed upon by project sponsors and FTA. The baseline alternative is best described as transit improvements lower in cost than the proposed new start, which result in a better ratio of measures of transit mobility compared to cost than the no build alternative; the "best you can do" without the new

start investment.<sup>[4]</sup> The purpose of the baseline comparison is to isolate the costs and benefits of the proposed major transit investment.

The NPRM also indicated FTA's intent to develop performance measures to evaluate the new starts program for purposes of the Government Performance and Results Act of 1993 (GPRA). The NPRM invited specific comment on how FTA's management of the program could be evaluated and the performance of Federal new starts investments could be measured; of the 41 comments received, three addressed these issues. While the issue of GPRA measures did not generate significant comment, the need for them still exists. Toward that end, the Final Rule incorporates a two-step data collection process to determine the degree to which projects remain on schedule and on budget once a commitment to fund the project has been made (i.e., an FFGA has been executed), and to measure the success of new starts projects once they are in operation. For those new starts that are put under FFGAs, FTA will combine before-and-after data with planning projections to evaluate the project in terms of six areas of interest: project scope, capital costs, operating costs, system utilization (including ridership levels, user characteristics, trip purposes, demographics, etc.), service levels, and external factors relevant to the project. These data collection activities will be considered an eligible part of the project for funding purposes.

The NPRM also generated significant comment on the overall project ratings of "highly recommended," "recommended," and "not recommended" that were established by TEA-21. Most commenters expressed discomfort with the terms, particularly the term, "not recommended." The most common concern was that a meritorious project would be rated "not recommended" simply because it had not been sufficiently developed to be rated, and many suggested that new terms be adopted in the Final Rule. The terms used for the overall project ratings – "highly recommended," "recommended" and "not recommended" – are established in law by TEA-21, and FTA is not at liberty to change them. However, in response to comments on this issue, the Final Rule adds one-letter indicators to the "not recommended" rating that will indicate where improvement is needed: "J" for project justification, "O" for the operating funding plan, and "C" for the capital funding plan. Thus, a proposed new start that was found to need improvement in the capital plan would be rated "not recommended (C)." This will provide project sponsors, State, local, and Federal decisionmakers, and the public at large with a simple means to identify the basis for the project rating.

Finally, public comment on the NPRM recommended that the measure for mobility improvements be refined in the Final Rule. Specifically, a new factor for destinations has been added for jobs within ½-mile of boarding points on the new system, to complement the existing factor for low-income households within ½-mile of boarding points.

It is important to note that the project evaluation and rating process for the FY 2002 budget request was undertaken before the effective date of the Final Rule; therefore, the information contained in this Report reflects the interim approach used by FTA to evaluate proposed projects under TEA-21 in the absence of this Rule. This interim approach was based on the existing project evaluation process as published in the *Federal Register* on December 19, 1996 (and amended on November 12, 1997), modified to account for the increased emphasis on land use by TEA-21 and the prohibition against placing a dollar value on mobility improvements. Proposed

projects will be evaluated under the procedures set forth in the FTA regulation for the FY 2003 budget recommendations, and reported in the 2002 edition of this report.

<sup>[1]</sup> In accordance with the memorandum of January 20, 2001 from the Assistant to the President and Chief of Staff, entitled “Regulatory Review Plan,” published in the Federal Register on January 24, 2001, FTA delayed the effective date of this Rule until April 6, 2001. A Notice to this effect was published in the Federal Register on February 9, 2001, at 66 FR 9677. The original effective date was February 5, 2001.

<sup>[2]</sup> The docket is available for inspection from 10:00 a.m. to 5:00 p.m., Monday through Friday (except Federal holidays), at the U.S. Department of Transportation, Central Dockets Office, PL-401, 400 7<sup>th</sup> Street SW, Washington, DC, 20590.

<sup>[3]</sup> Once you have accessed the DMS, follow the instructions and perform a search on docket no. 5474 to view the docket for this NPRM. Please note that the DMS requires the use of a “plug-in” to view the individual comments.

<sup>[4]</sup> In cases where the no-build alternative is found to satisfy the requirements for a baseline alternative, a separate baseline alternative may not be required.

Table 1a

**Table 1-A:  
Summary of FY 2002 New Starts Ratings**

Phase and City (Project)	Total Capital Cost (millions)	Total Section 5309 Funding Requested (millions)	Section 5309 Funds Share of Capital Costs	Overall Project Rating	Financial Rating	Project Justification Rating
<b>Final Design</b>						
<b>Chicago (North Central Corridor Commuter Rail)</b>	\$236.4 (YOE)	\$144.7	61%	<b>Recommended</b>	Medium-High	Medium
<b>Dallas-Ft. Worth (Trinity Railway Express - Phase II) **</b>	\$160.6 (YOE)	\$62.4	39%	<b>Not Rated</b>	Not Rated	Not Rated
<b>Little Rock (River Rail Project) *</b>	\$13.2 (YOE)	\$8.6	65%	<b>Exempt</b>	Exempt	Exempt
<b>Los Angeles-San Diego (LOSSAN Rail Corridor Improvement Project) *</b>	\$35.7 (1999)	\$24.1	68%	<b>Exempt</b>	Exempt	Exempt
<b>Miami (South Miami-Dade Busway Extension)</b>	\$88.8 (YOE)	\$23.4	26%	<b>Exempt</b>	Exempt	Exempt
<b>New Orleans (Canal Streetcar Spine)</b>	\$156.6 (YOE)	\$125.3	80%	<b>Recommended</b>	Medium	Medium-High
<b>San Diego (Oceanside-Escondido Rail Project)</b>	\$332.3 (YOE)	\$152.1	46%	<b>Highly Recommended</b>	Medium-High	Medium-High
<b>San Francisco (Third Street Light Rail Project)</b>	\$530.8 (YOE)	\$0.0	0%	<b>Recommended</b>	Medium	Medium

<b>Phase I)</b>						
<b>Seattle (Central Link LRT MOS-2 and MOS-3) **</b>	\$2,481.0 (YOE)	\$941.0	38%	<b>Not Rated</b>	Not Rated	Not Rated
<b>Preliminary Engineering</b>						
<b>Austin (Light Rail Corridors)</b>	\$739.0 (YOE)	\$369.0	50%	<b>Not Recommended</b>	Low-Medium	Medium
<b>Charlotte (South Corridor Light Rail)</b>	\$331.1 (YOE)	\$166.8	50%	<b>Recommended</b>	Medium	Medium
<b>Chicago (Ravenswood Line Expansion)</b>	\$327.0 (YOE)	\$245.5	75%	<b>Recommended</b>	Medium	High
<b>Chicago (Union-Pacific West Line Extension)</b>	\$142.1 (YOE)	\$87.4	62%	<b>Recommended</b>	Medium-High	Medium
<b>Cincinnati (I-71 Corridor LRT)</b>	\$874.7 (YOE)	\$431.2	49%	<b>Not Recommended</b>	Low	Low-Medium
<b>Cleveland (Euclid Corridor Transportation Project)</b>	\$228.6 (YOE)	\$135.0	59%	<b>Recommended</b>	Medium-High	Medium
<b>Girdwood, Alaska (Alaska Commuter Rail) *</b>	\$69.6 (YOE)	\$15.0	22%	<b>Exempt</b>	Exempt	Exempt
<b>Hartford (New Britain-Hartford Busway)</b>	\$82.0 (YOE)	\$51.6	63%	<b>Recommended</b>	Medium	Medium
<b>Houston (Downtown to Astrodome Corridor Light Rail)</b>	\$300.0 (YOE)	\$0.0	0%	<b>Recommended</b>	Medium-High	Medium
<b>Kansas City, Johnson County (I-35 Commuter Rail)</b>	\$30.9 (YOE)	\$24.8	80%	<b>Exempt</b>	Exempt	Exempt
<b>Las Vegas (Resort Corridor Fixed Guideway MOS)</b>	\$597.0(YOE)	\$210.0	35%	<b>Recommended</b>	Medium	Medium-High
<b>Los Angeles (San Fenando Valley)</b>	\$300.3(YOE)	\$0.0	0%	<b>Recommended</b>	Medium	Medium

<b>East-West Transit Corridor)</b>						
<b>Lowell, Massachusetts-Nashua, New Hampshire (Commuter Rail)</b>	\$41.0(YOE)	\$18.0	44%	<b>Exempt</b>	Exempt	Exempt
<b>Maryland (MARC Commuter Rail Improvements) **</b>	\$85.1 (YOE)	\$40.9	48%	<b>Not Rated</b>	Not Rated	Not Rated
<b>Miami (North 27th Avenue Corridor)</b>	\$87.9(YOE)	\$61.5	70%	<b>Not Recommended</b>	Low	Medium
<b>Minneapolis (Northstar Corridor Commuter Rail)</b>	\$223.0 (YOE)	\$112.0	50%	<b>Recommended</b>	Medium	Medium
<b>Nashville (East Corridor Commuter Rail Project) *</b>	\$34.9 (YOE)	\$24.0	70%	<b>Exempt</b>	Exempt	Exempt
<b>New Orleans (Desire Corridor Streetcar)</b>	\$93.5 (YOE)	\$65.5	70%	<b>Recommended</b>	Medium	Medium
<b>New York (Long Island Rail Road East Side Access Project)</b>	\$4,344.0 (YOE)	\$2,172.0	50%	<b>Recommended</b>	Medium	Medium
<b>Orange County (The Centerline Rail Corridor)</b>	\$3,741.2 (YOE)	\$1,870.6	50%	<b>Recommended</b>	Medium-High	Medium
<b>Phoenix (Central Phoenix/East Valley Corridor) **</b>	\$1,076.0 (YOE)	\$533.4	50%	<b>Not Rated</b>	Medium-High	Not Rated
<b>Pittsburgh (North Shore Connector LRT)</b>	\$389.9 (YOE)	\$195.9	50%	<b>Recommended</b>	Medium	Medium
<b>Raleigh (Regional Transit Plan Phase I Durham to Raleigh)</b>	\$754.7 (YOE)	\$377.3	50%	<b>Recommended</b>	Medium-High	Medium

<b>San Diego (Mid Coast Corridor Project)</b>	\$116.7 (YOE)	\$42.2	36%	<b>Highly Recommended</b>	Medium-High	Medium-High
<b>San Juan (Tren Urbano, Minillas Extension)</b>	\$477.5 (YOE)	\$382.6	80%	<b>Recommended</b>	Medium	Medium-High
<b>Seattle (Everett to Seattle Commuter Rail) *</b>	\$104.0 (YOE)	\$24.9	24%	<b>Exempt</b>	Exempt	Exempt
<b>Stamford (Urban Transitway and Intermodal Transportation Center)</b>	\$24.0 (YOE)	\$18.0	75%	<b>Recommended</b>	Medium	Medium
<b>Tacoma (Lakewood-to-Tacoma Commuter Rail) *</b>	\$86.0 (YOE)	\$24.9	29%	<b>Exempt</b>	Exempt	Exempt
<b>Washington County (Wilsonville to Beaverton Commuter Rail) *</b>	\$86.0 (YOE)	\$24.9	30%	<b>Exempt</b>	Exempt	Exempt
<b>Washington, D.C. (Dulles Corridor Rapid Transit)</b>	\$287.3 (YOE)	\$224.3	78%	<b>Recommended</b>	Medium	Medium

**Note:**

\* 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 required by §5309(e).

\*\* "Not Rated" indicates that sufficient information for a complete evaluation of this project was not available for this Report; for information on a specific project, see Appendix A.

"N/A" = Not Available





<b>(Central Link LRT MOS-2 and MOS-3)</b>	<i>Rated</i>	Rated	Rated	Rated	Rated	Rated	Rated	Rated	Rated	Rated	Rated
<b>Preliminary Engineering</b>											
<b>Austin (Light Rail Corridors)</b>	<i>Not Recommended</i>	Low-Medium	Low-Medium	Low-Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
<b>Charlotte (South Corridor Light Rail)</b>	<i>Recommended</i>	Medium	Medium	Medium-High	Medium	High	High	High	High	Medium	Medium
<b>Chicago (Ravenswood Line Expansion)</b>	<i>Recommended</i>	Medium	Medium	Medium	High	Medium-High	High	High	High	High	High
<b>Chicago (Union-Pacific West Line Extension)</b>	<i>Recommended</i>	Medium-High	Medium-High	High	Medium	Medium-High	High	High	High	Low-Medium	Low-Medium
<b>Cincinnati (I-71 Corridor LRT)</b>	<i>Not Recommended</i>	Low	Low	Low	Low-Medium	Low-Medium	Medium	Medium	Medium	Low-Medium	Medium
<b>Cleveland (Euclid Corridor Transportation Project)</b>	<i>Recommended</i>	Medium-High	Medium-High	Medium-High	Medium	Medium-High	Medium	Medium	Medium	Low	Medium-High
<b>Girdwood, Alaska (Alaska Commuter Rail) *</b>	<i>Exempt</i>	Exempt	N/A	N/A	Exempt	N/A	N/A	N/A	N/A	N/A	N/A
<b>Hartford (New Britain-Hartford Busway)</b>	<i>Recommended</i>	Medium	Medium	Medium	Medium	Medium-High	High	High	Low	High	Medium
<b>Houston</b>	<i>Recommended</i>	Medium	Medium	Medium	Medium	Medium	High	High	Medium	Medium	Medium





<b>(North Shore Connector LRT)</b>	<i>ended</i>	um	um	m	m			m	Medium	um-High
<b>Raleigh (Regional Transit Plan Phase I Durham to Raleigh)</b>	<i>Recommended</i>	Medium-High	Medium-High	Medium-High	Medium	Medium	High	Medium	Low-Medium	Medium
<b>San Diego (Mid Coast Corridor Project)</b>	<i>Highly Recommended</i>	Medium-High	Medium-High	Medium-High	Medium-High	Medium	High	Medium	High	Medium
<b>San Juan (Tren Urbano, Minillas Extension)</b>	<i>Recommended</i>	Medium	Medium-High	Medium	Medium-High	High	Medium	Low	Medium-High	Medium-High
<b>Seattle (Everett to Seattle Commuter Rail) *</b>	<i>Exempt</i>	Exempt	N/A	N/A	Exempt	N/A	N/A	N/A	N/A	N/A
<b>Stamford (Urban Transitway and Intermodal Transportation Center)</b>	<i>Recommended</i>	Medium	Medium	Not Rated	Medium	High	Medium	Not Rated	Low-Medium	Medium
<b>Tacoma (Lakewood-to-Tacoma Commuter Rail) *</b>	<i>Exempt</i>	Exempt	N/A	N/A	Exempt	N/A	N/A	N/A	N/A	N/A
<b>Washington County (Wilsonville to Beaverton Commuter</b>	<i>Exempt</i>	Exempt	N/A	N/A	Exempt	N/A	N/A	N/A	N/A	N/A

<b>Rail) *</b>										
<b>Washington DC (Dulles Corridor Rapid Transit)</b>	<i>Recommended</i>	Medium	Medium	Medium	Medium	Medium	High	Medium	Low-Medium	Low-Medium

\* 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 required by §5309(e).

\*\* "Not Rated" indicates that sufficient information for a complete evaluation of this project was not available for this Report; for information on a specific project, see Appendix A.

"N/A" = Not Available

Table 1c

**Table 1-C:  
Summary of FY 2002 New Starts Ratings**

Phase and City (Project)	Financial Rating	Financial Rating Criteria		
		Section 5309 Funds as Share of Capital Costs	Capital Finance Rating	Operating Finance Rating
<b>Final Design</b>				

<b>Chicago (North Central Corridor Commuter Rail)</b>	<i>Medium-High</i>	61%	Medium-High	Medium-High
<b>Dallas-Ft. Worth (Trinity Railway Express - Phase II) <u>**</u></b>	<i>Medium</i>	39%	Medium	Medium
<b>Little Rock (River Rail Project) <u>*</u></b>	<i>Exempt</i>	65%	N/A	N/A
<b>Los Angeles-San Diego (LOSSAN Rail Corridor Improvement Project) <u>*</u></b>	<i>Exempt</i>	68%	N/A	N/A
<b>Miami (South Miami-Dade Busway Extension) <u>*</u></b>	<i>Exempt</i>	26%	N/A	N/A
<b>New Orleans (Canal Streetcar Spine)</b>	<i>Medium</i>	80%	Medium-High	Medium
<b>San Diego (Oceanside-Escondido Rail Project)</b>	<i>Medium-High</i>	46%	Medium-High	Medium-High
<b>San Francisco (Third Street Light Rail Project Phase 1)</b>	<i>Medium</i>	0%	Medium	Medium
<b>Seattle (Central Link LRT MOS-2 and MOS-3) <u>**</u></b>	<i>Not Rated</i>	38%	Not Rated	Not Rated
<b>Preliminary Engineering</b>				
<b>Austin (Light Rail Corridors)</b>	<i>Low-Medium</i>	50%	Low-Medium	Low-Medium
<b>Charlotte (South Corridor Light Rail)</b>	<i>Medium</i>	50%	Medium	Medium-High
<b>Chicago (Ravenswood Line Expansion)</b>	<i>Medium</i>	75%	Medium	Medium
<b>Chicago (Union-Pacific West Line Extension)</b>	<i>Medium-High</i>	62%	Medium-High	High
<b>Cincinnati (I-71 Corridor)</b>	<i>Low</i>	49%	Low	Low
<b>Cleveland (Euclid Corridor Improvement Project)</b>	<i>Medium-High</i>	59%	Medium-High	Medium-High
<b>Girdwood, Alaska (Alaska Commuter Rail) <u>*</u></b>	<i>Exempt</i>	22%	N/A	N/A
<b>Hartford (New Britain-Hartford Busway)</b>	<i>Medium</i>	63%	Medium	Medium
<b>Houston (Downtown to Astrodome Corridor Light Rail)</b>	<i>Medium-High</i>	0%	Medium-High	Medium-High
<b>Kansas City, Johnson County (I-35 Commuter Rail) <u>*</u></b>	<i>Exempt</i>	80%	N/A	N/A

<b>Las Vegas (Resort Corridor Fixed Guideway MOS)</b>	<i>Medium</i>	35%	Medium	Medium
<b>Los Angeles (Eastside Corridor LRT)</b>	<i>Medium</i>	53%	Medium	Medium
<b>Lowell, Massachusetts-Nashua, Hew Hampshire (Commuter Rail)</b>	<i>Exempt</i>	44%	N/A	N/A
<b>Maryland (MARC Commuter Rail Improvements Projects) **</b>	<i>Not Rated</i>	48%	Not Rated	Not Rated
<b>Miami (North 27th Avenue Corridor)</b>	<i>Low</i>	70%	Low	Low
<b>Minneapolis (Northstar Corridor Commuter Rail)</b>	<i>Medium</i>	50%	Medium	Medium
<b>Nashville (East Corridor Commuter Rail Project) *</b>	<i>Exempt</i>	70%	N/A	N/A
<b>New Orleans (Desire Corridor Streetcar)</b>	<i>Medium</i>	70%	Medium	Medium
<b>New York (Long Island Rail Road East Side Access Project)</b>	<i>Medium</i>	50%	Medium	Medium
<b>Orange County (The Centerline Rail Corridor)</b>	<i>Medium-High</i>	50%	High	Medium-High
<b>Phoenix (Central Phoenix/East Valley Corridor) **</b>	<i>Medium-High</i>	50%	Medium-High	Medium-High
<b>Pittsburgh (North Shore Connector LRT)</b>	<i>Medium</i>	50%	Medium	Medium
<b>Raleigh (Regional Transit Plan Phase I Durham to Raleigh)</b>	<i>Medium-High</i>	50%	Medium-High	Medium-High
<b>San Diego (Mid Coast Corridor Project)</b>	<i>Medium-High</i>	36%	Medium-High	Medium-High
<b>San Juan (Tren Urbano, Minillas Extension)</b>	<i>Medium</i>	80%	Medium-High	Medium
<b>Seattle (Everett to Seattle Commuter Rail) *</b>	<i>Exempt</i>	24%	N/A	N/A
<b>Stamford (Urban Transitway and Intermodal Transportation Center)</b>	<i>Medium</i>	75%	Medium	Not Rated
<b>Tacoma (Lakewood-to-Tacoma Commuter Rail) *</b>	<i>Exempt</i>	29%	N/A	N/A
<b>Washington County (Wilsonville to Beaverton)</b>	<i>Exempt</i>	30%	N/A	N/A

<b>Commuter Rail) *</b>				
<b>Washington DC (Dulles Corridor Rapid Transit)</b>	<i>Medium</i>	78%	Medium	Medium

\* 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 required by §5309(e).

\*\* "Not Rated" indicates that sufficient information for a complete evaluation of this project was not available for this Report; for information on a specific project, see Appendix A.

"N/A" = Not Available

Table 1d

**Table 1-D: Summary of Fiscal Year 2002 New Starts Ratings**

Phase and City (Project)	Project Justification Rating	Mobility Improvement Rating	Mobility Improvements		Environment Benefits Rating	Environmental Benefits		
			Annual Travel Time Savings	Low Income Households within		Annual Reduction in Greenhouse Gas Emissions	Annual Reduction in Regional Energy Consumption (million)	EPA Classification



Busway Extension) <u>*</u>													
New Orleans (Canal Streetcar Spine)	<b>Medium-High</b>	Medium	0.2	0.2	5,888	Medium	1,749	635	20,595	2,270	Attainment	Attainment	
San Diego (Oceanside-Escondido Rail Project)	<b>Medium-High</b>	Medium-High	1.4	0.7	1,706	Medium	4,070	2,113	54,464	29,045	Serious Non-Attainment	Moderate Non-Attainment	
San Francisco (Third Street Light Rail Project Phase 1)	<b>Medium</b>	Medium	2.4	0.0	5,988	Medium	3,503	N/A	-12,582	N/A	Maintenance	Attainment	
Seattle (Central Link LRT MOS-2 and MOS-3) <u>**</u>	<b>Not Rated</b>	Not Rated	N/A	N/A	N/A	Not Rated	N/A	N/A	N/A	N/A	Maintenance	Maintenance	
<b>Preliminary Engineering</b>													
Austin (Light Rail Corridors)	<b>Medium</b>	Medium	2.6	2.1	4,446	Medium	2,295	278	1,575	27,941	Attainment	Attainment	
Charlotte (South Corridor Light Rail)	<b>Medium</b>	High	5.3	4.9	5,716	High	-46,966	-25,117	28,070	10,850	Attainment	Attainment	
Chicago (Ravenswood Line Expansion)	<b>High</b>	Medium-High	2.7	0.0	11,544	High	18,911	N/A	235,320	N/A	Severe Non-Attainment	Attainment	
Chicago	<b>Medium</b>	Medium	0.3	0.8	1	High	14,3	10,6	188,3	138,8	Severe	Attain	

(Union-Pacific West Line Extension)	<b>m</b>	-High					90	24	15	67	Non-Attainment	ment
Cincinnati (I-71 Corridor LRT)	<b>Low-Medium</b>	Low-Medium	1.6	0.8	18,882	Medium	4,360	1,969	61,120	19,201	Moderate Non-Attainment	Attainment
Cleveland (Euclid Corridor Transportation Project)	<b>Medium</b>	Medium-High	1.0	N/A	12,406	Medium	8,481	N/A	76,146	N/A	Maintenance	Moderate Non-Attainment
Girdwood, Alaska (Alaska Commuter Rail) *	<b>Exempt</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hartford (New Britain-Hartford Busway)	<b>Medium</b>	Medium-High	2.8	0.8	4,381	High	12,158	9,086	160,084	119,449	Serious Non-Attainment	Attainment
Kansas City, Johnson County (I-35 Commuter Rail) *	<b>Exempt</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Las Vegas (Resort Corridor Fixed Guideway MOS)	<b>Medium-High</b>	Medium	29.9	15.5	4,114	High	27,716	35,332	284,354	424,237	Attainment	Serious Non-Attainment
Los Angeles (Eastside Corridor LRT)	<b>Medium</b>	Medium	0.4	0.2	3,552	Medium	4,261	2,332	6,688	12,841	Extreme Non-Attainment	Serious Non-Attainment

Los Angeles (San Fernando Valley East-West Transit Corridor)	<b>Medium</b>	Medium	0.4	0.2	3,552	Medium	4,261	2,332	6,688	12,841	Extreme Non-Attainment	Serious Non-Attainment
Lowell, Massachusetts-Nashua, New Hampshire (Commuter Rail) *	<b>Exempt</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Maryland (MARC Commuter Rail Improvements) **	<b>Not Rated</b>	Not Rated	N/A	N/A	N/A	Not Rated	N/A	N/A	N/A	N/A	Severe Non-Attainment	Maintenance
Miami (North 27th Avenue Corridor)	<b>Medium</b>	Medium-High	0.7	0.6	3,084	Medium	-5,754	-1,028	73,661	13,439	Maintenance	Attainment
Minneapolis (Northstar Corridor Commuter Rail)	<b>Medium</b>	Low-Medium	1.0	-0.5	1,219	Medium	10,860	11,828	143,247	154,427	Attainment	Attainment
Nashville (East Corridor Commuter Rail Project) *	<b>Exempt</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
New Orleans (Desire Corridor)	<b>Medium</b>	Low-Medium	0.1	0.1	2,088	Medium	-170	-113	-6,008	-5,337	Attainment	Attainment



(Everett to Seattle Commuter Rail) *			A	A								
Stamford (Urban Transitway and Intermodal Transportation)	Medium	High	0.4	0.1	139	Medium	8,929	N/A	116,724	N/A	Attainment	Attainment
Tacoma (Lakewood-to-Tacoma Commuter Rail) *	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Washington County (Wilsonville to Beaverton Commuter Rail) *	Exempt	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Washington DC (Dulles Corridor Rapid Transit)	Medium	Medium	2.1	1.9	237	High	1,712	10,890	59,723	68,820	Serious Non-Attainment	Moderate Non-Attainment

\* 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 required by §5309(e).

\*\* "Not Rated" indicates that sufficient information for a complete evaluation of this project was not available for this Report; for information on a specific project, see Appendix A.

"N/A" = Not Available

Table 2

## Fiscal Year 2002 Funding for New Starts Projects (Millions of Dollars)

City/Project	Overall Project Rating	Fiscal Year 2000 and Prior Year Earmarks	Fiscal Year 2001 Earmarks	Fiscal Year 2002 Recommended Funding	Remaining FFGA Funding	Total Recommended Funding
<b>Totals by Phase</b>						
Existing Full Funding Grant Agreements		\$3,446.02	\$786.47	\$993.51	\$3,838.25	\$9,064.25
Pending Full Funding Grant Agreements		\$11.39	\$15.09	\$37.23		
Proposed Full Funding Grant Agreements		\$107.75	\$32.46	\$84.00		
Other Projects in Final Design		\$23.85	\$5.94			
Other Projects in Preliminary Engineering		\$232.51	\$147.61			
Additional Fiscal Year 2001 Earmarks			\$81.24			
Ferry Capital Projects (AK or HI) (\$5309(m)(5)(A))			\$10.30	\$10.30		
Oversight Activities			\$7.94	\$11.36		
<b>Grand Total</b>		<b>\$3,821.53</b>	<b>\$1,087.05 (1)</b>	<b>\$1,136.40</b>	<b>\$3,838.25</b>	<b>\$9,064.25</b>
<b>Existing Full Funding Grant Agreements</b>						
Atlanta - North Springs	FFGA	\$304.82 (2)	\$24.77	\$25.07 (2)	\$15.88 (2)	\$370.54 (2)
Boston - South	FFGA	\$294.76	\$24.77	\$11.20	FFGA	\$330.73

Boston Piers Transitway Phase 1					Complete	
Chicago - CTA Douglas Branch Reconstruction	FFGA	\$4.92	\$14.86 (3)	\$35.00	\$265.32	\$320.10
Dallas - North Central LRT Extension	FFGA	\$92.27	\$69.35	\$71.20	\$100.18	\$333.00
Denver - Southeast Corridor LRT	FFGA	\$3.44	\$2.97	\$71.80	\$446.79	\$525.00
Denver - Southwest Corridor LRT	FFGA	\$99.79	\$20.01	\$0.19	FFGA Complete	\$120.00
Fort Lauderdale - Tri-Rail Commuter Rail Upgrade	FFGA	\$10.81	\$14.86	\$84.83	FFGA Complete	\$110.50
Houston - Regional Bus Plan	FFGA	\$489.27	\$10.65	\$0.10	FFGA Complete	\$500.00
Los Angeles - North Hollywood	FFGA	\$670.17 (4)	\$49.53	\$49.69	\$647.11	\$1,416.49
Memphis - Medical Center Extension	FFGA	\$9.89	\$5.94	\$20.00	\$23.84	\$59.67
Minneapolis - Hiawatha Corridor LRT	FFGA	\$69.32	\$49.53	\$50.00	\$165.45	\$334.30
Newark Rail Link (MOS-1)	FFGA	\$29.68	\$9.91	\$20.00	\$82.37	\$141.95
Northern New Jersey - Hudson-Bergen LRT MOS-1	FFGA	\$325.43	\$119.87	\$151.33	\$7.46	\$604.09
Northern New Jersey - Hudson-	FFGA	\$0.00	\$0.00	\$0.00	\$500.00	\$500.00

Bergen MOS-2						
Pittsburgh - Stage 2 LRT Reconstruction	FFGA	\$11.82	\$11.89	\$20.00	\$56.49	\$100.20
Portland - Interstate MAX LRT Extension	FFGA	\$0.00	\$7.43	\$80.09	\$169.98	\$257.50
Sacramento - South LRT Extension	FFGA	\$77.98 (5)	\$34.87	\$0.33	FFGA Complete	\$113.18 (5)
St. Louis - Metrolink St. Clair Extension	FFGA	\$161.88 (5)	\$59.44	\$31.09	FFGA Complete	\$252.41 (5)
Salt Lake City - CBD to University LRT	FFGA	\$4.96 (5)	\$1.98	\$15.00	\$67.62	\$89.56 (5)
Salt Lake City - North-South LRT	FFGA	\$243.28	\$0.00	\$0.72	FFGA Complete	\$243.99 (5)
San Diego - Mission Valley East LRT Extension	FFGA	\$22.11	\$31.21	\$65.00	\$211.64	\$329.96
San Francisco - BART Extension to SFO Airport	FFGA	\$217.19	\$79.25	\$80.61	\$372.94	\$750.00
San Jose - Tasman West LRT	FFGA	\$170.50	\$12.14	\$0.11	FFGA Complete	\$182.75
San Juan - Tren Urbano	FFGA	\$84.63 (5)	\$74.30	\$50.16	\$103.28	\$312.37 (5)
Seattle - Central Link LRT (MOS-1)	FFGA	\$41.44	\$49.53	\$0.00	\$409.03	\$500.00
Washington DC/MD - Largo Extension	FFGA	\$5.65 (5)	\$7.43	\$60.00	\$192.87	\$265.95 (5)
<b>Subtotal</b>		<b>\$3,446.02</b>	<b>\$786.47</b>	<b>\$993.51</b>	<b>\$3,838.25</b>	<b>\$9,064.25</b>

<b>Pending Federal Funding Commitments</b>						
Baltimore - Central LRT Double-Tracking	Recommended	\$5.65	\$2.97	\$18.11		
Chicago - Metra South West Corridor Commuter Rail	Highly Recommended	\$5.74 (6)	\$12.12 (7)	\$19.12		
<b>Subtotal</b>		<b>\$11.39</b>	<b>\$15.09</b>	<b>\$37.23</b>		
<b>Proposed Funding Commitments</b>						
Chicago - Metra North Central Commuter Rail	Recommended	\$19.60 (6)	\$14.25 (7)	\$23.00		
Chicago - Metra UP West (Kane) Commuter Rail	Recommended	\$8.14 (6)	\$8.31 (7)	\$20.00		
Miami - South Miami-Dade Busway Extension	Exempt (8)	\$16.90	\$0.00	\$5.00		
New Orleans - Canal Streetcar Spine	Recommended	\$55.18	\$0.00	\$23.00		
San Diego County - Oceanside-Escondido Rail Project	Highly Recommended	\$7.93	\$9.91	\$13.00		
<b>Subtotal</b>		<b>\$107.75</b>	<b>\$32.46</b>	<b>\$84.00</b>		
<b>Other Projects in Final Design</b>						
Little Rock - River Rail Project	Exempt (8)	\$2.98	\$2.97			
Los Angeles - LOSSAN Rail Corridor Improvement Project	Exempt (8)	\$20.87	\$2.97			
San Francisco -	Recommended	\$0.00	\$0.00			

Third Street Light Rail Phase 1	d					
Seattle - Central Link LRT (MOS-2 & MOS-3)	Not Rated	\$0.00	\$0.00			
<b>Subtotal</b>		<b>\$23.85</b>	<b>\$5.94</b>			
<b>Other Projects in Preliminary Engineering</b>						
Alaska - Alaska Railroad Girdwood Commuter Rail	Exempt (8)	\$0.00	\$14.86			
Austin - Austin Area LRT System	Not Recommended	\$2.97	\$0.99			
Charlotte - South Corridor LRT	Recommended	\$0.00	\$4.95			
Chicago - CTA Ravenswood Line Expansion	Recommended	\$4.92	\$0.00 (3)			
Cincinnati - I-71 Corridor	Not Recommended	\$9.77	\$0.00			
Cleveland - Euclid Corridor Improvement Project	Recommended	\$9.49	\$3.96			
Hartford - New Britain-Hartford Busway	Recommended	\$1.49	\$0.00			
Houston - Downtown to Astrodome Light Rail	Recommended	\$5.93	\$2.48			
Kansas City - Johnson County I-35	Exempt (8)	\$1.97	\$0.99			

Commuter Rail						
Las Vegas - Resort Corridor Fixed Guideway MOS	Recommended	\$12.39	\$1.49			
Los Angeles - Eastside Corridor LRT	Recommended	\$0.00	\$1.98			
Los Angeles - San Fernando Valley Corridor	Recommended	\$0.00	\$0.00			
Maryland - MARC Commuter Rail Improvements	Not Rated	\$4.45	\$9.91			
Miami - North 27th Avenue Corridor	Not Recommended	\$11.92	\$0.00			
Minneapolis-Rice, MN - Northstar Corridor Commuter Rail	Recommended	\$0.00	\$4.95			
Nashua, NH - Nashua-Lowell Commuter Rail Extension	Exempt (8)	\$1.97	\$1.98			
Nashville - East Corridor Commuter Rail	Exempt (8)	\$1.97	\$5.94			
New Orleans - Desire Corridor Streetcar	Recommended	\$0.00	\$0.00			
New York - LIRR East Side Access	Recommended	\$45.72	\$7.93			
Orange County, CA - Centerline Rail Corridor	Recommended	\$8.44	\$1.98			

Phoenix - East Valley Light Rail	Not Rated	\$13.86	\$9.91			
Pittsburgh - North Shore Connector LRT	Recommended	\$10.80	\$4.95			
Raleigh - Regional Transit Plan Phase 1	Recommended	\$31.73	\$9.91			
San Diego - Mid Coast Corridor	Highly Recommended	\$11.33	\$0.00			
San Juan - Minillas Extension	Recommended	\$0.00	\$0.00			
Seattle - Everett-Seattle Commuter Rail	Exempt (8)	\$0.00	\$0.00			
Stamford, CT - Urban Transitway and ITC Improvements	Recommended	\$0.00	\$7.93			
Tacoma - Lakewood-Tacoma Commuter Rail	Exempt (8)	\$0.00	\$0.00			
Washington County, OR - Wilsonville-Beaverton Commuter Rail	Exempt (8)	\$0.00	\$0.99			
Washington, DC - Dulles Corridor Rapid Transit	Recommended	\$41.40	\$49.53			
<b>Subtotal</b>		<b>\$232.51</b>	<b>\$147.61</b>			

**Note: Totals may not add due to rounding.**

(1) Total FY 2001 allocations include \$1,056.07 million in FY 2001 funding (\$1,058.40 million from the FY 2001 Transportation and Related Agencies Appropriations Act, less \$2.33 million recinded by the Omnibus Consolidated Appropriations Act, P.L. 106-554), plus a total of \$3.97 million in additional funding for the Newark-Elizabeth Rail Link and the Dallas Southeast Corridor Light Rail project added by the Consolidated Appropriations Act, plus a total of \$26.99 million made available from unobligated or deobligated balances from the following projects: New Jersey/Burlington to Gloucester, \$1.49 million (PL 103-331); Orlando/Lynx Light Rail project, \$20.52 million; and Pittsburgh/Airport Busway, \$4.98 million (PL 105-66).

(2) Reflects amendment to FFGA. See text.

(3) FY 2001 appropriations provided a total of \$14.89 million for "Chicago Ravenswood and Douglas Branch Reconstruction Projects."

(4) Includes funding for all MOS-3 elements: North Hollywood, Mid-City and Eastside.

(5) Totals include prior year funding not included in FFGA. See Text.

(6) Reflects reallocation of FY 2000 funds for "Metra Commuter Rail Project" by grantee.

(7) Represents allocation of \$34.67 million in FY 2001 funds for "Metra Commuter Rail Projects" by grantee.

(8) 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 required by §5309(e). However, FTA strongly encourages sponsors who believe their projects to be exempt to nonetheless submit information for evaluation and rating purposes.

## New Starts Allocations and Recommendations

The President's budget for FY 2002 proposes that \$1,136.40 million be made available for new starts under §5309. This represents the full amount of guaranteed funds authorized by TEA-21. After subtracting amounts for FTA oversight activities as proposed in the budget, and for other purposes specified by §5309(m)(5)(A), [11](#) a total of \$1,114.74 million remains available for projects. Of this amount, a total of \$993.51 million will be allocated among 24 projects with existing Federal commitments. An additional \$37.23 million will be allocated among two projects for which funding commitments are currently pending, and \$84.00 million will be allocated among five projects that are expected to be ready for funding commitments before the end of FY 2002 (i.e., September 30, 2002). Complete descriptions of these projects can be found in Appendix A.

Table 2 summarizes the recommendations for FY 2002 funding and overall funding commitments. For each project, the first column indicates the overall project rating, as described earlier in this report. The second column shows the amount of FY 2000 and prior year funds that have been obligated by each project. The third column shows the amount of funds available as a result of the FY 2001 DOT Appropriations Act (adjusted for the oversight takedown). The fourth column shows the FY 2002 funding recommendations contained in the President's budget request, and the fifth indicates the maximum amount of outyear funding remaining for those projects under FFGAs. Finally, the last column sums the first five columns and shows the total amount to be made available over the life of the project from Federal transit major capital investment funds.

## A Word About Full Funding Grant Agreements

Section 5309(e)(7) specifies the Full Funding Grant Agreement (FFGA) as the means by which new starts projects are to be funded. The FFGA is also the principal means used by FTA to manage the new starts caseload. FTA also has the discretion to use an FFGA in awarding Federal assistance for other major capital projects.

The FFGA defines the project, including cost and schedule; commits to a maximum level of Federal financial assistance (subject to appropriation); establishes the terms and conditions of Federal financial participation; covers the period of time for completion of the project; and helps to manage the project in accordance with Federal law. The FFGA assures the grantee of

predictable Federal financial support for the project (subject to appropriation) while placing a ceiling on the amount of that Federal support.

An FFGA also limits the exposure of FTA and the Federal government to cost increases that may result if project design, engineering and/or planning is not adequately performed at the local level. FTA is primarily a financial assistance agency; it is not directly involved in the design and construction of new starts projects. While FTA is responsible for ensuring that planning projections are based on realistic assumptions and that design and construction follow acceptable industry procedures, it is the responsibility of project sponsors to ensure that proper planning, design and engineering have been performed.

Additional information and guidance on developing FFGAs is contained in [FTA Circular C 5200.1](#), *Full Funding Grant Agreements Guidance*, dated July 2, 1993, and the FTA Rule on Project Management Oversight (49 CFR Part 633).

## **Existing Federal Funding Commitments**

Twenty-six projects have existing FFGAs that commit FTA to provide specified levels of major capital investment funding. Two of these projects are not included in the funding recommendations: the Hudson-Bergen MOS-2 project in Northern New Jersey, because the FFGA does not commit funding before FY 2003; and the Central Link light rail project in Seattle, because the FFGA is under review. The remaining 24 projects will require a total of \$993.51 million in FY 2002. The status of these projects and the individual funding recommendations for FY 2002 are described below. All of these projects have been authorized by TEA-21, and all were either under an FFGA prior to TEA-21 or have been rated as “recommended” or higher at the time the FFGA was issued.<sup>[2]</sup>

### **Table 2: FY 2002 New Starts Funding Recommendations**

#### **Atlanta/North Springs**

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is constructing a 2.3-mile, 2-station extension of the North Line from the Dunwoody station to North Springs. This extension will serve the rapidly-growing area north of Atlanta, which includes Perimeter Center and north Fulton County, and will connect this area with the rest of the region by providing better transit service for both commuters and inner-city residents traveling to expanding job opportunities.

On December 20, 1994, FTA issued an FFGA committing a total of \$305.01 million in new starts funding to this project. In the Conference Report to the FY 2000 appropriations act, FTA was instructed to amend the FFGA for this project to incorporate a change in scope as authorized under Section 3030(d)(2) of TEA-21. Accordingly, on March 2, 2000, FTA amended the FFGA to include 28 additional railcars, a multilevel parking facility in lieu of a surface parking lot, and enhancements to customer security and amenity measures at the Sandy Springs and North Springs stations. The total cost of the amended project is \$463.18 million, with \$370.54 million from the §5309 new starts program. Of the \$65.53 million increase in Federal funding, \$10.67 million was applied from unexpended prior-year funds identified from cost savings on the

Dunwoody section of the North Line extension. Including these prior-year funds, a total of \$304.82 million has been appropriated for this project in FY 2000 and prior years, and an additional \$24.77 million was provided in FY 2001. This leaves \$40.95 million remaining in the amended FFGA for this project. It is recommended that \$25.07 million be provided to this project in FY 2002, with the remaining \$15.88 million to be provided in future years.

### **Boston/South Boston Piers Transitway Phase 1**

The Massachusetts Bay Transportation Authority (MBTA) is developing an underground transitway to connect the existing transit system with the South Boston Piers area. The Piers area, which is connected to the central business district (CBD) by three local bridges, is undergoing significant development. A 1.5-mile tunnel, which will be constructed in two phases, will extend from the existing Boylston Station to the World Trade Center; five underground stations will provide connections to the MBTA's Red, Orange, and Green Lines. Dual-mode trackless trolleys will operate in the transitway tunnel and on surface routes in the eastern end of the Piers area.

Phase 1 of this project consists of a 1-mile, three-station bus tunnel between South Station and the World Trade Center, with an intermediate stop at Fan Pier. Part of the construction is being coordinated with the Central Artery highway project. South Station serves the existing MBTA Red Line, as well as Amtrak and commuter rail and bus service. The total estimated cost of Phase I is \$601.00 million. Phase II would extend the transitway to Boylston Station on the Green Line and the Chinatown Station on the Orange Line.

Section 3035(j) of ISTEA directed FTA to enter into an FFGA for this project. On November 5, 1994, an FFGA was issued for Phase 1, committing a total of \$330.73 million in \$5309 new starts funding. Through FY 2000, a total of \$294.76 million has been provided for this project. The FY 2001 appropriation provided an additional \$24.77 million. This leaves \$11.20 million required to complete the Federal commitment to this project. It is recommended that these remaining funds be provided in FY 2002 to complete the FFGA. This phase of the transitway is expected to open in December 2002.

### **Chicago/CTA Douglas Branch Reconstruction**

The Chicago Transit Authority (CTA) is proposing a complete reconstruction of the Douglas Branch heavy rail line. Part of the CTA's Blue Line, the 11-station Douglas Branch extends 6.6 miles from Cermack Avenue to a point just west of downtown Chicago. Dating to the 19<sup>th</sup> Century, the oldest segment on the line opened in 1896 and the "newest" in 1910, though numerous improvements and upgrades were made through the mid-1980's. Age-related deterioration has resulted in high maintenance and operating costs on the line, as well as declining service.

The Douglas Branch currently carries approximately 27,000 riders on an average weekday, and serves one of the most economically distressed areas in Chicago; low income households make up 30 percent of the total number of households within walking distance of the stations. The line has been in operation for over 100 years, and serves neighborhoods that originally developed

along the system. The corridor contains an estimated 54,000 jobs and 115,000 residents within ½-mile of the stations, and serves the University of Illinois at Chicago (25,000 students) and a large, dense central business district with an estimated 339,000 jobs. Population and employment densities are high, averaging 9,100 jobs and nearly 20,000 people per square mile. After “looping” through the central business district, the Blue Line also extends to O’Hare International Airport and the Medical Center Complex. The total capital cost of the Douglas Branch Reconstruction project is estimated at \$482.60 million.

The Douglas Branch is authorized for final design and construction by Section 3030(a)(106) of TEA-21. In January 2001, FTA and CTA entered into an FFGA that commits a total of \$320.10 million in §5309 new starts funds to this project. A total of \$4.92 million has been appropriated through FY 2000, and an additional \$14.86 million was provided in FY 2001. This leaves \$300.32 million needed to fulfill the FFGA. In accordance with Attachment 6 of the FFGA, it is recommended that \$35.00 million in §5309 new starts funds be provided to this project in FY 2002.

### **Dallas/North Central LRT Extension**

Dallas Area Rapid Transit (DART) is constructing a 12.5-mile, 9-station extension of its light rail system from the Park Lane Station north to the City of Plano. DART estimates that approximately 17,000 riders will use this extension by 2020, of which 6,800 will be new riders. The total cost of this project is estimated at \$517.20 million. DART began contracting for construction and purchasing vehicles and necessary right-of-way in May 1998, and expects to open the North Central extension for revenue service in December 2003.

The North Central extension is authorized for final design and construction under Section 3030(a)(20) of TEA-21. FTA issued an FFGA for this project on October 6, 1999, which will provide a total of \$333.00 million in §5309 new starts funding. Through FY 2000, a total of \$92.27 million has been provided to this project, with an additional \$69.35 million appropriated in FY 2001. This leaves \$171.38 million required to complete the Federal funding commitment. It is recommended that \$71.20 million be provided to this project in FY 2002; this includes the \$70.00 million specified in Attachment 6 of the FFGA, plus an additional \$1.20 million to compensate for prior year Federal funding shortfalls where appropriations were less than the amounts specified in the FFGA. The remaining \$100.18 million required to complete the project would be provided in future years.

### **Denver/Southeast Corridor LRT**

The Regional Transportation District (RTD) in Denver and the Colorado Department of Transportation (CDOT) are implementing a 19.12-mile, 14-station light rail line between downtown Denver and Lincoln Avenue in Douglas County along I-25, with a spur along I-225 to Parker Road in Arapahoe County. The double-tracked line would operate over an exclusive right-of-way and connect with both the existing Central Corridor light rail line in downtown Denver, and the Southwest line which is currently under construction. The total capital cost of this project is estimated at \$879.30 million. Revenue service is projected to begin by June 30, 2008.

Section 3030(a)(23) of TEA-21 authorized the Southeast LRT in Denver for final design and construction. FTA issued an FFGA for this project on November 17, 2000, which will provide a total of \$525.00 million in §5309 new starts funding. A total of \$3.44 million in §5309 new starts funds has been appropriated for this project through FY 2000, and an additional \$2.97 million was provided in FY 2001. It is recommended that \$71.80 million be provided to this project in FY 2002; this includes the amount specified in Attachment 6 of the FFGA, plus additional funding to compensate for prior year Federal funding shortfalls where appropriations were less than the amounts specified in the FFGA. The remaining \$446.79 million needed to complete this project would be provided in future years.

### **Denver/Southwest Corridor LRT**

The Denver RTD Southwest Corridor light rail extension opened for revenue service in July 2000. The 8.7-mile, five-station line between Denver and Littleton extends from the I-25/Broadway station on the existing Central Corridor line south to Mineral Avenue in Littleton, running parallel to Santa Fe Drive over an exclusive, grade-separated right-of-way. The total cost of this project was \$176.32 million. Ridership in the opening year has exceeded not only the original opening-year forecast of 8,400 daily passengers, but also the projections of 22,000 daily riders by 2015. The line currently serves 30,000 passengers per day.

FTA issued an FFGA for this project on May 9, 1996, which will provide a total of \$120.00 million in §5309 new starts funding. Through FY 2000, a total of \$99.79 million has been provided to this project, with an additional \$20.01 million appropriated in FY 2001. This leaves \$192,492 required to complete the Federal funding commitment. It is recommended that these remaining funds be provided in FY 2002 to complete the FFGA.

### **Ft. Lauderdale/Tri-Rail Commuter Rail Upgrade**

The Tri-County Commuter Rail Authority (Tri-Rail) is proposing a number of system improvements to the 71.7-mile regional transportation system it operates between Palm Beach, Broward and Dade Counties in South Florida. This area has a population of over four million, nearly one-third of the total population of Florida. The planned improvements include construction of a second mainline track, rehabilitation of the signal system, station and parking improvements, acquisition of new rolling stock, improvements to the Hialeah Maintenance Yard facility and construction of a new, northern layover facility. The proposed double-tracking will improve service by a factor of three, permitting 20-minute intervals between trains during peak commuter hours instead of the current one-hour headways. Tri-Rail estimates that these improvements will serve 42,100 average daily boardings by 2015, including 10,200 daily new riders.

On May 16, 2000, FTA issued an FFGA for Segment 5 of the Double Track Corridor Improvement Program, which includes construction of 44.31 miles of the second mainline track and upgrades to the existing grade crossing system along the entire 71.7-mile South Florida Rail Corridor. It is expected to open for revenue service on March 21, 2005. The first four segments, upgrading the Hialeah Maintenance Yard and replacing the New River Bridge, while part of the

overall Double Track Corridor Improvement Program, are not included in the scope of this project. Total capital costs for the Segment 5 project are estimated at \$327.00 million.

The FFGA for the Double Track Corridor Improvement Program Segment 5 Project will provide a total of \$110.50 million in §5309 new starts funding. Tri-Rail has allocated a total of \$10.81 million in FY 2000 and prior year funding to this project, and an additional \$14.86 million was appropriated in FY 2001. This leaves \$84.83 million required to complete the Federal commitment; FTA recommends that this remaining amount be provided in FY 2002.

### **Houston/Regional Bus Plan**

Houston Metro is implementing a \$625.00 million package of improvements to its existing bus system. This Regional Bus Plan includes service expansions in most of the region, new and extended HOV (High-Occupancy Vehicle, or "carpool") facilities and ramps, new buses, several transit centers and park-and-ride lots, and supporting facilities. This collection of projects was selected as the locally-preferred alternative over a proposed rail project in 1992.

An FFGA was issued on December 30, 1994, to provide a total of \$500.00 million in §5309 new starts funds for the Regional Bus project. A total of \$489.27 million has been provided through FY 2000; the FY 2001 appropriation provided an additional \$10.65 million. The FY 2002 budget recommends that the remaining \$95,459 required to fulfill the Federal commitment be provided to this project. All projects under the Regional Bus Plan are expected to be completed by December 2004.

### **Los Angeles/North Hollywood**

The Los Angeles Metro Rail Red Line rapid-rail system is being planned, programmed and constructed in phases, through a series of "Minimum Operable Segments" (MOSs). The first of these segments (MOS-1), a 4.4-mile, 5-station segment, opened for revenue service in January 1993. A 2.1-mile, three-station segment of MOS-2 opened along Wilshire Boulevard in July 1996; an additional 4.6-mile, 5-station segment of MOS-2 opened in June 1999, and the Federal funding commitment has been fulfilled. On May 14, 1993, an FFGA was issued to the Los Angeles County Metropolitan Transportation Authority (LACMTA) for the third construction phase, MOS-3.

MOS-3 was defined under ISTEA (Section 3034) to include three segments: the *North Hollywood* segment, a 6.3-mile, three-station subway extension of the Hollywood branch of MOS-2 to North Hollywood through the Santa Monica mountains; the *Mid-City* segment, a 2.3-mile, two-station western extension of the Wilshire Boulevard branch; and an undefined segment of the *Eastside* project, to the east from the existing Red Line terminus at Union Station. LACMTA later defined this eastern segment as a 3.7-mile, four-station extension under the Los Angeles River to First and Leona in East Los Angeles. On December 28, 1994, the FFGA for MOS-3 was amended to include this definition of the eastern segment, bringing the total commitment of Federal new starts funds for MOS-3 to \$1,416.49 million.

In January 1997, FTA requested that LACMTA submit a recovery plan to demonstrate its ability to complete MOS-2 and MOS-3, while maintaining and operating the existing bus system. On January 14, 1998, the LACMTA Board of Directors voted to suspend and demobilize construction on all rail projects other than MOS-2 and the MOS-3 North Hollywood Extension. The MTA submitted a recovery plan to FTA on May 15, 1998, which was approved by FTA on July 2, 1998.

In 1998, LACMTA undertook a Regional Transportation Alternatives Analysis (RTAA) to analyze and evaluate feasible alternatives for the Eastside and Mid-City corridors. The RTAA addressed system investment priorities, allocation of resources to operate existing transit services at a reliable standard, assessment and management of financial risk, countywide bus service expansion, and a process for finalizing corridor investments. On November 9, 1998, the LACMTA Board reviewed the RTAA and directed staff to reprogram resources previously allocated to the Eastside and Mid-City Extensions to the implementation of RTAA recommendations, including the LACMTA Accelerated Bus Procurement Plan.

LACMTA continued to study transit investment options for the Eastside and Mid-City corridors. In October 2000, FTA approved entry into preliminary engineering for a 5.9-mile, 8-station light rail line in the Eastside Corridor between downtown Los Angeles and East Los Angeles. The Mid-City corridor is still undergoing alternatives analysis. FTA will consider the prior Federal commitment under the MOS-3 FFGA as an “other factor” for rating and evaluation purposes for these projects, as long as the identified projects otherwise meet the requirements of the new starts program.

On June 9, 1997, FTA and LACMTA negotiated a revised FFGA covering the North Hollywood segment (Phase 1-A) of MOS-3, which opened in June 2000. The total capital cost of the North Hollywood project is estimated at \$1,310.82 million, of which the revised FFGA commits \$681.04 million in §5309 new starts funds. Through FY 2000, a total of \$581.82 million has been appropriated for the North Hollywood segment of MOS-3; an additional \$49.53 million was provided in FY 2001, leaving \$49.69 million remaining to complete the commitment under the revised FFGA for this project. It is recommended that the remaining \$49.69 million be provided to the North Hollywood segment of MOS-3 in FY 2002.

In terms of the original FFGA for the three MOS-3 segments, a total of \$76.48 million was appropriated for the original Mid-City and Eastside segments through FY 2000, with another \$11.86 million provided in FY 1999 and FY 2000 for further study of alternatives to these segments. This is in addition to the \$631.35 million provided to the North Hollywood segment, which brings total appropriations to date for the original MOS-3 project to \$719.69 million, leaving \$696.80 million of the original MOS-3 FFGA commitment remaining.

## **Memphis/Medical Center Extension**

The Memphis Area Transit Authority (MATA), in cooperation with the City of Memphis, is proposing to build a 2-mile light rail extension to the Main Street Trolley/Riverfront Loop village rail system. The extension would expand service from the central business district (CBD) east to the Medical Center area. The line would operate on city streets in mixed traffic and would

connect with the Main Street Trolley, sharing a lane with automobile traffic on Madison Avenue between Main Street and Cleveland Street. Six new stations would be located along the route. The line will be designed to accommodate light rail vehicles, but vintage rail cars would be used until a proposed regional LRT line is implemented and a fleet of modern LRT vehicles is acquired. The total capital cost of this project is estimated at \$74.58 million. This project would be the last segment of the downtown rail circulation system as well as the first segment of a regional light rail line.

This project is included in the City of Memphis' Capital Improvement Program, the Memphis MPO Transportation Improvement Program, and the State Transportation Improvement Program. A Major Investment Study/Environmental Assessment was completed in May 1997, fulfilling the statutory requirement for an alternatives analysis. FTA approved this project for entry into final design in May 2000.

The Memphis Corridor was authorized for final design and construction by Section 3030(a)(43) of TEA-21. On December 12, 2000 FTA issued an FFGA committing a total of \$59.67 million in §5309 new starts funds to the Medical Center Extension. A total of \$9.89 million has been appropriated for this project through FY 2000; an additional \$5.94 million was provided in FY 2001, leaving \$43.84 million needed to complete the project. In accordance with Attachment 6 of the FFGA, it is recommended that \$20.00 million in §5309 new starts funds be provided in FY 2002, with the remaining \$23.84 million to be provided in future years.

### **Minneapolis/Hiwatha Corridor LRT**

Metro Transit and the Metropolitan Council of Minneapolis (the local MPO), in cooperation with the Minnesota Department of Transportation (MnDOT), Hennepin County, and the Metropolitan Airports Commission (MAC), plan to implement an 11.6-mile, 17-station light rail line linking downtown Minneapolis, the Minneapolis-St. Paul International Airport, and the Mall of America in Bloomington. The line would operate along the corridor following Hiawatha Avenue and Trunk Highway 55. Current plans call for the line to begin in the central business district and travel south on the existing transit mall south along 5<sup>th</sup> Street, follow the former Soo Line Railroad from the Metrodome to Franklin Avenue, and then run parallel along Hiawatha Avenue towards the airport. The line will tunnel under the runways and taxiways for 1.8 miles, with one station, emerge on the west side of the airport, and continue south to the vicinity of the Mall of America in Bloomington. The total capital cost of the Hiawatha Corridor LRT is estimated at \$675.40 million.

Section 3030(a)(91) of TEA-21 authorizes the "Twin Cities – Transitway Corridors" for final design and construction. In January 2001, FTA issued an FFGA that commits a total of \$334.30 million in §5309 new starts funds to the Hiawatha Corridor LRT. Of this, \$69.32 million has been provided in FY 2000 and prior years, and an additional \$49.53 million was appropriated in FY 2001. This leaves a total of \$215.45 million that will be needed to fulfill the FFGA. In accordance with Attachment 6 of the FFGA, it is recommended that \$50.00 million in §5309 new starts funds be provided to this project in FY 2002.

### **Newark/Newark Rail Link (MOS-1)**

The New Jersey Transit Corporation (NJ Transit) is planning a one-mile, five-station extension of the Newark City Subway light rail line, running from Broad Street Station in Newark to Newark Penn Station. This project is planned as the first minimum operable segment (MOS-1) of a proposed 8.8-mile, 16-station light rail system that will link the cities of Newark and Elizabeth, New Jersey. The second stage is a planned one-mile segment from Newark Penn Station to Camp Street in downtown Newark, and the third is the planned remaining 7-mile segment to Elizabeth, which includes a station serving Newark International Airport. The total cost of the MOS-1 segment is estimated at \$207.70 million.

Section 3030(a)(57) of TEA-21 authorized the New Jersey Urban Core Project, which consists of eight separate elements including the Newark-Elizabeth Rail Link, for final design and construction. On August 2, 2000 FTA issued an FFGA committing a total of \$141.95 million in §5309 new starts funds to the Newark Rail Link MOS-1 project. Through FY 2000, Congress has appropriated a total of \$29.68 million for this project. An additional \$9.91 million was provided in FY 2001, <sup>[3]</sup> leaving a total of \$102.37 million remaining to complete the project. As specified in Attachment 6 of the FFGA for this project, it is recommended that \$20.00 million be provided to this project in FY 2002, with the remaining \$82.37 million to be provided in future years.

### **Northern New Jersey/Hudson-Bergen MOS-1**

The New Jersey Transit Corporation (NJ Transit) is constructing a 9.6-mile, 16-station light rail line along the Hudson River Waterfront in Hudson County, from the Hoboken Terminal to 34<sup>th</sup> Street in Bayonne and Westside Avenue in Jersey City. This line is intended as the initial minimum operable segment (MOS-1) of a larger 21-mile, 30-station line extending from the Vince Lombardi park-and-ride lot in Bergen County to Bayonne, passing through Port Imperial in Weehauken, Hoboken, and Jersey City. The core of the completed system will serve the high-density commercial centers in Jersey City and Hoboken, and provide connections with NJ Transit commuter rail service, PATH trains to Newark and Manhattan, and the Port Imperial ferry from Weehauken to Manhattan. This initial operating segment is being constructed under a turnkey contract to design, build, operate, and maintain the system, which was awarded in October 1996. Total costs are expected to be \$992.14 million for MOS-1; construction began in December 1996.

The Department issued an FFGA on October 15, 1996 that commits \$604.09 million in §5309 new starts funding for MOS-1. Through FY 2000, a total of \$325.43 million has been appropriated for this project. The FY 2001 appropriation provided an additional \$119.87 million, leaving \$158.79 million needed to complete the Federal commitment. It is recommended that \$151.33 million be provided in FY 2002, in accordance with Attachment 6 of the FFGA for this project. The remaining \$7.46 million needed to complete the Federal funding commitment would be provided in future years. A portion of the MOS-1 line, between 34th Street and Exchange Place, opened in April 2000, and NJ Transit began revenue service from Exchange Place north to the Pavonia-Newport Station in November 2000. Full service to Hoboken Terminal will begin in spring 2002.

### **Northern New Jersey/Hudson-Bergen MOS-2**

The second Minimum Operable Segment (MOS-2) of the NJ Transit Hudson-Bergen LRT system is a 5.1-mile, 7-station segment running north from Hoboken Terminal to the Tonelle Avenue park-and-ride lot in North Bergen, and south to 22<sup>nd</sup> Street in Bayonne. The Hudson-Bergen MOS-2 line will serve an area with one of the highest residential densities in the region, and the downtown Jersey City area contains the largest concentration of office development in Hudson County. By providing connections to ferry and commuter rail service, it will also serve the Manhattan central business district. Total costs for MOS-2 are estimated at \$1,215.40 million.

FTA issued an FFGA for this project on October 31, 2000, committing a total of \$500.00 million in §5309 new starts funds. The MOS-2 project does not require funding from the §5309 new starts program until FY 2003; the issuance of the FFGA at this point provides NJ Transit with the authority to borrow funds to begin construction as soon as MOS-1 is complete, under the same turnkey contract. This permits the entire Hudson-Bergen project to be constructed at a lower cost by avoiding the significant costs associated with stopping and then restarting a major construction project. No prior year funding has been appropriated for MOS-2 from the §5309 new starts program. As the FFGA for this project does not require funding until FY 2003, no funding recommendation is contained in the FY 2002 budget request.

### **Pittsburgh/Stage II LRT Reconstruction**

The Port Authority of Allegheny County (“Port Authority”) is in the process of reconstructing Pittsburgh’s old 25-mile trolley lines to modern light rail standards. The reconstruction is taking place in two stages. The Stage I Light Rail Transit (LRT) project, undertaken in the 1980s, included reconstruction of the first segment and construction of Pittsburgh’s first subway. Ground was broken on the Stage I LRT project in December 1980, and the reconstruction of this segment was completed in 1987. The Stage II LRT project includes reconstruction of the remaining 12 miles of the system, which consists of the Overbrook, Library and Drake trolley lines, to modern LRT standards. Single-track segments will be double-tracked, the Overbrook and Drake lines (which are currently closed) would be reopened, and 28 new light rail vehicles would be purchased.

In order to prioritize program needs against financing requirements, Port Authority reconfigured its rail improvement program in 1999. As a result, the Stage II LRT project will itself be undertaken in segments. The revised Stage II LRT Priority Program includes reconstruction of 10.7 miles on both the Overbrook Line and a portion of the Library Line, construction of 2,400 park-and-ride spaces, and the purchase of 28 light rail vehicles. The total capital cost of the Stage II Priority Program is estimated at \$386.40 million. The remaining portions of the original Stage II LRT project will be undertaken as local funding becomes available.

Section 3030(a)(98) authorizes the “Pittsburgh – Stage II Light Rail” project for final design and construction. In January 2001, FTA issued an FFGA for this project that would commit a total of \$100.20 million in §5309 new starts funding. Through FY 2000, a total of \$11.82 million has been appropriated for this project, and an additional \$11.89 million was provided in FY 2001. This leaves a total of \$76.49 million needed to complete the anticipated Federal commitment to

this project. In accordance with Attachment 6 of the FFGA, it is recommended that \$20.00 million be provided in FY 2002.

### **Portland/ Interstate MAX LRT Extension**

The Tri-County Metropolitan Transit District of Oregon (Tri-Met) is planning a 5.8-mile, 10-station extension of the Metropolitan Area Express ("MAX") light rail system, which will connect Portland's central business district with the regional Exposition Center in north Portland. Riders will be able to transfer between the Interstate MAX extension and the existing 33-mile East/West MAX line at the Rose Quarter station. This line will complement regional land use plans by connecting established residential, commercial, entertainment and other major activity centers, and will provide a key transportation link in the region's welfare-to-work programs. The total cost of the Interstate MAX project is estimated at \$350.00 million. Tri-Met estimates that the Interstate MAX extension will serve 18,100 average weekday boardings and 8,400 daily new riders by 2020.

On September 20, 2000, FTA and Tri-Met entered into an FFGA that commits a total of \$257.50 million in §5309 new starts funds to the Interstate MAX project. This does not include funding appropriated in prior years that was allocated to Portland Metro for the 12-mile South-North light rail line originally proposed for this corridor. The FY 2001 appropriation provided \$7.43 million for the Interstate MAX light rail extension, leaving \$250.07 million required to complete the FFGA. It is recommended that \$80.09 million be provided for this project in FY 2002; this includes the amount specified in Attachment 6 of the FFGA, plus additional funding to compensate for prior year Federal funding shortfalls where appropriations were less than the amounts specified in the FFGA. The remaining \$169.98 million needed to complete the project would be provided in future years.

### **Sacramento/South LRT Extension**

The Sacramento Regional Transit District (RT) is developing an 11.3-mile light rail project in the South Sacramento Corridor. The system will follow existing Union Pacific right-of-way from downtown Sacramento to Calvine/Auberry. To maximize the use of available State and local capital funds, RT will implement this project in several phases. The first phase, a 6.3-mile minimum operable segment (MOS), would operate between downtown Sacramento and Meadowview Road. Population and employment in this corridor are expected to grow at rates faster than the regional average, resulting in severe congestion on the two major highways in the corridor. Construction of the MOS began in November 1999, and the project is projected to open for revenue service by September 2003. The total capital cost of this project is estimated at \$222.00 million.

On June 20, 1997, an FFGA was issued for the 6.3-mile MOS, committing a total of \$111.20 million in Federal new starts funding. This does not include \$1.98 million in prior year funds that were obligated before the FFGA was issued, which brings the total amount of §5309 new starts funding to \$113.18 million. A total of \$77.98 million in FY 2000 and prior year funding has been allocated to this project. An additional \$34.87 million was appropriated in FY 2001, leaving

\$328,810 required to complete the Federal commitment to this project. It is recommended that these remaining funds be provided in FY 2002 to fulfill the terms of the FFGA.

### **St. Louis/Metrolink St. Clair Extension**

The Bi-State Development Agency (Bi-State) is developing a 26-mile extension of the Metrolink light rail line from downtown East St. Louis, Illinois to the Mid America Airport in St. Clair County. A 17.4-mile Minimum Operable Segment (MOS) will extend from the current Metrolink terminal in downtown East St. Louis to Belleville Area College (now known as Southwest Illinois College). This segment consists of eight stations, seven park-and-ride lots, 20 new light rail vehicles, and a new maintenance facility in East St. Louis. The route makes extensive use of abandoned railroad rights-of-way. Right-of-way and real estate acquisition is proceeding as scheduled, and revenue service is scheduled to begin in 2001. The total capital cost of the St. Clair MOS is estimated at \$339.20 million.

On October 17, 1996, FTA and Bi-State entered into an FFGA that commits a total of \$243.93 million in §5309 new starts funding to complete the 17.4-mile MOS to Southwest Illinois College, and provides for extending the system to Mid-America Airport should funding become available at a later date. The funding committed to the MOS does not include \$8.49 million in Federal new starts funding provided prior to FY 1996, which brings total Federal funding for this project to \$252.41 million under the new starts program. Through FY 2000, a total of \$161.88 million has been appropriated for this project. The FY 2001 appropriation provided an additional \$59.44 million, leaving \$31.09 million needed to fulfill the original Federal funding commitment. It is recommended that these remaining funds be provided in FY 2002.

### **Salt Lake City/CBD to University LRT**

The Utah Transit Authority (UTA) is implementing a 2.5-mile, four-station light rail line in eastern Salt Lake City, from the downtown area to Rice-Eccles Stadium on the University of Utah campus. The line would connect with the existing North/South line at Main Street and travel east along 400 South and 500 South to the stadium. Light rail vehicles would operate on city streets and property owned by Salt Lake City, the Utah Department of Transportation, and the University. The line is intended to significantly improve access to jobs, educational opportunities, health care, and housing throughout the 400 South corridor. The CBD to University line is scaled back from the originally proposed 10.9-mile West/East line from the airport to the university. Total capital costs are estimated at \$105.80 million.

FTA issued an FFGA for the CBD to University LRT project on August 17, 2000, committing a total of \$84.60 million in §5309 new starts funds. This does not include \$4.96 million in FY 2000 and prior year funding, which brings the total amount of new starts funding for this project to \$89.56 million. An additional \$1.98 million was appropriated in FY 2001, leaving \$82.62 million remaining to complete the FFGA. As specified in Attachment 6 of the FFGA for this project, it is recommended that \$15.00 million be provided in FY 2002, with the remaining \$67.62 million to be provided in future years.

### **Salt Lake City/North-South LRT**

The Utah Transit Authority (UTA) has completed construction of a 15-mile light rail transit (LRT) line from downtown Salt Lake City to the southern suburbs. The line opened for regular weekday service on December 6, 1999. The system operates on city streets downtown (2 miles) and then follows a lightly-used railroad alignment owned by UTA to the suburban community of Sandy (13 miles). This project is one component of the Interstate 15 corridor improvement initiative, which includes reconstruction of a parallel segment of I-15. Though original ridership projections for the South LRT system estimated daily ridership at 14,000 daily passengers in 2000 and 23,000 passengers by 2010, current ridership has already exceeded 26,000 weekday passengers. Total capital costs for this project were \$312.49 million.

Salt Lake City has been selected as the site for the 2002 Winter Olympic and Paralympic Games. This project will connect major hotels and local residential areas with the Olympic venues for figure skating, medal rounds for ice hockey, and the International Broadcast Center, and will connect with bus service to venues for speed skating, curling, and the Nordic alpine events.

On August 2, 1995, FTA issued an FFGA for this project that commits a total of \$237.39 million in Federal new starts funding. This does not include \$6.60 million in prior year funds that were provided before the FFGA was issued, which brings the total amount of §5309 new starts funding to \$243.99 million. A total of \$243.28 million has been appropriated in FY 2001 and prior years, leaving \$718,006 needed to complete the Federal commitment. The FY 2002 budget recommends that these remaining funds be provided to fulfill the terms of the FFGA for this project.

### **San Diego/Mission Valley East LRT Extension**

The Metropolitan Transit Development Board (MTDB) is constructing a 5.9-mile, 4-station light rail extension of its existing Blue Line, from east of Interstate 15 to the City of La Mesa, where it will connect to the existing Orange Line near Baltimore Drive. The Mission Valley East line will serve four new and two existing stations, and would include elevated, at-grade, and tunnel portions. The project includes two park and ride lots and a new access road between Waring Road and the Grantville Station. The corridor runs parallel to Interstate 8 in eastern San Diego and La Mesa, and is characterized by a mix of low- to moderate-density industrial, residential, and commercial uses, but includes several major activity centers such as San Diego State University, the Grossmont regional shopping center, Kaiser Hospital, the Alvarado Medical Center, and the Grantville employment area. Over 24,000 jobs and nearly 10,000 residences are located within walking distance of the proposed stations, and existing zoning is generally supportive of transit. Total capital costs are estimated at \$431.00 million.

On June 22, 2000, FTA issued an FFGA committing a total of \$329.96 million in §5309 new starts funding to this project. Through FY 2000, Congress has appropriated \$22.11 million for this project, and an additional \$31.21 million was provided in FY 2001. As specified in Attachment 6 of the FFGA, it is recommended that \$65.00 million be provided for this project in FY 2002, with the remaining \$211.64 million to be provided in future years.

### **San Francisco/BART Extension to SFO Airport**

Bay Area Rapid Transit (BART) in San Francisco and the San Mateo County Transit District (SamTrans) are constructing an 8.7-mile, 4-station extension of the BART rapid transit system to serve San Francisco International Airport (SFO). The project consists of a 7.5-mile mainline extension from the existing BART station at Colma, through Colma, south San Francisco, and San Bruno, terminating at the Millbrae Avenue BART/CalTrain Station. An additional 1.2-mile spur from the main line north of Millbrae will take BART trains directly into the airport, to a station adjoining the new International Terminal.

The San Francisco International Airport is a major partner in this project. All structures and facilities to be constructed on airport property, and installation of related equipment, are being funded, designed and constructed by the airport for BART. This project is also part of the FTA Turnkey Demonstration Program to determine if the design/build approach will reduce implementation time and cost. On July 24, 1997, the first contract was awarded for site preparation and utility relocation associated with this project. Bids for the main contract for construction of the line, trackwork and related systems were opened on November 25, 1997.

On June 30, 1997, FTA entered into an FFGA for the BART-SFO extension, committing a total of \$750.00 million in Federal new starts funds to the project; total capital costs at that time were estimated at \$1,054.00 million. The total cost has since increased to an estimated \$1,510.20 million; a recent surge in local construction activity has resulted in higher than estimated costs for construction of this project. Per the terms of the FFGA, any cost increases are the responsibility of the local project sponsors. Thus, the original Federal commitment is unchanged at \$750.00 million. Through FY 2000, a total of \$217.19 million has been appropriated for this project. An additional \$79.25 million was provided in FY 2001, leaving \$453.56 million of the total commitment remaining. In accordance with Attachment 6 of the FFGA for this project, it is recommended that \$80.61 million be provided in the FY 2002 budget to keep this project progressing on schedule. The remaining \$372.94 million would be provided in future years. This extension is expected to open for service by July 1, 2002.

### **San Jose/Tasman West LRT**

The Santa Clara County Transit District (SCCTD) is implementing a 12.4-mile light rail system from northeast San Jose to downtown Mountain View, connecting with both the Guadalupe LRT in northern Santa Clara County and the Caltrain commuter rail system. The project is proceeding in two phases: the Phase 1 West Extension will connect the northern terminus of the Guadalupe Light Rail System in Santa Clara with the Caltrain Commuter Rail station in downtown Mountain View, a distance of 7.6 miles; the future Phase 2 East Extension will complete the remaining 4.8 miles. The total capital cost of the Phase 1 West project was \$325.00 million.

Construction is complete and the Phase I West Extension opened for revenue service on December 17, 1999, a year ahead of schedule. The Phase II East Extension is being funded with State and local funds.

An FFGA was issued for Phase 1 of this project on July 2, 1996, providing a total of \$182.75 million in §5309 new starts funding. A total of \$170.50 million was provided in FY 2000 and prior years, and an additional \$12.14 million was provided in FY 2001. This leaves \$113,336

needed to complete the Federal commitment to this project. It is recommended that these remaining funds be provided in FY 2002.

### **San Juan/Tren Urbano**

The Puerto Rico Department of Transportation and Public Works (DTPW) is constructing a 10.7-mile, 16-station rapid rail line between Bayamon Centro and the Sagrado Corazon area of Santurce in the San Juan metropolitan area. The system consists of a double-track line operating over at-grade and elevated rights-of-way with a short below-grade segment, and a maintenance facility. When complete, this system is expected to carry 113,300 riders per day by 2010.

This project has been selected as one of FTA's turnkey demonstration projects, which incorporates contracts to design, build, operate, and maintain the system. During 1996 and 1997, seven contracts were awarded under the turnkey procurement. The total capital cost of this project is now estimated at \$1,653.60 million.

On March 13, 1996, FTA entered into an FFGA committing \$307.41 million in §5309 new starts funds to this project, out of a total project cost of \$1,250.00 million. This did not include \$4.96 million in Federal new starts funding provided prior to FY 1996, which brings total Federal new starts funding for this project to \$312.37 million. This FFGA was amended in July 1999 to include two additional stations and 10 additional railcars. This amendment included \$141.00 million in §5307 funds and \$259.90 million in flexible funding; no additional §5309 new starts funds were committed. A total of \$84.63 million in §5309 funds has been allocated to the Tren Urbano project in FY 2000 and prior years, and an additional \$74.30 million was appropriated in FY 2001. This leaves \$153.44 million needed to complete the FFGA. In accordance with Attachment 6 of the FFGA, it is recommended that \$50.16 million be provided to this project in FY 2002, with the remaining \$103.28 million to be provided in future years.

### **Seattle/Central Link LRT (MOS-1)**

The Central Puget Sound Regional Transit Authority (Sound Transit) is planning a 23.5-mile, 23-station light rail system running north to south from Northgate, through downtown Seattle, Southeast Seattle and the cities of Tukwila and SeaTac. The *Link* LRT system would connect with and operate through the existing 1.6-mile Downtown Seattle Transit Tunnel.

Sound Transit plans to implement this system as a series of “minimum operable segments” (MOS). The initial segment (MOS-1) consists of a 7.2-mile, 10-station line running southwest from the Northeast 45<sup>th</sup> Street Station to the South Lander Street Station. The line includes 4.5 miles of new and exclusive right-of-way, 1.3 miles through the existing Transit Tunnel, and 1.4 miles reconfigured from an existing busway south of the downtown area. Ridership for MOS-1 is estimated at 87,200 average daily boardings and 39,800 daily new riders. Total capital costs for this project are now estimated at \$2,603.00 million, with revenue operations scheduled to begin in November 2009.

The *Link* LRT system is one element of Sound Transit's voter-approved ten year, \$3.9 billion *Sound Move* regional transit plan. This plan also includes a 2-mile light rail line in downtown

Tacoma; an 82-mile commuter rail system operating between Lakewood and Everett (the *Sounder*); 20 new regional express bus routes; 14 High Occupancy Vehicle (HOV) direct access ramps (providing access to over 100 miles of existing HOV lanes); 14 new park and ride lots and 9 transit centers; and other service improvements. The *Sound Move* Corridor was authorized for final design and construction by Section 3030(a)(85) of TEA-21.

In January 2001, FTA and Sound Transit entered into an FFGA for the *Link* LRT MOS-1 project, which committed a total of \$500.00 million in §5309 new starts funds. Through FY 2000, Congress has appropriated \$41.44 million in §5309 new starts funds for *Sound Move*. An additional \$49.53 million was appropriated for the *Link* LRT in FY 2001, leaving \$409.03 million needed to complete the Federal commitment.

However, due to increases in the overall cost of this project and delays in the implementation schedule, the FFGA for this project is currently under review. In April 2001 the Department's Inspector General issued an Interim Report recommending that the Secretary hold funds and funding decisions for this project in abeyance until a specific set of actions related to cost estimation, project scope, cost control, and overall financing plans have been addressed. DOT and FTA immediately began implementing these actions. No funding is recommended for the Seattle *Link* LRT MOS-1 project in FY 2002.

### **Washington, D.C. Metropolitan Area/Largo Extension**

The Maryland Mass Transit Administration (MTA) and the Washington Metropolitan Area Transit Authority (WMATA) are planning a joint project to extend the Blue Line of the Washington Metrorail system from the Addison Road station to Largo Town Center in Prince George's County, Maryland. The 3.1-mile, two-station extension will be operated by WMATA as an integral part of the regional Metrorail system, providing access to downtown Washington, D.C. and the surrounding counties in Maryland and Virginia. The line follows an alignment through central Prince George's County that has been preserved as a rail transit corridor in the county's Master Plan. The two new stations will be located at Summerfield Boulevard north of MD-214 (Central Avenue) and at Largo Town Center just outside the Capitol Beltway (I-95). Shuttle bus service is proposed to link both new stations with FedEx Field (formerly known as Redskins Stadium). MTA has managed the project through preliminary engineering, and WMATA has assumed responsibility for managing the final design and construction activities. MTA and WMATA expect this extension to open for service by December 31, 2004. Total capital costs are estimated at \$433.90 million.

This project is authorized by Section 3030(a)(94) of TEA-21 for final design and construction. On December 15, 2000, FTA entered into an FFGA with WMATA that commits a total of \$260.30 million in §5309 new starts funds to this project. This does not include \$5.65 million in prior year funds that were provided to the MTA for planning activities associated with this project, which would bring the total amount of §5309 new starts funding to \$265.95 million. A total of \$5.65 million has been appropriated through FY 2000, and an additional \$7.43 million was provided in FY 2001. This leaves \$252.87 million required to complete the pending FFGA. In accordance with Attachment 6 of the FFGA, it is recommended that \$60.00 million be

provided for this project in FY 2002, with the remaining \$192.87 million to be provided in future years.

## **Pending Federal Funding Commitments**

In addition to the funding recommendations for existing Federal commitments discussed above, new commitments are pending for two additional projects. In anticipation of these commitments, FTA recommends that a total of \$37.23 million be allocated among these projects in FY 2002. These projects have all been rated as “recommended” or “highly recommended” under the criteria and processes specified by TEA-21. The funding recommendations described below are based on the anticipated funding needs of each project in FY 2002. Both of these projects have been authorized by TEA-21 for final design and construction.

### **Baltimore/Central LRT Double-Tracking**

The Maryland Mass Transit Administration plans to construct 9.4 miles of track to upgrade designated areas of the Baltimore Central Corridor Light Rail Line that are currently single track. The Central Corridor is 29 miles long and operates between Hunt Valley in the north to Cromwell/Glen Burnie in the south, serving Baltimore City and Baltimore and Anne Arundel Counties, with extensions providing direct service to the Amtrak Penn Station and the Baltimore-Washington International Airport.

The proposed project will double-track eight sections of the Central Corridor between Timonium and Cromwell Station/Glen Burnie, for a total of 9.4 miles. Although no new stations are required, the addition of a second track will require construction of second station platforms at four stations. Other elements included in the project are bridge and crossing improvements, a bi-directional signal system with traffic signal preemption on Howard Street, and catenary and other equipment and systems. The double tracking will be constructed almost entirely in existing right-of-way.

The total cost of the double-tracking and related improvements is estimated at \$153.70 million, of which MTA is expected to seek \$120.00 million (78 percent) in §5309 new starts funds. MTA ridership forecasts estimate that this project will serve 44,000 average weekday boardings and 6,800 daily new riders by 2020. This project will improve service and reliability by permitting the operation of additional trains which will reduce the interval between trains to eight minutes in peak service and 12 minutes during off-peak periods; trains currently operate at 17-minute intervals. This project has been rated “medium-high” for finance and “medium” for project justification, based on FTA’s evaluation under §5309(e). This results in an overall project rating of “recommended.”

The original Central Corridor Light Rail Line began operations in 1992 as a mostly single-track line. MTA completed a study examining the feasibility, environmental impacts and benefits of double tracking eight sections. Three federally-funded extensions, to Hunt Valley, Penn Station, and Baltimore-Washington International Airport were completed in 1998. The double track project was adopted by the Baltimore Metropolitan Council and included in its financially constrained long-range plan in 1993.

Section 3030(a)(42) of TEA-21 authorizes the “Maryland – Light Rail Double Track” for final design and construction. A total of \$5.65 million has been appropriated through FY 2000, and an additional \$2.97 million was provided in FY 2001. An FFGA for this project is pending; the total amount of the Federal funding commitment will be determined at the time it is issued. In preparation for this commitment, it is recommended that \$18.11 million be provided to this project in FY 2002.

## **Chicago/Metra South West Corridor Commuter Rail**

Metra, the commuter rail division of the Regional Transportation Authority (RTA) of northeastern Illinois, is planning an extension and various improvements to the existing South West commuter rail line. The 29-mile South West line provides service from Orland Park, Illinois, to downtown Chicago. This project would extend the line 11 miles from the existing station at 179<sup>th</sup> Street in Orland Park, southwest to Manhattan, Illinois. Also included in this project are the construction of three miles of a second mainline track, two additional stations and parking facilities, and multiple track, signal, and station improvements. The project also includes expansion of two existing rail yards, construction of a third rail yard, rehabilitation of several railroad bridges, and the purchase of two diesel locomotives and 13 bi-level passenger cars. Finally, the downtown Chicago terminal would be relocated from Union Station to the LaSalle Street Station as part of this project. The total cost of this project is estimated at \$218.70 million, of which Metra is expected to seek \$36.97 million (17 percent) in §5309 new starts funding.

The South West corridor, located along the former Norfolk Southern railroad right-of-way between the southwest side of Chicago and Orland Park in Cook County, includes the Chicago central business district, the most significant hub of employment in the six-county northeastern Illinois region. It also encompasses the central and southwest portions of Will County, including the former Joliet Arsenal property. Metra estimates that the extension and improvements would serve 13,800 average weekday boardings, including 7,600 daily new riders, by 2020. Northeastern Illinois is classified as a “severe” nonattainment area for ozone. This project has been rated “medium-high” for both finance and project justification, resulting in an overall rating of “highly recommended.”

Section 3030(a)(12) of TEA-21 authorizes the “Southwest Extension (METRA)” for final design and construction. Through FY 2000, a total of \$5.74 million has been provided for this project, and Metra allocated an additional \$12.12 million from its overall FY 2001 new starts appropriation. An FFGA for this project is pending; the total amount of the Federal commitment will be determined at the time it is issued<sup>[4]</sup> In anticipation of this commitment, it is recommended that \$19.12 million in §5309 new starts funds be provided to the Metra South West Corridor project in FY 2002.

## **Proposed Funding Commitments**

In addition to the funding recommendations for the existing and pending Federal commitments discussed above, five proposed projects are expected to be ready for commitments before the end of FY 2002 (i.e., September 30, 2002). In anticipation of these new commitments, FTA recommends that a total of \$84.00 million be allocated among these projects in FY 2002. These

projects have all been rated as “recommended” or “highly recommended” under the criteria and processes specified by TEA-21, or are exempt from the rating process under §5309(e)(8)(A). All of these projects have been authorized by TEA-21. The funding recommendations described below are based on the anticipated funding needs of each project in FY 2002.

### **Chicago/Metra North Central Commuter Rail**

Metra, the commuter rail division of the Regional Transportation Authority (RTA) of northeastern Illinois, is seeking to add a second mainline track along 12 miles of the 53-mile North Central Service commuter rail line. The proposed project also includes track and signal upgrades, construction of five new stations, parking facilities, rail yard expansion and purchase of one new diesel locomotive and eight bi-level passenger cars. The total capital cost of this project is estimated at \$236.45 million, of which Metra is expected to seek \$144.69 million in §5309 new starts funding.

The North Central corridor extends from downtown Chicago to Antioch on the Illinois-Wisconsin border, and traverses suburban Lake County. It includes the two most significant hubs of employment in the six-county northeastern Illinois region, the Chicago CBD and the area surrounding O’Hare International Airport. Metra estimates that this project will serve an average of 8,400 average weekday boardings by 2020, with 8,000 daily new riders. This project has been rated “medium” for both project justification and finance, earning an overall rating of “recommended.” FTA approved entry into the final design stage of development in October 2000.

Section 3030(a)(10) of TEA-21 authorizes the North Central project for final design and construction. Through FY 2000, a total of \$19.60 million was provided for this project, and an additional \$14.25 million was provided in FY 2001.<sup>51</sup> FTA anticipates that Metra will be ready for an FFGA for this project before the end of FY 2002. The total amount of the Federal commitment will be determined at that time. In preparation for this expected commitment, FTA recommends that a total of \$23.00 million be provided to the Metra North Central Commuter Rail project in FY 2002.

### **Chicago/Metra UP West Commuter Rail (Central Kane)**

Chicago’s Metra commuter rail division is planning additional extensions and improvements on its Union Pacific West Commuter Rail line. The Union Pacific West project, also known as the Central Kane Corridor, is an extension of the existing 36-mile Union Pacific West line which currently provides service between Geneva and downtown Chicago. This project would extend the line eight miles west to Elburn, with two new stations serving Elburn and La Fox. The extension itself will use existing railroad track and right-of-way currently used by both Metra and the Union Pacific freight railroad. The scope of the project includes multiple track and signal improvements, construction of two new stations and associated parking facilities, a new train yard, and the purchase of one diesel locomotive and eight bi-level passenger cars. This project will link the rapidly developing communities to the west of Chicago with the major employment

center in the Chicago CBD. The total capital cost of the Union Pacific West extension and improvements project is estimated at \$142.08 million, of which Metra is expected to seek \$87.44 million in Federal new starts funding. Metra estimates that this project will serve 3,900 average weekday boardings by 2020, and 2,700 new riders. This project has been rated “medium” for project justification and “medium-high” for finance, based on FTA’s evaluation under §5309(e). This results in an overall project rating of “recommended.”

FTA approved Metra’s request to enter preliminary engineering for this project in December 1998. Metra completed an Environmental Assessment in June 2000, and FTA issued a Finding of No Significant Impact in August 2000.

Section 3030(a)(13) of TEA-21 authorizes this project as the Chicago “West Line Expansion” for final design and construction. Through FY 2000, a total of \$8.14 million was provided for this project, and an additional \$8.31 million was provided in FY 2001. FTA anticipates that Metra will be ready for an FFGA for this project before the end of FY 2002. The total amount of the Federal commitment will be determined at that time. In preparation for this expected commitment, FTA recommends that \$20.00 million be provided to the Metra Union Pacific West project in FY 2002.

### **Miami/South Miami-Dade Busway Extension**

The Miami-Dade Transit Agency (MDTA) is planning an 11.5-mile, 12-station busway extension along US Route 1, between Cutler Ridge Mall near SW 200 Street and Florida City. The project is an extension of the existing 8.3-mile South Busway, which opened in February 1997 and serves Miami and the rapidly growing area to the south. The extension is expected to serve an average of 8,800 average weekday boardings and 3,000 daily new riders, and will improve travel time and transit access in the corridor along Route 1 in South Florida, which now has only limited service.

The total capital cost of the extension is estimated at \$88.80 million, of which MDTA is seeking \$23.40 million (27 percent) in §5309 new starts funding. 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 required by §5309(e). The South Miami-Dade Busway Extension meets the requirements for this exemption. However, FTA strongly encourages sponsors who believe their projects to be exempt to nonetheless submit information for evaluation and rating purposes. As no information was submitted to FTA for evaluation, no rating has been assigned.

The Florida Department of Transportation (FDOT), in conjunction with the Federal Highway Administration (FHWA), undertook a major investment study in 1985, which recommended that a busway be constructed in the corridor extending from the Dadeland South Metrorail station south to Florida City. Phase I of this busway, the 8.3-mile segment to Cutler Ridge, was constructed with FHWA funds and opened in 1997. FDOT and FHWA completed a preliminary engineering report and draft environmental impact statement for this extension in December 1997. In August 1999, the South Miami-Dade Busway Extension was selected as one of FTA’s ten bus rapid transit (BRT) demonstration projects. FTA approved entry into final design in

October 2000, and construction is expected to begin on the first five-mile segment by January 2002.

Section 3030(a)(46) of TEA-21 authorizes the Miami South Busway Extension for final design and construction. The FY 2001 Transportation and Related Agencies Appropriations Act reprogrammed \$16.90 million in prior year §5309 new starts funds for this project from the Miami East-West Corridor and North 27<sup>th</sup> Avenue projects. In order to continue the development of this project, FTA recommends that \$5.00 million in §5309 new starts funding be provided to the South Busway Extension in FY 2002.

### **New Orleans/Canal Streetcar Spine**

The New Orleans Regional Transit Authority (RTA) is developing a 5.5-mile streetcar project in the downtown area, along the median of Canal Street. The Canal Streetcar Spine will extend from the Canal Ferry at the Mississippi River in the central business district, through the Mid-City neighborhood to Carrollton Avenue, where one branch will continue on Canal Street to the Cemeteries and another will follow Carrollton Avenue to City Park/Beauregard Circle. The corridor is located in an existing, built-up area that was originally developed in the streetcar era. Much of the corridor lies within the central business district and historic areas, where employment and housing densities, mix of uses, and pedestrian-oriented development are generally good. The central business district includes a high-density mix of office, retail, hotels and leisure attractions. The total capital cost of this project is estimated at \$156.60 million, of which RTA is expected to seek \$125.30 million (80 percent) in §5309 new starts funding.

RTA completed a major investment study for this project in March 1995, fulfilling the requirement for an alternatives analysis. FTA approved entry into preliminary engineering in September 1995, and RTA initiated final design activities in September 1997. Final design is essentially complete, contracts for vehicle assembly have been awarded, and construction contracts will be awarded in early 2001. This project has been rated “medium-high” for project justification and “medium” for local financial commitment, earning it an overall rating of “recommended.” The financial rating reflects the fact that sufficient local capital funds are now committed to this project, as well as improvements to the stability of the agency due to an extension in the scope of the RTA sales tax. RTA expects to open this line in April 2004.

Section 3030(a)(51) of TEA-21 authorizes the New Orleans Canal Streetcar Project for final design and construction. To date, Congress has appropriated a total of \$55.18 million for this project. FTA anticipates that RTA will be ready for an FFGA for this project before the end of FY 2001. The total amount of the Federal commitment will be determined at that time. In preparation for this expected commitment, FTA recommends that a total of \$23.00 million be provided to the Canal Streetcar Project in FY 2002.

### **San Diego County/Oceanside-Escondido Rail Project**

The North County Transit District (NCTD) in northern San Diego County, California is planning to convert an existing 22-mile freight railroad corridor between Oceanside and Escondido into a rail transit line. The line would run east from the City of Oceanside through the cities of Vista

and San Marcos and unincorporated portions of San Diego County, to the City of Escondido, using diesel multiple unit (DMU) rail vehicles. The alignment also includes 1.7 miles of new right-of-way to serve the campus of California State University San Marcos (CSUSM). The line is located along the State Route 78 corridor, the principal east-west corridor in the county. The complete 23.7-mile system will serve 15 stations, four of which would be located at existing transit centers. Passenger rail service would have exclusive use of the rail line during pre-defined hours of operation.

An Environmental Impact Report (EIR) for the Oceanside-Escondido project was certified in 1990, and a separate EIR for the CSUSM alignment was certified in 1991. A Major Investment Study was not required under the procedures in effect at the time, based on concurrence from FTA, FHWA, the San Diego Association of Governments, Caltrans, the City of San Marcos, and NCTD. Advance planning was completed in December 1995, and the Environmental Assessment/Supplemental Environmental Impact Report was completed in early 1997. FTA approved NCTD's request to enter final design in February 2000.

The total capital cost for this project is estimated at \$332.30 million, of which NCTD is expected to seek \$152.10 million (46 percent) in FTA §5309 new starts funds. Ridership is estimated at 15,100 average weekday boardings in 2015, and 8,600 daily new riders. The San Diego region is a "serious" nonattainment area for ground-level ozone and a "moderate" nonattainment area for carbon monoxide. This project will help to eliminate the heavy congestion of northern San Diego County along the Route 78 corridor, saving 700,000 hours of travel time a year compared to the TSM alternative. The project will serve large intermodal transit centers in both Oceanside and Escondido, and the corridor between contains a dispersed mix of commercial, industrial, and single- and multiple-family residential developments. This project is rated "medium-high" for both finance and justification, earning an overall rating of "highly recommended."

Section 3030(a)(77) of TEA-21 authorized this project for final design and construction. Through FY 2000, Congress has appropriated \$7.93 million in §5309 new starts funds for this project, and an additional \$9.91 million was provided in FY 2001. FTA anticipates that NCTD will be ready for an FFGA for this project before the end of FY 2001. The total amount of the Federal commitment will be determined at that time. In preparation for this expected commitment, it is recommended that \$13.00 million be provided for this project in FY 2002.

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<sup>[1]</sup> Section 3009(g) of TEA-21 requires that \$10.4 million in §5309 new starts funds be set aside annually for ferry capital projects in Alaska or Hawaii; after accounting for oversight activities under §5327, \$10.30 million is available for these projects.

<sup>[2]</sup> This includes the Seattle Central Link LRT MOS-1 project; however, due to increases in the overall cost of this project and delays in the implementation schedule, this FFGA is currently under review.

<sup>[3]</sup> Reflects amounts provided through the FY 2001 Transportation and Related Agencies Appropriations Act and the Omnibus Consolidated Appropriations Act (P.L. 106-554).

<sup>[4]</sup> The FY 2001 Transportation and Related Agencies Appropriations Act provides \$269.10 million in commitment authority for the three Chicago Metra commuter rail projects.

<sup>[5]</sup> FY 2001 and prior year funding reflects local allocation of Congressional appropriations for “Metra Commuter Rail Projects.”

## Conclusion

The proposed new starts funding level of \$1,136.40 million is based on the guaranteed funding level authorized by TEA-21 for FY 2002, and is sufficient to meet the funding needs of 31 new starts projects. After setting aside one percent of these funds for oversight activities as specified in the Administration’s FY 2002 budget proposal, and funding for ferry capital projects in Alaska or Hawaii as required by §5309(m)(5)(A), \$1,114.74 million is available for project grants.

Twenty-six projects have existing FFGAs that commit FTA to provide specified levels of major capital investment funding. Two of these projects are not included in the funding recommendations: the Hudson-Bergen MOS-2 project in Northern New Jersey, because the FFGA does not commit funding before FY 2003; and the Central Link light rail project in Seattle, because the FFGA is under review. The remaining 24 projects will require a total of \$993.51 million in FY 2002. All of these projects have been authorized by TEA-21, and all were either under an FFGA prior to TEA-21 or have been rated as “recommended” or higher at the time the FFGA was issued.

New funding commitments are pending for two additional new starts projects. In anticipation of these commitments, FTA recommends that a total of \$37.23 million be allocated among these projects in FY 2002. These projects have all been rated as “recommended” or “highly recommended” under the criteria and processes specified by TEA-21. The funding recommendations are based on the anticipated funding needs of each project in FY 2002.

In addition to the funding recommendations for the existing and pending Federal commitments discussed above, five proposed projects are expected to be ready for commitments before the end of FY 2002 (i.e., September 30, 2002). In anticipation of these new commitments, FTA recommends that a total of \$84.00 million be allocated among these projects in FY 2002. These projects have all been rated as “recommended” or “highly recommended” under the criteria and processes specified by TEA-21, or are exempt from the rating process under §5309(e)(8)(A). All of these projects have been authorized by TEA-21. The funding recommendations are based on the anticipated funding needs of each project in FY 2002.

The amounts specified for each project in this report, plus \$10.30 million for ferry capital projects as specified by §5309(m)(5)(A), and \$11.36 million for FTA oversight activities as provided under §5327(c), equal the total FY 2002 funding request of \$1,136.40 million for the §5309 new starts program, which is the guaranteed amount of funding authorized by TEA-21.

## Background

The new start project profiles presented in this Appendix provide background information supporting the Department of Transportation's New Start funding recommendations for FY 2002. The Department's funding recommendations are being provided to the Congress pursuant to 49 U.S.C. 5309(o)(1). The funding recommendations are based in part on the decision criteria defined in 49 U.S.C. 5309(e).

Under 49 U.S.C. 5309(e), discretionary capital grants and loans for the construction of a new fixed guideway system or the extension of an existing system 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; 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.

The 49 U.S.C. 5309(e) criteria provide a basis for selecting, from among the eligible projects, those which are the most worthy of Federal funds. To this end, the new start project profiles describe the fixed guideway projects that are most advanced, and evaluate them in terms of the 5309(e) criteria.

The Transportation Equity Act for the 21st Century (TEA-21) leaves prior Federal law and policy largely intact, including the new starts criteria and the multiple-measure method of project evaluation. Perhaps the most significant change to the project evaluation process introduced by TEA-21 is the requirement to establish summary ratings for each proposed project. Consistent with Section 5309(e)(6), summary ratings of “highly recommended,” “recommended,” or “not recommended” are assigned to each proposed project, based on the results of the review and evaluation of each of the criteria for project justification and local financial commitment.

This Annual Report on New Starts includes profiles for each proposed project or study undergoing Final Design and Preliminary Engineering. In addition, profiles have been prepared for projects that are under construction if additional funds are needed in FY2001 to fulfill Full Funding Grant Agreements.

In general, the profiles for projects in Final Design and Preliminary Engineering include five sections. These include:

- (1) **Description:** The description section briefly describes a project's physical characteristics and presents the latest estimates of cost and ridership. Unless otherwise noted, cost estimates are expressed in escalated (year of construction) dollars. This section includes a summary description of key project elements. *This section also includes the summary rating of "highly recommended," "recommended," or "not recommended" assigned to the proposed project, as well as the overall rating for project justification and local financial commitment.*
- (2) **Status:** This section identifies where the project is in the major investment planning and project development process. It indicates, for example, whether alternatives analysis (or a major investment study) and preliminary engineering have been completed. If not, it indicates when current studies are expected to be completed. This section also cites relevant statutory requirements.
- (3) **Evaluation:** This section presents an evaluation of the project's merit based on the criteria cited in 49 U.S.C. 5309(e), and updated in Federal Register Notices on December 19, 1996 and November 12, 1997 (documented in Appendix C). Ratings and data are reported for the following criteria: mobility improvements; environmental benefits, operating efficiencies, cost effectiveness. This section also includes FTA's rating of the project in terms of transit-supportive existing land use and future patterns.
- (4) **Local Financial Commitment:** This section reports the proposed non-Section 5309 share of total project capital costs, and provides FTA's ratings of the following: the stability and reliability of the capital financing plan; and, the stability and reliability of the operating financing plan.
- (5) **Other Factors (Optional):** Other rating factors which may be useful in identifying the most meritorious projects are described in this section. This optional section highlights projects where local officials have demonstrated community support for transit by means of commitments to supportive land use, economic development, and transportation policies.

The profiles for projects covered by Full Funding Grant Agreements include the description and status sections only, since a decision to fund the project has already been reached.

## How the Ratings were Developed

As part of the normal system planning and project development process, local agencies develop the information that FTA uses to assess projects in terms of project evaluation and local financial commitment. The specific information used for these evaluations is outlined below.

### Project Evaluation and Ratings

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) greatly broadened the criteria to evaluate new start projects. The Section 5309 New Starts criteria were updated in Federal Register Notices on December 19, 1996 and November 12, 1997. TEA-21 leaves prior Federal law and policy largely intact, including the new starts criteria and the multiple-measure method of project evaluation. This year's evaluations and ratings address the full range of project evaluation criteria, including: mobility improvements; environmental benefits, operating efficiencies, cost effectiveness, transit-supportive existing land use and future patterns, local financial commitment, and other factors.

In September 1997, the Federal Transit Administration's Office of Planning and the Office of Budget and Policy released the *Technical Guidance on Section 5309 New Starts Criteria*. In October 1998, FTA issued an *Addendum to the Technical Guidance* to further support local agencies in the completion of the criteria. In July 1999 and July 2000 FTA issued revised documentation of the *Technical Guidance on Section 5309 New Starts Criteria* to reflect lessons learned. In addition, FTA has have offered national workshops throughout 1998, 1999 and 2000 to offer technical assistance.

On December 7, 2000, FTA issued its Final Rule on new starts project evaluation and rating, published in the Federal Register at 65 FR76864. This regulation is required by Section 3009 of TEA-21, and governs how FTA will evaluate and rate new fixed-guideway transit systems and extensions that are proposed for section 5309 new starts funding. It replaces the procedures set forth in the December 19, 1996 policy statement [61 FR 67093], as amended on November 12, 1997 [62 FR 60756]. The regulation became effective on April 6, 2001.

This regulation retains the familiar “multiple-measure method” of project evaluation used by FTA to evaluate proposed new starts since 1994. It describes how each of the statutory project evaluation criteria will be evaluated: defines the overall project ratings of “highly recommended,” ”recommended,” and “not recommended,” and defines how these ratings will be used to approve entry into the preliminary engineering and final design stages of project development. It is important to note that the purpose of this Rule is to regulate how FTA will evaluate and rate proposed projects for purposes of the Section 5309 new starts program; it does not regulate the transit industry or other sponsors of new starts projects, though it may effect the type of information FTA requests for evaluation purposes. As in the past, FTA will continue to issue guidance and work with project sponsors as we implement this rule.

As noted above, FTA evaluates proposed new start projects against the full range of criteria for both project justification and local financial commitment, using a multiple-measure method. In reporting project profiles for this FY 2002 report, some local agencies were not able to report all of the new starts criteria at this time. In some cases, previous planning analyses may not have included estimation of data for the proposed New Start, the No-Build, and the TSM alternative which are required as inputs to calculate measures of mobility improvements, environmental benefits, operating efficiencies, and cost effectiveness. Each of these cases is discussed in the specific project profiles, and an N/A is reported to indicate that data are not available at this time.

For each of the project justification criteria (mobility improvements, environmental benefits, operating efficiencies, cost effectiveness, land use), the proposed project is evaluated against

both a No-Build and TSM alternative. For each proposed project, FTA assigns a rating of “high,” “medium-high,” “medium,” “low-medium,” or “low” for each of the five criteria, with “other factors” considered as appropriate. Similar ratings are assigned for the three factors used to evaluate local financial commitment, including the non-Section 5309 share, the capital financing plan, and the operating financing plan. Consistent with Section 5309(e)(6), summary ratings of “highly recommended,” “recommended,” or “not recommended” are assigned to each proposed project, based on the results of the review and evaluation of each of the criteria for project justification and local financial commitment. To assign these summary ratings, the individual ratings for each of the project justification criteria and financial rating factors are combined into overall “project justification” and “finance” ratings, which in turn are combined to produce the summary rating for the project.

In evaluating the project justification criteria, FTA gives primary consideration to the measures of transit supportive land use, cost effectiveness, and mobility improvements to arrive at the combined “project justification” rating. For local financial commitment, the measures of the proposed non-Section 5309 share of capital costs and the strength of the capital and operating financing plans are the primary factors in determining the combined “finance” rating.

For a proposed project to be rated as “*recommended*,” it must be rated at least “medium” in terms of both project justification and finance. To be “*highly recommended*,” a proposed project must be rated higher than “medium” for both project justification and finance. Proposed projects not rated at least “medium” in both project justification and finance will be rated as “*not recommended*”.

**It is important to note that project evaluation is an ongoing process. The project ratings contained in this report are based on project information available through November 2000. As proposed new starts proceed through the project development process, the estimates of costs, benefits, and impacts are refined. The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

*U.S. Department of Transportation Final Rule on Major Capital Investments, published on December 7, 2000, specifies FTA’s approach to project evaluation and assignment of summary ratings that are effective April 6, 2001. However, the project ratings contained in this report reflect an application of FTA’s existing project evaluation process, as published in the Federal Register on December 19, 1996 and amended on November 12, 1997 (61 FR 67093-106 and 62 FR 60756-58), and modified to account for the changes made by TEA-21.*

## **Section 5309 New Starts Criteria**

A brief description of the Section 5309 new starts criteria applied in project evaluation follows.

### **Mobility Improvements**

Mobility Improvements are derived from two measures. The first measure, *Annual Travel Time Savings* is defined as the projected aggregate travel time savings in the forecast year anticipated

from the new start compared to both the no-build and TSM alternatives. The measure is expressed as the annual hours of projected travel time savings for the study area. The second measure reflects the *Absolute Number of Low-Income Households Located Within ½ Mile of "Boarding Points" Associated with the New Investment or System*. Low income is defined as the number of households below the poverty level. This measure is reported for stations or stops directly related to the proposed fixed guideway project or system.

### **Environmental Benefits**

The first measure is the *Change in Criteria Pollutant Emissions and Greenhouse Gas Emissions in the Forecast Year*, comparing the new start to the no-build and TSM alternatives. The measure will be expressed as the change in the number of tons of emissions for carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOC) or hydrocarbons (HC), particulate matter (PM<sub>10</sub>), and carbon dioxide (CO<sub>2</sub>).

Energy consumption is measured as the *Net Change in the Forecast Year in the Regional Consumption of British Thermal Units (BTU)*, comparing the new start to the no-build and TSM alternatives.

The third measure includes the *Current Regional Designation by the Environmental Protection Agency (EPA) for National Ambient Air Quality Standards*.

### **Operating Efficiencies**

The sole measure for this criterion reports the *Change in Operating Cost per Passenger-Mile in the Forecast Year*, comparing the New Start to the No-Build and TSM alternatives. This measure, expressed in terms of absolute dollar value, is to address the impact on operating efficiencies for the entire regional transit system.

### **Cost-Effectiveness**

The sole measure for this criterion reports the *Incremental Change in Total Capital and Operating Cost per Incremental Passenger in the Forecast Year*. The index is based on the annualized total (including Federal and local) capital investment and annual operating cost divided by the forecast change in annual transit system ridership, comparing the new start to the no-build and TSM alternatives.

### **Transit Supportive Existing Land Use and Future Patterns**

Assessment of land use was introduced in the spirit of ISTEA and is consistent with FTA initiatives to encourage transit supportive land use and development. The measure, expressed in terms of a combined rating of "high," "medium/high," "medium," "low/medium," or "low", addresses the degree to which existing development patterns and local land use policies are likely to foster transit supportive land use. The combined rating considers each of the following factors: existing land use; containment of sprawl; transit-supportive corridor policies; supportive zoning regulations; tools to implement land use policies; and, performance of land use policies. The FY

2002 evaluations were supported by reviews conducted by FTA's contractors: Booz-Allen & Hamilton, Inc., Cambridge Systematics, Inc, SG Associates, Harvard Design and Mapping, and the Volpe National Transportation Systems Center.

### **Local Financial Commitment**

FTA's evaluation of the local financial commitment to a proposed project focuses on the proposed non-Section 5309 share of project costs, the strength of the proposed capital financing plan, and the stability and reliability of the operating financing plan. The FY 2002 evaluations were supported by reviews conducted by FTA's contractors: Booz-Allen & Hamilton, Inc., KPMG Peat Marwick, Inc., Cambridge Systematics, Inc., and the Volpe National Transportation Systems Center.

Non-Section 5309 share refers to the percentage of capital costs to be met with non-Federal funding, particularly non-Section 5309 New Starts funding, and includes both the local match required by Federal law and any capital "overmatch." Overmatch is accounted for in the rating process because it reduces the required Federal commitment, thus leveraging limited Federal funds, and because it indicates a strong local commitment to the project. Previous non-Federal funding support for other significant fixed guideway systems implemented in the area is also considered. The use of flexible funds and innovative financing techniques is noted, where appropriate.

The evaluation of each project's proposed capital financing plan takes two principal forms. First, the plan is reviewed to determine the stability and reliability of each proposed source of local match. This includes a review of inter-governmental grants, tax sources, and debt obligations. Each revenue source is reviewed for availability within the project timetable. Second, the financing plan is evaluated to determine if adequate provisions have been made to cover unanticipated cost overruns. The strength of the capital finance plan is rated "high," "medium/high," "medium," "low/medium," or "low". The indicators used to assign these ratings are further explained in Table A-1.

The third component of the financial rating is an assessment of the ability of the local transit agency to fund operation of the system as planned once the guideway project is built. This rating focuses on the operating revenue base and its ability to expand to meet the incremental operating costs associated with a new fixed guideway investment and any other new services and facilities. The strength of the operating finance plan is rated "high," "medium/high," "medium," "low/medium," or "low". The indicators used to assign these ratings are further explained in Table A-2.

### **Other Factors (Optional)**

This criterion has traditionally been included as an option to provide an opportunity to identify any additional factors which may be relevant to local and national priorities and relevant to the success of the project. These may include a variety of factors including: the degree to which local policies and institutions are in place (local planning, programming, parking policies; project management experience and capabilities; and, other local initiatives such as public-private

partnerships, etc.). These additional factors may provide FTA with an added assessment of the likelihood of the feasibility of a successful transit investment, measured against regional considerations.

**Table A-1**

**Financial Ratings: Capital Financing Commitments**

Stage	Rating	Description
<b>Final Design</b>	<b>High</b>	Sponsoring agency is considered to be in very sound financial condition. Non-Section 5309 New Starts Funds are committed and available to fund the project. The applicant has the fiscal capability to construct the project and has sufficient funds to cover the entire Non-Section 5309 New Starts share of the overall undertaking, including provision for contingent cost overruns, without exhausting such capacity.
	<b>Medium-High</b>	Sponsoring agency is considered to be in sound financial condition. Non-Section 5309 New Starts funds are committed to the project, yet funds may not be available. The applicant has the fiscal capacity to construct the project and has sufficient funds to cover the entire Non-Section 5309 New Starts share of the overall undertaking, including provision for contingent cost overruns.
	<b>Medium</b>	Sponsoring agency is considered to be in reasonably sound financial condition. The majority of Non-Section 5309 New Starts funds are committed to the project. However, a significant portion of the Non-Section 5309 New Starts funding either does not yet exist or exists but is not yet committed to the project. It is highly likely that sufficient funds will be committed to cover the entire Non-Section 5309 New Starts share of the overall undertaking, including provision for contingent cost overruns.
	<b>Low-Medium</b>	Sponsoring agency is in sound financial condition. The applicant may have identified potential sources of Non-Section 5309 New Starts funds to construct the project. However, the majority of Non-Section 5309 New Starts funds have not been committed to cover the Non-Section 5309 New Starts share of project costs, including the provision for contingent cost overruns, and assumes some local funding which does not yet exist.
	<b>Low</b>	The sponsoring agency is not in sound financial condition. The applicant has not yet identified nor committed sufficient funding to cover the Non-Section 5309 New Starts share of project costs.
<b>Preliminary Engineering</b>	<b>High</b>	Sponsoring agency is considered to be in very sound financial condition. Non-Section 5309 New Starts funds are identified and committed to fund the project, but a portion of the funds may not be

		available. Sufficient funds to cover the Non-Section 5309 New Starts share of the overall undertaking, including provision for contingent cost overruns, have been committed.
	<b>Medium-High</b>	Sponsoring agency is considered to be in sound financial condition. The applicant has identified and committed sufficient funds to cover the majority of the Non-Section 5309 New Starts share of the overall undertaking, including provision for contingent cost overruns.
	<b>Medium</b>	Sponsoring agency is considered to be in reasonably sound financial condition. The applicant has adopted a realistic capital finance plan that adequately covers projected local capital costs. Some portion of funding to cover the Non-Section 5309 New Starts share of project costs has been committed, but a significant portion of local funding either does not yet exist or exists but is not yet committed to the project.
	<b>Low-Medium</b>	Sponsoring agency may be in sound financial condition, with some correctable deficiencies. The applicant has not yet adopted a realistic capital finance plan that adequately covers projected local capital costs. Non-Section 5309 New Starts funds are not committed and proposed new sources of funding are not available to fund the construction of the project.
	<b>Low</b>	Sponsoring agency is not considered to be in reasonably sound financial condition. The applicant has adopted a capital finance plan that FTA considers inadequate or infeasible. Non-Section 5309 New Starts funds have not been identified to finance construction of the project.

## Table A-2

### Financial Ratings: Stable and Reliable Operating Revenue

Stage	Rating	Description
<b>Final Design</b>	<b>High</b>	Sponsoring agency is considered to be in very sound financial condition. Ample dedicated transit funding sources are committed and available and there is a good history of general appropriations from State or local government to provide a balanced budget for the transit system. Existing transit vehicles and facilities have been well maintained and replaced through continuing reinvestment in the system. The applicant has demonstrated the financial capacity to operate and maintain the proposed new starts project, other programmed projects, and the existing regional transit system.
	<b>Medium-High</b>	Sponsoring agency is considered to be in sound financial condition. Demonstrates that funding for operating an expanded transit system is committed. Existing transit facilities have been well maintained

		and replaced through continuing reinvestment in the system. Financial projections indicate adequate financial capacity to operate an expanded transit system.
	<b>Medium</b>	Sponsoring agency is considered to be in reasonably sound financial condition. The applicant has adopted a realistic operating finance plan that adequately covers projected operating costs for the existing and proposed transit system expansion. Demonstrates that funding for operating an expanded transit system is identified and will likely be committed. Existing facilities are adequately maintained. Financial projections indicate adequate financial capacity to operate an expanded transit system.
	<b>Low-Medium</b>	Sponsoring agency may be in sound financial condition, with some correctable deficiencies. The applicant has not yet adopted a realistic operating finance plan that adequately covers projected operating costs, and potential sources of operating funds have not been committed. Current sources of local funding are not sufficient to operate the proposed system expansion and operate and maintain the current transit system.
	<b>Low</b>	Sponsoring agency is not considered to be in reasonably sound financial condition. The applicant has adopted an operating finance plan that FTA considers inadequate or infeasible. Local funding does not generate sufficient revenue to operate and maintain the current transit system, and no new sources have been identified or committed to finance an expanded public transit system. Local transit system operating assistance is not reliable, resulting in deferred capital replacement and/or routine maintenance and/or service reductions.
<b>Preliminary Engineering</b>	<b>High</b>	Sponsoring agency is considered to be in very sound financial condition. Ample dedicated transit funding sources are committed and available and there is a good history of general appropriations from State or local government to provide a balanced budget for the transit system. Existing transit vehicles and facilities have been well maintained and replaced through continuing reinvestment in the system. The applicant has demonstrated the financial capacity to operate and maintain the proposed new starts project, other programmed projects, and the existing regional transit system.
	<b>Medium-High</b>	Sponsoring agency is considered to be in sound financial condition. Demonstrates that funding for operating an expanded transit system is committed. Existing transit facilities have been well maintained and replaced through continuing reinvestment in the system. Financial projections indicate adequate financial capacity to operate an expanded transit system.
	<b>Medium</b>	Sponsoring agency is considered to be in reasonably sound financial condition. The applicant has adopted a realistic operating finance

		plan that adequately covers projected operating costs for the existing and proposed transit system expansion. Demonstrates that funding for operating an expanded transit system is identified and will likely be committed. Existing facilities are adequately maintained. Financial projections indicate adequate financial capacity to operate an expanded transit system.
	<b>Low-Medium</b>	Sponsoring agency may be in sound financial condition, with some correctable deficiencies. The applicant has not yet adopted a realistic operating finance plan that adequately covers projected operating costs, and potential sources of operating funds have not been committed. Current sources of local funding are not sufficient to operate the proposed system expansion and operate and maintain the current transit system.
	<b>Low</b>	Sponsoring agency is not considered to be in reasonably sound financial condition. The applicant has adopted an operating finance plan that FTA considers inadequate or infeasible. Local funding does not generate sufficient revenue to operate and maintain the current transit system, and no new sources have been identified or committed to finance an expanded public transit system. Local transit system operating assistance is not reliable, resulting in deferred capital replacement and/or routine maintenance and/or service reductions.

## Table A-3

### Land Use Assessment Ratings

#### Assessment of Transit Supportive Existing Land Use Future Patterns

##### 1. Existing Land Use

Stage	Rating	Description
<b>Preliminary Engineering and Final Design</b>	<b>High</b>	Current population and employment levels, presence of high trip generators and pedestrian-friendly development in the corridor are sufficient to support a major transit investment.
	<b>Medium</b>	Current population and employment levels, presence of high trip generators and pedestrian-friendly development in the corridor are only marginally supportive of a major transit investment. Projected levels of growth must be realized.
	<b>Low</b>	Current and projected population and employment levels, high trip generators and pedestrian-friendly development are not sufficient to support a major transit investment.

Ratings based on assessment of the following:

- Existing corridor and station area development;
- Existing corridor and station area development character; and
- Existing corridor and station area parking supply and existing regional parking policies.

## 2. Containment of Sprawl

Stage	Rating	Description
<b>Preliminary Engineering and Final Design</b>	<b>High</b>	Adopted and enforceable urban containment and growth management policies are in place. Existing and planned densities and market trends are strongly compatible with transit.
	<b>Medium</b>	Significant progress has been made toward implementing urban containment and growth management policies. Existing and/or planned densities and market trends are moderately compatible with transit.
	<b>Low</b>	Limited consideration has been given to implementing urban containment and growth management policies. Existing and/or planned densities and market trends are minimally or not supportive of transit.

Ratings based on assessment of the following:

- Planned density and market trends for development within corridor and region; and
- Growth management policies.

## 3. Transit Supportive Corridor Policies

Stage	Rating	Description
<b>Preliminary Engineering and Final Design</b>	<b>High</b>	A detailed corridor plan and related policies which encourage and facilitate transit supportive development have been adopted in the proposed major transit investment corridor. Private/institutional plans and initiatives are consistent with public plan and policies for transit supportive land use.
	<b>Medium</b>	Significant progress has been made toward completing a corridor plan and implementing related policies which encourage and facilitate transit supportive development in the proposed major transit investment corridor. Private/institutional plans and initiatives may complement the public plan and policies.
	<b>Low</b>	Limited progress, to date, toward preparing and adopting a corridor plan and implementing related policies which encourage and facilitate transit supportive development in the proposed major transit investment corridor. Private/institutional plans and initiatives supportive of transit supportive land use are absent.

Ratings based on assessment of the following:

- Public plans and policies and private/institutional initiatives to increase station area development;
- Public plans and policies and private/institutional initiatives to enhance transit-friendly character of station area development; and
- Parking policies.

#### 4. Supportive Zoning Regulations Near Transit Stations

Stage	Rating	Description
<b>Preliminary Engineering</b>	<b>High</b>	Significant progress is being made toward preparing and adopting station area plans and related zoning.
	<b>Medium</b>	Initial efforts have begun to prepare station area plans and relating zoning.
	<b>Low</b>	No more than initial efforts have begun to prepare station area plans and relating zoning.
<b>Final Design</b>	<b>High</b>	Detailed station area plans and related local zoning and land use regulations have been adopted.
	<b>Medium</b>	Significant progress is being made toward preparing and adopting station area plans and relating zoning.
	<b>Low</b>	No more than initial efforts have begun to prepare station area plans and relating zoning.

Ratings based on assessment of the following:

- Zoning ordinances that support increased development density in transit station areas;
- Zoning ordinances that enhance transit-oriented character of station area development; and
- Zoning allowances for reduced parking and traffic mitigation.

#### 5. Tools to Implement Land Use Policies

Stage	Rating	Description
<b>Preliminary Engineering</b>	<b>High</b>	Local capital improvement programs and development initiatives have been adopted to implement local land use policies and which leverage the Federal Investment in the proposed major transit corridor. Private/institutional initiatives are strongly supportive.
	<b>Medium</b>	Efforts to prepare local capital improvement programs and development initiatives that support station area plans have begun. Private/institutional initiatives are moderately supportive.
	<b>Low</b>	Limited consideration has been given to local capital improvement

		programs and development initiatives that support corridor and station area plans. Private/institutional initiatives are minimally or non-supportive.
<b>Final Design</b>	<b>High</b>	Public infrastructure and other local investments, as well as private/institutional initiatives, are being undertaken in the corridor and station areas which implement the local land use policies and which leverage the Federal investment in the proposed major transit investment corridor.
	<b>Medium</b>	Local public and private/institutional capital improvement programs and development initiatives have been adopted to implement local land use policies and to leverage the Federal investment in the proposed major transit corridor.
	<b>Low</b>	No more than initial efforts to prepare local capital improvement programs and development initiatives which support corridor and station area plans have begun. Supportive private/institutional initiatives are in initial stages or absent.

Ratings based on assessment of the following:

- Endorsement and participation of public agencies, organizations and the private sector in development and planning process;
- Tools and actions to promote transit-oriented development;
- Involvement of development community in supporting station area plans and joint development efforts; and
- Public involvement in corridor and station area planning.

## 6. Performance of Land Use Policies

<b>Stage</b>	<b>Rating</b>	<b>Description</b>
<b>Preliminary Engineering</b>	<b>High</b>	Moderate amount of transit supportive housing and employment development is occurring in the corridor.
	<b>Medium</b>	Proposals for transit supportive housing and employment development in the corridor are being received.
	<b>Low</b>	Limited progress, to date, toward achieving transit supportive development in the corridor.
<b>Final Design</b>	<b>High</b>	Significant amount of transit supportive housing and employment development is occurring in the corridor.
	<b>Medium</b>	Moderate amount of transit supportive housing and employment development is occurring in the corridor.
	<b>Low</b>	Limited number of proposals for transit supportive housing and employment development in the corridor are being received.

Ratings based on assessment of the following:

- Demonstrated cases of development affected by transit-oriented policies;
- Corridor development targets; and
- Station area development proposals and status.

**Projects with Full Funding Grant Agreements**

**Atlanta, Georgia/North Springs (North Line Extension)**

**North Springs (North Line Extension)**

Atlanta, Georgia

(November 2000)

<p><b>Description</b></p>	<p>The Metropolitan Atlanta Rapid Transit Authority (MARTA) has constructed a 2.3-mile, two-station extension of the North Line from just north of the Dunwoody Station to North Springs. In addition, per the amended Full Funding Grant Agreement (FFGA), the project also includes the acquisition of a total of 56 rail cars. The extension connects the North Line segment from Buckhead to Dunwoody, which opened in June 1996. The North Line extension will serve the rapidly growing area north of Atlanta, including Perimeter Center and north Fulton County. The total estimated cost for this extension, as reflected in the original FFGA, was \$381.3 million and included the purchase of 28 rail vehicles. The project is currently estimated to cost \$463.18 million. Daily ridership on the rail extension in the year 2005 is estimated at 33,000 riders, including 11,000 new riders.</p>
<p><b>Status</b></p>	<p>In December 1994, MARTA and FTA entered into a FFGA in the amount of \$305.01 million in Section 5309 New Starts funds for the extension from Dunwoody through North Springs. TEA-21 Section 3030(a)(3) authorizes the Atlanta North Line Extension for final design and construction. Through FY 2001, a total of \$318.92 million in Section 5309 New Starts funds has been provided to the project (\$300.55 million in Congressional appropriations and \$18.37 million in prior year deobligated funds).</p> <p>Section 3030(d)(2) of TEA-21 further authorized FTA funding for project scope changes, including the purchase of the 28 additional rapid rail cars from amounts</p>

authorized by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. The expanded scope requirements are due to the need to address expected increases in estimated service levels and station parking enhancements as well as rights of way impacts stemming from the proposed widening of the adjacent GA 400 limited access highway. Consistent with this TEA-21 provision, an amendment to the existing FFGA incorporates the scope enhancements and results in a total Federal Section 5309 New Starts commitment to the North Line extension of \$370.54 million. The adjusted local share is now \$92.64 million. Revenue operations began in December 2000.

Reported in \$YOE

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b> §5309 New Starts (FFGA Commitment)	\$370.54	\$318.92 million appropriated through FY 2001
<b>Local:</b> Regional Sales Tax	\$92.64	N/A
<b>Total</b>	<b>\$463.18</b>	

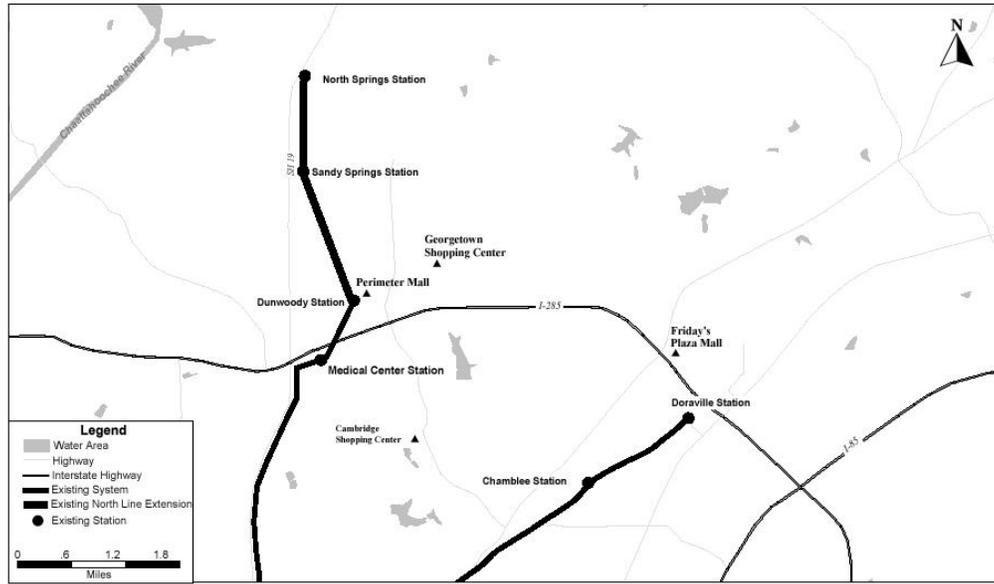
**Note:** Totals may not add due to rounding.

Section 3030 (d) (2) of TEA-21 authorizes FTA funding for project scope changes. These changes are reflected in a scope amendment to the North Line Extension FFGA. The cost of the enhancements is included in the funding totals displayed above.

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## North Springs (North Line Extension)

Atlanta, Georgia



## Boston, Massachusetts/South Boston Piers Transitway - Phase I

### South Boston Piers Transitway - Phase I

Boston, Massachusetts

(November 2000)

Description	
	<p>The Massachusetts Bay Transportation Authority (MBTA) is developing an underground transitway connecting the MBTA's existing transit system with the South Boston Piers area. The Piers area, which is connected to Boston's central business district by three local bridges, is undergoing significant development. Dual mode trackless trolleys are projected to operate in the transitway and on limited surface routes in the eastern end of the Piers area. Phase I of the project, a one mile tunnel connector between South Station and the World Trade Center, is now currently estimated to cost \$601 million (escalated dollars) according to a</p>

	<p>recently submitted recovery plan. The need for a recovery plan was caused by increased cost growth and delays in the project's implementation schedule. The revised cost reflects an increase of \$187.59 million over the original project cost, which will be paid for with non-Section 5309 New Starts funds. South Station is a transportation key hub in the downtown area, serving the MBTA Red Line and local bus, commuter rail, intercity bus, and Amtrak. Daily ridership for the Transitway in 2010 is estimated to range from 22,000 trips in the lower-growth scenario to 34,100 trips in the high-growth scenario. Phase II would extend the Transitway to the Chinatown Station on the Orange Line and the Boylston Station on the Green Line.</p>
<b>Status</b>	<p>The MBTA completed the alternatives analysis process and selected a locally preferred alternative in February 1993. The Final Environmental Impact Statement was published in December 1993. The project is under construction. In November 1994, FTA signed a Full Funding Grant Agreement (FFGA) with the MBTA with a commitment of \$330.73 million in Section 5309 New Starts funds. The FFGA covers final design and construction of Phase I. To address cost growth and project schedule delays, FTA required the submission of a project recovery plan by the MBTA. MBTA has prepared and submitted a recovery plan, which is currently under review by FTA. The project is now estimated to open for revenue service in December 2003.</p> <p>Through FY 2001, Congress has appropriated \$319.53 million in Section 5309 New Starts funds for the South Boston Piers Transitway.</p>

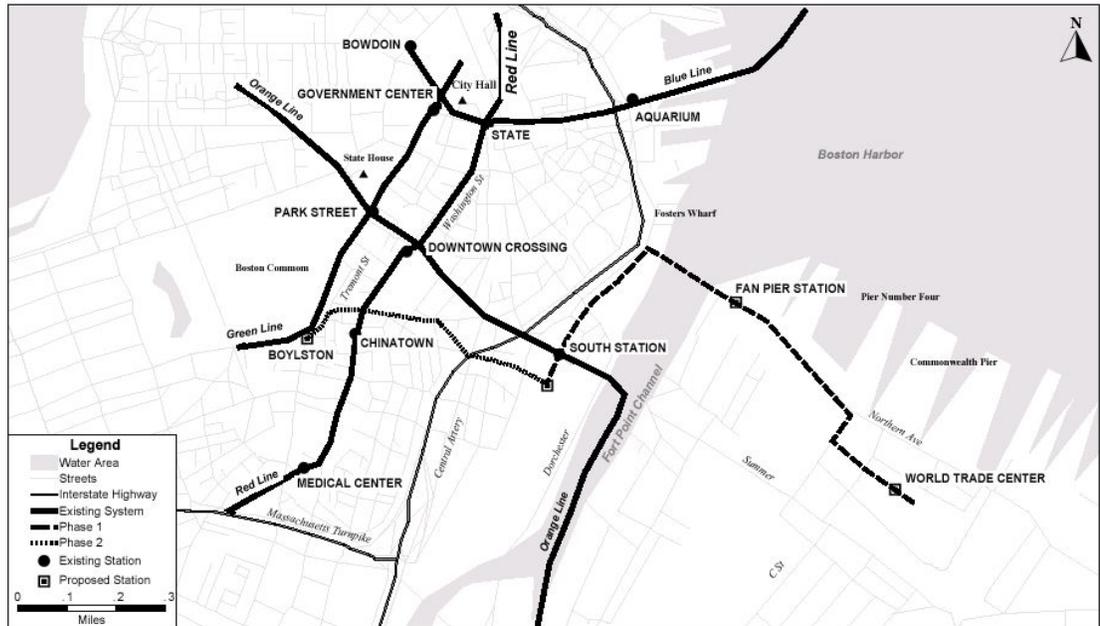
Reported in \$YOE

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: §5309 New Starts FFGA Commitment</b>	\$330.73	\$319.53 million appropriated through FY 2001
<b>Federal: §5307 Urbanized Area Formula Funds</b>	\$150.07	N/A
<b>State: Bond Funds</b>	\$120.20	N/A
<b>Total</b>	<b>\$601.00</b>	for Phase I

**Note:** Totals may not add due to rounding.

## South Boston Piers Transitway- Phase I

Boston, Massachusetts



Federal Transit Administration, 2001

## Chicago, Illinois/Douglas Branch Reconstruction

### Douglas Branch Reconstruction

Chicago, Illinois

(November 2000)

#### Description

The Chicago Transit Authority (CTA) is proposing a complete reconstruction of the approximately 6.6-mile length of the existing Douglas Branch of CTA's heavy rail Blue Line. The line extends from a point just west of downtown Chicago to its terminus at Cermak Avenue. The Douglas Branch Line was originally built in the early 20<sup>th</sup> Century with several improvements and

	<p>upgrades occurring through the mid-1980s. The line currently carries approximately 27,000 average weekday boardings utilizing 11 existing stations. Due to its age, the line has become seriously deteriorated which has resulted in high maintenance and operating costs and declining service. The Douglas Branch serves one of the most economically distressed areas in Chicago. Total capital costs for the proposed heavy rail reconstruction project are estimated at \$482.6 million (escalated dollars). The project is expected to serve 6,000 daily new riders in the year 2020.</p>
<b>Status</b>	<p>In December 1997, the Chicago Area Transportation Study (CATS) – local metropolitan planning organization - included the Douglas Branch Reconstruction Project in the region’s financially constrained long range transportation plan. CTA has completed an examination of the environmental impacts and benefits of the proposed project in an Environmental Assessment (EA). FTA issued a Finding of No Significant Impact on the EA in April 2000. FTA approved the project into final design in June 2000. FTA and CTA entered into a Full Funding Grant Agreement (FFGA) for the Douglas Branch Reconstruction project in January 2001. The FFGA commits \$320.1 million in Section 5309 New Starts funds to the project. Per the FFGA, the project is scheduled for completion in January 2005.</p> <p>Section 3030(a)(106) of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) authorizes the “Chicago – CTA Douglas Branch” for final design and construction. Through FY 2001, Congress has appropriated \$19.77 million in Section 5309 New Starts funds for the project.</p>

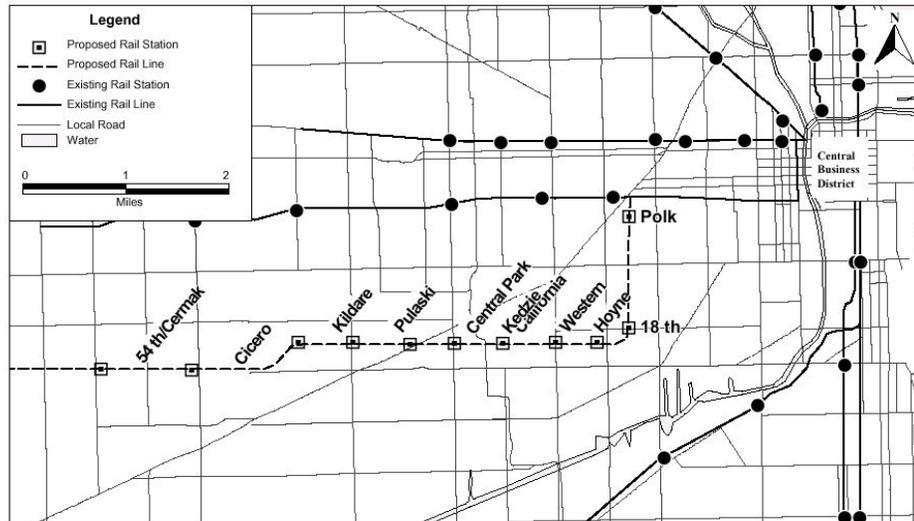
Reported in \$YOE

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: §5309 New Starts</b>	\$320.10	\$19.77 million appropriated through FY 2001
<b>Federal: Flexible Funds</b>	\$63.60	N/A
<b>State: Illinois DOT</b>	\$41.30	N/A
<b>Local: RTA Bonds</b>	\$57.50	N/A
<b>Total:</b>	<b>\$482.60</b>	N/A

**Note:** Totals may not add due to rounding.

# Douglas Branch Reconstruction

Chicago, Illinois



# Dallas, Texas/North Central LRT Extension

## North Central Corridor

Dallas, Texas

(November 2000)

### Description

Dallas Area Rapid Transit (DART) has initiated construction of the North Central Corridor light rail transit (LRT) extension to the region's 20.5-mile starter system. DART's starter system opened in

three phases from June 1996 to May 1997 (one underground station will open in 2000). The extension, part of a 20-year, \$4.8 billion transit capital program adopted in FY 1998, extends 12.5 miles from the current northern terminus at Park Lane Station to the new terminal in Plano. The extension has nine stations. Although some single-track sections were originally planned, the DART Board of Directors in 1997 approved the double tracking of the entire extension. DART estimates that over 17,000 daily riders, of which 6,800 will be new riders, are expected to use the extension in the year 2010. The project is estimated to cost \$517.2 million (escalated dollars).

## Status

FTA entered into an FFGA with DART for the North Central extension project in October 1999 with a Section 5309 New Starts commitment of \$333.0 million. The project is currently in the construction phase. An associated Northeast LRT extension is being built solely with local funds (\$475 million).

The project has been included in the regionally adopted Metropolitan Transportation Plan and Transportation Improvement Program that conforms with the State Implementation Plan for Air Quality. TEA-21 Section 3030(a)(20) authorizes the North Central Extension for final design and construction. Through FY 2001, Congress has appropriated \$161.61 million in Section 5309 New Starts funds to the project.

## Locally Proposed Financing Plan

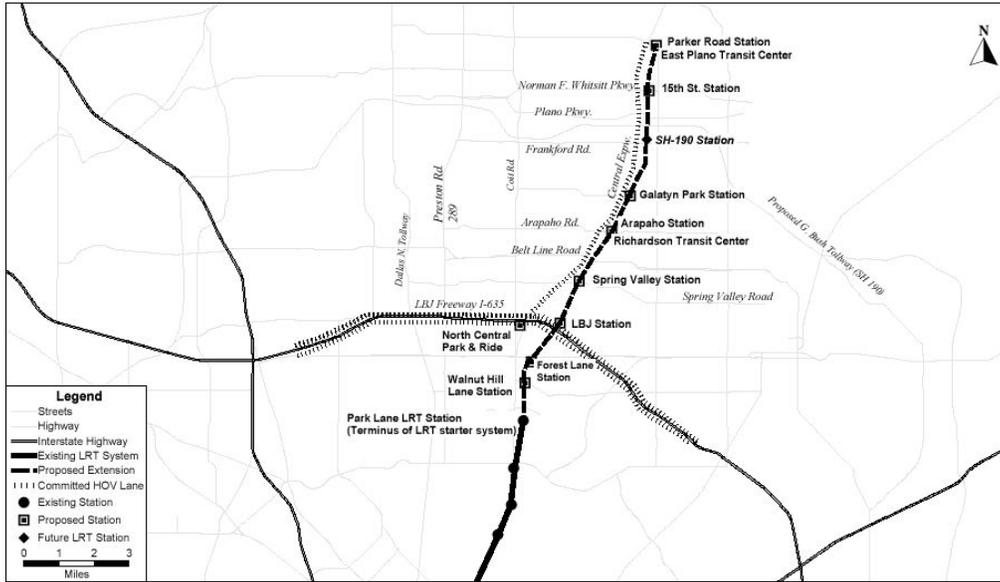
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Section 5309 New Starts</b>	\$333.00	\$161.61 million appropriated through FY 2001
<b>Local:</b>	\$184.20	N/A
<b>Total:</b>	<b>\$517.20</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# North Central LRT Extension

Dallas, Texas



# Denver, Colorado/Southeast Corridor LRT

## Southeast Corridor LRT

Denver, CO

(November 2000)

<b>Description</b>	<p>The Regional Transportation District (RTD) and the Colorado Department of Transportation (CDOT) are implementing the Southeast Corridor project, a 19.12-mile light rail transit (LRT) system extending from the existing LRT station at Interstate 25 and Broadway in Denver along I-25 to Lincoln Avenue and I-25 in Douglas County, with an LRT spur line along I-225 to Parker Road in Arapahoe County. The project includes 14 stations, 34 light rail vehicles, 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. Total capital cost of the fixed guideway element of the Southeast Corridor project is estimated at \$879.3 million (escalated dollars), including right-of-way acquisition, final design, construction and acquisition of rolling stock. Ridership is estimated at 38,100 average weekday boardings, including 12,900 new riders.</p>
<b>Status</b>	<p>CDOT, in cooperation with the Denver Regional Council of Governments and the RTD, completed a Major Investment Study (MIS) on the Southeast Corridor in July 1997. The MIS resulted in the selection of a multimodal package of highway and rail improvements. 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. RTD and FTA entered into a Full Funding Grant Agreement (FFGA) on November 17, 2000, which committed \$525 million in Section 5309 New Starts funds to the project. Per the FFGA, revenue operations are scheduled to begin by June 30, 2008.</p> <p>TEA-21 Section 3030(a)(23) authorized the Denver Southeast LRT for final design and construction. Through FY 2001, Congress has appropriated \$6.41 million in Section 5309 New Starts funds to the project.</p>

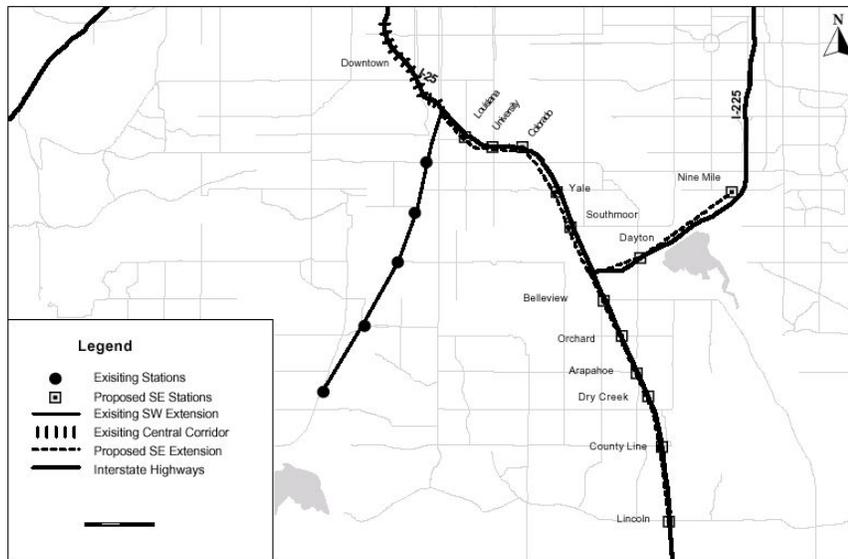
### Southeast Corridor Summary Description

(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Starts FFGA Commitment</b>	\$525.00	\$6.41 million appropriated through FY 2001
<b>Local: Sales Tax Revenue-Based Bond Proceeds</b>	\$354.30	N/A
<b>Total:</b>	<b>\$879.30</b>	

**Note:** Totals may not add due to rounding.

### Southeast Corridor LRT Denver, Colorado



Federal Transit Administration, 2001

Federal Transit Administration, 2001

# Denver, Colorado/Southwest Corridor LRT

## Southwest Corridor LRT

Denver, Colorado

(November 2000)

<b>Description</b>	<p>The Regional Transportation District (RTD) is implementing an 8.7-mile light rail transit (LRT) extension from the I-25/Broadway interchange in Denver parallel to Santa Fe Drive to Mineral Avenue in Littleton. The LRT line will operate over an exclusive, grade-separated right-of-way and connect with the existing 5.3-mile Central Corridor light rail line, which was constructed entirely with local funds and opened in October 1994. The new line will feature five stations.</p> <p>The capital cost of the project is \$176.32 million (escalated dollars). This estimate includes local costs already incurred by RTD for right-of way acquisition, a portion of an existing LRT maintenance and storage facility, transit improvements along the Southwest corridor, and preliminary engineering, as well as new costs for final design, construction, and the acquisition of 14 light rail vehicles. The project is estimated to carry 8,400 passengers per day in 2000 (opening year) and 22,000 passengers per day in 2015.</p>
<b>Status</b>	<p>FTA issued the Final Environmental Impact Statement (FEIS) for the project in February 1996. A Record of Decision was signed in March 1996. RTD and FTA entered into a Full Funding Grant Agreement (FFGA) in May 1996, which committed \$120 million in Section 5309 New Starts funding.</p> <p>TEA-21 Section 3030(a)(24) authorized the Denver Southwest LRT for final design and construction. Through FY 2001, Congress has appropriated \$118.51 million in Section 5309 New Starts funds. An additional \$1.34 million was provided in FY 1997 from reprogrammed funds for a total of \$119.80 million made available to the project.</p> <p>Revenue operations commenced in July 2000. Ridership has exceeded the forecast, resulting in 30,000 average weekday boardings systemwide. Of the 30,000 passenger boardings per day, approximately 12,000 are daily new riders. Construction is in the closeout phase.</p>

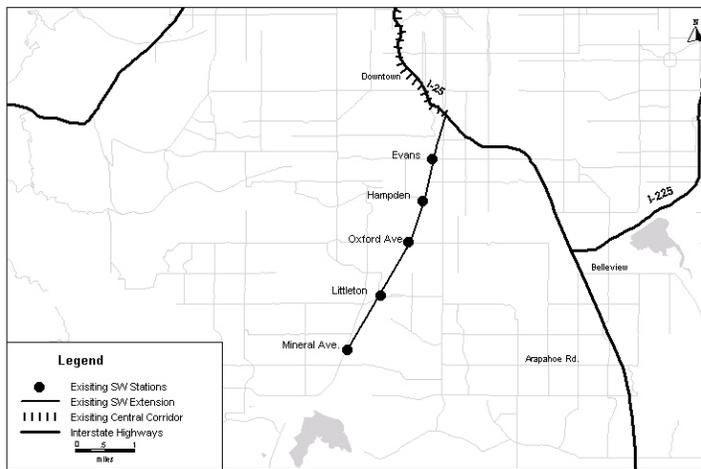
## Southwest Corridor Summary Description

Reported in (\$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal</b>		
Section 5309 New Start FFGA Commitment	\$120.00	\$119.80 million appropriated through FY 2001
Section 5307 Urbanized Area Formula Funds	\$0.88	N/A
Flexible Funds	\$18.00	N/A
<b>Local</b>		
RTD Sales and Use Tax and in-kind contributions	\$37.44	N/A
<b>Total:</b>	<b>\$176.32</b>	

**Note:** Totals may not add due to rounding.

### Southwest Corridor LRT Denver, Colorado



# Fort Lauderdale, Florida/Tri-County Commuter Rail Upgrades

## Tri-Rail Commuter Rail Upgrades

**Ft. Lauderdale, West Palm Beach and Miami, Florida**

(November 2000)

### Description

The Tri-County Commuter Rail Authority (Tri-Rail) operates a 71.7-mile regional transportation system connecting Palm Beach, Broward and Miami-Dade counties in South Florida. Tri-Rail is proposing improvements to enhance significantly the service reliability of commuter rail in the rail corridor owned by the Florida Department of Transportation (FDOT). Tri-Rail intends to construct a second mainline track, rehabilitate the signal system and provide station and parking improvements. In addition, project costs include acquisition of new rolling stock, improvements to the Hialeah maintenance yard and construction of a new northern maintenance and layover facility. The proposed project will allow Tri-Rail to operate 20-minute headways during peak commuter hours, as opposed to the current one-hour headways.

The Double Track Corridor Improvement Program Segment 5 project is approximately 44.3-miles and covers all remaining double-tracking and other improvements to the corridor. When completed, it will result in 71.7 miles of double track railroad for the Southeast Florida Rail Corridor between the Mangonia Park Station (just north of West Palm Beach) to the Miami Airport Station. A two-track high clearance bridge at the west branch of the New River in Ft. Lauderdale will be constructed by the completion of Segment 5. The components of the project include:

1. Construction of 44.31 miles of second mainline track, including the upgrade of five bridges and the construction of twelve new bridges to accommodate the second mainline track.
2. Modification and renovation of ten existing stations, closure of one station and construction of one station.
3. Demolition and reconstruction of the existing Palm Beach County Northern Layover Facility.
4. Upgrade of the existing signal system along the 44.31 miles of new second track.
5. Upgrade of the automated grade crossing protection at 72 crossings along the entire 71.7-mile corridor.
6. Acquisition of five diesel locomotives and two cab control coaches.

Previous improvements to four other segments of the line are not included in the Segment 5 project.

To date 9.6 miles of the Double Track Corridor Improvement Project have been completed, including a station at Miami International Airport, which is planned to be a part of the proposed Miami Intermodal Center. An additional seven miles is scheduled for completion in early 2000. FDOT, in conjunction with Tri-Rail, is arranging to assume the dispatching and maintenance operations in the corridor from CSX Transportation (CSXT) in 2005.

Total project cost for the project is estimated at \$327 million (escalated dollars), with a Section 5309 New Starts commitment of \$110.5 million. Tri-Rail estimates that 42,100 average weekday boardings, including 10,200 daily new riders, will occur in the year 2015.

### Status

The Tri-Rail system was created in 1989 as a traffic mitigation project during the State's widening of Interstate 95. Environmental requirements for the Tri-County Commuter Rail improvements were satisfied with categorical exclusions.

The Tri-Rail double-track corridor improvement project will be implemented in five segments. Segment I, an 8.14-mile portion between Pompano Beach and Broward Boulevard began in Spring 1995 and was completed in April 1997. Phase II, a 1.5-mile southern extension terminating at New Miami International Airport Station, adjacent to the site of the proposed Miami Intermodal Center, was completed in Spring 1998. Phase III, a 6.9-mile extension from south of the proposed Boca Raton/Glades Road Station to south of the Pompano Beach Station, began in March 1998 and was completed in July 2000.

Tri-Rail signed a Full Funding Grant Agreement (FFGA) with FTA in June 2000 to implement Segment 5 of the Double Track Corridor Improvement Program. Segment 5 is scheduled for completion in March 2005.

TEA-21 Section 3030(a)(27) authorizes the Ft. Lauderdale-West Palm Beach-Miami Tri-County Commuter Rail for final design and construction. Through FY 2001, Congress has appropriated \$25.66 million in Section 5309 New Starts funds for the project, with an additional \$54.26 million appropriated to the project, but not included in the scope of the FFGA. To date, Tri-Rail has also utilized \$11.5 million of apportioned Fixed Guideway Modernization funds for the project, \$24.1 million of Section 5307 Urbanized Area Formula funds and \$38.2 million in State funds, for a total of \$134.6 million.

### Locally Proposed Financing Plan

(Reported in \$YOE)

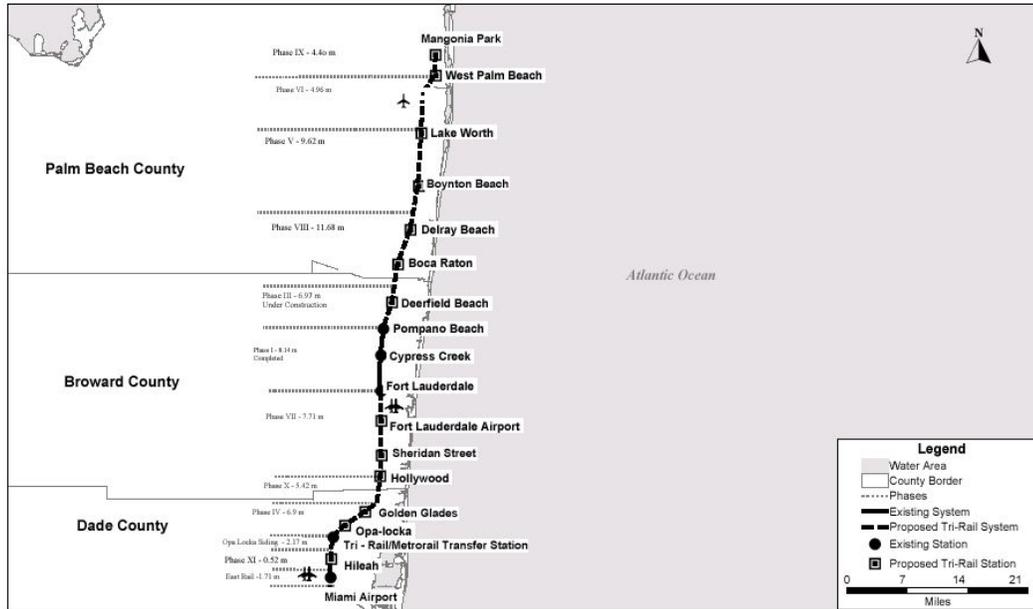
Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$110.50	\$25.66 million appropriated through FY 2001
Section 5307 Urbanized Area Formula Funds	\$14.90	N/A
Section 5309 Guideway Modernization	\$19.30	N/A
Flexible Funds	\$57.20	N/A
<b>State:</b>		
Florida DOT	\$69.90	N/A
<b>Local:</b>		
Dade MPO CMAQ/STP	\$22.20	N/A
Private Sector Financing	\$55.20	N/A
<b>Total:</b>	<b>\$327.00</b>	

**Note:**Totals may not add due to rounding.

(An additional \$54.26 million was appropriated to the project in prior years, but was not included in the FFGA scope. This amount brings the total appropriated to \$79.96 million.)

# Tri-County Commuter Rail Upgrades

Ft. Lauderdale, West Palm Beach - Miami, Florida



Federal Transit Administration, 2001

# Houston, Texas/Regional Bus Plan

## Regional Bus Plan

**Houston, Texas**

(November 2000)

### Description

Houston Metro's Regional Bus Plan (RBP) is a package of improvements to its bus system. The \$625 million project includes new and extended high occupancy vehicle (HOV) facilities and ramps, several transit centers and park-and-ride lots, bus acquisitions, bus service expansion, and supporting facilities. Houston's Metro has pledged an additional \$375 million in locally funded bus improvements, bringing the total value of the bus improvement package to \$1.0 billion.

### Status

In December 1994, FTA and Houston Metro signed a Full Funding Grant Agreement (FFGA) for \$500 million (80 percent) in Section 5309 New Starts funds and 20 percent in local resources. TEA-21 Section 3030(a)(30) authorizes the Houston Regional Bus Plan—Phase I for final design and construction. Houston is currently in the implementation phase of the Regional Bus Plan. All bus elements in the FFGA are now expected to be completed by December 2004.

Houston has proposed an amendment to the FFGA which would change the scope of the project. Some bus elements of the project would be changed (additions, deletions, modifications) while Houston Metro may ultimately seek to include the final design and construction of the Downtown to Astrodome LRT project in the scope of the FFGA. None of the proposed scope changes would affect the Federal commitment to the FFGA (\$500.0 million), of which \$95,459 remains to be appropriated. Through FY 2001, Houston Metro has received \$499.92 million in Section 5309 New Starts funds for the project.

### Locally Proposed Financing Plan

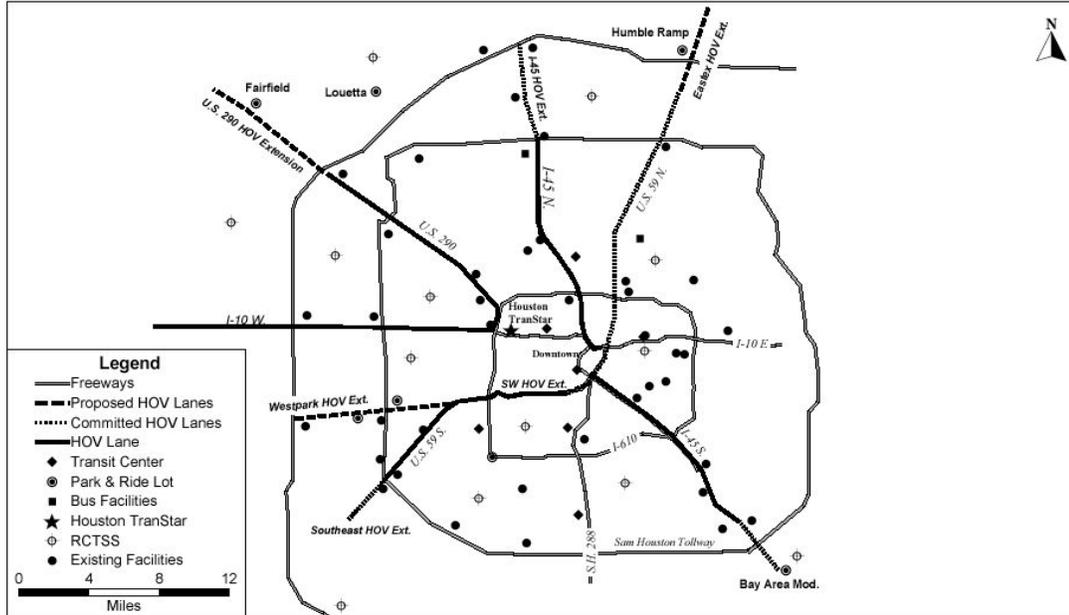
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: Section 5309 New Starts FFGA Commitment</b>	\$500.00	\$499.92 million appropriated through FY 2001
<b>Local: Houston Metro</b>	\$125.00	N/A
<b>Total:</b>	<b>\$625.00</b>	

**Note:** Houston Metro has pledged an additional \$375.0 million in bus projects bring the total value of the bus improvement package to \$1.0 billion. Totals may not add due to rounding.

# Regional Bus Plan

Houston, Texas



Federal Transit Administration, 2001

# Los Angeles, California/MOS-3 Extensions of Metro Rail

## MOS-3 Extensions of Metro Rail

Los Angeles, California

(November 2000)

### Description

The Metro Rail Red Line Project in Los Angeles was to be planned, programmed and constructed in phases through a series of "minimum operable segments" (MOS). The 4.4-mile, 5-station segment labeled MOS-1 opened for revenue service in January 1993. A 2.1-mile, three-station segment of MOS-2 opened along Wilshire Boulevard in July 1996. An additional 4.6-mile, 5-station segment in MOS-2 opened along Vermont Avenue & Hollywood Boulevard in June 1999. The 6.3-mile North Hollywood segment of MOS-3 began revenue operations in June 2000.

ISTEA Section 3034 authorized three extensions in MOS-3 of the Metro Rail Red Line:

1. The *North Hollywood Extension* is 6.3 miles in length with three stations, entirely in subway. It extends the Hollywood branch of MOS-2 generally to the north under the Santa Monica Mountains to North Hollywood in the San Fernando Valley. The estimated cost of the extension is \$1.31 billion (escalated dollars). Ridership for the entire system essentially doubled to approximately 120,000 daily boardings, far exceeding the projected daily boardings for 2010.
2. The *Eastside Extension* was originally designed as 3.7 miles of subway with four stations, extending from Union Station, the origin of MOS-1, into neighborhoods east of downtown. The estimated cost was \$1.05 billion (escalated dollars). Ridership for this extension was estimated at 12,000 daily boardings by 2010. However, work on this extension was suspended in 1998. Currently, a replacement project is being planned. The replacement, as currently planned, is approximately six miles of light rail transit that will directly interface with the locally-funded Pasadena LRT (Blue Line) at Union Station. Ridership for this extension is estimated at 15,000 daily boardings in 2010.
3. The *Mid-City Extension* was originally planned to extend the Wilshire Boulevard branch generally to the west beyond the current MOS-2 terminus at Western Avenue. It would add 2.3 miles, originally designed as subway, and two stations to the system. The estimated cost was \$683 million (escalated dollars). Ridership for this extension was estimated at 13,000 daily boardings in 2010. However, work on this extension was indefinitely suspended in 1998, pending completion of the Regional Transit Alternatives Analysis.

### Status

LACMTA and FTA signed a Full Funding Grant Agreement (FFGA) for MOS-3 in May 1993, which provided \$1.23 billion in Section 5309 New Starts funds for the three extensions of MOS-3. The FFGA was subsequently amended on December 28, 1994 to provide an additional \$186.49 million for a total commitment of \$1,416.49 million in Section 5309 New Starts funding. A restated FFGA for the North Hollywood extension (Phase I-A) of MOS-3 was signed on June 9, 1997.

In January 1997, FTA requested that the MTA submit a Recovery Plan (Plan) to demonstrate its ability to complete MOS-2 and MOS-3, while maintaining and operating the existing bus system.

Pursuant to the request, on January 14, 1998, the LACMTA Board of Directors voted to suspend and demobilize rail construction activities on all rail projects other than the MOS-2 and MOS-3 North Hollywood Extensions that were already under construction. The MTA subsequently submitted the Plan to FTA on May 15, 1998; FTA approved the Plan on July 2, 1998.

In 1998, the MTA undertook a Regional Transit Alternatives Analysis (RTAA) Study to analyze and evaluate feasible alternatives for the Eastside and Mid-City corridors. The RTAA addressed system investment priorities, allocation of resources to operate existing transit services at a reliable standard, assessment and management of financial risk, countywide bus service expansion, and a process for finalizing corridor investments. On November 9, 1998, the LACMTA Board reviewed the RTAA and directed staff to reprogram State and local resources that were previously allocated to the Eastside and Mid-City Extensions to the implementation of RTAA recommendations, including the LACMTA Accelerated Bus Procurement Plan.

The MTA conducted further studies of transit investment options for the Eastside and Mid-City corridor projects and subsequently requested FTA's concurrence to initiate preliminary engineering (PE) on both corridors in July 2000. In October 2000, FTA authorized the MTA to begin PE on the East Side corridor. The selected alternative for the Mid-City Corridor has not been approved for PE by FTA. Additional information on the Mid-City Corridor project must be developed to document mitigation measures that are acceptable to the local community. FTA will continue to evaluate the proposed investments, as required under 49 U.S.C. 5309(e).

Through 2001, Congress has appropriated \$631.35 million in New Starts funds for the North Hollywood segment of MOS-3. An additional \$76.48 million has also been appropriated for the original Mid-City and East Side subway alignments, and \$11.86 million was appropriated in FY 1999 and FY 2000 for further studies of alternatives in the corridors. LACMTA also plans to fund \$245.6 million of North Hollywood MOS-3 costs with Federal flexible funds (STP and CMAQ). TEA-21 Section 3030(a)(38) authorized the Los Angeles MOS-3 for final design and construction.

The post FY 2001 New Starts commitment remaining to MOS-3 is \$696.80 million. This includes \$49.69 million for North Hollywood and \$647.11 million for the Mid-City and East Side corridors.

### Locally Proposed Financing Plan

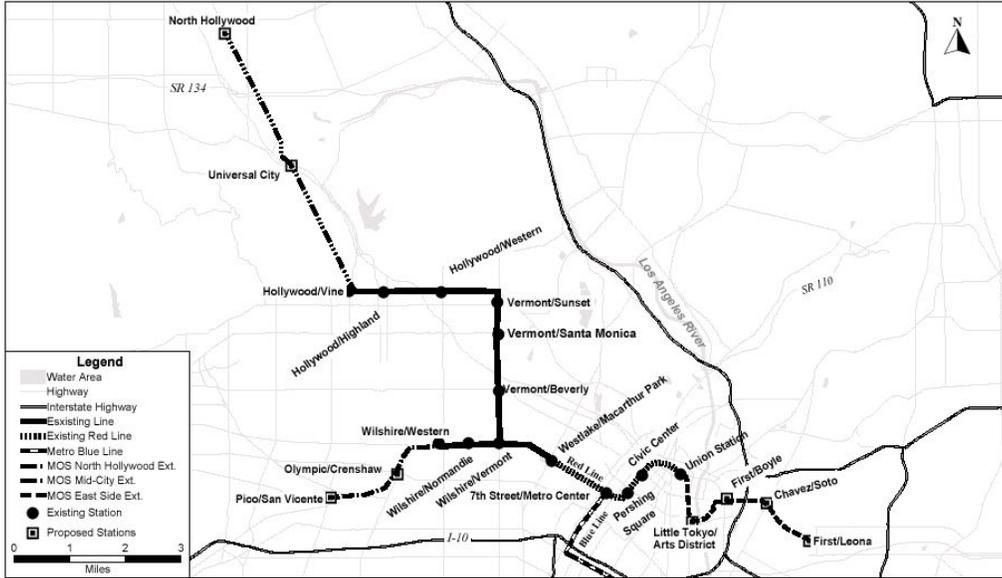
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: Section 5309 New Starts Hollywood FFGA</b>	\$681.04	\$631.35 million appropriated through FY 2001
<b>Federal: Flexible Funds</b>	\$245.60	N/A
<b>Local:</b>	\$384.18	N/A
<b>Total:</b>	<b>\$1,310.82</b>	

**Note:** Totals may not add due to rounding.

# MOS-3 Extensions of Metro Rail

Los Angeles, California



# Memphis, Tennessee/Medical Center Extension

## Medical Center Extension

**Memphis, Tennessee**

(November 2000)

### Description

The Memphis Area Transit Authority (MATA), in cooperation with the City of Memphis, is implementing a 2.0-mile light rail transit (LRT) extension to the Main Street Trolley/Riverfront Loop village rail system. The Memphis Medical Center Extension will expand the central business district (CBD) rail circulation system to serve the Medical Center area east of the CBD. The project will operate on street in mixed traffic and will connect with the Main Street Trolley, sharing a lane with automobile traffic on Madison Avenue between Main Street and Cleveland Street. At the eastern terminus, near Cleveland Street, a bus transfer point and a small park-and-ride lot will be constructed to accommodate transfers with buses and cars. At the western terminus, existing stations on Main Street near Madison Avenue will be utilized for transfers to/from the Main Street Trolley/Riverfront Loop system. Six new stations will be located along the route. The line will be designed to accommodate light rail vehicles, but vintage rail cars would be utilized until a proposed regional LRT line is implemented and a fleet of modern LRT vehicles is acquired. The project is the last segment of the downtown rail circulation system as well as the first segment of a regional light rail line.

The total capital cost of the 2.0-mile line with six stations, renovation of four historic trolley vehicles, right of way acquisition and construction of a park-and-ride facility is estimated at \$74.6 million (escalated dollars). The Section 5309 New Starts share for the project is \$59.7 million.

### Status

A Major Investment Study/Environmental Assessment (MIS/EA), resulting in the selection of a trolley service extension as the Locally Preferred Alternative (LPA), was completed in June 1997. A Supplemental EA was prepared to document proposed changes to the preferred alternative. FTA issued a Finding of No Significant Impact for the Medical Center Rail Extension on April 7, 2000. MATA and FTA entered into a Full Funding Grant Agreement (FFGA) in November 2000, which committed \$59.67 million in Section 5309 New Starts funding. Per the FFGA, the Revenue Operating Date is March 16, 2004.

TEA-21 Section 3030(a)(43) authorizes the Memphis Medical Center Extension for final design and construction. Through FY 2001, Congress has appropriated \$15.82 million in Section 5309 New Starts funds for this project, with an additional \$0.5 million appropriated to the project, but not included in the scope of the FFGA.

### Locally Proposed Financing Plan

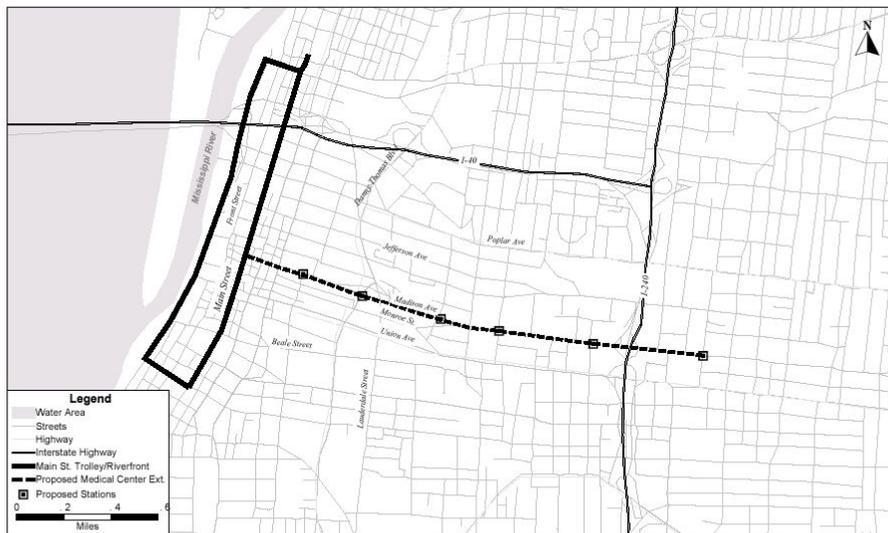
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Starts</b>	\$59.67	\$15.82 million appropriated through FY 2001
<b>State: Tennessee DOT</b>	\$7.46	N/A
<b>Local: City of Memphis</b>	\$7.46	N/A
<b>Total:</b>	<b>\$74.58</b>	

**Note:** An additional \$0.5 million was appropriated to the project in prior years, but was not included in the FFGA scope. This amount brings the total appropriated to \$16.34 million. Totals may not add due to rounding.

### Medical Center Extension

Memphis, Tennessee



# Minneapolis-St. Paul, Minnesota/Hiawatha Corridor LRT

## Central Corridor

### Minneapolis-St. Paul, Minnesota

(November 2000)

#### Description

Metro Transit and the Metropolitan Council (local metropolitan planning organization), in cooperation with the Minnesota Department of Transportation (MnDOT), Hennepin County and the Metropolitan Airports Commission (MAC), are proposing to design and construct an 11.6-mile Light Rail Transit (LRT) line within the Hiawatha Corridor. The proposed LRT will operate on the Hiawatha Avenue/Trunk Highway 55 Corridor linking downtown Minneapolis, the Minneapolis-St. Paul (MSP) International Airport, and the Mall of America (MOA) in Bloomington. The LRT is the transit component of a Locally Preferred Alternative, which includes the reconstruction of TH-55 as a four lane at-grade arterial between Franklin Avenue and 59<sup>th</sup> Street and construction of an interchange between TH-55 and TH-62 (Crosstown Highway).

Current plans call for the north end of the LRT to begin in the Central Business District (CBD) and operate on the existing transit mall along 5<sup>th</sup> Street. The LRT is planned to exit the CBD near the Hubert Humphrey Metrodome, following the former Soo Line Railroad to Franklin Avenue then generally parallel Hiawatha Avenue. The project will include a 1.8-mile tunnel to be constructed under the MSP airport runways and taxiways with the construction of one underground station and one at-grade station. The Metropolitan Airports Commission (MAC) will be responsible for the portion of the line that impacts the MSP, including the tunnel and stations. The line is then planned to emerge from the tunnel on the West Side of the airport and continue south with three proposed stations in Bloomington, including a station serving the Mall of America (MOA). The estimated capital cost for the 11.6-mile Hiawatha Corridor LRT, including 17 proposed stations, totals \$675.4 million (escalated dollars). The project is expected to serve 24,800 average weekday boardings by the year 2020; 19,300 average weekday boardings are projected in the opening year.

#### Status

A Final Environmental Impact Statement (FEIS), including a Record of Decision (ROD) for the Hiawatha Avenue Corridor, was completed in February 1985. The preferred alternative documented in the 1985 FEIS included the reconstruction of the roadway to a four-lane, divided at-grade arterial, with an LRT line adjacent to the roadway and extending north to the Minneapolis CBD and south to the Minneapolis-St. Paul International Airport. Since the completion of the 1985 FEIS, improvements have been implemented on the roadway elements of the preferred alternative.

FTA approved Metro Transit to initiate preliminary engineering in January 1999 on the LRT component of the LPA. In August 1999, Metro Transit completed a re-evaluation of the 1985 FEIS on a segment of the alignment extending from the Minneapolis CBD to Interstate 494. An Environmental Assessment (EA) on the segment extending from I-494 to the MOA was also completed that same month. Revised information included updated cost and ridership estimates, a final route alignment in the downtown Minneapolis portion of the project, and alignment options at the airport as well as options for service to the MOA. The proposed Hiawatha Corridor LRT is included in the region's financially constrained Transportation Improvement Program and the

Long-Range Transportation Plan. FTA issued a ROD on the re-evaluation of the 1985 FEIS on the Hiawatha Corridor LRT line in April 2000. In the same month, the Federal Aviation Administration also issued a Finding of No Significant Impact on an EA on the portion of the LRT project that will connect with the MSP International Airport. FTA approved the LRT's entrance into final design in April 2000. FTA and the Metropolitan Council entered into a Full Funding Grant Agreement (FFGA) for the Hiawatha Corridor LRT in January 2001. The FFGA commits \$334.3 million in Section 5309 New Starts funds to the project. The Hiawatha Corridor LRT is scheduled to begin initial revenue operations in late 2003. Per the FFGA, full revenue service is scheduled to commence in December 2004.

Section 3030(a)(91) of TEA-21 authorizes the "Twin Cities – Transitway Corridors" for final design and construction. Through FY 2001, Congress has appropriated \$118.84 million in Section 5309 New Starts funds for the "Twin Cities Transitways" project, which includes the Hiawatha Corridor light rail project.

### Locally Proposed Financing Plan

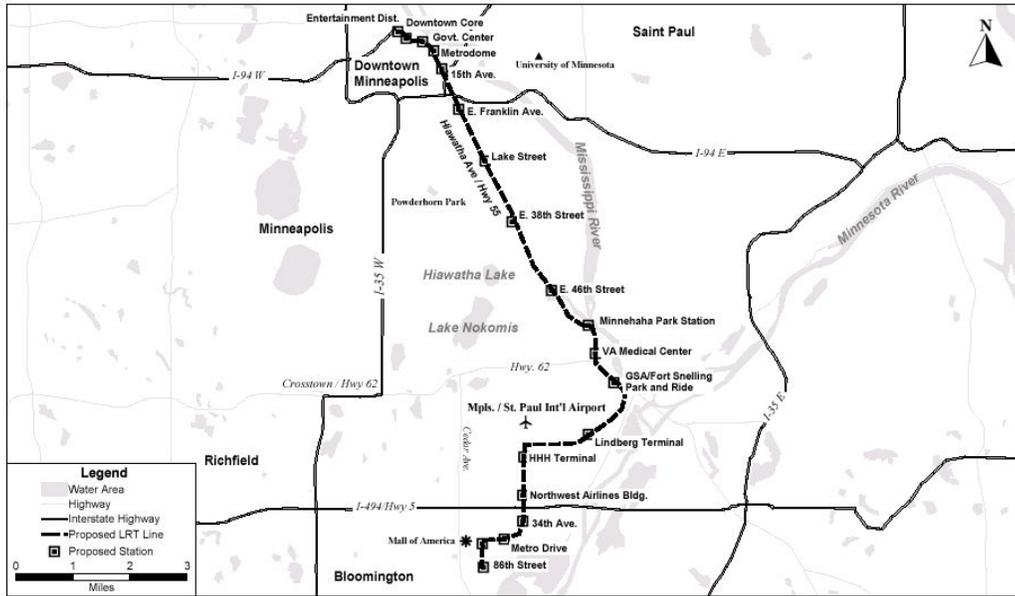
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal:</b>		
Section 5309 New Starts	\$334.30	\$118.84 million appropriated to the Hiawatha Corridor LRT through FY 2001
Flexible Funds	\$49.50	
<b>State:</b>		
Minnesota Legislature	\$120.10	
<b>Local:</b>		
Hennepin County Regional Railroad Authority	\$84.20	
Metropolitan Airports Commission	\$87.00	
<b>Total:</b>	<b>\$675.40</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Hiawatha Corridor LRT

Minneapolis - St. Paul, Minnesota



# Northern New Jersey/Hudson-Bergen LRT MOS-1

## Hudson-Bergen LRT (MOS-1)

### Northern New Jersey

(November 2000)

#### Description

The New Jersey Transit Corporation (NJ TRANSIT) is constructing a 9.6-mile, initial Minimum Operating Segment (MOS-1) of an eventual 21-mile light rail transit (LRT) line. The line will run principally along the Hudson River waterfront in Hudson County. MOS-1 will connect the Hoboken Terminal to 34<sup>th</sup> Street in Bayonne and Westside Avenue in Jersey City. MOS-1 is expected to cost \$992.14 million (escalated dollars) and carry 31,300 riders per day.

The proposed full rail system is an approximately 21-mile long, 30-station, at-grade LRT line from the Vince Lombardi Park-and-Ride lot in Bergen County to Bayonne. The system will pass through Port Imperial in Weehauken, Hoboken and Jersey City. The outer ends will provide 8,800 park-and-ride spaces. The core of the system will serve the high-density commercial and residential centers in Jersey City and Hoboken and connect to ferries, PATH, and NJ TRANSIT commuter rail lines. The full 21-mile system is expected to cost \$2.0 billion (escalated dollars) and carry 94,500 riders per day.

#### Status

In February 1993, NJ TRANSIT initially selected, as its locally preferred alternative, a 26-station at-grade LRT line from the Vince Lombardi Park-and-Ride lot through Hoboken and Jersey City to Route 440 in Southwest Jersey City. A Final Environmental Impact Statement (FEIS) for the full project was completed in the summer of 1996. In October 1996, the Federal Transit Administration (FTA) issued a Record of Decision (ROD) for the full project. In that same month, FTA signed a Full Funding Grant Agreement committing \$604.09 million of Section 5309 New Starts funds to support the 9.6-mile MOS-1. In January 1997, the Governor of New Jersey, in conjunction with the mayor and the City Council of Hoboken, agreed to shift the alignment in Hoboken to the West Side of the city. The shift from the East Side alignment to the West Side alignment in Hoboken places the station south and adjacent to the Hoboken Terminal and increases the number of stations for the full project from 26 to 30 stations. An Environmental Assessment was completed on the impacts resulting from this proposed change and submitted to the FTA in August 1998. FTA issued a Finding of No Significant Impact on the proposed alignment shift in June 1999.

The Hudson-Bergen LRT project is one of eight elements eligible for funding as part of the New Jersey Urban Core Project. Through FY 2001, Congress has appropriated \$445.30 million in Section 5309 New Starts funds to MOS-1 of the Hudson-Bergen LRT.

NJ TRANSIT is using a turnkey procurement to implement the project. A design/build/operate/maintain contract was signed in October 1996, and notice to proceed was given to the contractor in November 1996. Project construction began in December 1996. Revenue operation for the segment to Exchange Place (Phase A) began in April 2000. In November 2000, NJ TRANSIT began limited revenue service one mile north of the Exchange Place Station to three additional stations at Harborside Financial Center, Harsimus Cove and Pavonia-Newport. Full service to the Hoboken Terminal is scheduled to begin in Spring 2002.

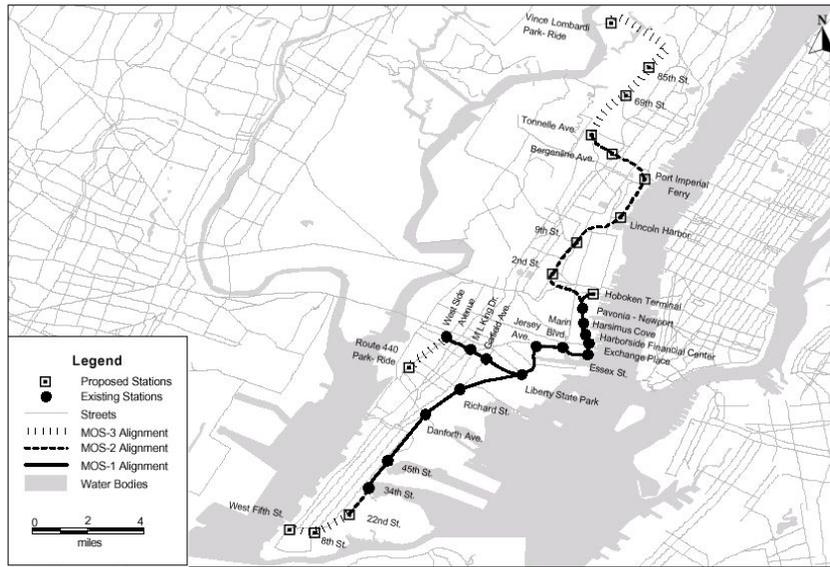
## Locally Proposed Financing Plan

(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Starts FFGA Commitment</b>	\$604.09	\$445.30 million appropriated through FY 2001
<b>Federal: Section 5307 Urbanized Area Formula Funds</b>	\$281.65	
<b>State:</b>	\$106.40	
<b>Total:</b>	<b>\$992.14</b>	

**Note:** Totals may not add due to rounding.

### Hudson - Bergen LRT (MOS-1) Northern New Jersey



# Northern New Jersey/Hudson-Bergen LRT MOS-2

## Hudson-Bergen LRT (MOS-2)

### Northern New Jersey

(November 2000)

#### Description

The New Jersey Transit Corporation (NJ TRANSIT) is proposing to construct a second Minimum Operable Segment (MOS-2) for the Hudson-Bergen Waterfront Light Rail Transit System (HBLRTS). The proposed MOS-2 would run 5.1 miles north from Hoboken Terminal to the Tonelle Avenue Park-and-Ride lot in North Bergen and one mile south from 34<sup>th</sup> Street to 22<sup>nd</sup> Street in Bayonne. The total capital cost of MOS-2 is estimated at \$1,215.4 million (escalated dollars), including borrowing costs. MOS-2, like the initial Minimum Operable Segment (MOS-1), which is now nearing completion, would be a design/build/operate/maintain project. With the completion of the second phase of the Hudson-Bergen LRT, NJ TRANSIT expects the system to become self-sufficient and not require any additional operating subsidies. MOS-2 is scheduled for completion in 2005 and is anticipated to carry 34,900 average weekday boardings in 2010.

The full Hudson-Bergen LRT, which includes a 4.7-mile MOS-3, is a \$2 billion (escalated dollars), 20.1-mile, 30-station at-grade LRT line from the Vince Lombardi Park-and-Ride lot in Bergen County to West Fifth Street in Bayonne in Hudson County. It is projected to serve 94,500 average weekday boardings in the year 2010. When completed, the project will pass through Port Imperial in Weehauken, Hoboken and Jersey City. The outer ends will provide 8,800 park-and-ride spaces. The core of the system will serve the high-density commercial and residential centers in Jersey City and Hoboken and connect to ferries, PATH and NJ TRANSIT commuter rail lines.

#### Status

The Final Environmental Impact Statement (FEIS) for the full Hudson-Bergen Waterfront LRT was issued in August 1996. In January 1997, the Governor of New Jersey, in conjunction with the Mayor and City Council of Hoboken, agreed to alter the alignment of the Hudson-Bergen LRT in Hoboken to the west side of the city. An Environmental Assessment (EA) was completed on the re-alignment and was submitted to FTA in August 1998. FTA issued a Finding of No Significant Impact on the EA in June 1999.

In November 2000, FTA executed a Full Funding Grant Agreement with NJ TRANSIT committing \$500 million of Section 5309 New Starts funds to support the 5.1-mile extension of the Hudson-Bergen LRT.

The Hudson-Bergen LRT is one of eight elements eligible for funding as part of the New Jersey Urban Core Project. Through FY 2001, Congress has not appropriated any Section 5309 New Starts funds to MOS-2 of the Hudson-Bergen LRT.

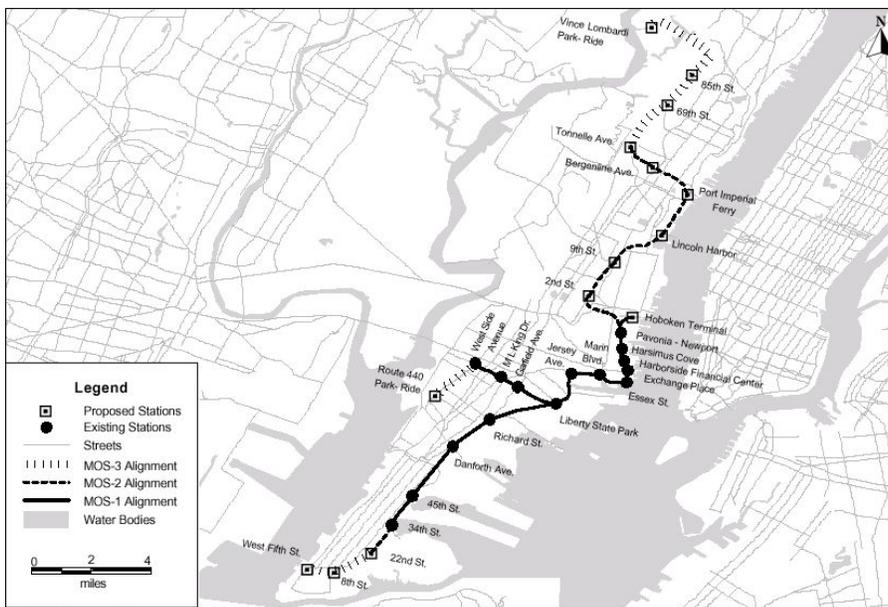
#### Locally Proposed Financing Plan

(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts FFGA Commitment	\$500.0	No appropriations to date for HBLRTS MOS-2
Section 5307 Formula (per 23 U.S.C. Section 1044)	\$153.7	
<b>State:</b>		
New Jersey Transportation Trust Fund	\$530.4	
Port Authority of NY & NJ and Utility Reimbursements	\$31.3	
<b>Total:</b>	<b>\$1,215.4</b>	

**Note:** Totals may not add due to rounding.

### Hudson - Bergen LRT (MOS-2) Northern New Jersey



# Northern New Jersey/Newark Rail Link (MOS-1)

## Newark Rail Link (MOS-1)

### Northern New Jersey

(November 2000)

#### Description

The New Jersey Transit Corporation (NJ TRANSIT) will construct a one-mile, five station initial Minimum Operable Segment (MOS-1) of a proposed 8.8-mile, 16-station light rail transit (LRT) system between downtown Newark and downtown Elizabeth, New Jersey. MOS-1 will function as an extension of the existing 4.3-mile Newark City Subway light rail line, running from Broad Street in Newark to Newark Penn Station. NJ TRANSIT estimates that the one-mile MOS will cost \$207.7 million (escalated dollars), including associated stations, and will serve 13,300 average weekday boardings in 2015. NJ TRANSIT estimates that the entire 8.8-mile project will have a total capital cost of \$694 million (1995 dollars) and will carry 24,900 average weekday boardings in the year 2015.

#### Status

The Newark-Elizabeth Rail Link is being advanced in three stages: MOS-1, a one-mile connection between the Broad Street Station and Newark Penn Station; the second segment, a one-mile LRT line from Newark Penn Station to Camp Street in downtown Newark; and the third segment, a seven mile LRT line from downtown Newark to the City of Elizabeth, including a station serving Newark International Airport. A Draft Environmental Impact Statement (DEIS) covering all three stages of the full build alternative was completed in January 1997. A Final EIS addressed only the initial MOS and was completed in October 1998. FTA signed the Record of Decision for MOS-1 in November 1998. In August 2000, FTA and NJ TRANSIT executed a Full Funding Grant Agreement for NERL MOS-1, committing \$141.95 million in Section 5309 New Starts funds to construct the project. Environmental work on the other segments of the Newark-Elizabeth Rail Link awaits completion of ongoing planning efforts.

TEA-21 Section 3030(a)(57) authorizes the New Jersey Urban Core Project, which consists of eight separate elements, including the Newark-Elizabeth Rail Link, for final design and construction. TEA-21 continued Section 3031(b) of the Intermodal Surface Transportation Efficiency Act of 1991, which stated:

*[F]or the purposes of calculating non-Federal contributions to the net cost of the New Jersey Urban Core Project, the [Secretary of Transportation] shall include all non-Federal contributions made on or after January 1, 1987 for construction of any element of the project. Non-Federal funds committed to one element of the project may be used to meet the non-Federal share requirement for any other element of the project.*

Through FY 2001, Congress has appropriated \$36.63 million in Section 5309 new starts funds for the Newark Rail Link MOS-1 project. An additional \$2.97 million in Section 5309 new starts funds was provided to the project in the FY 2001 Omnibus Consolidated Appropriations Act.

#### Locally Proposed Financing Plan

(Reported in \$YOE)

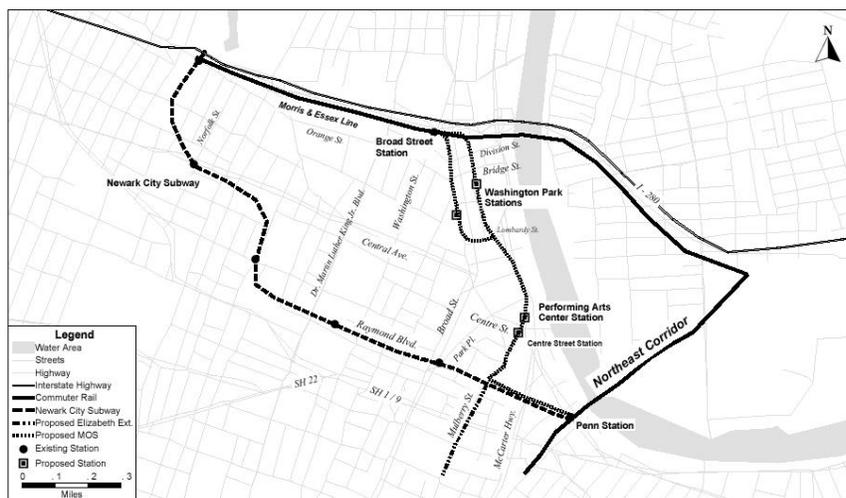
Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts FFGA Commitment	\$141.95	\$39.6 million appropriated through FY 2001. *
Section 5307 Urbanized Area Formula Funds	\$25.33	
<b>State:</b>		
Transportation Trust Fund	\$39.75	
Port Authority of NY & NJ	\$0.66	
<b>Total:</b>	<b>\$207.69</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

\* The Omnibus Consolidated Appropriations Act provided an additional \$2.97 million in Section 5309 New Starts fund to the project.

### Newark Rail Link (MOS-1)

Northern New Jersey



# Pittsburgh, Pennsylvania/Stage II LRT Reconstruction

## Stage II LRT Reconstruction

### Pittsburgh, Pennsylvania

(November 2000)

#### Description

The Port Authority of Allegheny County (PAAC) has undertaken reconstruction of the 25-mile Pittsburgh rail system to modern light rail standards. The Stage I Light Rail Transit (LRT) project resulted in the reconstruction of a 13-mile system to light rail standards during the 1980s. The Stage II LRT project proposes reconstruction and double-tracking of the remaining 12 miles of the system consisting of the Overbrook, Library, and Drake trolley lines. The Stage II LRT project would reconstruct these three lines to modern LRT standards, double track the single track segments, reopen the closed Overbrook and Drake Lines, add approximately 2,400 park and ride lots, and purchase 28 new light rail vehicles.

In 1999, PAAC reconfigured its rail improvement program to prioritize program needs against available funding. The modified New Starts project, the Stage II LRT Priority Program, would reconstruct the Overbrook Line and a portion of the Library Line, and add the 2,400 park-and-ride spaces and 28 vehicles. The remainder of the Stage II LRT program would be built as funds become available. The estimated cost of the Priority Program is \$386.4 million (escalated dollars).

#### Status

FTA issued a Finding of No Significant Impact for the project in February 1996. The project is included in the financially constrained long-range transportation plan adopted by the Southwest Pennsylvania Regional Planning Commission, the Pittsburgh area Metropolitan Planning Organization. A Letter of No Prejudice was approved in January 2000 for \$130.1 million to allow construction and vehicle procurement to proceed. A Full Funding Grant Agreement (FFGA) between FTA and PAAC was executed in January 2001. The FFGA provides a commitment of \$100.2 million in Section 5309 New Starts funds to the Stage II LRT Reconstruction project. Final Design is substantially complete and all major construction contracts, including the vehicle contract, have been awarded. Per the FFGA, the Revenue Operation Date for the project is June 2004.

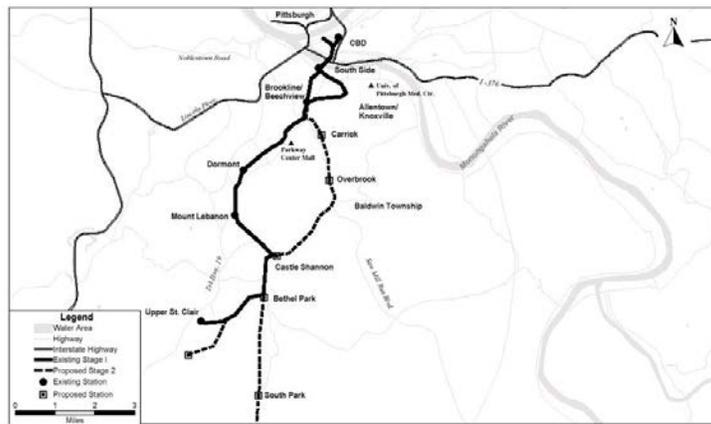
TEA-21 Section 3030(a)(98) authorizes the "Pittsburgh – Stage II Light Rail" for final design and construction. Through FY 2001, Congress has appropriated \$23.71 million in Section 5309 New Starts funds to the project.

**Locally Proposed Financing Plan**  
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal:</b>		
Section 5309 New Starts	\$100.2	\$23.71 million appropriated through FY 2001
Section 5309 Fixed Guideway Modernization	\$129.8	\$96.3 million appropriated through FY 2001
STP - Flexible Funds	\$3.8	
<b>State:</b>		
Commonwealth of Pennsylvania - State Bonds	\$48.7	
<b>Local:</b>		
PAAC - Act 26 Bonds	\$93.9	
Allegheny County - Capital Improvement Bonds	\$9.7	
<b>Total:</b>	<b>\$386.4</b>	

**Note:** Totals may not add due to rounding.

**Stage II LRT Reconstruction**  
Pittsburgh, Pennsylvania



# Portland, Oregon/Interstate MAX LRT Extension

## Interstate MAX LRT Extension

### Portland, Oregon

(November 2000)

#### Description

The Tri-County Metropolitan Transportation District of Oregon (Tri-Met) is proposing a 5.8-mile extension of its Light Rail Transit (LRT) system known locally as the Metropolitan Area Express (MAX). The proposed Interstate MAX line will extend existing LRT service northward from the Rose Quarter and the Oregon Convention Center, to North Portland neighborhoods, medical facilities, the Portland International Raceway and the Metropolitan Exposition Center. Goals of the alignment include complementing regional land use plans by connecting established residential, commercial, entertainment, and other major activity centers, and providing a key transportation link in the region's welfare-to-work programs. The LRT extension is estimated to cost \$350 million (escalated dollars) and carry 18,100 average weekday boardings, including 8,400 new riders, by 2020.

#### Status

The Federal Transit Administration (FTA) approved preliminary engineering on the 12-mile South-North LRT in April 1996. In February 1998, the Draft Environmental Impact Statement (DEIS) was completed for the project.

In November 1998, voters rejected an affirmation of a \$475 million General Obligation bond measure previously approved to fund construction of the South-North LRT. Consequently, Tri-Met re-evaluated alternative alignments and funding strategies to implement the system. A Supplemental DEIS for the north alignment of the proposed South-North LRT was completed in April 1999. In June 1999, Tri-Met passed a resolution endorsing capital funding for the Interstate MAX project and the City of Portland approved a resolution committing \$30 million to the project. The Final EIS on the Interstate MAX project was completed in October 1999, and a Record of Decision was issued in January 2000. Final design approval, coupled with pre-award authority, was given in February 2000. FTA and Tri-Met signed a Full Funding Grant Agreement (FFGA) in September 2000. The project will complete final design in early 2001. Construction activity has begun on utility relocation, with major project facilities' work to begin in 2001.

TEA-21 Section 3030(a)(66) authorizes the Portland South-North Corridor LRT (Interstate MAX) for final design and construction. Through FY 2001, Congress has appropriated \$7.42 million in Section 5309 New Starts funds for the project, with an additional \$8.96 million appropriated to the project, but not included in the scope of the FFGA.

## Locally Proposed Financing Plan

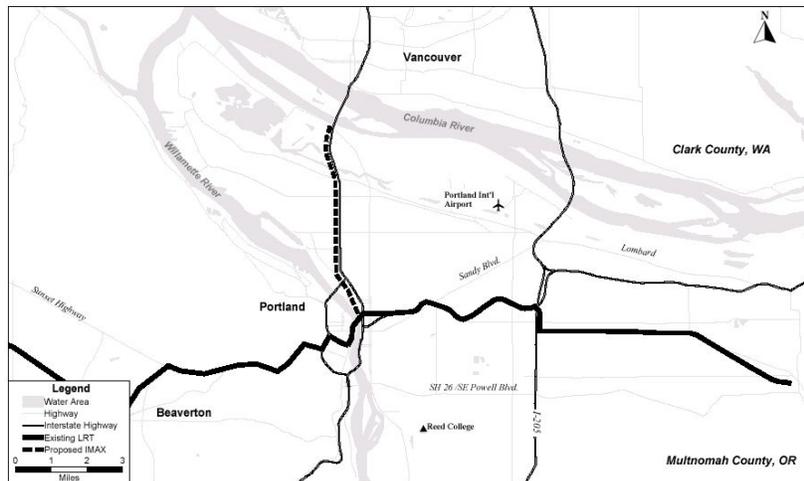
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts FFGA Commitment	\$257.5	\$7.42 million appropriated through FY 2001
STP	\$24.0	
<b>Local:</b>		
City of Portland	\$30.0	
Tri-Met Revenue Bonds	\$38.5	
<b>Total:</b>	<b>\$350.0</b>	

**Note:** An additional \$8.96 million was appropriated to the project in prior years, but was not included in the FFGA scope. This amount brings the total appropriated to \$16.41 million. Totals may not add due to rounding.

### Interstate MAX LRT Extension

Portland, Oregon



# Sacramento, California/South LRT Extension

## South LRT Extension

### Sacramento, California

(November 2000)

#### Description

The Sacramento Regional Transit District (RT) is developing an 11.3-mile light rail project on the Union Pacific right-of-way in the South Sacramento Corridor. RT has elected to synchronize the project to available State and local capital funds as well as to corresponding available operating funds. Phase 1 is a 6.3-mile Minimum Operable Segment (MOS) of the full project. The MOS would provide service between downtown Sacramento and Meadowview Road and is expected to capture 25,000 daily trips by the year 2015. The estimated capital cost of the MOS is \$222.0 million (escalated dollars).

#### Status

A Major Investment Study/Alternatives Analysis/Draft Environmental Impact Statement (EIS) for the project was completed in September 1994. The preferred alternative was selected in March 1995. The Final EIS was completed in February 1997. In March 1997, FTA issued a Record of Decision for the South Corridor MOS. In June 1997, FTA and RT entered into a Full Funding Grant Agreement (FFGA) committing \$111.2 million in Section 5309 New Starts funds for final design and construction. The final design phase of the project began in July 1997. Construction began in November 1999 and revenue service is projected to begin in September 2003. RT expects to begin preliminary engineering for the next segment (Phase 2) as soon as additional operating funds can be identified and secured.

TEA-21 Section 3030 (a)(71) authorized the South Sacramento Corridor for final design and construction. Through FY 2001, Congress has appropriated \$110.86 million in Section 5309 New Starts funds for the project of which \$76.0 million is covered under the FFGA.

#### Locally Proposed Financing Plan

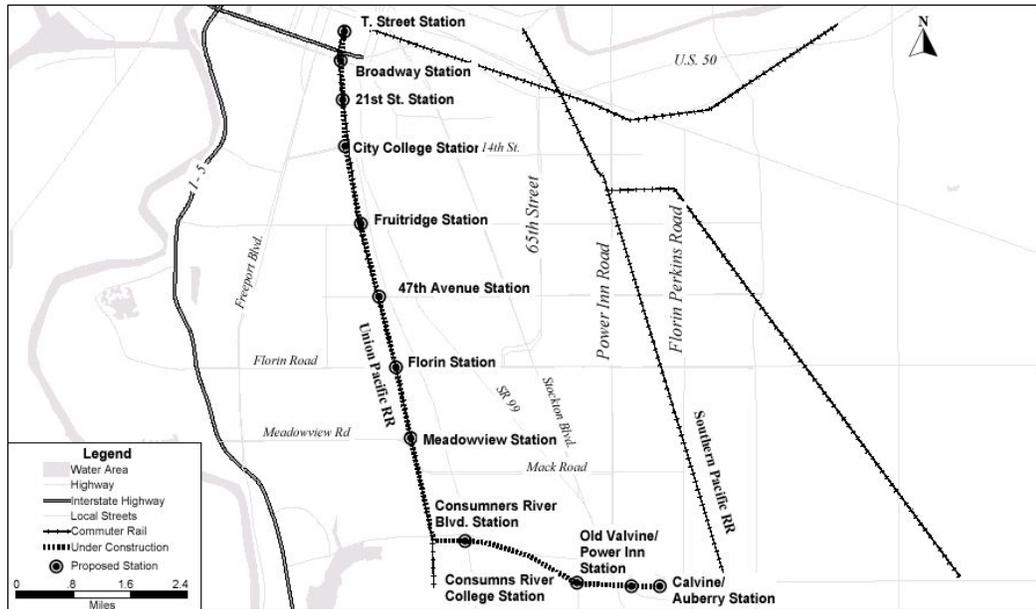
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: Section 5309 New Starts</b>	\$111.20	\$110.86 million appropriated through FY 2001
<b>State/Local:</b>	\$110.80	
<b>Total:</b>	<b>\$222.00</b>	

**Note:** Totals may not add due to rounding. Figures reflect an additional \$1.99 which was appropriated prior to award of the FFGA and was utilized for planning activities; this brings the total amount of Section 5309 funds to date for this project to \$112.93 million.

# South LRT Extension

Sacramento, California



Federal Transit Administration, 2001

# Salt Lake City, Utah/CBD to University LRT

## CBD to University LRT

### Salt Lake City, Utah

(November 2000)

#### Description

The Utah Transit Authority (UTA) is implementing a light rail transit (LRT) project extending 2.5 miles from the North/South LRT line in downtown Salt Lake City to Rice-Eccles Stadium on the University of Utah campus. The proposed University LRT line includes four stations and five light rail vehicles (LRV). The University LRT line was scaled back from the previously proposed 10.9-mile West-East LRT line that would have extended from the airport to the University. LRVs will operate primarily at-grade on tracks laid in existing city streets and on property owned by Salt Lake City, Utah Department of Transportation and University of Utah. UTA estimates ridership at 7,600 boardings per average weekday in 2020. The University LRT is being planned to significantly improve access to jobs, educational opportunities, health care and housing throughout the 400 South Corridor.

#### Status

The Wasatch Front Regional Council (WFRC) completed a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) in July 1997 on the 10.9-mile West-East Corridor. FTA approved entry into preliminary engineering on the West-East LRT in January 1998. FTA approved the Airport to University – West/East Final EIS in March 1999. In December 1999, the FEIS was revised, providing for an initial line between downtown Salt Lake City and Rice-Eccles Stadium on the University of Utah campus. The revision also included a change in alignment from side running LRT to center running LRT along 400 South from Main Street to 200 East. FTA issued a Record of Decision for the Airport to University – West/East LRT in December 1999. FTA approved final design for the Central Business District to University LRT in March 2000.

FTA and UTA signed a Full Funding Grant Agreement (FFGA) with in August 2000 to implement the extension to the University. The project is scheduled for completion in November 2002 – per the FFGA. However, UTA plans a Revenue Operations Date in time to support the 2002 Winter Olympic Games.

TEA-21 Section 3030(a)(72) authorizes the Salt Lake City – Light Rail (Airport to University of Utah) for final design and construction. Through FY 2001, Congress has appropriated \$1.98 million in Section 5309 New Starts funds for the project, with an additional \$4.96 million appropriated to the project, but not included in the scope of the FFGA.

## Locally Proposed Financing Plan

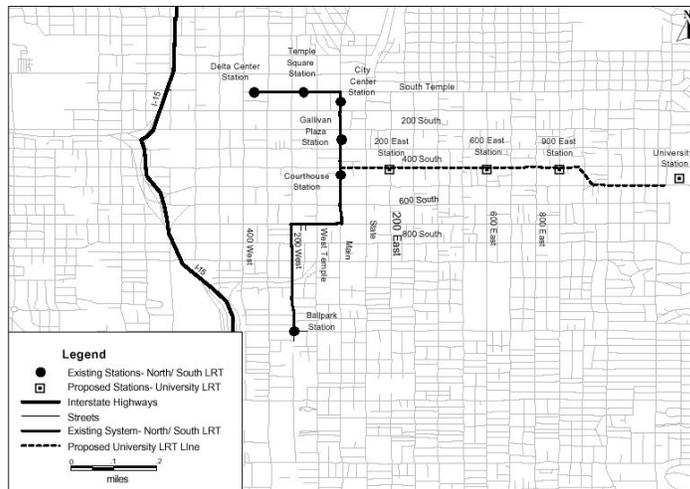
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts FFGA Commitment	\$84.6	\$1.98 million appropriated through FY 2001
Section 5307 Urbanized Area Formula Funds *	\$11.9	
<b>State/Local:</b>		
Sales Tax Revenue	\$21.7	
Donated Right-of-Way	\$0.3	
<b>Total:</b>	<b>\$118.5</b>	

**Note:** Totals may not add due to rounding. An additional \$4.96 million was appropriated for the project in prior years, but was not included in the FFGA scope. This amount brings the total amount appropriated to \$6.95 million.

\* Section 5307 Funds are transferred CMAQ funds.

### CBD to University LRT Salt Lake City, Utah



# Salt Lake City, Utah/North-South LRT

## North-South LRT

### Salt Lake City, Utah

(November 2000)

#### Description

The Utah Transit Authority (UTA) has implemented a 15-mile light rail transit (LRT) line from downtown Salt Lake City along State Street then paralleling I-15 to suburban areas to the south. The line opened for regular weekday service on December 6, 1999. The South LRT line operates at-grade on city streets in downtown Salt Lake City (two miles) and on a railroad right-of-way (13 miles) owned by UTA to the suburban community of Sandy. The total cost of this project is estimated at \$312.49 million (escalated dollars). Although the South LRT was estimated to carry 14,000 passengers per day in 2000 (opening year) and 23,000 passengers per day in 2010, current ridership has already exceeded 26,000 weekday riders. A total of 21 light rail vehicles have been ordered and delivered for the project. The South LRT project is one component of the Interstate 15 corridor improvement initiative, which includes reconstruction of a parallel segment of I-15.

#### Status

FTA issued the Final Environmental Impact Statement (FEIS) for the project in September 1994 and signed the Record of Decision in November 1994. In August 1995, FTA and UTA entered into a Full Funding Grant Agreement (FFGA) for \$237.39 million in Section 5309 New Starts funds. TEA-21 Section 3030(a)(74) authorized the South LRT for final design and construction. Through FY 2001, Congress has appropriated \$236.68 million for right-of-way acquisition, engineering, design and construction activities contained in the scope of the FFGA. An additional \$6.60 million in Section 5309 New Starts funds was appropriated to the FFGA.

Regular service on the line commenced on December 6, 1999. The system has been well received with ridership approaching 20,000 daily passengers. Construction is in the closeout phase.

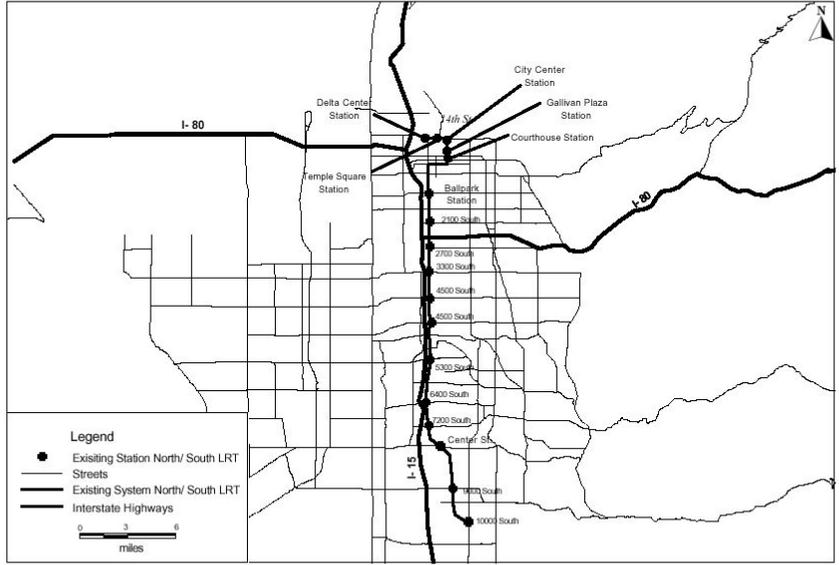
#### Locally Proposed Financing Plan

(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: Section 5309 New Start</b>	\$237.39	\$236.68 million appropriated through FY 2001
<b>Federal: Section 5309 Bus</b>	\$4.00	
<b>Local:</b>	\$71.10	
<b>Total:</b>	<b>\$312.49</b>	

**Note:** Totals may not add due to rounding. Appropriations include \$6.60 million appropriated prior to the FFGA.

### North - South LRT Salt Lake City, Utah



Federal Transit Administration, 2001

# San Francisco, California/BART Extension to San Francisco International Airport

## BART Extension to San Francisco International Airport

**San Francisco, California**

(November 2000)

### Description

The Bay Area Rapid Transit (BART) and San Mateo County Transit District (SamTrans) are constructing an 8.7-mile, 4-station, BART extension that proceeds southeast from the Colma BART Station through the cities of Colma, South San Francisco and San Bruno, and then continues south along the Caltrain right-of-way to the city of Millbrae. Approximately, 1.5 miles north of the Millbrae Avenue intermodal terminal, an east-west aerial "wye" (Y) stub will service the San Francisco International Airport (SFIA). The project is currently estimated by FTA to cost up to \$1.510 billion (escalated dollars). This total includes an unfunded \$27 million Capital Reserve Account (CAPRA) and \$113 million in civil works on airport property provided by the SFIA. FTA's commitment of \$750.0 million to the project remains unchanged. Ridership is projected to be 73,789 average weekday passengers by 2010, including approximately 17,800 daily trips by air travelers and airport employees.

### Status

An Alternatives Analysis/Draft Environmental Impact Statement (DEIS)/Draft Environmental Impact Report (DEIR) was completed in 1992, resulting in a locally preferred alternative. New alignments were later evaluated and, in April 1995, BART and SamTrans revised the preferred alternative. Due to MTC and Congressional direction to evaluate lower cost options, an aerial design option into the Airport was evaluated in a Focused Re-circulated DEIR/Supplemental #2 DEIS. The Final EIS was completed in June 1996 and a Record of Decision (ROD) was issued in August 1996.

On June 30, 1997, FTA entered into a Full Funding Grant Agreement (FFGA) for the BART/SFO Extension for \$750 million in Federal Section 5309 New Starts funds. TEA-21 Section 3030(a)(79) authorized the BART to SFO project for final design and construction.

Through FY 2001, \$296.45 million has been appropriated to the BART-SFO Extension.

The BART-SFO project is participating in the FTA Turnkey Demonstration Program, initiated under the Intermodal Surface Transportation Efficiency Act to determine if the turnkey (design/build) approach will reduce implementation time and cost. The first BART-SFO contract for Site Preparation and Utility Relocation was awarded on July 24, 1997. The main contract for construction of the line, trackwork, and systems, the first of the four design-build contracts, was given notice-to-proceed on May 4, 1998. The remaining three design-build contracts, for the construction of the South San Francisco, San Bruno and Millbrae stations have also been awarded. The Revenue Operation Date for the BART-SFO extension is now July 1, 2002.

The San Francisco International Airport (SFIA) is a major partner in this extension project although the airport work is outside the scope of the FFGA. The activities to be designed and constructed on the airport property consist mainly of construction of structures and facilities and the installation of related equipment. These activities are being funded, designed, and constructed by SFIA for BART.

## Locally Proposed Financing Plan

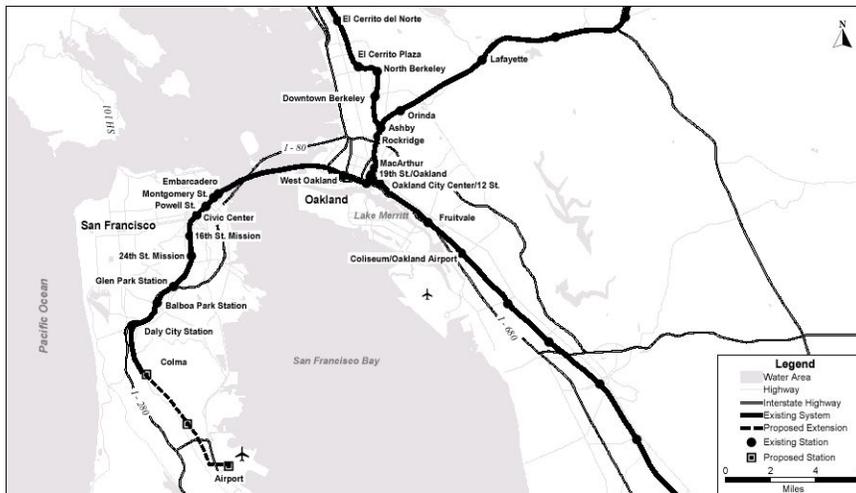
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Start</b>	\$750.00	\$296.45 million appropriated through FY 2001
<b>State:</b>	\$152.00	
<b>Local:</b>	\$468.2	
<b>Subtotal (Federal Project):</b>	<b>\$1,370.2</b>	
<b>San Francisco International Airport</b>	\$113.00	
<b>Subtotal:</b>	<b>\$1,483.2</b>	
<b>Available CAPRA</b>	\$27.00	
<b>Total Project with CAPRA:</b>	<b>\$1,510.2</b>	

**Note:** Totals may not add due to rounding.

### BART Extension to San Francisco International Airport

San Francisco, California



Federal Transit Administration, 2001

# St. Louis, Missouri Metropolitan Area/MetroLink St. Clair Extension

## MetroLink St. Clair Extension

### St. Louis, Missouri Metropolitan Area

(November 2000)

#### Description

The Bi-State Development Agency (Bi-State) is planning a 26-mile light rail line between downtown East St. Louis, Illinois, and the Mid America Airport in St. Clair County. The project will extend the MetroLink light rail project that opened in July 1993. The adopted alignment generally follows the former CSXT railroad right-of-way from East St. Louis to Belleville, Illinois, serving the Southwest Illinois College - SWIC - (formerly known as Belleville Area College), Scott Air Force Base and Mid America Airport. A 17.4-mile Minimum Operable Segment (MOS) terminates at SWIC. The MOS includes eight stations (seven with park and ride lots), 20 new light rail vehicles, and a new light rail vehicle maintenance facility in East St. Louis, Illinois. The MOS is estimated to cost \$339.2 million (1996 dollars), and scheduled to open for service in 2001.

#### Status

The East-West Gateway Coordinating Council (the MPO) completed a Major Investment Study and Draft Environmental Impact Statement (DEIS) for the project in 1995. A Preliminary Engineering/Final EIS for the full 26-mile project was completed in August 1996 and a Record of Decision was issued in September 1996. Section 5309 New Starts funds were made available in October 1996 to provide design and construction as far as BAC and a Full Funding Grant Agreement (FFGA) was awarded for that segment on October 17, 1996. The agreement authorized Bi-State to design and construct the MOS to SWIC, with provisions for extending the system to Mid-America Airport should funding become available at a later date.

The FFGA awarded by FTA provided a commitment of \$243.93 million in Section 5309 New Starts funds contributing to the total estimated cost of \$339.20 million (1996 dollars). The St. Clair County Transit District is providing \$95.3 million in local funds from a ¾-cent county sales tax.

The final design phase of project development has been completed for two additional segments of the entire St. Clair County Corridor – Phase IIB, which extends the line 3.5 miles from SWIC to Scott Air Force Base, and Phase IIC, which further extends the system by 5.4 miles to Mid America Airport.

Through FY 2001, Congress has appropriated \$212.84 million in Section 5309 New Starts funds for the FFGA-covered MOS portion of the project. An additional \$8.5 million in Section 5309 New Starts funds were previously appropriated, but not included in the FFGA scope.

## Locally Proposed Financing Plan

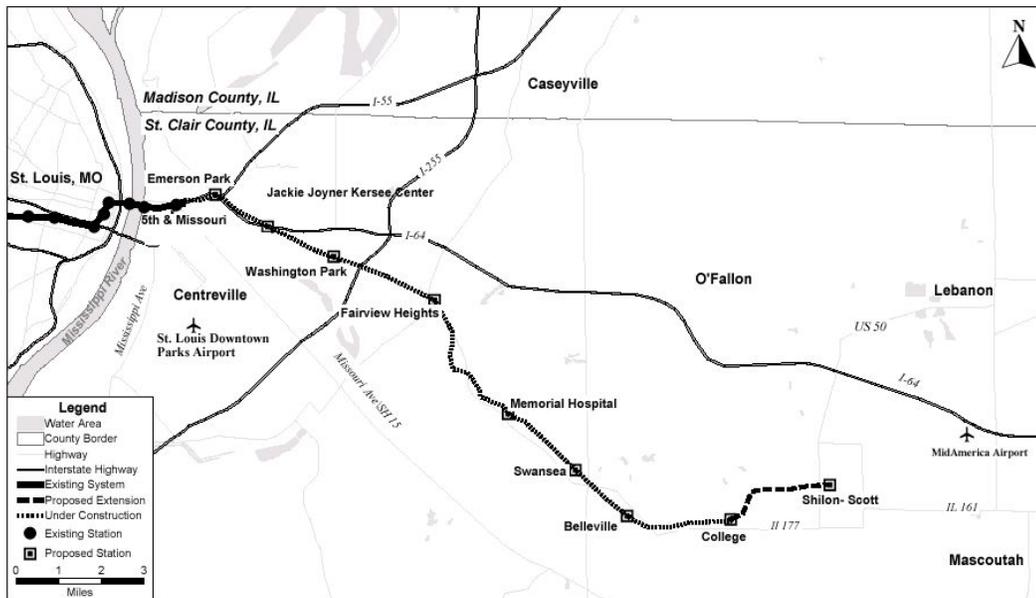
(Reported in \$1996)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Starts FFGA Commitment</b>	\$243.93	\$212.84 million appropriated through FY 2001
<b>Local: ¾-% Sales Tax</b>	\$95.27	
<b>Total:</b>	<b>\$339.20</b>	MOS Only

**Note:** Totals may not add due to rounding. An additional \$8.5 million in Section 5309 New Starts funds was appropriated to the project in prior years, but was not included in the FFGA scope. This brings the total amount appropriated to the Metrolink St. Clair Extension to \$221.47 million.

## Metrolink St. Clair Extension

St. Louis, Missouri Metropolitan Area



# San Diego, California/Mission Valley East LRT Extension

## Mission Valley East LRT Extension

**San Diego, California**

(November 2000)

### Description

The Metropolitan Transit Development Board (MTDB) has begun construction of the 5.9-mile Mission Valley East Light Rail Transit (LRT) extension of the agency's Blue Line. The project will extend the existing system from its current termini east of Interstate 15 to the City of La Mesa, where it will connect to the existing Orange Line near Baltimore Drive. The project also includes the construction of four new stations at Grantville, San Diego State University, Alvarado Medical Center and 70<sup>th</sup> Street, and will also serve two existing stations at Mission San Diego and Grossmont Center. The project includes elevated, at-grade and tunnel portions and provides two park-and-ride lots and a new access road between Waring Road and the Grantville Station. Total capital costs are estimated at \$431 million (escalated dollars). The project is expected to serve approximately 10,800 average weekday boardings in the year 2015. Revenue operations are scheduled to begin on December 31, 2005.

### Status

A Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) was completed in May 1997. The Locally Preferred Alternative was selected by MTDB in October 1997, with concurrence from the San Diego Association of Governments (the local Metropolitan Planning Organization). FTA approval to enter the preliminary engineering (PE) phase of project development was granted in March 1998. PE was completed in July 1998. The abbreviated schedule for PE was possible due to the extensive public involvement and detailed analyses undertaken during the planning stages, streamlining much of the work that would traditionally have been undertaken in the PE phase. The Final EIS was completed, and a Record of Decision was issued by FTA in August 1998. FTA approval to enter final design was granted in October 1998. FTA and MTDB executed a Full Funding Grant Agreement on June 22, 2000, providing a total of \$330 million in Section 5309 New Starts funds to the project.

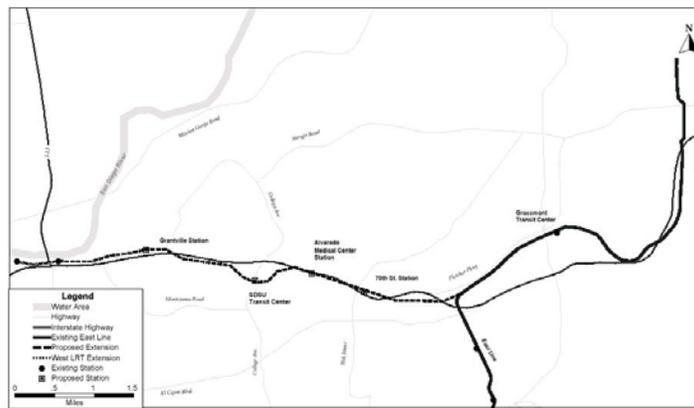
TEA-21 Section 3030(a)(76) authorized the Mission Valley East Corridor for final design and construction. Through FY 2001, Congress has appropriated \$53.31 million in Section 5309 New Starts funds to the project.

**Locally Proposed Financing Plan**  
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal:</b>		
Section 5309 New Starts	\$330.0	\$53.31 million appropriated through FY 2001
Flexible Funds (CMAQ)	\$13.7	
<b>State:</b>		
TCI	\$4.1	
TSM	\$0.8	
STIP	\$62.9	
<b>Local:</b>		
TransNet Sales Tax	\$19.5	<i>\$1.0 million in-kind ROW donation not included in total</i>
<b>Total:</b>	<b>\$431.0</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

**Mission Valley East LRT Extension**  
San Diego, California



Federal Transit Administration, 2001

# San Jose, California/Tasman West LRT

## Tasman West LRT

### San Jose, California

(November 2000)

#### Description

The Santa Clara County Transit District (SCCTD) originally developed a 12.4-mile extension to the existing light rail line, which would provide service from northeast San Jose to Capitol/Hosletter and downtown Mountain View. The total project includes 19 stations and 35 light rail vehicles. The State of California Supreme Court's invalidation of the Measure A sales tax led to the development of new financing alternatives and the separation of the project into two phases, Phase I (West Extension) and Phase 2 (East Extension).

The Phase I - West Extension consists of 7.6 miles of surface LRT from the northern terminus of the Guadalupe LRT in the city of Santa Clara, west through Sunnyvale, to the CalTrain commuter rail station in downtown Mountain View. The project includes 11 stations and is double tracked, except for some single tracking in Mountain View. The Phase I - West Extension has a total cost of \$325.00 million (escalated dollars). Ridership on the West Extension is projected to reach 7,500 per day by 2005.

#### Status

Section 3032 of Intermodal Surface Transportation Efficiency Act directed that the Tasman Corridor Project be included in a program of interrelated projects as part of the San Francisco Bay Area Rail Extension Program.

Preliminary engineering on the Tasman Corridor was completed in August 1992. In July 1996, FTA and SCCTD entered into a Full Funding Grant Agreement (FFGA) with a commitment of \$182.75 million in Federal Section 5309 New Starts funds for the West Extension. Construction of the Tasman West LRT Extension has been completed. Originally anticipated to be open for revenue operations by December 2000, the extension opened on December 17, 1999, a year ahead of schedule.

TEA-21 Section 3030(a)(80) authorized the San Jose Tasman Corridor Light Rail project for final design and construction. Through FY 2001, Congress has appropriated \$182.64 million of Section 5309 New Starts funds to the project. The East Extension is being completed with State and local Measure A funding.

**Locally Proposed Financing Plan**  
(Reported in \$YOE)

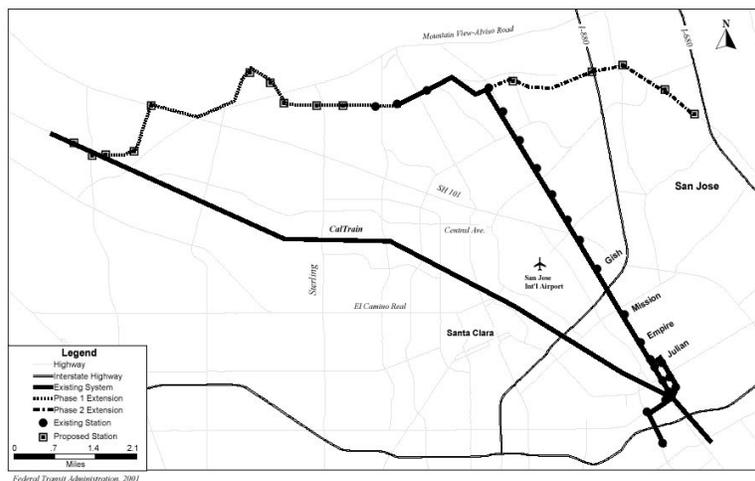
<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: Section 5309 New Start FFGA Commitment</b>	\$182.75	(\$182.64 million appropriated through FY 2001)
<b>Federal: Congestion Relief Program*</b>	\$37.25	
<b>Federal: CMAQ</b>	\$15.92	
<b>Federal: STP</b>	\$8.79	
<b>State:</b>	\$54.02	
<b>Local:</b>	\$26.28	
<b>Total:</b>	<b>\$325.00</b>	Phase 1 West Extension

**Note:** Totals may not add due to rounding.

\* California Flexible Congestion Relief Program reflects a State administered allocation of Federal Flexible Funds.

**Tasman West LRT**

San Jose, California



# San Juan, Puerto Rico/Tren Urbano

## Tren Urbano

### San Juan, Puerto Rico

(November 2000)

#### Description

The Puerto Rico Department of Transportation and Public Works (DTPW), through its Highway and Transportation Authority (PRHTA), is constructing a 10.7-mile (17.2 km) double-track guideway between Bayamon Centro and the Sagrado Corazon area of Santurce in San Juan. Approximately 40 percent of the alignment is at or near grade. The remainder, aside from a short below-grade segment in the Centro Medico area as well as an underground segment through Rio Piedras, is generally elevated above roadway rights-of-way. The project includes 16 stations and a vehicle and right of way maintenance/storage facility.

The original capital cost for the project as specified in the Full Funding Grant Agreement (FFGA) totals \$1,250.0 million (escalated dollars). The cost of the project is now estimated at \$1,653.6 million. The Tren Urbano project is expected to carry 113,300 riders per day in 2010.

#### Status

In 1993, the Federal Transit Administration (FTA) selected Tren Urbano as one of the Turnkey Demonstration Projects under the Intermodal Surface Transportation Efficiency Act (ISTEA). The Tren Urbano project is being constructed and will be operated under a turnkey procurement in order to expedite the implementation of the project and to develop the institutional capability necessary for its operation.

The Tren Urbano Phase 1 environmental review process was completed in November 1995 and included 14 stations. The alignment design allowed for the future addition of two stations, one in Rio Piedras and one in Hato Rey. A Record of Decision (ROD) was issued in February 1996. In March 1996, FTA entered into a FFGA for the Tren Urbano project providing a Federal commitment of \$307.4 million in Section 5309 New Starts funds out of a total project cost of \$1.250 billion. The cost of the project is now estimated at \$1,653.6 million.

Subsequent to the FFGA, three environmental assessments were prepared which revised the alignment at the Villa Nevarez station and added new stations, in Rio Piedras at the University of Puerto Rico, and in Hato Rey at Domenech Street. Findings of No Significant Impact (FONSI) by the FTA were issued for these three environmental assessments in November 1996, February 1997, and July 1997, respectively.

An amendment to the FFGA signed in July 1999, added the two stations identified in the environmental process as well as 10 additional railcars. The amendment also added \$141.0 million in Section 5307 funds and \$259.9 million in Flexible funding. The new cost estimate for the project encompasses the cost for extended project management and construction management services, for advance design development activities and for anticipated costs for claims and contingencies.

Local revenues from the PRHTA are providing the local funding share for the project. All operating costs, as well as debt service on PRHTA bonds, are included as part of the PRHTA annual budget, established in accordance with standard PRHTA budget procedures.

The project was also awarded a TIFIA (Transportation Infrastructure Finance and Innovation Act of 1998 - part of TEA-21) loan of \$300.0 million in recognition of the national and regional significance of the project.

The project is well into the construction phase of development. During 1996 and 1997, seven design-build contracts were awarded for different segments of the Tren Urbano Phase 1 system. The Systems Test Track and Turnkey contract, awarded in August 1996, provided for the purchase of rolling stock, design and installation of all systemwide components, construction of one of the civil segments, and operation and maintenance of Tren Urbano Phase 1 for an initial period of five years. The project is now expected to enter revenue service in May 2002.

TEA-21 Section 3030(a)(81) authorizes the Tren Urbano project for final design and construction. Through FY 2001, Congress has appropriated \$153.96 million in Section 5309 New Starts funds for the project, with an additional \$4.96 million appropriated to the project, but not included in the scope of the FFGA.

### Locally Proposed Financing Plan

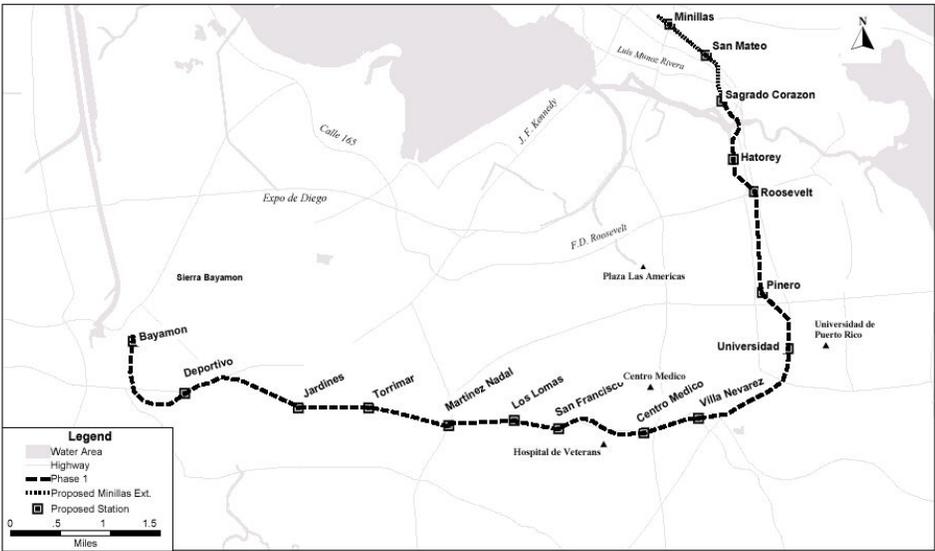
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: Section 5309 New Starts FFGA Commitment</b>	\$307.4	\$153.96 million appropriated through FY 2001
<b>Federal: Section 5307 Urbanized Area Formula Funds</b>	\$141.0	
<b>Federal: Flexible Funding</b>	\$259.9	
<b>Local: Local Funding</b>	\$945.3	
<b>Total:</b>	<b>\$1,653.6</b>	

**Note:** An additional \$4.96 million was obligated to the project in prior years, but was not included in the FFGA scope. This amount brings the total appropriated to \$158.92 million. Totals may not add due to rounding.

# Tren Urbano

San Juan, Puerto Rico



Federal Transit Administration, 2001

# Seattle, Washington/Central Link LRT (MOS-1)

## Central Link LRT (MOS-1)

### Seattle, Washington

(April 2001)

#### Description

Sound Transit (Central Puget Sound Regional Transit Authority) is planning a 23.5-mile Central *Link* light rail transit (LRT) line running north to south from Northgate, through downtown Seattle, Southeast Seattle and the cities of Tukwila and Seatac, Washington. *Link* will consist of 23 stations, four new park-and-ride lots, and one existing lot. The Locally Preferred Alternative (LPA) consists of a 20-mile alignment from the NE 45<sup>th</sup> Street station in Seattle to the S. 200<sup>th</sup> Street station in the City of SeaTac. Twenty-one (21) stations and three new park-and-ride lots (1,600 spaces) will constitute the LPA. The system would operate on existing and new right-of-way (ROW), including the existing 1.6-mile Downtown Seattle Transit Tunnel. Sound Transit estimates that a total of 156,400 daily riders on the 23.5-mile system in 2020.

Sound Transit proposes to implement the LRT system in several Minimum Operable Segments (MOS). The initial segment (MOS-1, also known as University Link) extends 7.2 miles from the Northeast 45<sup>th</sup> Street Station southward to the South Lander Street Station. The alignment includes 4.5 miles of new and exclusive ROW, 1.3 miles of exclusive transit ROW in the existing Downtown Seattle Transit Tunnel, and 1.4 miles of ROW reconfigured from an existing busway south of Downtown. Sound Transit estimates average weekday boardings of 87,200 for MOS-1 in the year 2020, including 39,800 daily new riders. Total capital costs are estimated at \$2,603 million (escalated dollars).

The *Link* LRT system is one element of Sound Transit's voter-approved ten year \$3.9 billion (\$1995) Sound Move regional transit plan, which also includes the implementation of a 2-mile LRT line in downtown Tacoma; an 82-mile Sounder commuter rail system operating between Lakewood and Everett; 20 new regional express bus routes; 14 High Occupancy Vehicle (HOV) direct access ramps (providing access to over 100 miles of existing HOV lanes); 14 new park-and-ride lots and nine transit centers; and other service improvements.

#### Status

The Sound Transit Board adopted the *Sound Move* regional transit plan in May 1996. Voters approved \$3.9 billion in local funding for implementation of the plan in November 1996. A Major Investment Study of *Sound Move's* services was completed in March 1997. *Sound Move* is included in the Puget Sound Regional Council's (the area's MPO) Transportation Plan and Regional Transportation Improvement Program.

FTA approved the initiation of preliminary engineering on the *Link* LRT in July 1997. A Draft Environmental Impact Statement (EIS) was published in December 1998. The Final EIS was completed in November 1999. FTA issued a Record of Decision in January 2000. The Sound Transit Board formally adopted the 7.2-mile initial MOS for Federal participation in November 1999. FTA approved the project's advancement 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 to \$2.6 billion and rescheduled the revenue operations date to November 2009. In January 2001, the Sound Transit Board adopted the revised budget and schedule. FTA entered into a Full Funding Grant Agreement (FFGA) for MOS-1 in January 2001, committing \$500 million in Section 5309 New Starts funds to the project.

In April 2001, the DOT Office of Inspector General issued an Interim Report recommending that the Secretary hold funds and funding decisions for the project in abeyance until a specific set of actions related to cost estimation, project scope, cost control, and overall financing plans for the Link LRT project have been addressed. In April 2001, DOT and FTA immediately began implementing these actions.

TEA-21 Section 3030(a)(85) authorizes the Seattle Sound Move Corridor (*Link* and *Sounder*), of which link is one element, for final design and construction. Through FY 2001, Congress has appropriated \$90.97 million for the *Link* LRT.

### Locally Proposed Financing Plan

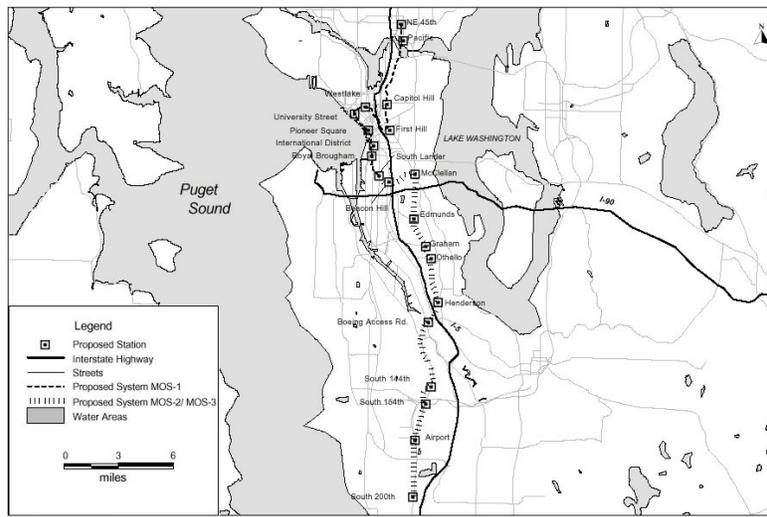
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Start</b>	\$500.0	\$90.97 million appropriated through FY 2001 for the entire <i>Link</i> system
<b>Local: Sales and Use Tax and MVET, and Bonds</b>	\$2,103.0	
<b>Total:</b>	<b>\$2,603.0</b>	

**Note:** Totals may not add due to rounding.

This total reflects the projected cost of MOS-1.

### Central Link LRT (MOS-1) Seattle, Washington



Federal Transit Administration, 2001

# Washington, D.C. Metropolitan Area/Largo Metrorail Extension

## Largo Metrorail Extension

**Washington, DC**

(November 2000)

### Description

The Washington Metropolitan Area Transit Authority (WMATA) is the lead local agency in management and development of a proposed 3.1-mile heavy rail extension of Metrorail Blue Line. The proposed Largo Metrorail Extension will be from the existing Addison Road Station to Largo Town Center, located just beyond the Capital Beltway in Prince George's County, Maryland. The project follows an alignment that has been preserved as a rail transit corridor in the Prince George's County Master Plan. The 3.1-mile alignment includes at-, above- and below-grade segments, and will be underground or covered between Central Avenue and the Capital Beltway. Two new stations will be constructed at Summerfield and Largo Town Center. The stations will provide a total of 2,700 park-and-ride spaces, including "kiss-and-ride" spaces and bus bays. In addition, existing WMATA and Prince George's County bus routes will be re-routed to serve the new stations. Shuttle bus service between the new stations and FedEx Field will also be provided. The project will also provide direct service to USAir Arena, a former major sports complex that will be redeveloped for entertainment and retail uses. The Maryland Mass Transit Administration managed the project through preliminary engineering; WMATA is undertaking final design and construction of the design-build project. Total capital costs are estimated at \$433.9 million (escalated dollars), including the procurement of 18 heavy rail cars, and will be entirely funded by the State of Maryland. Average weekday boardings are estimated at 28,500 in 2020, including 16,400 daily new riders.

### Status

The project is included in the National Capital Region's Constrained Long Range Plan.

Preliminary engineering for the Largo Metrorail Extension was initiated in February 1996 and completed in June 2000. A Draft Environmental Impact Statement (DEIS) was completed in October 1996. WMATA's Board of Directors approved the Largo Extension as an addition to the 103-mile Metrorail Adopted Regional System in February 1997, applying WMATA Compact funding arrangements, contingent upon requisite FTA approvals. A Final EIS was completed in September 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 a Full Funding Grant Agreement (FFGA) in December 2000, which committed \$260.3 million in Section 5309 New Starts funds to the project. The non-Federal share for the project will be provided by the State of Maryland through a funding agreement, which was executed on May 26, 2000. Per the FFGA, revenue operations are scheduled to begin on December 31, 2004.

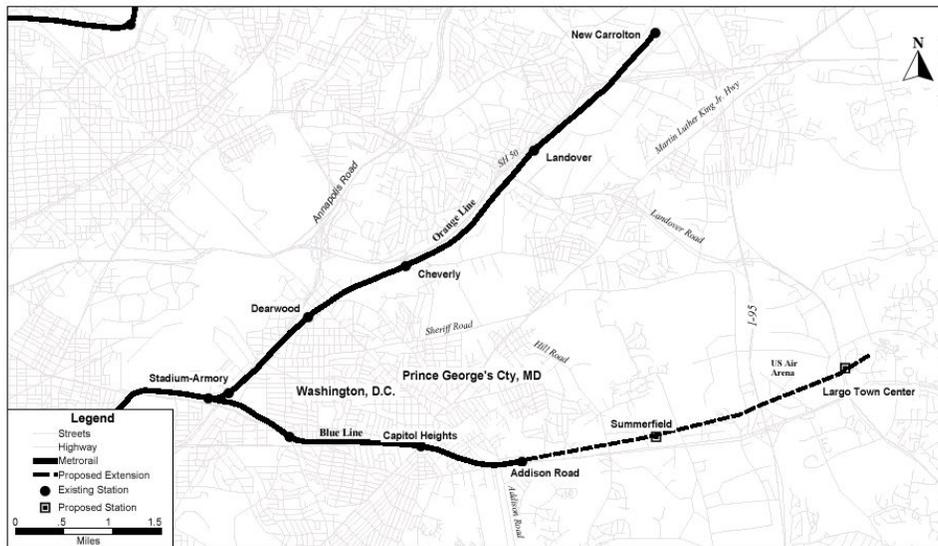
TEA-21 Section 3030(a)(94) authorizes the "Washington, DC – Largo Extension" for final design and construction. Through FY 2001, Congress has appropriated \$13.07 million in Section 5309 New Starts funds to the project.

**Locally Proposed Financing Plan**  
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: Section 5309 New Start</b>	\$260.3	\$13.07 million appropriated through FY 2001
<b>State: Maryland DOT/Transportation Trust Fund</b>	\$173.6	
<b>Total:</b>	<b>\$433.9</b>	

**Note:** Totals may not add due to rounding.

**Largo Metrorail Extension**  
Washington, D.C. Metropolitan Area



Federal Transit Administration, 2001

## Projects Pending Full Funding Grant Agreements

# Baltimore, Maryland/Central LRT Double Track

## Central LRT Double Track

Baltimore, Maryland

(November 2000)

### Description

The Maryland Mass Transit Administration (MTA) proposes to construct 9.4 miles of double track to upgrade designated areas of the Baltimore Central Light Rail Line (CLRL) that are currently single track. The CLRL is 29 miles long and operates from Hunt Valley in the north to Cromwell/Glen Burnie in the south, serving Baltimore City and Baltimore and Anne Arundel Counties, with extensions providing service to Amtrak at Penn Station and the Baltimore-Washington International Airport.

The project will double track eight sections of the CLRL between Warren Road and Cromwell/Glen Burnie Station. Although no new stations are required, the addition of a second track will require construction of additional station platforms and four stations. Once the project is complete and traffic signal pre-emption on Howard Street has been installed, the project will reduce headways from 17 minutes to 8 minutes in the peak period, and to 12 minutes in the off-peak, and also improve operational reliability. Other elements in the double track project include bridge and crossing improvements, installation of a bi-directional signal system, and catenary and other equipment and systems. The double tracking will be constructed almost entirely in existing right-of-way. The MTA estimates the total cost of these improvements at \$153.7 million (escalated dollars). In 2020, average weekday boardings are estimated at 44,000, with an estimated 6,800 daily new riders.

### Status

The original Central Light Rail Line was built entirely with local funds. The line began operations in 1992 predominately as single track. MTA subsequently examined the feasibility and environmental impacts and benefits of double tracking eight sections. Three Federally funded extensions of the CLRL to Hunt Valley, Penn Station and Baltimore- Washington International Airport, were completed in 1998. The double track project was adopted by the Baltimore Metropolitan Council and included in its financially constrained long-range transportation plan in 1993.

In January 1999, FTA approved Maryland MTA's request to enter preliminary engineering (PE). The project has been divided into two segments to facilitate environmental review. An Environmental Assessment for the southern segment, Cromwell Station to Hamburg Street, was completed with FTA's issuance of a Finding of No Significant Impact (FONSI) in July 2000. FTA approved entry into final design for the southern segment in August 2000. The PE/environmental review phase for the northern segment, 28<sup>th</sup> Street to Warren Road, was completed with FTA's issuance of a FONSI in November 2000. MTA has requested FTA approval for entry into final design for the northern segment of the CLRL. MTA is also preparing a request for a Full Funding Grant Agreement for the entire CLRL double track project.

TEA-21 Section 3030(a)(42) authorizes the "Maryland – Light Rail Double Track" for final design and construction. Section 3030(g)(1)(C) specifies that the "Baltimore- Washington Transportation Improvements Program" projects will be funded at an 80 percent Federal share, comparing the

aggregate expenditure of State and local funds, including highway funds, provided by the State of Maryland for all phases of the Central Corridor Light Rail project. Through FY 2001, Congress has appropriated \$8.62 million in Section 5309 new starts funds to the project.

## Locally Proposed Financing Plan

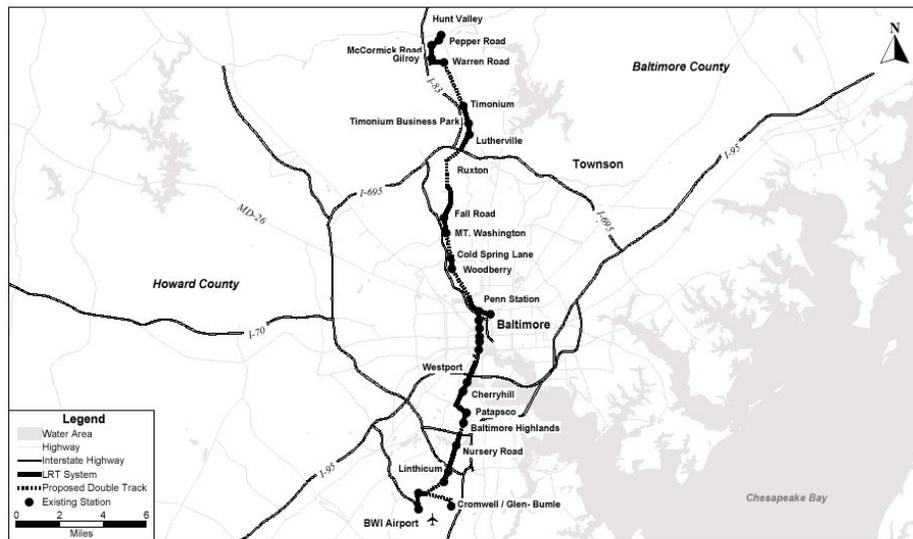
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Start</b>	\$120.00	\$8.62 million appropriated through FY 2001
<b>Federal: Section 5307 Urbanized Area Formula Funds</b>	\$3.00	N/A
<b>State: Maryland DOT/Transportation Trust Fund</b>	\$30.70	N/A
<b>Total</b>	<b>\$153.70</b>	

**Note:** Totals may not add due to rounding.

## Central LRT Double Track

Baltimore, Maryland



# Chicago, Illinois/South West Corridor Commuter Rail

## South West Corridor Commuter Rail

**Chicago, Illinois**

(November 2000)

### Description

Metra, the commuter rail division of Regional Transportation Authority (RTA) of Northeastern Illinois, is proposing to construct 12 additional miles to an existing 29-mile corridor connecting Union Station in downtown Chicago to 179<sup>th</sup> Street in Orland Park, Illinois. The project would extend commuter rail service from Orland Park southwest to Manhattan, Illinois. The project also includes the construction of three miles of a second mainline track, two additional stations, parking facilities and multiple track, signal and station improvements. In addition, two existing rail yards would be expanded, a third rail yard would be constructed and several railroad bridges would be rehabilitated. Metra also plans to purchase two diesel locomotives and 13 bi-level passenger cars. The project also includes the relocation of the Union Station terminal in downtown Chicago to the LaSalle Street Station, also in Chicago. Total capital cost for the South West Corridor improvements are estimated at \$218.7 million (escalated dollars). Metra estimates that 13,800 average weekday boardings, including 7,600 daily new riders, will use the full South West Corridor line (including the 11-mile extension) in the year 2020.

### Status

In April 1997, Metra initiated a Major Investment Study (MIS) for the South West Corridor (SWC). The purpose of the MIS was to analyze the ability and cost effectiveness of various alternative investment strategies to serve the growing need for travel along the corridor to employment in the Chicago central business district. The MIS was completed in August 1998. Based on the results of the MIS, Metra selected Rail Alternative R1 as the Locally Preferred Alternative, which provides for the upgrade of commuter rail service in the SWC with an extension to Manhattan, Illinois. The LPA was included in the Chicago Area Transportation Study's (local MPO) 2020 Long-Range Transportation Plan and Transportation Improvement Program in November 1997. In December 1998, FTA approved Metra's request to initiate preliminary engineering/environmental review process on the SWC project. Metra completed an Environmental Assessment (EA) for the project in September 2000. FTA issued a Finding of No Significant Impact on the EA in October 2000. Metra has submitted a request to enter final design for the SWC project and is also preparing a Full Funding Grant Agreement application.

TEA-21 Section 3030(a)(43) authorizes the "Southwest Extension [Metra]" for final design and construction. Through FY 2001, Congress has appropriated \$17.86 million in Section 5309 New Starts funds to the project.

# Locally Proposed Financing Plan

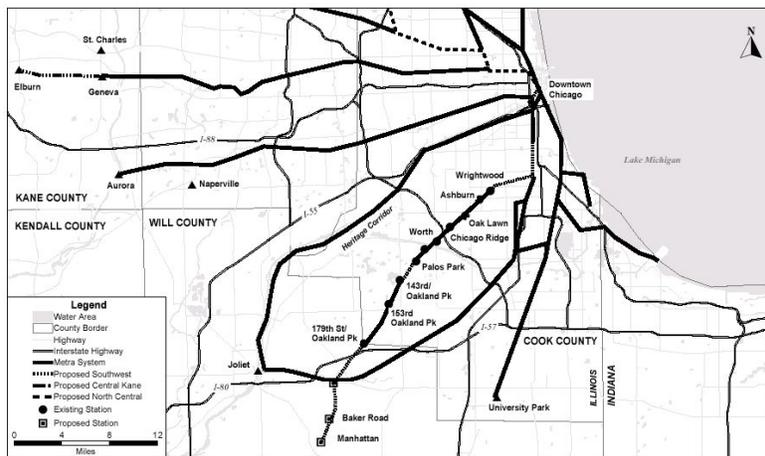
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$37.00	\$17.86 million appropriated through FY 2001
Section 5309 Fixed Guideway Modernization	\$43.30	N/A
Section 5307 Urbanized Area Formula	\$47.80	N/A
<b>State:</b>		
Illinois DOT Bonds	\$1.00	N/A
<b>Local:</b>		
Metra	\$50.50	N/A
RTA	\$30.60	N/A
Local Governments	\$8.60	N/A
<b>Total:</b>	<b>\$218.70</b>	

**Note:** Totals may not add due to rounding.

## South West Corridor Commuter Rail

Chicago, Illinois



Federal Transit Administration, 2001

**Projects in Final Design**

# Chicago, Illinois/North Central Corridor Commuter Rail

## North Central Corridor Commuter Rail

### Chicago, Illinois

(November 2000)

#### Description

Metra, the commuter rail division of the Regional Transportation Authority (RTA) of northeastern Illinois, is proposing to construct 16 miles of an additional (second) mainline track, including a two-mile stretch of third track, along the existing 53-mile North Central Service (NCS) commuter rail line. The NCS also uses the tracks of the Wisconsin Central Railroad, which also operates its own freight trains on the same tracks. The corridor extends from downtown Chicago to Antioch on the Illinois-Wisconsin border, traversing suburban Lake County. The proposed project also includes track and signal upgrades, construction of five new stations, parking facilities, expansion of an existing rail yard, and the purchase of one new diesel locomotive and eight bi-level passenger cars. The total estimated capital cost for the North Central Corridor project is \$236.4 million (escalated dollars).

The North Central Corridor is an area located along either side of the Wisconsin Central Limited track between Antioch and Franklin Park in Lake and Cook counties and along the Milwaukee-West Line between Franklin Park and the City of Chicago. The corridor includes the two most significant hubs of employment in the six-county northeastern Illinois region, namely, the Chicago Central Business District (CBD) and the area surrounding O'Hare International Airport. Metra estimates that 8,400 average weekday boardings on the full NCS line in the year 2020.

#### North Central Corridor Summary Description

<b>Proposed Project</b>	Commuter Rail Line (upgrade, multiple improvements) 16 miles, 5 stations
<b>Total Capital Cost (\$YOE)</b>	\$236.40 million
<b>Section 5309 New Starts Share (\$YOE)</b>	\$144.70 million
<b>Annual Operating Cost (\$YOE)</b>	\$6.70 million
<b>Ridership Forecast (2020)</b>	8,400 average weekday boardings 8,000 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the project's adequate justification criteria ratings and the strength of the project's capital and operating financing plans. The overall

project rating applies to this *Annual New Starts Report* and reflects conditions as of November 2000. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined.

## Status

In April 1997, Metra initiated a Major Investment Study (MIS) for the North Central Corridor. The primary purpose of the MIS was to analyze the ability and cost effectiveness of various alternative investment strategies to serve the growing need for travel from the corridor to employment in the Chicago CBD. As a secondary purpose, Metra also analyzed the need for travel from the corridor to the area surrounding O'Hare International Airport.

The MIS was completed in August 1998. Based on the results of the MIS, Metra selected the Locally Preferred Alternative (LPA) to be Rail Alternative R2 that provides for the enhancement of commuter rail service in the North Central Corridor. The LPA was included in the Chicago Area Transportation Study's (local Metropolitan Planning Organization) 2020 Long-Range Transportation Plan and Transportation Improvement Program in November 1997.

FTA approved the North Central Corridor to initiate preliminary engineering (PE) and the environmental review process of project development in December 1998. Metra completed an Environmental Assessment (EA) for the NCS in April 2000. FTA issued a Finding of No Significant Impact on the EA in May 2000. FTA approved the NCS to enter final design in October 2000.

Section 3030(a)(10) of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) authorizes the "North Central Upgrade – Commuter Rail [Metra]" for final design and construction. Through FY 2001, Congress has appropriated \$33.84 million in Section 5309 New Starts funds for the project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. N/A indicates that information for a specific criterion was not available.

FTA has evaluated this project as being in final design.

## Justification

The *Medium* project justification rating reflects across-the-board *Medium* ratings assigned to each of the justification criteria.

## Mobility Improvements

### Rating: Medium

Metra estimates that in the year 2020, 8,400 average weekday boardings will be served by the full 53-mile North Central Corridor commuter rail project, including 8,000 daily new riders. Other Metra lines that would benefit from improvements to segments of the North Central Corridor would carry many of these new riders. Metra estimates the following annual travel time savings for the North Central Corridor:

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	1.60 million hours	1.30 million hours

Based on 1990 census data, there are an estimated 3,811 low-income households within a ½-mile radius of the existing and proposed stations, representing 12 percent of the total number of households within a ½-mile radius of the stations.

## Environmental Benefits

### Rating: Medium

Northeastern Illinois is classified as being in “severe” non-attainment for ozone. The region is in attainment for carbon monoxide (CO) and particulate matter (PM<sub>10</sub>). Metra reports a slight increase in volatile organic compound (VOC) emissions for the New Start compared to both the No-Build and TSM alternatives. Metra estimates that in the year 2020, the proposed project will result in the following emissions reductions:

Criteria Pollutant	New Start vs. <i>No- Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	reduction of 159 annual tons	reduction of 78 annual tons
Nitrogen Oxide (NO <sub>x</sub> )	reduction of 21 annual tons	reduction of 8 annual tons
Hydrocarbons (HC)	increase of 50 annual tons	increase of 44 annual tons
Particulate Matter (PM <sub>10</sub> )	N/A	N/A
Carbon Dioxide (CO <sub>2</sub> )	reduction of 9,433 annual tons	reduction of 4,166 annual tons

Metra estimates that the proposed project will result in the following decreases in regional energy consumption (measured in British Thermal Units – BTUs):

Annual Energy Savings	New Start vs. <i>No- Build</i>	New Start vs. <i>TSM</i>
BTU (million)	reduction of 123,963 million BTU	reduction of 54,964 million BTU

## Operating Efficiencies

### Rating: Medium

Metra estimates the following systemwide operating cost per passenger mile in the year 2020 for the New Start, No-Build, and TSM alternatives.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	\$0.23	\$0.23	\$0.23

Values reflect 2020 ridership forecast and 1997 dollars.

## Cost Effectiveness

### Rating: Medium

Metra estimates the following cost effectiveness indices, comparing the proposed project to the No-Build and TSM alternatives:

Cost Effectiveness	New Start vs. <i>No- Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$10.20	\$13.60

Values reflect 2020 ridership forecast and 1997 dollars.

## Transit-Supportive Existing Land Use and Future Patterns

### Rating: Medium

The *Medium* land use rating reflects the adequate transit-supportive development characterizing the proposed North Central Corridor (NCC). The rating also acknowledges widespread local

redevelopment initiatives in transit station areas and Metra's proactive efforts to engage municipalities along the NCC in land use planning and transit-oriented design.

**Existing Conditions:** The proposed corridor extends along a 53-mile area located along either side of the Wisconsin Central Limited track between Antioch and Franklin Park in Lake and Cook counties and along the Milwaukee-West Line between Franklin Park and Union Station in downtown Chicago. Downtown Chicago, which is a major destination for riders, contains high density, pedestrian and transit-friendly development. The NCC also serves the O'Hare International Airport (100,000 jobs). Beginning at Union Station and extending out towards the Antioch Station, the development character changes from high-density development to rural low-density land uses. For example, base year corridor estimates for a sample of two existing station areas include Deval Transfer station with 6.88 persons/acre and 9.85 jobs/acre; and Rosemont station with 0.91 persons/acre and 8.87 jobs/acre. However, the two outermost stations are located in or near town centers with moderate densities and pedestrian-friendly development patterns. Parking requirements are generally the responsibility of individual municipalities along the NCC. While the areas surrounding Metra stations in Chicago and several other communities are zoned for high-density development, most communities in the corridor do not have zoning regulations that apply specifically to transit station areas. The 2020 Regional Transportation Plan encourages the implementation of parking space reduction policies. Downtown Chicago's parking policies prohibit stand-alone commercial parking facilities. In addition, the municipality of Antioch offers a reduction of 15 percent in the number of parking spaces required for commercial use when parking is shared within the Business Overlay District, which includes an existing Metra station.

**Future Plans and Policies:** Metra has made a commitment to assist communities in updating their comprehensive plans to include transit-oriented development (TOD). Metra has developed a set of brochures entitled *Land Use Guidelines* and *Local Economic Benefits to Foster TOD* and has provided assistance to several communities located along the NCC. Approximately eight communities have expressed support of the TOD concept report and have indicated that TOD activities are currently in place in their areas. However, no examples have been provided of specific incentives for private or public development projects in station areas.

Several station areas along the NCC have plans to develop TODs within existing residential, commercial and light industrial locations. The strategies range from new single-family homes and multi-density dwelling units to retail and open space developments. In addition, located directly east of the extant Mundelein station (11 acres) plans call for 235,000-square foot office facility for the proposed State-funded University Center of Lake County. At the proposed Franklin Park Station, plans call for the development of a nine-story, assisted living complex located one block from the new station. In addition, a nine-story condominium development with retail is planned adjacent to the nearby Franklin Park Station on the Milwaukee West Line.

## Local Financial Commitment

### **Proposed Non-Section 5309 New Starts Share of Total Project Costs: 39%**

The project financial plan proposes to use \$144.7 million (61 percent of total project costs) in Section 5309 New Starts funds, \$8.2 million (3 percent) in Section 5309 Rail Modernization funds, \$35 million (15 percent) of Strategic Capital Improvement Program (SCIP) bonds issued by RTA, \$35 million (15 percent) in Metra contributions, and \$13 million (6 percent) from the State and local governments.

## Stability and Reliability of Capital Financing Plan

**Rating: Medium-High**

The *Medium-High* rating reflects the soundness of Metra's financial condition and the strength of the agency's dedicated revenue sources. The rating also acknowledges the commitment of the majority of non-Section 5309 New Starts funds to the North Central Corridor project.

**Agency Capital Financial Condition:** Metra's financial condition is strong. Metra has two revenue sources that are available for funding capital projects: a five percent fare increase, introduced in 1989 and dedicated to capital improvements currently generates \$9 million annually. In addition, Metra's portion of the RTA sales tax revenues (collected in the six-county region) that exceeds Metra's operating expenses is applied to capital improvements. In 1999, Metra's share of the sales tax revenue totaled \$208 million. Excess sales tax revenue, along with revenue generated from the five percent fare increase, provided a total of \$39 million. Metra also plans to contribute approximately \$34.9 million from the agency's funding sources, including rolling stock and capital fund contributions, to the construction of the North Central Corridor Commuter Rail project. The remainder of the local share (\$48.6 million) will be funded by RTA via the Strategic Capital Improvement Program (SCIP) and State and local municipalities.

**Capital Cost Estimates and Contingencies:** Total capital costs increased approximately 37 percent over the last year as a result of more refined engineering analyses. These estimates are considered acceptable for a project of this magnitude. Contingencies for the North Central Corridor project are budgeted at 13.5 percent of the NCC's total capital cost.

**Existing and Committed Funding:** Funds for the North Central Corridor project are programmed in Metra's five-year (FY2000-FY2004) capital program. The RTA has legislatively authorized the funds from the SCIP bond program.

**New and Proposed Sources:** Only existing sources are proposed to cover the non-Section 5309 New Starts share of capital costs associated with the North Central Corridor project.

## Stability and Reliability of Operating Finance Plan

### Rating: High

The *High* rating reflects the strong operating condition of Metra. The rating also acknowledges the agency's full commitment of the required operating and maintenance funding for the North Central Corridor project.

**Agency Operating Condition:** Metra is projecting systemwide operating budgets through the year 2001 that represent a 55 percent revenue recovery ratio for the agency. The agency's 1999 Financial Report indicated that Metra had an operating loss, before depreciation, of \$173.2 million (a 6.5 percent increase over the prior year's operating loss). Metra received \$215.1 million in tax revenue, which covered the operating deficit. Tax revenue grew at a slightly faster rate than the operating loss (6.6 percent over the previous year). Total operating revenues for the agency increased from \$122.2 million to \$128.1 million (a 4.9 percent increase).

**Operating Cost Estimates and Contingencies:** Annual operating and maintenance costs are estimated at \$6.73 million in the opening year.

**Existing and Committed Funding:** Operating funds (sales tax revenues) for the NCC are existing and committed. A statutory mandate requires Metra to fund operations with tax proceeds before funding capital improvements. The sales tax is considered a reliable funding source since it responds to growth in the economy and price level inflation.

**New and Proposed Sources:** No new operating sources are proposed for the NCC project.

# Locally Proposed Financing Plan

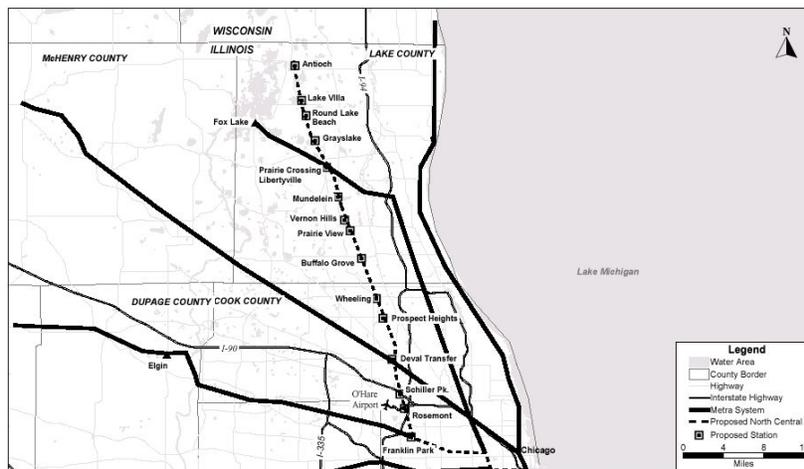
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Starts</b>	\$144.70	\$33.84 million appropriated through FY 2001
<b>Federal: Section 5309 Fixed Guideway Modernization</b>	\$8.20	N/A
<b>State: Illinois DOT Bonds</b>	\$1.80	N/A
<b>Local: SCIP Bonds</b>	\$34.90	N/A
<b>Local: Metra</b>	\$34.90	N/A
<b>Local: Municipality Contributions</b>	\$12.00	N/A
<b>Total:</b>	<b>\$236.40</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

## North Central Corridor Commuter Rail

Chicago, Illinois



Federal Transit Administration, 2001

# Dallas-Ft. Worth, Texas/Trinity Railway Express Phase II

## Trinity Railway Express RAILTRAN Phase II

Dallas, Ft. Worth, Texas

(November 2000)

### Description

Phase II of the Trinity Railway Express (formerly RAILTRAN) project will provide 25 miles of additional commuter rail service, on existing track and right-of-way, between South Irving and Fort Worth, serving the Fort Worth Intermodal Transportation Center. Phase I initiated ten miles of service between Dallas and Irving in December 1996. Partial Phase II service began in September 2000 with the opening of 15 miles of commuter rail service from Richland Hills in east Fort Worth to Irving. The remaining 10 miles of the TRE Phase II system will be opened from downtown Fort Worth to Richland Hills in Fall 2001. The Fort Worth Transportation Authority (FWTA) has estimated total project costs in year of expenditure (YOE) at \$184.05 million, with an estimated Section 5309 New Starts share of \$46.4 million. Long-term plans call for a Phase III to extend service to the Dallas-Fort Worth International Airport.

Phase II includes five new passenger stations, track and signal improvements to the existing rail line, construction of 1.5 miles of new main track on a new alignment in downtown Fort Worth, expansion of the existing Irving Yard commuter rail maintenance facility, and purchase of rolling stock. Two stations are located in downtown Fort Worth, including the site of the Intermodal Transportation Center, and three stations are located in the suburbs. In 2010, average weekday boardings are estimated at 11,000, with an estimated 5,000 daily new riders. FWTA is seeking no further Section 5309 New Starts funds beyond that already appropriated through FY 2001. Hence, the project has not been evaluated and rated according the New Starts criteria.

### Trinity Railway Express Phase II Summary Description

<b>Proposed Project:</b>	Commuter Rail 25 miles, 5 stations
<b>Total Capital Cost (\$YOE):</b>	\$184.10 million
<b>Section 5309 Share (\$YOE):</b>	\$46.40 million
<b>Annual Operating Cost (\$YOE):</b>	\$9.20 million
<b>Ridership Forecast (2010):</b>	11,000 average weekday boardings 5,000 daily new riders

### Status

In 1984, the Trinity Railway Express (TRE) right-of-way between Dallas and Fort Worth was purchased with FTA assistance. Since then the Union Pacific and Burlington Northern Santa Fe railroads have been operating freight service on the tracks.

The Fort Worth Transportation Authority (FWTA) and Dallas Area Rapid Transit (DART) have signed an agreement on the construction, operation, and financing of the TRE service. The easternmost segment of Phase II opened in September 2000 with service to Richmond Hills; service to downtown Ft. Worth is scheduled to begin in fall 2001. FWTA is the lead local agency

in the development of Phase II of the Trinity Railway Express. A Finding of No Significant Impact (FONSI) was most recently amended in December 1998.

Section 3030(21) of TEA-21 authorizes the Dallas-Ft. Worth TRE Phase II Project for final design and construction. Through FY 2001, Congress has appropriated \$46.41 million in Section 5309 New Starts funds for this project; no additional New Starts funds are being sought for this project.

### Locally Proposed Financing Plan

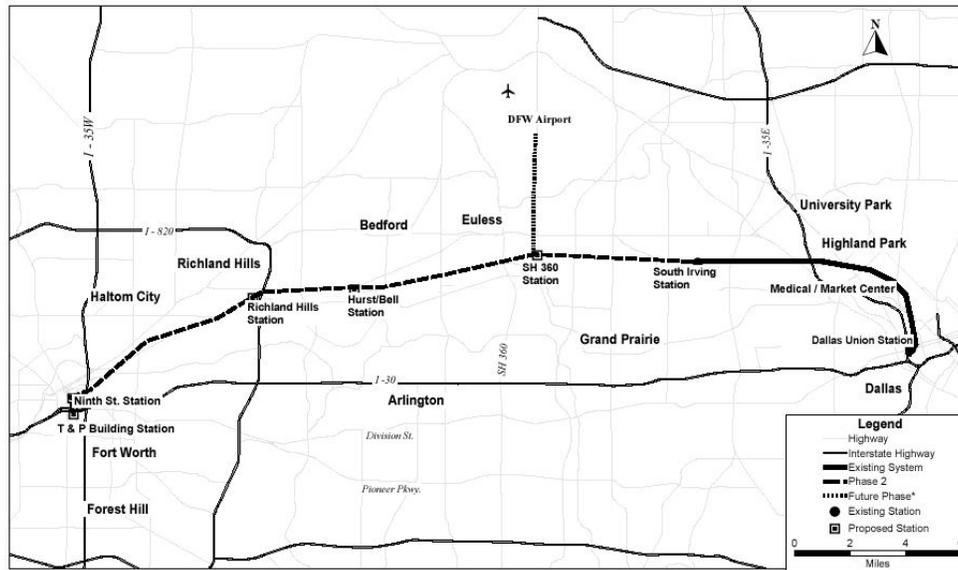
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal:</b>		
Section 5309 New Starts	\$46.40	\$46.41 million appropriated through FY 2001
Section 5309 Bus	\$6.50	N/A
Section 5307 Formula	\$1.00	N/A
Flexible Funds (CMAQ)	\$44.20	N/A
ISTEA Section 1108 Highway Funds (ITC)	\$13.10	N/A
<b>Local:</b>		
FWTA	\$46.50	N/A
DART	\$8.10	N/A
Tarrant County & Cities	\$6.50	N/A
RAILTRAN	\$10.90	N/A
<b>Other:</b>		
Amtrak	\$3.00	N/A
<b>Total:</b>	<b>\$184.10</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Trinity Railway Express - Phase 2

Dallas- Fort Worth, Texas



# Little Rock, Arkansas/River Rail Project

## Little Rock River Rail Project

Little Rock, Arkansas

(November 2000)

### Description

The Central Arkansas Transit Authority (CATA) is planning the implementation of a vintage streetcar circulator system on existing right-of-way connecting the Alltel Arena, the River Market, and the Convention Center in downtown Little Rock to the communities of North Little Rock and Pulaski County. CATA proposes that service be provided by seven replica streetcars operating on a single track powered by overhead catenary. The proposed system includes a 2.1 mile alignment, purchase of vehicles, and construction of a maintenance facility. Ridership projections estimate 1,000 to 1,200 average weekday boardings with an additional 1,000 to 1,800 riders on special event days. A future 0.4 mile extension to the William Jefferson Clinton Presidential Library site has been proposed. Revenue service is planned to begin in December 2002.

The project is estimated to cost \$13.2 million in escalated dollars, with a proposed Section 5309 New Starts share of \$8.6 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 (TEA-21 Section 5309(e)(8)(A)).**

### Little Rock River Rail Summary Description

<b>Proposed Project</b>	Vintage Streetcar System 2.1 miles, 8 stations
<b>Total Capital Cost (\$YOE)</b>	\$13.20 million
<b>Section 5309 Share (\$YOE)</b>	\$8.60 million
<b>Annual Operating Cost (\$YOE)</b>	\$0.70 million
<b>Ridership Forecast (2020)</b>	1,000 average weekday boardings

### Status

A feasibility study was completed in 1997. No formal Major Investment Study (MIS) was completed due to the limited scale of the proposed investment, the use of existing rail and street rights-of-way, and the estimated low cost. FTA approval to enter the preliminary engineering phase of project development was granted in May 1998. FTA approved project entrance into Final Design in September 1999.

TEA-21 Section 3030(a)(36) authorizes the Little Rock River Rail project for final design and construction. Through FY 2001, Congress has appropriated \$5.94 million in Section 5309 New Starts funds to this project.

## Locally Proposed Financing Plan

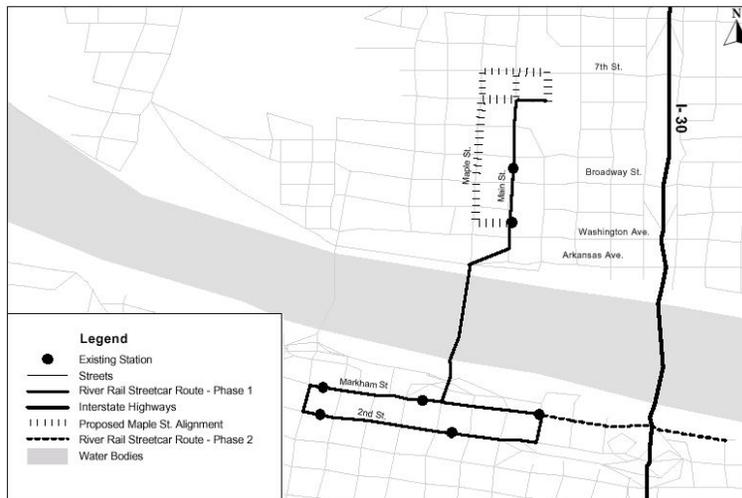
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Start</b>	\$8.60	\$5.94 million appropriated through FY 2001
<b>Federal: STP / FHWA Section 1602</b>	\$2.00	N/A
<b>Local:</b>	\$2.60	N/A
<b>Total:</b>	<b>\$13.20</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### River Rail Streetcar

Little Rock, Arkansas



# Los Angeles and San Diego Counties, California/LOSSAN Rail Corridor Improvements

## LOSSAN Rail Corridor Improvements

Los Angeles and San Diego Counties, California

(November 2000)

### Description

The Los Angeles-San Diego Rail Corridor Agency (LOSSAN) is implementing a long-range plan to improve the safety, capacity and speed of intercity and commuter rail service between Los Angeles and San Diego. This 129-mile stretch of rail includes 18 stations (10 intercity/commuter and 8 commuter only). Three operators provide service in the corridor: Amtrak operates intercity rail service (the *San Diegan*); the Southern California Regional Rail Authority (SCRRA) operates Metrolink commuter rail service; and the North (San Diego) County Transit District (NCTD) operates the Coaster commuter rail service. In addition, the LOSSAN Rail Corridor accommodates the only freight rail service into the San Diego region.

LOSSAN is proposing to utilize Section 5309 New Starts funding for two station-area improvements and to improve safety along a portion of the railway roadbed. Specifically, LOSSAN is proposing to add capacity enhancing passenger loading platforms and implement track and signal improvements at Los Angeles Union Station; to construct a 450-space multi-level parking structure at the Oceanside Transit Center; and to stabilize the railway roadbed located along the oceanfront bluffs in the City of Del Mar.

Proposed improvements in the LOSSAN Rail Corridor are estimated to cost \$35.7 million in 1999 dollars, with a proposed Section 5309 New Starts share of \$24.1 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** (TEA-21 Section 5309(e)(8)(A)).

<b>Proposed Project</b>	Intercity Rail Improvements (2 station-area improvements and roadbed stabilization)
<b>Total Capital Cost (\$1999)</b>	\$35.70 million
<b>Section 5309 Share (\$1999)</b>	\$24.10 million

### Status

The LOSSAN agency was created to implement a program of rail system improvements in the three-county area of Los Angeles, Orange, and San Diego. A formal Major Investment Study or Alternatives Analysis was not prepared for the proposed rail improvements. Some environmental and geotechnical work has been completed on each of the proposed improvements.

Through FY 1997, Congress had appropriated \$19.89 million in Section 5309 New Starts funding for several prior grade-separation projects along the LOSSAN Rail Corridor. TEA-21 Section 3030(b)(26) authorizes the LOSSAN (Del Mar-San Diego) corridor for alternatives analysis and preliminary engineering. Congress has appropriated \$3.95 million in New Starts funding for the San Diego LOSSAN Corridor project during the TEA-21 Authorization period. Thus, Congress has appropriated \$23.83 million through FY 2001.

TEA-21 Section 3030(b)(26) authorizes the "LOSSAN Rail Corridor" for Final Design and Construction.

### Locally Proposed Financing Plan

(Reported in \$1999)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Start</b>	\$24.10	\$3.95 million appropriated through FY 2001; \$19.89 millin appropriated for prior improvements
<b>Local:</b>	\$11.60	N/A
<b>Total:</b>	<b>\$35.70</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Miami, Florida/South Miami-Dade Busway Extension

## South Miami-Dade Busway Extension

Miami, Florida

(November 2000)

### Description

The Miami-Dade Transit Agency (MDTA) is proposing to extend its existing South Miami-Dade Busway further south to Florida City. The Miami-Dade County Metropolitan Planning Organization (MPO) has selected a locally-preferred alternative (LPA), which is an 11.5 mile extension of the South Miami-Dade Busway from Cutler Ridge Mall near SW 200 Street to Florida City along side US Route 1 (U.S.1). Within the corridor, 12 stations are proposed with 6 park-n-ride lots and 620 parking spaces. The proposed extension will improve bus travel times and transit access in the corridor along U.S. 1 in South Florida, which now has limited transit service. The proposed Busway is an extension to an existing 8.3 mile busway which opened in February of 1997, and which has increased transit ridership in the corridor by providing improved travel times for commuters from the rapidly growing area south of Miami. MDTA has estimated total project costs at \$88.8 million (escalated dollars), with a proposed New Starts share of \$23.4 million. **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 (TEA-21 Section 5309(e)(8)(A)).** The busway is estimated to carry 8,800 average weekday boardings on the extension, including 3,300 daily new riders.

### South Miami-Dade Busway Summary Description

<b>Proposed Project</b>	Busway 11.5 miles, 12 stations
<b>Total Capital Cost (\$YOE)</b>	\$88.80 million
<b>Section 5309 Share (\$YOE)</b>	\$23.40 million
<b>Annual Operating Cost (\$YOE)</b>	\$4.90 million
<b>Year Ridership Forecast (2015)</b>	8,800 average weekday boardings 3,000 daily new riders

### Status

The Florida Department of Transportation (FDOT), in conjunction with the Federal Highway Administration (FHWA), undertook a Major Investment Study of the Florida East Coast Railroad Right of Way, completed in 1985, which recommended that a Busway be constructed from the Dadeland South Metrorail Station south to Florida City. Phase I of the busway, from the Dadeland Metrorail Station to Culter Ridge, was constructed with FHWA funding and opened in 1997. Concurrent with construction of Phase I, FDOT and FHWA completed a Preliminary Engineering Report/Draft Environmental Impact Statement that was completed December of 1997. The MPO Board selected the Busway as the locally preferred alternative in December of 1998, and added the project to its 2015 and 2020 Long Range Transportation Plans. FTA approved the initiation of Final Design for the project in October, 2000. Miami-Dade anticipates beginning construction for the first 5 mile segment by March of 2001 and for the remaining 6.5 miles by January 2002.

In August 1999, the South Miami-Dade Busway Extension was selected as one of FTA's ten Bus Rapid Transit (BRT) Demonstration Projects.

TEA-21 Section 3030(a)(46) authorizes the South Miami-Dade Busway Extension for final design and construction. Through FY2000, Congress has not appropriated any Section 5309 New Start funds for this proposed project. In FY2001, Congress reprogrammed \$16.9 million in funding previously appropriated for the Miami North 27<sup>th</sup> Avenue corridor and the Miami East-West Corridor projects for the South Busway.

### Locally Proposed Financing Plan

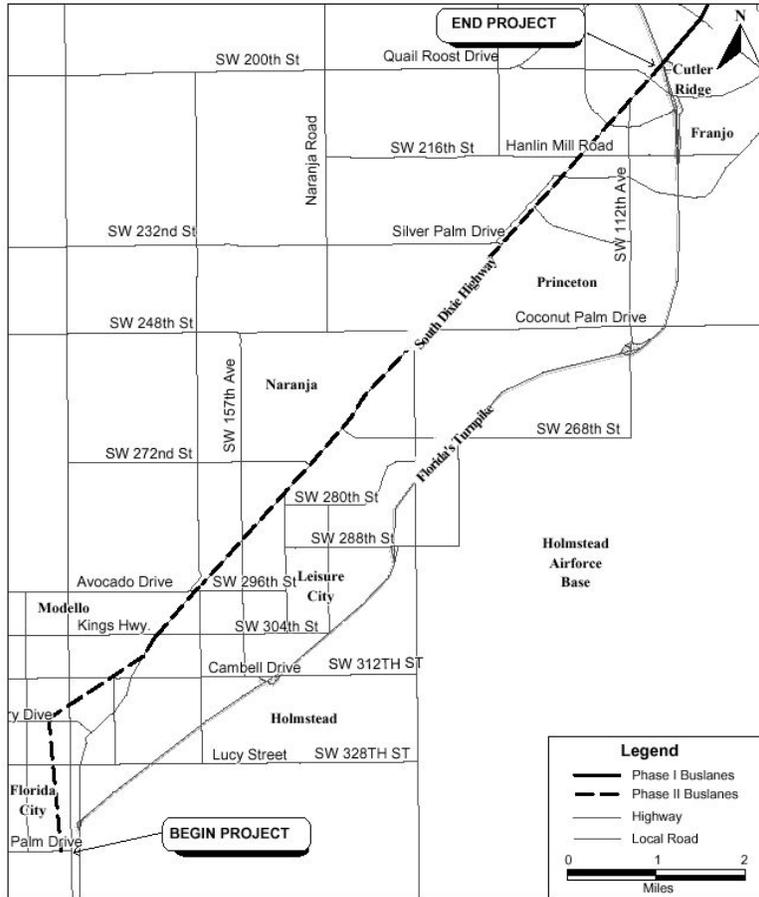
(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal:</b>		
Section 5309 New Starts	\$23.40	\$16.90 million previously appropriated for the North Corridor and East-West Corridor was reprogrammed to the project in FY 2001
CMAQ Flexible Funds	\$38.60	N/A
National Highway System	\$2.70	N/A
<b>State:</b>		
Florida East-Coast Railroad Right-of-Way Purchase	\$20.80	N/A
State Toll Road Credits	\$2.00	N/A
<b>Total:</b>	<b>\$88.80</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# South Miami - Dade Busway Extension

## Miami, Florida



Federal Transit Administration, 2001

# New Orleans, Louisiana/Canal Streetcar Line

## Canal Streetcar Line

New Orleans, Louisiana

(November 2000)

### Description

The Regional Transit Authority (RTA) is developing a 5.5-mile streetcar project in downtown New Orleans. The Canal Streetcar Line would extend along the median of Canal Street from the Canal Ferry, at the Mississippi River in the Central Business District, through the Mid-City neighborhood to two outer termini at the Cemeteries and City Park/Beauregard Circle. The project provides for restoration of streetcar service on Canal Street, the construction of a maintenance facility for the RTA streetcar fleet, and the rebuilding of a fleet of 33 PCC vehicles to current transit standards. The capital cost is estimated at \$156.6 million (escalated dollars), which covers design refinements. Ridership is estimated to be 31,400 average weekday boardings and 5,300 daily new riders for the forecast year (2015).

### Canal Streetcar Line Summary Description

<b>Proposed Project</b>	Traditional Streetcar 5.5 miles, 37 stations
<b>Total Capital Cost (\$YOE)</b>	\$156.60 million
<b>Section 5309 Share (\$YOE)</b>	\$125.30 million
<b>Annual Operating Cost (\$YOE)</b>	\$7.00 million
<b>Ridership Forecast (2015)</b>	31,400 average weekday boardings 5,300 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the solid local financial commitment and strong cost effectiveness of the project. The overall project rating applies to this *Annual New Starts Report and reflects conditions as of November 2000*. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

### Status

RTA completed a Major Investment Study/Alternatives Analysis of the Canal Street corridor in March 1995. The Regional Planning Commission, the Metropolitan Planning Organization for New Orleans, has included the Canal Streetcar Line and the Carrollton Spur to City Park in the Transportation Plan and Transportation Improvement Program. The Federal Transit Administration (FTA) approved the initiation of preliminary engineering (PE) and the preparation of a Draft Environmental Impact Statement (DEIS) in September 1995. The DEIS was published in March 1997 and the Final Environmental Impact Statement (FEIS) was published in July 1997.

FTA issued a Record of Decision for the project in August 1997. The RTA initiated Final Design on the Canal Streetcar Line in September 1997. Project start-up is anticipated in April 2004.

TEA-21 Section 3030(a)(51) authorizes the New Orleans Canal Streetcar project for final design and construction. Through FY 2001, Congress has appropriated \$55.18 million in Section 5309 new starts funds for this project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria* unless otherwise indicated. N/A indicates that data are not available for a specific measure. The project is rated as being in final design

## Justification

The *Medium-High* project justification rating reflects the project's strong estimated cost effectiveness and positive land use rating, but relatively weak mobility improvements.

## Mobility Improvements

### Rating: Medium

RTA estimates the project will serve 31,400 average weekday boardings and 5,300 daily new riders in 2015, with the following annual travel time savings.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	0.20 million hours	0.20 million hours

Based on 1990 Census data, there are an estimated 5,888 low-income households within a ½-mile radius of the line's proposed stations, approximately 35 percent of the total households within a ½-mile radius of proposed stations.

## Environmental Benefits

### Rating: Medium

The New Orleans metropolitan area is an attainment area for carbon monoxide and ozone. RTA estimates the following annual emissions reductions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	decrease of 192 annual tons	decrease of 154 annual tons
Nitrogen Oxide (NO <sub>x</sub> )	decrease of 56 annual tons	decrease of 52 annual tons
Volatile Organic Compounds (VOC)	decrease of 26 annual tons	decrease of 22 annual tons
Particulate Matter (PM <sub>10</sub> )	decrease of 1 annual ton	decrease of 1 annual ton
Carbon Dioxide (CO <sub>2</sub> )	decrease of 1,749 annual tons	decrease of 635 annual tons

RTA estimates that in 2015, the Canal Streetcar Line project will result in the following savings in regional energy consumption (measured in British Thermal Units – BTU):

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (millions)	decrease of 20,595 million annual BTU	decrease of 2,270 million annual BTU

### Operating Efficiencies

**Rating: Not Rated**

RTA estimates the following systemwide operating cost per passenger mile in the year 2015.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2015)	N/A	N/A	N/A

Values reflect 2015 ridership forecast and 1997 dollars.

### Cost Effectiveness

**Rating: High**

RTA estimates the following cost effectiveness indices:

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$4.40	\$5.40

Values reflect 2015 ridership forecast and 1997 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* land use rating reflects moderate to good existing densities and pedestrian-friendliness in the corridor, as well as adoption of a more transit-supportive comprehensive land use plan for the city in 1999.

**Existing Conditions:** The proposed Canal Streetcar Line is wholly located within an existing built-up urban area originally developed in the streetcar era. Much of the corridor lies within the CBD and historic areas, in which densities, mix, and pedestrian friendliness are generally good. The CBD includes a high-density mix of office, retail, hotels, and leisure attractions. CBD employment is 122,000, two-thirds of which is within ½ mile of the proposed Canal Streetcar Line. Parking in the CBD is moderately priced, but zoning ordinances establish parking caps for new development that are fairly restrictive. Adjacent to the CBD are the riverfront and the French Quarter historic district that include tourist and leisure attractions. The remainder of the corridor is a mix of neighborhood commercial development surrounded by moderately dense residential neighborhoods on a grid street pattern. Residences are primarily single or two-family detached houses with long, narrow lots; there are some pockets of two- to three-story apartment buildings. An estimated 38,000 people live within ½ mile of the proposed line as a whole, at an average density of 6,800 persons per square mile.

**Future Plans and Policies:** The New Orleans Land Use Plan, adopted in 1999, is expected to result in zoning revisions to facilitate mixed-use redevelopment. A neighborhood mixed-use category should assist in preserving and enhancing the existing desirable elements of the corridor, while an urban mixed-use designation will facilitate redevelopment of vacant or underutilized industrial and commercial sites. While the plan does not strongly focus on increasing development in the Canal Streetcar corridor, it does address the broader primary

issues faced by the city including the need to stabilize population and spur re-investment and redevelopment. CBD employment growth is forecast in hotel, leisure and related service industries, and the market is currently sustaining continued residential and hotel conversions. Retail revitalization strategies have been incorporated in the Land Use Plan. The city's design review authority for large projects and conditional-use projects is the most significant tool for ensuring that new development is transit-supportive; the city has already demonstrated its intent to use this authority accordingly. Much of the corridor is eligible for city and state economic development incentives, including tax exemptions or credits for construction, rehabilitation and job creation. The city planning process and its Land Use Plan have greatly improved public and neighborhood participation, with beneficial results.

## Local Financial Commitment

### **Proposed Non-Section 5309 New Starts Share of Total Project Costs: 20%**

The project's financial plan proposes to utilize \$125.3 million (80 percent of total project costs) in Section 5309 New Start funds, \$27.1 million in loan funds (17.3 percent), \$3.2 million in donated land from the City of New Orleans (2.0 percent), and a \$1.0 million private donation.

## Stability and Reliability of Capital Financing Plan

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

The *Medium-High* capital finance plan rating reflects RTA's high level of commitment of capital funds (100%) and aggressive action to turn around recent deficits through fare increases, tax increases, and use of leases for new buses.

**Agency Capital Financial Condition:** RTA has revamped its bus fleet with a new lease arrangement for 175 buses, which means that what had once been an aging fleet now is an average of 3.5 years old. The bus lease has a Moody's rating of Baa3. The largest component of the local share of the capital will be a loan from the Louisiana Local Government Environmental Facilities and Community Development Authority (LLGEFCDA), which will be paid back with the newly collected sales tax on hotel and motel rooms. This should be a stable source of income that appears to have been conservatively estimated.

**Capital Cost Estimates and Contingencies:** The capital cost estimate (and process) for the project has been examined and determined to be acceptable. RTA reconfigured its project budgeting approach in summer 2000. A review of cost estimating details and backup data indicates the revised project budgeting approach is significantly better than earlier approaches.

**Existing and Committed Funding:** One hundred percent of the local funds are committed. The largest portion comes from a loan agreement, for which there is a letter of commitment. The loan would be paid back by a new sales tax on hotels and motels that began collection in August 2000. There is also a copy of a City of New Orleans ordinance authorizing the Mayor to enter into an agreement regarding provision of right of way.

**New Funding:** The private donation of catenary poles, valued at \$1 million, has not yet been secured.

## Stability and Reliability of Operating Financing Plan

### **Rating: Medium**

The *Medium* operating finance plan rating reflects the positive action taken by the agency to reverse past operating deficits, and the high level of commitment of operating funds.

**Agency Operating Financial Condition:** RTA had operating deficits from \$13 million to almost \$22 million shown for the last 5 years. However, the agency has taken meaningful action to

reverse those deficits: (1) a new lease arrangement for 175 new buses, and revised preventive maintenance procedures; (2) a fare increase from \$1.00 to \$1.25 for the basic fare (and similar increases for other fares); (3) reductions in expenses, including medical insurance, service headways, administrative wages, and work force; and (4) an extension in scope of the RTA sales tax to include hotel and motel room rental receipts. With these modifications, the agency projects that its accounting deficit will go away by 2005. In FY 2001 there is a projected consolidated cash balance of zero, which is forecast to increase steadily over time up to exceeding 6 months of operating expenses. The cash balance is forecast to remain below 3 months through 2003, below 6 months through 2012, and to remain in excess of 6 months through the remainder of the forecast period.

**Operating Cost Estimates and Contingencies:** Annual operating costs for the project are estimated at \$7 million in 2004 (\$YOE), representing approximately 7 percent of systemwide operating costs. Operating cost estimates were built up from past experience with streetcar operation and provided in considerable detail. On a systemwide basis, passenger fares are expected to be 46 percent of operation expenses in 2004.

**Existing and Committed Funding:** All operating funding sources are committed. Aside from passenger fares, the main source of operating revenue is the sales tax, collected for years, that is a stable source and is conservatively estimated into the future.

**New Funding:** No new funding is proposed.

### Locally Proposed Financing Plan

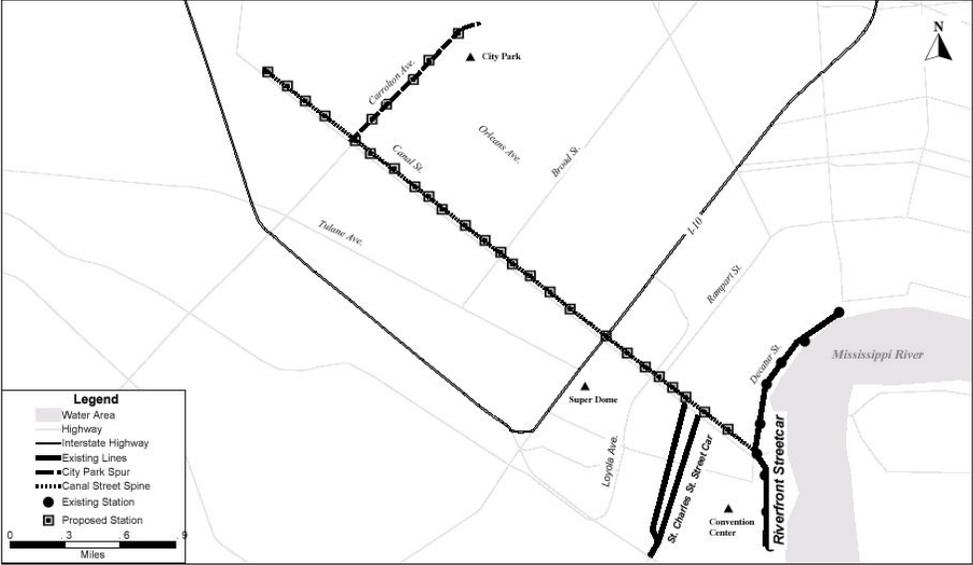
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$125.30	\$55.18 million appropriated through FY 2001
<b>State and Local:</b>		
City of New Orleans (Right-of-Way)	\$3.20	
Regional Transit Authority (RTA) Loan Funds	\$27.20	
Materials Donations (Poles)	\$1.00	
<b>Total:</b>	<b>\$156.60</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Canal Streetcar Line

New Orleans, Louisiana



# North San Diego County, California/Oceanside-Escondido Rail Corridor

## Oceanside-Escondido Rail Corridor

North San Diego County, California

(November 2000)

### Description

The North County Transit District (NCTD) is planning the conversion of an existing 22-mile freight rail corridor into a diesel multiple unit (DMU) transit system running east from the coastal City of Oceanside, through the cities of Vista, San Marcos, and unincorporated portions of San Diego County, to the City of Escondido. The alignment also includes 1.7 miles of new right-of-way to serve the campus of California State University, at San Marcos (CSUSM). The proposed project is situated along the State Route 78 corridor, which connects Interstate Highways 5 and 15, the principal east-west corridor in Northern San Diego County. The proposed DMU system would serve fifteen stations; four of these stations would be located at existing transit centers. Average daily weekday boardings in 2015 are estimated at 15,100, with 8,600 daily new riders.

### Oceanside-Escondido Rail Corridor Summary Description

<b>Proposed Project</b>	Diesel Multiple Units 23.7 miles, 15 stations
<b>Total Capital Cost (\$YOE)</b>	\$332.30 million
<b>Section 5309 Share (\$YOE)</b>	\$152.10 million
<b>Annual Operating Cost (\$YOE)</b>	\$8.30 million
<b>Ridership Forecast (2015)</b>	15,100 average weekday boardings 8,600 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Highly Recommended</b>

The overall project rating of *Highly Recommended* is based on the project's strong cost effectiveness and mobility improvements, and the high level of local funding committed to the construction and operation of the proposed project. The overall project rating applies to this Annual Report on New Starts **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined.

### Status

An Environmental Impact Report (EIR) for the Oceanside-Escondido Rail Project and an EIR for the CSUSM alignment were published and certified in 1990 and 1991, respectively. A Major Investment Study was not required based on concurrence from FTA, FHWA, the San Diego Association of Governments (SANDAG), Caltrans, the City of San Marcos, and NCTD. Advanced planning for the Oceanside-Escondido Rail Project, which resulted in 30 percent design, was completed in December 1995. The Environmental Assessment/Subsequent Environmental

Impact Report (EA/SEIR), was completed in early 1997. The North San Diego County Transit Development Board certified the SEIR in March 1997. FTA issued a Finding of No Significant Impact in October 1997. FTA approved the NCTD's request to advance the project into final design in February 2000.

Section 3030 (a)(77) authorizes the Oceanside-Escondido Corridor for final design and construction. Through FY 2001 Congress has appropriated \$17.81 million in Section 5309 New Starts funds for this project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. N/A indicates that data are not available for a specific measure. FTA has evaluated this project as being in final design.

## Justification

The *Medium-High* project justification rating reflects the project's strong cost effectiveness and mobility improvements, and acknowledges local efforts to ensure that future development in the corridor supports the transit investment.

## Mobility Improvements

### Rating: Medium-High

The proposed project is expected to serve 15,100 average weekday boardings and 8,600 daily new riders by 2015. NCTD estimates the project will result in the following annual travel time savings.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Annual Travel Time Savings (Hours)</b>	1.40 million hours	0.70 million hours

Based on 1990 Census data, there are an estimated 1,706 low-income households within a ½ mile radius of the proposed 15 stations, approximately 12 percent of total households within ½ mile of proposed stations.

## Environmental Benefits

### Rating: Medium

The San Diego region is a "serious" non-attainment area for ozone, and a moderate non-attainment area for carbon monoxide. NCTD estimates that the project would result in the following annual emissions reductions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Carbon Monoxide (CO)</b>	decrease of 96 annual tons	decrease of 43 annual tons
<b>Nitrogen Oxide (NOx)</b>	increase of 1 annual ton	decrease of 12 annual tons
<b>Volatile Organic Compounds (VOC)</b>	decrease of 5 annual tons	decrease of 4 annual tons
<b>Particulate Matter (PM<sub>10</sub>)</b>	0	0
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	decrease of 4,070 annual tons	decrease of 2,113 annual tons

NCTD estimates that in 2015, the project will result in the following savings in regional energy consumption (measured in British Thermal Units-BTU).

<b>Annual Energy Savings</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>BTU (millions)</b>	decrease of 54,464 million annual BTU	decrease of 29,045 million annual BTU

### Operating Efficiencies

**Rating: Medium**

NCTD estimates the following systemwide operating cost per passenger mile in 2015:

<b>Operating Efficiencies</b>	<b>No-Build</b>	<b>TSM</b>	<b>New Start</b>
<b>System Operating Cost per Passenger Mile (1997)</b>	\$0.10	\$0.10	\$0.10

Values reflect 2015 ridership forecast and 1998 dollars.

### Cost Effectiveness

**Rating: Medium-High**

NCTD estimates the following cost effectiveness indices:

<b>Cost Effectiveness</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>Incremental Cost per Incremental Passenger</b>	\$5.30	\$8.10

Values reflect 2015 ridership forecast and 1998 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* land use rating reflects the low density and the dispersed development patterns which currently exists in the corridor, but acknowledges the efforts of local agencies to ensure that future development is transit supportive.

**Existing Conditions:** The corridor parallels Highway 78 along an existing freight rail right-of-way between Oceanside and Escondido, terminating in the two cities at large intermodal Transit Centers. The corridor contains a dispersed mix of commercial, industrial, and single- and multiple-family residential developments. Population and employment densities are generally low around station areas (6.3 people and 4.1 jobs per acre), but are expected to increase. The proposed project would serve several activity centers including the business districts of the four corridor cities (Oceanside, Vista, San Marcos, and Escondido), several office buildings and industrial sites, two hospitals, two community colleges, a regional shopping mall, and the campus of the California State University at San Marcos. There is evidence of some restrictive parking policies in Oceanside, but parking is generally plentiful along the corridor and no regional parking policies were identified by the NCTD. Zoning regulations in Oceanside, Escondido, and Vista have been recently modified to support higher densities and mixed uses around proposed station areas.

**Future Plans and Policies:** Between 1990 and 1995, cities along the proposed rail corridor experienced rates of growth from 10-20 percent. Population and employment around proposed station areas are forecasted to increase by 49 percent (to 65,500) and 66 percent (to 47,400) by

2015. Local development plans to promote transit-friendly character around proposed station areas are significant and demonstrate strong commitment to public transportation. The city of Oceanside has the most developed set of transit supportive policies; its *Oceanside Transit Corridor Study* resulted in the development of transit overlay districts and has set the framework for pedestrian-oriented mixed-use development around the seven stations planned within the city.

Redevelopment plans for the downtown areas of the cities of San Marcos, Vista, and Escondido are underway and include a mix of commercial, residential, and office uses within walking distances of proposed rail stations. The Escondido general plan includes an endorsement of infill development to improve existing neighborhoods. The NCTD has been active in promoting transit-supportive land use planning in the corridor cities, and has made joint development agreements with owners of property adjacent to a few station sites. SANDAG, San Diego County's metropolitan planning organization, supports the management of growth through the encouragement of more intense residential and commercial development around rail stations, and provides funding to member jurisdictions for transit-oriented development planning.

## Local Financial Commitment

### **Proposed Non-Section 5309 New Starts Share of Total Project Costs: 54%**

The project's financial plan (reflected in escalated dollars) proposes \$152.1 million (46 percent of total project costs) in Section 5309 New Starts funds, \$104.2 million (41 percent) in State funds, and \$76 million (31 percent) in local funds.

## Stability and Reliability of Capital Financing Plan

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

The *Medium-High* rating reflects the demonstrated commitment of state and local funding to construct the Oceanside-Escondido Rail project.

**Agency Capital Financial Condition:** NCTD is in good financial condition, with positive operating balances over the past several years and \$5.2 million in cumulative balances for capital projects.

**Capital Cost Estimates and Contingencies:** Project cost estimates and contingencies are reasonable for a project at this stage of development.

**Existing and Committed Funding:** All of NCTD's proposed non-Section 5309 new starts funding for the project is committed, except for \$4.9 million (1.5 percent of the project cost). Funding commitment for this remaining amount is expected in early 2001. State funding for the project includes Proposition 108 passenger rail bond revenues and State Transportation Improvement Program funding. In July 2000, the California State Assembly and Senate approved Governor Davis' Transportation Congestion Relief Plan, including \$80 million for the Oceanside-Escondido Rail project.

San Diego County's ½ cent TransNet revenue is a stable and reliable funding source through 2008. If required, NCTD would borrow against future TransNet revenues to absorb the local share of project costs. However, current TransNet revenue projections do not demonstrate the capacity to cover any other potential significant cost increases.

**New and Proposed Sources:** The July 2000 passage of Governor Davis' transportation budget commits \$80 million of new funding to the project.

## Stability and Reliability of Operating Finance Plan

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

The *Medium-High* rating reflects the agency's demonstrated revenues and contingencies to operate the proposed project.

**Agency Operating Condition:** In recent years, NCTD has experienced positive operating balances and increased ridership, but increasing costs and a declining farebox recovery ratio (currently at 26 percent of operating costs). The agency is in adequate financial condition.

**Operating Cost Estimates and Contingencies:** NCTD estimates annual project operating costs of \$8.3 million (in 2004 dollars). Annual O&M costs and inflation factors used in NCTD's financial projections are reasonable. The agency is projected to maintain a 10 percent operating reserve margin through 2020.

**Existed and Committed Funding:** NCTD proposes to fund rail system operations through a variety of systemwide revenue sources. Transportation Development Act (TDA) and TransNet revenues provide a significant and reliable operating funding stream to the agency. NCTD projects a 5.7 percent growth in TDA revenues over a 20-year horizon. However, failure to achieve this rate of growth may jeopardize the agency's operating balance after the TransNet source sunsets in the year 2008.

**New and Proposed Sources:** No new operating funding sources are proposed.

### Locally Proposed Financing Plan

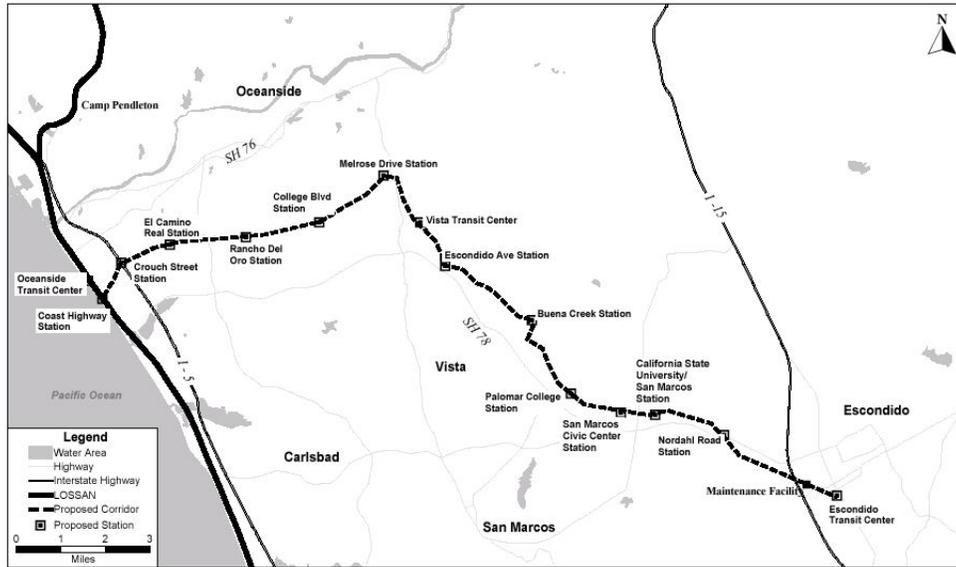
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$152.10	\$17.81 million appropriated through FY 2001
<b>State:</b>		
State 108	\$17.60	
State STIP	\$6.60	
State GTIP	\$80.00	
<b>Local:</b>		
TransNet (NCTD)	\$60.90	
TransNet (MTDB)	\$10.20	
Other Local Funds	\$4.90	
<b>Total:</b>	<b>\$332.30</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Oceanside - Escondido Rail Corridor

North San Diego County, California



# San Francisco, California/Third Street Light Rail - Phase 1

## Third Street Light Rail - Phase 1

San Francisco, California

(November 2000)

### Description

The San Francisco Municipal Railway (MUNI) has proposed implementing a 7.1 mile light rail transit (LRT) line and maintenance facility in the heavily transit-dependent Third Street corridor in eastern San Francisco. The primary purposes of the Third Street Light Rail Project are to accommodate existing and forecasted transit ridership with greater reliability, comfort, and speed, and to facilitate economic development opportunities along the corridor. Phase 1 of the proposed project is the construction of 5.4 miles of a light rail system extension from the Caltrain Bayshore Station at the San Francisco County line to the south and connect to the existing LRT system in downtown San Francisco via Third Street. The 5.4 mile minimum operable segment (MOS), would operate as a surface extension of the J-Church MUNI Metro line between the Market Street Subway and the Bayshore CalTrain Station. The estimated capital cost for the MOS is \$530.8 million (escalated dollars). Only Phase 1 of the project is being evaluated in this profile. No Section 5309 New Starts funds are proposed for this project, therefore the project is technically exempt from the New Starts evaluation process. MUNI wishes to retain eligibility to apply for federal funds at a future date, thus, they have submitted the New Starts criteria to FTA for rating and evaluation.

Phase 2 of the project would extend the light rail line 1.7 miles into a subway terminating in Chinatown and is estimated to cost \$876.1 million (escalated dollars) to construct. The project would provide regional connections to BART and CalTrain at multimodal stations. Capital costs for the entire Phase 1 and Phase 2 of the proposed Third Street Light Rail Project total \$1.41 billion (escalated dollars).

### Third Street Light Rail Summary Description

<b>Proposed Project</b>	Light Rail Transit Line (MOS); 5.4 miles, 19 stations
<b>Total Capital Cost (\$YOE)</b>	\$530.8 million
<b>Section 5309 Share (\$YOE)</b>	\$0.0 million
<b>Annual Operating Cost (\$YOE)</b>	\$5.0 million
<b>Ridership Forecast (2015)</b>	71,000 average weekday boardings 670 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the strong transit supportive land use policies in place along the corridor, and the adequate local financial commitment to construct the project. The overall project rating applies to this Annual Report on New Starts **and reflects**

**conditions as of November 2000.** Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

## Status

In October 1996, FTA authorized the initiation of Preliminary Engineering and the preparation of a Draft Environmental Impact Statement/Draft Environmental Impact Report (DEIS/DEIR) on the Third Street corridor. In November 1997, MUNI began Preliminary Engineering for Phase 1 of the light rail alignment as well as the Metro East Maintenance Facility. In June 1998, the San Francisco Public Transportation Commission (SFPTC), which governs MUNI, designated a 2-phase light rail project as the Locally Preferred Alternative. A Record of Decision on Phase I of the project was issued in April 1999. FTA approved the project's entrance into final design in April 2000.

Phase I of the Third Street Light Rail project is included in the region's long-range transportation plan. MUNI is currently working with the Metropolitan Transportation Council (the region's MPO) to adopt Phase II into the financial constrained plan, and to accelerate further development activities on that portion of the project. The complete 7.1 mile project would leverage approximately \$560 million in Federal funds with over \$800 million in State and local resources.

TEA-21 Section 3030(a)(79) authorizes the San Francisco Bayshore Corridor for final design and construction. To date, no Section 5309 New Starts funds have been appropriated for this project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Criteria are presented only for the 5.4-mile Phase 1 MOS. In agreement with FTA, the project is not evaluating separate no-build and TSM alternatives; these have been merged into a single alternative for the purposes of the environmental analysis. As a result, the project evaluation data are reported for the comparison of the new start (Phase 1) and the No-Build alternative. N/A indicates that data are not available for a specific measure. FTA has evaluated this project as being in final design and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the strong the transit supportive land use policies in place along the corridor and the project's anticipated mobility improvements, but notes the project's poor cost-effectiveness in terms of attracting new riders to the transit system.

## Mobility Improvements

### Rating: Medium

The Phase 1 Third Street LRT would serve approximately 71,000 average weekday boardings and carry 670 daily new riders. MUNI estimates that Phase 1 would result in the following annual travel time savings.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	2.4 million	N/A

Based on 1990 census data, there are an estimated 5,988 low-income households within a ½-mile radius of the MOS corridor, representing 16 percent of all households located within ½-mile of the corridor.

## Environmental Benefits

### Rating: Medium

The San Francisco Area is a maintenance area for ozone, and in attainment for carbon monoxide, nitrogen oxides and particulate matter. MUNI estimates that in 2015, Phase 1 would result in the following reductions in emissions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	decrease of 1 annual ton	N/A
Nitrogen Oxide (NO <sub>x</sub> )	decrease of 8 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 19 annual tons	N/A
Particulate Matter (PM <sub>10</sub> )	0	N/A
Carbon Dioxide (CO <sub>2</sub> )	decrease of 3,503 annual tons	N/A

MUNI estimates that in 2015, Phase 1 of the Third Street LRT would result in the following increase in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (millions)	increase of 12,582 million annual BTU	N/A

## Operating Efficiencies

### Rating: Medium

MUNI estimates that systemwide-operating costs per passenger mile would remain constant when comparing Phase 1 of the Third Street LRT to the No-Build alternative.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2015)	\$0.62	N/A	\$0.62

Values reflect 2015 ridership forecast and 1999 dollars.

## Cost Effectiveness

### Rating: Low

MUNI estimates the following cost effectiveness index.

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$40.50	N/A

Values reflect 2015 ridership forecast and 1999 dollars.

## Transit-Supportive Existing Land Use and Future Patterns

### Rating: High

The *High* rating reflects the urban character of the corridor and the successful efforts of local agencies in encouraging transit supportive development.

**Existing Conditions:** The Third Street light rail project serves a very dense regional CBD (over 220,000 jobs in a 1.25 square mile area) as well as medium- to high-density (14 to 29 units per

acre) urban residential neighborhoods with integrated commercial uses. The proposed project will also serve some industrial areas, several of which are being developed for various residential, commercial, and entertainment uses. A new major league baseball stadium opened in Spring 2000 near the northern terminus of the MOS. Neighborhoods throughout the corridor are pedestrian-scaled and walkable. Parking is extremely limited in the CBD and throughout the north end of the MOS. Existing zoning regulations are supportive of moderate- to high-density, transit-oriented development throughout the corridor.

**Future Plans and Policies:** San Francisco's *General Plan* has long encouraged higher-density transit- and pedestrian-oriented development. The city is currently preparing detailed plans for redevelopment areas of the corridor, including specific plans for the Mission Bay and Bayview - Hunters Point communities. In addition, urban design guidelines were recently completed for the Phase I corridor. The San Francisco Redevelopment Agency (SFRA) has special powers to facilitate development, including land acquisition, land assembly, and tax increment financing.

## Other Factors

**Economic Development:** One of the primary goals of the Third Street LRT project is to serve as a catalyst for the redevelopment of economically disadvantaged neighborhoods, including the Bayview/Hunters Point community. Concurrently with the light rail planning process, the SFRA is working with residents to produce a Revitalization Concept Plan to serve as the framework for the physical and economic redevelopment of the community.

## Local Financial Commitment

No Section 5309 New Starts funds are proposed for this project. The MUNI wishes to retain eligibility to apply for federal funds at a future date, thus, they have formally requested to complete FTA's planning and project development process.

## Proposed Non-Section 5309 New Starts Share of Total Project Costs: 100%

The current financial plan for the Phase I MOS project does not include Section 5309 New Starts funds. The plan proposes \$51.1 million (10 %) in Federal Section 5309 Rail Modernization and Surface Transportation Program resources; \$90.6 million (17 %) in State funding; \$381.1 million (72 %) in local Proposition B revenues; and \$8.0 million (1 %) in private contributions. The current plan reflects escalated dollars; project costs reported in prior years were based on 1997 dollars. MUNI is proposing the use of \$512.3 million in Section 5309 new starts funding for implementing Phase II of the project.

## Stability and Reliability of Capital Financing Plan

### Rating: Medium

The *Medium* rating reflects the high level of local capital funding committed to the Phase 1 project.

**Agency Capital Financial Condition:** The capital financial condition of MUNI is considered strong. Dedicated Proposition B sales tax revenues administered through the San Francisco County Transportation Authority are projected at \$779 million through 2010 to address capital needs.

**Capital Cost Estimates and Contingencies:** Capital costs for the Phase I project are reasonable and include adequate contingencies.

**Existing and Committed Funding:** All proposed Proposition B funding --- covering 70 percent of project costs - is committed to the Phase 1 project. \$25 million of existing State Transportation Improvement Program funding is also considered committed.

**New and Proposed Sources:** MUNI is proposing the use of \$30 million in revenues from a proposed State Rail Bond Program. The proposed program is currently a bill in the state legislature. MUNI is further proposing the use of \$8 million of as yet identified developer contribution and/or other private revenue to complete the financing for the Phase 1 3<sup>rd</sup> Street LRT. These private funds would be used to purchase the 10 additional light rail vehicles required by 2015.

## Stability and Reliability of Operating Finance Plan

### Rating: Medium

The *Medium* rating reflects the City of San Francisco's increasing financial support for operation of the MUNI system.

**Agency Operating Condition:** Since July 1, 2000, the San Francisco Municipal Railway has been operating as the Metropolitan Transportation Authority with a new and more reliable sources of funding, including Proposition E City parking revenues. MUNI has long term experience operating an urban rail system.

**Operating Cost Estimates and Contingencies:** Implementation of Phase 1 of the Third Street LRT would result in a net increase of \$5.0 million to systemwide operating costs. This increase represents a one percent increase in MUNI's systemwide operating budget.

**Existed and Committed Funding:** MUNI projects a 33 percent farebox recovery for the 3<sup>rd</sup> Street LRT. Local legislation passed in November 1999 (Proposition E) ensures that operating cost increases associated with current and expanded MUNI services will be met by a baseline budget adjustment (resulting in increased annual appropriations) from the San Francisco General Fund. Proposition E also transfers the administration of City parking revenues to a Municipal Transportation Agency, which is to include MUNI. These revenues are also available to fund MUNI system operations.

**New and Proposed Sources:** No new sources of operating funding are being proposed by MUNI.

## Locally Proposed Financing Plan

(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$0.0	No Section 5309 New Starts funds have been appropriated through FY 2001
Section 5309 Rail Mod	\$46.1	
STP	\$5.0	
<b>State:</b>		
STIP	\$60.6	

State Rail Bond Program	\$30.0	
<b>Local:</b>		
Proposition B Sales Tax	\$381.1	
Developer Contribution	\$8.0	
<b>Total:</b>	<b>\$530.8</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### Third Street Light Rail - Phase 1

San Francisco, California



Federal Transit Administration, 2001

# Seattle, Washington/Central Link LRT (MOS-2 and MOS-3)

## Central Link LRT (MOS-2 and MOS-3)

Seattle, Washington

(April 2001)

### Description

Sound Transit (Central Puget Sound Regional Transit Authority) is planning a 23.5-mile Central *Link* light rail transit (LRT) line running north to south from Northgate, through downtown Seattle, Southeast Seattle and the cities of Tukwila and SeaTac, Washington. *Link* proposes 23 stations, four new park-and-ride lots, and one existing lot. The system would operate on existing and new right-of-way (ROW), including the existing 1.6-mile Downtown Seattle Transit Tunnel. Sound Transit estimates a total of 156,400 daily riders on the 23.5-mile system in 2020. Total cost estimates for the 20-mile Locally Preferred Alternative (LPA) is \$4.0 billion (escalated dollars).

Sound Transit proposes to implement the system in several minimum operable segments (MOS). The LPA consists of a 20-mile alignment from the NE 45<sup>th</sup> Street station in Seattle to the S. 200<sup>th</sup> Street station in the City of SeaTac, including twenty-one (21) stations and three new park-and-ride lots (1,600 spaces). The initial MOS-1 (known as University Link) extends 7.2 miles from the NE 45<sup>th</sup> Street station southward to the South Lander Street station and is discussed in a separate project profile as an executed FFGA in this report. MOS-2 (known as Airport Link) extends 12.9 miles from the planned operations and maintenance facility near the South Lander Street station south to the South 200<sup>th</sup> Street station. MOS-3 (known as Northgate Extension) extends 3.5 miles from NE 45<sup>th</sup> Street northward to Northgate. This project profile addresses MOS-2 and MOS-3. However, New Starts criteria are reported for the 23.5-mile *Link* project.

The *Link* LRT system is one element of Sound Transit's voter-approved ten-year, \$3.9 billion (\$1995) *Sound Move* regional transit plan, which also includes implementation of a 2-mile LRT line in downtown Tacoma; an 82-mile Sounder commuter rail system operating between Lakewood and Everett; 20 new regional express bus routes; 14 high occupancy vehicle (HOV) direct access ramps (providing access to over 100 miles of existing HOV lanes); 14 new park-and-ride lots and 9 transit centers; and other service improvements.

### Central Link LRT Summary Description

<b>Proposed Project</b>	Light Rail Line (MOS-2 & MOS-3); 16.3 miles, 13 stations
<b>Total Capital Cost (\$YOE)</b>	\$1,350 million <sup>1</sup>
<b>Section 5309 Share (\$YOE)</b>	\$931 million <sup>2</sup>
<b>Annual Operating Cost (\$YOE)</b>	\$104 million <sup>3</sup>
<b>Ridership Forecast (2020)</b>	156,700 average weekday boardings (Entire <i>Link</i> Project)
<b>FY 2002 Financial Rating:</b>	<b>Not Rated</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Not Rated</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Not Rated</b>

<sup>1</sup> Reflects the capital cost of MOS-2 and MOS-3, not including debt service.

<sup>2</sup> Reflects the proposed New Starts share for MOS-2 and MOS-3.

<sup>3</sup> Reflects the annual operating cost for the entire 23.5-mile *Link* project.

The project is *Not Rated* based on uncertainty in current cost estimates, project schedule and financing plans. The overall project rating applies to this *Annual New Starts Report* and **reflects conditions as of April 2001**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

## Status

The Sound Transit Board adopted the *Sound Move* regional transit plan in May 1996. Voters approved \$3.9 billion in local funding for implementation of the plan in November 1996. A Major Investment Study of *Sound Move's* services was completed in March 1997. *Sound Move* is included in the Puget Sound Regional Council's (the area's MPO) Transportation Plan and Regional Transportation Improvement Program (TIP).

FTA approved initiation of preliminary engineering on the Link LRT in July 1997. A Draft Environmental Impact Statement (EIS) was published in December 1998. The Final EIS was initiated in February 1999 and a Record of Decision issued January 2000. FTA approved final design on a 7.2-mile MOS in February 2000. FTA approved Sound Transit's request to initiate final design on the remainder of the LPA in July 2000. Based on increased costs for rights-of-way, mitigation, and other factors, Sound Transit increased the total project cost for the LPA to \$4.0 billion, including \$2.6 billion (including financing and indirect costs) for MOS-1, \$1.4 billion for MOS-2 and MOS-3, and about \$400 million in finance, art, and other project costs and rescheduled the revenue operations date to November 2009. The Sound Transit Board adopted the revised budget and schedule. In January 2001, FTA entered into a Full Funding Grant Agreement (FFGA) for MOS-1, committing \$500 million in Section 5309 New Starts funds.

In April 2001, the DOT Office of Inspector General issued an Interim Report recommending that the Secretary hold funds and funding decisions for the project in abeyance until a specific set of actions related to cost estimation, project scope, cost control, and overall financing plans for the Link LRT project have been addressed. In April 2001, DOT and FTA immediately began implementing these actions.

TEA-21 Section 3030(a)(85) authorizes the Seattle Sound Move Corridor (*Link* and *Sounder*), of which *Link* is one element, for final design and construction. Through FY 2001, Congress has appropriated \$90.97 million for the *Link* light rail project.

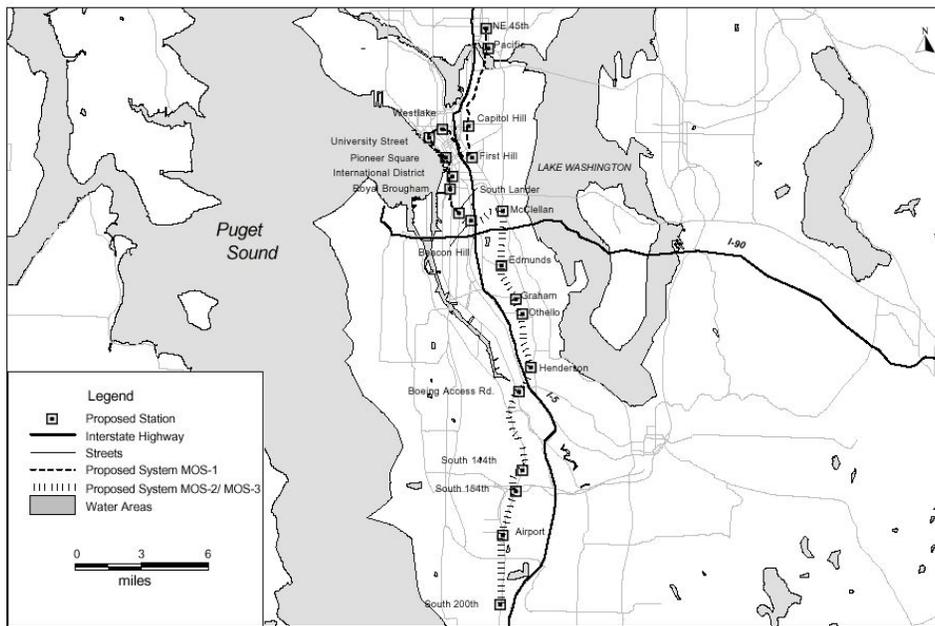
## Locally Proposed Financing Plan

(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Start</b>	\$931.4	\$90.97 million appropriated through FY 2001 for the entire <i>Link</i> LRT project
<b>Local: Bonds (Grant Anticipation Notes)</b>	\$571.6	
<b>Total:</b>	<b>\$1,503.0</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### Central Link LRT (MOS-2 & MOS-3) Seattle, Washington



## Projects in Preliminary Engineering

# Austin, Texas/Light Rail Corridors

## Austin Light Rail Corridors

Austin, Texas

(November 2000)

### Description

The Austin Capital Metropolitan Transportation Authority (Metro) is proposing to develop a light rail transit (LRT) system in the phased implementation. The locally preferred alternative is development of a 20-mile light rail transit (LRT) system with 26 stations. The proposed LRT system would run north-south from McNeil Road to Ben White Boulevard, and east-west from the central business district (CBD) to 5th and Pleasant Valley. This LRT system is estimated to cost \$1,085.8 million (in escalated dollars).

The currently proposed New Starts project is a 14.6 mile, 16 station Minimum Operable Segment (MOS) of the LRT system, and would extend from McNeil Road in north Austin to the CBD. The MOS is planned to provide direct access to the University of Texas, the State Capitol Complex and the Austin CBD. Service is proposed to operate at 10-minute frequencies during peak periods, and 20-minute frequencies during the off-peak. The 14.6 mile MOS is estimated to cost \$739.0 million (in escalated dollars) and to serve 37,400 average weekday boardings by the year 2025.

### Austin Light Rail Summary Description

<b>Proposed Project</b>	14.6 mile, 16 station LRT Minimum Operable Segment
<b>Total Capital Cost (\$YOE)</b>	\$739.00 million
<b>Section 5309 New Starts Share (\$YOE)</b>	\$369.50 million
<b>Annual Operating Cost (\$YOE)</b>	\$23.40 million
<b>Ridership Forecast (2025)</b>	37,400 average weekday boardings (17,100 daily new riders)
<b>FY 2002 Finance Rating:</b>	Low-Medium
<b>FY 2002 Project Justification Rating:</b>	Medium
<b>FY 2002 Overall Project Rating:</b>	Not Recommended

The *Not Recommended* rating is based on the uncertainty of the project's Local Financial Commitment at this time due to the recently failed referendum. The overall project rating applies to this *Annual New Starts Report* and **reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.

### Status

In March 1997, Capital Metro and CAMPO (the Capital Area Metropolitan Planning Organization) jointly completed a major investment study (MIS) which recommended a proposed LRT line in the northwest/north central corridor, designated as the Red Line from the CBD to the City of Leander. The southeast corridor, referred to as the Orange Line, was designated as the second highest priority. In October 1997, the Federal Transit Administration authorized Capital Metro to initiate preliminary engineering and to prepare an Environmental Impact Statement for the Red Line alignment.

The Capital Metro Board, in conjunction with selection of a new General Manager in October 1998, initiated additional planning efforts to refine the locally preferred alternative to ensure that the final plan incorporates the area's major destinations and activity centers. The Austin Area in Motion (AIM) study was a comprehensive market research, public involvement and technical analysis addressing future transportation options. Following extensive public involvement, the Capital Metro Board adopted the revised plan on October 25, 1999 and CAMPO formally endorsed the plan on November 8, 1999. In May 2000, Capital Metro initiated the environmental review process for the proposed 20-mile LRT system, focusing preliminary engineering on the 14.6 mile MOS. The November 2000 voter referendum on the service area's preferences regarding light rail was unsuccessful, making the project's continuation uncertain.

TEA-21 Section 3030(a)(85) authorizes the Austin Northwest/North Central/ Southeast-Airport Light Rapid Transit (LRT) for final design and construction. Through FY 2001, Congress has appropriated \$3.96 million in Section 5309 New Start funds to the project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Information reflects the 14.6 mile minimum operable segment (MOS) of the project. N/A indicates that data are not available for a specific measure.

FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design, and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects across the board average ratings in the criteria, including cost-effectiveness and transit-supportive land use.

## Mobility Improvements

### Rating: Medium

Capital Metro estimates that the 14.6 mile MOS will serve 37,400 average weekday boardings, will attract 17,100 daily new riders by 2025, and will result in the following annual travel time savings.

Mobility Improvements	New Start vs. No-Build	New Start vs. TSM
Annual Travel Time Savings (Hours)	2.6 million hours	2.1 million hours

Based on 1990 census data, there are an estimated 4,446 low-income households within a ½ mile radius of the proposed 16 LRT stations in the MOS, or roughly 28 percent of total households within ½ mile of proposed stations.

## Environmental Benefits

### Rating: Medium

The Austin region is in attainment for ozone and in attainment for carbon monoxide. Capital Metro estimates the following annual emissions reductions.

Criteria Pollutant	New Start vs. No-Build	New Start vs. TSM
Carbon Monoxide (CO)	reduction of 137 annual tons	reduction of 122 annual tons
Nitrogen Oxide (NOx)	reduction of 49 annual tons	reduction of 43 annual tons
Volatile Organic Compounds (VOC)	reduction of 18 annual tons	reduction of 16 annual tons
Particulate Matter (PM10)	reduction of 170 annual tons	reduction of 152 annual tons
Carbon Dioxide (CO <sub>2</sub> )	reduction of 2,295 annual tons	reduction of 278 annual tons

Capital Metro estimates that in 2025, the MOS will result in the following savings in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. No-Build	New Start vs. TSM
BTU (million)	reduction of 1,575 million BTU	reduction of 27,941 million BTU

## Operating Efficiencies

**Rating: Medium**

Capital Metro estimates the following costs per passenger mile for the 14.6 mile MOS.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2025)	\$1.18	\$1.15	\$1.14

**Note:** Values reflect 2025 ridership forecast and 1999 dollars.

## Cost Effectiveness

**Rating: Medium**

Capital Metro estimates the following cost effectiveness indices.

Cost Effectiveness	New Start vs. No-Build	New Start vs. TSM
Incremental Cost per Incremental Passenger	\$11.70	\$12.30

**Note:** Values reflect 2025 ridership forecast and 1999 dollars.

## Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* land use rating reflects existing conditions in the corridor with a mix of from moderate to low densities, but including a number of major trip generators. Local agencies have initiated a proactive program to encourage transit-supportive development.

**Existing Conditions:** The proposed 14.6 mile corridor for the MOS connects the Austin area's major activity centers including the University of Texas (UT), the UT Pickle Research area, the

State Capitol Complex and the CBD. Total employment for the CBD, including the University of Texas, equals 70,000. An additional 30,000 jobs are located within ½ mile of stations in the remainder of the MOS corridor. Total population within ½ mile of stations in the MOS is estimated at 48,000, at an average density of 4,300 persons per square mile. Densities are highest around the eight stations in the CBD and UT area, while the northernmost two station areas are largely undeveloped. Strong population and employment growth is occurring in the Austin metropolitan area in general; this is resulting in a number of major office and residential development projects in the CBD. By 2025, employment and population in station areas are expected to grow by 20 percent and 57 percent, respectively. There are a considerable number of surface parking lots in the CBD, although surface parking is restricted to 60 percent of normal, city-wide requirements. UT plans to continue to supply a minimal 14,000 parking spaces for a total campus population of 70,000. There are no specific restrictions on parking in other parts of the corridor.

**Future Plans and Policies:** The City of Austin, Capital Metro, and the MPO have all issued transit-supportive policy guidelines and have initiated proactive public involvement programs to develop corridor and station area plans. The City of Austin's Smart Growth Initiative includes a number of activities supportive of transit-oriented development. These include designation of Smart Growth Corridors in coordination with bus and light rail transit services; adoption of a Traditional Neighborhood Development ordinance encouraging higher density, mixed use and transit-oriented development; and anticipated land use plans and development incentives around proposed transit station areas (to be further developed during preliminary engineering). Citizen interest and involvement in planning for Smart Growth and transit-oriented development has been high. Outcomes of land use policies to date have included a number of significant new developments in the CBD, a transit-supportive development proposal for the Triangle Square station area, and a plan for redevelopment of an air force base (not on the MOS alignment) as a neo-traditional neighborhood. The city is conducting a comprehensive parking study and developing a parking management plan for the Austin Downtown area.

## Local Financial Commitment

**Note:** Failure of a November 7, 2000 light rail referendum in Austin in a very close vote is reflected in this annual rating. Capital Metro did not submit an updated financial plan for the FY 2002 New Starts evaluation.

### **Proposed Non-Section 5309 Share of Total Project Costs: 50%**

The financial plan for the 14.6 mile MOS includes \$369.5 million (50 percent of total project costs) in Section 5309 New Starts funding, \$103.7 million (14 percent) in existing cash reserves accumulated from the 1% local sales tax revenues, and \$265.8 million (36 percent) from future dedicated local sales tax revenues.

## Stability and Reliability of Capital Financing Plan

### **Rating: Low-Medium**

The *Low-Medium* capital finance plan rating is based on the uncertainty of the allowed expenditure of sales tax funds for light rail, due to failure of the November 7, 2000 referendum.

**Agency Capital Financial Condition:** The Austin Capital Metropolitan Transportation Authority is in sound financial condition. Capital Metro receives a one cent set-aside from the local sales tax, generating approximately \$100 million in revenues annually which can be used for capital as well as operating expenses. The Board of Directors and Capital Metro management have been working aggressively to reduce the amount of this annual revenue used to fund local operations and to increase the amount reserved for capital projects. The amount used for current operations was reduced to 74% in FY 1998 and to 67% in FY 1999. Cash reserves are estimated to exceed \$100 million by the end of FY 2000.

**Capital Cost Estimates and Contingencies:** Capital cost estimates, averaging approximately \$51 million per mile for the MOS, appear reasonable at this time. However, preliminary engineering is needed to produce more specific cost estimates.

**Existing and Committed Funding:** Capital Metro proposes that \$369.5 million (in escalated dollars) will be available as the local capital funding share for the MOS by leveraging its existing revenue base of sales tax revenues and passenger fare revenues. The financing plan includes \$103.7 million in cash reserves from sales tax proceeds and an additional \$265.8 million in anticipated sales tax revenues, reflecting approximately one-third of annual sales tax proceeds which are dedicated to capital project development. The existing financing plan does not assume the issuance of debt, except the potential of a small amount of short term debt to meet cash flow requirements during the construction period.

Assuming the current 1% dedicated sales tax revenue remains in place, the local funding source appears solid and reasonable to meet projected capital financing requirements. The projected annual growth rate in sales tax revenues is 4% to 5%, compared to a 15% annual growth rate in the 1995-1999 period. Although previous Capital Metro Board action indicated strong policy support for commitment of local sales tax funds to the proposed financing plan, the failure of the November 7, 2000 referendum, which would have allowed the expenditure of sales tax revenues for light rail, casts doubt on the reliability of these funds.

**New and Proposed Sources:** Only existing sources are proposed for the construction of the MOS. No new or proposed sources are needed.

## Stability and Reliability of Operating Finance Plan

**Rating: Low-Medium**

**Agency Operating Condition:** The agency plans to continue to use two-thirds of the dedicated sales tax revenue, totaling approximately \$100 million annually, for current operations and to place the remaining one third in reserve for future capital projects. Capital Metro is attempting to cut its existing system operating costs by redesigning the route network, developing new service policy guidelines and a five-year service plan. Capital Metro's current fare recovery ratio is only 12%, in part due to low fares. The Agency is trying to increase the ratio to 20% by changes in the pass program and more enforcement of fare evasion.

**Operating Cost Estimates and Contingencies:** Annual operating costs for the 14.6 mile MOS are estimated at \$23.4 million in 2015 (YOE dollars), reflecting 10-minute peak and 20-minute off-peak service frequencies. Operating cost estimates appear reasonable at this time. More detailed operating plans are to be developed as preliminary engineering progresses.

**Existing and Committed Funding:** All of the project's proposed sources of operating funding are existing, leveraged from passenger fare revenues and the approximately two-thirds of the annual sales tax revenues directed to operating expenses. Capital Metro's service area encompasses one of the strongest growth areas in the country, and projections of continued sales tax growth are reliable. A 30-year cash flow analysis illustrates that ongoing system transit and paratransit operations, system capital replacement needs, as well as LRT operations for the MOS can be financed with currently available sources. However, planned expenditure of sales tax revenues for light rail is uncertain at this time.

**New and Proposed Sources:** All proposed operating revenue sources currently exist, although their allowed expenditure for light rail is uncertain at this time.

# Locally Proposed Financing Plan

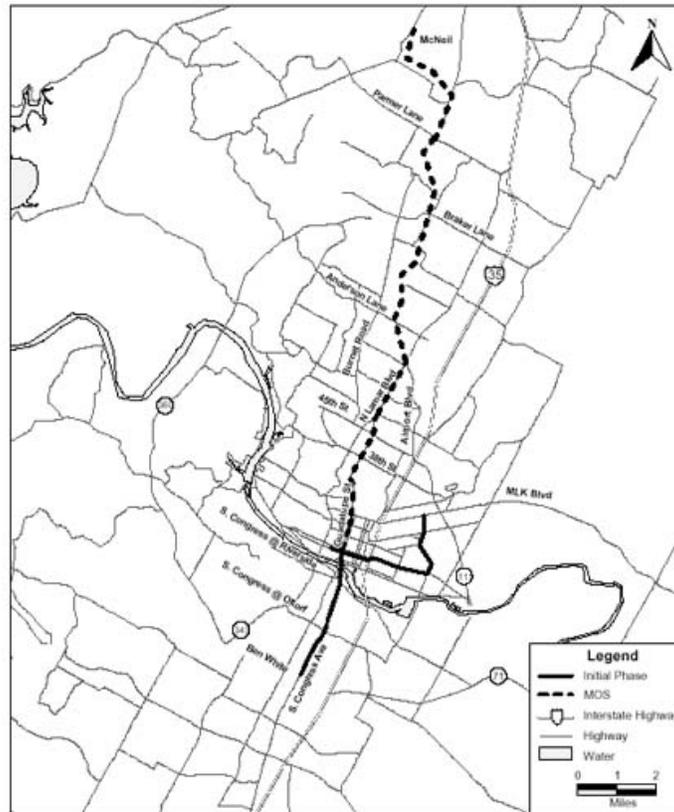
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b> Section 5309 New Start	\$369.50	\$3.96 million appropriated through FY 2001
<b>Local:</b> Cash Reserves (from sale tax revenues)	\$103.70	N/A
Dedicated 1% sales tax revenues	\$265.80	N/A
<b>TOTAL</b>	<b>\$739.00</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

## Austin Area Light Rail Transit System

Austin, TX



Federal Transit Administration, 2000

# Charlotte, North Carolina/South Corridor LRT

## South Corridor LRT

Charlotte, North Carolina

(November 2000)

### Description

The Charlotte Area Transit System (CATS), in cooperation with the City of Charlotte, is proposing to design and construct an 11-mile light rail transit (LRT) line extending from Uptown Charlotte to the Town of Pineville, North Carolina, near the South Carolina border. The proposed project is currently planned to operate within portions of existing Norfolk-Southern (NS) railroad right-of-way (ROW), including sharing ROW with the city's existing Downtown Trolley System. The proposed project also includes the construction of 19 stations, purchase of up to twelve light rail vehicles and the construction of a light rail vehicle maintenance and storage facility. Total capital costs for the South Corridor project are estimated at \$331 million (escalated dollars).

The South Corridor is an area generally paralleling Interstate-77 along NS railroad ROW in the City of Charlotte and Mecklenburg County. A 3.7-mile portion of the proposed system – between Uptown and Scaleybark Road – would operate on abandoned NS ROW owned by the City of Charlotte. The remainder of the planned system (7.3 miles) would operate on separate tracks generally paralleling NS ROW. Three stations at the southern terminus of the line would include park-and-ride lots and serve as transfer points for local and feeder bus service. An additional station will serve as an intermodal transfer point for feeder buses, while a station at the Charlotte Transportation Center in Uptown Charlotte will provide connections to the Downtown Trolley and local bus service.

The South Corridor light rail project is expected to serve 15,500 average weekday boardings by 2020, including 11,200 daily new riders.

### South Corridor LRT Summary Description

<b>Proposed Project</b>	Light Rail Transit Line 11 miles, 19 stations
<b>Total Capital Cost (\$YOE)</b>	\$331.10 million
<b>Section 5309 Share (\$YOE)</b>	\$166.80 million
<b>Annual Operating Cost (\$YOE)</b>	\$16.90 million
<b>Ridership Forecast (2020)</b>	15,500 average weekday boardings; 11,200 daily new riders
<b>FY 2002 Finance Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The *Recommended* rating is based upon the project's adequate cost effectiveness and transit-supportive land use as well as the strength of the project's capital and operating financing plans for this early stage of project development. The overall project rating applies to this Annual Report on New Starts **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs,

benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

## Status

In 1999, the City of Charlotte completed a Major Investment Study examining transportation and coordinated land use options in the South Corridor between Uptown Charlotte and the Town of Pineville, North Carolina. In February 2000, the Metropolitan Transit Commission (governing board for CATS) selected light rail as the Locally Preferred Alternative (LPA). The LPA was adopted by the Mecklenburg-Union Metropolitan Planning Organization's financially constrained long-range transportation plan in February 2000.

In November of 1998, a local referendum was passed authorizing a dedicated local sales tax of ½ percent for funding transit service in the region. FTA approved the South Corridor project into preliminary engineering in August 2000.

TEA-21 Section 3030(a)(8) authorizes the Charlotte North-South Corridor Transitway for final design and construction. Through FY 2001, Congress has appropriated \$12.84 million in Section 5309 new starts funds for this project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance into final design and for next year's *Annual Report on New Starts*. N/A indicates that data are not available for a specific measure.

## Justification

The *Medium* project justification rating reflects the strong mobility improvements and transit-supportive land use policies in place to support the proposed light rail project.

## Mobility Improvements

### Rating: High

CATS estimates that the South Corridor light rail will result in the following annual travel time savings:

<b>Mobility Improvements</b>	<b>New Start vs. No- Build</b>	<b>New Start vs. TSM</b>
<b>Annual Travel Time Savings (Hours)</b>	5.3 million hours	4.9 million hours

Based on 1990 census data, there are an estimated 5,700 low-income households within a ½ mile radius of the proposed 19 stations. This represents approximately 33 percent of the total number of households within ½ mile radius of the proposed stations.

## Environmental Benefits

### Rating: High

The Charlotte area is currently classified as an "attainment" area for both ozone and carbon monoxide. CATS estimates that in the year 2025, the project would result in the following annual changes in emissions.

Criteria Pollutant	New Start vs. No- Build	New Start vs. TSM
Carbon Monoxide (CO)	reduction of 1,135 annual tons	reduction of 607 annual tons
Nitrogen Oxide (NO <sub>x</sub> )	reduction of 157 annual tons	reduction of 84 annual tons
Hydrocarbons (HC)	reduction of 101 annual tons	reduction of 54 annual tons
Particulate Matter (PM <sub>10</sub> )	No Change	No Change
Carbon Dioxide (CO <sub>2</sub> )	reduction of 46,966 annual tons	reduction of 25,117 annual tons

CATS estimates that in the year 2025, the project would result in the following savings in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. No- Build	New Start vs. TSM
BTU (million)	reduction of 28,070 million BTU	reduction of 10,850 million BTU

### Operating Efficiencies

**Rating: Medium**

CATS estimates the following costs per passenger mile for the LRT extension and the Coaster station improvements.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (1999)	\$0.77	\$0.88	\$0.79

**Note:** Values reflect 2025 ridership forecast and 1999 dollars.

### Cost Effectiveness

**Rating: Medium**

CATS estimates the following cost-effectiveness indices:

Cost Effectiveness	New Start vs. No- Build	New Start vs. TSM
Incremental Cost per Incremental Passenger	\$10.00	\$10.30

**Note:** Values reflect 2020 ridership forecast and 1999 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* land use rating reflects the strong policies employed by the region to implement transit-supportive land use patterns in the Mecklenburg-Union metropolitan area. The rating also acknowledges the region's success in effectuating infill development.

**Existing Land Use:** The predominant land uses along the proposed corridor are commercial, industrial, multi- and single family housing, including lower-density office and institutional uses. The northern termini of the project is the Charlotte Central Business District, which contains 14 million sq. ft. of office space with over 50,000 employees. The Central Business District contains other major trip generators including the Ericsson Stadium, the Charlotte Convention Center, and the North Tryon arts and entertainment district. Additionally, the redevelopment of formerly abandoned industrial sites along South Corridor is underway. Within the corridor, the redevelopment of industrial sites into transit-supportive land uses has produced 600,000 sq. ft. of

office and commercial space and 594 residential units, and other large tracts are planned for additional development. The southern portions of the corridor are low-density and auto-oriented with land a mixture of light industrial, commercial, newer multi-family housing, and a large regional retail facility.

**Proposed Plans and Policies:** The region has proactively supported land use plans and policies that are considered supportive of transit in the adoption of the *2025 Integrated Land Use/Transit Plan*. The plan is designed to concentrate growth within a designated transit corridor and promote urban redevelopment in an older section of the City, which might otherwise deteriorate. Additionally, the *2025 Integrated Land Use/Transit Plan* contains policies to pedestrian accessibility, and promote station area redevelopment. The Regional Centers and Corridors policy is designed to direct growth to the proposed transit corridors and allow higher densities at transit station sites. Specific station area plans will be developed during the preliminary engineering stage of project development. A number of proposed station areas have had new mixed-use office/commercial projects constructed. In addition, several new projects are under construction while others are proposed for rezoning in the corridor. The market demand is strong in the South Corridor for mixed-use development.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 50%**

The financial strategy for the proposed South Corridor LRT assumes \$166.8 million (50 percent) of Section 5309 New Starts funds, \$82.15 million (25 percent) in State funds and \$82.15 million (25 percent) in local funds.

## Stability and Reliability of Capital Financing Plan

### **Rating: Medium**

The *Medium* reflects the strong financial condition of the Charlotte Area Transit System (CATS) and the percentage (50 percent) of non-Section 5309 New Starts funding committed at the local level to the proposed project. However, the capital costs presented have low contingency costs allocated for this early phase of project development.

**Agency Financial Condition:** CATS is in strong financial condition. The agency receives funding for both capital and operating expenses from the City of Charlotte. CATS is a component of the city government created in 1999 pursuant to an interlocal agreement between the city, Mecklenburg County and the six towns in the county. The city has taxing capacity and acts as an administrator of both Federal and State funds for CATS.

**Cost Estimates and Contingencies:** The capital cost estimates for the South Corridor LRT include only a 10 percent construction contingency. Given the early stage in project development, the contingency costs should be increased to allow for potential increases in right-of-way costs, vehicle costs, and higher construction costs.

**Existing and Committed Funding:** At this time, approximately 50 percent (\$82.15 million) of the proposed local share has been reasonably committed to the South Corridor LRT through CATS' dedicated local revenue source. The revenue source (extant sales tax) is considered stable and reliable. State legislative action is required to commit the remaining 50 percent (\$82.15 million) of the proposed local share.

**New and Proposed Sources:** Only existing sources are proposed to fund the construction of the South Corridor light rail project.

## Stability and Reliability of Operating Finance Plan

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

The *Medium-High* rating reflects CATS' (a component of the City of Charlotte) healthy operating condition. Revenues to operate the proposed South Corridor light rail project appear to be strong.

**Operating Costs and Contingencies:** Operating cost estimates appear reasonable for this early stage of development. Project sponsors estimate an annual operating and maintenance costs at \$16.9 million (escalated dollars) for the South Corridor light rail project.

**Existing and Committed Funding:** All of the proposed South Corridor light rail project's operating funds are existing and considered committed. Funds to support operating expenses are derived from the Charlotte-Mecklenburg region's retail sales tax, farebox revenues, State general appropriations and other [local] sources – e.g., regional service reimbursement program, city's interest income, etc.

**New and Proposed Sources:** All proposed operating revenues currently exist. No new sources are proposed.

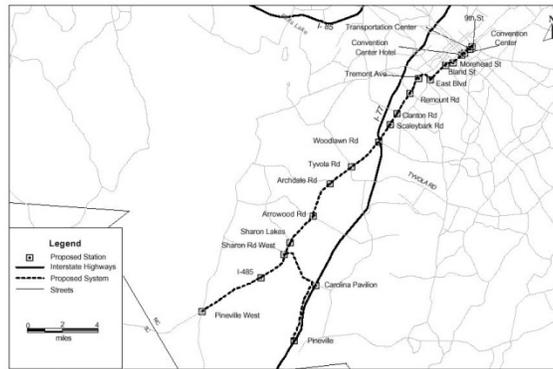
### Locally Proposed Financing Plan

(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Start</b>	\$166.80	\$12.84 million appropriated through FY 2001
<b>State: Transportation Trust Fund</b>	\$82.15	N/A
<b>Local: City of Charlotte's Dedicated Sales Tax</b>	\$82.15	N/A
<b>Total</b>	<b>\$331.10</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

**South Corridor LRT**  
Charlotte, North Carolina



Federal Transit Administration, 2001

# Chicago, Illinois/Ravenswood Line Expansion

## Ravenswood Line Expansion

Chicago, Illinois

(November 2000)

### Description

The Chicago Transit Authority (CTA) is proposing to lengthen existing platforms and expand stations on the existing Ravenswood (Brown) Line to accommodate eight-car trains. The Brown Line extends 9.3 miles from the north side of Chicago to the "Loop elevated" in downtown Chicago and includes 19 stations. The majority of the Brown Line is operated on an elevated structure (8.1 miles) except for a portion near the northern end of the line, which operates at-grade (1.2 miles). The Brown Line was built between 1900 and 1907. The line currently carries approximately 104,000 average weekday boardings. However, current station and platform size prohibits CTA from increasing capacity on the line to handle increased demand. The proposed project would expand stations and platforms and straighten curves to allow CTA to operate longer trains, which would increase the capacity of the line. Other related capital improvements would also be undertaken. Total capital costs are currently estimated at \$327 million (escalated dollars).

### Ravenswood Line Expansion Summary Description

<b>Proposed Project</b>	Capacity expansion of existing heavy rail line and related capital improvements; 9.3 miles, 19 stations
<b>Total Capital Cost (\$YOE)</b>	\$327.00 million
<b>Section 5309 New Starts Share (\$YOE)</b>	\$245.50 million
<b>Annual Operating Cost (\$1997)</b>	\$2.40 million decrease from current Ravenswood Line operating expenses
<b>Ridership Forecast (2020)</b>	12,100 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>High</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The *Recommended* rating is based on the project's strong cost effectiveness, transit-supportive land use conditions and the adequacy of the capital and operating plans. The overall project rating applies to this *Annual New Starts Report* and **reflects conditions as of November 2000**. Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions and refined financing plans.**

### Status

In November 1997, the Chicago Area Transportation Study (CATS) – local Metropolitan Planning Organization – included the Ravenswood Line Expansion project in the region’s financially constrained Long-Range Transportation Plan. CATS subsequently included the project in the region’s financially constrained Transportation Improvement Program in January 1999. CTA is currently completing an examination of the environmental impacts and benefits related to the proposed project. CTA is currently addressing an historical preservation issue associated with one of the stations that are scheduled for rehabilitation along the Ravenswood Line. The environmental review process is scheduled for completion in 2001.

Section 3030(a)(11) of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) authorizes the “Ravenswood Line Extension [CTA]” for final design and construction. Through FY 2001, Congress has appropriated \$4.92 million in Section 5309 New Starts funds for the project.

## Evaluation

The following criteria have been estimated in conformance with *FTA’s Technical Guidance on Section 5309 New Starts Criteria*. With FTA’s concurrence, CTA did not provide information on a TSM alternative for comparison to the New Starts project.

FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design and for next year’s *Annual Report on New Starts*.

## Justification

The *High* justification rating reflects the project’s overall performance in terms of mobility improvements, environmental benefits, cost effectiveness, and transit supportive land use.

## Mobility Improvements

### Rating: Medium-High

The Ravenswood Line currently carries approximately 104,000 average weekday boardings. CTA estimates 12,100 daily new riders on the Ravenswood Line in 2020. CTA estimates the following travel time savings for the New Start versus the No-Build alternative.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	2.70 million hours	N/A

Based on 1990 census data, there are an estimated 11,544 low-income households within a ½ mile radius of Ravenswood Line stations. This represents 13 percent of the total number of households within a ½ mile radius of the Ravenswood Line.

## Environmental Benefits

### Rating: High

Northeastern Illinois (which includes the Chicago metropolitan area) is classified as being in “severe” non-attainment for ozone. The region is in attainment for carbon monoxide and particulate matter (PM10). CTA estimates that in the year 2020, the proposed project will result in the following emissions reductions:

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	reduction of 270 annual tons	N/A
Nitrogen Oxide (NO <sub>x</sub> )	reduction of 61 annual tons	N/A
Volatile Organic Compounds (VOC)	reduction of 34 annual tons	N/A
Particulate Matter (PM <sub>10</sub> )	No Change	N/A
Carbon Dioxide (CO <sub>2</sub> )	reduction of 18,911 annual tons	N/A

CTA estimates that the proposed project will result in the following decreases in regional energy consumption (measured in British Thermal Units – BTUs):

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (million)	reduction of 235,320 million BTU	N/A

### Operating Efficiencies

**Rating: Medium**

CTA estimates the following systemwide operating costs per passenger mile in the year 2020 for the New Start and No-Build alternatives:

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	\$0.21	N/A	\$0.20

Values reflect 2020 ridership forecast and 1997 dollars.

### Cost Effectiveness

**Rating: High**

CTA estimates the following cost effectiveness index for the Ravenswood Line Expansion project:

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$3.50	N/A

Values reflect 2020 ridership forecast and 1997 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: High**

The *High* land use rating reflects the high employment levels and strong transit-accessible environment that characterizes the Ravenswood corridor.

**Existing Conditions:** The Ravenswood (Brown Line) line has been in operation for nearly 100 years, and serves neighborhoods that originally developed around the transit system. Since 1979, Brown Line ridership has increased by 36 percent. On a typical weekday, the Brown Line carries approximately 104,000 riders. The corridor contains an estimated 89,000 jobs and 194,000 residents within a ½ mile radius of stations (not including the CBD). Densities are very high, averaging 11,400 jobs per square mile and 24,900 persons per square mile. The line serves a large, dense CBD with an estimated 339,000 jobs. Other major trip generators in the corridor include DePaul University (18,000 students) and three major hospitals. Existing development along the entire line is highly urban in character. Mixed commercial, retail, and residential

development on arterials – generally two to four stories in height in the inner portion of the corridor – is surrounded by dense residential neighborhoods characterized by multi-family and densely packed single-family housing. The inner stations along the Brown Line also serve some high-rise apartment buildings and specialty retail districts near the Lake Michigan waterfront.

Existing Chicago zoning ordinances permit transit-supportive commercial and residential densities in the corridor. Commercial districts generally permit floor-to-area ratios of up to 2.2. Most residential districts permit both single family and multi-family uses with a minimum lot size of 900 square feet per dwelling unit – e.g., maximum of 48 units per acre net of public rights-of-way.

**Future Plans and Policies:** CTA, along with the State of Illinois, is engaged in the promotion and support of transit-oriented development principles and activities as well as regional growth management strategies. The City of Chicago also has a number of policies and programs to support urban redevelopment and transit-supportive development. The city has designated a number of tax increment financing (TIF) districts to finance improvements in dilapidated areas and stimulate reinvestment. There are a number of TIF districts in proximity to existing Ravenswood Line stations. In addition, the city has created an Industrial Corridors Program to plan and implement improvements to Chicago's 22 industrial corridors to increase the area's competitiveness. One of these corridors is adjacent to three existing Ravenswood Line stations. In addition, the Metropolitan Planning Council, a non-profit, non-partisan group of business and civic leaders, is leading a "Campaign for Sensible Growth," to promote economic and community development in established urban neighborhoods.

## Other Factors

**Enterprise Zone:** The Ravenswood Line has two stations adjacent to a State-designated Enterprise Zone. Enterprise Zone benefits include various tax exemptions, reductions, and credits for firms locating in the zone. In addition, redevelopment of the Cabrini-Green public housing project – located within the proximity of the Brown Line – north of downtown Chicago - is underway. The 100-acre, \$1 billion project has completed a new library, commercial development, parks and the first phase of new mixed-income housing.

## Local Financial Commitment

### **Proposed Non-Section 5309 New Starts Share of Total Project Costs: 25%**

The financial strategy for the proposed Ravenswood Line Expansion project includes \$245.5 million (75 percent of total project costs) in Section 5309 New Starts funds, \$13.2 million (4 percent in Section 5309 Rail Modernization funds, \$34.1 million (10 percent) in Illinois Department of Transportation (IDOT) bond funds and \$34.1 million (10 percent) in Regional Transportation Authority (RTA) of Northeastern Illinois bond funds.

## Stability and Reliability of Capital Financing Plan

### **Rating: Medium**

The *Medium* rating reflects the sound financial condition of CTA and the agency's dedicated revenue sources. The rating also acknowledges the commitment of the RTA and IDOT to provide funding for the local match for the Ravenswood Line Expansion project. The rating also reflects the absence of a project-specific capital plan.

**Agency Capital Financial Condition:** The CTA, RTA, and the State of Illinois are considered to be in sound financial condition. The CTA receives funding for both capital and operating expenses from the RTA.

**Capital Cost Estimates and Contingencies:** Capital costs estimates for the project are considered reasonable. However, the agency did not provide FTA with a project-specific capital

plan, including definitive documentation to evaluate escalation rates or provisions to address unanticipated cost overruns or funding shortfalls. In response to an FTA request to resolve cost estimation discrepancies, CTA is also refining the capital cost estimates for the Ravenswood Line Expansion project.

**Existing and Committed Funding:** All non-Section 5309 New Starts funding is considered committed to the project. IDOT and the RTA are scheduled to contribute a total of approximately \$68.3 million in funding for capital costs associated with the project from Series B Transportation bond revenues authorized in recent legislation and proceeds from the State-supported Strategic Capital Improvement Program (SCIP). An additional \$13.25 million in Section 5309 rail modernization funds have also been programmed to the project. It should also be noted that the construction schedule for the project exceeds the lifespan of CTA's current Capital Improvement Program. An additional capital funding commitment will be needed by 2004.

**New and Proposed Sources:** No new sources are proposed for the Ravenswood Line Expansion project.

## Stability and Reliability of Operating Finance Plan

### Rating: Medium

The *Medium* rating reflects the adequacy of existing operating revenues to continue operation of the Ravenswood Line. The rating also acknowledges the absence of an operating plan specific to the Ravenswood Line.

**Agency Operating Condition:** The operating condition of the CTA is sound. CTA receives funds for operations from the RTA, including revenue generated from RTA's dedicated sales tax. Total operating and maintenance costs for the agency for FY 2000 are estimated at \$841 million. Operating and maintenance costs for the agency's rail system are projected at \$80.7 million (9.6 percent). As of January 2000, CTA had an operating reserve fund of approximately \$108 million.

**Operating Cost Estimates and Contingencies:** CTA did not provide definitive information on operating and maintenance costs or escalation rates and contingency factors specific to the Ravenswood Line.

**Existing and Committed Funding:** No project-specific operations and maintenance plan was submitted for the Ravenswood Line Expansion project. However, CTA's analysis indicates that no additional operating funds would be necessary to operate the proposed improvements.

**New and Proposed Sources:** No new sources of operating funding are proposed for the Ravenswood Line Expansion project.

# Locally Proposed Financing Plan

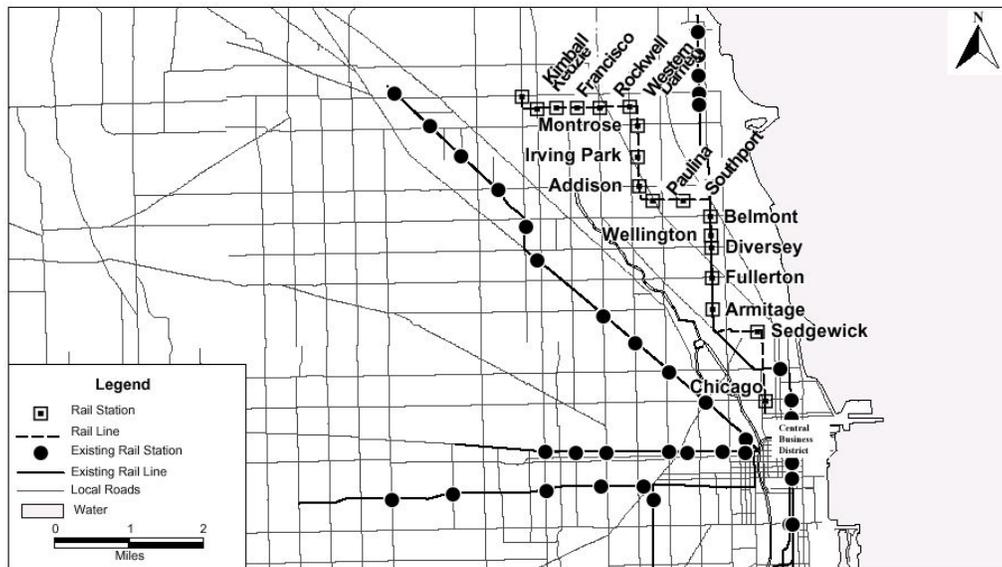
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: \$5309 New Starts</b>	\$245.50	\$4.92 million appropriated through FY 2001
<b>Federal: \$5309 Fixed Guideway Modernization</b>	\$13.20	N/A
<b>State: Illinois DOT Bonds</b>	\$34.10	N/A
<b>Local: RTA Bonds</b>	\$34.10	N/A
<b>Total:</b>	<b>\$327.00</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

## Ravenswood Line Expansion

Chicago, Illinois



# Chicago, Illinois/Union-Pacific West Line Extension

## Union-Pacific West Line Extension

Chicago, Illinois

(November 2000)

### Description

Metra, the commuter rail division of the Regional Transportation Authority (RTA) of northeastern Illinois, is proposing an 8.5-mile extension to the existing 36-mile Union-Pacific West (UPW) Line – also known as the Central Kane Corridor project. Metra's UPW commuter rail line currently provides service between downtown Chicago west to Geneva. The proposed project would extend trackage further west to Elburn, Illinois. The proposed project also includes multiple track and signal improvements, construction of two additional stations and parking facilities, construction of a new train storage yard, and the purchase of one diesel locomotive and eight bi-level passenger cars. The proposed extension will utilize an existing railroad track and right-of-way currently used by both Metra and the Union-Pacific freight railroad. The total estimated capital cost for the UPW Line extension and improvements is \$142.1 million (escalated dollars). Metra estimates 3,900 average weekday boardings on the entire UPW line in the year 2020.

### Union-Pacific West Summary Description

<b>Proposed Project</b>	Commuter Rail Line (extension and multiple improvements) >8.5 miles, 2 new stations
<b>Total Capital Cost (\$YOE)</b>	\$142.10 million
<b>Section 5309 New Starts Share (\$YOE)</b>	\$87.44 million
<b>Annual Operating Cost (\$YOE)</b>	\$6.73 million
<b>Ridership Forecast (2020)</b>	3,900 average weekday boardings 2,700 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the strength of the project's financial plan and the strong mobility improvements and environmental benefits that are anticipated for the UPW Line Extension. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined.

### Status

In April 1997, Metra initiated a Major Investment Study (MIS) for the Central Kane Corridor. The purpose of the MIS was to analyze the ability and cost effectiveness of various alternative

investment strategies to serve the growing need for travel from the Central Kane Corridor to the Chicago CBD. The MIS was completed in August 1998. Based on the results of the MIS, Metra selected Rail Alternative R1 as the Locally Preferred Alternative (LPA). This project would provide for the extension of commuter rail service from Geneva to Elburn, Illinois on the UPW Line. The LPA was included in the Chicago Area Transportation Study's (local Metropolitan Planning Organization) 2020 financially constrained Long-Range Transportation Plan and Transportation Improvement Program in November 1997.

In December 1998, FTA approved Metra's request to initiate preliminary engineering (PE) and the environmental review process of project development on the UPW Line Extension. Metra completed an Environmental Assessment (EA) for the UPW Line Extension in June 2000. FTA issued a Finding of No Significant Impact on the EA in August 2000.

Section 3030(a)(13) of the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) authorizes the "West Line Extension" for final design and construction. Through FY 2001, Congress has appropriated \$16.44 million in Section 5309 New Starts funds for the project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. N/A indicates that information for a specific criterion was not available. FTA has evaluated this project as being in preliminary engineering.

## Justification

The *Medium* rating reflects the UPW Line's strong mobility improvements and environmental benefits, while acknowledging the relatively low ratings for cost-effectiveness and transit-supportive land use.

## Mobility Improvements

### Rating: Medium-High

Metra estimates 3,900 average weekday boardings and 2,700 daily new riders on the UPW Line Extension in the year 2020. Metra estimates the following annual travel time savings for the project:

Mobility Improvements	New Start vs. <i>No- Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	0.30 million hours	0.80 million hours

Based on 1990 census data, there is one (1) reported low-income household within a ½-mile radius of the two proposed stations, representing 2 percent of the total number of households within a ½-mile of the proposed stations.

## Environmental Benefits

### Rating: High

Northeastern Illinois is classified as being in "severe" nonattainment for ozone and is in attainment for carbon monoxide (CO) and particulate matter (PM<sub>10</sub>). Metra estimates a slight increase in Volatile Organic Compounds (VOC) for the New Start versus the TSM. Metra estimates that in the year 2020, the proposed project would result in the following emissions reductions:

Criteria Pollutant	New Start vs. <i>No- Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	reduction of 215 annual tons	reduction of 154 annual tons
Nitrogen Oxide (NO <sub>x</sub> )	reduction of 36 annual tons	reduction of 26 annual tons
Volatile Organic Compounds (VOC)	reduction of 3 annual tons	increase of 5 annual tons
Particulate Matter (PM <sub>10</sub> )	No Change	No Change
Carbon Dioxide (CO <sub>2</sub> )	reduction of 14,390 annual tons	reduction of 10,624 annual tons

Metra estimates that the proposed project will result in the following decreases in regional energy consumption (measured in British Thermal Units – BTUs):

Annual Energy Savings	New Start vs. <i>No- Build</i>	New Start vs. <i>TSM</i>
BTU (million)	reduction of 188,315 million BTU	reduction of 138,867 million BTU

### Operating Efficiencies

**Rating: Medium**

Metra estimates the following systemwide operating cost per passenger mile in the year 2020 for the New Start, No-Build, and TSM alternatives.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	\$0.23	\$0.23	\$0.22

Values reflect 2020 ridership forecast and 1997 dollars.

### Cost Effectiveness

**Rating: Low-Medium**

Metra estimates the following cost effectiveness indices, comparing the proposed project to the No-Build and TSM alternative:

Cost Effectiveness	New Start vs. <i>No- Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$17.20	\$21.50

Values reflect 2020 ridership forecast and 1997 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Low-Medium**

The *Low-Medium* land use rating reflects the marginally transit-supportive and low-density development that currently exists in the UPW Line Corridor, but acknowledges the proactive efforts being undertaken by Metra, the Regional Transportation Authority (RTA) of Northeastern Illinois, and Kane County municipalities in coordinating station area development.

**Existing Conditions:** The existing Union Pacific West Line (Central Kane Corridor) connects rapidly developing communities west of Chicago with a major employment center in Chicago's central business district (CBD). Development in the existing station areas along the line varies from rural towns to high-density residential and commercial uses. Downtown Chicago, which is a

major destination for riders, contains high density, pedestrian and transit-friendly development. Land use in proposed station areas on the western end of the corridor is relatively low in density, or agricultural/rural in character. Major trip generators along the western part of the corridor include the Kane County Government Center, Judicial Center, Delnor Hospital, Charlestown Mall, Dupage County Airport (third busiest airport in Illinois), Fermi National Accelerator Laboratory in Batavia and Waubensee Community College in Sugar Grove. Low or medium-density single-family housing characterizes the majority of development in Kane County, although a significant amount of undeveloped land exists within the proposed and existing station areas.

**Future Plans and Policies:** At the regional, corridor and municipal level, population and job growth trends suggest continued rapid development throughout the study area. The outer suburbs in Kane County are expected to grow the most rapidly. The *Elburn Land Use Plan* seeks to avoid isolated pockets of development, while promoting the preservation of open space by accommodating compact development and higher densities, encouraging infill development within walking distance of the Elburn CBD, and limiting strip-commercial development. Within the plan, land has been set aside for a potential station. As part of Geneva's *Future Land Use and Development Policies*, the municipality will encourage residential development and redevelopment that will provide diversity in housing types, including higher densities in the downtown area. The RTA has been very active in developing and sharing information about transit-oriented development through production of studies, workshops and reports, and has a grant program for supporting TOD initiatives. Growth management policies are discussed in several regional and county-level planning documents. However, these documents provide general non-binding recommendations for managing growth. With some exceptions, zoning regulations in corridor municipalities are generally designed to preserve the suburban and rural character of the communities.

Elburn has taken a proactive approach to parking policies within its CBD. The existing zoning ordinance allows joint or shared parking. Developments that can show that a parking facility is located within close proximity will be allowed a reduction in the required number of spaces. In addition to existing transit parking facilities, Geneva also has a remote parking lot that is connected to the station via a shuttle bus. The remote lot has a shared-parking agreement with a local church located approximately one mile from the station. Parking is free and the shuttle service is \$0.50 per trip. Outside of Elburn and the City of Chicago, communities do not have existing policies in effect to limit parking supplies.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 38%**

The project financial plan proposes to use \$87.44 million (62 percent of total project costs) in Section 5309 New Starts funds, \$21 million (15 percent) of Strategic Capital Improvement Program (SCIP) bonds backed by the State of Illinois, \$32.5 million (23 percent) in Metra contributions, and \$1.1 million from RTA and local governments.

## Stability and Reliability of Capital Financing Plan

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

The *Medium-High* rating reflects the soundness of Metra's financial condition and the strength of the agency's dedicated revenue sources. The rating also acknowledges the commitment of the majority of non-Section 5309 New Starts funds to the UPW Line Extension.

**Agency Capital Financial Condition:** Metra's financial condition is strong. Metra has two revenue sources that are available for funding capital projects: a five percent fare increase, introduced in 1989 and dedicated to capital improvements, currently generates \$9 million annually. In addition, Metra's portion of the RTA sales tax revenues (collected in the six-county

region) that exceeds Metra's operating expenses is applied to capital improvements. In 1999, Metra's share of the sales tax revenue totaled \$208 million. Excess sales tax revenue, along with revenue generated from the five percent fare increase, provided a total of \$39 million. Metra also plans to contribute approximately \$32.5 million from the agency's funding sources, including rolling stock contributions and capital fund contributions, to the construction of the UPW Line Extension. The remainder of the local share (\$22.11 million) will be funded via the Strategic Capital Improvement Program (SCIP) and local government contributions.

**Capital Cost Estimates and Contingencies:** Total capital cost estimates increased approximately 50 percent over the last year to reflect more definitive engineering analyses. Contingencies for the UPW Line Extension are budgeted at nine percent of the project's total cost. These estimates are considered adequate given the project's size and scope.

**Existing and Committed Funding:** Funds for the Union-Pacific West Line Extension are programmed in Metra's five-year (FY00-FY04) capital program. The RTA has legislatively authorized the funds from the SCIP bond program.

**New and Proposed Sources:** No new funding sources are proposed for the UPW Line Extension.

## Stability and Reliability of Operating Finance Plan

### Rating: High

The *High* rating reflects the strong operating condition of Metra. The rating also acknowledges the agency's full commitment of the required operating and maintenance funding for the UPW Line Extension.

**Agency Operating Condition:** Metra is projecting system-wide operating budgets through the year 2001 that represent a 55 percent revenue recovery ratio for the agency. The agency's 1999 Financial Report indicated that Metra had an operating loss, before depreciation, of \$173.2 million (a 6.5 percent increase over the prior year's operating loss). Metra received \$215.1 million in tax revenue, which covered the operating deficit. Tax revenue grew at a slightly faster rate than the operating loss (6.6 percent over the previous year). Total operating revenues for the agency increased from \$122.2 million to \$128.1 million (a 4.9 percent increase).

**Operating Cost Estimates and Contingencies:** Annual operating and maintenance costs are estimated at \$6.73 million in the opening year.

**Existing and Committed Funding:** Operating funds (sales tax revenues) for the UPW Line Extension are existing and committed. A statutory mandate requires Metra to fund operations with tax proceeds before funding capital improvements. The sales tax is considered a reliable funding source since it responds to growth in the economy and price level inflation.

**New and Proposed Sources:** No new operating revenues are proposed for the UPW Line Extension.

## Locally Proposed Financing Plan

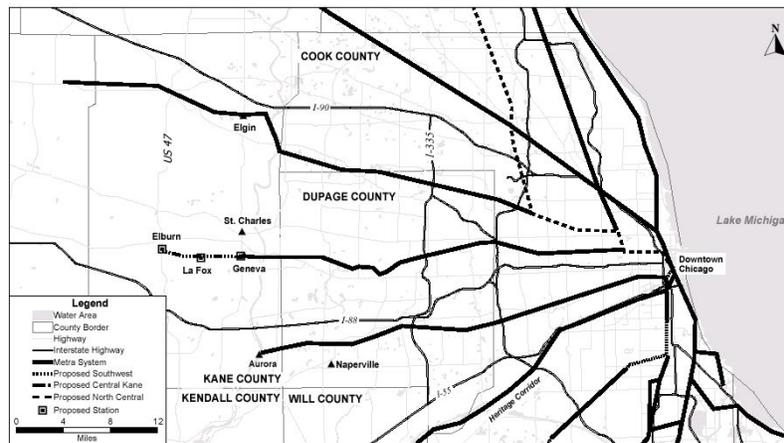
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$87.44	\$16.44 million appropriated through FY 2001
<b>Local:</b>		
Metra (Rolling Stock and Capital Funds)	\$32.53	N/A
SCIP Bonds	\$20.99	N/A
RTA	\$0.52	N/A
Local Governments	\$0.60	N/A
<b>Total:</b>	<b>\$142.08</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### Union-Pacific West Line Extension

Chicago, Illinois



# Cincinnati, Ohio/Interstate 71 Corridor LRT

## Interstate 71 Corridor LRT

Cincinnati, Ohio

(November 2000)

### Description

The Ohio-Kentucky-Indiana (OKI) Regional Council of Governments is proposing to design and construct a 43-mile Light Rail Transit (LRT) line in a corridor that extends north from the Cincinnati/Northern Kentucky International Airport and Florence, Kentucky to the City of Mason, Ohio. The proposed alignment will use an existing right-of-way along a portion of Interstate 71 as well as a former Conrail Railroad right-of-way and active right-of-way of the Indiana and Ohio (I&O) Railroad, owned by the Southwest Ohio Regional Transit Authority (SORTA). OKI has initiated preliminary engineering and the preparation of a Draft Environmental Impact Statement (DEIS) for the first Minimum Operable Segment (MOS-1) extending approximately 19 miles. MOS-1 begins at 12<sup>th</sup> Street in Covington, Kentucky, runs north through downtown Cincinnati, and terminates at Grooms Road in Blue Ash, Ohio. MOS-1 includes a proposed 24 stations. Capital cost estimates for MOS-1 total \$874.7 million (escalated dollars). OKI estimates that 23,800 average weekday boardings, including 17,600 daily new riders, will use MOS-1 in the year 2020.

The total capital cost estimate for the entire 43-mile LRT, including 30 proposed stations, is estimated at \$1,157 million (in 1996 dollars).

### Interstate 71 Corridor Summary Description

<b>Proposed Project</b>	Light Rail Transit (LRT) Line (MOS- 1); 19 miles, 24 stations
<b>Total Capital Cost (\$YOE)</b>	\$874.70 million
<b>Section 5309 New Starts Share (\$YOE)</b>	\$431.20 million
<b>Annual Operating Cost (\$1999)</b>	\$15.90 million
<b>Ridership Forecast (2020)</b>	23,800 average weekday boardings 600 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Low</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Low-Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Not Recommended</b>

The overall project rating of *Not Recommended* is based on the project's poor cost effectiveness, absence of transit supportive land use policies in the corridor, and the lack of local financial commitment to build and operate the proposed system *at this time*. The overall project rating applies to this *Annual New Starts Report* and **reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates, costs, benefits and impacts are refined. **The FTA ratings and recommendations will be updated to reflect new information, changing conditions, and refined financing plans.**

### Status

In March 1998, OKI completed the I-71 Major Investment Study (MIS) with the selection of the Locally Preferred Alternative (LPA) recommending the design and construction of a 43-mile LRT line. The entire 43-mile LRT (including MOS-1) is included in OKI's Long-Range Transportation Plan and conforming Transportation Improvement Program. Using \$5.8 million in Section 5307 Flexible funds, SORTA purchased several portions of active and abandoned railroad right-of-way for the proposed light rail project.

In December 1998, FTA approved the initiation of preliminary engineering and the preparation of a Draft Environmental Impact Statement (DEIS) for MOS-1. The DEIS is scheduled for completion in November 2001.

Section 3030(b)(66) of TEA-21 authorizes the "Cincinnati/Northern Kentucky Northeast Corridor" for final design and construction. Through FY 2001, Congress has appropriated \$9.75 million in Section 5309 New Starts funds for the proposed project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. OKI has reported the New Starts criteria for MOS-1. N/A indicates that information for a specific measure was not available.

FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design and for next year's *Annual Report on New Starts*.

## Justification

The *Low-Medium* project justification rating reflects the project's relatively low ratings for cost effectiveness and mobility improvements.

## Mobility Improvements

### Rating: Low-Medium

OKI estimates 23,800 average weekday boardings, including 17,600 new riders, on MOS-1 of the Interstate 71 light rail project in 2020. OKI estimates the following annual travel time savings for the project:

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	1.60 million hours	0.80 million hours

Based on 1990\_census data, there are an estimated 18,882 low-income households within a ½ mile radius of the proposed MOS-1 station sites.

## Environmental Benefits

### Rating: Medium

The Cincinnati metropolitan area is currently classified as a moderate non-attainment area for ozone and is in attainment for carbon monoxide (CO). OKI estimates that the proposed project will result in increases in nitrogen oxide (NOx) and carbon monoxide emissions compared to the No-Build alternative. Overall, OKI estimates that in 2020, the proposed project would result in the following emissions reductions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	reduction of 20 annual tons	reduction of 31 annual tons
Nitrogen Oxide (NOx)	increase of 6 annual tons	reduction of 7 annual tons
Volatile Organic Compounds (VOC)	reduction of 4 annual tons	reduction of 6 annual tons
Particulate Matter (PM <sub>10</sub> )	reduction of 1 annual ton	reduction of 1 annual ton
Carbon Dioxide (CO <sub>2</sub> )	increase of 4,360 annual tons	reduction of 1,969 annual tons

OKI anticipates that the proposed project would result in an increase in British Thermal Units (BTUs) compared to the No-Build alternative and a decrease in BTUs when compared to the TSM alternative.

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (million)	increase of 61,120 million BTU	reduction of 19,201 million BTU

### Operating Efficiencies

**Rating: Medium**

OKI estimates the following systemwide operating costs per passenger mile in the year 2020 for the New Start, the No-Build, and the TSM alternatives.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	\$0.47	\$0.46	\$0.47

Values reflect 2020 ridership forecast and 1999 dollars.

### Cost Effectiveness

**Rating: Low-Medium**

OKI estimates the following cost effectiveness indices, comparing the proposed project to the No-Build and TSM alternatives:

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$15.50	\$17.60

Values reflect 2020 ridership forecast and 1999 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* land use rating reflects the positive existing land use elements of the proposed corridor, including the Cincinnati central business district (CBD) and redeveloping riverfront area, several high trip generators and moderately dense urban neighborhoods. Transit-supportive corridor policies include redevelopment plans that have been generated for several corridor communities and institutions. While station area planning efforts are still in the early stages, recent progress, including the development of design guidelines, provides a useful foundation to guide future transit-oriented development initiatives at individual stations.

**Existing Conditions:** While the project corridor accounts for nearly 30 percent of metropolitan area employment, within a ½ mile radius of all stations, total employment is only 3,800 jobs, the majority of which are located in downtown Cincinnati, total population is only 2,700. Reported corridor densities are also fairly low, at 8.2 residents and 10.3 employees per acre. Total CBD employment is estimated at 79,700 (8.5 percent of the metropolitan region). CBD employment density is estimated at 217 jobs/acre. The proposed station areas encompass a variety of high trip generators, despite the relatively low employment and population densities including two universities (University of Cincinnati – 30,000 students; Xavier University – 6,000 students) a new sports stadium, several major hospitals, suburban malls and office parks. There are an estimated 1,140 housing units located within the ½ mile radius of station areas of the initial MOS. Development patterns in the Cincinnati CBD and a number of other station areas are moderately pedestrian-friendly and urban-scaled. Development at station areas farther from the Cincinnati downtown area are more suburban and auto-oriented, but still feature some concentrations of development. Currently, there are no regional parking policies or requirements in place.

**Future Plans and Policies:** The metropolitan region is projected to grow; however, population densities are projected to decrease for many areas in the proposed corridor. Housing and population are forecast to increase for only the five northernmost station areas. Employment has been growing in downtown Cincinnati and is expected to increase by 15 percent over the period from 1995-2020, while corridor employment is projected to increase by 11 percent. Zoning regulations supporting high-density development appropriate to an urban center are in effect in Cincinnati's Downtown Development District and the City is considering the establishment of transit overlay districts in the LRT's station areas. The current 2020 Metropolitan Transportation Plan recommends that local governments manage growth and encourage alternatives to single occupant vehicles. The Boone County (Kentucky) 2020 Comprehensive Plan encourages redevelopment of infill sites. There are plans for development along several portions of the corridor, including the Ohio riverfront and the Covington and Cincinnati CBDs, and the Uptown Cincinnati area north of the CBD. In addition, plans are being developed for the proposed station areas near the University of Cincinnati and around Xavier University. Transit service and transportation policies were factors in the designation of a Federal Urban Empowerment Zone that includes a majority of the proposed stations.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 51%**

The financial strategy for the 19-mile MOS of the proposed Interstate 71 Corridor light rail project includes \$431.2 million (49 percent of total project costs) in Section 5309 New Starts funds, \$227.9 million (26 percent of total project costs) in local funds and \$215.6 million (25 percent) in State funding.

## Stability and Reliability of Capital Financing Plan

### **Rating: Low**

The *Low* rating reflects the lack of progress in the commitment of non-Federal funds and the absence of a local entity to build and operate the proposed light rail project. The rating also reflects the lack of a capital plan for the project.

**Agency Capital Financial Condition:** At this time, a local entity to build and operate the proposed light rail project has not been identified. However, OKI, SORTA and TANK have agreed to jointly manage the initial phases of project development, including preliminary engineering and the preparation of a Draft Environmental Impact Statement. FTA did not receive any updated information on the financial condition of the two transit agencies that have agreed to jointly manage the proposed project.

**Capital Cost Estimates and Contingencies:** The capital cost estimates and contingencies for the I-71 LRT are considered reasonable at this stage of project development. However, it is important to note that the contingencies are reliant on the as-yet-undetermined dedicated source of capital funding that will be determined as part of a local referendum that is scheduled to occur in late 2001.

**Existing and Committed Funding:** At this time, no non-Section 5309 New Starts funds are committed to the initial MOS of the LRT. The region (Ohio and Kentucky) in which the proposed project would operate does not have a dedicated source of funding for transit. In each state, funds must be authorized and appropriated as part of the normal annual budgetary cycle.

**New and Proposed Sources:** Project sponsors are currently examining potential new funding sources for the proposed LRT, including a sales tax, motor fuel tax, or a property tax. A local referendum on these options is currently planned for November 2001.

## Stability and Reliability of Operating Finance Plan

### Rating: Low

The *Low* rating reflects the absence of a dedicated funding source for the operational requirements of the project. The rating also acknowledges the lack of a 20-year cash flow analysis to evaluate the stability of the operating plan for the LRT.

**Agency Operating Condition:** At this time, a local entity to operate the proposed light rail project has not been formally identified. Two local transit operators (SORTA and TANK) have entered into an interlocal agreement for the initial phases of project development. The agreement may likely be amended to also include the operation of the proposed LRT. At this time, SORTA and TANK are considered to be in adequate operating condition.

**Operating Cost Estimates and Contingencies:** Annual operating and maintenance costs are currently estimated at \$15.9 million (escalated dollars). These estimates are considered reasonable. However, provisions to cover unanticipated cost overruns or lower than anticipated passenger revenues are dependent on the as-yet-undetermined dedicated operating source of funding.

**Existing and Committed Funding:** No existing funding sources are currently available to operate the proposed LRT.

**New and Proposed Sources:** A dedicated source of funding for the light rail project has not been determined. A local referendum is scheduled to occur in November 2001 to determine a dedicated operating source of funding for the proposed project.

## Locally Proposed Financing Plan

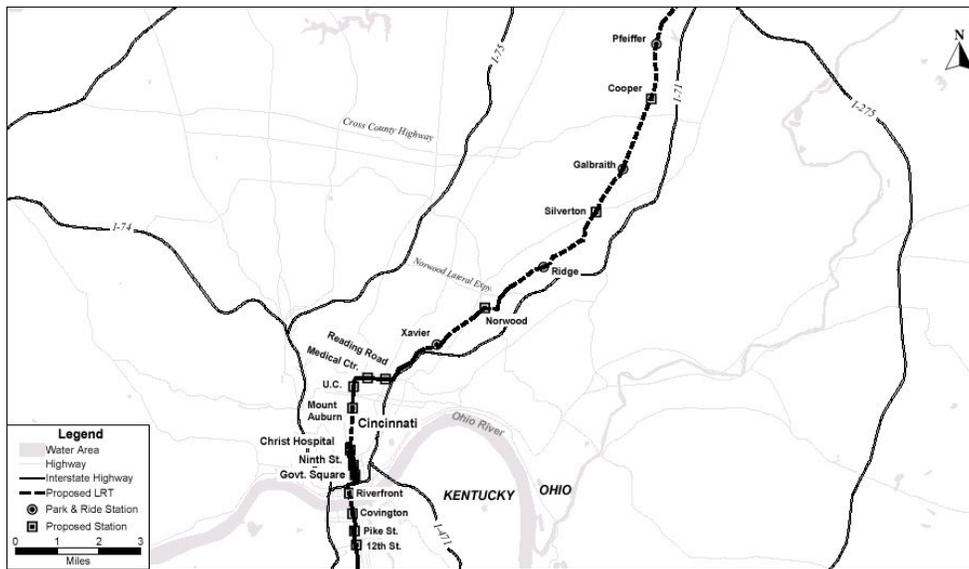
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$431.20	\$9.75 million appropriated through FY 2001
<b>State:</b>		
Legislative Appropriations	\$215.60	N/A
<b>Local:</b>		
Dedicated Transit Tax	\$139.30	N/A
RTA	\$88.60	N/A
<b>Total:</b>	<b>\$874.70</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### Interstate 71 Corridor LRT

Cincinnati, Ohio



# Cleveland, Ohio/Euclid Corridor Transportation Project

## Euclid Corridor Transportation Project

Cleveland, Ohio

(November 2000)

### Description

The Greater Cleveland Regional Transit Authority (GCRTA) is proposing to design and construct a 9.8-mile transit corridor incorporating exclusive bus rapid transit lanes and related capital improvements on Euclid Avenue from Public Square in downtown Cleveland east to University Circle. The proposed project is known as the Euclid Corridor Transportation Project (ECTP). The ECTP incorporates a series of transit improvements including an exclusive center median busway along Euclid Avenue from Public Square to University Circle, improvements to East 17<sup>th</sup>/East 18<sup>th</sup> Streets, as well as a "Transit Zone" on St. Clair and Superior Avenues utilizing exclusive transit lanes. The proposed busway will provide service to the University Circle area and continue into the City of East Cleveland, terminating at the Stokes/Windermere Rapid Transit Station. GCRTA proposes to operate sixty-foot articulated electric trolley buses (ETB) with both left and right-hand side doors for access and egress of patrons in the corridor. The ETBs will have access to the entire length of the Euclid corridor. However, conventional buses will not be able to access Euclid Avenue in the CBD. Total capital costs for the ECTP are estimated at \$228.6 million (escalated dollars). GCRTA estimates that 29,500 average weekday boardings will use the ECTP in the forecast year (2025).

The proposed "Transit Zone" will be bounded by Superior Avenue, St. Clair Avenue, West 3<sup>rd</sup> Street and East 18<sup>th</sup> Street. The improvements to E. 17<sup>th</sup>/E. 18<sup>th</sup> Streets are anticipated to facilitate traffic flows into and out of the Transit Zone that will also function as north/south arterial roads connecting Euclid Avenue to St. Clair/Superior Avenues. E. 17<sup>th</sup> Street will be limited to transit and local auto traffic north of Euclid Avenue. E. 17<sup>th</sup> Street will also be extended from Prospect Avenue one block south for buses only. E. 18<sup>th</sup> Street will carry auto traffic only between the inner belt and the northern edge of the CBD.

### Euclid Corridor Transportation Project Summary Description

<b>Proposed Project</b>	Bus Rapid Transit Lanes (7.34 miles – exclusive, 2.43 miles – mixed traffic) and related capital improvements
<b>Total Capital Cost (\$YOE)</b>	\$228.60 million
<b>Section 5309 New Starts Share (\$YOE)</b>	\$135.00 million
<b>Annual Operating Cost (\$YOE)</b>	\$1.30 million
<b>Ridership Forecast (2025)</b>	29,500 average weekday boardings 2,400 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The *Recommended* rating is based on the project's strong transit-supportive land use qualities and the strength of the project's capital and operating plans. The overall project rating applies to this Annual New Starts Report and **reflects conditions as of November 2000**. Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

## Status

Section 3035 of ISTEA authorized FTA to enter into a multiyear grant agreement for development of the Dual Hub Corridor, originally considered as a rail link between downtown and University Circle. In November 1995, the GCRTA Board of Trustees selected the ECTP as the Locally Preferred Alternative (LPA), which included a busway and the rehabilitation and relocation of several existing rapid rail stations. In December 1995, the Northeast Ohio Areawide Coordinating Agency (local Metropolitan Planning Organization) adopted a resolution supporting the ECTP. In mid-1999, GCRTA reconfigured the scope of the ECTP to incorporate only the construction of a busway along Euclid Avenue. The rapid rail elements have been eliminated from the ECTP proposal for Section 5309 New Starts funding. The environmental review process for the ECTP is scheduled for completion in Summer 2001.

Section 3030(a)(17) of TEA-21 authorized the "Euclid Corridor Extension" for final design and construction. Through FY 2001, Congress has appropriated \$13.44 million in Section 5309 New Starts funds for the Euclid Corridor Transportation Project. Of this amount, \$4.72 million was rescinded or reprogrammed by Congress.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. With concurrence from FTA, a comparison to a TSM alternative was not completed. N/A indicates that data are not available for a specific measure.

FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the strength of the transit-supportive land use element and the anticipated travel time savings benefits associated with the project. The rating also acknowledges ECTP's relatively poor cost-effectiveness in terms of new riders.

## Mobility Improvements

### Rating: Medium-High

GCRTA estimates 29,500 average weekday boardings, including 2,400 daily new riders, on the ECTP busway in 2025. GCRTA estimates the following annual travel time savings for the ECTP:

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	1.00 million hours	N/A

Based on 1990 census data, there are an estimated 12,406 low-income households within a ½ mile radius of the 22 proposed stations. This represents 55 percent of the total households within a ½ mile radius of the proposed stations.

## Environmental Benefits

### Rating: Medium

Cleveland is currently classified as a maintenance non-attainment area for ozone and a moderate non-attainment area for particulate matter (PM<sub>10</sub>). GCRTA estimates the following emission reductions for the ECTP as compared to the No-Build alternative.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	decrease of 71 annual tons	N/A
Nitrogen Oxide (NO <sub>x</sub> )	decrease of 23 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 19 annual tons	N/A
Particulate Matter (PM <sub>10</sub> )	decrease of 1 annual ton	N/A
Carbon Dioxide (CO <sub>2</sub> )	decrease of 8,481 annual tons	N/A

GCRTA estimates that the ECTP will result in the following decrease in regional energy consumption (measured in British Thermal Units – BTUs) compared to the No-Build alternative.

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (millions)	decrease of 76,146 million annual BTU	N/A

## Operating Efficiencies

### Rating: Medium

GCRTA estimates the following systemwide operating costs per passenger mile in the year 2025 for the New Start compared to the No-Build alternative:

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (YOE)	\$0.63	N/A	\$0.63

Values reflect 2025 ridership forecast and YOE dollars.

## Cost Effectiveness

### Rating: Low

GCRTA estimates the following cost effectiveness index:

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$26.90	N/A

Values reflect 2025 ridership forecast and YOE dollars.

## Transit-Supportive Existing Land Use and Future Patterns

### Rating: Medium-High

The *Medium-High* land use rating reflects the strong existing land use and high trip generators in the Euclid Avenue Corridor, as well as transit-supportive policies within the Cleveland central business district (CBD) and much of the remainder of the corridor.

**Existing Conditions:** The downtown area adjacent to Euclid Avenue includes high-density commercial uses (office and retail), a theater district, the campus of Cleveland State University, and a professional sports complex. Several institutional and cultural uses are located in the University circle area, including Case Western Reserve University, the Cleveland Clinic Foundation, and four museums. MidTown, located between the CBD and University Circle, is characterized by underutilized commercial and industrial land. Multi-family and single-family housing – situated on a grid street pattern – is located one to two blocks away from Euclid Avenue throughout most of the corridor. In 1995, total employment in the Cleveland CBD was approximately 120,000, while total employment in the corridor as a whole (a one-half-mile radius of the busway) was estimated at 207,000. Corridor population was estimated at 41,000. In addition, evidence of a reversal of previous downward population and employment trends is supported by recent increases in residential development in the Cleveland CBD and two corridor neighborhoods, and by commercial redevelopment in the MidTown area.

**Future Plans and Policies:** A wide range of city, small area and institutional plans have been developed that focus on promoting redevelopment and on creating a more pedestrian-friendly, transit-oriented environment in the CBD and the Euclid Corridor. The city, including the MidTown area, also has a strong network of local development corporations and business organizations that act in partnership with the public sector in promoting redevelopment. Cleveland's 1990 comprehensive plan calls for rezoning of the corridor to convert industrial areas to office uses and to allow mixed-use activities. Zoning will be revised following an update of the comprehensive plan, which is now underway. Conceptual plans have been developed for some neighborhoods, with demonstrated examples of redevelopment activities that are consistent with these plans. Institutional plans also stress creating a more pedestrian-friendly environment and increasing institutional-related development in specific areas. Planning activities specific to the Euclid Corridor Transportation Project have also been undertaken. These include an economic development plan for the corridor, street design guidelines, and *Transit-Supportive Principles and Development Guidelines* that specify guidelines for transit-supportive building design and placement. At a regional level, some recent efforts are being demonstrated that support reinvestment in fully developed communities and existing infrastructure.

## Other Factors

**FTA BRT Demonstration Program:** In August 1999, the Cleveland ECTP was selected as one of FTA's ten Bus Rapid Transit (BRT) Demonstration Projects. FTA's BRT Demonstration Program is intended to foster the development of BRT systems in the United States; address BRT planning, implementation, and operational issues; and evaluate system performance in a wide range of operating environments.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 41%**

The financial plan for the proposed Euclid Corridor Transportation Project includes \$135 million (59 percent) in Section 5309 New Starts funds, \$50 million (22 percent) in Flexible funds and \$43.6 million (19 percent) in GCRTA and City of Cleveland funds.

## Stability and Reliability of Capital Financing Plan

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

The *Medium-High* rating reflects the sound financial condition of GCRTA and the State of Ohio's financial commitment to the ECTP. The rating also acknowledges FTA's determination that GCRTA should re-evaluate the methodology that was used to develop the capital cost estimates for the project to ensure that adequate contingencies are in place to cover any unanticipated cost overruns associated with the project.

**Agency Capital Financial Condition:** The GCRTA is in good financial condition and is currently paying down debt incurred earlier in the 1990s to build the existing Waterfront light rail extension project. In addition, the agency's major funding source (sales tax revenues) continues to grow at a faster than estimated rate solidifying the agency's strong financial condition. GCRTA maintains a well-managed re-capitalization program for the agency's bus fleet. According to GCRTA's bus fleet management plan, the average of the agency's buses is 7.9 years.

**Capital Cost Estimates and Contingencies:** Based upon FTA's review of the methodology that was used to develop the capital cost estimates for the ECTP, FTA has determined that GCRTA should re-evaluate the current capital cost estimate to ensure that adequate escalation rates and contingency factors are in place to account for any unanticipated cost overruns associated with the planned procurement of the dual-mode electric trolley vehicles.

**Existing and Committed Funding:** At this time, 100 percent (\$93.6 million) of the non-Section 5309 New Starts share has been committed to the ECTP via the Ohio Department of Transportation's Transportation Review Advisory Commission, the City of Cleveland and GCRTA. The City and GCRTA have executed an interagency agreement that outlines the City's financial contribution (\$17 million) to the ECTP.

**New and Proposed Sources:** Only existing sources are proposed for the construction of the ECTP.

## Stability and Reliability of Operating Finance Plan

### Rating: Medium-High

The *Medium-High* rating reflects the healthy operating condition of GCRTA. Revenues to operate the proposed ECTP are considered strong.

**Agency Operating Condition:** The GCRTA has managed to fully fund the operations of its existing system during a period of expansion. In 1997, ridership increased by four percent over 1996. Both bus and rail ridership increased for the first time since 1990. The increased ridership is attributed to special events in downtown Cleveland and a generally improved regional economy. Sales tax revenues rose by five percent on average per year between 1988 and 1997. GCRTA estimates annual increases of three percent beginning in the year 2000.

**Operating Cost Estimates and Contingencies:** Annual operating and maintenance costs - estimated at \$1.3 million (escalated dollars) - are considered reasonable. However, it should be noted that while the proposed project replaces existing bus service along Euclid Avenue with electric trolley buses (ETB), the increased operation and maintenance costs associated with the ETBs is anticipated to be covered by existing sources.

**Existing and Committed Funding:** All proposed operating revenues for the ECTP are existing and committed to the project. The operating plan for the ECTP projects an operating surplus of \$12 million in the project's opening year (2004). Assumptions included in the 20-year cash flow analysis are based on historic funding levels and growth rates that appear to be reasonable. These funds are considered stable and reliable.

**New and Proposed Sources:** All proposed operating revenues currently exists. No new sources are needed.

# Locally Proposed Financing Plan

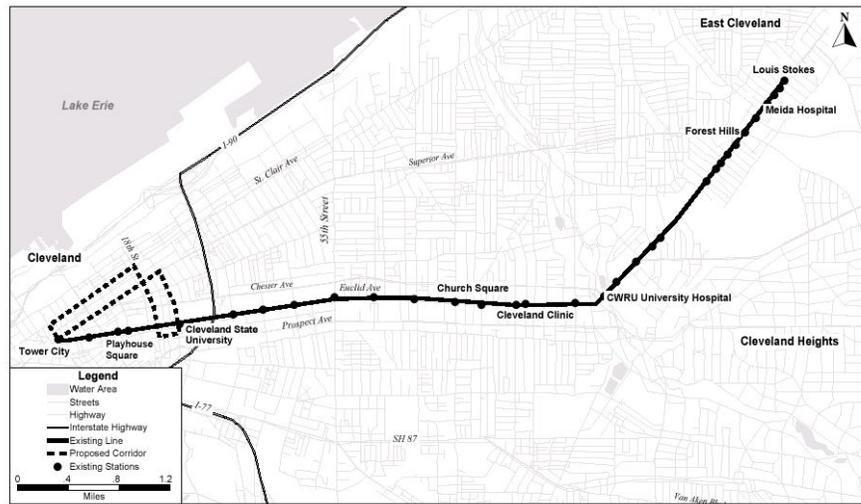
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$135.00	\$13.44 million appropriated through FY 2001. \$4.72 million rescinded or reprogrammed.
<b>State:</b>		
Flexible Funds	\$50.00	N/A
<b>Local:</b>		
GCRTA	\$26.60	N/A
City of Cleveland	\$17.00	N/A
<b>Total:</b>	<b>\$220.00</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

## Euclid Corridor Transportation Project

Cleveland, Ohio



# Girdwood, Alaska/Alaska Railroad Commuter Rail

## Alaska Railroad Commuter Rail

### Girdwood, Alaska

(November 2000)

#### Description

The Alaska Railroad Corporation (ARRC) is proposing improvements to a segment of railroad between Girdwood and Wasilla, Alaska. The project consists of three elements. Two elements involve curve straightening of the existing alignment north of Anchorage from the town of Eagle River to the Knik River, and from the Knik River to Wasilla. The curve-straightening project will reduce travel time between Anchorage and Wasilla by 50 minutes, and improve safety for passengers and freight. The third element involves the double-tracking of an approximately 5-mile section of the line south of Anchorage toward Girdwood. The double-tracking will increase speeds and facilitate operations in an industrial area of Anchorage where many ARRC freight customers are located. ARRC operates both freight and passenger service over the sections of trackage to be improved. The passenger service is primarily geared toward serving tourists between the months of May and September.

The total budget for this project is \$69.6 million in current dollars. In FY 2001, the Girdwood Commuter Rail Project (including North Anchorage) received a New Start earmark \$14.9 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 (TEA-21 Section 5309(e)(8)(A)).*

#### Alaska Railroad Commuter Rail Summary Description

<b>Proposed Project</b>	Commuter Rail (71 miles, 3 existing stations, and 3 planned stations)
<b>Total Capital Cost (\$YOE)</b>	\$69.60 million
<b>Section 5309 Share</b>	\$15.00 million
<b>Annual Operating Cost</b>	Not Reported
<b>Ridership Forecast</b>	Not Reported

#### Status

The existing rail line currently carries passenger service, but at slow speeds averaging approximately 2-miles per hour on 12 curves on a 13-mile stretch of track. In 1999 the ARRC undertook a study of its system titled the Woodside Study, which assessed the overall condition of the railroad and the ability to undertake various types of improvements, including commuter rail. During 2000, the study identified the benefits of incrementally improving the performance of the railroad on its existing right-of-way.

In June 2000, the Federal Transit Administration (FTA) approved entry into preliminary engineering (PE) for the Alaska Railroad Curve Straightening and Double Tracking Project. FTA's Regional Administrator was given authority and responsibility for approving the initiation of PE for the Alaska Railroad project that received a New Start earmark of \$9.9 million in the FY 2000 appropriations act. The project was approved for entry into PE in June 2000. Through FY 2001,

Congress has appropriated \$24.66 million in Section 5309 New Starts funding for the commuter rail system.

The project will be fully funded by the current earmark and matching funds. Additional New Starts funds will not be needed in the future to complete the project, although the AARC does intend to continue to seek Section 5309 funding for other projects. The project is under \$25 million in New Start funding and is, therefore, exempt from the New Starts rating process.

The ARRC operates both freight and passenger service over the sections of trackage to be improved. The passenger service is primarily geared toward serving tourists between the months of May and September.

### Locally Proposed Financing Plan

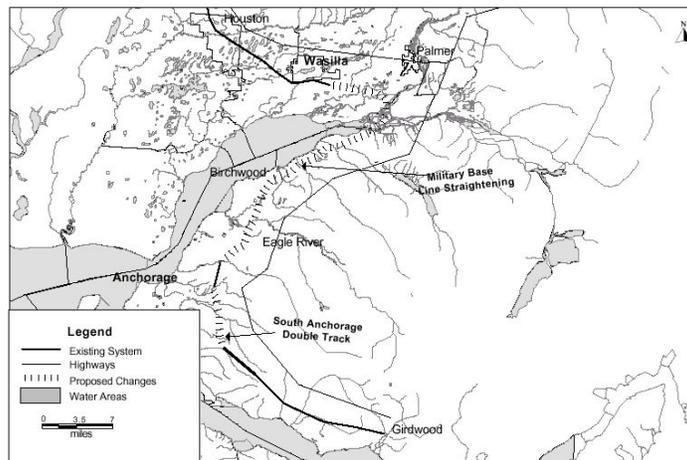
(Reported in \$Current)

Proposed Source of Funds	Total Funding (\$million)
<b>Federal: Section 5309 New Start</b>	\$14.90 (\$24.66 million appropriated to the commuter rail system through FY 2001)
<b>Local:</b>	\$44.80
<b>Local: Other</b>	\$9.90
<b>Total:</b>	<b>\$69.60</b>

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

### Alaska Railroad Commuter Rail

Anchorage - Wasilla, Alaska



# Hartford, Connecticut/New Britain – Hartford Busway

## New Britain - Hartford Busway

Hartford, Connecticut

(November 2000)

### Description

The Connecticut Department of Transportation (ConnDOT) is proposing the New Britain-Hartford Busway, a 9.6-mile, 12-station busway to operate on existing and abandoned right-of-way between downtown New Britain and Union Station in Hartford. The proposed New Britain Hartford Busway is intended to relieve congestion in the I-84 Corridor and improve access to suburban employment and educational opportunities for inner city residents. The capital cost estimate for the proposed project is \$82.00 million in escalated dollars. ConnDOT proposes to begin operations of the New Britain Hartford Busway in 2003.

### New Britain-Hartford Busway Summary Description

<b>Proposed Project</b>	Bus Rapid Transit (BRT) 9.6 miles, 12 stations
<b>Total Capital Cost (\$YOE)</b>	\$82.00 million
<b>Section 5309 Share (\$YOE)</b>	\$51.60 million
<b>Annual Operating Cost (\$YOE)</b>	\$6.60 million
<b>Ridership Forecast (2020)</b>	8,800 average weekday boardings 3,720 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The *Recommended* rating is based on the project's strong estimated cost effectiveness and the adequacy of the project's capital and operating plans at this stage of development. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

### Status

In 1996, ConnDOT, the Capitol Regional Council of Governments (CROG) and the Central Connecticut Regional Planning Agency (CCRPA) initiated a Major Investment Study (MIS) for the Hartford West corridor; the study was completed July 1999. In March of 1999, the Locally Preferred Alternative was selected by the Capitol Regional Council of Governments (CROG) and included in the Long-Range Plan.

FTA approved the Busway project's entrance into preliminary engineering in January 2000.

The New Britain Hartford Busway is not authorized for Section 5309 New Starts funds in the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). To date, Congress has appropriated \$1.49 million in Section 5309 New Starts funding for this project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Criteria are reported for the 9.6-mile Busway system. N/A indicates that information is not available for a specific measure.

FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects strong cost effectiveness and mobility improvement ratings, offset by poor transit supportive land use.

## Mobility Improvements

### Rating: Medium-High

The 9.6-mile system is expected to serve 8,800 average weekday boardings and 3,720 daily new riders by 2020. ConnDOT estimates the following annual travel time savings for the Busway compared with the No-Build and Transportation System Management (TSM) alternatives.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Annual Travel Time Savings (Hours)</b>	2.80 million hours	0.80 million hours

Based on the 1990 census data, there are an estimated 4,381 low-income households within a ½ mile radius of the proposed 12 stations, or 11 percent of the total households within ½ mile of proposed stations.

## Environmental Benefits

### Rating: High

The Hartford Metropolitan area is an attainment area for carbon monoxide and a serious non-attainment area for ozone. ConnDOT estimates that in 2020, the Metrorail Extension will result in the following reduction in emissions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Carbon Monoxide (CO)</b>	decrease of 269 annual tons	decrease of 183 annual tons
<b>Nitrogen Oxide (NOx)</b>	decrease of 40 annual tons	decrease of 23 annual tons
<b>Volatile Organic Compounds (VOC)</b>	decrease of 42 annual tons	decrease of 29 annual tons
<b>Particulate Matter (PM<sub>10</sub>)</b>	0	0
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	decrease of 12,158 annual tons	decrease of 9,086 annual tons

ConnDOT estimates that in the year 2020, the LPA will result in the following reductions in regional energy consumption (measured in British Thermal Units – BTU).

<b>Annual Energy Savings</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>BTU (millions)</b>	decrease of 160,084 million annual BTU	decrease of 119,449 million annual BTU

### Operating Efficiencies

**Rating: Low**

ConnDOT estimates an increase in the system-wide operating cost per passenger mile in the year 2020 for the Busway alternative compared to both the No-Build and TSM.

<b>Operating Efficiencies</b>	<b>No-Build</b>	<b>TSM</b>	<b>New Start</b>
<b>System Operating Cost per Passenger Mile (YOE)</b>	\$0.68	\$0.74	\$0.78

Values reflect 2020 ridership forecast and 1997 dollars.

### Cost Effectiveness

**Rating: High**

ConnDOT estimates the following cost-effectiveness indices for the Busway alternative compared to the No-Build and the TSM alternatives.

<b>Cost Effectiveness</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>Incremental Cost per Incremental Passenger</b>	\$5.50	\$4.30

Values reflect 2020 ridership forecast and 1997 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* rating reflects the presence of concentrations of development at both ends of the proposed investment. Policies to encourage transit supportive land use in the corridor are still in the early stages of being developed. Full coordination of land use plans among the five communities served by the proposed Busway is still limited.

**Existing Land Use:** The proposed corridor will connect the central business districts (CBD) in New Britain and Hartford. In West Hartford and Newington, development along the Busway corridor is low-density residential and industrial, with some suburban “big-box” retail. There are a total of 20,300 households within one-half mile of the twelve stations, and is expected to rise to 25,300 in 2020. In addition to the two CBDs, the proposed Busway also serves Central Connecticut State University (CCSU), the New Britain Superior Court Building, and the Liberty Square and Government Center Office Complex areas. Employment population within one-half of the 12 station areas was 81,364 in 1995 and is expected to rise by 26 percent to 102,212 in 2020. Parking charges range from \$25 to \$100 per month within the New Britain and Hartford CBDs, and there is an ample supply. Parking is generally free outside of the Central Business Districts. Pedestrian accessibility is good within the two CBDs, but the pedestrian environment declines throughout the middle portion of the busway corridor.

**Plans and Policies:** The City of Hartford has adopted an “Economic and Urban Design Action Strategy” to encourage redevelopment within the CBD. Adriaen's Landing, a large development proposed in downtown Hartford will include a conference center, retail and entertainment uses. The state had committed \$325 million to redevelopment projects in downtown Hartford, while the

Parkville neighborhood has received Transportation and Community and System Preservation Pilot Program (TCSP) grant from USDOT. In West Hartford an overlay district favoring high-density development has been improved, while New Britain is also actively encouraging redevelopment of its downtown area. However, there is not yet any coordinated approach to encouraging transit supportive development in the five communities along the proposed busway. Likewise, there are not yet any strategies for transit station area development, coordinated policies to reduce sprawl, or coordinated parking policies. Station area zoning plans have not yet been fully considered outside of Hartford and New Britain.

## Other Factors

**FTA BRT Demonstration Program:** In August 1999, the New Britain-Hartford Busway was selected as one of FTA's ten Bus Rapid Transit (BRT) Demonstration Projects. FTA's BRT Demonstration Program is intended to foster the development of BRT systems in the United States; address BRT planning, implementation, and operational issues; and evaluate system performance in a wide range of operating environments.

**Transportation Community and System Preservation Program:** On June 8, 1999 the Parkville Community within Hartford was awarded a Transportation Community and System Preservation Pilot Program Grant to undertake coordinated transportation and land use planning activities.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 37%**

ConnDOT proposes a \$51.6 million Section 5309 New Start share (63 percent) of total project capital costs. The financial plan includes \$3.12 million in FHWA National Highway System Funds (3.8 percent), \$3.9 million in FHWA Congestion Mitigation and Air Quality (CMAQ) funds (5 percent), and \$7 million in FTA Section 5307 funds (8 percent). ConnDOT will provide \$16.4 million (20 percent) in State funding for the project.

## Stability and Reliability of Capital Financing Plan

### **Rating: Medium**

The *Medium* rating reflects the strong financial condition of ConnDOT; however the adequacy of the project's financial plan at this stage of development needs improvement. The capital plan is missing several key components.

**Agency Financial Condition:** ConnDOT serves as the primary fixed route transit provider throughout the State of Connecticut. The agency's Special Transportation Fund has increased each of the past 14 years and was estimated at \$858.2 million for FY98.

**Capital Cost Estimates and Contingencies:** Current project cost estimates did not identify contingencies.

**Existing and Committed Funding:** All of the non-Section 5309 New Starts funding for the proposed Busway project, totaling \$30.4 million is from existing sources. ConnDOT's contribution towards the project is \$16.4 million and these funds are budgeted and programmed. Additional funding will come from other federal sources including NHS funds, CMAQ and formula funds.

**New and Proposed:** No new sources of funding are proposed.

## Stability and Reliability of Operating Finance Plan

### **Rating: Medium**

The *Medium* rating is based on the adequacy of the project's operating plan at this stage of development; however the operating plan was missing several key components. An updated operating plan is currently being developed.

**Agency Operating Condition:** The overall operating financing condition of ConnDOT is sound.

**Operating Cost Estimates and Contingencies:** ConnDot estimates annual operating costs for the busway to be \$6.6 million. These estimates are reasonable given the project size, scope, and current stage of development. Funding sources are committed and are likely to be adequate to cover operating costs, but due to an incomplete operating plan neither revenue nor cost projections were well documented.

**Existing and Committed Funding:** Operating costs are to be covered by the project's farebox revenues and from the Connecticut Special Transportation Fund. ConnDOT's Special Transportation Fund provides funding for capital improvements and for maintenance and operation of the State's surface transportation system. The fund has always had a positive annual cumulative balance.

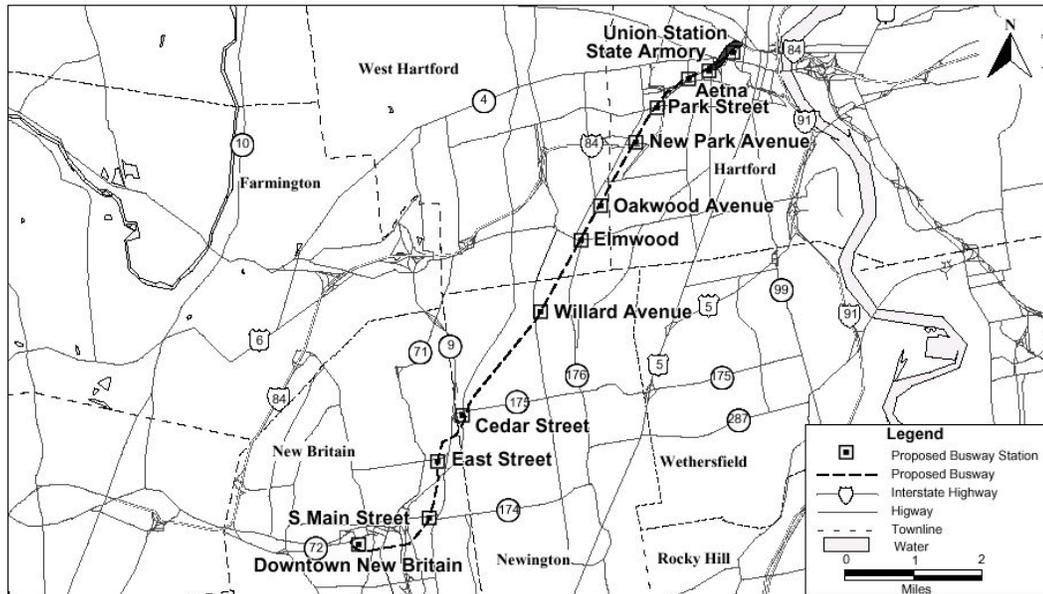
**New and Proposed Sources:** There are no new funding sources proposed to operate the project.

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal:</b>		
Section 5309 New Starts	\$51.60	\$1.49 million appropriated through FY 2001
FHWA NHS	\$3.10	N/A
FHWA CMAQ	\$3.90	N/A
FTA Section 5307	\$7.00	N/A
<b>State:</b>		
ConnDOT Special Transportation Funds	\$16.40	N/A
<b>Total:</b>	<b>\$82.00</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# New Britain - Hartford Busway

Hartford, Connecticut



Federal Transit Administration, 2001

# Houston, Texas/Downtown to Astrodome Light Rail

## Houston Downtown to Astrodome Light Rail

**Houston, Texas**

(November 2000)

### Description

The Metropolitan Transit Authority of Harris County (METRO) in Houston, Texas is proposing to build a 7.5 mile light rail transit (LRT) line as part of the Advanced Transit Program, in conjunction with completion of the Regional Bus Plan. The 7.5 mile Downtown to Astrodome Corridor Light Rail Project is proposed to provide an inner-city collector and distribution system for the existing 85-mile Regional Bus Plan and HOV system (expanding to 120-miles by 2010).

The Downtown to Astrodome corridor extends 7.5 miles from the University of Houston-Downtown Campus at its north end, through the Houston Downtown Central Business District, Midtown, Museum District, Hermann Park, Texas Medical Center, and the Astrodome area. The proposed Light Rail Project is an at-grade system, generally operating within reserved lanes within existing streets. The project will serve a number of multimodal stations, including: the McKinney/Lamar Station Super Stop that integrates with the downtown underground/aerial pedestrian system and bus system; the Downtown Transit Center; two stations with Texas Medical Center Skywalk System; and the Texas Medical Center Transit Center. The construction of the light rail line will be integrated with the reconstruction of Downtown/Midtown and South Main streets.

The estimated capital cost for the 7.5 mile LRT system totals \$300 million (in escalated dollars). METRO is currently proposing that the project be constructed without any Section 5309 New Starts funds. METRO proposes start of operations in 2004, including 6-minute service frequencies in the peak periods and 12-minute off-peak frequencies. Ridership is forecast to total 33,100 average weekday boardings in the year 2020.

### Houston Downtown to Astrodome Light Rail Summary Description

<b>Proposed Project</b>	7.5 miles, 17 station LRT
<b>Total Capital Cost (\$YOE)</b>	\$300.00 million
<b>Section 5309 Share (\$YOE)</b>	\$0.00 million
<b>Annual Operating Cost (\$YOE)</b>	\$23.50 million
<b>Ridership Forecast (2020)</b>	33,100 average weekday boardings 3,500 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The *Recommended* rating is based on the project's Medium project justification rating, relatively low cost-effectiveness and adequate transit-supportive land use, and strong capital and operating financing plans. The overall project rating applies to this *Annual New Starts Report* and **reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined.

**The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

## Status

METRO completed a Major Investment Study/Environmental Assessment for the Downtown to Astrodome Corridor. The locally preferred alternative (LPA), consisting of a 7.5 mile light rail option, was adopted by METRO's Board of Directors in September 1999. The Houston-Galveston Area Council (the region's MPO) formally adopted the LPA as part of the Metropolitan Transportation Plan in September 1999. In October 1999, the Federal Transit Administration authorized METRO to initiate preliminary engineering on the 7.5 mile light rail project. METRO is currently working on completion of an Environmental Assessment.

The Advanced Transit Program was authorized in ISTEA. TEA-21 Section 3030(b)(20) authorizes the Advanced Transit Program for final design and construction. Through FY 2001, Congress has appropriated \$5.92 million in Section 5309 New Starts funds to the project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Information reflects the 7.5 mile light rail transit project from the Houston Central Business District to the Astrodome. With FTA's concurrence, Houston Metro did not provide criteria for the TSM alternative. N/A indicates that data are not available for a specific measure.

FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design, and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects adequate project performance projections in transit-supportive land use and mobility improvements, and an above average cost effectiveness rating.

## Mobility Improvements

### Rating: Medium

Metro estimates that the 7.5-mile LRT system will serve 33,100 average weekday boardings, will attract 3,500 daily new riders by 2015 and would result in the following annual travel time savings.

<b>Mobility Improvements</b>	<b>New Start vs. No-Build</b>	<b>New Start vs. TSM</b>
<b>Annual Travel Time Savings (Hours)</b>	1.20 million hours	N/A

Based on 1990 census data, there are an estimated 2,000 low-income households within a 1/2 mile radius of the proposed 17 LRT stations.

## Environmental Benefits

### Rating: High

The Houston region is a "severe" non-attainment area for ozone. METRO estimates the following annual emissions reductions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	decrease of 105 annual tons	N/A
Nitrogen Oxide (NO <sub>x</sub> )	decrease of 10 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 10 annual tons	N/A
Particulate Matter (PM <sub>10</sub> )	decrease of 2 annual tons	N/A
Carbon Dioxide (CO <sub>2</sub> )	decrease of 13,004 annual tons	N/A

METRO estimates that in 2020, the 7.5-mile LRT system will result in the following savings in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (millions)	decrease of 82,867 million annual BTU	N/A

### Operating Efficiencies

**Rating: Medium**

METRO estimates the following costs per passenger mile for the proposed system.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	\$0.58	N/A	\$0.56

Values reflect 2020 ridership forecast and 1999 dollars.

### Cost Effectiveness

**Rating: Medium-High**

METRO estimates the following cost effectiveness index comparing the proposed new start to the no-build alternative.

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$8.40	N/A

Values reflect 2020 ridership forecast and 1999 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* land use rating reflects strong existing conditions and trip generators in the corridor with a pro-active public and private sector effort to implement plans and policies.

**Existing Conditions:** The corridor connects two major employment and institutional centers in Houston, the Central Business District and the Texas Medical Center. Over 180,000 jobs currently exist within these two areas, approximately 10% of the region's employment. Current employment along the entire corridor totals 240,000 and is expected to increase by 50,000 (23%) in the next 20 years. Population in the corridor is expected to increase from 31,000 to 55,000 (78%). The corridor includes many high trip generators, in addition to the CBD and Medical Center, including the Theater and Museum Districts, three universities, Hermann Park, and the Astrodome area (which includes convention/exhibition space, new football stadium and an

amusement park). There is a substantial supply of parking in the corridor, including 85,000 spaces in the CBD and 37,000 spaces in the Texas Medical Center area.

**Future Plans and Policies:** While there is no zoning within Houston in the traditional sense, the majority of the corridor is within private, public, and semi-public jurisdictions that regularly produce and implement district development plans. These include the Downtown Management District, the Midtown, Market Square, and OST/Alameda Tax Increment Reinvestment Zones, Hermann Park, the Texas Medical Center, Rice University, and the Astrodome complex. Anticipating significant growth, these districts are planning with the light rail project as a central feature. The Main Street Coalition, a public-private partnership endorsed by the Houston Mayor, is coordinating the corridor's institutions, public agencies, neighborhood associations, and other stakeholders in developing a comprehensive vision and plan for the corridor with the light rail project as its center piece. Another non-profit organization, Making Main Street Happen, has been raising private funds to assist in this effort. The Master Plan for the Texas Medical Center includes significant infrastructure investment and other initiatives that are pedestrian- and transit-supportive. The City of Houston has established Tax Increment Reinvestment Zones in the corridor (Midtown, Market Square, and OST/Alameda) as well as other Public Improvement Districts to promote redevelopment through reinvestment in infrastructure (including light rail). These efforts include new land use regulations and zoning plans. Policies to solidify mixed uses and additional housing are not yet solidified. The City has also established neighborhood development standards and implemented amendments to its Development Ordinance that are pedestrian- and transit-supportive.

The City of Houston, on behalf of the Main Street Coalition, has been awarded two successive USDOT Transportation and Community System Preservation grants to coordinate infrastructure investments in the corridor, and a Corridor Master Plan is being developed. Funds have also been received from the FTA's Livable Communities Initiative, and a new joint public/private venture is incorporating transit accessibility in new project design and development. A significant amount of new development is either underway or planned throughout the corridor, including in the CBD, the Midtown and Medical Center area, and the Astrodome area. The Medical Center plans to add 9.3 million square feet of new space and 25,000 employees by 2015. Formal parking policies in the corridor are limited. However, the Medical Center Master Plan includes significant transit promotion to compensate for a reduction in parking availability.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 100%**

METRO currently proposes no Section 5309 New Starts funds for this project. The financial plan for the 7.5 mile LRT project includes \$275.4 million (92 percent of total project costs) in METRO Sales Tax Proceeds funding, \$15.6 million (5 percent) in sale of excess land funds, and \$9.0 million (3 percent) in leaseback revenues.

## Stability and Reliability of Capital Financing Plan

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

The *Medium-High* rating reflects the sound financial condition of Houston Metro, the agency's strong dedicated revenue sources available to construct and operate the proposed LRT project, and a proven track record in implementation of major capital investments.

**Agency Capital Financial Condition:** Houston METRO is in strong financial condition. METRO has a substantial dedicated local revenue mechanism enabling METRO to have a sizable ongoing capital program for mobility improvements while operating and maintaining its bus, HOV and other mobility services. METRO receives capital and operating revenue from a dedicated 1%

regional sales tax, generating over \$300 million annually. Over the past five years, sales tax revenues have increased by 45%. METRO has no outstanding debt.

**Capital Cost Estimates and Contingencies:** Current capital cost estimates, averaging \$40 million per mile for an at-grade LRT system, appear reasonable at this time.

**Existing and Committed Funding:** METRO proposes that \$275.4 million (in escalated dollars) from the dedicated 1% sales tax and cash reserves will be available. The METRO 1% sales tax mechanism, contributing over \$300 million annually in revenues, has been in place and generating significant revenue for METRO projects for many years. METRO's capital program continues to grow such that \$225 million currently available as working capital is estimated to decline to \$39 million by the proposed opening of the LRT, resulting in potential cash flow pressures for this project and the overall capital program.

**New and Proposed Sources:** One innovative financing technique is identified as a project funding source. A lease/leaseback agreement will transfer the depreciation benefits of METRO-owned maintenance facilities.

## Stability and Reliability of Operating Finance Plan

### Rating: Medium-High

The *Medium-High* rating reflects the strong dedicated local funding source and METRO planning for LRT operating expenses in projected cash flow balances.

**Agency Operating Condition:** Houston Metro is in strong operating financial condition, reporting positive annual operating surpluses and currently covering a 21% systemwide farebox recovery ratio. The dedicated 1% sales tax mechanism generates approximately \$300 million annually available for capital and operating expenditures.

**Operating Cost Estimates and Contingencies:** Annual operating costs for the 7.5-mile LRT line are estimated at \$23.5 million. METRO expects to have a commensurate reduction in local bus operating costs plus farebox revenues to offset the full light rail operating from the current budget. Operating cost estimates appear reasonable given the proposed operating plan and service frequencies.

**Existing and Committed Funding:** All of the project's operating funding requirements are proposed from a combination of system generated revenue and the existing regional sales tax. The dedicated 1% sales tax mechanism has a strong historical pattern as a stable and reliable revenue source for operations. For example, systemwide farebox recovery is projected to increase from 21% currently to 28% in the opening year of LRT service.

**New and Proposed Sources:** All proposed operating revenue sources currently exist.

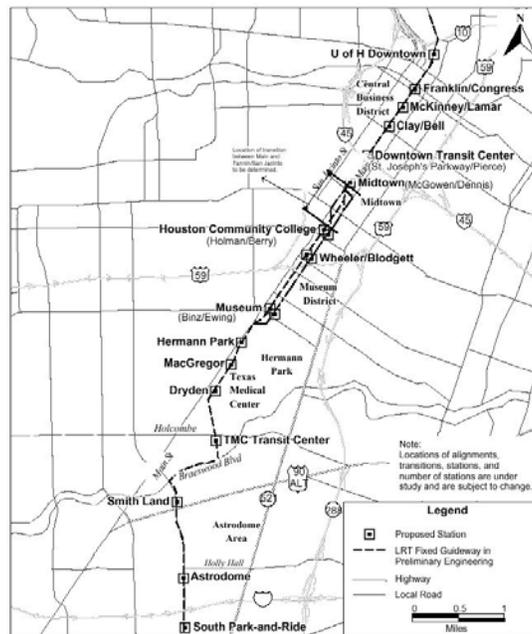
## Locally Proposed Financing Plan

(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Start	\$0.00	\$5.92 million appropriated through FY 2001
<b>Local:</b>		
Local: Dedicated 1% Sales Tax and Cash Reserves	\$275.40	N/A
Excess Land Sales	\$15.60	N/A
Leaseback	\$9.00	N/A
<b>Total:</b>	<b>\$300.00</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### Downtown to Astrodome Light Rail Houston, Texas



# Johnson County, Kansas – Kansas City, Missouri/I-35 Commuter Rail

## I-35 Commuter Rail

**Johnson County, KS/Kansas City, MO**

(November 1999)

(I-35 Commuter Rail)

### Description

Johnson County, Kansas, is proposing to implement a 5 station, 23-mile Commuter Rail line extending from downtown Kansas City, Missouri, southwest to Olathe, Kansas, in Johnson County. The proposed commuter rail project would parallel Interstate 35, the major highway connecting Kansas City with Olathe, and would utilize existing Burlington Northern and Santa Fe (BNSF) railroad track (except for the line's northern-most mile segment, which would require either new track or existing Kansas City Terminal Railway trackage). Park and ride facilities are being planned for each proposed station. The commuter rail line will terminate in Kansas City at its historic Union Station. Ridership estimates for the I-35 commuter rail project range from 1,400 to 3,800 trips per day by 2001; these estimates will be refined during subsequent phases of project development.

The project is estimated to cost \$30.9 million in 1997 dollars, with a proposed Section 5309 New Starts share of \$24.75 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 (TEA-21 Section 5309(e)(8)(A)).*

### I-35 Commuter Rail Summary Description

<b>Proposed Project</b>	Commuter Rail (23 miles, 5 stations)
<b>Total Capital Cost</b>	\$30.90 million
<b>Section 5309 Share</b>	\$24.80 million
<b>Annual Operating Cost</b>	\$4.20 million
<b>Ridership Forecast</b>	1,400-3,800 average weekday boardings

### Status

Johnson County initiated a major investment study (MIS) on the I-35 corridor in early 1996. The MIS resulted in the selection of commuter rail as the locally preferred alternative (LPA) in August 1998. The LPA was adopted in the financially constrained regional plan in February 1999. FTA approved Johnson County's request to enter into preliminary engineering (PE) on the project in July 1999. An Environmental Assessment for the project will be undertaken as part of the PE effort.

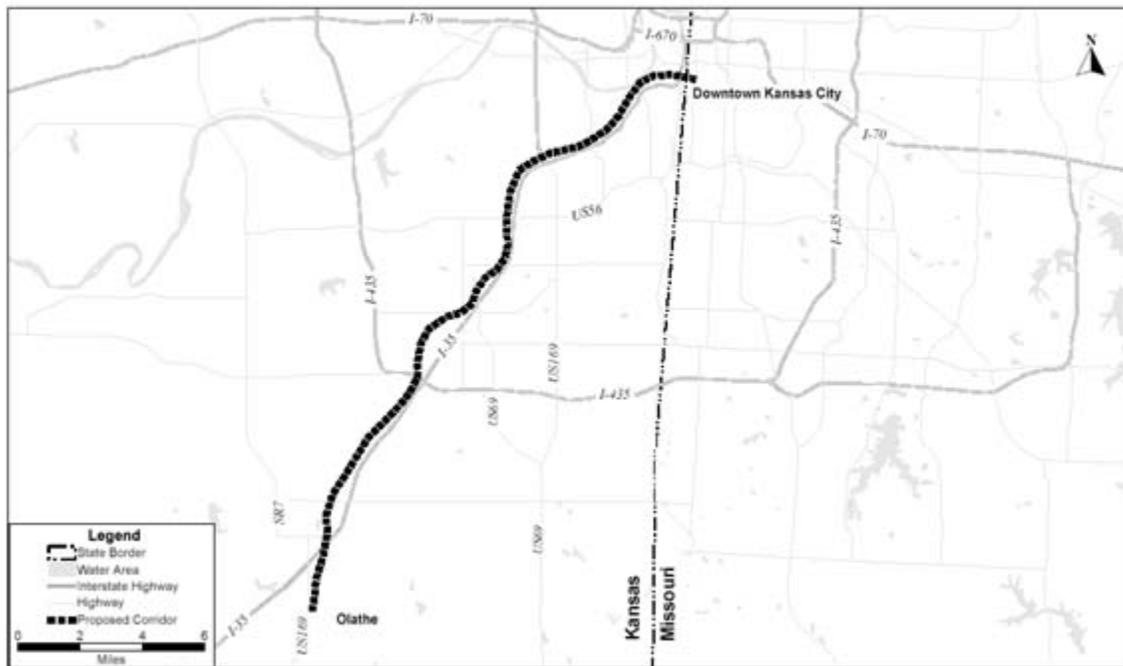
TEA-21 Section 3030(a)(32) authorizes the "Kansas City I-35 Commuter Rail" project for final design and construction. Through FY 2000, Congress has appropriated \$1.97 million for the project.

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Starts</b>	\$24.80	\$1.97 million appropriated through FY 2000
<b>Local:</b>	\$6.20	N/A
<b>Total:</b>	<b>\$30.90</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

## I-35 Johnson County Commuter Rail

Johnson County, KS / Kansas City, MO



Federal Transit Administration, 2000

# Las Vegas, Nevada/Resort Corridor Fixed Guideway MOS

## Las Vegas Resort Corridor Fixed Guideway MOS

Las Vegas, Nevada

(November 2000)

### Description

The Regional Transportation Commission (RTC) of Clark County, Nevada, is the lead local agency proposing the implementation of a fixed guideway transit system in the Las Vegas Resort Corridor. The proposed guideway investment is designed to improve mobility within the 18.4 mile corridor, which includes the region's central business district, several gaming resorts along "The Strip", the University of Nevada at Las Vegas, McCarran International Airport, and three regional shopping centers. The RTC is studying several alignments along the corridor, including a 4.7 mile minimum operable segment (MOS) extending south from Cashman Field, through downtown Las Vegas, and terminating at the intersection of Convention Center Drive and Las Vegas Boulevard. The MOS is a double track, elevated, automated fixed guideway with 11 stations, including a major intermodal facility at the northern terminus with a 2,000 vehicle park and ride lot and a 30-bay bus terminal. The MOS is estimated to cost \$597 million (escalated dollars) and carry over 63,000 weekday boardings in 2020. The MOS is being evaluated in this profile.

RTC is also working with the MGM-Hilton Limited Liability Corporation to develop a 3.6 mile system extension to the RTC system which would extend as far south as Tropicana Avenue. The proposal is to provide a seamless connection between the proposed RTC-built guideway and a 3.6 mile facility proposed to be constructed by the MGM-Hilton Limited Liability Corporation. Average weekday boardings on the entire proposed 8.3 mile system is estimated to be 173,000 in 2020.

### Las Vegas Resort Corridor Summary Description

<b>Proposed Project</b>	Automated Fixed Guideway Transit (MOS) 4.7 miles, 11 stations
<b>Total Capital Cost (\$YOE)</b>	\$597.00 million
<b>Section 5309 Share (\$YOE)</b>	\$210.00 million
<b>Annual Operating Cost (\$Year)</b>	\$13.50 million
<b>Ridership Forecast (2020)</b>	63,700 average weekday boardings 36,000 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the project's strong cost effectiveness, and the adequacy of the project's capital and operating financing plan *at this stage of development*. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined.

**The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

## Status

RTC initiated a Major Investment Study (MIS) for the central employment area of the Las Vegas Valley in July 1994. In January 1997, the RTC and the City of Las Vegas formally adopted the Resort Corridor Transportation Master Plan, which included a 15.6 mile fixed guideway transit system.

FTA approved entrance to preliminary engineering on the 4.7 MOS in July 1998. A Draft Environmental Impact Statement (EIS) on the entire corridor is ongoing and expected to be completed in spring of 2001, with the selection of an LPA from the DEIS anticipated in mid 2001. RTC anticipates a Record of Decision, following completion of a Final EIS for the project, in the fall of 2001.

TEA-21 Section 3030(a)(35) authorizes the Las Vegas Corridor for final design and construction. Through FY 2001, Congress has appropriated \$13.85 million in Section 5309 New Start funds for this project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Information and criteria are presented for the 4.7 mile MOS. N/A indicates that data are not available for a specific measure.

FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design, and for next year's *Annual Report on New Starts*.

## Justification

The *Medium-High* project justification rating reflects the project's strong cost effectiveness and acknowledges the existing dense activity centers along the proposed alignment.

## Mobility Improvements

### Rating: Medium

RTC estimates that the MOS will serve 65,000 average weekday boardings, including 36,000 daily new riders, in 2020. RTC estimates that the MOS will result in the following annual travel time savings.

<b>Mobility Improvements</b>	<b>New Start vs. No-Build</b>	<b>New Start vs. TSM</b>
<b>Annual Travel Time Savings (Hours)</b>	29.90 million hours	15.50 million hours

Based on 1990 census data, there are an estimated 4,114 low-income households within a ½ mile radius of the proposed 11 stations of the MOS.

## Environmental Benefits

### Rating: High

The Las Vegas Metropolitan Area is an attainment area for ozone and nitrogen oxides; however, it is designated as a "serious" non-attainment area for both carbon monoxide (CO) and particulate matter. RTC estimates that in 2020, the MOS would result in the following annual changes in emissions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Carbon Monoxide (CO)</b>	decrease of 2731 annual tons	decrease of 179 annual tons
<b>Nitrogen Oxide (NOx)</b>	decrease of 127 annual tons	increase of 32 annual tons
<b>Hydrocarbons (HC)</b>	decrease of 137 annual tons	increase of 53 annual tons
<b>Particulate Matter (PM<sub>10</sub>)</b>	increase of 18 annual tons	increase of 110 annual tons
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	decrease of 27,716 annual tons	decrease of 35,332 annual tons

RTC estimates that in 2020 the MOS would result in the following savings in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>BTU (millions)</b>	decrease of 284,354 million annual BTU	decrease of 424,237 million annual BTU

### Operating Efficiencies

**Rating: High**

The RTC estimates a decrease in the systemwide operating cost per passenger mile in the year 2020 for the MOS compared to the TSM and the No-Build.

Operating Efficiencies	No-Build	TSM	New Start
<b>System Operating Cost per Passenger Mile (2020)</b>	\$0.37	\$0.39	\$0.31

Values reflect 2020 ridership forecast and 1999 dollars.

### Cost Effectiveness

**Rating: High**

RTC estimates the following cost effectiveness indices.

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Incremental Cost per Incremental Passenger</b>	\$2.50	\$0.40

Values reflect 2020 ridership forecast and 1999 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* rating reflects the lack of formal transit supportive land use and parking policies in the Las Vegas region, but acknowledges that market conditions have created a highly dense, job-rich environment in the corridor.

**Existing Conditions:** The 18.4 mile Resort Corridor functions as the region's primary employment center, accommodating nearly 50% (206,000) of regional jobs. More specifically, there are an estimated 57,000 jobs within ½ mile of proposed MOS station areas (1995 data); 90,000 jobs along the MOS are forecasted in 2020. Existing zoning supports high-intensity hotel, resort, retail, and some residential uses. Areas adjacent to the major resort activities are

pedestrian and transit-friendly, but the pedestrian environment declines outside of the these areas. Parking throughout the area is allowed without limitation.

**Future Plans and Policies:** Current public policies to shape development are generally weak throughout the region, but market forces are expected to contribute to the continued increase of major trip generators in the Resort Corridor and the MOS. Over 90,000 jobs are forecast within the MOS corridor by 2020, an increase of 59%. The amount of square foot development within the MOS is also expected to increase over 60% (to 39.5 million) by 2020. However, similarly measured growth throughout the entire metropolitan area is forecast to increase by over 90% over the same period, with a 142% increase in employment regionwide.

In September 1999, the RTC and the City of Las Vegas entered into an interlocal agreement to conduct station area land use planning activities along the corridor. In addition, the city has taken significant steps to implement its downtown redevelopment plan, including undertaking streetscape and design improvements.

## Other Factors

**Potential Private Sector Involvement:** RTC is also examining in its DEIS of the Resort Corridor an 8.3 mile joint public/private seamless fixed guideway system. The RTC and the MGM-Hilton Limited Liability Corporation have entered into a memorandum of understanding to pursue the integration of system operations, and private sector contributions for the 4.7 mile RTC system are estimated to total \$85 million.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 65%**

The project's financial plan includes \$210 million of Section 5309 New Starts funding (35 percent of total project costs), \$105 million of FHWA flexible funding (17 percent), \$190 million in RTC Bonds (32 percent), and \$85 million (14 percent) in private sector contributions.

## Stability and Reliability of Capital Financing Plan

### **Rating: Medium**

The *Medium* capital rating reflects the RTC's stable local dedicated revenues for capital expansion and the level of committed funding for the proposed project

**Agency Capital Financial Condition:** Based on current financial statements and the historical performance of RTC's locally dedicated sales tax, the capital health of the agency is healthy.

**Capital Cost Estimates and Contingencies:** Cost estimates assume a conservative 5 percent rate of cost inflation and reasonable contingencies. The project's cash flow demonstrates an annual average surplus equal to 2.2 % of systemwide operating and capital revenues, which would be available to absorb unexpected cost overruns or unanticipated funding shortfalls.

**Existing and Committed Funding:** The RTC is proposing the use of \$105 million in Federal flexible funds to support project capital costs. As the region's MPO, local control of these funds lies with the RTC. The RTC is further proposing that \$190 million of project costs are to be financed by revenue bonds secured by anticipated farebox revenue surpluses generated by the Resort Corridor project. If such surpluses do not materialize, RTC's local dedicated ¼ cent sales tax is sufficient to cover bond payments, although the RTC's bus expansion plans would be put at risk (existing bus operations would not be negatively impacted).

**New and Proposed Sources:** No new funding sources are proposed for the MOS. Private resources are proposed for \$85 million of the project costs in as part of the implementation of the

proposed 8.3 mile RTC/ MGM-Hilton Limited Liability Corporation seamless system alternative described earlier.

## Stability and Reliability of Operating Finance Plan

### Rating: Medium

The *Medium* rating reflects the RTC's strong operating revenues.

**Agency Operating Condition:** In recent years, RTC's transit system has experienced declining operating surpluses but significant increases in ridership and productivity (in terms of riders per vehicle mile). The overall operating condition of the agency is considered good.

**Operating Cost Estimates and Contingencies:** Annual operating costs are estimated at \$13.5 million in 2006, escalating to \$26.7 million by 2020 (a reasonable 5% rate of growth). These estimates are considered reasonable for an Automated Guideway Transit system operating under a broad range of service level assumptions.

**Existed and Committed Funding:** RTC is projecting that project operating costs would be more than fully funded from farebox receipts. Current transit ridership in the corridor is high and rail ridership forecasts support RTC revenue estimates. RTC's dedicated sales tax revenue represents an additional available operating funding source.

**New and Proposed Sources:** No new sources are proposed to fund the proposed project's operation.

## Locally Proposed Financing Plan

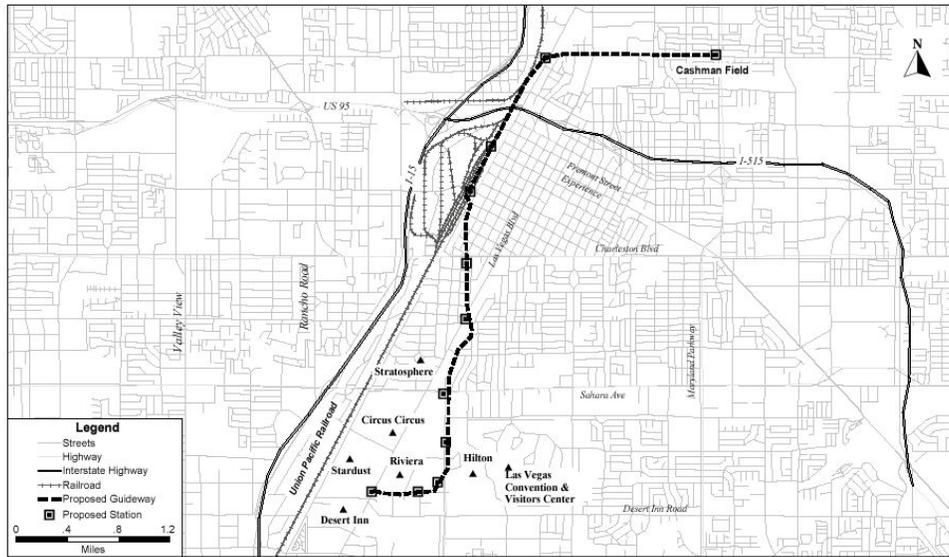
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$210.00	\$13.85 million appropriated through FY 2001
CMAQ	\$32.50	N/A
STP State	\$40.00	N/A
STP Urban	\$32.50	N/A
<b>Local:</b>		
RTC Sales Tax Bond	\$190.00	N/A
Private Sector Contribution	\$85.00	N/A
<b>Total:</b>	<b>\$597.00</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Resort Corridor Fixed Guideway MOS

Las Vegas, Nevada



# Los Angeles, California/Eastside Corridor LRT

## Eastside Corridor LRT

Los Angeles, California

(November 2000)

### Description

The Los Angeles County Metropolitan Transportation Authority is proposing to implement a 5.9 mile light rail transit (LRT) line in the Eastside Corridor, connecting Downtown Los Angeles with low- to moderate-income communities in East Los Angeles. The proposed system would include 8 stations and will traverse eastward from Union Station (the city's major intermodal hub, serving intercity, commuter, and regional rail service, as well as local and express bus services) along Alameda Street through the City Terrace, Belvedere, and East Los Angeles communities of unincorporated Los Angeles County. The project would terminate at Beverly and Atlantic Boulevards, where a 500 space park-and-ride facility is planned. The project is primarily at-grade, with a 1.8 mile mid-section underground in tunnel. The project is intended to improve mobility for residents and employees in the corridor, and provide improved access to employment opportunities throughout the MTA service area. 15,000 average weekday boardings are forecasted on the proposed line in 2020, including 9,700 daily new riders. The project is estimated to cost \$759.5 million in escalated dollars, with a Section 5309 New Starts share of \$402.3 million.

### Eastside Corridor Summary Description

<b>Proposed Project</b>	Light Rail Transit Line 5.9 miles, 8 stations
<b>Total Capital Cost (\$YOE)</b>	\$759.50 million
<b>Section 5309 Share (\$YOE)</b>	\$402.30 million
<b>Annual Operating Cost (\$1999)</b>	\$22.40 million
<b>Ridership Forecast (2020)</b>	15,000 average weekday boardings 9,700 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the existing densities in the corridor and significant mobility improvements estimated to result from the proposed investment. The overall project rating applies to this Annual Report on New Starts **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

### Status

Initial systems planning efforts for the Eastside Corridor began in 1989, and an alternatives analysis on the corridor commenced in 1990, resulting in the selection of a heavy rail subway line

from Union Station to Whittier/Atlantic Boulevard in 1993. A Record of Decision on the corridor was issued in December 1994. The FTA and MTA entered into a Full Funding Grant Agreement (FFGA) on three heavy rail corridors (“MOS-3”), which included the North Hollywood, Mid-City, and Eastside corridors, in May 1993. In January 1997, FTA requested that the MTA submit a Recovery Plan to demonstrate its ability to complete the FFGA while maintaining and operating the existing bus system. Pursuant to the request, in January 1998, the LACMTA Board of Directors voted to suspend and demobilize rail construction activities on the Mid-City and Eastside projects. The MTA subsequently submitted a Recovery Plan to FTA in May 1998 and FTA approved the Plan in July 1998.

In 1998, the MTA undertook a Regional Transit Alternatives Analysis (RTAA) to analyze and evaluate feasible alternatives for the Eastside and Mid-City corridors. The RTAA addressed system investment priorities, allocation of resources to operate existing transit services at a reliable standard, assessment and management of financial risk, countywide bus service expansion, and a process for finalizing corridor investments. In November 1998, the LACMTA Board reviewed the RTAA and directed staff to reprogram state and local resources previously allocated to the Eastside and Mid-City Extensions to the implementation of RTAA recommendations. In June 1999, the MTA initiated a Re-Evaluation/Major Investment Study on the Eastside corridor, and began a draft environmental impact statement on the corridor in March 2000. In June 2000, the MTA board formally selected a light rail transit technology in the Eastside corridor as the locally preferred alternative. FTA approved the initiation of preliminary engineering in August 2000.

TEA-21 Section 3030(a)(38) authorized the Los Angeles MOS-3 for final design and construction. Through FY 2000, Congress has appropriated \$76.48 million for the original Mid-City and Eastside subway alignments. In FY2001, Congress appropriated \$0.99 million for the Eastside Corridor Project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. FTA has evaluated this project as being in preliminary engineering. The project will be reevaluated when it is ready to advance to final design and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the high densities and transit supportive land uses in the corridor and the project's anticipated mobility improvements, but notes the project's low cost-effectiveness rating.

## Mobility Improvements

### Rating: Medium

The Eastside Corridor LRT would serve approximately 15,000 average weekday boardings and carry 9,700 daily new riders. The MTA estimates that the project would result in the following annual travel time savings.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	0.40 million hours	0.20 million hours

Based on 1990 census data, there are an estimated 5,343 low-income households within a ½ mile radius of the MOS corridor, representing 16 percent of all households located within ½ mile of the corridor.

## Environmental Benefits

### Rating: High

The Los Angeles region is classified as an “extreme” area for ozone, a “serious” area for carbon monoxide and particulate matter, and as an attainment area for nitrogen oxides. MTA estimates that in 2020, the Eastside LRT project would result in the following reductions in emissions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	decrease of 57 annual tons	decrease of 43 annual tons
Nitrogen Oxide (NO <sub>x</sub> )	0	decrease of 3 annual tons
Volatile Organic Compounds (VOC)	decrease of 1 annual ton	decrease of 1 annual ton
Particulate Matter (PM <sub>10</sub> )	0	0
Carbon Dioxide (CO <sub>2</sub> )	decrease of 2,074 annual tons	decrease of 2,030 annual tons

MTA estimates that in 2020, the proposed Eastside LRT project would result in the following reduction in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (millions)	decrease of 8,851 million annual BTU	decrease of 16,112 million annual BTU

## Operating Efficiencies

### Rating: Medium

MTA estimates that systemwide-operating costs per passenger mile would remain relatively constant when comparing the Eastside LRT project with the no-build and TSM alternatives.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	\$0.32	\$0.32	\$0.32

Values reflect 2020 ridership forecast and 1999 dollars.

## Cost Effectiveness

### Rating: Low

MTA estimates the following cost effectiveness index for the Eastside LRT project.

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$24.00	\$25.30

Values reflect 2020 ridership forecast and 1999 dollars.

## Transit-Supportive Existing Land Use and Future Patterns

### Rating: Medium-High

The *Medium-High* rating reflects the dense urban character of the corridor and generally transit-supportive zoning in areas served by the proposed project.

**Existing Conditions:** The corridor study area contains a variety of land uses: commercial uses in the Central City north area; industrial uses between Central City north and the Los Angeles River; commercial uses lining much of the proposed alignment; and increasingly residential uses within the Boyles Heights and East Los Angeles communities. There exists a mixture of residential, commercial, and public uses along 1<sup>st</sup> Street in Boyle Heights. Population in the corridor is relatively dense (10,300 persons/sq mile). Existing parking in the corridor is primarily on-street, with the exception of small lots to serve local businesses. Much of the corridor is auto-oriented, with pedestrian facilities limited to sidewalks; however, major shopping areas in Boyle Heights are pedestrian-oriented, including the El Mercado area at First and Lorena Streets. The LA County Planning and Zoning Code contains development and parking standards for, and requires pedestrian amenities in, specified transit-oriented districts, include the Eastside corridor.

**Future Plans and Policies:** The corridor contains a number of development proposals which are planned or currently under construction, and which would ultimately increase densities throughout adjacent communities. The Pico Aliso and Aliso Village Urban Revitalization Demonstration Projects will provide for significant new residential and community resources in the corridor; medical and cultural centers are also planned. The LA Land Use and Transportation Policy and MTA's Joint Development Policy encourage the development of transit- and pedestrian-friendly development in transit station areas. Specifically, the Land Use and Transportation Policy contains incentives to reduce parking and increase densities within ½ mile of transit stations. While population and employment in the corridor through 2020 is expected to increase by 20 and 30 percent, respectively, the study area's share of regional population and employment is forecasted to decline; the MTA provided no evidence of significant policies that address growth management issues in the City, County, or region.

## Other Factors

**MOS-3 FFGA:** The FTA and MTA entered into a full funding grant agreement (FFGA) on three heavy rail corridors ("MOS-3"), which included the North Hollywood, Mid-City, and Eastside corridors, in May 1993. In January 1998, the MTA suspended work on the Eastside and Mid-City corridors. The Eastside corridor LRT is being pursued by MTA as a replacement project for the Eastside heavy rail project issued under the original MOS-3 FFGA.

## Local Financial Commitment

### **Proposed Non-Section 5309 New Starts Share of Total Project Costs: 47%**

The current financial plan for the Eastside Corridor LRT project proposes \$402.3 million in Section 5309 New Starts funding (53%); \$116.0 million (15 %) in Section 5309 Rail Modernization and FHWA flexible funds; and \$241.8 million (32 %) in State funding;

## Stability and Reliability of Capital Financing Plan

### **Rating: Medium**

The *Medium* rating reflects the high level of local capital funding committed to the proposed project.

**Agency Capital Financial Condition:** The capital financial condition of the MTA is good. The agency enjoys a very good bond rating and plans to issue very little debt for planned capital improvements. The MTA's sales tax base is strong.

**Capital Cost Estimates and Contingencies:** The MTA was in design and had performed some geotechnical work on the proposed heavy rail subway in the Eastside corridor when work was

suspended in 1998. Consequently, current tunneling and other infrastructure cost estimates in the corridor alignment are relatively advanced, and considered reasonable.

**Existing and Committed Funding:** In July 2000, the California State Assembly and Senate approved Governor Davis' Transportation Congestion Relief Plan, including \$236.0 million for the Los Angeles Eastside LRT project. The sources of these funds are a surplus in state general funds and a commitment of six years sales tax revenue on motor vehicle fuel. While the program is new, the underlying revenue sources already exist and do not require voter approval. These funds are considered committed, but have a six year sunset provision. Additional state funding comes from California's Regional Improvement Fund; the \$5.1 million in these revenues are also considered committed to the project.

**New and Proposed Sources:** The July 2000 passage of California State transportation budget commits \$236.0 million of new funding to the project.

### Stability and Reliability of Operating Finance Plan.

#### **Rating: Medium**

The *Medium* rating reflects the MTA's improving operating condition, although FTA is concerned about some of the agency's revenue assumptions in its twenty year operating plan.

**Agency Operating Condition:** In the past, FTA has found MTA's operating condition to be poor. Recent operating revenue forecasts project zero operating balances through 2025, although realizing such balances will require significant progress in implementing a new fare structure and containing growth in operating costs.

**Operating Cost Estimates and Contingencies:** Little information was provided on the project's operating cost estimates and contingencies.

**Existed and Committed Funding:** The MTA assumes operating costs will be covered by existing operating revenue sources and a 20 percent fare increase to be implemented in FY 2003, with triennial increases thereafter. The MTA further assumes the implementation of a zonal fare structure on the rail system. The MTA board is anticipated to act on these fare policies in the fall of 2000. The MTA also proposes to limit the cost of bus operations to 1 percent annually through 2004.

**New and Proposed Sources:** No new sources of operating funding are being proposed by MTA.

## Locally Proposed Financing Plan

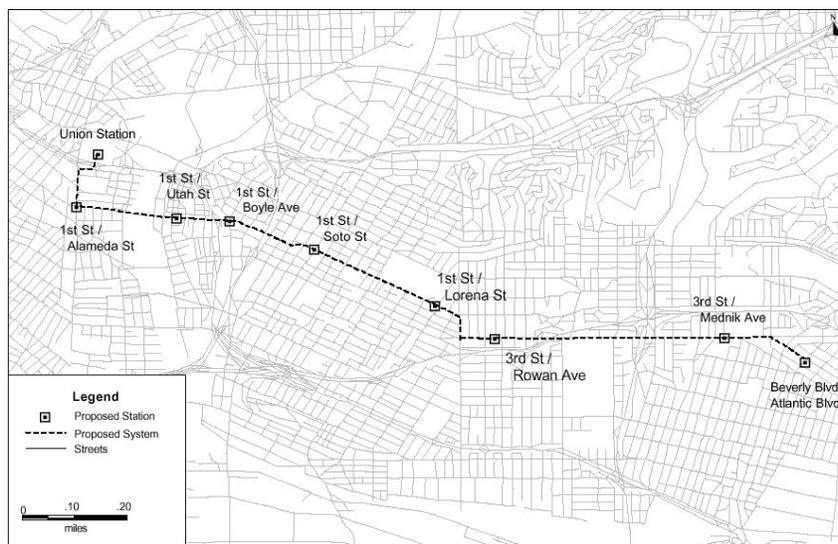
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$402.30	\$0.99 million appropriated for the Eastside Corridor Project through FY 2001
Section 5309 Rail Mod	\$38.90	N/A
STP	\$77.10	N/A
<b>State:</b>		
Traffic Congestion	\$236.60	N/A
Relief Fund	\$5.20	N/A
Regional Improvement Fund	\$0.00	N/A
<b>Total:</b>	<b>\$759.50</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### Eastside Corridor LRT

Los Angeles, California



# Los Angeles, California/San Fernando Valley East-West Transit Corridor

## San Fernando Valley East-West Transit Corridor

Los Angeles, California

(November 2000)

### Description

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is proposing to implement a 14.2 mile Bus Rapid Transit (BRT) line in the San Fernando Valley area of the County of Los Angeles. The proposed BRT would connect the mature suburbs and urbanized area of San Fernando Valley with the North Hollywood Metro Red line subway station. The proposed system would include 13 stations that would serve major activity centers including North Hollywood, the Van Nuys Civic Center, Peirce College, Valley College, and the high density commercial development along Ventura Boulevard. The project would terminate at the proposed Warner Center Transit Hub at the intersection of Owensmouth Avenue and Erwin Street. The LACMTA proposes to use former Southern Pacific Railroad right-of-way between Chandler and Burbank that was purchased in 1991 for a future rapid transit corridor. The project is intended to improve mobility for residents and employees in the corridor, reduce travel times from 55 minutes to 30 minutes for bus riders in the corridor, and provide relief for congested conditions on area roads and the Ventura Freeway. Additionally, the BRT would provide an extension to the successful Metro Red line system and improve connectivity to the rapid transit system for bus riders throughout the San Fernando Valley. 23,800 average weekday boardings are forecasted on the proposed line in 2020, including 15,200 new riders. The project is estimated to cost \$300.3 million in escalated dollars.

No Section 5309 New Starts funds are proposed for this project, therefore the project is technically exempt from the New Starts evaluation process. The LACMTA wishes to retain eligibility to apply for federal funds at a future date, thus, they have submitted the New Starts criteria to FTA for rating and evaluation.

### San Fernando Valley East-West Transit Corridor Summary Description

<b>Proposed Project</b>	Bus Rapid Transit 14.2 miles, 13 stations
<b>Total Capital Cost (\$YOE)</b>	\$300.30 million
<b>Section 5309 Share (\$YOE)</b>	\$0.00 million
<b>Annual Operating Cost (\$YOE)</b>	\$15.40 million
<b>Ridership Forecast (2020)</b>	23,800 average weekday boardings 15,200 daily new riders
<b>FY 2001 Financial Rating:</b>	<b>Medium</b>
<b>FY 2001 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2001 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the existing densities in the corridor, the mobility improvements estimated to result from the proposed investment, and the commitment of

local funds to construct and operate the project. The overall project rating applies to this Annual Report on New Starts **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

## Status

Initial planning efforts for rapid transit in the San Fernando Valley Corridor began in the 1980's, and resulted in the selection of the MOS-4 extension of the Los Angeles Metro rapid transit system into the Valley. However, by 1998, it was realized that rail rapid transit may not be the most cost-effective mode for the San Fernando Valley. Thus, in 1999, the MTA undertook a Major Investment Study re-evaluation to analyze and evaluate feasible alternatives for the San Fernando Valley – Burbank Chandler Corridor. In February 2000, the MTA board formally selected Bus Rapid Transit technology in the corridor as the locally preferred alternative, and requested formal FTA approval for preliminary engineering on the LPA in July 2000; FTA plans to approve the project for preliminary engineering in December 2000.

TEA-21 Section 3030(a)(25) authorized the Los Angeles MOS-4, San Fernando Valley, for Final Design and Construction. Through 2001, Congress has not appropriated any Section 5309 New Starts funds for this project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. FTA has evaluated this project as entering preliminary engineering. The project will be reevaluated when it is ready to advance to final design and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the project's anticipated mobility improvements, and transit supportive land use policies adopted by the Los Angeles City Council.

## Mobility Improvements

### Rating: Medium

The San Fernando Valley Bus Rapid Transit would serve approximately 23,800 average weekday boardings and carry 15,200 daily new riders. The MTA estimates that the project would result in the following annual travel time savings.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	0.40 million hours	0.20 million hours

Based on 1990 census data, there are an estimated 3,552 low-income households within a ½ mile radius of the MOS corridor, representing 10 percent of all households located within ½ mile of the corridor.

## Environmental Benefits

### Rating: High

The Los Angeles region is classified as an "extreme" area for ozone, a "serious" area for carbon monoxide and particulate matter, and as an attainment area for nitrogen oxides. MTA estimates that in 2020, the San Fernando Valley BRT project would result in the following reductions in emissions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	decrease of 113 annual tons	decrease of 46 annual tons
Nitrogen Oxide (NOx)	decrease of 16 annual tons	decrease of 5 annual tons
Volatile Organic Compounds (VOC)	decrease of 3 annual tons	decrease of 1 annual ton
Particulate Matter (PM <sub>10</sub> )	increase of 1 annual ton	0
Carbon Dioxide (CO <sub>2</sub> )	decrease of 4,261 annual tons	decrease of 2,332 annual tons

MTA estimates that in 2020, the proposed San Fernando Valley BRT project would result in the following reduction in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (millions)	decrease of 6,688 million annual BTU	decrease of 12,841 million annual BTU

### Operating Efficiencies

**Rating: Medium**

MTA estimates that systemwide-operating costs per passenger mile would remain relatively constant when comparing the San Fernando Valley BRT project with the no-build and TSM alternatives.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	\$0.32	\$0.32	\$0.32

Values reflect 2020 ridership forecast and 1999 dollars.

### Cost Effectiveness

**Rating: Low-Medium**

MTA estimates the following cost-effectiveness index for the San Fernando Valley BRT project.

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$9.70	\$15.80

Values reflect 2020 ridership forecast and 1999 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* rating reflects the moderately strong population densities in the busway corridor, and acknowledges provisions in City of Los Angeles plans and policies to focus development in regional centers served by the corridor as well as to improve the mix of uses and pedestrian friendliness of new development.

**Existing Conditions:** The proposed 14-mile busway does not directly serve a CBD, but it does provide indirect service to the Los Angeles CBD through its connection with the Metro Red Line

at its eastern terminus in North Hollywood. Employment in the corridor totals 58,000 of which over 17,000 is concentrated in Warner Center, at the western terminus of the line. Average population density in station areas is relatively high, averaging 8,900 persons per square mile. While much of the housing in the corridor is single-family, 3 to 4-story multi-family housing tends to be clustered along major arterials and near proposed station areas. There are some low-density industrial parks that are gradually being replaced by higher density retail and office development. Pedestrian accessibility in the corridor varies from proposed station site to proposed station site, but is generally good. The street system is a grid network and connectivity is good, but the arterial streets are typically wide and are heavily congested. There are several high density commercial centers, however, much of the corridor contains auto-oriented retail plazas and office development along commercial strips.

**Future Plans and Policies:** Los Angeles County is projected to grow by 33 percent in population and 40 percent in employment between 1994 and 2020. The Los Angeles General Plan Framework designates existing activity centers – of which there are four in the corridor -- as focal points for future growth, while protecting other areas from upzoning. The city's policies also call for concentrating growth within one-quarter mile of transit stations and creating a pedestrian oriented environment in these areas. Recommended densities in "major bus centers" range from 20 to 40 dwelling units per acre and 2:1 to 3:1 commercial floor area ratio (FAR). Community plans covering the corridor recognize the potential for additional commercial, residential, and mixed-use development in transit station areas, but also emphasize appropriate buffering and transition to existing single-family neighborhoods. The city's zoning codes include "pedestrian-oriented districts" and "mixed-use districts" consistent with the general plan; these districts would be applied to many of the busway station areas. The city also anticipates developing new street standards for "pedestrian priority segments." The general plan as well as specific plans for the corridor allow for a phased reduction in parking requirements as development increases and transit service is improved.

## Local Financial Commitment

No Section 5309 New Starts funds are proposed for this project. The LACMTA wishes to retain eligibility to apply for federal funds at a future date, thus, they have formally requested to complete FTA's planning and project development process. In July 2000 the State of California committed \$145 million to the project.

### **Proposed Non-Section 5309 New Starts Share of Total Project Costs: 100%**

The current financial plan for the San Fernando Valley project proposes \$145 million in State Traffic Congestion Relief funds (48%); \$155 million (52%) in bonds backed by local Proposition C revenues, and \$300,000 (<1%) in State Regional Improvement funds.

## Stability and Reliability of Capital Financing Plan

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

The *Medium-High* rating reflects the high level of local capital funding committed to the proposed project.

**Agency Capital Financial Condition:** The capital financial condition of the MTA is good. The agency enjoys a very good bond rating and plans to issue very little debt for planned capital improvements. The MTA's sales tax base is strong.

**Capital Cost Estimates and Contingencies:** The capital cost estimates and contingencies are reasonable for an at-grade exclusive busway in the early preliminary engineering stage of project development.

**Existing and Committed Funding:** In July 2000, the California State Assembly and Senate approved Governor Davis' Transportation Congestion Relief Plan, including \$145.0 million for the San Fernando Valley BRT project. The sources of these funds are a surplus in state general funds and a commitment of six years sales tax revenue on motor vehicle fuel. While the program is new, the underlying revenue sources already exist and do not require voter approval. These funds are considered committed, but have a six year sunset provision. Additional state funding comes from California's Regional Improvement Fund; the \$300,000 thousand in these revenues are also considered committed to the project. LACMTA will issue bonds backed by Proposition C to provide the remaining \$155 million for the project.

**New and Proposed Sources:** The July 2000 passage of California State transportation budget commits \$145.0 million of new funding to the project.

## Stability and Reliability of Operating Finance Plan.

### **Rating: Medium**

The *Medium* rating reflects the MTA's improving operating condition, although FTA is concerned about some of the agency's revenue assumptions in its twenty year operating plan.

**Agency Operating Condition:** In the past, FTA has questioned the MTA's operating condition. However, recent operating revenue forecasts project zero operating balances through 2025. Realizing such balances will require significant progress in implementing a new fare structure and containing growth in operating costs, which the MTA is currently addressing.

**Operating Cost Estimates and Contingencies:** The financial planning assumptions are reasonable for a project in this stage of preliminary engineering.

**Existed and Committed Funding:** The MTA assumes operating costs will be covered by existing operating revenue sources and a 20 percent fare increase to be implemented in FY 2003, with triennial increases thereafter. The MTA further assumes the implementation of a zonal fare structure on the rail system. The MTA board is anticipated to act on these fare policies in the fall of 2000. The MTA board also proposes to limit any future increased in the cost of operations to 1 percent annually through 2004. The San Fernando Valley BRT will have a very small effect on operating funding requirements, since it would represent only about 1.5 percent of system-wide operation and maintenance cost.

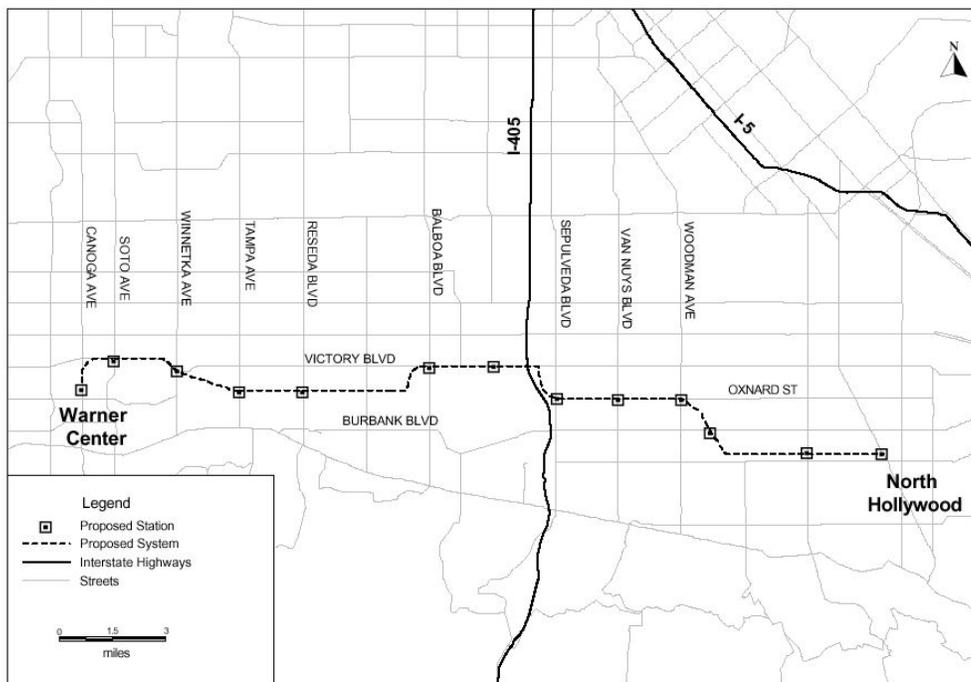
**New and Proposed Sources:** No new sources of operating funding are being proposed by MTA.

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts Funds	\$0.00	\$0.00 million appropriated for the San Fernando Valley Corridor Project through FY 2001
<b>State:</b>		
Traffic Congestion Relief Fund	\$145.00	N/A
Regional Improvement Fund	\$0.30	N/A
<b>Local:</b>		
Proposition C Bonds	\$155.00	N/A
<b>Total:</b>	<b>\$300.30</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

## San Fernando Valley East-West Transit Corridor

Los Angeles, California



# Lowell, Massachusetts-Nashua, New Hampshire/Lowell-Nashua Commuter Rail Extension

## Lowell-Nashua Commuter Rail Extension

### Lowell, Massachusetts-Nashua, New Hampshire

(November 2000)

#### Description

The New Hampshire Department of Transportation (NHDOT) is proposing to design and construct a 12-mile extension of an existing commuter rail line from Lowell, Massachusetts to Nashua, New Hampshire. The proposed project would extend existing commuter rail service provided by the Massachusetts Bay Transportation Authority (MBTA) on an anticipated schedule of six round trips per weekday and three roundtrips on Saturdays. The proposed service extension would provide an alternative to a highly congested highway corridor and is also anticipated to provide traffic mitigation during the planned expansion of Route 3 in Massachusetts. The proposed project also includes the purchase of commuter rail equipment for use by the MBTA, rehabilitation of existing track and the construction of new trackage (where necessary), and a park-and-ride lot with a boarding platform near Everett Turnpike (Exit 2) in Nashua. MBTA anticipates 900 average weekday boardings in FY 2003.

The Lowell, MA-Nashua, NH commuter rail extension is located in an area generally paralleling Route 3 in Massachusetts. NHDOT plans to execute an agreement with the MBTA (primary commuter rail operator in New England) to operate the commuter rail extension project. The total capital cost for the commuter rail extension project is estimated at \$41 million (escalated dollars), with a proposed Section 5309 new starts share of \$18 million. *Since the proposed new starts share is less than \$25 million, the project is exempt from the New Starts criteria (see 49 USC Section 5309 (e)(8)(A)).*

#### Lowell-Nashua Commuter Rail Summary Description

<b>Proposed Project</b>	Commuter Rail Extension 12 miles, 1 station
<b>Total Capital Cost (\$YOE)</b>	\$41.00 million
<b>Section 5309 Share (\$YOE)</b>	\$18.00 million
<b>Annual Operating Cost (\$1999)</b>	\$1.70 million
<b>Ridership Forecast (2003)</b>	900 average weekday boardings

#### Status

The Nashua Regional Planning Commission, in cooperation with the City of Nashua, NHDOT and other participatory agencies, has studied the feasibility of restoring commuter rail service to southern New Hampshire since the early 1980s. In 1999, NRPC completed a Major Investment Study that analyzed the passenger rail market, required capital investments, operational issues and several alternatives to the commuter rail extension option. In June 1999, NRPC and NHDOT selected the extension of commuter rail service from Nashua to Lowell as the Locally Preferred Alternative (LPA). The LPA was also included in the NRPC's long-range transportation plan. FTA

approved NHDOT's request to initiate preliminary engineering on the project in May 2000. NHDOT is currently undergoing the environmental review phase for the proposed project.

Section 3030(a)(49) of TEA-21 authorizes the "Nashua, NH-Lowell, MA Commuter Rail" for final design and construction. Through FY 2000, Congress has appropriated \$2.95 million in Section 5309 New Starts funds for the project.

### Locally Proposed Financing Plan

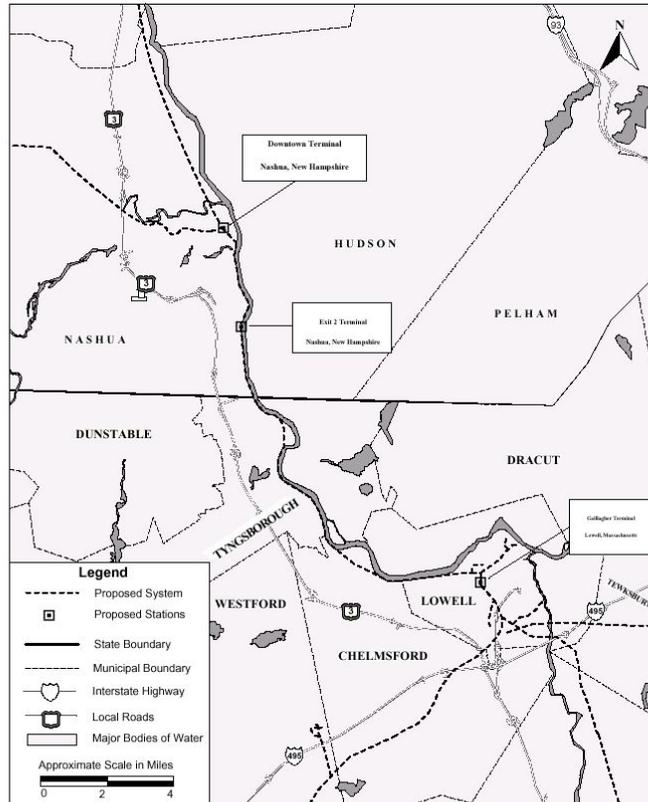
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$18.00	\$2.95 million appropriated through FY 2001
CMAQ	\$14.50	N/A
<b>State:</b>		
General Appropriations	\$8.20	N/A
<b>Total:</b>	<b>\$41.00</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Lowell-Nashua Commuter Rail Extension

Nashua, NH - Lowell, MA



Federal Transit Administration, 2001

# Maryland/MARC Commuter Rail Improvements

## MARC Commuter Rail Improvements

### Maryland

(November 2000)

#### Description

The Maryland Mass Transit Administration is proposing three projects for the Maryland Commuter Rail (MARC) system serving the Baltimore, MD and Washington, DC metropolitan areas. These projects are (1) Mid-Day Storage Facility, (2) Penn-Camden Connection, and (3) Silver Spring Intermodal Transit Center.

The proposed Mid-Day Storage Facility would be used for daytime equipment layover, minor repair, daily servicing and inspections of commuter rail train sets within the Amtrak Yard at Washington, DC's Union Station. Platforms that are currently used to store these trains at Union Station will no longer be available following the introduction of high-speed Amtrak service, and the new facility will avoid the operating cost of sending trains back to Baltimore for mid-day storage. MTA will lease the five-acre site owned by Amtrak. Estimated capital costs for the project total \$21.0 million.

The Penn-Camden Connection is a six-mile connection between the MARC Camden Line and MARC Penn Line/Amtrak Northeast Corridor in southwest Baltimore. The connection of these two commuter rail lines is designed to achieve many benefits: the opportunity to remove trains from the congested Camden line for reverse peak movements; access to the planned MARC Maintenance Facility to be located along the connection; and, increased operating flexibility on both commuter rail lines, allowing redirection of MARC service during periods of CSX freight operations. Estimated capital costs for the project total \$30.8 million.

The proposed Silver Spring Intermodal Transit Center, located in suburban Washington, DC, will construct an intermodal transit facility that relocates the Silver Spring MARC Station to the Silver Spring Metrorail station. The transit center would allow convenient passenger transfers between several modes of travel, including commuter rail, heavy rail, commuter and local bus service, taxi, bicycle, auto, and pedestrians. The center will also accommodate the proposed Georgetown Branch Trolley to operate between Silver Spring and Bethesda. Located in the Silver Spring, MD central business district, a major transit hub for lower Montgomery County, the intermodal transit center will more efficiently meet existing and future transit needs of this area. Estimated capital costs for the project total \$33.3 million.

Section 3030(g)(2) of TEA-21 authorizes these projects as part of the Frederick extension, and will permit service improvements necessary to take full advantage of that extension. The proposed share of Federal funding from the Section 5309 new starts program is less than \$25.0 million for each of the individual improvements, which renders them exempt from evaluation.

#### MARC Commuter Rail Summary Description

<b>Proposed Project</b>	<b>Commuter Rail Improvements</b>
<b>Total Capital Cost (\$YOE)</b>	\$85.10 million
<b>Section 5309 Share (\$YOE)</b>	\$40.90 million
<b>Annual Operating Cost (\$YOE)</b>	Not reported at this time

## Status

The proposed MARC Commuter Rail Improvements are in varying stages of planning and project development. Preliminary engineering on the MARC Mid-Day storage facility is complete and final design is in progress; a Categorical Exclusion was issued in November 1999. A Finding of No Significant Impact was issued in October 1999 for the MARC Penn-Camden Connection, selected in the 1995 MARC Master Plan Study. An Environmental Assessment on the MARC Silver Spring Intermodal Center has been completed; FTA action is pending local decisionmaking.

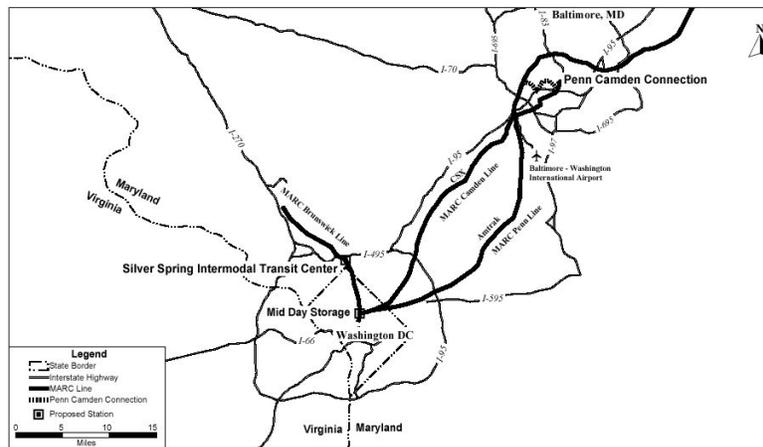
TEA-21 Section 3030(a) authorizes the "MARC Commuter Rail Improvements " for final design and construction. Through FY 2001, Congress has appropriated \$14.36 million for these improvement projects.

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Starts</b>	\$40.90	\$14.36 million appropriated through FY 2001
<b>Federal: Other</b>	\$13.50	N/A
<b>State:</b>	\$30.70	N/A
<b>Total:</b>	<b>\$85.10</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### MARC Commuter Rail Improvements

Maryland



Federal Transit Administration, 2001

# Miami, Florida/North 27th Avenue

## North 27th Avenue

Miami, Florida

(November 2000)

### Description

The Miami-Dade Transit Agency (MDTA) has proposed to construct a bus rapid transit (BRT) line along a 9.5-mile section of NW 27th Avenue between an existing Dr. Martin Luther King Jr. Metrorail station and the Broward County line. The proposed BRT system differs significantly from the heavy rail transit proposed in the FY 2001 New Starts submission. Redefinition of the project to a BRT system has resulted in the addition of three new stations, for a total of ten. Park-n-ride lots would be provided to intercept commuters in the corridor. The proposed BRT along the Northwest 27th Avenue corridor would provide direct service to the Miami CBD and Medical Center as well as provide service to Miami Dade Community College-North Campus and the Pro Player Stadium. MDTA has estimated total project costs at \$87.9 million (escalated); with a proposed Section 5309 New Starts share of \$61.5 million (escalated).

In July 1999, voters rejected a one-cent sales tax increase to support proposed MDTA capital and operating needs, including the previously proposed North 27<sup>th</sup> Avenue rail project. As a result of the failed referendum, Metro-Dade evaluated lower cost busway options for the North Corridor. Consequently, MDTA selected the BRT system as its preferred option.

### North 27th Avenue Summary Description

<b>Proposed Project</b>	Bus Rapid Transit 9.5 miles, 10 stations
<b>Total Capital Cost (\$YOE)</b>	\$87.90 million
<b>Section 5309 Share (\$YOE)</b>	\$61.50 million
<b>Annual Operating Cost (\$1997)</b>	\$8.90 million
<b>Year Ridership Forecast (2015)</b>	10,400 average weekday boardings 3,450 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Low</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Not Recommended</b>

The overall project rating of *Not Recommended* is based upon the lack of local financial commitment to construct and operate the proposed project. The overall project rating applies to this Annual New Starts Report and **reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

### Status

The Miami-Dade Transit Agency completed a Major Investment Study (MIS) for the North Corridor in November 1995. The MPO Board selected the NW 27th Avenue alignment as the locally preferred alternative in November 1995 and added the project to its fiscally constrained 2015 Long Range Transportation Plan. An Alternative Analysis and the Draft Environmental Impact Statement (DEIS), including consideration of two busway alternatives and one heavy rail alternative, have been completed with FTA participating as the lead Federal Agency. In May 1998, the MPO selected the heavy rail alternative, a Metrorail Extension along NW 27th Avenue, as the Locally Preferred Alternative LPA. The Preliminary Engineering/Final Environmental Impact Statement (FEIS) phase is underway and is currently scheduled for completion in early 2001.

In July 1999, voters rejected a one-cent sales tax increase to support proposed MDTA capital and operating needs, including the proposed North 27<sup>th</sup> Avenue rail project. As a result, Metro-Dade re-evaluated other alternatives to improve transportation mobility in the North 27<sup>th</sup> Avenue Corridor.

TEA-21 Section 3030 (a) (45) authorizes the Miami North 27<sup>th</sup> Avenue project for final design and construction. Through FY 2001, Congress has appropriated \$11.93 million in Section 5309 New Start funds for this proposed project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria* for the 9.5-mile BRT. N/A indicates that information is not available for a specific measure.

FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design, and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the adequate transit supportive policies along the proposed alignment, but acknowledges the relatively poor cost-effectiveness of the project.

## Mobility Improvements

### Rating: Medium-High

The 9.5-mile extension is expected to serve 10,400 average weekday boardings and 3,450 daily new riders by 2015. MDTA estimates the following annual travel time savings for the BRT alternative compared to the No-Build and TSM alternatives.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	0.70 million hours	0.60 million hours

Based on 1990 census data, there are an estimated 3,084 low-income households within a ½ mile radius of the proposed seven stations for the BRT, roughly 24 percent of total households within ½ mile of the proposed stations.

## Environmental Benefits

### Rating: Medium

The southeast Florida area is an attainment area for carbon monoxide and a maintenance area for ozone. MDTA estimates that in 2015, the BRT will result in the following impact on emissions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	decrease of 435 annual tons	decrease of 528 annual tons
Nitrogen Oxide (NOx)	decrease of 32 annual tons	decrease of 39 annual tons
Hydrocarbons (HC)	decrease of 39 annual tons	decrease of 47 annual tons
Particulate Matter (PM <sub>10</sub> )	decrease of 56 annual tons	decrease of 67,434 annual tons
Carbon Dioxide (CO <sub>2</sub> )	increase of 5,754 annual tons	increase of 1,028 annual tons

MDTA estimates that in the year 2015, the LPA will result in the following impacts on regional energy consumption.

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (millions)	decrease of 73,661 million annual BTU	decrease of 13,439 million annual BTU

### Operating Efficiencies

**Rating: Medium**

MDTA estimates a decrease in the system-wide operating cost per passenger mile in the year 2015 for the heavy-rail alternative compared to both the No-Build and TSM.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2015)	\$0.41	\$0.45	\$0.41

Values reflect 2015 ridership forecast and 1999 dollars.

### Cost Effectiveness

**Rating: Low**

MDTA estimates the following cost-effectiveness indices for the BRT alternative compared to the No-Build and the TSM alternatives.

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$11.20	\$42.50

Values reflect 2015 ridership forecast and 1999 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* rating reflects only marginally transit-supportive existing land uses along the proposed alignment, but acknowledges local policies that encourage infill development and increased densities at transit station locations and the potential for future development activities in the corridor.

**Existing Conditions:** The predominant land use along the proposed corridor is strip commercial that is bordered on the east and west by low and medium density residential land uses. However, there are several potential high-trip generators including the Pro Player Stadium, St. Thomas University and the North Campus of the Miami-Dade Community College and Miami-Dade

County Health Center along the proposed corridor. The population of the corridor is expected to grow by 9 percent, from 248,500 to 269,900 between 1995 and 2015 and the employment in the corridor is expected to grow from 94,700 to 115,200 a 22 percent increase. The corridor contains 12 percent of the metropolitan area population and 8 percent of the metropolitan area employment. The land use patterns in the corridor are auto-oriented, with a significant supply of parking in most employment centers, shopping areas, and attractions.

**Future Plans and Policies:** The State of Florida and several regional planning councils have established an Urban Infill Strategy Task Force to encourage infill development and increase densities. State and regional policies promote infill development with implementation dependent on local jurisdictions. Miami-Dade County's Comprehensive Development Master Plan (CDMP) requires localities to accommodate new development around transit stations that incorporate certain physical design elements. The CDMP promotes pedestrian access and the provision of bus stops. Recent changes to the Miami-Dade County's CDMP require a minimum density of housing units and employment based on distance from rail stations. Transit overlay zones exist to promote transit-oriented development in station areas and along the corridor. Currently, there is no county-wide parking policy for Dade County. However, a recent study proposes a schedule for development of a coordinated parking policy. The DEIS process has resulted in a program to tie each station to the adjoining residential neighborhoods through the planning of pedestrian connections and bus transfers. Miami-Dade County has included *extensions of water and sewer lines to each station along the project corridor to support development in the station areas.*

The development community has participated in project planning through membership in the citizen's advisory committee. Recent development activities are indicated by proposals for new development projects. For example, developers have obtained clearances for large-scale projects near the proposed NW 199<sup>th</sup> Street Station.

## Local Financial Commitment

### **Proposed Non-Section 5309 of Total Project Costs: 30%**

MDTA's financial plan assumes \$61.5 million from Section 5309 New Start funds (70 percent), \$13.2 million (15 percent) in State funds, and \$13.2 million (15 percent) in other local funds.

## Stability and Reliability of Capital Financing Plan

### **Rating: Low**

The *Low* rating is due to the large share of uncommitted and/or unspecified local funding proposed for the project.

**Agency Capital Financial Condition:** In July 1999, a proposed one-cent sales tax increase, primarily to help pay for new MDTA transit projects and transit operating expenses, was rejected by Miami-Dade County residents. The impact of the failure to pass the one-cent tax has significant financial implications for availability of MDTA capital funding. However, there is no debt indicated in the financial plan.

**Capital Cost Estimates and Contingencies:** No capital financing plan was submitted.

**Existing and Committed Funding:** MDTA has not secured any firm local funding commitments for the proposed North 27<sup>th</sup> Avenue BRT project. A potential State funding source for 15 percent of total costs has been identified as supplemental appropriations of Florida's Public Transit Block Grant Program. MDTA currently receives its full allocation from this source, and intends to seek legislative action to raise the Block Grant spending cap to seek additional funds for the project. The Local Option Gas Tax (LOGT) is proposed to yield \$13.2 million (15 percent). It has been rolled back from the five cents per gallon assumed in the project's financial plan to three cents per gallon.

New and Proposed Sources: MDTA has proposed that Miami-Dade County fund a portion of the local match through general obligation bonds supported by the County's existing revenues. The bonds would be backed by the redevelopment benefits the project is assumed to provide within the North Corridor. This source has not been approved by the County.

## Stability and Reliability of Operating Finance Plan

### Rating: Low

The *Low* operating plan rating reflects the lack of committed operating funding sources to the project.

**Agency Operating Condition:** The MDTA is in good operating condition. In recent years, MDTA has experienced operating surpluses (on average), a 30 percent farebox recovery ratio, and consistent ridership levels. Miami-Dade County has historically provided sufficient operating funds as required to operate the existing MDTA system.

**Operating Cost Estimates and Contingencies:** MDTA has not specified an annual project operating cost for the opening year, 2004.

**Existing and Committed Funds:** MDTA has not identified specific sources or revenues to fund operation of the proposed project.

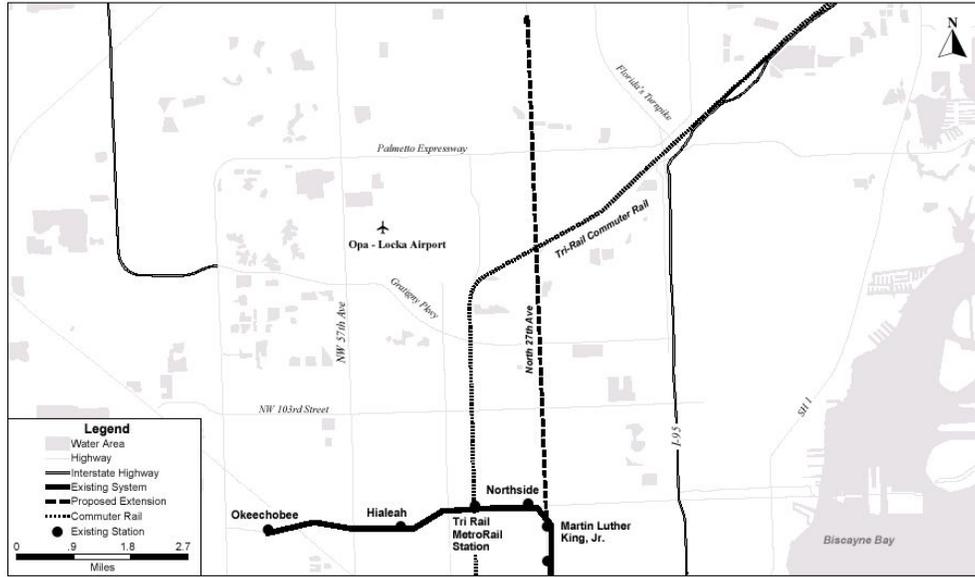
**New and Proposed Sources:** MDTA has not identified specific sources or revenues to fund operation of the proposed project.

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
Federal: Section 5309 New Starts	\$61.50	\$11.93 million appropriated through FY 2001
State: Public Transit Block Grant Program, County Incentive Program, STP, or other eligible funding source	\$13.20	N/A
Local: Local Option Gas Tax, Right-of-Way Easements, General County Revenues/General Obligation Bonds	\$13.20	N/A
<b>Total:</b>	<b>\$87.90</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# North 27th Avenue

Miami, Florida



Federal Transit Administration, 2001

# Minneapolis – Rice, Minnesota/Northstar Corridor Commuter Rail

## Northstar Corridor Commuter Rail

Minneapolis-Rice, Minnesota

(November 2000)

### Description

The Northstar Corridor Development Authority (NCDA) and the Minnesota Department of Transportation (MN DOT) are proposing to design and construct an 80-mile commuter rail line within the Northstar Corridor connecting the Minneapolis-St. Paul metropolitan area and Rice, Minnesota. The proposed project also includes a 0.3-mile extension of the proposed Hiawatha Corridor light rail transit (LRT) project from its currently planned terminus in downtown Minneapolis to provide a direct link to the proposed commuter rail service. The proposed commuter rail line would operate along existing Burlington-Northern Santa Fe (BNSF) railroad tracks. The commuter rail project also includes the purchase of five locomotives, 17 passenger rail cars, and the construction of layover and vehicle storage facilities. Total capital costs for the commuter rail project are estimated at \$223 million (escalated dollars). The proposed Hiawatha Corridor LRT extension runs approximately one-third of a mile between Third Avenue North and a proposed downtown Minneapolis commuter rail station at Fifth Avenue North. Total capital costs for the Hiawatha Corridor LRT extension are estimated at \$21.8 million (escalated dollars).

The Northstar Corridor is an area generally paralleling Trunk Highway 10 that extends from Downtown Minneapolis northwest for a distance of 80 miles to Rice, Minnesota. The corridor will connect the Twin Cities with several suburban areas, including Anoka, Sherburne, Benton and Morrison counties. Ten of the twelve proposed commuter rail stations will provide park-n-ride facilities and all stations will accommodate bus pick-up areas. A feeder bus program providing increased bus service to station sites will also be implemented. The commuter rail project is expected to serve 10,550 average weekday boardings by the year 2020, including 9,400 daily new riders.

### Northstar Corridor Summary Description

<b>Proposed Project</b>	Commuter Rail Line 80 miles, 12 stations; Light Rail Transit Extension, 1,750 feet
<b>Total Capital Cost (\$YOE)</b>	\$223.00 million (commuter rail); \$21.8 million (LRT extension)
<b>Section 5309 Share (\$YOE)</b>	\$112.00 million
<b>Annual Operating Cost (\$YOE)</b>	\$13.97 million (commuter rail)
<b>Ridership Forecast (2020)</b>	10,550 average weekday boardings 9,400 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The *Recommended* rating is based on the project's adequate cost effectiveness and transit-supportive land use elements, and it acknowledges the developing capital and operating financing plans for the proposed project. The overall project rating applies to this *Annual Report on New Starts* and reflects conditions as of November 2000. Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions and refined financing plans.**

## Status

In May 1998, NCDa undertook a Major Investment Study (MIS) and a Draft Environmental Impact Statement (DEIS) to examine transportation options in the Northstar Corridor between downtown Minneapolis and Rice, Minnesota. The MIS was completed in December 1999 with the selection of a Locally Preferred Alternative (LPA). The LPA includes new river crossings, Trunk Highway 10 improvements, commuter rail, feeder bus, pedestrian/bike improvements, and ITS initiatives. The LPA is included in both the Metropolitan Council's and the St. Cloud Area Planning Organization's (local metropolitan planning organizations) financially constrained long-range transportation plans. The Northstar Corridor commuter rail project is also included in the State Transportation Improvement Program. FTA approved NCDa and MN DOT's request to initiate preliminary engineering in June 2000 on the commuter rail and light rail extension projects. NCDa completed the DEIS in November 2000. A Final EIS is scheduled for completion in Summer 2001.

Section 3030(a)(90) of TEA-21 authorizes the "Twin Cities -- Northstar Corridor (Downtown Minneapolis-Anoka County-St. Cloud)" for final design and construction. Through FY 2001, Congress has appropriated \$3.81 million in Section 5309 New Starts funds for the "Twin Cities -- Transitways Projects" which includes the Northstar Corridor commuter rail project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design, and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the adequacy of the ratings for the New Starts criteria, including cost effectiveness and transit-supportive land use.

## Mobility Improvements

### Rating: Low-Medium

NCDa estimates that, in the year 2020, the Northstar Corridor commuter rail project will result in 10,550 average weekday boardings, including 9,400 daily new riders. NCDa estimates the following annual travel time savings for the proposed project:

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	decrease of 1.00 million hours	increase of 0.50 million hours

Based on 1990 census data, there are an estimated 1,219 low-income households within a ½ mile radius of the proposed 12 commuter rail stations. This represents two percent of the total number of households within a ½ mile radius of the proposed stations.

## Environmental Benefits

### Rating: Medium

The Minneapolis-St. Paul metropolitan area is an attainment area for ozone and carbon monoxide (CO) and a moderate non-attainment area for particulate matter (PM<sub>10</sub>). NCDA estimates that, in the year 2020, the implementation of the Northstar Corridor project will result in the following emissions reductions:

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Carbon Monoxide (CO)</b>	decrease of 498 annual tons	decrease of 401 annual tons
<b>Nitrogen Oxide (NOx)</b>	decrease of 44 annual tons	decrease of 40 annual tons
<b>Hydrocarbons (HC)</b>	decrease of 24 annual tons	decrease of 33 annual tons
<b>Particulate Matter (PM<sub>10</sub>)</b>	increase of 1 annual ton	No Change
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	decrease of 10,860 annual tons	decrease of 11,828 annual tons

NCDA estimates that by 2020, the Northstar Corridor project will result in the following savings in regional energy consumption (measured in British Thermal Units – BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>BTU (millions)</b>	decrease of 143,247 million annual BTU	decrease of 154,427 million annual BTU

## Operating Efficiencies

### Rating: Medium

NCDA estimates the following systemwide operating costs per passenger mile, reporting a decrease for the new start compared to the no-build alternative.

Operating Efficiencies	No-Build	TSM	New Start
<b>System Operating Cost per Passenger Mile (2020)</b>	\$0.35	\$0.34	\$0.34

Values reflect 2020 ridership forecast and escalated dollars.

## Cost Effectiveness

### Rating: Medium

NCDA estimates the following cost-effectiveness indices:

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Incremental Cost per Incremental Passenger</b>	\$10.40	\$13.30

Values reflect 2020 ridership forecast and escalated dollars.

## Transit-Supportive Existing Land Use and Future Patterns

### Rating: Medium

The *Medium* rating reflects the presence of urban-scale development at many of the stations and the initiation of station area planning efforts to stimulate transit-oriented development. The rating

also acknowledges the high projected rates of corridor growth and the region's current growth management policies, which include strategies to encourage transit-supportive land use patterns.

**Existing Conditions:** Downtown Minneapolis serves as the dominant job center for the metropolitan area and the upper Midwest with approximately 140,000 employees and 20,000 residents. The total population within the proposed corridor is estimated at 299,000. While high-density, pedestrian-friendly development is located within walking distance of the proposed Downtown Minneapolis station, the immediate station surroundings are industrial or undeveloped and are not strongly pedestrian-oriented. However, the proposed Minneapolis Northeast station is in a dense urban neighborhood. Mid-corridor development at several other proposed stations is lower-density and single-use. The stations near the terminus of the line, which serve the City of St. Cloud and the University of St. Cloud, are in or near areas with moderately high densities.

The middle portion of the alignment is characterized by low-to-medium density development, with a municipal services' complex immediately located to the southwest side of the proposed St. Cloud East station. However, Highway 10 presents a barrier to pedestrian movement between the station and the undeveloped area to the north. The St. Cloud Downtown station, located near the northern terminus, is close to the central business district and is surrounded by high-density residential and mixed-used development in a pattern that appears to be highly pedestrian-friendly. A potential terminus of the commuter rail alignment (Rice Station) is located near the center of a small rural town with mixed land use and a development pattern supportive of pedestrian activity.

**Future Plans and Policies:** The Northstar Corridor has been identified as the growth center of Minneapolis. Population is forecast to increase approximately 20 percent in the Northstar Corridor by the year 2020, while employment is projected to increase approximately 50 percent. The Twin Cities-St. Cloud metropolitan area is considered a high-growth area. The Twin Cities metropolitan area has experienced one of the highest rates of population growth in all of the major metropolitan areas in the Midwest throughout the last two decades. Land use plans and policies of the Metropolitan Council and the St. Cloud Area Joint Planning Council, and the counties and cities through which the proposed commuter rail alignment passes, support capturing growth in urbanized areas, the reduction of sprawl, the constraint of residential growth in rural areas and the preservation of productive agricultural land. In addition, the St. Cloud Area Joint Planning Council has a plan that will concentrate development in urban centers and limit development in rural and natural areas. Sherburne and Benton counties also have land use plans that direct new housing into their respective cities, thus supporting growth near proposed commuter rail stations. Several of the suburban communities in the Northstar Corridor have initiated station area plans. NCTA has prepared preliminary station area land use plans that are subject to community approval. The Metropolitan Council will provide technical assistance for continued neighborhood station area planning efforts.

Downtown Minneapolis currently has 62,000 parking spaces, which is equivalent to 0.43 spaces per employee. Three major parking facilities with a total capacity of 7,000 spaces are located near the proposed downtown station. Parking spaces in downtown Minneapolis are near capacity. The City of Minneapolis' municipal policy prohibits the creation of parking spaces at transit stations. Currently, there are no public parking lots at stations along the corridor outside of Minneapolis, except at the proposed Foley Boulevard Station, where a 1,200-car parking structure was recently built at the Metro Transit bus hub near the proposed station, and the St. Cloud Downtown station, where there are no public parking structures, private lots, or on-street metered spaces. The parking supply ratio in this station area is low, due to relatively high rates of transit, bicycle and pedestrian travel.

## Local Financial Commitment

**Proposed Non-Section 5309 Share of Total Project Costs: 50%**

The financial strategy for the proposed Northstar Corridor commuter rail project proposes \$112 million (50 percent) of Section 5309 New Starts funds, \$89 million (40 percent) of State funds and \$22 million (10 percent) of local funds to finance the \$223 million (escalated dollars) estimated capital cost of the commuter rail project.

## Stability and Reliability of Capital Financing Plan

### **Rating: Medium**

The *Medium* rating reflects the commitment of several suburban county funds to the project and the State's efforts to secure the remaining funding. However, the rating also acknowledges the absence of a 20-year agency-wide finance plan for the Northstar Corridor commuter rail project, including revenue forecasts for capital revenue sources, debt proceeds and a service plan.

**Agency Capital Financing Condition:** The Northstar Corridor Development Authority and the Minnesota Department of Transportation (MN DOT) are joint project sponsors. NCDCA was created for the sole purpose of developing the Northstar Corridor commuter rail project and thus has no historical track record for funding major transportation investments. FTA did not receive any information on the financial condition of MN DOT.

**Capital Cost Estimates and Contingencies:** Capital cost estimates are considered reasonable given the project's size and scope. However, additional engineering may lead to increased capital cost estimates.

**Existing and Committed Funding:** At this time, \$19.14 million (17 percent) of the non-Section 5309 New Starts share has been committed to the Northstar Corridor commuter rail project through county board resolutions. The revenue source for these funds is an existing local property tax that is considered stable and reliable. State and local legislative action is required to commit the remaining portion (\$91.86 million) of the proposed non-Section 5309 New Starts share.

**New and Proposed Sources:** Only existing sources are proposed to fund the capital cost proposed Northstar Corridor commuter rail project.

## Stability and Reliability of Operating Finance Plan

### **Rating: Medium**

The *Medium* rating reflects the State's support for operations of the proposed system. However, the rating also acknowledges the lack of a 20-year agency-wide operating plan, including documentation of the commitment of operating revenue sources.

**Operating Cost Estimates and Contingencies:** Operating cost estimates appear reasonable at this early stage of project development. Project sponsors estimate annual operating and maintenance costs at \$13.97 million (escalated dollars) for the Northstar Corridor commuter rail project. However, project sponsors did not submit a detailed agency-wide 20-year operating plan or any information on escalation factors to FTA for review.

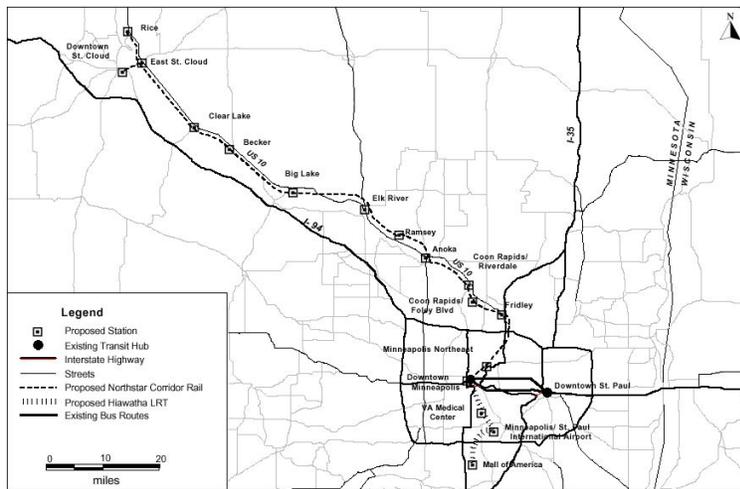
**Existing and Committed Funding:** At this time, the State has committed to fund operations of the proposed project. However, specific funding amounts, sources and uses have not yet been identified.

**New and Proposed Sources:** A combination of new and proposed revenue sources are being examined by the State for ongoing operations and maintenance of the proposed system.

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Starts</b>	\$112.00	\$3.81 million appropriated to the Northstar Corridor commuter rail project through FY 2001
<b>State: Legislative Appropriations</b>	\$89.00	
<b>Local: Anoka, Serburne, Benton and Morrison County Bond Resolutions</b>	\$22.00	
<b>Total:</b>	<b>\$223.00</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### Northstar Corridor Commuter Rail Minneapolis- Rice, Minnesota



# Nashville, Tennessee/East Corridor Commuter Rail

## East Corridor Commuter Rail

**Nashville, Tennessee**

(November 2000)

### Description

The Metropolitan Transit Authority (MTA) and the Regional Transportation Authority (RTA) of Nashville, Tennessee are proposing the implementation of a 31.1-mile, 5 station commuter rail line between downtown Nashville and the City of Lebanon in Wilson County. The East Corridor commuter rail project is proposed to operate on an existing rail line owned by the Nashville and Eastern Railroad Authority (N&E), a governmental entity comprised of the Tennessee Department of Transportation (TDOT), Wilson County, Lebanon, Mt. Juliet, and the Metropolitan Government of Nashville and Davidson County. Rolling stock and maintenance facilities will be leased from the N&E.

The MTA and RTA estimate 1,400 average weekday boardings on the proposed project in 2006, including 700 daily new riders. The project is estimated to cost \$33.2 million in escalated dollars, with a proposed Section 5309 New Starts share of \$22.9 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 (TEA-21 Section 5309(e)(8)(A)).*

### East Corridor Commuter Rail Summary Description

<b>Proposed Project</b>	Commuter Rail 31.1 miles, 5 stations
<b>Total Capital Cost (\$YOE)</b>	\$33.20 million
<b>Section 5309 Share (\$YOE)</b>	\$22.90 million
<b>Annual Operating Cost (\$YOE)</b>	\$2.00 million
<b>Ridership Forecast (2006)</b>	1,400 average daily boardings 700 daily new riders

### Status

In 1996, the MTA and RTA initiated a study to explore the potential of commuter rail in the Nashville region. From this study, six corridors were considered for further evaluation. A 1998 study analyzed the capital costs for the three most promising corridors. As the result of these studies and efforts of the Nashville area Commuter Rail Task Force - which includes the Nashville Chamber of Commerce, area business leaders, the MPO, MTA, RTA, the Tennessee Department of Transportation (TDOT), CSX Railroad and the Nashville and Eastern Rail Authority, and the Nashville Congressional delegation - the East Corridor was selected as the first corridor to be implemented in the Nashville Area Commuter Rail System.

The Nashville MPO included the East Corridor commuter rail project in its fiscally constrained long range transportation plan in September 1999. The FTA approved the project to advance into preliminary engineering in November 1999. The RTA completed an Environmental Assessment and received a FONSI for the project in May 2000.

TEA-21 Section 3030(a)(50) authorizes the "Nashville Commuter Rail" project for final design and construction. Through FY 2001, Congress has appropriated \$7.9 million for the project.

### Locally Proposed Financing Plan

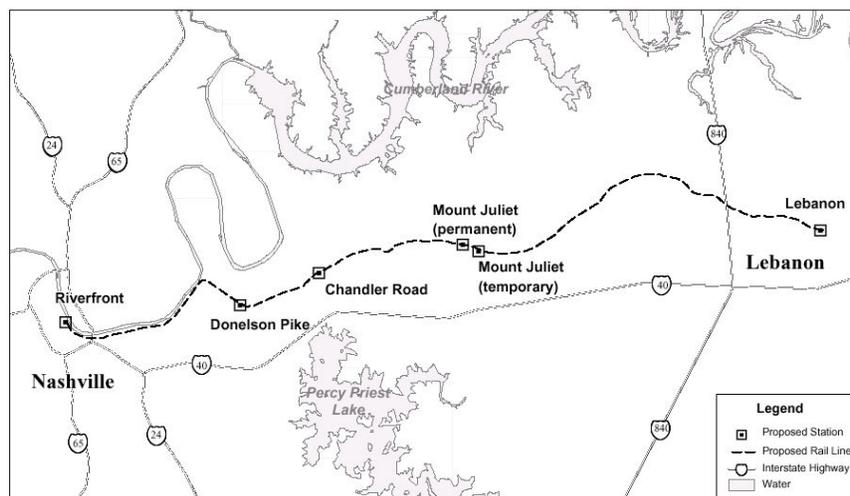
(Reported in \$2001)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$22.90	\$7.90 million appropriated through FY 2001
FHWA Intermodal	\$3.70	
<b>Local:</b>		
Tennessee DOT	\$3.30	
Local Government Funding	\$3.30	
<b>Total:</b>	<b>\$33.20</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### East Corridor Commuter Rail

Nashville, Tennessee



Federal Transit Administration, 2001

# New Orleans, Louisiana/Desire Corridor Streetcar

## Desire Corridor Streetcar

New Orleans, Louisiana

(November 2000)

### Description

The Regional Transit Authority (RTA) is restoring a 2.9-mile traditional streetcar line in downtown New Orleans, as part of the locally preferred alternative for the Desire Corridor. The Desire Corridor Streetcar project will operate along North Rampart Street and St. Claude Avenue between Canal Street and Poland Avenue. The proposed streetcar alignment will loop at Canal Street and use exclusive right-of-way in the median of city streets, as much as possible. The single-track loop will operate in the median of North Rampart and Canal Streets and in the traffic lanes of Basin and Toulouse Streets. The double-track section will operate in the left traffic lanes of North Rampart Street, McShane Place, and St. Claude Avenue between Toulouse Street and Elysian Fields Avenue, and in the median of St. Claude Avenue between Elysian Fields and Poland Avenues. The project will serve the communities of Iberville, Treme, Faubourg Marigny, St. Roch and Bywater. Six major bus transfer points with construction of center- platforms, canopies, passenger benches and landscaping will be provided; 16 intermediate stops with less elaborate center-platform facilities are also planned. The project also includes the purchase of 13 new vehicles. The capital cost estimate of the streetcar project is \$93.5 million (escalated dollars). Ridership is forecast at 15,300 daily boardings by 2020.

### Desire Corridor Streetcar Summary Description

<b>Proposed Project</b>	Traditional Streetcar 2.9 miles, 22 stops
<b>Total Capital Cost (\$YOE)</b>	\$93.50 million
<b>Section 5309 Share (\$YOE)</b>	\$65.50 million
<b>Annual Operating Cost (\$1999)</b>	\$1.02 million
<b>Ridership Forecast (2020)</b>	15,300 average weekday boardings >2,200 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the adequacy of the project's justification criteria and local financial commitment to construct and operate the project. The overall project rating applies to this *Annual Report on New Starts* and reflects conditions as of **November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

### Status

RTA completed a Major Investment Study for the Desire Corridor in September 1999. The locally preferred alternative (LPA) includes a package of TSM/enhanced bus improvements in addition to the 2.9-mile streetcar line. The Regional Planning Commission, the New Orleans region's Metropolitan Planning Organization, endorsed the LPA and incorporated it in the metropolitan transportation plan. The Federal Transit Administration (FTA) approved the initiation of preliminary engineering (PE) in August 2000.

TEA-21 Section 3030(b)(34) authorizes the "New Orleans -- Desire Streetcar" project for final design and construction. Through FY 2001, Congress has appropriated \$5.96 million in Section 5309 New Starts funds to the project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. N/A indicates that data are unavailable for this specific measure.

FTA has evaluated this project as entering preliminary engineering. The project will be reevaluated when it is ready to advance to final design and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the adequacy of the project's environmental benefits, operating efficiencies, cost-effectiveness index, and transit supportive land use at this early stage of preliminary engineering.

## Mobility Improvements

### Rating: Low-Medium

RTA estimates that the Desire Corridor Streetcar will have 15,300 average weekday boardings by 2020, and would result in the following annual travel time savings.

<b>Mobility Improvements</b>	<b>New Start vs. No-Build</b>	<b>New Start vs. TSM</b>
<b>Annual Travel Time Savings (Hours)</b>	0.10 million hours	0.10 million hours

Based on 1990 Census data, there are an estimated 6,017 low-income households within a ½ mile radius of the proposed streetcar stops, approximately 29 percent of the total households within the corridor.

## Environmental Benefits

### Rating: Medium

The New Orleans region is an attainment area for carbon monoxide and ozone. RTA estimates the project will result in the following annual emissions reductions.

<b>Criteria Pollutant</b>	<b>New Start vs. No-Build</b>	<b>New Start vs. TSM</b>
<b>Carbon Monoxide (CO)</b>	decrease of 13 annual tons	decrease of 9 annual tons
<b>Nitrogen Oxide (NOx)</b>	decrease of 4 annual tons	decrease of 4 annual tons
<b>Hydrocarbons (HC)</b>	decrease of 2 annual tons	decrease of 1 annual ton
<b>Particulate Matter (PM<sub>10</sub>)</b>	decrease of 2 annual tons	decrease of 1 annual ton
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	increase of 170 annual tons	increase of 113 annual tons

RTA estimates that in 2020 the Desire Corridor Streetcar would result in the following increase in regional energy consumption (measured in British Thermal Units – BTU).

<b>Annual Energy Savings</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>BTU (millions)</b>	increase of 6,008 million annual BTU	increase of 5,337 million annual BTU

## Operating Efficiencies

### Rating: Medium

RTA estimates that its systemwide operating cost per passenger mile will not change significantly with the implementation of the Desire Corridor Streetcar project.

<b>Operating Efficiencies</b>	<b>No-Build</b>	<b>TSM</b>	<b>New Start</b>
<b>System Operating Cost per Passenger Mile (YEAR)</b>	\$0.54	\$0.54	\$0.54

Values reflect 2020 ridership forecast and 1999 dollars.

## Cost Effectiveness

### Rating: Medium

RTA estimates the following cost effectiveness indices.

<b>Cost Effectiveness</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>Incremental Cost per Incremental Passenger</b>	\$11.30	\$10.90

Values reflect 2020 ridership forecast and 1999 dollars.

## Transit-Supportive Existing Land Use and Future Patterns

### Rating: Medium-High

The *Medium-High* land use rating reflects good existing densities and pedestrian-friendliness in the corridor, as well as adoption of a more transit-supportive comprehensive land use plan for the city in 1999.

**Existing Conditions:** The Desire Corridor Streetcar serves the New Orleans CBD and adjacent 18th- and 19th-century residential neighborhoods. The CBD contains a high-density mix of employment, hotel, retail, and tourist destinations, with a total of 122,000 jobs. Outside the CBD, the corridor serves a mix of neighborhood commercial surrounded by residential neighborhoods. Population densities are relatively high, averaging 10,000 persons per square mile. The entire corridor is laid out as a walkable street grid system, although some areas suffer from blight and a general lack of landscaping and urban design elements. Parking caps in the CBD are fairly restrictive, and most parking in the residential neighborhoods is on-street.

**Future Plans and Policies:** The New Orleans Land Use Plan, adopted in 1999, is expected to result in zoning revisions to facilitate mixed-use redevelopment. A neighborhood mixed-use category is proposed which would apply to much of the Desire Corridor. This designation would assist in preserving and enhancing the existing desirable elements of the corridor. The plan also recommends concentrating industrial development in certain areas and converting other areas to mixed residential/ commercial or open space. An urban mixed-use designation is proposed to facilitate redevelopment of vacant or underutilized industrial and commercial sites. Finally, the

plan recommends the development of additional parks and recreation areas in Desire corridor neighborhoods.

While the plan does not strongly focus on increasing development in the Desire corridor, it does address the broader primary issues faced by the city including the need to stabilize population and spur re-investment and redevelopment. CBD employment growth is forecast in hotel, leisure and related service industries, and the market is currently sustaining continued residential and hotel conversions. Retail revitalization strategies have been incorporated in the Land Use Plan. The city's design review authority for large projects and conditional-use projects is the most significant tool for ensuring that major new development is transit-supportive; the city has already demonstrated its intent to use this authority accordingly. Much of the corridor is eligible for city and state economic development incentives, including tax exemptions or credits for construction, rehabilitation and job creation. The city planning process and its Land Use Plan have also greatly improved public and neighborhood participation.

## Local Financial Commitment

### **Proposed Local Share of Total Project Costs: 30%**

The project's financial plan proposes to utilize \$65.5 million (70 percent of total project costs) in Section 5309 New Starts funds, \$27.0 million (29 percent) in RTA hotel/motel sales tax revenue, and \$1.0 million (1 percent) in local right-of-way donations.

## Stability and Reliability of Capital Financing Plan

### **Rating: Medium**

The *Medium* capital finance plan rating reflects RTA's aggressive action to turn around recent deficits through fare increases, tax increases, and use of leases for new buses.

**Agency Capital Financial Condition:** RTA has revamped its bus fleet with a new lease arrangement for 175 buses, which means that what had once been an aging fleet now is an average of 3.5 years old. The bus lease has a Moody's rating of Baa3. The largest component of the local share of the capital for this project will be the newly collected sales tax on hotel and motel rooms. This should be a stable source of income that appears to have been conservatively estimated. The Canal Street Streetcar project, however, takes priority over the Desire Corridor Streetcar project in funding allocations.

**Capital Cost Estimates and Contingencies:** The capital cost estimates are adequate for a project in this early stage of preliminary engineering. Capital cost estimates will be refined as the project advances through planning and project development.

**Existing and Committed Funding:** The hotel industry portion of the Sales and Use Tax is expected to generate \$7.2 million annually in incremental revenue, although the proposed Canal Street Streetcar project has been stated as RTA's first priority and will require a significant portion of the revenue. There is a City of New Orleans ordinance authorizing the Mayor to enter into an agreement regarding provision of right-of-way. The reliance on a majority of new starts funds for this project, however, may pose future project funding challenges.

**New Funding:** No new sources of funding are proposed.

## Stability and Reliability of Operating Finance Plan

### **Rating: Medium**

The *Medium* operating finance plan rating reflects the positive action taken by the agency to reverse past operating deficits, and the high level of commitment of operating funds.

**Agency Operating Financial Condition:** RTA had operating deficits of from \$13 million to almost \$22 million shown for the last 5 years. However, the agency has taken meaningful action to reverse those deficits: (1) a new lease arrangement for 175 new buses, and revised preventive maintenance procedures; (2) a fare increase from \$1.00 to \$1.25 for the basic fare (and similar increases for other fares); (3) reductions in expenses, including medical insurance, service headways, administrative wages, and work force; and (4) an extension in scope of the RTA sales tax to include hotel and motel room rental receipts. With these modifications, the agency projects that its accounting deficit will go away by 2005. In FY 01 there is a projected consolidated cash balance of zero, which is forecast to increase steadily over time. The cash balance is forecast to remain below 3 months through 2003, below 6 months through 2012. They remain forecast in excess of 6 months for the remainder of the forecast period.

**Operating Cost Estimates and Contingencies:** Operating costs estimates were built up from past experience with streetcar operation and provided in considerable detail. Annual operating cash flow provides a surplus starting in 2000, and cash balances are slowly built up over time. A specific contingency plan was not provided. However, presumably, cash balances would be built up more slowly if there were operating cost overruns. On a systemwide basis, passenger fares are expected to be 46 percent of operation expenses in 2004.

**Existing and Committed Funding:** All operating funding sources are committed. Aside from passenger fares, the main source of operating revenue is the sales tax, collected for years, that is a stable source and is conservatively estimated into the future.

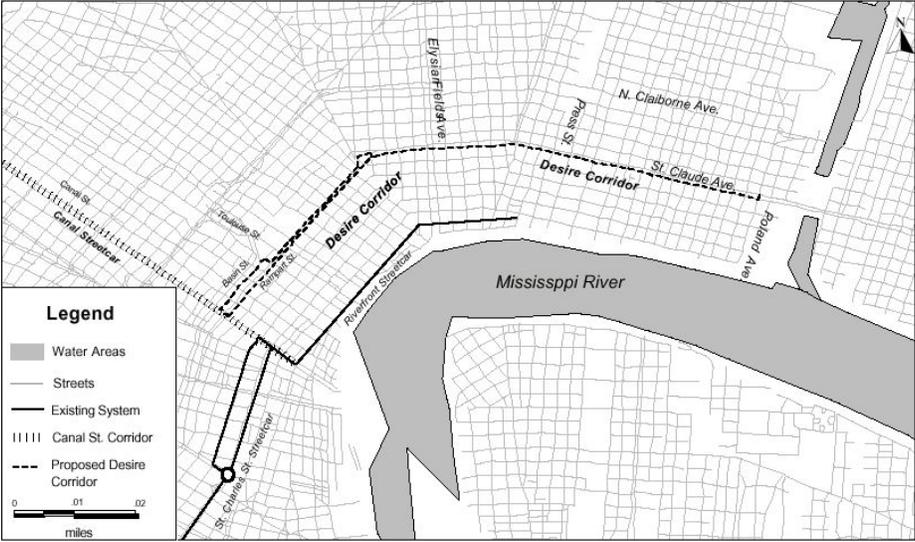
**New Funding:** No new funding sources are proposed.

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: Section 5309 New Starts</b>	\$65.50	\$5.96 million appropriated through FY 2001
<b>Local: Hotel/Motel Sales Tax</b>	\$27.00	
<b>Local: Right-of-Way Donation</b>	\$1.00	
<b>Total:</b>	<b>\$93.50</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Desire Corridor Streetcar

New Orleans, Louisiana



Federal Transit Administration, 2001

# New York, New York/Long Island Rail Road Access to Manhattan's East Side (East Side Access)

## Long Island Rail Road Access to Manhattan's East Side (East Side Access)

New York, New York

(November 2000)

### Description

The Metropolitan Transportation Authority (MTA) is the lead agency for the proposed Long Island Rail Road (LIRR) East Side Access (ESA) project. The project would provide increased capacity for the commuter rail lines of the LIRR and direct access between suburban Long Island and Queens and a new passenger terminal in Grand Central Terminal (GCT) in east Midtown Manhattan, in addition to the current connection to Penn Station in Manhattan.

The ESA connection and increased LIRR capacity would be achieved by constructing a 4,600-foot tunnel from the LIRR Main Line in Sunnyside, Queens to the existing tunnel under the East River at 63<sup>rd</sup> Street. LIRR trains would use the lower level of this bi-level structure. A second 5,000-foot tunnel would carry LIRR trains from the 63<sup>rd</sup> Street Tunnel under Park Avenue and into a new LIRR terminal in the lower level of GCT. ESA will provide the LIRR with additional tunnel capacity across the East River. Increased capacity and headways would be introduced at most LIRR stations. For example, additional 24 peak hour trains would operate through the existing 63<sup>rd</sup> Street Tunnel to GCT. Ten new tracks and five platforms would be constructed for LIRR trains at GCT. In addition, a new LIRR station would be constructed at Sunnyside Yard to provide access between Long Island City and Penn Station in Manhattan. The East River tunnels in Manhattan are at capacity. ESA is anticipated to improve LIRR tunnel capacity constraints and enable the growth of the overall system.

Total capital costs are estimated at approximately \$4.34 billion (escalated dollars), including \$3.56 billion for project management, design, construction and right-of-way, and \$0.79 billion for rolling stock (over 225 new vehicles). Overall, more than 351,000 average weekday boardings to both Penn Station and GCT would benefit directly from the LIRR ESA project by the year 2020. These include approximately 162,000 daily boardings serving GCT, 161,000 daily boardings serving Penn Station and 5,500 daily boardings at the proposed Sunnyside Station.

### LIRR East Side Access Summary Description

<b>Proposed Project</b>	Commuter Rail Extension 4 miles, 2 stations
<b>Total Capital Cost (\$YOE)</b>	\$4,344.00 million
<b>Section 5309 Share (\$YOE)</b>	\$2,172.00 million
<b>Annual Operating Cost (\$YOE)</b>	\$147.40 million
<b>Ridership Forecast (2020)</b>	351,000 average weekday boardings
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The *Recommended* rating is based primarily on the strong transit-supportive environment along the corridor and throughout the metropolitan area, the healthy operating condition of the MTA, and the adequacy of the commitment of the non-New Starts share to the project *at this stage of development*. The overall project rating applies to this Annual New Starts Report and reflects conditions as of November 2000. Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.

## Status

A Major Investment Study (MIS) on the Long Island Rail Road East Side Access was completed in April 1998. In June 1998, the New York Metropolitan Transportation Council (NYMTC), the Metropolitan Planning Organization, passed a resolution endorsing the recommended extension of the LIRR into Grand Central Station. In September 1998, FTA approved preliminary engineering and preparation of an Environmental Impact Statement (EIS) for the project. A DEIS for the LIRR ESA was completed in May 2000. MTA completed the Final EIS in March 2001. A Record of Decision is anticipated in mid 2001.

TEA-21 Section 3030(a)(54) authorizes the Long Island Rail Road East Side Access for final design and construction. Through FY 2001, Congress has appropriated \$53.63 million in Section 5309 new starts funds for this project.

## Evaluation

TEA-21 Section 3030(c)(3) exempts the East Side Access project from the New Starts criteria. However, MTA provided FTA considerable data on the project. MTA estimated the following criteria in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. N/A indicates that information is not available for specified measures. FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design, and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the primary benefits of this project to relieve overcrowding and improve travel times and reliability of existing rail service. The project also demonstrates strong transit supportive land use.

## Mobility Improvements

### Rating: Medium

NY MTA estimates that 351,000 average weekday boardings will occur on the LIRR ESA project in the year 2020. MTA provided the following information on annual travel time savings. See the *Cost Effectiveness* measure for additional discussion on mobility improvements.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	7.40 million hours	5.70 million hours

Based on 1990 census data, there are an estimated 3,681 low-income households within a ½ mile radius of Grand Central Terminal. This represents approximately 15 percent of the total households within ½ mile radius of GCT.

## Environmental Benefits

### Rating: High

The U.S. Environmental Protection Agency designates the New York City area as “severe” non-attainment for ozone and “moderate” non-attainment for carbon monoxide. New York County is designated as a “moderate” non-attainment area for Particulate Matter-10. The emissions model for the NYMTC region is undergoing an update. NY MTA provided the following information on changes in emissions.

<b>Criteria Pollutant</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>Carbon Monoxide (CO)</b>	decrease of 576 annual tons	decrease of 433 annual tons
<b>Nitrogen Oxide (NO<sub>x</sub>)</b>	decrease of 119 annual tons	decrease of 161 annual tons
<b>Volatile Organic Compounds (VOC)</b>	increase of 164 annual tons	decrease of 120 annual tons
<b>Particulate Matter (PM<sub>10</sub>)</b>	decrease of 68 annual tons	decrease of 49 annual tons
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	increase of 80,261 annual tons	increase of 97,356 annual tons

NY MTA estimates the following increases in regional energy consumption (measured in British Thermal Units – BTUs):

<b>Annual Energy Savings</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>BTU (millions)</b>	increase of 1,305,826 million annual BTU	increase of 1,531,344 million annual BTU

### Operating Efficiencies

**Rating: Low-Medium**

NY MTA provided the following information on operating efficiencies:

<b>Operating Efficiencies</b>	<b>No-Build</b>	<b>TSM</b>	<b>New Start</b>
<b>System Operating Cost per Passenger Mile</b>	\$0.23	\$0.23	\$0.25

### Cost Effectiveness

**Rating: Low**

NY MTA provided the following information on cost effectiveness:

<b>Cost Effectiveness</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>Incremental Cost per Incremental Passenger</b>	\$31.50	\$39.50

Values reflect 2020 ridership forecast and 1997 dollars.

**Note:** FTA and the NY MTA are working on revised cost effectiveness indices that will be reflected in subsequent reports. The higher cost per new transit trip, relative to other projects nationally, is a consequence of New York City’s high transit mode share. Any improvement to transit service in extraordinary high transit markets will result in high costs for incremental riders. The primary benefits of the LIRR ESA project are to relieve crowding of existing LIRR trains, provide more reliable service, improve travel times and provide additional transportation capacity for the Long Island/Queens transportation corridor to Manhattan.

## Transit-Supportive Existing Land Use and Future Patterns

### Rating: High

The *High* land use rating reflects the exceptionally strong transit-supportive development and high population densities that characterize the largest central business district of the nation, Midtown Manhattan. The rating also acknowledges the active and comprehensive planning effort being undertaken at the proposed Sunnyside station, located in Long Island City, Queens.

**Existing Conditions:** The Grand Central Terminal (GCT) is located in a uniquely high-intensity setting where transit and walking are the dominant modes of transportation. Nearly 500,000 employees work within a ½ mile of the proposed station at GCT, while over 68,000 people reside within the area. Employment density in the Manhattan Central Business District (CBD) is approximately 261.1 employees per acre. The proposed station at the Sunnyside railroad yard in Long Island City would be located in an area that functions as an industrial center, surrounded by a variety of commercial, institutional, and residential land uses. Approximately 39,000 employees currently work in the area, which has a residential population of 11,470. While existing land use at the site of the proposed Sunnyside Station cannot be characterized as pedestrian-friendly, the Queens Plaza transportation hub, located directly north of the railroad yard, serves three subway lines and generates substantial pedestrian activity. City policies support the continued vitality of the GCT area as an economic center and residential neighborhood. Zoning in the vicinity of the GCT is governed by the Special Midtown District, which was designed to strengthen Midtown's function as a business core and to provide incentives for further growth in specified areas. The GCT subdistrict provides for the transfer of unused development floor area from the terminal to a specified surrounding area. Zoning near the GCT allows for high-density development (up to 18.0 FAR) and usually does not require any parking. Development throughout the Special Midtown District is required to include design features supporting pedestrian activity and circulation, as well as subway improvements.

While limited off-street parking is available near GCT, high parking costs, resulting from both market forces and city policies, serve as a strong deterrent to parking in the station area. New York City policies discourage parking in CBDs. The City levies a tax of over 18 percent on users of lots in Manhattan and existing zoning does not encourage the expansion of parking supplies. In addition, parking policies governing the Manhattan CBD could potentially be extended to the area surrounding the proposed station in Long Island City (Sunnyside) as anticipated growth of commercial and office development proceeds in the area.

**Future Plans and Policies:** Future land use in the Manhattan CBD will continue to be shaped by dense office development. In the year 2020, population in the GCT area is projected to increase approximately 4.4 percent, while employment is forecast to grow by 21.3 percent. New York City policies anticipate and emphasize the concentration of office-related uses in the city's three existing CBDs (Midtown Manhattan, Downtown Manhattan and Downtown Brooklyn) and a planned fourth CBD to be developed in Long Island City.

Accordingly, a trend toward more and upgraded office use is underway in Long Island City near the planned Sunnyside station. Zoning changes are pending in a large area located next to the station to create the new Long Island City CBD. A zoning subdistrict would be created within this area to help to reinforce the historic mixed residential and industrial character and allow mixed-use and CBD-type commercial development. Additional changes in development anticipated in the short term includes some residential infill, an expected upgrading of retail and office development, the introduction of new, larger institutional uses, and the possible opening of a department store, which would transform the visual character of the area. New York City grants zoning density bonuses for developer improvements of local transit, such as integrating station entrances into the proposed development.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 50%**

The financial strategy for the proposed LIRR ESA project proposes \$2,172 million (50 percent) in Section 5309 New Starts funds and \$2,172 million (50 percent) in State and local funds.

## Stability and Reliability of Capital Financing Plan

### **Rating: Medium**

The *Medium* rating reflects the soundness of the MTA's financial condition and the adequacy of the agency's dedicated revenue sources (debt financing, bonding capacity, etc). The rating also acknowledges that, at this time, approximately \$750 million (35 percent) of the total proposed non-Section 5309 New Starts share of capital costs associated with the LIRR ESA are reasonably committed.

**Agency Capital Financing Condition:** NY MTA is in sound financial condition. The average age of the MTA's bus fleet is 5.37 years. In addition, the agency's current bond ratings (transit and commuter revenue bonds, dedicated tax fund bonds, Triborough Bridge and Tunnel Authority bonds) collectively average in the medium grade range and serve as an indicator for the MTA's financial condition. The New York legislature approved the MTA's FY2000-FY2004 capital program, which includes a proposed \$17.46 billion in Federal, State and local funds for the overall agency. Federal sources are projected to account for approximately 30 percent of the agency's FY00-FY04 capital program. Historically, these projections are consistent with the agency's reliance on Federal funds.

**Capital Cost Estimates and Contingencies:** Based upon FTA's review, current capital cost estimates for the LIRR ESA appear reasonable at this stage of development. FTA is currently reviewing the cost estimation methodology to ensure its reliability. This review is scheduled for completion during the second quarter of FY 2001. Engineering and management costs were based on the actual value of contracts related to program management, environmental, tunnel engineering and systems engineering work. Real estate costs were based on current estimates of acquisitions, temporary and permanent easements, building surveys and other activities.

**Existing and Committed Funding:** At this time, 35 percent (\$750 million) of the total non-Section 5309 New Starts share has been committed to the project in MTA's FY00-FY04 capital program. The remaining \$1,422 million will need to be committed – in future MTA capital programs – to cover the entire construction phase of the LIRR ESA project. It should also be noted that, given New York residents rejection of a \$3.8 billion bond referendum in November 2000, which would have provided additional capital funds for the LIRR ESA, the MTA will need to re-evaluate the funding strategy for the project to ensure the availability of the remaining 65 percent of the total non-Section 5309 New Starts share for the project.

**New and Proposed Sources:** No new sources are proposed for the LIRR ESA project.

## Stability and Reliability of Operating Financing Plan

### **Rating: Medium**

The *Medium* rating acknowledges NY MTA's healthy operating condition. Revenues to operate the proposed LIRR ESA project are considered adequate. The rating also reflects the lack of a detailed systemwide operating plan, including forecasts for proposed operating revenue sources or a project-specific plan to cover operating subsidy requirements.

**Agency Operating Condition:** The operating condition of the MTA is considered sound. MTA's audited financial statements indicate that the agency is operating within a sound financial

framework. Within the last decade, the agency has achieved a farebox recovery rate between 44 percent and 54 percent, indicating stability in the agency's operating revenues and expenses. MTA's 20-year cash flow projections anticipate that the agency will break even for each year of operations after covering the agency's capital, operating and debt service requirements.

**Operating Cost Estimates and Contingencies:** Annual operating and maintenance costs for the LIRR ESA are estimated at \$147.4 million (escalated dollars). This estimate is projected to increase approximately three percent (annually) according to the agency's 20-year cash flow analysis. FTA's review of the MTA's financial framework revealed that the agency identifies its revenue requirements for operations and capital, then based on these projections, draws from its reserves or obtains additional financing as warranted. While MTA identifies its revenue sources, the agency does not match these sources to specific needs, such as the operations associated with the proposed LIRR ESA.

**Existing and Committed Funding:** All proposed operating funds exist. Annual operating and maintenance costs are estimated at \$147.4 million (escalated dollars). Since the MTA did not provide a detailed systemwide operating plan outlining forecasted revenue sources and specifically matching them (as warranted) to the LIRR ESA, FTA cannot adequately gauge the degree of commitment of these sources to the project at this time.

**New and Proposed Sources:** No new sources of operating revenue are proposed.

### Locally Proposed Financing Plan

(Reported in \$YOE)

<b>Proposed Source of Funds</b>	<b>Total Funding (\$million)</b>	<b>Appropriations to Date</b>
<b>Federal: Section 5309 New Starts</b>	\$2,172.00	\$53.63 million appropriated through FY 2001
<b>State and Local:</b>	\$2,172.00	
<b>Total:</b>	<b>\$4,344.00</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Long Island Rail Road Access to Manhattan's East Side

New York, New York



Federal Transit Administration, 2001

# Orange County, California/Centerline Rail Corridor

## The Centerline Orange County Rail Corridor

Orange County, California

(November 2000)

### Description

The Orange County Transportation Authority (OCTA) is developing a 30.1-mile rail corridor in central Orange County between Fullerton and Irvine. The proposed project will connect major activity centers within the corridor, including downtown Fullerton and the Fullerton Transportation Center, downtown Anaheim, the Anaheim Resort Area (including Disneyland, the Anaheim Convention Center, Edison Stadium and the Arrowhead Pond) downtown Santa Ana (and the county government center), John Wayne Airport, El Toro Marine Base (which is being converted to civilian use), and several hospitals and regional shopping, employment, cultural, and entertainment centers.

In response to input from citizens and local elected officials, OCTA has revised the project since its FY 2001 New Starts review. The proposed project alignment has lengthened from 26.5 miles to 30 miles and will be an elevated LRT system, rather than a primarily surface system. This profile reflects an assumption of a 35-station 30.1-mile LRT system, which is 90 percent elevated and 10 percent at-grade. Project costs are estimated at \$3.741 billion (escalated dollars) with ridership estimated at 82,500 average weekday boardings. OCTA forecasts that the corridor will carry 50,300 daily new riders.

### Centerline Orange County Rail Summary Description

<b>Proposed Project</b>	Rail Fixed Guideway (LRT) 30.1 miles, 35 stations
<b>Total Capital Cost (\$YOE)</b>	\$3.741 billion
<b>Section 5309 New Starts Share (\$YOE)</b>	\$1.871 billion
<b>Annual Operating Cost (\$YOE)</b>	\$55.4 million
<b>Ridership Forecast (2020)</b>	82,500 average weekday boardings 50,300 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2001 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the project's adequate project justification criteria and committed capital and operating funding. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

### Status

OCTA completed a Major Investment Study (MIS) for the corridor in June 1997. The MIS led to the selection of a rail/bus project consisting of a 28-mile rail corridor and a 49 percent increase in bus service. The project is included in the financially constrained and conforming regional

transportation plan and transportation improvement program. In February 1998, FTA approved entry into the Preliminary Engineering (PE)/Draft Environmental Impact Statement (DEIS) phase of project development. The DEIS effort is expected to conclude in the January 2001 with the selection of a Locally Preferred Alternative (LPA), at which point OCTA will focus its remaining PE effort on the LPA.

TEA-21 Section 3030(a)(59) authorizes the Fullerton-Irvine Corridor for final design and construction. Through FY 2001, Congress has appropriated \$10.43 million in Section 5309 New Starts funds.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design, and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the Medium or higher ratings assigned to each of the justification criteria.

## Mobility Improvements

### Rating: Medium-High

The 26.6 mile system is expected to serve 82,500 average weekday boardings and 50,300 daily new riders by 2020. OCTA estimates the following travel time savings for the New Start compared with the No-Build/TSM alternative.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Annual Travel Time Savings (Hours)</b>	9.3 million hours	N/A

Based on the 1990 US Census, OCTA estimates that there are 17,506 low-income households within ½ mile of the 35 proposed stations (approximately 40 percent of all households located within ½ mile of stations).

## Environmental Benefits

### Rating: Medium

Orange County lies within the South Coast Air Basin and is currently classified as an "extreme" nonattainment area for ozone, a "serious" nonattainment area for carbon monoxide and for PM-10, and a nonattainment area for NOx.

OCTA estimates the following changes in annual regional emissions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Carbon Monoxide (CO)</b>	decrease of 224 annual tons	N/A
<b>Nitrogen Oxide (NO<sub>x</sub>)</b>	decrease of 64 annual tons	N/A
<b>Volatile Organic Compounds (VOC)</b>	decrease of 15 annual tons	N/A
<b>Particulate Matter (PM<sub>10</sub>)</b>	decrease of 20 annual tons	N/A
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	decrease of 20,623 annual tons	N/A

OCTA estimates the following changes in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (millions)	decrease of 249,326 million annual BTU	N/A

### Operating Efficiencies

**Rating: High**

OCTA estimates a decrease in the systemwide operating cost per passenger mile compared to the No-Build/TSM.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	\$0.42	N/A	\$0.34

Values reflect 2020 ridership forecast and 1999 dollars.

### Cost Effectiveness

**Rating: Medium**

OCTA estimates the following cost effectiveness index:

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$14.30	N/A

Values reflect 2020 ridership forecast and 1999 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* rating reflects the varied densities and transit-supportive conditions found along the corridor, but acknowledges the proactive role of OCTA and several local jurisdictions in encouraging transit-oriented development around proposed station areas.

**Existing Conditions:** The proposed 30.1-mile project serves several single and multi-family residential neighborhoods, several office parks, regional malls, strip retail development, several industrial areas, and Disneyland, Anaheim Stadium, two large medical centers, and downtown Santa Ana/Orange County Civic Center. Additionally, the John Wayne Airport and the El Torro Base Redevelopment Site will also be served by the proposed investment. As of 1997, a total of 180,000 residents and 172,000 jobs were located within ½ mile of proposed stations. By 2020, station area employment is projected to grow by 69 percent and station area population by 13 percent, reflecting strong regional growth conditions. Average employment and population densities are 9.5 and 11.5 per acre, respectively. Population and employment densities are highest in the some of the central portions of the corridor (Santa Ana and Orange), moderate in the northern portion (Anaheim and Fullerton), and lowest in the southern portion (Costa Mesa and Irvine). The land use patterns in the corridor are largely auto-oriented, with a significant supply of parking in most employment centers, shopping areas, and attractions, and wide arterial streets, although a few older downtowns exist.

**Future Plans and Policies:** OCTA has been working with corridor communities to develop station area planning and design guidelines and has executed cooperative agreements with all jurisdictions in the corridor to conduct station area planning. OCTA has also developed tools to

assist in station area planning efforts including transit supportive development guidelines, a joint development strategy, station area land use profiles, station area parking guidelines, and an implementation plan. In addition, OCTA has conducted public education and outreach on transit-oriented land use planning, and is investigating joint development opportunities. Most of the communities along the corridor have relatively dense residential zoning (15 to 30 units per acre and higher) in place in the corridor. There are a number of redevelopment and expansion projects that include proposed light rail station areas as part of their plans.

## Other Factors

**Santa Ana Enterprise Zone:** The city of Santa Ana has three sites designated by the State of California as Enterprise Zones, and within the boundaries of these zones are three Centerline stations. A portion of Santa Ana is also designated as a Federal Empowerment Zone. OCTA has been involved with the city in development activities and is committed to supporting Enterprise/Empowerment Zone initiatives.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 50%**

The OCTA financial plan proposes \$1,870.6 million (50 percent) in Section 5309 New Start funds and an additional Federal contribution of \$638.6 million (20 percent) in Federal flexible funds. The plan includes \$932.8 million (21 percent) in State funding and \$299.2 million (9 percent) in local funds.

## Stability and Reliability of Capital Financing Plan

### **Rating: High**

The Centerline Rail Corridor has received a *High* capital plan rating because 100 percent of proposed local funding for the project is committed from existing sources, OCTA has demonstrated its ability to finance large projects, and cost contingencies are more than adequate.

**Agency Capital Financial Condition:** OCTA is in sound financial condition. The agency has sufficient capital resources from a ½ percent sales tax (Measure M) to finance a wide range of capital improvements. OCTA carries a very high bond rating: A+ from Standard and Poor's, A from Fitch, and Aa3 from Moody's. Strengthening this is that the bonds have been insured, increasing their ratings to AAA/AAA/Aaa, the highest ratings that can be attained.

**Capital Cost Estimates and Contingencies:** OCTA has incorporated cost contingencies into its financial plan. The contingencies should be more than adequate to cover cost overruns for design and construction, rights-of-way, and vehicle cost. An additional project reserve of 10 percent exists and is applied to the total costs, including contingencies.

**Existing and Committed Funding:** The OCTA Board of Directors has committed \$179 million in Measure M funds and sufficient CMAQ and State Transit Improvement Program (STIP) funding to finance the non-Section 5309 New Starts share of capital costs.

**New and Proposed:** All of the proposed Non-Section 5309 share of project costs are from existing funding sources.

## Stability and Reliability of Operating Finance Plan

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

The *Medium-High* operating plan rating reflects the existing dedicated revenue stream for operating the Centerline Rail Corridor.

**Agency Operating Condition:** OCTA is in sound operating financial condition. Measure M and other existing revenues provide the agency with sufficient resources to operate its existing bus system.

**Operating Cost Estimates and Contingencies:** Annual O&M costs are estimated at \$55.4 million. These estimates appear reasonable given the proposed size of the system. OCTA uses conservative growth forecasts.

**Existing and Committed Funding:** OCTA proposes that operation of the completed Rail Corridor would be funded with an interest-bearing operating fund comprised of Measure M (\$14.5 million) and CMAQ (\$14.9 million) funds. These resources are expected to yield sufficient funds to operate the completed 30.1-mile system through 2011 when the current round of Measure M sales tax is scheduled to end. If the Measure M initiative is not renewed, the project would experience declining, but still positive, operating cash balance from 2012 through 2028, particularly after 2022.

**New and Proposed Funding Sources:** All of the funding proposed for operations and maintenance is from existing funding sources.

### Locally Proposed Financing Plan

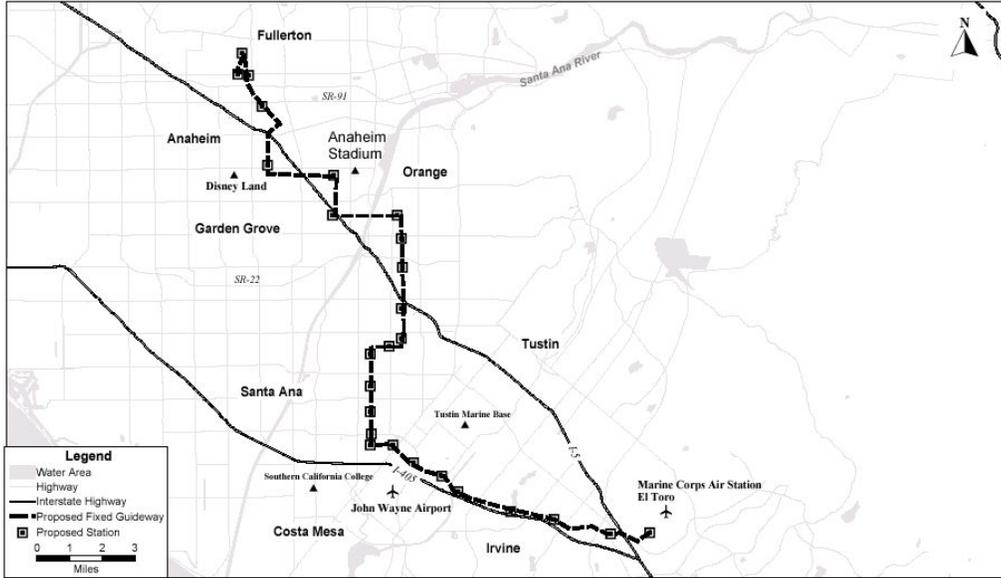
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$1,870.6	\$10.43 million appropriated through FY 2001.
STP/CMAQ	\$638.6	
<b>State:</b>		
STIP	\$932.8	
<b>Local:</b>		
Proposition 116 (Bond)	\$120.0	
Measure M	\$179.2	
<b>Total:</b>	<b>\$3,741.2</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Any errors are due to rounding.

# Centerline Rail Corridor

Orange County, California



Federal Transit Administration, 2001

# Phoenix, Arizona/Central Phoenix/East Valley Corridor

## Central Phoenix / East Valley Corridor

Phoenix, Arizona

(November 2000)

### Description

The Regional Public Transportation Authority (RPTA) is proposing to implement a 25-mile at-grade light rail system to connect the cities of Phoenix, Tempe, and Mesa. As a first step, the RPTA is undertaking preliminary engineering on a 20.3 mile segment from the Chris-Town Mall area, through downtown Phoenix and downtown Tempe, to Mesa. The proposed project would have 28 stations and serve major activity centers including downtown Phoenix, the Sky Harbor Airport, Papago Park Center and downtown Tempe. It will be the centerpiece of redevelopment along Apache Boulevard in Mesa. The proposed 20.3 mile LRT system is estimated to cost approximately \$1.076 billion (escalated), of which the RPTA intends to seek \$533.4 million in New Starts funding.

### East Valley Corridor Summary Description

<b>Proposed Project</b>	Light Rail Transit 20.3 miles, 28 stations
<b>Total Capital Cost (\$YOE)</b>	\$1.076 million
<b>Section 5309 Share (\$YOE)</b>	\$533.4 million
<b>Annual Operating Cost (\$YOE)</b>	\$15 million
<b>Ridership Forecast (2020)</b>	24,400 average weekday riders 9,900 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Not Rated</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Not Rated</b>

The Central Phoenix/East Valley Corridor is *Not-Rated* pending the determination of a Minimum Operating Segment (MOS) and updating of the regional travel demand model. However, the local financial commitment of capital and operating funds demonstrate a high level of local support for the project. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

### Status

The RPTA completed the Central Phoenix/East Valley (CP/EV) Major Investment Study (MIS) in the spring of 1998. In September 1998, FTA granted permission to enter the Preliminary Engineering/Environmental Impact Statement (PE/EIS) phase on a 13-mile segment of the corridor. FTA subsequently approved preliminary engineering on 20.3 miles of the proposed

system. Since the original approval, the size and scope of the proposed MOS and issues related to the regional travel demand model have been identified that remain to be resolved. As of the date of this report, the anticipated completion of PE/FEIS cannot be determined. The Maricopa Association of Governments (MAG) (local metropolitan planning organization) adopted the CP/EV Corridor as a fixed-guideway corridor and included the CP/EV LRT project in the Long Range Transportation Plan and the current Regional Transportation Improvement Plan (TIP). Section 3030(a)(62) of TEA-21 authorizes the Phoenix Fixed Guideway project for final design and construction. Through FY 2001, Congress has appropriated \$23.74 million for the project.

## Evaluation

The CP/EV project was not evaluated for this Annual Report on New Starts because issues regarding the size and scope of the proposed MOS and the regional travel demand model are currently being resolved. FTA has evaluated this project as being in preliminary engineering. The project will be reevaluated when it is ready to advance to final design and for next year's *Annual Report on New Starts*.

## Justification

The *Not-Rated* project justification was assigned pending definition of the size and scope of the MOS and refinement of the regional travel demand model.

## Mobility Improvements

**Rating: Not Rated**

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	N/A	N/A

## Environmental Benefits

**Rating: Not Rated**

The Phoenix Metropolitan region is a serious non-attainment area for ozone, carbon monoxide, and particulates (PM<sub>10</sub>).

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxide (NO <sub>x</sub> )	N/A	N/A
Hydrocarbons (HC)	N/A	N/A
Particulate Matter (PM <sub>10</sub> )	N/A	N/A
Carbon Dioxide (CO <sub>2</sub> )	N/A	N/A

The RPTA is refining estimates for the reduction in regional energy consumption (measured in British Thermal units – BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (millions)	N/A	N/A

## Operating Efficiencies

**Rating: Not Rated**

The RPTA is refining estimates of the systemwide-operating costs per passenger mile between the no-build, TSM, and new start alternatives.

<b>Operating Efficiencies</b>	<b>No-Build</b>	<b>TSM</b>	<b>New Start</b>
<b>System Operating Cost per Passenger Mile</b>	N/A	N/A	N/A

### Cost Effectiveness

**Rating: Not Rated**

The RPTA is refining estimates of the cost effectiveness index for the proposed CP/EV LRT project

<b>Cost Effectiveness</b>	<b>New Start vs. No-Build</b>	<b>New Start vs. TSM</b>
<b>Incremental Cost per Incremental Passenger</b>	N/A	N/A

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* land use rating reflects the generally low- to medium-densities along the corridor, the number of significant trip generators, and local efforts to encourage transit-oriented development.

**Existing Conditions:** The proposed alignment is characterized by predominantly low density residential, commercial, and industrial uses with two higher density nodes in downtown Phoenix and downtown Tempe. The corridor serves several high trip generators, including the 20,000 seat America West Arena; the Phoenix Civic Plaza/Convention Center; the 50,000 seat Bank One Ballpark; Sky Harbor International Airport; 75,000 seat Sun Devil Stadium; and the campus of Arizona State University (ASU; 42,000 students), and the Apache Boulevard Redevelopment Area in Tempe east of ASU, which boast the highest residential density in the state. The corridor also contains several of the largest employment centers in the region and 12 % of metropolitan area employment. Downtown Phoenix and the City of Tempe have instituted strong parking policies such as the removal of minimum parking requirements for new office and retail development in the CBD.

**Future Plans and Policies:** Local jurisdictions and agencies have made some progress in examining and implementing transit supportive plans and policies in the corridor. The Maricopa Association of Governments has produced Pedestrian Area Policies and Design Guidelines to guide member city planning and design efforts. Several small area plans have been revised to accommodate higher intensity, mixed use development. RPTA is working with transit and planning departments of affected cities to develop a TOD model ordinance. Several significant new developments are being planned along the corridor, including the 7 million square foot Rio Salado development. While there is progress with new housing development in downtown Phoenix, plans to support higher intensities of housing in other portions of the alignment are limited.

### Local Financial Commitment

**Proposed Non-Section 5309 Share of Total Project Costs: 50%**

The financial plan for the 20.5 mile Central Phoenix/East Valley LRT MOS includes \$533.4 million (YOE) (50 percent) in Section 5309 New Start funds, \$7.6 million in FHWA flexible funding, and \$355.2 million (33 percent) in funds from the City of Phoenix, \$150.5 million from the City of Tempe, and \$29 million from the City of Mesa.

## Stability and Reliability of Capital Financing Plan

### Rating: Medium-High

The *Medium-High* rating reflects the availability of a dedicated source of revenue to finance the construction and operation of the proposed system and the existing regional transit system.

**Agency Capital Financial Condition:** The RPTA is in good financial condition. On March 14<sup>th</sup>, 2000, the Proposition 2000 was approved by the voters of the City of Phoenix, thus providing an increase to the local sales tax of 0.4 percent dedicated to transit development. Additionally, the RPTA currently receives annual funding from the State's Local Transportation Assistance Fund (LTAF)/Public Transit Fund (PTF) which is used for the capital and operating needs of the existing bus system.

**Capital Cost Estimates and Contingencies:** Capital cost estimates for the proposed project have doubled since 1998, reflecting refinements in project engineering, an increase in the length of the project, an increase in the number of vehicles required, and the addition of higher contingency factors. The revised cost estimate is reasonable at this stage of development.

**Existing and Committed Funding:** The Cities of Phoenix, Tempe, and Mesa each have committed funds for the local match for the project from existing, dedicated sources of funding. The City of Phoenix receives funding from the 0.4 percent sales tax. The City of Tempe receives funding from a 0.5 percent dedicated sales tax, and the City of Mesa has committed funding from its general fund.

**New and Proposed Sources:** No new sources of funding are proposed.

## Stability and Reliability of Operating Finance Plan

### Rating: Medium-High

The *Medium-High* rating reflects the availability of a dedicated source of revenue to finance the construction and operation of the proposed system and the existing regional transit system.

**Agency Operating Condition:** The RPTA is in good financial condition. The RPTA has an annual operating and maintenance budget of \$103 million and a farebox recovery ratio of 31 percent for its current bus system. The RPTA currently receives annual funding from the State's Local Transportation Assistance Fund (LTAF)/Public Transit Fund (PTF). On March 14<sup>th</sup>, 2000, the Proposition 2000 was approved by the voters of the City of Phoenix, providing an increase of 0.4 percent in the local sales tax dedicated to transit development and operations.

**Operating Cost Estimates and Contingencies:** Annual operating costs for the proposed project are estimated at \$15 million when the system is scheduled to open in 2006. Cost estimates and escalation factors are reasonable.

**Existing and Committed Funding:** The Cities of Phoenix, Tempe, and Mesa each have committing funds for the local match for the project from existing, dedicated sources of funding. The City of Phoenix receives funding from the 0.4 percent sales tax. The City of Tempe receives funding from a 0.5 percent dedicated sales tax, and the City of Mesa has committed funding from its general fund.

**New and Proposed Sources:** No New sources of funding are proposed.

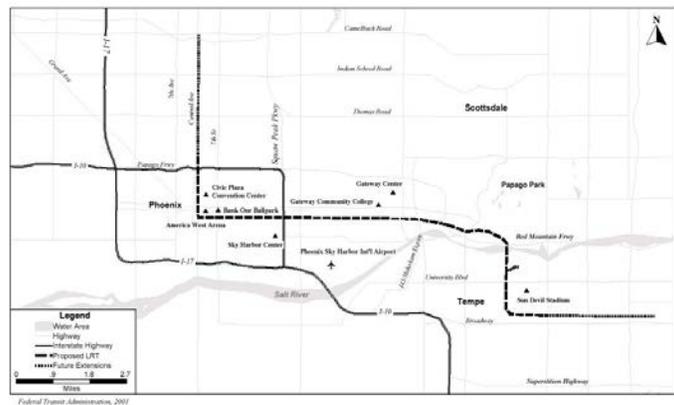
## Locally Proposed Financing Plan

(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$533.4	\$23.74 million appropriated through FY 2001
FHWA Flexible Funds	\$7.6	
<b>Local:</b>		
City of Phoenix	\$355.2	
City of Mesa	\$150.5	
City of Tempe	\$29.0	
<b>Total:</b>	<b>\$1,075.9</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

**Central Phoenix / East Valley Corridor**  
Phoenix, Arizona



# Pittsburgh, Pennsylvania/North Shore Connector LRT

## North Shore Connector LRT

### Pittsburgh, Pennsylvania

(November 2000)

#### Description

The Port Authority of Allegheny County (PAAC) proposes to construct a 1.6 mile Light Rail Transit (LRT) system extension connecting the Golden Triangle and the North Shore wholly within downtown Pittsburgh. The project would extend existing LRT service from the Gateway Center LRT Station in the Golden Triangle to the vicinity of the West End Bridge on the North Shore via a tunnel below the Allegheny River. On the North Shore, the project would be a mix of at-grade and elevated alignment. The project would also include a Convention Center Connection, linking the existing Steel Plaza LRT Station and the Convention Center.

The North Shore Connector LRT project would include the construction of four new LRT stations and modification of the Gateway Center and Steel Plaza stations, and the acquisition of 10 new light rail vehicles. Project capital costs are estimated at \$389.9 million (escalated dollars); revenue service start-up is planned in 2004. Year 2015 ridership is projected at 59,700 average weekday boardings and 6,500 daily new riders.

#### North Shore Connector LRT Summary Description

<b>Proposed Project</b>	Light rail line extension 1.6 miles, 4 new & 2 modified stations
<b>Total Capital Cost (\$YOE)</b>	\$389.9 million
<b>Section 5309 Share (\$YOE)</b>	\$194.9 million
<b>Annual Operating Cost (\$YOE)</b>	\$15.9 million
<b>Ridership Forecast (2015)</b>	13,600 daily boardings 3,800 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The *Recommended* rating is based on the project's generally adequate financial plan and justification criteria, reflecting relatively strong land use. The overall project rating applies to this *Annual New Starts Report and reflects conditions as of November 2000*. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

#### Status

The alternatives analysis completed in early 1999 concluded that a multi-modal package of transportation improvements be carried forward for further analysis during project environmental review. The Draft Environmental Impact Statement was published in May 2000. The "Gateway LRT Alternative" was selected as the Locally Preferred Alternative for the North Shore Connector

LRT project on August 16, 2000 by PAAC. FTA approval to initiate Preliminary Engineering was granted January 2001. The project is included in the 1997 Southwestern Pennsylvania Commission (SPC) Long Range Plan, as well as the 1999-2002 SPC Transportation Improvement Program for design and construction.

TEA-21 Section 3030(a)(97) authorizes the "Pittsburgh North Shore – Central Business District Corridor." Through FY 2001, Congress has appropriated \$15.75 million in Section 5309 New Starts funds to the project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Criteria have been reported and evaluated on the North Shore Connector LRT. N/A indicates that data are not available for a specific measure.

FTA has evaluated this project as being in early preliminary engineering.

## Justification

### Mobility Improvements

#### Rating: Medium

PAAC estimates that the project will serve 59,700 average weekday boardings and attract 6,500 daily new riders by 2015, and would result in the following annual travel time savings.

<b>Mobility Improvements</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>Annual Travel Time Savings (Hours)</b>	0.2 million	0.1 million

Based on 1990 Census data, there are an estimated 510 low-income households within a ½ mile radius of the 4 stations along the proposed project corridor.

### Environmental Benefits

#### Rating: Medium

The Pittsburgh Metropolitan Area is a moderate non-attainment area for ozone. PAAC estimates that in 2015, the North Shore Connector LRT project would result in the following annual emissions reductions.

<b>Criteria Pollutant</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>Carbon Monoxide (CO)</b>	decrease of 85 annual tons	decrease of 33 annual tons
<b>Nitrogen Oxide (NOx)</b>	decrease of 2 annual tons	decrease of 5 annual tons
<b>Volatile Organic Compounds (VOC)</b>	decrease of 20 annual tons	decrease of 8 annual tons
<b>Particulate Matter (PM<sub>10</sub>)</b>	0	0
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	decrease of 15,416 annual tons	decrease of 13,161 annual tons

In 2015, the project is estimated to result in the following savings in regional energy consumption (measured in British Thermal Units – BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU (millions)	decrease of 22,956 million annual BTU	decrease of 22,956 million annual BTU

### Operating Efficiencies

**Rating: Low-Medium**

PAAC estimates the following costs per passenger mile for the project.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2015)	\$0.45	\$0.46	\$0.46

Values reflect 2015 ridership forecast and 1999 dollars.

### Cost Effectiveness

**Rating: Low-Medium**

PAAC estimates the following cost effectiveness index for the project.

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$14.80	\$14.70

Values reflect 2015 ridership forecast and 1999 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium-High**

The *Medium-High* land use rating reflects a compact and walkable CBD, as well as plans and policies to redevelop the North Shore with high trip generators and a mix of uses in a pedestrian-friendly manner.

**Existing Conditions:** The proposed line serves a compact regional CBD with high levels of employment, high employment densities, and other major trip generators. Total employment is approximately 120,000, with nearly all of this within ½ mile – and most within ¼ mile – of LRT stations. The line connects the main CBD area (the “Golden Triangle”) and residential areas to the south to the North Shore, a redeveloping industrial area across the river from the Golden Triangle. Several trip generators, including the convention center, museums, and two new sports stadiums on the North Shore will be served by the project. Parking that serves the major developments on the North Shore will also serve as remote parking for commuters, who would transfer by LRT to the CBD. As development increases on the North Shore, surface parking would be converted to structured parking.

**Plans and Policies:** Substantial development is planned for the North Shore area to be served by the LRT project. In addition to the major projects cited above, plans call for 1.3 to 2.3 million square feet of mixed-use development on the former Three Rivers Stadium site. A hotel/conference, office, and sports related development is also planned for the area west of the new football stadium.

The Pittsburgh Downtown Plan calls for increasing the mix of retail and entertainment options in both the “Golden Triangle” area and the North Shore to better attract people to the area and increase 24-hour activity. The plan calls for implementation of pedestrian-oriented urban design

guidelines, development of a review process, and completion of district plans (including a plan for the North Shore). The proposed guidelines are strongly supportive of mixed-use development and a pedestrian-scale streetscape. Redevelopment of the North Shore will be done around a “reestablished historic street grid.” Parking policies emphasize fringe parking for all-day commuters, in conjunction with transit connections, to reduce congestion and parking requirements in the Golden Triangle.

## Local Financial Commitment

### **Proposed Local Share of Total Project Costs: 50%**

The project financial plan proposes to use \$194.95 million (50 percent of total project costs) in Section 5309 New Starts funds, and \$194.95 million (50 percent) of Commonwealth of Pennsylvania funds.

## Stability and Reliability of Capital Financing Plan

### **Rating: Medium**

The *Medium* capital finance plan rating reflects the financial conditions of the Commonwealth of Pennsylvania (Commonwealth) and PAAC, and the reasonableness of the capital financing plan at this stage of the project.

**Agency Capital Financial Condition:** The Commonwealth and PAAC are in sound financial condition. The Commonwealth will finance the capital development of the project through a new dedicated revenue stream. PAAC has an investment grade rating of AAA, indicating the accepted stability and reliability of its revenue sources, as well as PAAC’s out-year fiscal viability.

**Capital Cost Estimates and Contingencies:** The project cost estimate is unchanged from the DEIS cost estimate, which is reasonable for a project of this scope. PAAC has not fully developed a contingency plan at this time.

**Existing and Committed Funding:** One-third, \$65 million, of non-Section 5309 New Starts funds has been approved by the legislature for this project.

**New and Proposed Sources:** A new dedicated revenue stream, to begin in FY 2002, has been proposed to the legislature.

## Stability and Reliability of Operating Finance Plan

### **Rating: Medium**

The *Medium* operating finance plan rating reflects PAAC’s projection of balanced operating budgets, consistent with its historical experience.

**Agency Operating Financial Condition:** Historical data and 20 year cash flow projections indicate that any annual operating cash flow shortfall can be paid from operating cash reserves. Beginning at the end of the initial year of project operations, PAAC’s projected operating cash surplus balances are substantially equal to three months of operating expenses.

**Operating Cost Estimates and Contingencies:** Projected O&M costs relative to the existing transit system equate to about 1.5 percent in the initial year of operations, FY 2004. Annual operating costs are estimated at \$15.9 million (\$YOE).

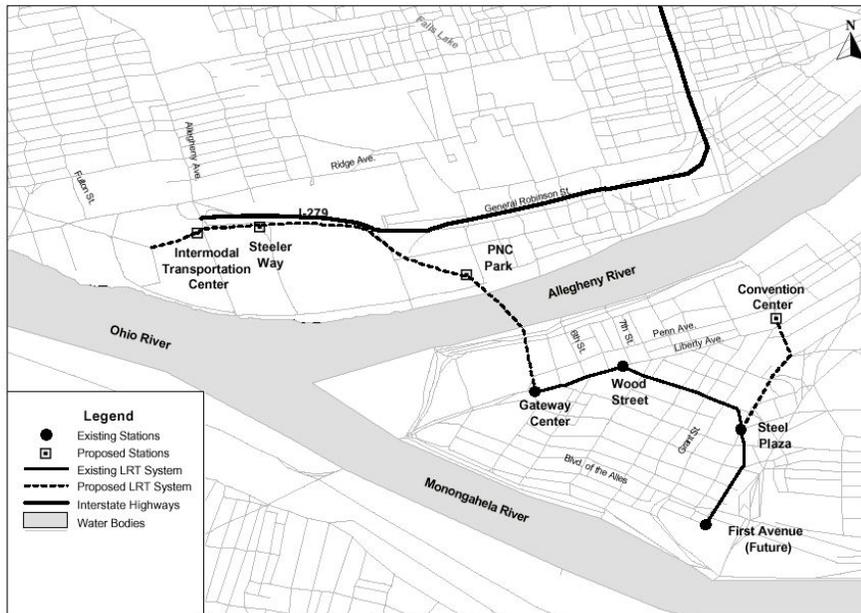
**Existing and Committed Funding:** PAAC indicates that project farebox revenues will provide about 32 to 33 percent of the project O&M costs, consistent with the 32 percent systemwide farebox recovery.

**New and Proposed Sources:** A new dedicated revenue stream, to begin in FY 2002, will provide an additional funding source for project O&M costs.

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
Federal: Section 5309 New Starts	\$194.95	\$15.75 million appropriated through FY 2001
State and Local: State Appropriations	\$194.95	
<b>Total:</b>	<b>\$389.90</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Any errors are due to rounding.

### North Shore Connector LRT Pittsburgh, Pennsylvania



Federal Transit Administration, 2001

# Raleigh, North Carolina/Regional Transit Plan Phase I Regional Rail – Durham to North Raleigh

## Regional Transit Plan Phase I Regional Rail - Durham to North Raleigh

Raleigh-Durham-Chapel Hill MSA, North Carolina

(November 2000)

### Description

The Phase I Regional Rail project is the first segment of a three-phased regional transit plan for linking the three counties - Wake, Durham, and Orange - in the Triangle Region of North Carolina. In Phase I, the Triangle Transit Authority (TTA) intends to initiate regional rail service from Durham to downtown Raleigh and from downtown Raleigh to North Raleigh. TTA proposes to use Diesel Multiple Unit (DMU) rail vehicles to serve the 16 stations proposed for the Phase I of the project.

TTA has proposed that the Phase I Regional Rail project will use the existing North Carolina Railroad and CSX rail corridors to connect Duke University, downtown Durham, Research Triangle Park, RDU Airport, Morrisville, Cary, North Carolina State University, downtown Raleigh, and North Raleigh. The proposed project is estimated to serve 17,600 average weekday boardings by the year 2020. The most recent capital cost estimate for Phase I is \$754.7 million (escalated dollars). The cost estimate includes final design, acquisition of right-of-way (ROW) and rail vehicles, station construction, park and ride lots, and construction of storage and maintenance facilities.

The corridor proposed to be used by TTA for the project is shared among a number of railroads, thus, TTA is considering a number of track realignments to accommodate proposed inter-city and high-speed rail improvements.

### Regional Transit Plan Summary Description

<b>Proposed Project</b>	Commuter Rail (Diesel Multiple Units) 34.7 miles, 16 stations (Phase I)
<b>Total Capital Cost (\$YOE)</b>	\$754.7 million
<b>Section 5309 Share (\$YOE)</b>	\$111.0 million
<b>Annual Operating Cost (\$1997)</b>	\$28.4 million
<b>Ridership Forecast (2020)</b>	17,600 average weekday boardings
<b>FY 2002 Financial Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the strong financial plan and local efforts to adopt transit supportive land use policies and encourage transit oriented development at proposed station areas. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As

projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

## Status

In 1995, TTA completed the Triangle Fixed Guideway Study. The Authority's Board of Trustees has adopted the study's recommendations to put into place a regional rail system, and resolutions of support have been received from all major units of local government, chambers of commerce, universities, and major employers in the Triangle.

The Durham-Chapel Hill-Carrboro MPO and the Capital Area MPO have each adopted the Locally Preferred Alternative into their fiscally constrained long-range plans and the Phase I Regional Rail project is included in their respective 1998-2004 Transportation Improvement Program and North Carolina State Transportation Improvement Program. In January 1998, TTA initiated Preliminary Engineering and the preparation of a Draft Environmental Impact Statement (DEIS). TTA rail alignment issues are currently being worked out with a number of participating agencies, including the North Carolina Railroad (NCR), CSX Railroad, NCDOT Rail, and the Federal Railroad Administration. TTA anticipates completing the Draft Environmental Impact Statement in January 2001, and a Record of Decision on the Final EIS expected in December 2001.

TEA-21 Section 3030 (a) (68) authorizes the project for final design and construction. Through FY 2001, Congress has appropriated \$41.6 million in Section 5309 New Starts funds for this project.

## Evaluation

Unless otherwise noted, the following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. N/A indicates that data is not available for a specific measure.

The project is evaluated as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design, and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* rating reflects primarily the positive efforts of TTA and local jurisdictions to promote transit-supportive development within the corridor

## Mobility Improvements

### Rating: Medium

TTA estimates that Phase 1 of the Regional Rail project will result in the following annual travel time savings:

<b>Mobility Improvements</b>	<b>New Start vs. No-Build</b>	<b>New Start vs. TSM</b>
<b>Annual Travel Time Savings (Hours)</b>	5.7 million	4.0 million

Based on 1990 census data, there are an estimated 1,325 low-income households within a ½ mile radius of the proposed 16 stations of Phase I, approximately 13 percent of the total households within ½ mile of stations.

## Environmental Benefits

### Rating: High

The Raleigh-Durham Metropolitan Area is designated a moderate maintenance area for ozone and a maintenance area for carbon monoxide. TTA estimates that in 2020, Phase I of the Regional Rail project will result in the following emissions reductions for CO and VOC. However, TTA projects an increase in NOx emissions.

<b>Criteria Pollutant</b>	<b>New Start vs. No-Build</b>	<b>New Start vs. TSM</b>
<b>Carbon Monoxide (CO)</b>	decrease of 307 annual tons	decrease of 66 annual tons
<b>Nitrogen Oxide (NOx)</b>	increase of 480 annual tons	decrease of 486 annual tons
<b>Volatile Organic Compounds (VOC)</b>	decrease of 14 annual tons	decrease of 7 annual tons
<b>Particulate Matter (PM<sub>10</sub>)</b>	0	0
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	increase of 6,898 annual tons	increase of 1,531 annual tons

The TTA estimates the proposed project will result in the following changes in regional energy consumption (measured in British Thermal Units – BTU).

<b>Annual Energy Savings</b>	<b>New Start vs. No-Build</b>	<b>New Start vs. TSM</b>
<b>BTU (millions)</b>	decrease of 75,136 million annual BTU	decrease of 14,602 million annual BTU

### Operating Efficiencies

**Rating: Medium**

TTA projects a decrease in the systemwide operating cost per passenger mile in the year 2020 for the Phase I Regional Rail Plan compared to the TSM alternative.

<b>Operating Efficiencies</b>	<b>No-Build</b>	<b>TSM</b>	<b>New Start</b>
<b>System Operating Cost per Passenger Mile (1996)</b>	\$0.36	\$0.45	\$0.41

Values reflect 2020 ridership forecast and 2000 dollars.

### Cost Effectiveness

**Rating: Low-Medium**

TTA estimates the following cost-effectiveness indices:

<b>Cost Effectiveness</b>	<b>New Start vs. No-Build</b>	<b>New Start vs. TSM</b>
<b>Incremental Cost per Incremental Passenger</b>	\$9.80	\$14.50

Values reflect 2020 ridership forecast and 2000 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* land use rating reflects the generally low densities and poor pedestrian access along the corridor, but acknowledges the positive efforts of TTA and local jurisdictions to promote transit-supportive development within the corridor.

**Existing Conditions:** Existing land uses adjacent to proposed rail stations varies and includes low to medium-density residential, industrial, office development, and undeveloped or underutilized land. The corridor currently contains approximately 42 percent of the region's population and 65 percent of its employment. Employment within 1/2 mile of proposed station areas is projected to increase from 68,000 in 1995 to 102,000 by the year 2025, and the number of households is forecast to increase from 10,500 to 17,900. Major activity centers in the proposed corridor include Duke Medical Center, North Carolina State University, Research Triangle Park (RTP), and the State Fairgrounds. However, because of the low density and poor pedestrian accessibility found along the corridor, many of these activity centers will rely largely on feeder bus services to access the proposed system.

**Plans and Policies:** TTA has developed a conceptual plan for station areas, entitled "*Station Area Development Guidelines*" and has distributed it among the various municipalities to encourage *mixed and concentrated land use, adequate access and parking, and pedestrian-oriented station area environment* at proposed station sites. The City of Durham has adopted an interim overlay district for transit station areas that include transit-supportive design requirements and development intensities, as well as restrictions on uses incompatible with transit. The City of Raleigh and the Town of Cary have also initiated station area planning efforts and have incorporated some mixed-use, pedestrian-friendly policies into their long range plans to promote transit station area development. Each of these jurisdictions has adopted transit oriented development guidelines consistent with TTA's "*Station Area Development Guidelines.*" The Durham Comprehensive Plan defines a target of 25 percent future housing growth and 50 percent of employment growth to occur within the transit-oriented areas they've identified as Compact Neighborhoods. Three reuse/redevelopment projects are proposed in Raleigh and Durham within proposed station areas.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 50%**

The current finance plan for the Regional Rail Project proposes a Section 5309 New Starts share of \$337.3 million (50 percent), \$14.0 million in CMAQ funding (1.9 percent), \$146.7 million (20 percent) in State funds, \$27.9 in right-of-way purchased with State funds (3.7 percent), and \$188.6 million (25 percent of project costs) in local contributions.

## Stability and Reliability of Capital Financing Plan

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

The *Medium-High* rating reflects the availability of committed local funding for the Non-Section 5309 New Starts share of capital costs and TTA's financial capacity to implement the proposed investment.

TTA has faced challenges regarding CSX negotiations, which would change the capital financing plan.

**Agency Financial Condition:** TTA's capital financial condition is healthy, with strong cash and investment reserves. TTA receives funding from dedicated sources including rental car taxes and vehicle registration fees at a rate of \$10 million per year. The agency currently operates a 90-bus system.

**Cost Estimates and Contingencies:** The capital cost estimate for the project has increased significantly as preliminary engineering has progressed and right-of-way needs have been identified. The cost-estimates and contingencies are reasonable for a project in the Preliminary Engineering stage of project development.

**Existing and Committed Funding:** Local capital funding is proposed to be generated from TTA's dedicated 5% tax on rental vehicles (which will also be used to support project operations). This source is stable and reliable, and has been broadened to include property-hauling vehicles of up to 7,000 pounds. While the annual rate of growth in rental vehicle tax revenues has reached nearly 20 percent in recent years. The State of North Carolina is proposed to provide \$174.67 million in capital costs and these funds are committed to the project.

**New and Proposed Sources:** No new capital funding sources are proposed for the Phase I Regional Rail project.

### Stability and Reliability of Operating Finance Plan

**Rating: Medium-High**

The *Medium-High* rating acknowledges the project's dedicated operating revenue stream and the capacity of the funding sources to meet the project's operating and maintenance needs.

**Agency Financial Condition:** In recent years, TTA has experienced a balanced operating plan, a low but increasing farebox recovery rate, and increasing ridership and operating costs. The current overall operating condition of the agency is good. The agency has been averaging a 12.5 percent annual increase in systemwide operating costs. The proposed Phase 1 Regional Rail project by itself represents a 300 percent increase over the agency's existing systemwide operating budget.

**Operating Costs Estimates and Contingencies:** Annual operations and maintenance costs for the completed Phase 1 Regional Rail project are projected at \$9.4 million (\$1997) when full revenue service begins in 2004. These estimates are reasonable, assuming a commuter rail system of the proposed network size and service levels.

**Existing and Committed Funding:** System operations are proposed to be funded with bus and rail fare revenues and with revenues generated from TTA's dedicated vehicle registration fee and rental vehicle tax. Passenger revenues are estimated to cover 20 percent of rail operating costs. The estimated fare revenue stream assumes significant increases in bus ridership.

**New and Proposed Sources:** No new operating revenues are proposed for the project.

### Locally Proposed Financing Plan

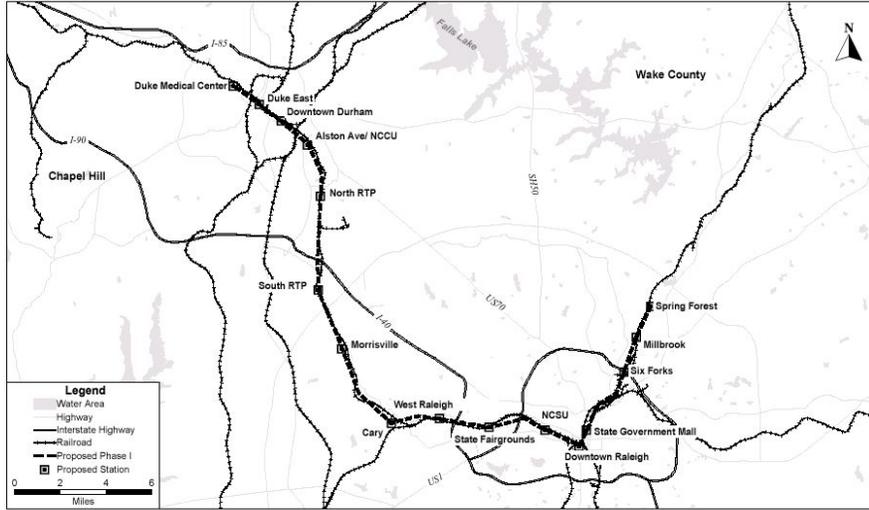
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Starts</b>	\$377.3	\$41.6 million appropriated through FY 2001
<b>Federal: CMAQ Funds</b>	\$14.0	
<b>State:</b>	\$174.6	
<b>Local:</b>	\$188.6	
<b>Total:</b>	<b>\$754.7</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Regional Transit Plan Phase I Regional Rail - Durham to North Raleigh

Durham - Raleigh, North Carolina



# San Diego, California/Mid Coast Corridor

## Mid Coast Corridor

San Diego, California

(November 2000)

### Description

The Metropolitan Transit Development Board (MTDB) is proposing to implement a 10.7 mile, 9 station light rail transit (LRT) line and improve several commuter rail stations in the San Diego Mid Coast Corridor. Proposed investments in the corridor are intended to alleviate congestion on Interstate 5 by extending light rail service north from downtown San Diego to the vicinity of the University of California at San Diego and the growing University City and Carmel Valley areas of the region, and to enhance connectivity between the region's LRT and Coaster commuter rail systems. The MTDB has proposed as Phase 1 of the project a 3.4-mile, 3 station Balboa extension from the Old Town Transit Center to Balboa Avenue. The estimated project cost of Phase 1 is \$116.7 million (escalated), with a Section 5309 New Starts share of \$42.2 million.

### Mid Coast Corridor Summary Description

<b>Proposed Project</b>	3.4 mile, 3 station LRT extension
<b>Total Capital Cost (\$YOE)</b>	\$116.7 million
<b>Section 5309 Share (\$YOE)</b>	\$42.2 million
<b>Annual Operating Cost (\$YOE)</b>	\$2.1 million
<b>Ridership Forecast (2015)</b>	12,100 average weekday boardings 9,900 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Highly Recommended</b>

The overall project rating of *Highly Recommended* is based on the project's strong cost-effectiveness, good transit supportive land use, and strong local financial commitment. The overall project rating applied to this Annual New Starts Report **and reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

### Status

A Draft Environmental Impact Study (EIS) for the Mid Coast Corridor was completed in February 1995. The Mid Coast Locally Preferred Alternative was selected in October 1995 and included in the regional Long Range Plan in 1996. FTA approved the MTDB's request to enter Preliminary Engineering (PE) for the 3.4-mile initial phase of the LRT extension in September 1996 and for improvements to the Sorrento Valley and Nobel Drive Coaster commuter rail stations in May 1997. The Sorrento Valley Coaster station received a Finding of No Significant Impact (FONSI) in September 1999. Work is continuing on a Final EIS for the Balboa Extension. A Record of Decision on the project is anticipated in Spring 2001.

TEA-21 Section 3030(a)(75) authorizes the Mid Coast LRT Corridor for final design and construction. Through FY 2001, Congress has appropriated \$11.33 million in Section 5309 New Start funds to the project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Information reflects both the 3.4 mile initial phase of the Mid Coast LRT. With FTA's permission, the MTDB did not provide criteria on a TSM alternative. N/A indicates that data are not available for a specific measure.

FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design, and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the project's strong cost effectiveness and adequate mobility improvements and transit supportive land use.

## Mobility Improvements

### Rating: Medium

MTDB estimates that the Mid Coast light rail extension will serve 12,100 average weekday boardings and attract 9,900 daily new riders by 2015, and would result in the following annual travel time savings.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	0.8 million	N/A

Based on 1998 data, there are an estimated 258 low-income households within a 1/2 mile radius of the proposed 3 LRT stations, or roughly 8 percent of total households within 1/2 mile of proposed stations.

## Environmental Benefits

### Rating: High

The San Diego region is a "serious" non-attainment area for ozone, and a moderate non-attainment area for carbon monoxide. MTDB estimates the following annual emissions reductions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	decrease of 179 annual tons	N/A
Nitrogen Oxide (NO <sub>x</sub> )	decrease of 23 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 15 annual tons	N/A
Particulate Matter (PM <sub>10</sub> )	decrease of 2 annual tons	N/A
Carbon Dioxide (CO <sub>2</sub> )	decrease of 13,425 annual tons	N/A

MTDB estimates that in 2015, the LRT extension will result in the following savings in regional energy consumption (measured in British Thermal Units - BTU).

<b>Annual Energy Savings</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>BTU (millions)</b>	decrease of 175,016 million annual BTU	N/A

### Operating Efficiencies

**Rating: Medium**

MTDB estimates the following cost per passenger mile for the LRT extension.

<b>Operating Efficiencies</b>	<b>No-Build</b>	<b>TSM</b>	<b>New Start</b>
<b>System Operating Cost per Passenger Mile (2015)</b>	\$0.22	N/A	\$0.22

Values reflect 2015 ridership forecast and 1997 dollars.

### Cost Effectiveness

**Rating: High**

MTDB estimates the following cost effectiveness index for the project.

<b>Cost Effectiveness</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>Incremental Cost per Incremental Passenger</b>	\$3.20	N/A

Values reflect 2015 ridership forecast and 1997 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* land use rating reflects the marginally transit supportive development that currently exists in the Mid Coast corridor, but acknowledges the proactive land use planning efforts of the MTDB and the City of San Diego.

**Existing Conditions:** The corridor runs parallel to Interstate 5 in northwest San Diego. The area on the east side of the corridor is dominated by single-family homes with some low- to medium-density commercial, multi-family, and industrial development. The pedestrian environment is characterized by a gridded street pattern in residential areas. The corridor is bordered on the west side by the recreational facilities of Mission Bay and some commercial development. Over 14,000 jobs and nearly 7,000 housing units (1995 data) are located within ½ mile of proposed LRT and commuter rail station sites. Significant trip generators along the Balboa LRT extension include the mixed-use Mission City and Rio Vista developments. The Nobel Drive Coaster commuter rail station will serve the University City suburban activity center, including University Town Centre - the fourth largest shopping area in the MTDB service area. Significant population and employment growth is forecasted for this area. Parking is generally constrained throughout the corridor. Current zoning along the corridor is moderately supportive of transit.

**Future Plans and Policies:** The City of San Diego has implemented extensive measures to encourage higher-density, mixed use development around rail stations, including the development and adoption of *Transit-Oriented Development Design Guidelines* to address redevelopment strategies, street and circulation systems, bicycle and pedestrian systems, transit stop site location and design, and parking supply. The City also participates in a number of programs which provide incentives for improving pedestrian and transit access. The MTDB has been very active in fostering transit-oriented development and has recently adopted a memorandum of understanding that enhances coordination between the MTDB and other local government agencies, and establishes a process for allocating some MTDB funding to

jurisdictions based on their adoption of transit-friendly design standards. SANDAG, the area's metropolitan planning organization, provides funding to member jurisdictions to plan for and implement growth management and sustainability strategies.

Efforts to change zoning are progressing with the introduction of special parking zones and Urban Village and Transit Area overlay zones throughout the city. Station area plans along the Balboa Extension are under development, and are being coordinated with the North (San Diego) Bay Revitalization program and redevelopment plans for a shopping center at the proposed Claremont Drive station.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 64%**

The financial plan for the 3.4 mile initial phase of Mid Coast LRT and the Nobel Coaster Station includes \$42.2 million (36 percent of total project costs) in Section 5309 New Starts funding, \$519,000 (0.4 percent) in FTA Section 5307 funds, \$56.5 million (48 percent) in dedicated TransNet local sales tax revenues, \$10 million (9 percent) from the State Traffic Congestion Relief Fund, \$7 million (6 percent) from the State Transportation Improvement Program, and \$485,000 (0.4 percent) in State Transit Capital Improvement funds.

## Stability and Reliability of Capital Financing Plan

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

The *Medium-High* rating reflects the sound financial condition of the MTDB and the agency's strong dedicated revenue sources. The MTDB's Mission Valley East LRT Extension remains the agency's priority, and the capacity of local funding sources to implement both it and the Mid Coast Phase I project is the later project's only significant risk at this time.

**Agency Capital Financial Condition:** The MTDB is in good financial condition with an existing capital balance of over \$16 million. Historically, the MTDB has placed minimal reliance on Federal funding assistance for the development of its regional LRT system, relying instead on its stable and reliable funding sources.

**Capital Cost Estimates and Contingencies:** Capital cost estimates for the project have been refined and have decreased over the last year, primarily because the Nobel Drive Coaster station is no longer a portion of this project. These costs are considered reasonable given the project size and alignment.

**Existing and Committed Funding:** All non-New Starts funding for the project is committed. MTDB's dedicated ½ cent TransNet sales tax revenue is considered a stable and reliable source, although the tax sunsets in 2008 and will have to be reauthorized to continue. The San Diego LRT extension program has been structured such that the Mission Valley East LRT project and the Mid-Coast extension are built sequentially and will not compete with each other for New Starts funding. Both projects also depend on local TransNet funding for a portion of their construction costs and the MTDB acknowledges that it must reassess TransNet's revenue projections before the Balboa LRT advances into final design. State gas tax revenues of \$288,000 have also been committed to the project.

**New and Proposed Sources:** Only existing sources are proposed for the construction of Phase I of the Mid Coast corridor.

## Stability and Reliability of Operating Finance Plan

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

The *Medium-High* rating reflects the MTDB's healthy operating condition. Revenues to operate the proposed Balboa LRT Extension are adequate.

**Agency Operating Condition:** In recent years, MTDB has experienced zero operating balances, moderate cost increases, and increasing ridership. MTDB has strong fund balances to draw from to cover unexpected operating costs.

**Operating Cost Estimates and Contingencies:** Annual operating costs for the project are estimated at \$1.9 million in 2015 (YOE dollars). The proposed extension would increase the system-wide operating budget by 1 percent. Operating cost estimates appear reasonable. The MTDB has significant experience operating light rail transit. With the exception of FY 2006 – FY 2009 when operating surpluses are not expected, MTDB's cash flow indicates moderate positive operating balances to address potential cost overruns.

**Existing and Committed Funding:** The proposed start-up date for the Mid-Coast Corridor Phase one is estimated to be in 2008. This coincides with the date that the TransNet dedicated funding source will sunset, and this source is proposed to contribute 8 percent of system operating costs through 2008, at which point the source is terminated. Other sources of operating funding proposed are farebox revenues and CMAQ funds, and only farebox revenues are committed to the project.

**New and Proposed Sources:** All proposed operating revenue sources currently exist.

### Locally Proposed Financing Plan

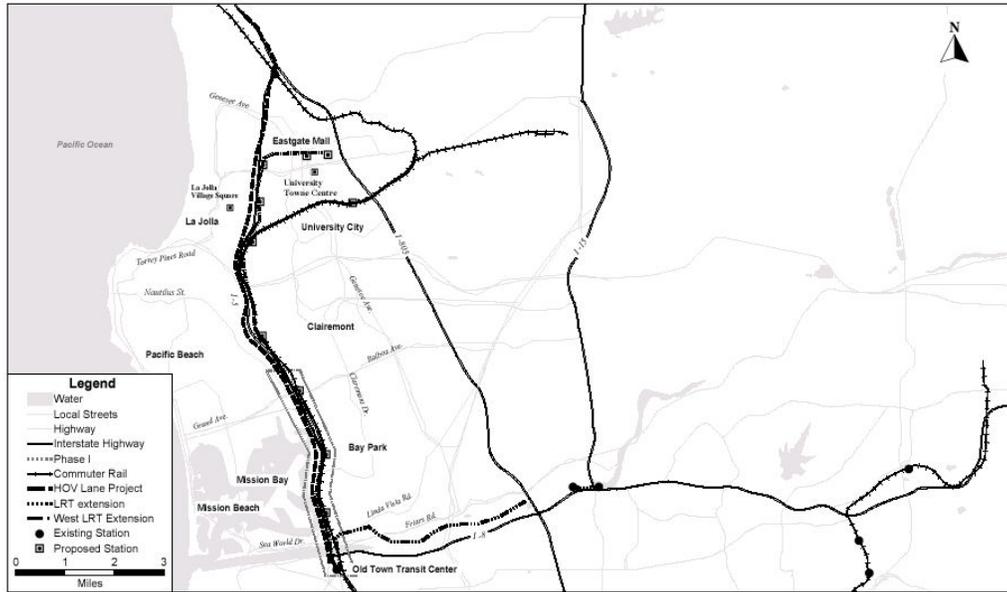
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$42.2	\$11.33 million appropriated through FY 2000
Section 5307 Funds	\$0.5	
<b>State:</b>		
State TIP	\$7.0	
Traffic Congestion Relief Fund	\$10.0	
Transit Capital Improvement	\$0.4	
<b>Local:</b>		
TransNet Tax	\$56.5	
<b>Total:</b>	<b>\$116.7</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

# Mid Coast Corridor

San Diego, California



# San Juan, Puerto Rico/Minillas Extension

## Minillas Extension

San Juan, Puerto Rico

(November 2000)

### Description

The Puerto Rico Department of Transportation and Public Works (PRDTPW), through its Highway and Transportation Authority (PRHTA), is proposing an extension of its heavy rail rapid transit system, known as Tren Urbano Phase I (currently under construction). The proposed investment would extend Tren Urbano Phase I approximately one mile under Ponce de Leon Avenue from its current terminus at Sagrado Corazon to the Minillas area of Santurce. Santurce is home to government offices of the Commonwealth, the Luis A. Ferre Fine Arts Centers, four major hospitals, and is one of the main commercial and residential districts on the Island. Capital costs of the Minillas extension are estimated at \$477.5 million (escalated dollars). The extension is forecast to carry 14,400 average weekday boardings in 2010.

### Minillas Extension Summary Description

<b>Proposed Project</b>	Heavy Rail Line; 1 mile, 2 stations
<b>Total Capital Cost (\$YOE)</b>	\$477.5 million
<b>Section 5309 Share (\$YOE)</b>	\$382.6 million
<b>Annual Operating Cost (\$YOE)</b>	\$2.7 million
<b>Ridership Forecast (2010)</b>	14,425 average weekday boardings 9,100 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium-High</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The *Recommended* rating is based on the project's cost-effectiveness, transit supportive existing land use, and the adequacy of the project's capital and operating plans. The project will be re-evaluated when it is ready to advance to final design, and for next year's Annual Report on New Starts. The overall project rating applies to this Annual New Starts Report and **reflects conditions as of November 2000**. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

### Status

In 1993, the Federal Transit Administration (FTA) selected Tren Urbano as one of the Turnkey Demonstration Projects under the Intermodal Surface Transportation Efficiency Act (ISTEA). A Full Funding Grant Agreement (FFGA) was signed in March 1996 for the Phase I 10.7-mile (17.2-kilometer) section of Tren Urbano. Phase I is currently under construction.

The Minillas Extension has been included in previous planning studies as part of the rail system planned for metropolitan San Juan and has been included in the regional Land Use and Transportation Plan since 1982.

In May 1997, a Memorandum of Understanding (MOU) was signed by FTA and PRHTA stating that the planning process undertaken for the Minillas Extension satisfied the requirements of a Major Investment Study. Further, PRHTA was authorized to proceed with development of a Draft Environmental Impact Statement for the extension of Tren Urbano Phase I to Minillas. In August 1997, a Notice of Intent to prepare a Draft Supplemental Environmental Impact Statement (DSEIS) was published in the Federal Register. The DSEIS was published in July 1998 and identified the subway alignment beneath Ponce de Leon Avenue as the preferred extension alternative. The Supplemental Final EIS to examine in more detail the impacts of the Ponce de Leon extension was completed in September 1999. A Record of Decision was signed in September 2000.

TEA-21 Section 3030(a)(82) authorized the San Juan Tren Urbano Extension to Minillas for final design and construction. Through FY 2001, Congress has not appropriated any funds for the Minillas Extension.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. The following evaluation criteria, unless noted, reflect a comparison of the No-Build and TSM Alternative to the proposed Minillas Extension. The TSM is defined as Phase I, Tren Urbano. The Build Alternative is the Tren Urbano Phase I along with the Minillas Extension. N/A indicates that data are unavailable for a specific measure.

FTA has evaluated this project as being in preliminary engineering. The project will be re-evaluated when it is ready to advance to final design and for next year's *Annual Report on New Starts*.

## Justification

The *Medium-High* project justification rating reflects the strong transit supportive existing land use and the cost-effectiveness of the proposed project.

## Mobility Improvements

### Rating: High

The Minillas Extension is expected to serve 14,400 average weekday boardings and 9,100 daily new riders by 2010. PRHTA estimates that the Minillas Extension will result in the following annual travel time savings.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	33.8 million	0.9 million

Based on 1990 US census data, there are an estimated 4,349 low-income households within a ½ mile radius of the two Minillas Extension stations, this represents 40% of the households within ½ miles of the stations.

## Environmental Benefits

### Rating: Medium

The San Juan area is currently in compliance with all National Ambient Air Quality Standards (NAAQS). PRHTA estimates the following annual emissions reductions for the Tren Urbano I and

Minillas Extension. For the New Start compared to the TSM alternative there is an estimated increase in Carbon Dioxide.

<b>Criteria Pollutant</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>Carbon Monoxide (CO)</b>	decrease of 13,802 annual tons	decrease of 1,436 annual tons
<b>Nitrogen Oxide (NOx)</b>	decrease of 699 annual tons	decrease of 699 annual tons
<b>Hydrocarbons (HC)</b>	decrease of 1,515 annual tons	decrease of 167 annual tons
<b>Particulate Matter (PM<sub>10</sub>)</b>	decrease of 11 annual tons	decrease of 1 annual ton
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	decrease of 48,564 annual tons	increase of 4,538 annual tons

PRHTA estimates the proposed project will result in the following changes in regional energy consumption (measured in British Thermal Units – BTU).

<b>Annual Energy Savings</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>BTU (millions)</b>	decrease of 488,977 million annual BTU	increase of 87,589 million annual BTU

### Operating Efficiencies

**Rating: Low**

PHRTA estimates an increase in system-wide operating cost per passenger mile in the year 2010 compared to the No-Build alternative and equal cost per passenger mile compared to the TSM alternative.

<b>Operating Efficiencies</b>	<b>No-Build</b>	<b>TSM</b>	<b>New Start</b>
<b>System Operating Cost per Passenger Mile (2010)</b>	\$0.25	\$0.29	\$0.29

Values reflect 2010 ridership forecast and 1997 dollars.

### Cost Effectiveness

**Rating: Medium**

PHRTA estimates the following cost effectiveness indices for the Minillas Extension alternative compared to the No-Build and the TSM alternative.

<b>Cost Effectiveness</b>	<b>New Start vs. <i>No-Build</i></b>	<b>New Start vs. <i>TSM</i></b>
<b>Incremental Cost per Incremental Passenger</b>	\$7.10	\$12.60

Values reflect 2010 ridership forecast and 1997 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium-High**

The *Medium-High* land use rating reflects the existing compact development patterns and promotion of mixed use development in the area.

**Existing Conditions:** The proposed extension under Ponce de Leon Avenue is located within the Santurce district, a dense, older, business district within the municipality of San Juan. The Santurce District has very high densities of population and employment and serves as the

traditional national center of government and commerce. Major activity centers served by the Minillas Extension include the Center for Fine Arts, the Minillas Government Center, San Carlos Hospital, and Sagrado Corazon University. Near the proposed transit stations, the Arts Museum of Puerto Rico is under development, which includes a theater, a library, and other public spaces. Other projects underway include the Public Square Complex, proposed to have 1.9 million square feet, an expansion to the Pavia Hospital, and an expansion of the YMCA. Currently, there are 26 persons per acre residing in the corridor and 14 employees per acre.

**Future Plans and Policies:** The Puerto Rico Planning Board's Land Use Plan Objectives and Public Policies promote mixed use developments to support greater accessibility among various land uses. Population in the corridor is anticipated to increase from 100,000 in 1990 to 106,900 in 2010, a 7 percent increase. Employment in the corridor is expected to increase from 108,800 employees in 1990 to 122,000 in 2010, a 12 percent increase. Pedestrian amenities are addressed in the Special Zoning Regulation for Santurce as well as the Governor's Guide for the Regulation of Public Space Infrastructure. The Transportation Plan of Puerto Rico proposes parking management and regulation to adjust parking prices and supply, but the plan does not suggest any specific strategy to reduce parking ratios for development in proposed station areas. Plans suggesting specific responses to the proposed Minillas extension are still in the process of development. Local zoning regulations are determined by the legislature of the Commonwealth. A proposal to devolve that authority to the municipality of San Juan is still under consideration in the legislature.

In April 2000, the Planning Board adopted Resolution 2000-263, which creates two special interagency committees (both with PRHTA membership) to advance the integration of transit and land use. In August 2000, the Governor signed into law a bill designed to advance the goal of transit-oriented development. Senate Bill 2652 amends the PRHTA Enabling Act by making transit-oriented joint development an explicit public purpose of the Authority, authorizing it to assemble and dispose of land for that purpose, and allowing it to participate in the economics of joint development projects.

## Other Factors

**Turnkey Construction:** Tren Urbano Phase I is one of the FTA designated Turnkey Demonstration Projects. Phase I is being constructed and will be operated under a turnkey procurement which has expedited the implementation of the project. The Minillas Extension would also employ turnkey procurement.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 20%**

The financing plan for the Minillas Extension is interrelated with funding for Phase I and the Commonwealth's highway program, and relies upon a combination of bond receipts, tax revenues, and legislative appropriations. PHRTA's financial plan assumes \$382.6 million from Section 5309 New Start funds (80 percent) and local funding sources totaling \$94.9 million (20 percent). The total Federal New Starts share of the entire Tren Urbano Phase I and the proposed Minillas Extension will equal \$681.8 million, or roughly one-third of the total project cost.

## Stability and Reliability of Capital Financing Plan

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

The *Medium-High* rating reflects that the Non-Section 5309 share of funds are committed to the project. PRHTA has more than adequate dedicated funding sources and additional debt capacity available to cover any potential cost increases in the project.

**Agency Capital Financial Condition: The PHRTA is in sound financial condition.**

As the transportation department for Puerto Rico, the PHRTA is responsible for the transportation system throughout the Commonwealth and receives revenue from both a dedicated fuels tax and the toll road system it administers. Because of extremely high levels of traffic congestion, toll road revenues have steadily increased and are projected to increase as more roads are constructed.

The PRHTA was recently approved for a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan commitment of \$300 million for the construction of Phase I of the Tren Urbano system. This loan enables PHRTA to reduce the level of bonds issued for the project and thus reduce the overall debt service payments for the bonds. This enables the use of additional local financial resources to secure bonds to construct the Minillas Extension Phase IA.

**Capital Cost Estimates and Contingencies:** The capital cost estimates for the Minillas Extension Phase IA, based upon 30 percent preliminary engineering, are consistent with the capital costs incurred for the Phase I of the Tren Urbano System, when compared by cost per square foot of construction. However, the Minillas Extension will be constructed mostly through a tunnel, so all site condition risks are not currently known. The assumed growth of pledged revenues is very conservative, with growth rates much lower than historical experience.

**Existing and Committed Funding:** The proposed Non-Section 5309 New Starts share of project costs is \$94.9 million, or 20 percent of the total capital costs. Local funding will be generated from bond issuance. Funds to repay the bonds are committed to the project and are from the following revenue sources: a \$0.16 per gallon gasoline tax; gross receipts from an annual per motor vehicle license fee, of which \$15 is dedicated to PRHTA; all existing toll facility revenues; and investment earnings on deposits resulting from the issuance of bonds.

**New and Proposed Sources:** No specific new funding sources are proposed. However, the Secretary of Transportation has the authority to focus all available capital financial resources to the Tren Urbano Minillas Extension and can generate additional revenues, if necessary, by increasing tolls on existing toll roads.

## Stability and Reliability of Operating Finance Plan

### Rating: Medium

The *Medium* rating reflects the operating condition of the PHRTA and the dedication of funds for the on-going operations and maintenance of the Tren Urbano system. The rating also reflects the lack of specific operating revenue projections and lack of historical basis to project costs because the agency has not operated a heavy rail system.

**Agency Operating Condition:** The PHRTA receives revenues from toll roads and dedicated fuels taxes. The Tren Urbano System, when constructed, is anticipated to carry heavy daily passenger loads and may provide an operating revenue surplus. However, PRHTA's projected cash balances would not cover one month of operating balances in the early years of the financial plan. Furthermore, operating revenues are not specifically projected within the plan for both Tren Urbano projects.

**Operating Cost Estimates and Contingencies:** The first five years of Tren Urbano's operating and maintenance costs are included as part of the project's Design-Build contract. The operating cost for the Phase IA Minillas Extension was estimated by adding the incremental operating cost of one mile and two stations to the costs of operating the 10.7-mile Phase I operating and maintenance cost bid.

**Existing and Committed Funding:** Funding for operating and maintenance are committed to the project as part of the Design-Build contract. Long-term bonds may be issued to cover any other operating and maintenance costs.

**New and Proposed Sources:** No new revenue sources are proposed to fund project operation.

## Locally Proposed Financing Plan

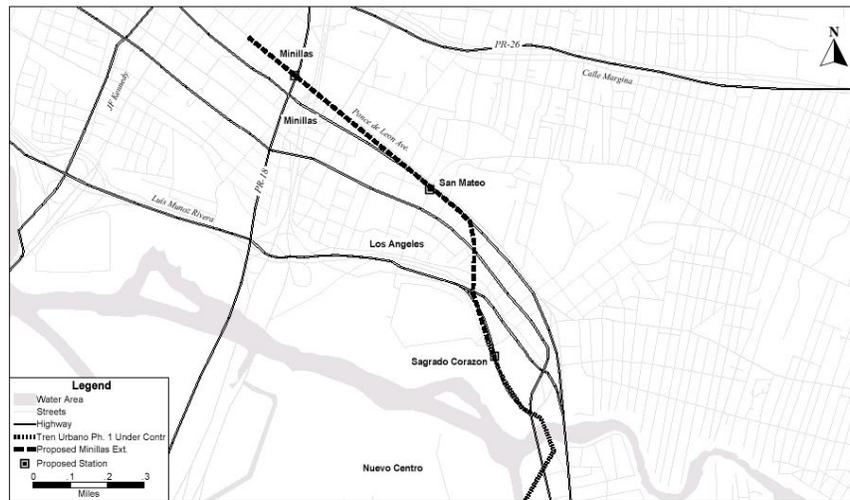
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Start</b>	\$382.6	\$0.0 million appropriated through FY 2001 for the Minillas Extension
<b>Local: PHRTA Funding</b>	\$94.9	
<b>Total:</b>	<b>\$477.5</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### Minillas Extension

San Juan, Puerto Rico



Federal Transit Administration, 2001

# Seattle-to-Everett Commuter Rail

## Everett-to-Seattle Commuter Rail

**Seattle, Washington**

(November 2000)

### Description

The Central Puget Sound Regional Transit Authority (Sound Transit) is proposing to implement peak-hour commuter rail service in the 35-mile corridor linking Everett and Seattle, Washington. The service would be part of the 82-mile *Sounder* commuter rail corridor serving 14 stations between Lakewood and Everett, Washington. The Everett-Seattle commuter rail segment would include three multimodal stations that provide connections to a variety of transportation services, including local and express bus service, the Washington State ferry system (connecting cities on the east and west sides of Puget Sound), the proposed *Link* light rail system, and Amtrak. Twelve trains per day will serve up to six stations, and by 2020 will carry 5,300 boardings.

Sound Transit estimates total project costs for the Everett-Seattle segment of the *Sounder* system at \$104 million in escalated dollars. Sound Transit is proposing a 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 (TEA-21 Section 5309(e)(8)(A)).*

### Everett-to-Seattle Summary Description

<b>Proposed Project</b>	Commuter Rail; 35 miles, 7 stations
<b>Total Capital Cost (\$YOE)</b>	\$104.0 million
<b>Section 5309 Share (\$YOE)</b>	\$24.9 million
<b>Annual Operating Cost (\$YOE)</b>	N/A
<b>Ridership Forecast</b>	5,300 average weekday boardings

### Status

The Draft Environmental Impact Statement (DEIS) for this project was issued in June 1999. Following extensive public outreach and ongoing coordination with tribes and Federal, state, and local agencies, the Preferred Alternative was selected. The final EIS was published in November 1999 and the Record of Decision was signed in February 2000. Sound Transit will be seeking FTA authorization to enter Final Design for this project in 2000.

TEA-21 Section 3030(a)(85) authorizes the "Sound Move Corridor" for final design and construction. To date, Congress has appropriated \$59.53 million to the 82-mile *Sounder* commuter rail system.

## Locally Proposed Financing Plan

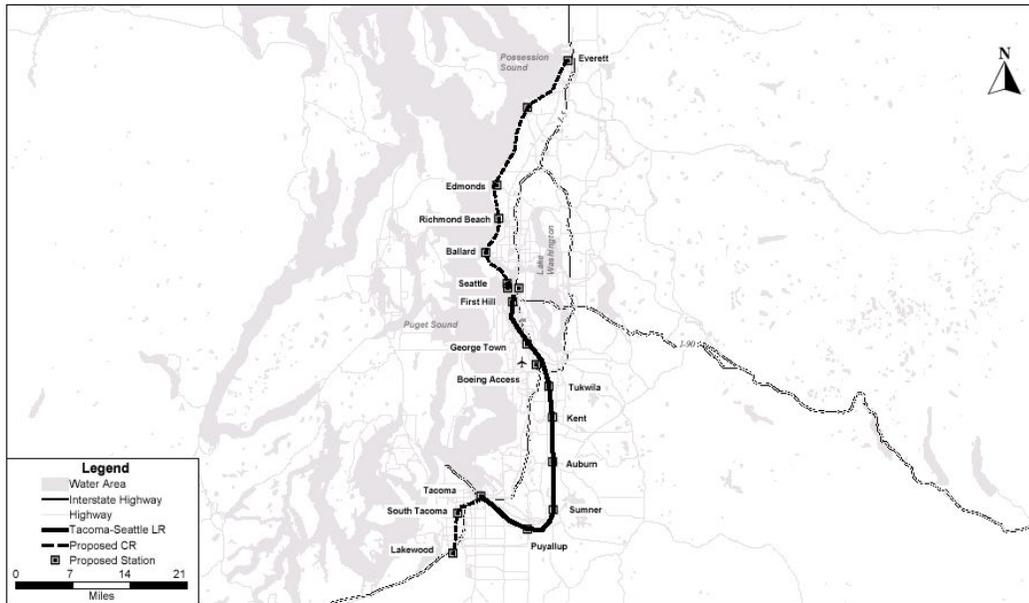
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Start</b>	\$24.9	\$59.53 million appropriated for the 82-mile <i>Sounder</i> system through FY 2001
<b>Local:</b>	\$79.1	
<b>Total:</b>	<b>\$104.0</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### Everett-to-Seattle Commuter Rail

Tacoma - Seattle, Washington



# Stamford, Connecticut/Urban Transitway and Intermodal Transportation Center Improvements

## Stamford Urban Transitway and Intermodal Transportation Center Improvements

**Stamford, Connecticut**

(November 2000)

### Description

The City of Stamford, in coordination with the Connecticut Department of Transportation (ConnDOT), and the Southwestern Regional Planning Agency, is proposing to design and construct a one-mile Urban Transitway. This will consist of a bus lane, shared with high occupancy vehicles, that will provide a direct link from Interstate 95 to the Stamford Intermodal Transportation Center (SITC). The Urban Transitway project will include changes to the bus routes serving the SITC, improved pedestrian access, and the implementation of intelligent transportation systems (ITS). The SITC serves as a major transfer point for local bus and employer shuttle service and provides access to existing Amtrak and Metro-North rail service in the Northeast corridor. Currently, Metro-North operates 190 daily trains that stop at the SITC and approximately 2,500 riders use the service in the peak hours to commute from Stamford to New York City, while 1,500 riders travel inbound to employment opportunities in Stamford. To accommodate additional commuter capacity at the SITC, the City is expanding rail platform capacity and constructing a 1,200-space parking facility.

The total capital cost for the proposed Urban Transitway is estimated at \$24 million (year 2000 dollars), with a proposed Section 5309 new starts share of \$18.0 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 (TEA-21 Section 5309(e)(8)(A)).* However, the City of Stamford and ConnDOT wish to retain the eligibility of the overall SITC project to apply for additional federal funds in the future and have, therefore, submitted New Starts criteria for FTA evaluation and rating.

### Stamford Urban Transitway Summary Description

<b>Proposed Project</b>	One-Mile Access Road (including bus and HOV lanes) and Parking Facility
<b>Total Capital Cost (\$2000)</b>	\$24.0 million (\$44.0 million including the parking facility)
<b>Section 5309 Share (\$2000)</b>	\$18.0 million
<b>Annual Operating Cost</b>	N/A
<b>Ridership Forecast (2005)</b>	17,200 average weekday boardings 1,200 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

The overall project rating of *Recommended* is based on the project's strong transit supportive existing land use plans and policies, the level of anticipated travel time savings, and the level of committed local funding to build the Urban Transitway. The overall project rating applies to this *Annual Report on New Starts* and reflects conditions as of November 2000. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

## Status

The Stamford Urban Transitway is the preferred alternative resulting from a series of studies that evaluated alternatives to improve accessibility to the Stamford Intermodal Transportation Center. FTA approved the City of Stamford's request to initiate preliminary engineering on the Urban Transitway project in February 2000. The city plans to complete the environmental review during calendar year 2001.

Section 3030(c)(1)(A)(ix) of TEA-21 authorizes the Stamford "Fixed Guideway Connector" for final design and construction. Through FY 2001, Congress has appropriated \$9.89 million in Section 5309 New Starts funds to the project.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. It should be noted that the criteria reflect both the proposed investment in the Urban Transitway and the 1,200-space parking facility at the SITC. FTA has evaluated this project as being in preliminary engineering. The project will be reevaluated when it is ready to advance to final design and for next year's *Annual Report on New Starts*.

## Justification

The *Medium* project justification rating reflects the project's strong transit supportive land use and mobility improvements, but below average cost effectiveness.

## Mobility Improvements

### Rating: High

The City of Stamford estimates that improvements to the SITC will result in the following annual travel time savings:

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Annual Travel Time Savings</b>	decrease of 0.4 million hours	increase of 0.1 million hours

Based on 1990 census data, there are an estimated 139 low-income households within a ½ mile radius of the proposed boarding points. This represents approximately 3 percent of the total number of households within ½ mile radius of the proposed stations.

## Environmental Benefits

### Rating: Medium

The City of Stamford is currently classified as an "attainment" area for both ozone and carbon monoxide. The City of Stamford estimates that the project would result in the following annual changes in emissions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Carbon Monoxide (CO)	decrease of 49 annual tons	decrease of 41 annual tons
Nitrogen Oxide (NOx)	decrease of 7 annual tons	decrease of 7 annual tons
Hydrocarbons (HC)	decrease of 6 annual tons	decrease of 6 annual tons
Particulate Matter (PM <sub>10</sub> )	decrease of 8 annual tons	decrease of 8 annual tons
Carbon Dioxide (CO <sub>2</sub> )	decrease of 8,929 annual tons	decrease of 8,929 annual tons

The City of Stamford estimates that in the year 2005, the project would result in the following savings in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
BTU	decrease of 116,724 million annual BTU	decrease of 116,724 million annual BTU

### Operating Efficiencies

**Rating: Not Rated**

Information in support of FTA's measure for operating efficiencies is not available.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile	N/A	N/A	N/A

### Cost Effectiveness

**Rating: Low-Medium**

The City of Stamford estimates the following cost-effectiveness indices for the Urban Transitway and new SITC parking facility:

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Incremental Cost per Incremental Passenger	\$11.40	\$13.00

Values reflect 2005 ridership forecast and 1999 dollars.

### Transit-Supportive Existing Land Use and Future Patterns

**Rating: Medium**

The *Medium* rating reflects the moderate to high population and employment densities in the project corridor and the demonstrated integration of SITC improvements into land use planning and redevelopment of the surrounding area.

**Existing Conditions:** The Stamford Urban Transitway project corridor includes the area surrounding the SITC and the Stamford central business district (CBD). The existing land uses in the study area are a mixture of industrial uses, residential neighborhoods, and some commercial development. In 1990, the population and employment in the corridor was estimated at 12,800 (13/acre) and 6,950 (7/acre), respectively. The site is located near the Stamford CBD and will serve as the centerpiece for the new development and redevelopment of the area. Within the corridor, the population is expected to increase 37 percent and employment is expected to increase by 142 percent by 2020.

**Future Plans and Policies:** The Stamford Urban Transitway project is integrated with several strategies underway in Stamford to encourage the redevelopment of surrounding neighborhoods. These strategies are integrated with “1984 Master Plan for Amendment for the City of Stamford” and include a special “Transportation Center Design District” zoning designation in the City of Stamford’s zoning regulations. Additionally, the “Stamford Harbor Area Development Plan,” the state Enterprise Zone, and local community planning efforts have been coordinated to encourage development activity, improve pedestrian accessibility, and improve connectivity between the study area, the CBD, and the harbor area. The City is using other development programs (e.g., Brownfields) to augment planned development and redevelopment efforts adjacent to the project corridor. Additionally, there is strong business and neighborhood support for the Transitway project and associated improvements.

## Local Financial Commitment

### **Proposed Non-Section 5309 Share of Total Project Costs: 25%**

Total project cost for the Urban Transitway is \$24.0 million (year 2000 dollars). The estimated cost for the Urban Transitway and the SITC improvements is \$44.0 million. The City of Stamford proposes a Section 5309 New Starts share of \$18.0 million (75 percent of total Urban Transitway costs); \$5.8 million in City of Stamford bonds (24 percent); and \$0.2 million in EPA Brownfields Pilot Program funds (1 percent).

## Stability and Reliability of Capital Financing Plan

### **Rating: Medium**

The *Medium* rating reflects the commitment of proposed non-New Starts funding for the Urban Transitway project.

**Agency Financial Condition:** The City of Stamford and the State of Connecticut are funding partners for a planned \$150 million in improvements for the SITC and have demonstrated the financial capacity to undertake this portion of the project as part of an overall program.

**Cost Estimates and Contingencies:** The estimated cost of the project is \$23.96 million (year 2000 dollars). This estimate was developed during the Alternatives Analysis phase of project development and will be updated during preliminary engineering. No contingency funding was identified as part of the capital costs and as the project progresses into preliminary engineering, the contingency costs will be updated and identified.

**Existing and Committed Funding:** The funding for the non-federal share of the project's capital costs will be provided primarily from the City of Stamford bond funding. Of the \$5.8 million in City of Stamford bond funding proposed for the project, \$1.25 million has been appropriated from the City and the remaining \$4.5 million is already programmed in the FY 2001 and FY 2002 City of Stamford capital budgets. An additional \$0.2 million of funding is proposed from the EPA Brownfields Pilot Program.

**New and Proposed Sources:** The City of Stamford is considering using tax increment financing to leverage additional funds for the project. The City of Stamford is also developing a plan for a sponsorship program for private sector support of the project's incremental costs. Additionally, the City of Stamford is considering using CMAQ funding for additional elements of the project, which would be defined during preliminary engineering.

## Stability and Reliability of Operating Finance Plan

### **Rating: Not Rated**

According to the City of Stamford, current local bus routes will be modified to utilize the Urban Transitway without a significant change in bus service operations. Since the cost of the service will not be affected, no operating cost information was provided, and FTA did not rate the project on this measure. Prior to the completion of the preliminary engineering phase of project development, an Operating Finance Plan will be developed for the project and associated improvements.

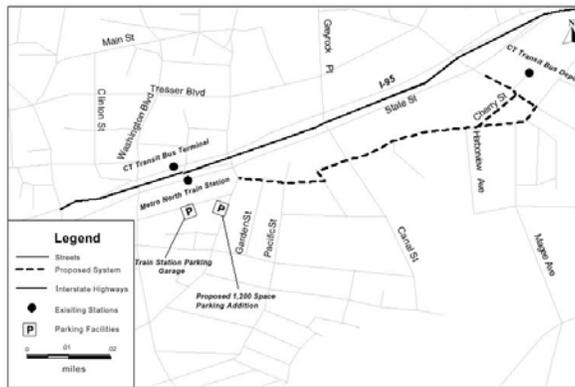
### Locally Proposed Financing Plan

(Reported in \$2000)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$18.0	\$9.89 million appropriated through FY 2001
EPA Brownfields Pilot Program	\$0.2	
<b>Local:</b>		
City of Stamford Bonds	\$5.8	
<b>Total:</b>	<b>\$24.0</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

### Urban Transitway and Intermodal Transportation Center Improvements Stamford, Connecticut



# Tacoma, Washington/Lakewood-to-Tacoma Commuter Rail

## Lakewood-to-Tacoma Commuter Rail

### Tacoma, Washington

(November 2000)

#### Description

The Central Puget Sound Regional Transit Authority (Sound Transit) is proposing to implement peak-hour commuter rail service for an eight-mile segment linking Tacoma and Lakewood, Washington. The service will be part of the overall 82-mile *Sounder* commuter rail corridor serving 14 stations from Lakewood, through the downtowns of Tacoma and Seattle, and terminating in Everett, Washington. Sound Transit proposes to run eighteen trains per day (including reverse commute service) to the cities along the alignment, including Lakewood, South Tacoma, and Tacoma, connecting to stations in Puyallup, Sumner, Auburn, Kent, Tukwila, and Seattle. Two trains will run from Lakewood to Everett.

The total budget for this segment, including vehicle purchase, track and signal improvements, and station construction, is \$86.0 million in escalated dollars. Sound Transit is proposing a 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 (TEA-21 Section 5309(e)(8)(A)).*

#### Lakewood-to-Tacoma Summary Description

<b>Proposed Project</b>	Commuter Rail; 8 miles, 3 stations
<b>Total Capital Cost (\$YOE)</b>	\$86.0 million
<b>Section 5309 Share</b>	\$24.9 million
<b>Annual Operating Cost</b>	N/A
<b>Ridership Forecast</b>	2,800 average weekday boardings

#### Status

Lakewood-to-Tacoma commuter rail service is scheduled to begin operations in 2001. The Final EIS was published in May 2000 and the Record of Decision was signed in June 2000. Sound Transit will be seeking Final Design authorization for this project in 2001.

TEA-21 Section 3030(a)(85) authorizes the "Sound Move Corridor" for final design and construction. To date, Congress has appropriated \$59.53 million to the 82-mile *Sounder* commuter rail system.

## Locally Proposed Financing Plan

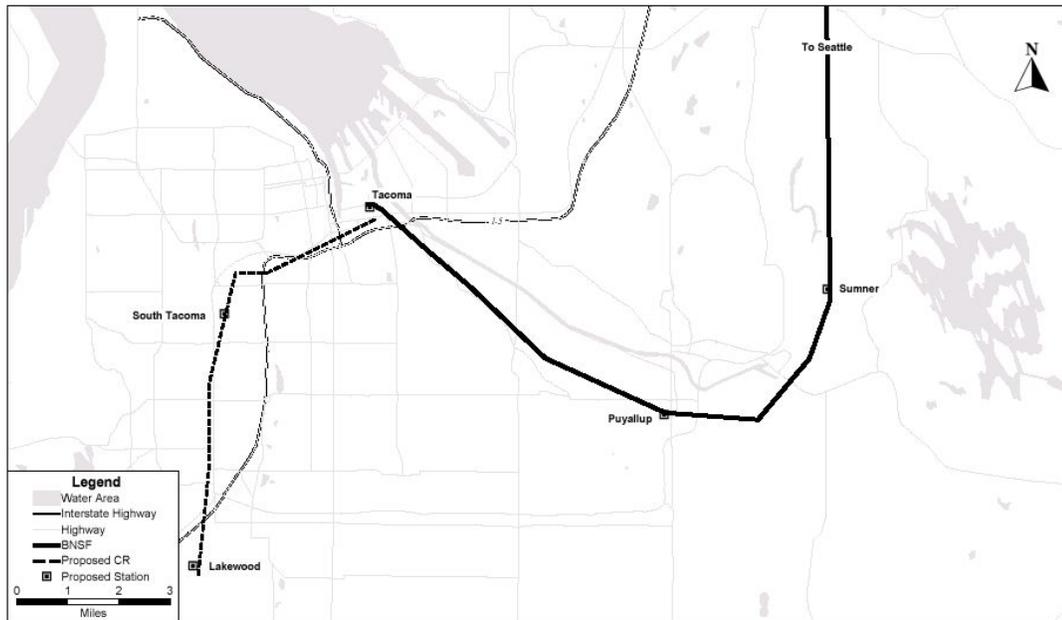
(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal: Section 5309 New Start</b>	\$24.9	\$59.53 million appropriated to the 82-mile <i>Sounder</i> commuter rail system through FY 2001
<b>Local:</b>	\$61.1	
<b>Total:</b>	<b>\$86.0</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

## Lakewood-to-Tacoma Commuter Rail

Tacoma, Washington



# Washington County, Oregon/Wilsonville-Beaverton Commuter Rail

## Wilsonville-Beaverton Commuter Rail

Washington County, Oregon

(November 2000)

### Description

Washington County, Oregon, in conjunction with the Oregon Department of Transportation (ODOT), Tri-County Metropolitan District of Oregon (Tri-Met), Portland Metro (Metro), Clackamas County, and the cities of Wilsonville, Tualatin, Tigard and Beaverton, are proposing to design and construct a 15-mile commuter rail line in the Wilsonville-Beaverton Corridor. The proposed project would operate along portions of existing Union-Pacific railroad tracks and connect to Metro's existing Westside light rail system at the Beaverton Transit Center (BTC). As part of the proposed project, approximately 2,000 feet of new railroad trackage will be constructed at the northern terminus of the alignment near the BTC. The proposed project also includes the purchase of eight passenger rail cars, the construction of vehicle maintenance and dispatch facilities and multiple capital improvements. The proposed commuter rail project is estimated to have 4,650 average weekday boardings.

The Wilsonville-Beaverton Corridor extends from the City of Wilsonville northwest to Beaverton, Oregon. The northern portion of the corridor is owned by the Union-Pacific railroad, while the southern portion is owned by ODOT. The corridor will connect the two cities with several outlying jurisdictions. Five commuter rail stations are planned along the alignment. All proposed stations, with the exception the BTC station, will have park-and-ride facilities. Total capital cost for the commuter rail project is estimated at \$82.8 million (escalated dollars), with a proposed Section 5309 new starts share of \$24.9 million. *Since the proposed New Starts share is less than \$25 million, the project is exempt from evaluation under the New Starts criteria (see 49 USC Section 5309(e)(8)(A)).*

### Wilsonville-Beaverton Summary Description

<b>Proposed Project</b>	Commuter Rail 15.3 miles, 5 stations
<b>Total Capital Cost (\$YOE)</b>	\$82.8 million
<b>Section 5309 Share (\$YOE)</b>	\$24.9 million
<b>Annual Operating Cost (\$1999)</b>	\$3.87 million
<b>Ridership Forecast (2020)</b>	4,650 average weekday boardings

### Status

In May 1997, Phase I of the *Washington County Interurban Rail Feasibility Study* was completed. The study determined that there were no technical, regulatory or legal issues that would prevent the implementation of a commuter rail line in the Wilsonville-Beaverton Corridor. Phase I resulted in the Oregon Legislature's approval to fund the initiation of a Phase II study to determine if the use of existing Union-Pacific freight railroad trackage offered a transportation solution significant enough to warrant the required capital and operating cost investments. Phase II was commissioned by interested jurisdictions located in the eastern portion of Washington County and was completed in April 1999. In June 2000, the Washington County Board of Commissioners

unanimously adopted commuter rail as the locally preferred alternative (LPA) for the corridor. The affected local governments also passed resolutions adopting the LPA. The project is also supported by the Joint Policy Advisory Committee on Transportation (JPACT) as one of its regional transportation priorities for seeking Federal funding in 2000. FTA approved Washington County's request to enter preliminary engineering on the project in July 2000. In July 2000, FTA authorized publication of the Draft EA. The project was adopted into the Long Range Plan in June 1999. In August 2000, the Metro Council adopted the financially constrained Regional Transportation Plan, which includes the Wilsonville-Beaverton commuter rail project.

The Wilsonville-Beaverton commuter rail project is not authorized in TEA-21. Through FY 2001, Congress has appropriated \$1.47 million in Section 5309 new starts funds to the project.

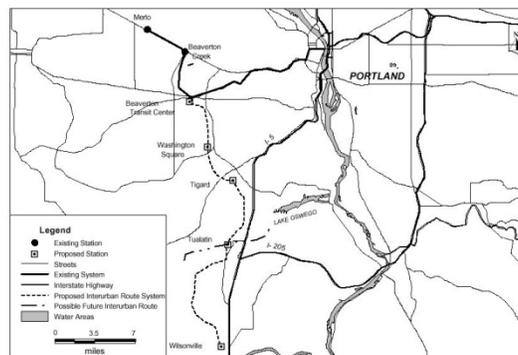
### Locally Proposed Financing Plan

(Reported in \$YOE)

Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	\$24.9	\$1.47 million appropriated through FY 2001
<b>State:</b>		
Lottery, STP, or CMAQ	\$32.8	
<b>Local:</b>		
Counties and Cities or Regional STP Funds	\$25.0	
<b>Total:</b>	<b>\$82.8</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

**Wilsonville-Beaverton Commuter Rail**  
Washington County, Oregon



# Washington, D.C. Metropolitan Area/Dulles Corridor Bus Rapid Transit

## Dulles Corridor Bus Rapid Transit

### Washington, D.C. Metropolitan Area

(November 2000)

#### Description

The Virginia Department of Rail and Public Transportation (VDRPT) proposes to construct, under the technical guidance of the Washington Metropolitan Area Transit Authority (WMATA), an approximately 23 mile bus rapid transit (BRT) system as an interim step to rail in the Dulles Corridor located in Northern Virginia. The Dulles Corridor, a rapidly growing suburban area west of Washington, DC, contains major regional employment and residential centers, including Tysons Corner, Reston Town Center, Dulles International Airport, the Town of Herndon, the proposed Smithsonian Air and Space Museum Annex, and new commercial and residential development in eastern Loudoun County.

The BRT project is proposed as a minimum operating segment (MOS) of the Dulles Corridor Rapid Transit project, which will phase implementation of rapid transit technologies throughout the corridor. BRT service will be provided between the Metrorail Orange Line and the Western Regional Park and Ride Lot located at Route 606 in Loudoun County. The proposed BRT system will include construction of at least three transit stations convertible to rail stations located in the median of the Dulles Airport Access Road (DAAR), stations at major park and ride lots within the corridor and Tysons Corner, and interface with Metrorail at Falls Church. BRT service is scheduled for operation in 2003 at an estimated capital cost of \$287.3 million (escalated). Average weekday boardings for the BRT are estimated to be 23,000 in 2020 with 13,600 daily new riders. (**Note:** The BRT analysis reflects year 2020 conditions although plans call for rail to replace BRT in 2010.)

#### Dulles Corridor Bus Rapid Transit Summary Description

<b>Proposed Project</b>	Bus Rapid Transit; 23 miles, 3 new stations convertible to rail
<b>Total Capital Cost (\$YOE)</b>	\$287.3 million
<b>Section 5309 Share (\$YOE)</b>	* See footnote
<b>Annual Operating Cost (\$YOE)</b>	\$38.0 million
<b>Ridership Forecast (2020)</b>	23,000 average weekday boardings 13,600 daily new riders
<b>FY 2002 Financial Rating:</b>	<b>Medium</b>
<b>FY 2002 Project Justification Rating:</b>	<b>Medium</b>
<b>FY 2002 Overall Project Rating:</b>	<b>Recommended</b>

\* The FY 2001 Transportation and Related Agencies Appropriations Act states that \$217.8 million in commitment authority be provided for the Dulles Corridor Bus Rapid Transit project. VDRPT has proposed \$224.3 million in Section 5309 New Starts fund for the Dulles Corridor Bus Rapid Transit project.

The *Recommended* rating is based on the adequacy of the BRT system's justification criteria and capital finance plan for Preliminary Engineering. The overall project rating applies to this *Annual New Starts Report* and reflects conditions as of November 2000. Project evaluation is an ongoing process. As new starts projects proceed through development, the estimates of costs, benefits, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, and refined financing plans.**

## Status

The report of a Major Investment Study (MIS) for the corridor was issued in 1996, recommending construction of a Metro-like rail system. The Dulles Corridor Task Force issued the Dulles Corridor MIS Refinement in July 1999, reaffirming development of a rail system but with interim development of a BRT system. The phased BRT/rail system was adopted by the National Capital Region Transportation Planning Board and included in the metropolitan Washington region Constrained Long Range Plan in October 1999. In March 2000, FTA approved initiation of Preliminary Engineering (PE) for the Dulles Corridor Bus Rapid Transit (BRT) Project. This PE approval is applicable only to the BRT project, although it allows for the necessary engineering efforts to support the environmental review process with consideration of other modal alternatives, including rail alternatives. WMATA is the grant applicant for the project, at the request of VDRPT, and is providing technical oversight and control of the PE work on the proposed Dulles Corridor BRT project.

TEA-21 Section 3030(a)(93) authorizes the "Washington, DC – Dulles Corridor Extension" for final design and construction. Through FY 2001, Congress has appropriated \$90.93 million for this project in Section 5309 New Starts funds.

## Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria* for the 23 mile BRT system. N/A indicates that data are not available for a specific measure.

FTA has evaluated this BRT project as entering preliminary engineering. The project will be re-evaluated when it is ready to advance to final design and for next year's *Annual Report on New Starts*; subsequent rail phases of the Dulles Corridor Rapid Transit Project will be evaluated when ready to initiate preliminary engineering.

## Justification

The *Medium* project justification rating reflects the adequacy of the project's environmental benefits, mobility improvements, and cost effectiveness at this early stage of preliminary engineering.

## Mobility Improvements

### Rating: Medium

VDRPT and WMATA estimate that the Dulles Corridor BRT will have 23,000 average weekday boardings and attract 13,600 daily new riders by 2020, and would result in the following annual travel time savings.

Mobility Improvements	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
Annual Travel Time Savings (Hours)	2.1 million	1.9 million

Based on 1990 Census data, there are an estimated 237 low-income households within a ½ mile radius of the proposed 3 new stations, approximately 4 percent of total households within ½ mile radius of the proposed stations.

## Environmental Benefits

### Rating: High

The Washington, DC Metropolitan area is a “serious” non-attainment area for ozone, and a moderate non-attainment area for carbon monoxide. VDRPT and WMATA estimate that in 2020, the Dulles Corridor BRT would result in the following annual emissions reductions.

Criteria Pollutant	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Carbon Monoxide (CO)</b>	decrease of 2,362 annual tons	decrease of 2,387 annual tons
<b>Nitrogen Oxide (NOx)</b>	decrease of 184 annual tons	decrease of 207 annual tons
<b>Volatile Organic Compounds (VOC)</b>	decrease of 220 annual tons	decrease of 225 annual tons
<b>Particulate Matter (PM<sub>10</sub>)</b>	decrease of 321 annual tons	decrease of 328 annual tons
<b>Carbon Dioxide (CO<sub>2</sub>)</b>	decrease of 1,712 annual tons	decrease of 10,890 annual tons

VDRPT and WMATA estimate that in 2020, the Dulles Corridor BRT would result in the following savings in regional energy consumption (measured in British Thermal Units – BTU).

Annual Energy Savings	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>BTU (millions)</b>	decrease of 59,723 million annual BTU	decrease of 68,820 million annual BTU

## Operating Efficiencies

### Rating: Medium

VDRPT and WMATA estimate the following system wide operating costs per passenger mile in 2020 for the Dulles Corridor BRT, No-Build, and TSM alternatives.

Operating Efficiencies	No-Build	TSM	New Start
<b>System Operating Cost per Passenger Mile (2020)</b>	\$0.31	\$0.31	\$0.30

Values reflect 2020 ridership forecast and 1999 dollars.

## Cost Effectiveness

### Rating: Low-Medium

VDRPT and WMATA estimate the following cost effectiveness indices for the new start as compared to the no-build and TSM alternatives.

Cost Effectiveness	New Start vs. <i>No-Build</i>	New Start vs. <i>TSM</i>
<b>Incremental Cost per Incremental Passenger</b>	\$17.60	\$20.20

## Transit-Supportive Existing Land Use and Future Patterns

### **Rating: Low-Medium**

The *Low-Medium* land use rating reflects the moderate to low density of existing land uses in the Dulles Corridor and the need for additional transit supportive land use policies.

**Existing Conditions:** The proposed Dulles Corridor Bus Rapid Transit (BRT) will serve several suburban major activity centers including Tysons Corner (18 million sq.ft. of office space and two regional malls), Reston Town Center (a large suburban office park/shopping area surrounded by a large planned residential development), the town of Herndon, Dulles International Airport, the proposed Smithsonian Air and Space Museum Annex, and the rapidly growing suburban communities in Loudoun County. However, much of the existing development is auto-oriented and the proposed BRT system will utilize the center of the Dulles Airport Access Road (an eight lane freeway), which will make pedestrian access to/from the surrounding land uses difficult. With the exception of Dulles Airport, free parking is available throughout the numerous office parks and shopping centers along the corridor. Year 2000 totals for all busway station areas (one-half mile radius) are estimated at roughly 58,000 jobs and 12,800 residents. If the proposed rail line is built, additional stations (mostly in Tysons Corner) will bring the totals to 103,200 jobs and 24,500 residents.

**Future Plans and Policies:** The population in the corridor is expected to increase from 180,700 in 1990 to 430,200 in 2020, an increase of 138 percent. Employment in the corridor is anticipated to increase from 145,000 in 1990 to 324,000 in 2020, an increase of 123 percent. Generally, high population growth is forecast for the Washington, DC metropolitan area (44 percent between 1995 and 2020) and the study area is expected to capture a significant share of that growth. Fairfax and Loudoun Counties have adopted policies in their comprehensive plans that support moderate increases in density in transit station areas. Fairfax County is examining whether additional changes to its comprehensive plan are necessary to promote transit-supportive land uses and improve pedestrian connections, and the Virginia Department of Rail and Public Transportation has hired a full-time planner to evaluate and make recommendations on land use issues around specific stations. Additionally, WMATA has a strong track record of encouraging joint development at Metrorail Stations. It is anticipated that as the project progresses through preliminary engineering and after station locations are identified, more specific transit supportive plans and policies will be developed and implemented by individual jurisdictions in the Dulles Corridor.

### Other Factors

**FTA BRT Demonstration Program:** In August 1999, the Dulles Corridor BRT project was selected as one of FTA's ten Bus Rapid Transit (BRT) Demonstration Projects. FTA's BRT Demonstration Program is intended to foster the development of BRT systems in the United States, address BRT planning, implementation and operational issues, and evaluate system performance in a wide range of operating environments.

### Local Financial Commitment

#### **Proposed Non-Section 5309 New Starts Share of Total Project Costs:**

\* The FY 2001 Transportation and Related Agencies Appropriations Act provides that \$217.8 million in commitment authority be provided for the Dulles Corridor Bus Rapid Transit project. VDRPT has proposed up to \$224.3 million for the Dulles Corridor Bus Rapid Transit project.

### Stability and Reliability of Capital Financing Plan

#### **Rating: Medium**

The *Medium* capital finance plan rating reflects the financial conditions of the Commonwealth of Virginia (Commonwealth) and WMATA, and the reasonableness of the capital financing plan at this stage of the BRT project. This rating reflects evaluation of only the BRT system.

**Agency Capital Financial Condition:** The Commonwealth and WMATA are in sound financial condition. The Commonwealth of Virginia will finance the capital development of the project through its Priority Transportation Fund and Transit Capital Fund; locally, Fairfax and Loudoun Counties will finance the project with Northern Virginia Transportation District Bonds. The Commonwealth, WMATA and Fairfax County hold AAA bond ratings from Standard and Poor's, while Loudoun County holds an AA bond rating. The Commonwealth and Fairfax County are members of the WMATA Compact, responsible for financing the 103 mile Metrorail system.

**Capital Cost Estimates and Contingencies:** The capital cost estimates are sufficient for a project in preliminary engineering. The BRT has 27 percent contingency funding to handle any shortfalls in the capital funding.

**Existing and Committed Funding:** All funding sources for the Dulles BRT project are established, and all local funding has been committed. Section 5309 bus discretionary funds were appropriated in FY 2001.

**New and Proposed Sources:** No new sources of funding are proposed.

## Stability and Reliability of Operating Finance Plan

### Rating: Medium

The *Medium* operating finance plan rating reflects the ability of Fairfax and Loudoun Counties and WMATA to operate local and regional bus service, and current efforts to increase transit service in the Dulles Corridor. This rating reflects evaluation of only the BRT system.

**Agency Operating Financial Condition:** WMATA will operate advanced technology buses for the proposed Dulles Corridor BRT. The agency is in sound operating condition and has been experiencing a 2 percent increase in ridership annually.

**Operating Cost Estimates and Contingencies:** Average annual operating costs are estimated in forecast-year dollars at \$48.4 million for the Dulles Corridor BRT. A detailed account of the operation and maintenance costs for the project has not been provided.

**Existing and Committed Funding:** The assumed farebox recovery of 40 percent from the proposed BRT service compares favorably with WMATA's existing 51 percent farebox recovery ratio. The Commonwealth will subsidize project operations.

**New and Proposed Sources:** No new funding sources are proposed.

## Locally Proposed Financing Plan

(Reported in \$YOE)

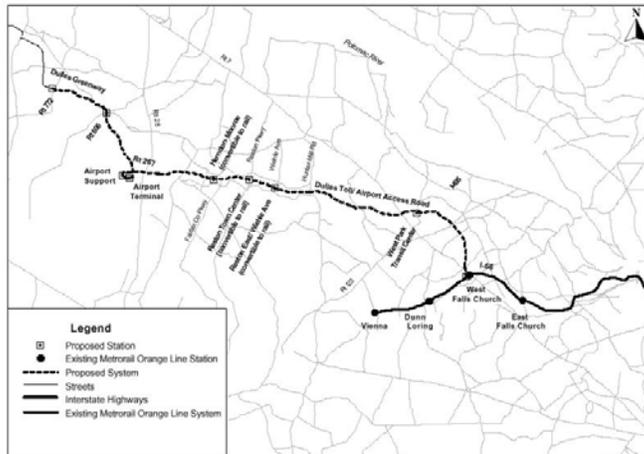
Proposed Source of Funds	Total Funding (\$million)	Appropriations to Date
<b>Federal:</b>		
Section 5309 New Starts	*	\$90.93 million appropriated through FY 2001
Section 5309 Bus	\$1.0	
<b>State:</b>		
Commonwealth Priority Transportation Fund	\$54.0	Proposed funding levels may change following VDRPT's allocation of Section 5309 new starts funds
Commonwealth Transit Capital Fund	\$2.0	Proposed funding levels may change following VDRPT's allocation of Section 5309 new starts funds
<b>Local:</b>		
Northern Virginia Transportation District Bonds	\$6.0	Proposed funding levels may change following VDRPT's allocation of Section 5309 new starts funds
<b>Total:</b>	<b>\$287.3</b>	

**Note:** Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Totals may not add due to rounding.

\* The FY 2001 Transportation and Related Agencies Appropriations Act provides that \$217.8 million in commitment authority be provided for the Dulles Corridor Bus Rapid Transit project. VDRPT has proposed up to \$224.3 million for the Dulles Corridor Bus Rapid Transit project.

### Dulles Corridor Bus Rapid Transit

Washington D.C. Metropolitan Area



# Authorizations for Final Design and Construction

## Alvarado Transportation Center

### **Albuquerque, New Mexico**

The Alvarado Transportation Center has been designed to function as a transportation center that includes administrative offices for the City of Albuquerque Transit Department. The operation of the facility is anticipated to improve transit service to the Downtown area, aid in congestion management efforts and provide efficient passenger interchange among various modes of transportation, including City transit, intercity rail, intercity motorcoach, taxi services, and potential light rail transit. The Transit Department has worked with Greyhound and Amtrak to ensure that the facility meets their required operational criteria. While providing for current and future transportation needs, the Alvarado Transportation Center is helping to create an historical "feel" for the Downtown. The facility has been designed in the style of the former Alvarado Hotel (circa 1900), one of the "gems" of the Fred Harvey-Atchinson, Topeka and Santa Fe string of first class resort hotels. Three buildings that are eligible for the national register will be functionally incorporated into the site layout. Funds for the project were provided by FTA, City of Albuquerque, State of New Mexico and the Albuquerque Development Commission. The project is currently scheduled to be operational in July 2001.

## Greater Albuquerque Mass Transit Project

### **Albuquerque, New Mexico**

The City of Albuquerque's Transit Department, in coordination with New Mexico's Highway and Transportation Department, and the Middle Rio Grande Council of Governments, has undertaken a High Capacity Transportation System (HCTS) Study. The Albuquerque Metropolitan Planning Area is forecasted to have a 48 percent increase in population by 2020. Accordingly, in order to maintain the area's attractiveness for residents and economic development, a combination of transportation improvements is under examination. Planning for the proposed HCTS will be completed in two phases. Phase I will develop a 20-year high capacity-strategic corridors plan. Phase I will be completed in November 2000. Phase II will include the environmental document for the approved corridor(s). The Draft Environmental Impact Statement is anticipated for completion in December 2002. Alternatives that are being studied include: No-build, roadway improvements, new roadways, Travel Demand Management/Transportation System Management (TDM/TSM), including Intelligent Transportation System (ITS) applications, bus service improvements, express bus and park-and-ride service, High Occupancy Vehicle (HOV) lanes, busways, commuter rail, light rail and a combination of modes. High capacity-strategic corridors will be incorporated into the region's Metropolitan Transportation Plan. Through FY 2001, Congress has appropriated \$12.30 million in Section 5309 New Starts funds for this effort.

## High Capacity Corridor Light Rail

### **Albuquerque, New Mexico**

See the description for the Greater Albuquerque Mass Transit Project. Project sponsors have informed FTA that the two are the same.

## Atlanta-Athens Commuter Rail

### Atlanta-Athens, Georgia

The Georgia Rail Passenger Authority (GRPA) is conducting a Major Investment Study (MIS) to examine the feasibility of various transportation improvements in the 70-mile transportation corridor between downtown Atlanta and downtown Athens, Georgia. The options under evaluation include the no-build option, Transportation Systems Management (TSM) options, including commuter bus service on existing roads, and commuter rail service on the existing CSX line between Athens and Atlanta. The GRPA has submitted a preliminary draft of the MIS for review by the Federal agencies, the Georgia Department of Transportation (GDOT), the Atlanta Regional Commission (ARC), the Athens-Clarke Metropolitan Planning Organization, and the transit operators in the Atlanta and Athens areas. An additional analysis of ridership, capital and operating costs and financing will be conducted as part of the MIS. In addition, study sponsors are working with CSX to address unresolved issues on the use of CSX right-of-way in the proposed corridor.

## Griffin Commuter Rail

### Atlanta-Griffin-Macon, Georgia

The Georgia Rail Passenger Authority (GRPA), in coordination with the Georgia Department of Transportation (GDOT), is advancing the 1997 Intercity Rail Plan with its program of combined intercity/commuter rail service in North and Middle Georgia. The plan calls for commuter rail service to Griffin and intercity services beyond to Macon, Georgia. The proposed line will serve seven counties (Bibb, Monroe, Lamar, Spalding, Henry, Clayton, and Fulton) as well as numerous communities along the way. The GRPA has undertaken a study to update the 1997 GDOT Intercity Rail Plan in preparation for completing a Major Investment Study (MIS) in the corridor. Plans for the initial service outline the utilization of over 102 miles of an existing Norfolk Southern commercial freight line. Total capital costs for the initiation of service from Atlanta-to-Griffin-to-Macon are estimated at \$163.12 million. The Georgia General Assembly has appropriated approximately \$4 million to continue with the MIS and follow-up activities.

## Georgia 400 Multimodal Corridor (North Fulton Corridor)

### Atlanta, Georgia

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is conducting a feasibility study to examine transit options in a proposed 14-mile corridor extending from the North Springs Station (currently completing construction) to McGinnis Ferry Parkway along the Georgia 400 corridor. High growth in office, commercial, and residential development has occurred within the corridor with additional significant growth already planned.

## MARTA - Interstate 285 Transit Corridor

### Atlanta, Georgia

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is conducting a feasibility study to examine transit infrastructure options within the Interstate 285 Corridor extending from the existing Kensington Rail Station in DeKalb County to the Medical Center Station and Perimeter Center area. The proposed corridor is highly congested and currently carries over 170,000 daily auto trips.

## MARTA - Marietta-Lawrenceville Corridor

### **Atlanta, Georgia**

FTA has not received any information on this effort.

## MARTA - South DeKalb Comprehensive Transit Program

### **Atlanta, Georgia**

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is examining potential transit solutions to alleviate traffic congestion throughout South DeKalb County. The proposed area, located south of MARTA's existing East Line is currently experiencing rapid growth in residential development. The result has been heavy traffic congestion on all major streets and highways. A portion of the proposed study area was included in the South DeKalb-Lindbergh Corridor Major Investment Study (MIS). As a result, data collected from the South DeKalb-Lindbergh MIS will be incorporated into the South DeKalb Comprehensive Transit Study.

## Atlanta (South DeKalb - Lindbergh Corridor)

### **Atlanta, Georgia**

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is conducting a Major Investment Study (MIS) to examine transportation options in a proposed 15-mile corridor extending from the South campus of the Georgia Perimeter College, north to the Emory University area. The proposed corridor also includes the Centers for Disease Control and medical center complex, and continues on to the existing Lindbergh Center Station on MARTA's North Line. Through FY 2001, Congress has appropriated \$3.63 million in Section 5309 New Starts funds for this effort.

## Central LRT Extension to Glen Burnie

### **Baltimore, Maryland**

The Maryland Mass Transit Administration (MTA) has decided not to pursue this effort at this time. The most cost-effective alignment is not acceptable to the public or locally elected officials.

## MARC - Commuter Rail Improvements (MARC Maintenance Facility)

### **Baltimore, Maryland-Washington, D.C.**

The Mass Transit Administration of the Maryland Department of Transportation (MD DOT) is conducting preliminary engineering and an environmental analysis study for the Maryland Commuter Rail (MARC) maintenance facility. A preferred site has been selected at Mt. Clare in southwest Baltimore City, located along the MARC Penn-Camden Connection. The study is one of several recommendations resulting from the MARC Master Plan completed in 1995. The purpose of the study is to design and build a storage and centralized maintenance facility for the MARC system. Currently, maintenance activities are performed in multiple facilities owned and operated by Amtrak and CSXT in the Baltimore and Washington metropolitan area. MD DOT funded the first phase of the project.

## Metropolitan Rail Corridor

### **Baltimore, Maryland**

The Maryland Department of Transportation (MD DOT) is currently considering 17 transportation improvement options for the Baltimore-Washington, D.C. metropolitan region. The various projects under study for the region range in scope from a two-mile extension for a Baltimore-

Washington International Airport Square light rail transit (LRT) line and a downtown Baltimore LRT "Loop" to a 19-mile Metro (heavy rail) extension between Columbia and Silver Spring, Maryland. Total capital costs for the various options range between \$120 million (downtown Baltimore Loop) to \$1.9 billion (Baltimore Metro options to White Marsh Mall or Westminster).

## People Mover (Central Downtown Study)

### **Baltimore, Maryland**

The City of Baltimore has initiated a feasibility study to identify transportation improvements within the Baltimore Downtown area. The study area includes an east-west corridor that also encompasses the Inner Harbor. The study will examine transportation options for moving people in the downtown area to areas just east and west of the Harbor. Alternatives under consideration include, but are not limited to, a potential light rail transit extension from the current Penn Station and a people mover. Through FY 2001, Congress has appropriated \$0.49 million in Section 5309 New Starts funds for this effort.

## Cross County Light Rail

### **Bergen County, New Jersey**

The Bergen County, New Jersey, Cross County Light Rail Transit (LRT) line was recommended as one of three new rail lines under the West Shore Major Investment Study/Draft Environmental Impact Statement. The proposed Cross County LRT is anticipated to share the right-of-way of the New York, Susquehanna and Western Railroad southeast from Maywood (possibly Paterson) New Jersey, through the City of Hackensack and terminate at the Vince Lombardi park-and-ride lot, a distance of approximately seven miles. A second track and passing sidings for the LRT would be constructed in the right-of-way and would be separate from the current freight service. Potential stations include Maywood/Rochelle Park, Hackensack (Prospect Avenue), Hackensack (Main Street) and Bogota. The Vince Lombardi park-and-ride lot will be the terminus point for the Hudson-Bergen LRT (HBLRT). The first Minimum Operable Segment of the HBLRT began revenue operations in April 2000. The proposed Cross County Line would serve as an extension to the HBLRT. The HBLRT track and structures could be used for the operation of service from Hoboken to the Vince Lombardi park-and-ride lot in North Bergen. This would allow a one-seat ride from Hoboken to Maywood, a distance of 17 miles. An Environmental Impact Statement is scheduled for completion within the next two years.

## Transit Corridor

### **Birmingham, Alabama**

The Birmingham Metropolitan Planning Organization (MPO) completed a Regional Transit Feasibility Analysis as part of the Strategic Regional Multi-modal Mobility Plan (Plan) in November 1999. The overall Plan includes a congestion management system element and a feasibility determination for regional transportation and transit improvements for the Birmingham Metropolitan Planning Area of Jefferson and Shelby Counties. In the Phase I regional transportation and investment planning process, the transportation alternatives that were identified included highway improvements, high-occupancy vehicle (HOV) lanes, improved fixed-route transit service, circulator and feeder bus service, express bus service operating from park-and-ride lots on HOV lanes and light rail transit. The conclusions from the Phase I effort included, among other findings, the need to address long-term dedicated public transit funding and land development policies. The Birmingham MPO, representing local municipal and county governments, in cooperation with the Birmingham-Jefferson County Transit Authority, will conduct Phase II. Phase II will identify the locally preferred alternative in each corridor in accordance with FTA's regulations for Major Capital Investment Projects. Phase II is scheduled for completion in

FY 2002. Through FY 2001, Congress has appropriated \$8.88 million in Section 5309 New Starts funds for this effort.

## Airport Intermodal Transit Connector

### **Boston, Massachusetts**

The Massachusetts Port Authority (Massport), in coordination with the Massachusetts Bay Transportation Authority (MBTA), conducted a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) on transportation improvements to enhance the intermodal connection between Logan International Airport and the Boston regional transit system and ease airport roadway and curb congestion. The study included bus as well as people mover alternatives. During the MIS process, Massport determined that improvements to the bus system at Logan Airport and the addition of bus service to South Station would be more cost-effective than a people mover. Massport suspended work on the MIS/DEIS and further developed the bus alternative now known as the Airport Intermodal Transit Connector (AITC) under an Environmental Assessment (EA). The project involves two routes: one connecting South Station in Boston to the airport via the South Boston Piers Transitway and the new Ted Williams Tunnel (Central Artery) and the second connecting the MBTA's Blue Line to airport terminals. Massport will operate dual mode buses (electric trolley/diesel) on the South Station to Logan Airport route and alternative fueled buses on the Blue Line/Terminals route. FTA has approved the EA for the AITC and Massport is now prepared to move ahead with the project, which is programmed in the Massachusetts State Transportation Improvement Program and Boston Transportation Improvement Program. FTA has approved a \$12.6 million Letter of No Prejudice request by Massport to incur costs for the procurement of eight low-floor buses to provide service from Logan Airport to South Station.

## Boston-Providence Commuter Rail/Pawtucket Layover Facility

### **Boston, Massachusetts-Providence, Rhode Island**

The proposed project involves the construction of a commuter rail layover facility in Pawtucket, Rhode Island. The project is a joint Rhode Island Department of Transportation/Massachusetts Bay Transportation Authority (RIDOT/MBTA) venture for the design and construction of six-to-nine track commuter rail yard for the purpose of overnight layover/storage and future light maintenance of commuter rail equipment. The project would serve the existing Providence-Boston service on Rhode Island's future Providence-Westerly service. The twelve-acre parcel is situated adjacent to the east of the Amtrak Main Line. As part of the existing agreement with the MBTA, RIDOT will fund the design and construction of the yard in exchange for ten years of commuter rail service to the Providence Station. Total capital costs are estimated at \$10 million. The project is included in Rhode Island's Transportation Plan, and Transportation Improvement Program. Through FY 2001, Congress has appropriated \$0.49 million in Section 5309 New Starts funds for this effort.

## North Shore Corridor Project

### **Boston, Massachusetts**

The Massachusetts Bay Transportation Authority (MBTA) has previously conducted a series of feasibility studies for improvements to the North Shore transportation system. These studies evaluated extensions of the Blue Line; improved commuter rail and express bus services; and the connection of the Blue Line and North Shore commuter rail service in Revere. Area officials now intend to further evaluate these alternatives with a comprehensive, corridor-wide analysis with an extensive public outreach effort. The study will build on previous work and focus on operational impacts to the MBTA system, ridership analysis, capital and operating costs, community impacts,

environmental impacts and cost/benefit analyses. This project is in the local Metropolitan Planning Organization's Unified Planning Work Program, but is not in the Boston area Long-Range Transportation Plan. Through FY 2001, Congress has appropriated \$2.98 million in Section 5309 New Starts funds for this effort.

## North-South Rail Link

### **Boston, Massachusetts**

The Massachusetts Bay Transportation Authority (MBTA) is conducting a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) to examine transit options in the corridor between North Station and South Station in downtown Boston. The alternatives under consideration include a bus shuttle system as a transportation systems management (TSM) option and various configurations of a rail tunnel. The tunnel would be constructed under the Central Artery alignment and would permit through commuter rail transit to serve both downtown stations. Currently, MBTA commuter rail service is split into two completely separate services, one serving the North Station and the other serving the South Station. The project is included in the "future projects" section of the Boston area Long-Range Transportation Plan, but is not in the financially constrained plan. Through FY 2001, Congress has appropriated \$0.49 million in Section 5309 New Starts funds for this effort.

## South Boston Piers Transitway - Phase II

### **Boston, Massachusetts**

In February 1993, the Massachusetts Bay Transportation Authority (MBTA) completed an alternative analysis and selected a 1.5-mile underground transit tunnel from the Boylston Station to the World Trade Center, combined with surface bus operations as the locally preferred alternative. The alternative, referred to as the Full Build Transitway, is proposed for construction in two phases. Phase I will connect South Station – which is the terminus of the MBTA's south side commuter rail operations and Amtrak's Northeast Corridor service, a major bus station and a station on the MBTA's Red Rapid Transit Line – to the World Trade Center in the Piers area. Dual mode trackless trolleys will operate in the Transitway Tunnel and on limited surface routes in the eastern end of the Piers area and to Logan International Airport. The Final Environmental Impact Statement was completed in December 1993. FTA issued a Record of Decision in May 1994 for the Full Build Transitway. In 1994, FTA signed a Full Funding Grant Agreement with the MBTA for \$330.73 million, including a contingent commitment of \$53 million, for Phase I of the Transitway. Phase I is currently under construction and is scheduled to commence revenue operations in December 2003. Through FY 2001, Congress has appropriated \$319.57 million in Section 5309 New Starts funds for Phase I. Phase II would extend the Transitway underground from South Station to Chinatown Station on the Orange Line and Boylston Station on the Green Line, a distance of approximately one-half mile. Phase II is estimated to cost \$363.7 million (\$1996). The MBTA is proposing to combine the South Boston Piers Transitway project and the locally funded Washington Street Replacement as one overall bus rapid transit project known as the "Silver Line." By linking the Transitway and Washington Street projects at the Boylston Street Station, the Silver Line is expected to improve transit service for Roxbury, South End and Chinatown neighborhoods to the downtown financial district, new development in the South Boston Seaport District, including the Boston Convention and Exhibition Center and Logan International Airport.

## Urban Ring

### **Boston, Massachusetts**

The Massachusetts Bay Transportation Authority (MBTA) is conducting a Major Investment Study (MIS) to examine transportation alternatives to improve circumferential mass transit in a corridor surrounding the Boston central core. The proposed corridor, known as the Urban Ring and generally following a previously proposed inner belt highway alignment, includes regional trip generators, beginning at the University of Massachusetts' Boston Campus at the southeast end and terminating at Logan Airport at the northeast end. The corridor also includes many major public, private, and institutional activity centers located in Boston, Cambridge, Chelsea, Everett, Somerville, and Brookline. Currently, the alternatives under consideration include circumferential rail service, various combinations of rail and bus service to new station stops on the existing radial system, and enhanced bus service. These alternatives would connect with extant commuter rail and transit lines. The project is included in the "future projects" section of the Boston area Long-Range Transportation Plan, but is not in the financially constrained plan. Through FY 2001, Congress has appropriated \$4.8 million in Section 5309 New Starts funds for this effort.

## Intermodal Corridor

### **Bridgeport, Connecticut**

The proposed effort involves the construction of a \$34 million multi-phased Intermodal Transportation Center in downtown Bridgeport. In order to complete this facility, the City proposes to fund this effort in two phases: Phase I - \$14 million parking garage; and Phase II - \$20 million bus facility. Through FY 2001, Congress has appropriated \$5.6 million in Section 5309 Bus funds for Phase I of this project.

## Burlington-Essex Commuter Rail

### **Burlington, Vermont**

The Vermont Agency of Transportation (VAOT) is planning an extension of commuter rail service on 7.8 miles of existing right-of-way between Burlington and Essex Junction. This is Phase II of the VAOT Burlington Commuter Rail effort. The proposed project will extend the Burlington to Charlotte commuter rail service from the recently renovated Union Station in Burlington to connect with Amtrak and major employment centers in Essex Junction. The Burlington to Charlotte commuter rail service is scheduled to begin operation in FY 2000. The VAOT has prepared a corridor analysis for the proposed project with \$0.26 million from their \$4.98 million FY 1998 earmark. The Metropolitan Planning Organization (MPO) anticipates that additional analysis will be required prior to requesting permission to commence preliminary engineering. This analysis is currently under review by the MPO for incorporation into the Transportation Improvement Program. The improvements in the corridor would include track, tunnel, signal, at-grade crossings and drainage improvements. Two intermediate stations are also being considered along this route. Through FY 2001, Congress has appropriated \$6.96 million in Section 5309 New Starts funds for this effort.

## Canton-Akron-Cleveland Interregional Travel Corridor Study

### **Canton-Akron-Cleveland, Ohio**

The METRO Regional Transit Authority (METRO), in cooperation with local metropolitan planning organizations, regional transit authorities, and the Ohio Department of Transportation, is conducting a Major Investment Study (MIS) to assess the costs and benefits of new passenger rail service, Transportation System Management (TSM), and/or capacity improvements for the

Canton-Akron-Cleveland (CAC) Corridor. The proposed 62-mile corridor follows a path along Interstate 77 (I-77) between Canton and Akron. Between Akron and Cleveland, the corridor widens to include both I-77 and State Route 8 (SR-8). The SR-8 alignment utilizes I-271 and I-480, returning to I-77 then into the Central Business District of Cleveland. The corridor frequently experiences traffic congestion and related safety problems on major transportation facilities. The study is currently in the alternative definition stage. Light rail Transit (LRT) is being evaluated along two separate alignments. One route generally follows I-77 for 25 miles from Richfield in Northern Summit County into downtown Cleveland. The second LRT route starts near the intersection of I-271 and SR-8 and continues for approximately 25 miles into the Cleveland CBD. In addition, two commuter rail routes, using existing rail rights-of-way are being examined. Lastly, a number of highway improvements and possible widenings are also being evaluated. The proposed project is included in the Akron Metropolitan Area Transportation Study's Long-Range Needs Plan. To date, METRO has purchased and preserved about 43 miles of rail right-of-way for future passenger use. The MIS is scheduled for completion in June 2001. Through FY 2001, Congress has appropriated \$16.38 million in Section 5309 New Starts funds for this effort.

## Monobeam Corridor

### **Charleston, South Carolina**

The Charleston Area Regional Transportation Authority, in cooperation with the City of Charleston and the City of North Charleston, is examining the feasibility of implementing a proposed monobeam transit system from the Airport to the Convention Center. The proposed full-scale monobeam prototype is a three-year \$35-\$40 million effort that is expected to be financed largely with private funds. An approximately 1.25-mile prototype will be erected on a site in the Charleston community and is designed to demonstrate the aesthetic, cost and environmental characteristics of the monobeam, as well as its safety and reliability. The prototype could become the first segment of a regional rail transit network. Through FY 2001, Congress has appropriated \$6.13 million in Section 5309 New Starts for this effort.

## 35<sup>th</sup> Street Station (also known as the Comiskey Park Station)

### **Chicago, Illinois**

Metra, the commuter rail agency for northeastern Illinois, initiated a review of the relative merits of developing a proposed commuter rail station at 35<sup>th</sup> Street, located near Comiskey Park in Chicago. The preferred location would allow commuters to transfer to two Chicago Transit Authority rapid transit lines. Metra's analysis will be released following the completion of a State-funded study being conducted by the Regional Transportation Authority (RTA) of northeastern Illinois. The study will examine the feasibility of improving integration of service and fares of all the transit services provided by the RTA.

## Inner Circumferential Commuter Rail

### **Chicago, Illinois**

Metra, the commuter rail agency for northeastern Illinois, has completed the first phase of a study examining the feasibility of implementing commuter rail service in the corridor between O'Hare and Midway airports. An effort to secure local funds to initiate additional studies is also underway. The Chicago Area Transportation Study (local metropolitan planning organization) has not included this effort in its Long-Range Transportation Plan, although it identifies it as one of twenty corridors for further study.

## McCormick Place Busway

### Chicago, Illinois

The City of Chicago is proposing to design and construct the Lakefront Busway project. The proposed project consists of a two-lane, two-way bus road to shuttle McCormick Place attendees between the convention center to Randolph Street and hotels to the north.

The proposed roadway, which would be separate from general traffic in and adjacent to Grant Park, is anticipated to allow faster trips to and from McCormick Place, and thereby reduce the convention center's transportation costs, and traffic congestion. The project is being funded by the Metropolitan Pier and Exposition Authority, and is currently in the design and right-of-way acquisition stage. Substantial completion of the project is scheduled in late 2000. No Federal Section 5309 New Starts funds are being sought for the project.

## Northwest Rail Transit Corridor

### Chicago, Illinois

The Regional Transportation Authority of northeastern Illinois is conducting a feasibility study to investigate the transit and transportation needs of the Interstate 90/Northwest Tollway Corridor. The study is evaluating a range of transportation options that will result in a set of viable, cost-effective alternatives for the proposed corridor. The Northwest Corridor Transit Feasibility Study (I-90/Northwest Tollway Corridor) area is bounded by Harlem Avenue on the east, the Kane/Cook County line on the west, Metra's (commuter rail agency for northeastern Illinois) Union-Pacific Northwest Line on the north and Metra's Milwaukee West Line on the south. A final set of alternatives were identified and evaluated more extensively. However, before a final alternative is selected, a second level of study will be necessary to further refine the details.

## Berea/I-X Center Red Line Extension

### Cleveland, Ohio

The Greater Cleveland Regional Transit Authority (GCRTA) is conducting a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) to determine transportation options to provide a direct link between downtown Cleveland, Hopkins International Airport, the International Exposition (I-X) Center, and Baldwin Wallace College. The proposed Berea Rapid Transit Extension, extending approximately three to four miles from the GCRTA's Airport station, is directly aligned with the local transit operator's Red Line rapid rail system. The MIS/DEIS is also considering adequate walk-up access and park-n-ride facilities to encourage more usage of the Red Line Light Rail Transit System. The Berea Rapid Transit Extension MIS was programmed in the Northeast Ohio Areawide Coordinating Agency's (NOACA) - (local metropolitan planning organization) FY 1997 Unified Work Program. A decision on a Locally Preferred Alternative has not been made by GCRTA at this time. Through FY 2001, Congress has appropriated \$2.9 million in Section 5309 New Starts funds for this effort.

## Blue Line Extension

### Cleveland, Ohio

The Greater Cleveland Regional Transit Authority (GCRTA) is conducting a Major Investment Study to examine transportation options in a corridor extending from the terminus of GCRTA's Blue Line at the intersection of Van Aken Boulevard and Warrensville Road in Shaker Heights. Among the alternatives being considered is a potential extension of the Blue Line to an area near the planned interchange on Interstate 271 at Harvard Road near Beachwood that is being built to serve the new Chagrin Highlands development. A joint economic development agreement

between the City of Cleveland, a private developer and area suburbs, will develop over 650 acres of unused land for the Chagrin Highlands complex over the next 20 years. The master plan projects approximately 3.5 million square feet of office space, 1,000 hotel rooms, 250,000 square feet of shops and restaurants and over 15,000 jobs. The MIS is also being coordinated with major plans for new developments, including Highland Hills' Cleveland Enterprise Park and the City of Shaker Heights' Warrensville/Van Aken shopping center redevelopment at the current Blue Line terminus. Through FY 2001, Congress has appropriated \$0.8 million in Section 5309 New Starts funds for this effort.

## Interstate 90 Corridor to Ashtabula County

### **Cleveland, Ohio**

See the description for the Northeast Ohio Commuter Rail Feasibility Study. Study sponsors have informed FTA that the two are the same.

## Lorain-Cleveland Commuter Rail

### **Cleveland, Ohio**

See the description for the Northeast Ohio Commuter Rail Feasibility Study. Study sponsors have informed FTA that the two are the same.

## Northeast Ohio Commuter Rail Feasibility Study, Phase II

### **Cleveland, Ohio**

The Northeast Ohio Areawide Coordinating Agency (NOACA), the local Metropolitan Planning Organization for the Cleveland area, is examining the feasibility of initiating commuter rail service in the Cleveland metropolitan area. Phase I of the Northeast Ohio Rail Feasibility Study was completed by NOACA. Seven corridors were identified in Phase I as being potentially feasible for commuter rail service. Phase II will bring the analysis of commuter rail in northeast Ohio to a conclusion, providing regional decision makers with information necessary to select, program and fund potential commuter rail service. Completion of Phase II is anticipated during the year 2001.

## North - South Corridor (Waterfront Line Extension)

### **Cleveland, Ohio**

The Greater Cleveland Regional Transit Authority (GCRTA) is conducting a Major Investment Study to examine transportation options to the North-South transportation corridor in the eastern portion of the Central Business District (CBD) in Cleveland, Ohio. One option under consideration includes providing light rail transit (LRT) service to the proposed corridor. The alternatives under study could potentially provide rail service to an emerging office corridor, Cleveland's theater district, and two local colleges, while creating a downtown rail loop. Accordingly, one of the alternatives under consideration includes a potential extension of the Waterfront Line LRT south from the existing North Coast terminus through the eastern portion of the CBD. Alternatives under examination could also provide a North-South rail connection to the proposed Euclid Corridor bus rapid transit project. Through FY 2001, Congress has appropriated \$0.99 million in Section 5309 New Starts funds for this effort.

## Hollis-Ketchikan Ferry

### **Craig, Alaska**

Residents of the State of Alaska rely on ferries to connect many of the State's coastal islands and towns. The State operates the Alaska Marine Highway, a system of 17 vessels, in the southeast

and south central portions of the State. The system has limited funding availability and has been unable to introduce additional services and routes. The City of Craig combined with other communities on Prince of Wales Island to evaluate the feasibility of replacing a ferry service operated by the Alaska Marine Highway between the island and the City of Ketchikan with more frequent and reliable service. The vessel is currently under construction and is anticipated for completion (in time for service initiation) during the year 2001. The Inter-Island Ferry Authority is the grant recipient. Through FY 2001, Congress has appropriated \$6.3 million in Section 5309 New Starts funds for this effort.

## Dallas (Northwest Corridor LRT)

### Dallas, Texas

The Dallas Area Rapid Transit (DART) system completed a Major Investment Study for the Northwest Corridor in March 2000. The locally preferred alternative (LPA) recommended light rail transit (LRT) for an 18-mile corridor extending from the Dallas central business district to Frankford Road in the City of Carrollton. The Regional Transportation Council, the local Metropolitan Planning Organization for the Dallas-Ft. Worth metropolitan area, adopted the LPA in the region's long-range transportation plan in January 2000. The Northwest Corridor LRT is part of the third phase of implementing the DART Transit System Plan. The project would link an area encompassing approximately one-quarter of DART's service area to the DART LRT system. Major activity centers along the corridor include a new professional sports arena, Market Center convention and office area, Medical Center complexes, Dallas Love Field Airport, major redevelopment projects in northwest Dallas and the two rapidly growing suburban cities of Farmers Branch and Carrollton. The planned double-track alignment for the proposed LRT would consist of a mix of at-, above- and below-grade trackage, in addition to exclusive lanes within roadway right-of-way. Eleven stations are proposed, of which nine would have a combined total of 1,600 parking spaces. All stations would have transfers to DART's bus system, and others would offer transfers to intercity bus, commuter rail or Love Field Airport.

## Dallas (Southeast Corridor LRT)

### Dallas, Texas

In March 2000, the Dallas Area Rapid Transit system completed a Major Investment Study, with the selection of a locally preferred alternative (LPA) that recommended light rail transit (LRT) for a 10-mile corridor connecting the Dallas central business district to the Southeast portion of the City of Dallas and southern Dallas County. The Regional Transportation Council, the local Metropolitan Planning Organization for the Dallas-Ft. Worth metropolitan area, adopted the LPA in the region's long-range transportation plan in January 2000. The Southeast Corridor LRT is part of the third phase of implementing the DART Transit System Plan. The Southeast Corridor is an area generally connecting downtown Dallas with several southern communities, including Deep Ellum, Baylor Hospital, South Dallas, Fair Park, Buckner Terrace and Pleasant Grove. The proposed project would utilize portions of abandoned railroad right-of-way as well as sections of on-street alignment. The project also would include the construction of nine stations and procurement of 19 light rail vehicles. Six of the nine proposed stations would provide park-and-ride facilities, totaling approximately 2,000 parking spaces. Two of the proposed stations would also serve as intermodal facilities. Feeder bus service, roadway improvements and traffic calming improvements are also planned to complement the proposed LRT. The Southeast Corridor LRT, similar to DART's original 20-mile starter system, is contained entirely within the Dallas city limits. Through FY 2001, Congress has appropriated \$0.99 million in Section 5309 New Starts funds for this effort.

## Regional Riverfront Corridor

### Dayton, Ohio

The City of Dayton, in cooperation with the Miami Valley Regional Transportation Authority (Miami Valley RTA) is proposing to revitalize the area along the Miami River in downtown Dayton. The proposed riverfront corridor revitalization effort includes a landscaped walkway, a plaza for community festivals, fountains, a small boat harbor and the redevelopment of an existing street into a pedestrian way lined with trees, benches and streetlights. In accordance with this, the City of Dayton, along with the Miami Valley RTA is also proposing to relocate the existing infrastructure of an electric trolley for one of Miami Valley RTA's electric trolley bus lines. In addition, the proposed project includes the construction of pedestrian access facilities, bus shelters, benches and signage.

## East Corridor (Airport)

### Denver, Colorado

The Denver Regional Council of Governments (DRCOG), in cooperation with the Colorado Department of Transportation (CDOT) and the Regional Transit District (RTD), has completed the technical work for a Major Investment Study (MIS) to evaluate transportation improvements in its East Corridor, which links downtown Denver via Interstate 70 with Denver International Airport (DIA). The East Corridor MIS was coordinated with concurrent Major Investment Studies of the region's West and Southeast Corridors. The East Corridor MIS recommended a multimodal package of improvements in the corridor including a 23-mile single-track commuter rail line between Denver Union Station and DIA and a one-mile light rail extension from downtown to connect with the commuter rail at East 40<sup>th</sup> Avenue and 40<sup>th</sup> Street. With the commuter and light rail improvements, DRCOG estimates an increase of 8,800 daily linked transit trips in the corridor by the year 2020. The capital cost estimate of the commuter and light rail improvements is \$330 million, with annual operating costs estimated at \$31.2 million. DRCOG has officially adopted this locally preferred alternative by including it in the Long-Range Transportation Plan. The RTD Board has authorized the General Manager to begin the preliminary engineering (PE) and the environmental review process for the project. A request to initiate PE will be submitted to FTA in early 2001.

## North Front Range Corridor (Ft. Collins-Denver)

### Denver, Colorado

The Colorado Department of Transportation (CDOT) with the cooperation of local stakeholder agencies, will examine transportation options for the entire North Front Range Corridor, which extends 90 miles from the northern suburbs of Denver to the Wyoming border and includes the urbanized areas of Denver, Boulder, Longmont, Greeley and Fort Collins. Commuter rail is one of the alternatives being considered in the study. The North Front Range area demonstrated the highest ridership potential in a statewide commuter rail feasibility study completed in 1996. The feasibility study estimated ridership at 721,500 per year for an 85-mile Denver-Greeley-Ft. Collins line and 416,200 per year for a 74-mile Denver-Boulder-Longmont-Loveland-Ft. Collins line. Both of these segments, as well as shorter lines using the same alignments, are under consideration in the current study. Phase 1 of the study was completed in 1998 and recommended more detailed consideration of commuter rail, high occupancy vehicle lanes and highway improvements. Phase 2 of the study is currently underway. Through FY 2001, Congress has appropriated \$0.5 million in Section 5309 New Starts funds for this effort. These funds lapsed in October 2000.

## West Corridor

### Denver, Colorado

The Denver Regional Council of Governments (DRCOG), in cooperation with the Colorado Department of Transportation (CDOT) and the Regional Transit District (RTD), has completed the technical work for a Major Investment Study (MIS) to evaluate improvements in the West Corridor, linking downtown Denver with the City of Golden at the intersection of US Routes 6 and 40, along West Colfax and Sixth Avenues. The West Corridor MIS was coordinated with concurrent MISs of the region's East and Southeast Corridors. Included in the recommendations for the West Corridor is approximately 12.5 miles of light rail from Union Station to the Cold Spring Park-n-Ride, as well as some enhanced bus service. The capital cost of the recommended alternative is estimated at \$251 million, with annual operating costs of \$11 million. DRCOG has officially adopted this locally preferred alternative by including it in the Long-Range Transportation Plan. Construction has been initiated for a segment of the corridor. The segment will be called the Central Platte Valley Connector and run from the Colfax Avenue station on the existing Central Corridor LRT system to the Denver Union Terminal and serve the Auraria Campus, the Pepsi Center, Mile High Stadium and Lower Downtown Denver. Project sponsors will fund the \$44 million segment with a combination of Federal, State, local and private funds. No New Starts funds will be used to fund the initial segment. The RTD Board has authorized the General Manager to begin the preliminary engineering (PE) and the environmental review process for the project. A request to initiate PE will be submitted to FTA in early 2001.

## International Fixed Guideway (El Paso to Juarez)

### El Paso, Texas

The City of El Paso, Texas is proposing to reestablish a fixed guideway public transportation system between the City of El Paso, Texas and Ciudad, Mexico. The El Paso-Juarez region has the largest population of any international border in North America. The initial phase of the proposed international fixed guideway system involves approximately 1.6-miles of fixed guideway in downtown El Paso, Texas and an approximately 0.75-mile segment in downtown Juarez, Mexico. Until 1974, a rail trolley system linked the downtown areas of both cities. Tremendous growth and increased traffic resulting from the North American Free Trade Agreement (NAFTA) have increased traffic congestion on the region's international bridges. Project sponsors are currently in the process of establishing an alignment, selecting the preferred technology, identifying stations and terminals, and developing an operational framework for the El Paso portion of the proposed system. The appropriate legal and international agreements will be pursued with local, State and Federal officials in Mexico to secure Mexico's financial participation in the capital development and operation of the system. The total capital cost of the proposed project is estimated at \$43.75 million.

## South Bay Corridor

### Fremont, California

The Santa Clara Valley Transportation Authority (SCVTA) is examining transportation options in a proposed corridor extending approximately 21 miles between the cities of Union and Fremont, including downtown San Jose. The corridor is located primarily in the southeast portion of the San Francisco Bay Area. The corridor is predominantly traveled by residents living in the East Bay area - and beyond - who work in Silicon Valley. The proposed corridor is the third most congested corridor in the Bay Area. Residential development in the East Bay area has been compounded by the significant job growth in the Silicon Valley area, which has resulted in very high and increasing levels of traffic congestion. In 1994, building on several earlier planning efforts, the Metropolitan Transportation Commission, in conjunction with local cities and transit

agencies conducted a study to evaluate multiple transit options as a longer-term solution. This included an option of extending the Bay Area Rapid Transit and SCVTA's rail systems. Capital costs for a potential extension ranged from \$390 million - \$1.14 billion, depending on the preferred technology and route alignments. A longer-term rail project is included in the 1998 Regional Transportation Plan for the San Francisco Bay Area. Further analysis, regional consensus and public involvement is needed to determine the specific technology and route alignments for a potential rail extension in the corridor.

## Trolley Extension

### **Galveston, Texas**

The City of Galveston is conducting a Modified Investment Study and preliminary engineering report to determine the most suitable alignment and technology for extending the existing Galveston rail trolley system. The Galveston trolley has been operating successfully since 1988 and has been previously extended to serve the new Harborside development north of downtown. Preliminary feasibility studies have identified the potential benefits of extending the existing system to serve Galveston Island's largest employer - the University of Texas Medical Center (UTMC) - on the East Side of downtown. A proposed route has been selected between downtown and the UTMC. The proposed extension has been adopted as part of the Houston-Galveston area Council's Transportation Improvement Program and the Long-Range Transportation Plan. The study is scheduled for completion in 2000. Through FY 2001, Congress has appropriated \$4.46 million in Section 5309 New Starts funds for this effort.

## Cumberland/Dauphin County Corridor 1 Commuter Rail

### **Harrisburg, Pennsylvania**

The Cumberland-Dauphin-Harrisburg Transportation Authority (Capitol Area Transit – CAT) is conducting a Transportation Investment Study for a selected priority transportation corridor known as "Corridor One." The proposed corridor extends approximately 55 miles in central Pennsylvania between Carlisle and Lancaster, via Harrisburg. The proposed corridor has been endorsed by the Harrisburg Area Metropolitan Planning Organization, as well as through local funding from the Pennsylvania Department of Transportation and numerous county, township and municipal contributions. The study recommended commuter rail as the locally preferred alternative. CAT is currently focusing on a Minimum Operable Segment between Harrisburg to Mechanicsburg. Through FY 2001, Congress has appropriated \$1.97 million in Section 5309 New Starts funds for this effort.

## City Light Rail Connection to the Central Business District

### **Hartford, Connecticut**

The City of Hartford is proposing to study the feasibility of a connection from the Central Business District in Hartford to the "North Meadows" area, in cooperation with the Greater Hartford Transit District (GHTD). This is an area adjacent to the Connecticut River, along the Interstate 91 (I-91) North Corridor. The I-91 corridor has experienced a variety of development including, suburban commercial, light manufacturing, sports and a music theater. The corridor will be further defined by the study and may include some elements of downtown circulation to maximize the efficiency of the transit connection. The alternatives being considered may include light rail and bus rapid transit as well as the potential for "fringe parking." The City, the Regional Planning Agency and the Transit District are still defining the final scope of the project. The parties are proposing to develop this project by undertaking a two-phased feasibility study: Phase I: -- Bus Circulation Study and Phase II -- Light Rail Study. GHTD is preparing to begin Phase I, which will provide a general assessment of the current transit conditions and evaluate the need for a downtown

circulator with connections to proposed busways. Phase II, Light Rail Study, will be undertaken at a later date. This project is in the Hartford area Long Range Transportation Plan. Through FY 2001, Congress has appropriated \$1.48 million in Section 5309 New Starts funds for this effort.

## Griffin Line

### **Hartford, Connecticut**

The Greater Hartford Transit District (GHTD) conducted a Major Investment Study (MIS) to examine transit options within a proposed 16-mile corridor extending from downtown Hartford and several city neighborhoods to suburban towns to the north and on to Bradley International Airport. The MIS resulted in a Light Rail Transit (LRT) option as the Locally Preferred Alternative (LPA) being adopted in July 1995 by the Capitol Regional Council of Governments (CRCOG) – the local Metropolitan Planning Organization (MPO). Since that date, the State, CRCOG, GHTD and local officials, after extensive discussions on funding sources and local financial constraint, have determined that the LRT is not a viable alternative. The CRCOG is currently exploring alternatives to meet the travel demands in this corridor. Following the identification of a Locally Preferred Alternative, a financial plan for the full development of the project will be determined. Through FY 2001, Congress has appropriated \$0.99 million in Section 5309 New Starts funds for this effort.

## Old Saybrook-Hartford Rail Extension

### **Hartford, Connecticut**

The proposed project involves the reconstruction of the existing rail line between Old Saybrook and Hartford. Future passenger uses, however, remain uncertain. The line is currently inactive except for a short tourist operation near Old Saybrook. At this time, definitive planning efforts have not been undertaken for this effort and it has not been included in Hartford's Long-Range Transportation Plan. Through FY 2001, Congress has appropriated \$0.49 million in Section 5309 New Starts funds for this effort.

## Washington County Corridor

### **Hastings-St. Paul, Minnesota**

The Minnesota Department of Transportation is considering the feasibility of implementing commuter rail service along a proposed 30-mile corridor located in Washington County. The proposed corridor would connect downtown St. Paul with Hastings, Minnesota in Dakota County, located southeast of St. Paul. The area under consideration extends approximately 30 miles along Canadian Pacific railroad tracks. Ridership estimates vary between 933 daily passenger trips with two proposed stations over the entire 30-mile corridor to 1,179 daily trips with ten proposed stations along the entire corridor. Total capital costs for the entire corridor are estimated at \$108.8 million.

## Primary Corridor Transportation Project

### **Honolulu, Hawaii**

The City and County of Honolulu Department of Transportation Services is proposing improvements to address existing and future mobility demand in the Oahu's primary transportation corridor. The proposed corridor extends from Kapolei in the Ewa District to the University of Hawaii-Manoa (UH-Manoa) and Waikiki in the Primary Urban Center. A Major Investment Study/Draft Environmental Impact Statement was released in August 2000. Three alternatives are examined in the document, including: (1) A No-Build alternative which includes those projects expected to be implemented in the next three years and expansion of bus service in

developing areas to maintain existing service levels; (2) A Transportation System Management (TSM) alternative which features the reconfiguration of the present bus route network to a hub-and-spoke system, and some highway elements; and (3) A Bus Rapid Transit (BRT) alternative which builds on the TSM alternative and adds the Regional and In-Town BRT system. The Regional BRT system includes a continuous H-1 BRT Corridor from Kapolei to downtown with contraflow express lanes and special bus ramps to transit centers. The In-Town BRT system would function as a high capacity transit spine from Middle Street to downtown, with a University Branch from downtown to UH-Manoa, and a Kakaako-Waikiki Branch that extends from downtown to Waikiki via Kakaako. The locally preferred alternative is anticipated for selection in late 2000. Through FY 2001, Congress has appropriated \$2.47 million in Section 5309 New Starts funds for this effort.

## Advanced Transit Program (West Loop Corridor)

### Houston, Texas

The Advanced Transit Program (ATP) is a \$304.8 million program that is proposed for funding with fifty percent Section 5309 New Starts funds and fifty percent local funds. The ATP includes a number of projects, including two Major Investment Studies (MIS) - (Downtown to Astrodome and West Loop Corridors). The Downtown to Astrodome MIS/Environmental Assessment was completed in September 1999. Preliminary engineering for the resultant light rail locally preferred alternative is currently underway. The West Loop MIS is scheduled for completion in March 2001. The West Loop MIS is locally funded. Through FY 2001, Congress has appropriated \$8.40 million in Section 5309 New Starts funds for the ATP. Section 5309 New Starts funds appropriated through FY 1999 were applied to the MIS/EA for the Downtown to Astrodome LRT. Assignment of FY 2000 and FY 2001 funds is pending.

## Northeast Indianapolis Corridor

### Indianapolis, Indiana

The Indianapolis Metropolitan Planning Organization, in cooperation with the Indiana Department of Transportation and other stakeholders, is conducting a Major Investment Study to examine the feasibility of major transit investments within the northeast portion of Marion County and the Southeast portion of Hamilton County between U.S. Route 31 and Interstate 70. The study corridor also encompasses parts of Interstate 69/State Route 37 and Interstate 465. In previous years, I-69/SR 37, as well as U.S. 31, were identified for major highway investments. Traffic congestion, along with rapid commercial and industrial development, has also been increasing within the study corridor. However, as a result of including improved transit service as a potential alternative, the Hoosier Heritage Port Authority purchased the Norfolk Southern rail line extending from 10<sup>th</sup> Street in Indianapolis to Tipton, Indiana. Through FY 2001, Congress has appropriated \$5.19 million in Section 5309 New Starts funds for this effort.

## Jacksonville Fixed Guideway Corridor

### Jacksonville, Florida

The Jacksonville Transportation Authority and the Florida Department of Transportation are planning to conduct a corridor-level study for a single corridor in the Jacksonville urbanized area of Duval, Clay, and St. Johns' counties. The proposed study is a continuation of a systems planning effort known as the Jacksonville Long-Range Corridor and Park and Ride Study (JLRCS) - Phase II. The JLRCS will result in the selection of one corridor for study in the corridor-level analysis. The proposed study will consider all viable transportation alternatives for improving mobility in the selected corridor. The corridor-level effort will be based upon the Jacksonville Urban Area Transportation Study (JUATS) Update for 2020, nearing completion. The JUATS will

also include a proactive, focused and citizen-led public involvement program. The corridor-level study is scheduled for completion in 2000.

## Southtown Corridor

### **Kansas City, Missouri**

In 1995, the Kansas City Area Transportation Authority (KCATA) completed a Major Investment Study (MIS) that examined transit improvements for a corridor extending from the Missouri River through downtown Kansas City and south to the Country Club Plaza, with extensions further south to 85<sup>th</sup> Street and east and south to 75<sup>th</sup> Street along Watkins Drive. The locally preferred alternative (LPA) resulting from the MIS recommended that a 15.2-mile light rail transit (LRT) line be constructed within the corridor. The LPA was subsequently included in the Mid-America Regional Council's (MPO) long-range transportation plan. Capital costs were estimated at \$450 million (\$1994). KCATA proposed to build the project in phases with an initial 5.6-mile starter segment extending from the Missouri River to the Plaza at approximately 52<sup>nd</sup> Street. Total capital cost for the starter segment was estimated at \$250 million. The starter segment was projected to average 10,800 daily boardings, including 4,200 new riders, in the year 2010. In October 1995, FTA approved the initiation of preliminary engineering (PE) for the Southtown Corridor project. The PE phase has progressed slowly as local officials are currently refining the LPA alignment and local financing plans. Through FY 2001, Congress has appropriated \$7.48 million in Section 5309 New Starts funds for the project.

## Kenosha-Racine-Milwaukee Rail Extension [Metra]

### **Kenosha-Racine-Milwaukee, Wisconsin**

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) – local Metropolitan Planning Organization - plans to conduct an Alternative Analysis study to examine the feasibility of extending Chicago-based Metra commuter rail service from Kenosha to Racine and Milwaukee. The study will focus on a proposed 33-mile corridor connecting the central business districts of Kenosha, Racine and Milwaukee in southeastern Wisconsin. SEWRPC has recently completed a feasibility study - funded entirely with local funds - that concluded that the extension is feasible. SEWRPC has adopted the project into the region's Long-Range Plan. Through FY 2001, Congress has appropriated \$5.44 million in Section 5309 New Starts funds for this effort.

## Electric Transit

### **Knoxville, Tennessee**

The City of Knoxville is proposing an innovative program to incorporate multi-modal linkages among and between downtown Knoxville destinations. The Downtown Knoxville Transportation Linkages Study is examining the feasibility of connecting numerous destinations in downtown Knoxville with a fixed guideway transit system as well as a Transportation System Management alternative. The proposed program addresses the linkages that will connect these downtown generators with trolleys and a dedicated trolley route around downtown Knoxville, as well as bus transit, bicycle and pedestrian ways, transfer stations and intermodal parking/transit facilities. Through FY 2001, Congress has appropriated \$1.49 million in Section 5309 New Starts funds for this effort.

## Queens West Light Rail Link

### **Long Island City, New York**

The proposed project involves the construction of a Light Rail Transit (LRT) line along the Long Island City (LIC) waterfront. The proposed LRT would connect the new Queens West

development, currently under construction along the waterfront, with subway stations that are a substantial distance inland. The Queens West development is a large, residential and commercial project sponsored, in part, by the Port Authority of New York and New Jersey and the Empire State Development Corporation. The developer is also interested in enhancing existing New York City Transit bus service, possibly with improved bus stop signage, shelters and maps. A local Environmental Impact Statement (EIS) was developed and included an analysis of an enhanced bus shuttle to the subway stations. The LRT was not proposed as part of the EIS. Presently, a project sponsor has not been identified. However, several years ago the New York City, Queens Borough President's Office made a similar proposal for an LRT along the LIC waterfront.

## **Metrolink (San Bernardino Line)**

### **Los Angeles, California**

The Southern California Regional Rail Authority (SCRRA) is proposing a series of improvements to its commuter rail service within an existing railroad right-of-way. These improvements include the construction of sidings in the Interstate 10 Corridor, an upgrade of siding at Marengo and the double tracking of a line between the existing Pomona and Montclair stations. These improvements will result in an increase in frequencies, a reduction of commuter train delays, and an improvement to the schedules of counter-flow trains on the San Bernardino Line. The San Bernardino Line has the highest ridership of all Metrolink lines. There are currently 26 daily train trips in the corridor serving 8,200 daily commuter rail trips. The estimated capital cost for the proposed project is \$31.4 million. Through FY 2001, Congress has appropriated \$1.96 million in Section 5309 New Starts funds for this effort.

## **Metrolink (Union Station-Fullerton)**

### **Los Angeles, California**

The Southern California Regional Rail Authority, Caltrans, Amtrak, and the Burlington Northern Santa Fe Railroad have proposed a series of multiple track improvements between the City of Fullerton and Los Angeles' Union Station. The proposed project is located on the existing Metrolink Orange County Line, which is part of the Los Angeles-San Diego Rail Corridor (LOSSAN) between San Diego and Los Angeles. The proposed corridor is the second busiest in the nation. Throughout the Fullerton to Los Angeles section of the corridor, there are 21 Amtrak intercity train trips, 22 commuter rail trips and 41 freight trips. Metrolink ridership on the Orange County Line has grown to over 5,600 daily trips. Local agencies have jointly contributed over \$400 million to purchase and upgrade the proposed corridor. Amtrak contributed approximately \$15 million of this amount. The portion of the LOSSAN corridor from Los Angeles to San Diego is owned entirely by public agencies, except the proposed 25-mile section between downtown Los Angeles and Fullerton. The Burlington Northern Santa Fe Railroad owns the Union Station-Fullerton segment.

## **Redlands-San Bernardino Transportation Corridor**

### **Los Angeles, California**

The Southern California Regional Rail Authority (Metrolink) is proposing a complete reconstruction of a mile of rail line previously purchased by the agency. The proposed rail line extends from the San Bernardino Metrolink station eastward to Redlands. The first phase extends approximately one mile to the site of a proposed intermodal bus terminal in downtown San Bernardino. The bus facility is currently in final design. If the proposed rail project is completed, it will allow many Metrolink trains to connect directly with the new bus facility. The proposed project will also provide for the design and construction of a signal system for the first mile. The proposed

project is included in the State Transportation Improvement Plan. Through FY 2001, Congress has appropriated \$1.99 million in Section 5309 New Starts funds for this effort.

## **Santa Monica Boulevard Transit Parkway**

### **Los Angeles, California**

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is studying a section of Santa Monica Boulevard (State Route 2) between the San Diego Freeway (Interstate 405) and Moreno Drive, the boundary line between the cities of Los Angeles and Beverly Hills. The purpose of the study is to develop a multi-modal corridor, including improved operational efficiency of the roadway, priority treatments to improve bus transit flow, improved aesthetics, a bikeway and parkway, increased safety, and the preservation of the right-of-way for future rail improvements in the Santa Monica Boulevard corridor. The California Department of Transportation (Caltrans) approved a Project Study Report (PSR) in October 1994. The PSR outlined a one-way couplet project concept for each direction. In January 1996, the LACMTA initiated a Major Investment Study (MIS) to refine the alternative approved in the PSR. In June 1997, LACMTA initiated preliminary engineering and environmental clearance for the project. The draft environmental document was released for a minimum 45-day comment period in early 1999. A public hearing was held in April 1999. LACMTA's Planning and Programming Committee and the full LACMTA board approved the project in July 1999. A Notice of Determination, required by the California Environmental Quality Act, was filed and posted in August 1999. Lead agency responsibility is being transferred to the City of Los Angeles who will be responsible for design and construction. Final design is slated to begin after the Los Angeles City Council concurs on the project and all required agreements are executed between the appropriate agencies. Construction is scheduled to begin in late FY 2001 and conclude in FY 2003.

## **South Central Corridor**

### **Louisville, Kentucky**

The Transit Authority of River City (TARC) has completed the "Transportation Tomorrow (T-square)" Major Investment Study (MIS) for a proposed corridor that would operate in an exclusive right-of-way extending south from downtown Louisville to an area just beyond the "Outer Loop," a distance of approximately 15 miles. The Locally Preferred Alternative (LPA) is a light rail transit system with 21 stations and includes an enhanced bus element. Enhanced bus service will include augmented cross-county service, which will connect riders from local neighborhoods to the proposed rapid transit line. Improvements to both the existing bus service as well as the proposed bus enhancements will be considered. The preliminary capital cost estimate for the enhanced bus element is approximately \$25 million. Proposed station sites for the LPA are being considered at: Downtown, Medical Center, Smoketown, Shelby Park, University of Louisville - Student Center and Papa John's Stadium, Kentucky Fair and Exposition Center (Southern Heights), Louisville International Airport, United Parcel Service, Ford Motor, Inc. and a proposed park-and-ride lot/maintenance facility to be located between the "Outer Loop" and the Gene Synder Freeway. The preliminary capital cost for the LPA is estimated \$640 million. The proposed project was adopted in the local metropolitan planning organization's long-range transportation plan in April 1999. TARC has initiated the environmental review process for the project.

## **North Bay Commuter Rail**

### **Marin/Sonoma, California**

Sonoma and Marin Counties are exploring the possibility of implementing passenger rail service along an existing rail right-of-way. Some initial planning studies have been conducted. However,

this effort has not proceeded into the alternatives analysis stage of planning. Presently, funding for completion and operation of a rail line has not been identified. A local sales tax measure with the potential to fund a rail project did not pass a November 1998 referendum.

## Memphis Regional Rail Plan

### Memphis, Tennessee

The Memphis Area Transit Authority (MATA) has completed a Long-Range Plan that includes Light Rail Transit (LRT) in three proposed corridors for the year 2020. The plan has been adopted by the local Metropolitan Planning Organization (MPO). The three proposed corridors include the East, North and South corridors. The East corridor extends a distance of approximately 24.8 miles, and encompasses Downtown, Midtown, East Memphis, Germantown, and Collierville. Total capital cost for the East Corridor is estimated at \$443 million. Daily ridership for the East Corridor is anticipated to be 34,300 by the forecast year 2020. The North Corridor extends a distance of 17.6 miles and includes Downtown, North Memphis, Frayser, and Millington. Total capital cost for the North Corridor is estimated at \$304 million. Daily ridership for the North Corridor is estimated to be 6,900 for the year 2020. The South Corridor extends a distance of approximately 19 miles, and includes Downtown, South Memphis, Whitehaven, Southhaven, and a spur to the Airport. Total capital cost for the South Corridor is estimated at \$330 million. Daily ridership is anticipated to be 21,200 by the year 2020.

## Kendall-Airport Corridor

### Miami, Florida

The Miami-Dade Transit Agency (MDTA), in cooperation with the Florida Department of Transportation (FDOT), is conducting an Alternatives Analysis study to examine mobility improvements in the Kendall corridor to the Miami Intermodal Center (MIC). The corridor spans approximately 15 miles with both east-west and north-south segments. The Kendall segment, from Southwest 147<sup>th</sup> Avenue to the Dadeland area, is centered along Southwest 88<sup>th</sup> Street or North Kendall Drive. The Palmetto/Airport segment, from the Dadeland area to the Miami International Airport (MIA), is centered along the Palmetto Expressway (State Route 826) corridor. Major generators, along with the study area, include the MIA, Mall of Americas, Downtown Dadeland, Baptist Hospital and Miami-Dade Community College (Kendall Campus). The Kendall-Airport AA study commenced in April 1998 and is scheduled for completion during the winter of 2000. The study follows Miami-Dade's 2015 Long-Range Transportation Plan, which identified the Kendall and Palmetto corridors as requiring premium transit treatment. Several prior studies have examined the feasibility of transitways in the study area and concluded that transitways were viable options. The Kendall-SR 826 AA study is being funded locally by the FDOT and managed by the MDTA.

## Northeast Corridor

### Miami, Florida

The Miami-Dade Transit Agency (MDTA) is planning to conduct an Alternatives Analysis (AA) study for the area's Northeast Corridor. The proposed corridor extends approximately 13.6 miles from Miami's central business district to the Broward County line, serving the cities of Miami, Miami Shores, North Miami, North Miami Beach and Aventura. The Northeast Corridor AA will examine mobility enhancements generally along the Biscayne Boulevard alignment that includes a parallel railroad corridor. Transit technologies that will be studied include both busway and light rail/diesel multiple unit rail options. The corridor was identified in the Miami-Dade's 2020 Long-Range Transportation Plan as needing premium transit improvements. It also has been studied

as part of the Metropolitan Planning Organization's Miami-Dade Transit Corridors Transitional Analyses (1993), which concluded that the proposed corridor was viable for a transitway.

## Palmetto Metrorail

### **Miami, Florida**

The Miami-Dade Transit Agency (MDTA) has begun construction of a 1.4-mile extension of the Metrorail system from its northern terminus (Okeechobee Station) to west of the Palmetto Station (State Road 826). The project includes construction of one at-grade station and an at-grade 700-space park-and-ride facility. This project will facilitate auto access to the northern terminus station with its placement adjacent to the major roadway in the region. The project is estimated to generate 1,900 new transit riders by the year 2015. The estimated total capital cost for the project is \$87.8 million. The 2000 Transportation Improvement Program anticipates that the Federal Government will provide 57 percent of the total capital costs, while state and county sources will provide 43 percent. The project is scheduled for completion in February 2002.

## Downtown Transit Connector Study

### **Milwaukee, Wisconsin**

In April 2000, the Wisconsin Center District, along with the Metropolitan Milwaukee Association of Commerce, the City of Milwaukee and Milwaukee County, initiated the Milwaukee Downtown Transit Connector Study to examine alternative transit improvements within the downtown Milwaukee area to link downtown attractions with hotels, residential, retail and business districts. The study area includes several Milwaukee neighborhoods such as East Town, West Town, Third Ward, Avenues West, Merri-Park, Story Hill and Brady Street. In 1997, a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) for the Milwaukee East-West Corridor Transportation Study was completed with the selection of a Locally Preferred Alternative (LPA) recommending both transit and highway improvements for the area. The LPA was not implemented due to a lack of local consensus on funding options, and financial constraint issues. Accordingly, since much of the information that was prepared in the original MIS/DEIS is applicable to the current Downtown Transit Connector Study, study sponsors are planning to prepare a Supplemental Draft Environmental Impact Statement (SDEIS) in conjunction with the current effort. The SDEIS is anticipated for completion in Spring 2001. An LPA is anticipated in late 2001. This effort is being sponsored with non-Section 5309 New Starts funds.

## Monmouth/Ocean/Middlesex Study

### **Monmouth-Ocean-Middlesex, New Jersey**

The New Jersey TRANSIT Corporation (NJ TRANSIT) is conducting a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) to consider transportation improvement options between Lakehurst and Newark, New Jersey. Several alignment possibilities have been examined and the options have been narrowed to diesel powered commuter rail on one of two alignments. An enhanced bus system was adopted by NJ TRANSIT's Board of Directors and is now advancing as an independent initiative. In response to suggestions from two of the affected counties, analysis continues on two potential rail options, one of which would connect with Amtrak's Northeast Corridor in Middlesex County and the other with the North Jersey Coast Line in Monmouth County. Information on the local financial commitment, mobility improvements, cost effectiveness, environmental benefits and operating efficiencies is being developed as part of the MIS/DEIS. Through FY 2001, Congress has appropriated \$7.8 million in Section 5309 New Starts funds for this effort.

## Monterey County Commuter Rail and Inter-City Passenger Rail

### **Monterey County, California**

The Transportation Agency for Monterey County (TAMC) is proposing the development and extension of two commuter rail lines to Monterey County. The first component involves the extension of the Caltrain peninsula rail corridor, of which four trains now operate to Gilroy for peak commute trips in the morning and evening. TAMC is in the process of evaluating the ridership to determine which of the four trains to Gilroy should be extended to Monterey County and where the destination(s) should be. TAMC will develop a business plan for this extension, including identifying all the needed capital improvements, institutional arrangements and an estimation of the projected operating subsidy. The Caltrain extension would operate on an existing rail line from Gilroy to either Salinas or Seaside on the Monterey Peninsula. A second component includes the implementation of inter-city passenger rail service between San Francisco and Seaside. Monterey County has been allocated \$17 million under the California Rail Initiative under State Proposition 116 and has secured \$0.45 million for environmental clearance, preliminary design and an economic assessment of the branch line improvements between Castroville and Seaside. An additional \$2.1 million was awarded to Monterey County for grade crossing improvements under TEA-21. The proposed inter-city passenger rail connection is being planned to connect with other existing rail services in the Bay area, including a connection with the Capital Corridor inter-city service between San Jose and Sacramento (Colfax) and the Altamont Commuter Express between San Jose and Stockton.

## Personal Rapid Transit

### **Morgantown, West Virginia**

The University of West Virginia is planning an upgrade of the heating and on-board vehicle control system on the Morgantown Personal Rapid Transit (M-PRT) system. The system was originally developed as a research and demonstration project during the 1970s. The system consists of 8.2 miles of dedicated guideway with five passenger stations and a fleet of 71 fully automated vehicles. Through FY 2001, Congress has appropriated \$8.2 million in Section 5309 New Starts funds for this effort.

## Nassau Hub

### **Nassau County, New York**

An Alternatives Analysis (AA) Study is proposed by Nassau County, New York to examine transportation improvements within this 1.5 by 2-square-mile area, located in central Nassau County within the Town of Hempstead. The Nassau Hub is defined as an area bordered by Hempstead Turnpike (NY-24) to the south, Clinton Road to the west, Old Country Road to the north and Merrick Avenue to the east. However, the focal point of the Hub is the 1,100-acre former Mitchell Field Air Force Base that has become an extensive mixed-use development area that includes a range of commercial, recreational and institutional uses. The Nassau Hub, in its entirety, contains retail, office, manufacturing, warehousing, a regional active park, a preserve, two colleges, museums and a sports arena. The study will consider a range of alternatives, including light rail transit, a fixed guideway loop, and shuttle buses that would connect existing facilities and new infill development into a pedestrian/transit-friendly environment. Potential circulator transit service would also connect with a Long Island Rail Road (LIRR) commuter rail station(s). Nassau County will seek assistance from the New York Metropolitan Transportation Council (local Metropolitan Planning Organization), LIRR and Long Island Bus, along with civic groups and the local business and development community. Through FY 2001, Congress has appropriated \$0.5 million in Section 5309 New Starts funds for this effort. A grant for the AA study was awarded in December 1999.

## Newburgh LRT System

### **Newburgh, New York**

The City of Newburgh is planning to initiate a feasibility study for a proposed Light Rail Transit (LRT) system linking its Hudson River waterfront to Stewart International Airport. There is currently no public transportation between the two sites. The proposed LRT corridor would run along Broadway (Route 17K) connecting Newburgh's waterfront, historic district and downtown commercial area with the airport and the surrounding industrial facilities, a distance of approximately four miles. The corridor could also be extended across the Hudson River -- via the Newburgh Beacon Bridge -- to an existing Metro-North commuter rail station, creating an innovative intermodal system. A segment of the proposed corridor passes through the City's federally designated Enterprise Community area. It would also serve a major portion of Newburgh's New York State Economic Development Zone (EDZ). The proposed LRT would boost tourism in the City by creating a unique and direct link between its historic waterfront area and the region's major entry point for outside visitors. In addition, the proposed project would provide job access to the Stewart vicinity's industrial sites for Newburgh's underutilized work force. The feasibility study would take approximately 12 months to complete and include consultation with the Town of Newburgh, State of New York Department of Transportation, Stewart Airport Commission, New York Metropolitan Transportation Authority/Metro North, New York State Thruway Authority, New York State Bridge Authority and the Newburgh EDZ. The study would also include consideration of alternative transportation systems.

## Waterfront Access

### **New London, Connecticut**

The proposed Waterfront Access project in the City of New London is an extension of the existing waterfront and its Intermodal facility. The City is in the process of defining the project. Through FY 2001, Congress has appropriated \$0.49 million in Section 5309 New Starts funds for this effort.

## East Jefferson Corridor

### **New Orleans, Louisiana**

In April 1999, the Regional Planning Commission (local metropolitan planning organization) for the Jefferson, St. Bernard, Orleans, St. Tammany and Plaquemines Parishes, completed a Major Investment Study (MIS) for a corridor extending approximately 15 miles from Interstate 310 and the New Orleans International Airport to Downtown New Orleans and the Union Passenger Terminal on the East Bank of the Mississippi River. Alternatives studied included No-build, TSM, U.S. 61 Widening, Earhart Boulevard Extension, rail development (technology unspecified), busway, truckway and a combination alternative. The MPO selected a combination alternative as it locally preferred alternative consisting of both rail and an extension of Earhart Boulevard. Total estimated capital costs -- in order of magnitude -- range from \$140 million (rail alternative) to \$500 million (Earhart Boulevard extension). During the course of the MIS, particular attention was given to the sensitivity to community impacts and involved a large public involvement component. It is anticipated that this emphasis will continue into the environmental review phase that will be led by the Louisiana Department of Transportation and Development. Land use impacts will be addressed in more detail as well as the alignments, design and technology. To date, none of the alternatives have been included in the Transportation Improvement Program beyond the environmental review phase. However, a placeholder has been included in the region's recently adopted Long-Range Transportation Plan.

## Trans-Hudson Midtown Corridor

### **New York/New Jersey Metropolitan Area**

The Port Authority of New York and New Jersey, along with the New York Metropolitan Transportation Authority and the New Jersey TRANSIT Corporation (NJ TRANSIT) are conducting a Major Investment Study (MIS) to examine the feasibility of establishing new transportation links from Westchester and Western Queens, New York, through Midtown Manhattan, and on to Northern New Jersey. This effort is known locally as the Access to the Region's Core (ARC) study. A *Milestone Summary Report* identified as the preferred alternative a commuter rail solution involving all three of the region's commuter railroads – NJ TRANSIT, the Long Island Rail Road and Metro-North - allowing all three railroads to gain access to New York's Penn Station and Grand Central Terminal. The alternative involves a new commuter rail tunnel under the Hudson River to an expanded Penn Station with a tunnel extension to Grand Central Terminal. Project sponsors are seeking approval to complete Phase III of the MIS with detailed analysis of this alternative as well as possible variants, including an investigation of potential freight opportunities. The analysis is also evaluating capacity expansion strategies at New York's Penn Station in the near term. The MIS is scheduled for completion in the Spring of 2001. Through FY 2001, Congress has appropriated \$4.90 million in Section 5309 New Starts funds for this effort.

## 8<sup>th</sup> Avenue Subway Connection

### **New York, New York**

The Pennsylvania Station Building Redevelopment Corporation (PSRC) is proposing a pedestrian connection between the existing Pennsylvania Station and the new Amtrak area in the James A. Farley Building as a component of the Pennsylvania Station Building Redevelopment Project. The proposed project would widen an existing pedestrian passageway on 33<sup>rd</sup> Street (Midtown Manhattan) which connects Penn Station with the New York City Transit 8<sup>th</sup> Avenue/34<sup>th</sup> Street Subway Station and the Long Island Rail Road West End Corridor and extend it to the Farley Building. The existing passageway is currently overcrowded. In addition to widening the corridor, the proposed project includes reducing the grade of a ramp in the corridor, improving accessibility for the disabled, and upgrading the lighting, ventilation and life safety components. Total capital costs for the proposed connection are estimated at \$10.8 million. The construction budget for the Farley Building Project is estimated at \$305 million. The overall Farley Building Project is estimated at \$788 million, of which \$268 million is proposed for Federal funding. In addition, \$160 million in TIFIA loan funds have been applied to the project. The 8<sup>th</sup> Avenue Subway Connection represents a portion of the Federal share. The Federal Railroad Administration (FRA) has been the lead agency for the project. FRA issued a Finding of No Significant Impact for the project in September 1999.

## Astoria-East Elmhurst Extension (LaGuardia Airport Subway Access Study)

### **New York, New York**

The LaGuardia Airport Subway Access (LASA) Study, previously known as the "Astoria East Elmhurst Extension," is being conducted as part of a cooperative partnership comprised of the City of New York, Queens Borough President's Office, the Port Authority of New York and New Jersey and the New York Metropolitan Transportation Authority (MTA). The purpose of the LASA Study is to determine the physical, operational and capital requirements, environmental impacts and potential mitigation measures associated with the provision of one-seat ride subway service from Lower and Midtown Manhattan to LaGuardia Airport. An Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS) is being conducted by the MTA, acting as the lead

local agency. The FTA is the lead federal agency in the planning effort, with the Federal Aviation Administration, Federal Highway Administration and the Federal Railroad Administration, acting as cooperating agencies, as defined by the National Environmental Policy Act. Using an established set of criteria, a "long list" of approximately 20 alternatives is being screened down to a "short list" that will be evaluated in more detail. These alternatives include various branches and/or extensions of the New York City subway system and the Long Island Rail Road, and also include new people mover and guided busway systems. The DEIS will include the build alternatives that survive the short list evaluation and will then be analyzed for environmental impacts. The AA/DEIS is currently scheduled for completion in early 2002 with the Final EIS to be completed in late 2002. The present LASA Study has been funded with local sources. Beyond the planning and environmental review phase, the MTA has included \$645 million in its FY2000-FY2004 Capital Program to complete preliminary engineering, final design and construction of key off-airport segments, should a build alternative be selected as the preferred alternative. The Capital Program also includes a contribution towards the cost of construction of the on-airport segment.

## **Broadway-Lafayette-Bleecker Street**

### **New York, New York**

See the description for the Brooklyn-Manhattan Access project. Project sponsors have informed FTA that the two are the same.

## **Brooklyn-Manhattan Access (formerly known as the East River Crossing MIS)**

### **New York, New York**

The New York Metropolitan Transportation Authority (MTA) and New York City Transit (NYCT) have completed an Option 1 Major Investment Study (MIS) to examine the preliminary operating and engineering options for improving the capacity and flexibility of subway services crossing the East River. The study was formerly known as the East River Crossing MIS. The distribution among the subway lines crossing the East River is uneven and some crossings are congested while others have underutilized capacity. One of the major goals of the study was to provide alternatives to current NYCT subway service over the aging Williamsburg and Manhattan bridges. The MIS reviewed approximately 68 strategies and ultimately recommended Manhattan Bridge Alternative 5 (MBA 5) as the preferred alternative to be advanced for further analysis. The full MBA 5 Alternative has an estimated capital cost of approximately \$600 million, and an estimated operating cost of \$0.4 million. The MBA 5 Alternative is comprised of five components. These include: Rutgers Street Tunnel-DeKalb Avenue Track Connection; Lawrence Street-Metro Tech to Jay Street Passenger Transfer; Broadway-Lafayette and Bleecker Street Passenger Transfer; Revise Existing Service Pattern on the D/Q/N lines; and lengthen the No. 3 line trains. The MBA 5 Alternative also recommended adding approximately 12 additional passenger trains per hour. These components are important to NYCT system improvements. However, the Rutgers Street-DeKalb Avenue Track Connection provides the major benefits of the MBA 5 Alternative and its ability to provide critically needed system flexibility and additional capacity. In addition, it should be noted that while the study has been completed and a recommended alternative identified, the MTA/NYCT is focusing on the engineering of the Broadway-Bleecker Street and Jay Street passenger transfers as distinct components. These activities have been programmed into the MTA's FY 2000-FY2004 Capital Program. The Broadway-Bleecker Street passenger transfer is programmed for construction at \$25 million in 2004. Design is expected to start in 2001, and construction in 2004. The Lawrence-Jay Street transfer is programmed for design at \$0.6 million in 2001.

## Brooklyn-Staten Island Ferry

### **New York, New York**

The New York City Department of Transportation (NYCDOT) and the Port Authority of New York and New Jersey (PORT) recently performed a series of studies examining potential routes connecting Staten Island (SI) with Downtown Brooklyn, either directly, after a stop in Manhattan, or enroute to a Midtown-Manhattan landing. Currently, there is no ferry service from Staten Island to Downtown Brooklyn. However, there is ferry service serving the Brooklyn Army Terminal Pier at 60<sup>th</sup> Street enroute from Monmouth County, New Jersey to Manhattan. In 1997, NYCDOT solicited the business community's interest in operating these routes. The response to the request resulted in limited interest by private operators, in part due to the recent elimination of SI Ferry passenger fares, and the creation of the One City-One Fare free transfer between the New York Metropolitan Transportation Authority's buses and subways. NYCDOT has indicated that if a private ferry operator were to express interest, NYCDOT would consider constructing or enhancing existing docking space to support the service.

## Lower Manhattan Access Alternatives Study

### **New York, New York**

See the description for the Second Avenue Subway project.

## Manhattan East Side Alternatives

### **New York, New York**

See the description for the Second Avenue Subway project.

## Midtown West Ferry Terminal

### **New York, New York**

The New York City Department of Transportation (NYCDOT), in cooperation with the New York City Economic Development Corporation, is proposing the development of a ferry terminal on Manhattan's West Side for the ferry services along the Hudson River and New York Harbor. The largest operator would be New York Waterway (a private ferry operator owned by Authur Imperatore). The proposed terminal is located geographically on the West Side of Manhattan. An expanded terminal is expected to serve additional ferry routes along the Hudson River and from New York Harbor. A separate project has been proposed for the New York Waterway Terminal on the New Jersey side of the Hudson River that does not involve NYC DOT. Total capital costs for the Midtown West Ferry Terminal are estimated at \$22.24 million. The Federal Highway Administration is supporting the design and engineering costs of the project. NYC DOT is anticipated to apply for construction funding in the year 2000. Through FY 2001, Congress has appropriated \$2.48 million in Section 5309 New Starts funds for the project.

## North Shore Railroad

### **New York, New York**

The Rehabilitation of the North Shore Railroad Line project involves conducting an Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS) to examine the feasibility of re-establishing passenger rail service along the North Shore Rail line located on Staten Island, New York. Originally, the line went from Cranford, New Jersey to the St. George Ferry terminal on Staten Island. The current project only considers the section between the Arlington Rail Yards and St. George, Staten Island, a distance of approximately 5.2 miles. This effort is part of a larger project to improve intermodal connections between New York and New Jersey to transport freight

from ocean-going ships and trucks as well as passengers to a new industrial work site, the Howland Hook Marine Terminal on Staten Island. This project is also expected to stimulate economic development on Staten Island (SI). The study will evaluate a range of alternatives, including No-build, bus rapid transit, commuter rail and diesel multiple unit technology. Phases 1 and 2 of the rehabilitation project have been completed. Phase 3 consists of revitalizing the remaining portion of the rail corridor for passenger service and implementing the AA/DEIS study. Currently, the project is not in the Transportation Improvement Program/State Transportation Improvement Program. However, the North Shore Railroad Line project is one study, among others, of the Corridor Level Options discussion in the draft Regional Transportation Plan for the New York City urbanized area. Other related studies include: Cross Harbor Freight Movement Major Investment Study – this effort is evaluating a rail freight tunnel that may use a portion of the SI North Shore Line. Another effort is a New York City Department of City Planning Rails with Trails study that proposes a greenway trail sharing one trackway of the SI North Shore Line, provided it remains a lightly used freight line. FTA provided \$10.4 million to purchase the Staten Island North Shore Railroad right-of-way from Howland Hook to St. George.

## St. George Ferry Intermodal Terminal

### **New York, New York**

The New York City Department of Transportation (NYCDOT) is proposing to modernize the Saint George Ferry Terminal. The terminal is located on Staten Island and functions as a termination point for ferry service between Staten Island and Manhattan. The terminal also provides intermodal connections for commuter rail (New York Metropolitan Staten Island Railway - SIR), New York City Transit bus, vans, automobiles, bicycles and pedestrians. The facility has not undergone significant reconstruction since it was built in 1950 after a fire destroyed the original terminal. Hence, there are areas in and around the terminal that need immediate improvements. In addition, portions of the terminal have been closed to public access due to unsafe conditions. The proposed modernization and reconstruction of facilities will include new entrances, a pedestrian plaza at the concourse level, new stairs, escalators and elevators, parking facilities that conform with the Americans with Disabilities Act (ADA) of 1990, a new pedestrian walk, intermodal improvements to the bus complex and retail stores. A new minor league baseball stadium is also being built immediately adjacent to the terminal on the west side. In addition, the National Lighthouse Museum is expected to move into historic former U.S. Coast Guard buildings located on the east side. Total capital costs are currently estimated at \$101 million. Funding for the proposed project will come from a combination of sources including, the FTA, NYCDOT, and the State. A Finding of No Significant Impact was approved for the project in September 2000. It is important to note that although NYCDOT would be the grantee for the funds, the lead agency for design and construction would be in the New York Economic Development Corporation. Through FY 2001, Congress has appropriated \$2.5 million in Section 5309 New Starts funds for the project.

## Second Avenue Subway

### **New York, New York**

The New York Metropolitan Transportation Authority (MTA) is planning to develop a full-length Second Avenue subway line along the East Side of Manhattan from 125<sup>th</sup> Street to the Financial District in Lower Manhattan pursuant to approvals by the MTA Board and the MTA Capital Program Review Board. The East Side of Manhattan has only one rapid transit line (Lexington Avenue). The line experiences significant overcrowding during peak periods. In 1995, the line carried approximately 288,000 inbound daily passenger trips. There is limited additional capacity to expand bus service. The specific alignment of the full-length subway line is being developed by two coordinated studies: Manhattan East Side Alternatives (MESA) Study and the Lower Manhattan Access (LMA) Study. FTA is sponsoring both studies. The MESA Study has

completed a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) on the northern segment of the Second Avenue subway from 125<sup>th</sup> Street to the 63<sup>rd</sup> Street subway line. The LMA Study is completing an MIS/DEIS on the southern segment of the Second Avenue subway from 63<sup>rd</sup> Street to Lower Manhattan. FTA and the MTA are developing an approach to complete the planning and environmental review process for the full-length Second Avenue subway using these two studies. The MTA has included \$1.05 billion in its FY2000-FY2004 Capital Program for planning, environmental review, design and engineering, and the initiation of construction by the end of 2004.

## Whitehall Intermodal Terminal

### **New York, New York**

The New York City Department of Transportation (NYCDOT) is undertaking the reconstruction of the Whitehall Street Intermodal Ferry Terminal. The terminal, located at the southern tip of Manhattan was mostly destroyed by fire in 1991 and ferry service has been operating out of interim facilities since then. Reconstruction of the terminal will include improved connections with the New York City Transit subway and bus system. The Staten Island Ferry System moves over 65,000 riders daily. A Finding of No Significant Impact was approved in September 1999. In the same month, FTA awarded a grant for the initiation of project construction. Originally, construction was estimated to cost approximately \$81 million. However, construction estimates are currently estimated at approximately \$135 million. Through FY 2001, Congress has appropriated \$15.43 million in Section 5309 New Starts funds for this effort.

## Norfolk-Virginia Beach Corridor LRT

### **Norfolk, Virginia**

Hampton Roads Transit (HRT) selected an 18.3-mile light rail transit (LRT) alignment between Virginia Beach and downtown Norfolk as the locally preferred alternative (LPA) resultant of a Major Investment Study completed in 1995. The local Metropolitan Planning Organization endorsed the LPA in January 1997. This east-west alignment, with an estimated capital cost of \$525.6 million (escalated dollars), represents the first phase of a planned 30-mile LRT system in the Hampton Roads region. Other planned LRT segments would serve the Norfolk Naval Base and the cities of Chesapeake and Portsmouth. HRT completed a Draft Environmental Impact Statement (DEIS) and a Final EIS in April 1999 and March 2000, respectively, on the 18.3-mile LRT. In November 1999, Virginia Beach residents rejected a referendum of support for the proposed project. In view of the failed referendum and at the request of the City of Norfolk, HRT has undertaken a Supplemental DEIS to examine alternative alignments for proceeding with the proposed LRT. Through FY 2001, Congress has appropriated \$10.91 million in Section 5309 New Starts funds to the project.

## West Lake Commuter Rail Link

### **Northern Indiana**

The Northern Indiana Commuter Transportation District (NICTD) is conducting a Major Investment Study (MIS) for the West Lake Corridor to examine the southern extension of the South Shore Line commuter rail service. The proposed corridor includes approximately 4.5 miles of unused former right-of-way purchased under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and jointly owned by the two towns of Munster and Hammond, Indiana and the NICTD. The right-of-way begins at Airline Junction in Munster, Indiana and ends at Dan Rabin Transit Plaza in downtown Hammond. NICTD has completed a sketch engineering study that would connect this corridor and the South Shore Line at Burnham Yards in Illinois. The proposed alignment would provide direct access via Metra's (commuter rail division of the

Regional Transportation Authority of northeastern Illinois) Electric to Randolph Street line in Chicago. The MIS will primarily build upon an extensive alternate mode study done prior to ISTEA. Through FY 2001, Congress has appropriated \$0.49 million in Section 5309 New Starts funds for the MIS.

## Lackawanna Cut-off Corridor

### **Northern New Jersey/Northeastern Pennsylvania**

Morris, Sussex and Warren Counties, all located in New Jersey, in cooperation with the New Jersey TRANSIT Corporation (NJ TRANSIT) are conducting a Major Investment Study/Environmental Assessment to examine the feasibility of re-instituting rail service on the Lackawanna Cut-off Corridor between Scranton, Pennsylvania and Hoboken, New Jersey. In addition, in 1998, a planning study was undertaken by Lackawanna County, Pennsylvania to preliminarily define the State's portion of the project. The options currently under examination include commuter rail, enhanced bus service, and transportation systems management alternatives. The potential rail service would connect to the NJ TRANSIT Boonton Line and Morristown Line in Roxbury, New Jersey. Trains would operate to Hoboken and connect to Midtown Direct trains traveling to New York's Penn Station. The proposed project would include track and signal improvements, new stations, parking facilities, train storage yard, and rail equipment acquisition. Information on mobility improvements, environmental benefits, cost effectiveness, operating efficiencies, transit-supportive land use and other factors are being developed. Through FY 2001, Congress has appropriated \$0.99 million in Section 5309 New Starts funds for this effort.

## Newark-Elizabeth Rail Link (NERL) - Elizabeth Segment

### **Northern New Jersey**

In January 1997, the New Jersey TRANSIT Corporation (NJ TRANSIT) completed a Draft Environmental Impact Statement (DEIS) covering an 8.8-mile area linking Newark and Elizabeth, New Jersey with a proposed light rail transit (LRT) system. Currently, the proposed LRT is planned for construction in three Minimum Operable Segments (MOS). MOS-1: a one-mile connection between Broad Street Station and Newark Penn Station (a Full Funding Grant Agreement was executed between FTA and NJ TRANSIT in August 2000 for MOS-1); MOS-2: a one-mile line from Newark Penn Station to Camp Street in downtown Newark; and MOS-3: a seven mile LRT line from downtown Newark to Elizabeth, including a station serving Newark International Airport (NIA). At the request of Union County, New Jersey and the City of Elizabeth, NJ TRANSIT, is preparing a Supplemental DEIS to analyze the effects of an alignment modification on the segment contained within the City of Elizabeth. MOS-3, as described in the 1997 DEIS, includes stations south from NIA at the following locations: Routes 1 & 9, McClellan Street, Airport City, Division Street, Spring Street and the terminus at Midtown Elizabeth. This segment of the system would connect NIA with employment areas south of the airport and with downtown Elizabeth. The proposed Union County LRT segment (MOS-3) would modify the Elizabeth alignment and diverge just south of the proposed McClellan Street Station, proceed through NIA's parking lot "D" to the Jersey Gardens Mall, then turn west and reconnect to the proposed Spring Street Station and terminate at the proposed Elizabeth Midtown Station in downtown Elizabeth. The modified alignment is anticipated to support the extensive commercial and retail development that has been initiated since the completion of the DEIS in 1997. The modified alignment is also anticipated to assist in optimizing land use at NIA through an LRT connection to the existing Airport Monorail system. The implementation of this segment of NERL would be performed as a joint development partnership between the NJ DOT, NJ TRANSIT, Union County and the private sector under New Jersey's 1997 Public-Private Partnership legislation. Federal participation will also be sought.

## New York, Susquehanna & Western Commuter Rail (Hawthorne-Warwick Corridor)

### Northern New Jersey

In 1996, the New Jersey TRANSIT Corporation (NJ TRANSIT) completed a study resulting in a proposal to restore commuter rail service on the New York, Susquehanna Western rail line (NYS&W) as far as Sparta, New Jersey. The service would connect to NJ TRANSIT's Main Line at Hawthorne, New Jersey, where trains would serve the Secaucus Transfer Station and Hoboken. The proposed project would include track and signal improvements, nine new stations, parking facilities and equipment acquisition. In August 1996, a final Environmental Assessment Study was completed for the NYS&W rail passenger restoration. FTA subsequently issued a Finding of No Significant Impact in September 1996. The total cost for the NYS&W passenger restoration project is estimated at approximately \$100 million. Another component of the project is the rehabilitation of the Paterson Station on the NJ TRANSIT Main Line to comply with the Americans with Disabilities Act (ADA) of 1990. The rehabilitation consists of a new high-level platform, two new stairways connecting the street level with the new high-level platform, and an ADA compliant elevator and pedestrian plaza. The total cost of the Paterson Station rehabilitation is approximately \$8 million. The U.S. Department of Interior reviewed the Section 4(f) Evaluation for the Paterson Station upgrade as it relates to the ADA and subsequently concurred with NJ TRANSIT in September 1999 that there was no prudent and feasible alternative to the proposed project. A Section 106 Memorandum of Agreement among the New Jersey State Historical Preservation Office, NJ TRANSIT and FTA for the proposed project was executed in January 2000. Later that same month, FTA determined that there was no prudent and feasible alternative to the proposed project. NJ TRANSIT anticipates completion of the Paterson Station rehabilitation in August 2001. Through FY 2001, Congress has appropriated \$29.73 million in Section 5309 New Starts funds for both the NYS&W passenger restoration and the Paterson Station rehabilitation.

## Union Township Station (Raritan Valley)

### Northern New Jersey

In 1995, Union County, along with New Jersey TRANSIT (NJ TRANSIT), initiated a study to determine the potential for establishing a new train station and for fostering development in the Townley section of the Township of Union, New Jersey. The station is located at Morris Avenue on NJ TRANSIT's Raritan Valley Line. The Union Township Station will consist of the following elements: a rail station building; a new bridge for the railroad tracks at Morris Avenue; a 545-foot high-level center-island canopied platform; a 20-foot wide pedestrian underpass to access the rail station's central platform from the parking lots; two parking lots with a combined capacity of 484 spaces; an access road entering the site from Green Lane at the entrance of Kean University, and the realignment of existing railroad tracks and all signals and communications. In November 1999, a final Environmental Assessment Study was completed for the Union Township Station. During the same month, FTA issued a Finding of No Significant Impact. NJ TRANSIT has proceeded with the project with non-Federal funds. The station is currently under construction.

## West Trenton Line Corridor

### Northern New Jersey

The New Jersey TRANSIT Corporation (NJ TRANSIT) is conducting planning, conceptual design and an Environmental Assessment (EA) for the restoration of commuter rail service on the West Trenton Line between West Trenton and Newark, New Jersey. The rail service would connect with NJ TRANSIT's Raritan Valley Line in Bridgewater, New Jersey. The proposed project would include the installation of a second track in selected locations, signal improvements, construction

of five new stations, parking facilities, train storage yard, and rail equipment acquisition. Information on mobility improvements, environmental benefits, cost effectiveness, operating efficiencies, transit-supportive land use and other factors are being developed. The EA is scheduled for completion in early 2001. Through FY 2001, Congress has appropriated \$4.46 million in Section 5309 New Starts funds for this effort.

## Oakland Airport-BART Corridor

### Oakland, California

The Bay Area Rapid Transit District (BART) is working with the Port of Oakland and the City of Oklahoma on a proposed 3.2-mile transit link between the Oakland Coliseum BART station and the Oakland International Airport. The route will generally follow an alignment along Hegenberger Road. The present non-stop bus service can make the trip in 10-15 minutes (including a five minute wait), but due to traffic congestion, often takes 30 minutes or more. The technology for the connector will be selected to provide the speed and added capacity necessary to serve the rapid growth in air passengers and employees anticipated at the airport in the 21<sup>st</sup> century. BART is considering automated guideway transit and a state-of-the-art bus system with signal preemption and some dedicated right-of-way. The selected system must make the trip in six-to-seven minutes. The City of Oakland has asked that the intermediate stops be included in the study of alternatives although the cost-constrained budget since the project precludes early implementation of these elements. Planning funds for the proposed project are included in the Regional Transportation Plan and State Transportation Improvement Program. Capital funding for the project is included in Alameda County's Expenditure Plan for Measure B, a county-wide ballot initiative that will provide \$72 million in sales tax revenue for the project, which is budgeted at \$130 million. Measure B was passed in November 2000 receiving over 66 percent of the vote.

## Broad Street Line Extension

### Philadelphia, Pennsylvania

FTA has not received any information on this effort.

## Cross County Metro

### Philadelphia, Pennsylvania

The Southeastern Pennsylvania Transportation Authority (SEPTA) is completing a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) along a proposed 60-mile suburban corridor in a southwest to northeast direction, from Glenoch in Chester County, through Norristown in Montgomery County and terminating in Morrisville, Bucks County. The proposed corridor, almost all of which is located along an existing rail freight right-of-way, is roughly parallel to the US Route 202 Expressway and the Pennsylvania Turnpike. Revision of the MIS/DEIS will commence shortly. The revision will accommodate the change in the locally preferred alternative (LPA) from the initially selected electric light rail to the LPA selected for the Philadelphia - Schuylkill Valley Metro. If constructed, these two lines would intersect in the Norristown/King of Prussia area. The change in technology is anticipated to result in cost reductions from the estimates given below as a result of shared vehicle development and procurement of common maintenance facilities. The proposed project would be constructed in two phases. The first phase would provide rail service from Glenoch to Norristown via King of Prussia, coupled with express bus service from King of Prussia to Oxford Valley via the Pennsylvania Turnpike. The second phase would extend the proposed rail service from Norristown to Morrisville. Total capital costs for the first phase are estimated at \$396 million. Total capital costs for the entire corridor, including both the first and second phases, are estimated at \$742 million. Total daily ridership for the first phase is anticipated at 8,500. Ridership for the entire corridor is estimated at 14,700.

Through FY 2001, Congress has appropriated \$5.16 million in Section 5309 New Starts funds for this effort.

## Lower Merion Township

### **Philadelphia, Pennsylvania**

FTA has not received any information on this effort.

## Schuylkill Valley Metro

### **Philadelphia, Pennsylvania**

The Southeastern Pennsylvania Transportation Authority (SEPTA) and the Berks Area Reading Transportation Authority (BARTA) are conducting an Alternatives Analysis Study/Draft Environmental Impact Statement (AA/DEIS) for the Schuylkill Valley Corridor. The proposed corridor extends approximately 62 miles from Philadelphia to Reading and parallels the following major congested roadways: Schuylkill Expressway (Interstate 76), US 422 Expressway and US Route 202. The corridor includes the smaller cities of Norristown, Pottstown and Phoenixville. The corridor also includes suburban centers of King of Prussia and Great Valley, as well as regional activity centers and attractions including Center City Philadelphia, Art Museum, Philadelphia Zoo, King of Prussia Malls, Valley Forge National Park and Reading outlets. The proposed corridor encompasses three transit authorities: SEPTA, BARTA and Pottstown Urban Transit (PUT) and two metropolitan planning regions: Delaware Valley and Berks County. Commuter rail service currently operates in the eastern portion of the corridor with rail freight service operations in the western portion of the corridor. A locally preferred alternative (LPA) has been chosen by SEPTA and BARTA, but has not been adopted into the fiscally constrained long-range plans of the respective urbanized areas. The LPA would employ rail vehicle suitable for operation on mixed-use (passenger or freight) track, capable of one-man operation and with 15 and 30-minute headways in the peak and off peak, respectively. Total capital costs for the LPA are estimated at \$1.4 billion. A preliminary DEIS is currently under review by FTA prior to its public release before in the end of 2000. Work has commenced on the preparation of supporting documentation for entry into preliminary engineering (PE). Project sponsors plan to submit a request to FTA to enter PE before the end of 2000. Through FY 2001, Congress has provided \$16.81 million in Section 5309 New Starts funds for the proposed Schuylkill Valley Corridor. In addition, the Delaware Valley Regional Planning Commission, the Philadelphia Area metropolitan planning organization, is studying a proposed Regional Transit Oriented Development Program in the corridor under a Transportation and Community and System Preservation (TCSP) grant.

## Highspeed Rail

### **Philadelphia-Pittsburgh, Pennsylvania**

FTA has not received any information on this effort.

## Roaring Fork Valley (Aspen-Glenwood Springs Corridor)

### **Pitkin County, Colorado**

In 1995, the Colorado Department of Transportation (CDOT) completed a feasibility study of rail transit in the 40-mile Aspen to Glenwood Springs Corridor in the Roaring Fork Valley, about 160 miles west of Denver. The study estimated that a valley-wide rail system would cost approximately \$129 million. As a result, the City of Aspen is considering a locally funded light rail transit line in a four-mile segment of the corridor connecting Pitkin County Airport with downtown Aspen. CDOT, meanwhile, is conducting a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) to analyze transportation alternatives, alignments, and costs in the

remainder of the valley, the 35-mile corridor from Aspen to Glenwood Springs. The MIS/DEIS is scheduled for completion in fiscal year 2001. Through FY 2001, Congress has appropriated \$3.95 million in Section 5309 New Starts funds for this effort.

## Airbourne Shuttle System

### **Pittsburgh, Pennsylvania**

The Pittsburgh Airbourne Shuttle System is a proposal, put forth by a private sector group, to design and construct a low-speed magnetic levitation project.

## Portland Marine Highway Program

### **Portland, Maine**

The City of Portland, Maine is considering several waterfront projects that will improve the connectivity of the waterfront infrastructure. An expanded ferry terminal is one of the projects under review. Through FY 2001, Congress has appropriated \$1.98 million in Section 5309 New Starts funds for this effort.

## Integrated Intermodal Transportation

### **Providence – Westerly, Rhode Island**

The Rhode Island Department of Transportation (RIDOT) is proposing to undertake an alternatives analysis (AA) of the Providence to Westerly Corridor. The purpose of the study is to evaluate transportation alternatives that would improve mobility. The analysis will examine a range of modes including, but not limited to, commuter rail, automated guideway transit, people movers, Transportation System Management alternatives and exclusive facilities for bus and other high occupancy vehicles. In addition to the AA study, RIDOT will develop project justification criteria in order to qualify for New Starts funding. Under TEA-21, \$25 million was authorized for the Integrated Intermodal Transportation Project.

## Transportation Commission (San Jacinto Branch Line)

### **Riverside County, California**

The Riverside County Transportation Commission (RCTC) is proposing to implement rail passenger service on the San Jacinto Branch Line of the former Atchison, Topeka and Santa Fe (ATSF) railroad. The proposed project will implement service on the entire 38-mile line between the communities of Riverside/Highgrove and San Jacinto. RCTC plans to implement Phase I of the project, which involves railbed improvements, Metrolink connections, track and signal improvements and stations for the first 19 miles between Riverside/Highgrove Moreno Valley, March Air Reserve Base and Perris. Total capital cost for Phase I is estimated at \$43 million. The capital cost for the entire 38-mile project is estimated at \$108 million. RCTC purchased the route from the ATSF in 1992 using local and state bond funds. ATSF retained freight operating rights. It's successor railroad, Burlington Northern Santa Fe, continues to operate freight service and maintain the line under agreements with RCTC. The proposed project is included in the Southern California Association of Governments' Regional Transportation Plan. Through FY 2001, Congress has appropriated \$0.5 million in Section 5309 New Starts funds for this effort.

## Folsom Extension

### **Sacramento, California**

The Sacramento Regional Transit District (RT) is proposing a series of multiple improvements to the existing light rail transit (LRT) corridor between downtown Sacramento and the Mather Field

Station, with a potential extension of the LRT line from the current Mather Field LRT station to downtown Folsom. The proposed project also includes a potential extension of the LRT line in downtown Sacramento. The majority of the needed right-of-way for the proposed project has already been acquired using State and local funds. A portion of right-of-way acquisition is required in downtown Folsom. Improvements to the existing LRT system in the Folsom corridor will include double-tracking two portions of the existing line at Bee Bridge and 65<sup>th</sup>-to-Watt. These improvements will allow the RT to operate limited-stop express rail service from downtown Folsom to downtown Sacramento.

## Placer County Corridor

### **Sacramento, California**

FTA has not received any information on this effort.

## Cross County Corridor

### **St. Louis, Missouri**

The East-West Gateway Coordinating Council (EWGCC) - the local Metropolitan Planning Organization (MPO) and the Missouri Highway and Transportation Department (MoDOT) have completed a Major Investment Study (MIS) in the Cross County Corridor including St. Louis City and County. The east-west corridor connection is through Clayton, Missouri to the existing Metrolink system. The study evaluated transportation alternatives such as light rail transit (LRT), busway, highway, Transportation Systems Management alternatives and a No-Build alternative. Phase I of the MIS was completed in March 1997. A Locally Preferred Alternative (LPA), which included highway and transit improvements, was selected in September 1997. The transit LPA is a 28.8-mile LRT line that extends Metrolink west in the City of St. Louis through downtown Clayton in St. Louis County, and then south from Clayton beyond the Interstate 55/Interstate 270 interchange in southeast St. Louis County and north from Clayton to beyond the I-170/I-270 interchange in North St. Louis County. Total estimated capital cost range from \$1 billion to \$1.2 billion. Through FY 2001, Congress has appropriated \$3.44 million in Section 5309 New Starts funds for this effort.

## Twin Cities - Transitway Corridors (Central Corridor)

### **St. Paul-Minneapolis, Minnesota**

The Ramsey County Regional Railroad Authority (RCRRA) is examining mobility improvement options in a corridor study of an area generally extending from downtown St. Paul to downtown Minneapolis. The proposed corridor will include connections to the proposed Hiawatha Avenue light rail project and the proposed Riverview, Northstar and Red Rock corridors. The corridor will also provide connections to major local destinations, including the University of Minnesota, State Capitol and St. Paul's Midway area. The study will evaluate a range of alternatives and alignments and is scheduled for completion in the year 2001. Through FY 2001, Congress has appropriated \$0.98 million in Section 5309 New Starts funds for this effort.

## Twin Cities - Transitway Corridors (Riverview Corridor)

### **St. Paul-Minneapolis, Minnesota**

The Ramsey County Regional Railroad Authority (RCRRA) is conducting a Major Investment Study (MIS) to examine transportation options within a proposed corridor beginning on the lower east side of St. Paul continuing through downtown St. Paul and along the west side, parallel to the Mississippi River. The proposed corridor includes connections to the Phalen Corridor redevelopment area, Minneapolis-St. Paul International Airport, Mall of America in Bloomington –

the largest retail complex in the nation – and the proposed Hiawatha Avenue light rail transit (LRT) line. The corridor also includes connections to the new site of the Minnesota Science Museum, Fort Snelling State Park, Ordway Music Theater, Minnesota Children’s Museum and the Minnesota Wild Arena, which when combined have a total annual visitor patronage of approximately 2.7 million people. The study is considering a range of alternatives including No-Build, a Transportation System Management alternative featuring an improved bus system, bus rapid transit (express buses operating in exclusive lanes) and LRT. The study is scheduled for completion in early 2001. Through FY 2001, Congress has appropriated \$4.61 million in Section 5309 New Starts funds for this effort.

## **Airport to University LRT (Airport to Salt Lake City CBD LRT Extension)**

### **Salt Lake City, Utah**

The proposed project would extend the North/South LRT line from the Salt Lake City central business district (CBD) approximately six miles to the Salt Lake City International Airport, one of the largest traffic generators in the State of Utah. Eight stations would also be constructed as part of the proposed project. A Major Investment Study, Final Environmental Impact Study and Record of Decision, including preliminary engineering, were completed as part of the Airport to University LRT extension. Total capita costs for the Airport to Salt Lake CBD LRT extension are estimated at \$300 million.

## **Airport to University LRT (Rice/Eccles Stadium to University Medical Center LRT Extension)**

### **Salt Lake City, Utah**

The proposed project would extend the University Line light rail transit (LRT) project from its terminus at Rice/Eccles Stadium to the University Medical Center (UMC). The project is approximately 1.5 miles in length and would have three stations. A Major Investment Study, Final Environmental Impact Study and Record of Decision, including preliminary engineering, were completed as part of the Airport to University LRT extension. Total capital costs for the Rice/Eccles to UMC extension are estimated at \$74 million. The University strongly encourages students and staff to use public transit to access the University and has a policy to continue to reduce the overall parking supply on its campus.

## **Draper Light Rail Extension**

### **Salt Lake City, Utah**

The Utah Transit Authority (UTA), in cooperation with the Wasatch Front Regional Council, and the cities of Sandy and Draper, are conducting a feasibility study to examine the option of extending the North/South LRT line approximately seven miles to the suburban communities of Draper and Sandy. The project is proposed for construction on existing railroad right-of-way owned by UTA. The cities have requested an evaluation of alternatives outside the railroad corridor right-of-way, which would better connect light rail to the cities’ business districts. The proposed Draper extension would have six stations, complete with park-and-ride lots and bus transfer facilities. The proposed project is included region’s Long-Range Transportation Plan. Total capital costs for the Draper extension are estimated at \$156.3 million.

## Salt Lake City-Ogden-Provo Commuter Rail

### **Salt Lake City, Utah**

The Wasatch Front Regional Council (WFRC) and the Mountainlands Association of Governments (MAG) the two metropolitan planning organizations that oversee transportation planning for more than 85 percent of the State of Utah's population, along with the Utah Transit Authority and the Utah Department of Transportation, are conducting an Alternatives Analysis (Inter-Regional Corridor Alternatives Analysis) study to evaluate transportation improvements in a proposed 120-mile corridor from Brigham City to Payson. The corridor encompasses the Ogden, Salt Lake City and Provo/Orem urbanized areas. The study is evaluating highway and transit alternatives in the corridor. The study is scheduled for completion in March 2001. WFRC and MAG completed a Long-Range Transit Analysis in 1998, identifying commuter rail as an effective means of serving the transportation demands in the corridor between Brigham City and Payson. A commuter rail line, with twelve stations, has been identified and evaluated and subsequently included in the region's Long Range Transportation Plan. Discussions are underway with the Union-Pacific Railroad concerning the acquisition of railroad right-of-way to implement commuter rail, light rail or other transportation improvements. Total capital costs are estimated at \$292 million. Through FY 2001, Congress has appropriated \$3.9 million in Section 5309 New Starts funds for this effort. Consideration has been given to a proposed option of implementing interim commuter rail service during the Olympic 2002 Winter Games.

## West Jordan Light Rail Extension

### **Salt Lake City, Utah**

The Utah Transit Authority, in cooperation with the Wasatch Front Regional Council, Midvale City and West Jordan, is conducting a feasibility study to examine the option of extending the North/South light Rail transit (LRT) line approximately seven miles through the cities of Midvale and West Jordan. The project is proposed for construction on existing railroad right-of-way owned by the Union-Pacific Railroad. It would be constructed at-grade and would have five stations with bus transfer facilities and park-and-ride lots. The project is included in the region's Long-Range Transportation Plan. Total capital costs are estimated at \$187.5 million.

## CalTrain Extension to Hollister

### **San Francisco-San Jose, California**

The Council of San Benito County Governments is proposing an extension of Caltrain service approximately 13 miles south from the current terminus in Gilroy, along an existing rail line, to the City of Hollister, located in the southeast portion of the San Francisco Bay Region. Hollister is the population center for San Benito County, the fastest growing county in California over the past five years. Hollister has grown in response to the increasing demand for affordable housing for Silicon Valley workers. Further planning, regional consensus building, and public involvement are needed to determine the specific technology and frequency of rail service for the proposed corridor. Total capital costs for upgrading the existing freight rail line are estimated at \$15 million.

Through FY 2001, Congress has appropriated \$0.99 million in Section 5309 New Starts funds for this effort.

## Regional Transit Corridor

### **San Joaquin, California**

The Altamont Commuter Express (ACE) Authority is proposing a series of service improvements to the existing commuter rail line operating in the Silicon and Tri-Valley areas. ACE serves eight

cities and many of the major employers in the Silicon Valley, Central Valley and Tri-Valley areas. The proposed project includes the purchase of an additional trainset and associated track improvements, which are estimated to result in a nearly 50 percent increase in ridership and a corresponding increase in fare revenues.

## **Santa Cruz Fixed Guideway**

### **Santa Cruz, California**

The Santa Cruz County Regional Transportation Commission, in coordination with the Santa Cruz Metropolitan Transit District, conducted a Major Investment Study (MIS) to evaluate improvements in the Watsonville to Santa Cruz Corridor. A state highway and an underutilized freight rail line run through the length of most of the corridor. The MIS looked at seven different alternatives, including three fixed guideway options. The study also considered the feasibility of initiating inter-city weekend rail service between Santa Cruz and San Jose, via Watsonville and Gilroy. The study was completed in the Summer of 1999. The final project includes the purchase of the rail right-of-way for future transportation uses, including a bike/pedestrian path along the ROW and partial funding for High Occupancy Toll lanes on the parallel highway. Major bus improvements within the corridor also received a high priority for future funding.

## **Santa Fe - El Dorado Rail Link**

### **Santa Fe, New Mexico**

The City of Santa Fe, in cooperation with the Santa Fe Southern Railway, Santa Fe County, the New Mexico State Highway and the Transportation Department is proposing to develop commuter rail service along an existing 13-mile rail line between El Dorado and Santa Fe. The proposed project was identified in the local Metropolitan Planning Organization's Long-Range Transportation Plan and the City's proposed General Plan. The proposed undertaking resulted from a commuter rail demonstration project that established the need for providing public transportation services in the Santa Fe/El Dorado Corridor. Project sponsors anticipate that the proposed project will provide connections between Santa Fe and El Dorado to major employment centers in both cities, thereby removing automobile traffic from a highly congested roadway network. In addition, the proposed project is expected to meet the long-range regional planning goals of reducing sprawl and concentrating future growth in areas that will be serviceable by existing infrastructure. The proposed Santa Fe/El Dorado Rail Link is included in the region's Transportation Improvement Program (TIP) and is anticipated to be included in the State TIP. Total capital costs for the proposed project are estimated at \$10 million. Through FY 2001, Congress has appropriated \$4.42 million in Section 5309 New Starts funds for this effort.

## **Laurel Line Intermodal Corridor**

### **Scranton, Pennsylvania**

Lackawanna County is proposing the restoration of historic trolley passenger service on an old interurban trolley line between Scranton and Wilkes-Barre with major destination points at Montage, Wilkes-Barre/Scranton International Airport and Wilkes-Barre, a total distance of approximately 16 miles. The proposed corridor is located along a right-of-way (ROW) that largely parallels Interstate 81 from Scranton to the vicinity of the Airport. Luzerne County owns approximately 11 miles of the ROW, while Lackawanna County owns the remaining five miles. Currently, there is light, but active freight service along most of the route. The first 1.5 miles of track from Scranton/Steamtown are now electrified. Lackawanna County will be seeking bids for design of the electrification of the next portion of track in the near future.

## SEATAC - Personal Rapid Transit

### **Seatac, Washington**

The City of SeaTac, Washington in cooperation with other local agencies, has conducted a Major Investment Study (MIS) to examine several options to improve the mobility of the City's commercial core, which includes the activity centers located around the International Boulevard area and the City of SeaTac International Airport. The MIS, completed in July 1997, resulted in a Locally Preferred Transportation Strategy recommending a Personal Rapid Transit (PRT) System. The total estimated capital cost for Phase I of the PRT system is \$307.5 million. Phase I of the proposed project includes the acquisition of 210 PRT vehicles, operating along 12.1 miles of "one-way" guideway and serving a forecasted ridership of 24,000 patrons, utilizing 21 PRT stations. The City of SeaTac has incorporated the proposed PRT system into its Municipal Comprehensive and Transportation Plans. The City is also proposing that the project be included in the Regional Plan for Seattle. Since the primary beneficiaries of the proposed PRT system are local businesses, a "Partnership Franchise" between the public and private entities was recommended as part of the implementation approach. The proposed project is included in the Puget Sound Regional Council's Long-Range Transportation Plan. Through FY 2001, Congress has provided \$0.6 million in Section 5309 New Starts funds for this effort.

## Southworth Highspeed Ferry (Trans-Puget Sound)

### **Seattle/Kitsap County, Washington**

The Washington State Department of Transportation (WSDOT) - Marine Division has completed a 20-year plan for the proposed Southworth Highspeed Ferry system. The plan included an extensive public involvement process, including publication of the documented plan. Alternatives for the system were considered and several passenger-only ferry routes were proposed in lieu of costly auto ferry service on some routes. The Washington State legislature is responsible for the \$2 billion program of improvements. During 1998, State transportation bonding authority, based on motor vehicle excise tax receipts, was enacted to enable the WSDOT Marine Division to carry out several of the projects, including the Southworth Highspeed Ferry, in the proposed program. However, Initiative 695 rescinded the State's ability to levy motor vehicle excise taxes, a portion of which had been used to support the ferry system. The State of Washington is reassessing its capital program priorities, including the Southworth Highspeed Ferry project, in light of the referendum's passage.

## Micro Rail Trolley System

### **Sioux City, Iowa**

The City of Sioux is examining the feasibility of implementing a Micro Rail Trolley system in an as yet undefined corridor that could potentially include the city's downtown Central Business District. Through FY 2001, Congress has appropriated \$0.25 million in Section 5309 New Starts funds for this effort.

## Southeastern North Carolina Corridor

### **Southeast North Carolina**

The North Carolina Department of Transportation (NCDOT) is proposing to implement high-speed intercity passenger rail service along the Southeast High Speed Rail Corridor (SEHSR) from Washington, D.C. to Charlotte, North Carolina. The SEHSR was one of five national high-speed rail corridors designated under the Intermodal Surface Transportation Efficiency Act of 1991. Existing Amtrak intercity passenger rail serves the urbanized corridor stretching between Raleigh, Greensboro and Charlotte. The SEHSR corridor is anticipated to connect with this

service via the Northeast Corridor in Washington, D.C. and is being planned to interface with rail transit systems currently under development in the urbanized areas of North Carolina. North Carolina and Virginia are coordinating their efforts on the implementation of the SEHSR. NCDOT will conduct an Environmental Impact Statement (EIS) for the entire corridor from Washington, D.C. to Charlotte, NC. The NCDOT has conducted feasibility studies on the SEHSR corridor in North Carolina, including evaluations of time savings, ridership increases, environmental benefits, operating efficiencies, and environmental impact screenings and other analyses. These studies are summarized in the SEHSR Corridor Status Report (April 1999). In July 1999, NCDOT published a notice of intent to prepare a Tiered EIS on the SEHSR Corridor from Washington, D.C. to Charlotte, NC. This work is a joint effort between NCDOT, Virginia Department of Rail and Public Transportation, Virginia DOT, Federal Railroad Administration and the Federal Highway Administration. A joint scoping meeting was held between North Carolina DOT and Virginia DOT in October 1999. Analyses prepared for the Tier I EIS will build upon the analyses of the feasibility studies to consider a full range of issues under the National Environmental Policy Act of 1969, as amended. The SEHSR Tier I EIS is scheduled for completion in 2002. The study will include extensive public involvement and interagency coordination. In 1998, the U.S. Department of Transportation extended the SEHSR south from Charlotte through Greenville and Spartan, South Carolina to Atlanta and Macon, Georgia and south from Raleigh through Columbia, South Carolina and Savannah, Georgia to Jacksonville, Florida. North Carolina and Virginia have begun to work with Georgia and South Carolina on the development of the fully extended corridor.

## South Valley Corridor Light Rail

### **Spokane, Washington**

The Spokane Regional Transportation Council has conducted a Major Investment Study (MIS) to examine the impacts of high capacity transportation on a proposed 16-mile corridor between the central business district of Spokane, Washington and Liberty Lake. The proposed corridor would connect major residential and employment centers within the Spokane Valley. Spokane has been classified as a "serious" non-attainment area for carbon monoxide. Trips along the corridor nearly double based on the population and employment forecasts between the years 1990 and 2020. The MIS considered three alternatives including: high occupancy vehicle lanes, express busways, and light rail. Based on the results of the MIS, light rail was selected as the preferred alternative with strong public support. The MIS was included in the region's Long-Range Metropolitan Transportation Plan in November 1997. The total estimated capital cost for the light rail project, including local, state and Federal funds, ranges between \$200 and \$300 million. Through FY 2001, Congress has appropriated \$6.92 million in Section 5309 New Starts funds for this effort.

## Altamont Commuter Rail

### **Stockton, California**

The San Joaquin Regional Rail Commission (SJRRRC), the Alameda Congestion Management Agency, and the Santa Clara Valley Transportation Authority have proposed to implement a commuter rail system along an existing Union-Pacific Railroad right-of-way operating between the three counties. A Joint Powers Board comprised of members from each of the three agencies was also created to operate the proposed Altamont Commuter Express. The SJRRRC would be the managing agency for the initial 36-month term of an agreement executed between the three agencies. In addition to identifying potential sources for capital and operating funds, the member agencies will define the methods for allocating future costs and the shares of future capital improvement contributions from the member agencies. Through FY 2001, Congress has appropriated \$6.91 million in Section 5309 New Starts funds for this effort.

## Tampa Bay Regional Rail System

### Tampa, Florida

In April 1998, a Major Investment Study (MIS) to address alternatives for enhancing mobility throughout Tampa, Hillsborough County, Lakeland and Polk County region was completed with the selection by local stakeholders of a multimodal Locally Preferred Strategy (LPS) that included the implementation of a 71-mile, 39-station Regional Rail System. The MIS also identified a 28.5-mile Minimum Operable Segment (MOS) of rail investment in the Northeast/Southwest and West Corridors to be included in a regional "Early Action Plan (EAP)." The EAP MOS is a portion of a proposed \$4 billion LPS for implementing a region wide package of multimodal transportation investments, including a regional rail system. The proposed project would provide service throughout Hillsborough County and a portion of Polk County, including the cities of Tampa, Lakeland and Plant City. The Hillsborough Metropolitan Planning Organization formally adopted the Year 2020 Long-Range Transportation Plan, which incorporates both the EAP and LPS in November 1998. A first step to the proposed rail system is a 30-mile, 30-station EAP MOS. The MOS would utilize Diesel Multiple Unit (DMU) rail technology in two corridors: a 19-mile Northeast/Southwest Corridor and an 11-mile West Corridor. Capital cost for the proposed 30-mile investment are estimated at \$953.8 million (escalated dollars), with a requested Section 5309 New Starts share of \$476.9 million. The Hillsborough Area Regional Transit Authority (HART) estimates 37,000 average weekday boardings in the year 2020 on the proposed 30-mile segment. Capital costs for the 71-mile system are estimated at \$1.09 billion (\$1997). Through FY 2001, Congress has appropriated \$5.94 million in Section 5309 New Starts funds for this effort.

## Pinellas County - Mobility Initiative

### Tampa-St. Petersburg, Florida

The Pinellas County Metropolitan Planning Organization is conducting an Alternatives Analysis study to identify transportation solutions to mobility issues in multiple corridors. A major focus of the study is the enhancement of alternative modes of travel to the single occupant vehicle. The study will consider the early coordination of alternatives with economic development prospects to ensure the compatibility of future land uses activities with the preferred transportation alternatives. Emphasis is given to strategies that enhance primarily north-south intra-county mobility, and secondarily improve east-west inter-county connectivity to Hillsborough County. Based on the study's first tier analysis, fixed guideway transit concepts were identified for further evaluation within corridors in the north and central portions of the county, east-west corridors in the mid-portions of the county, and north-south corridors between St. Petersburg and Clearwater. Through FY 2001, Congress has appropriated \$2.45 million in Section 5309 New Starts funds for this effort.

## Williamsburg-Newport News-Hampton LRT

### Tidewater, Virginia

In September 1996, the cities of Newport News, Williamsburg and Hampton initiated a Major Investment Study (MIS) on a proposed 32-mile corridor along the CSX rail right-of-way. The Hampton Roads Metropolitan Planning Organization (MPO) identified the CSX Corridor, from Williamsburg to Newport News, as a priority transportation corridor for providing long-range alternatives to widening existing roadways. The Hampton Roads MPO determined that a MIS was needed to establish feasible alternatives leading to the development of a multimodal transportation system on the Virginia Peninsula. The CSX Corridor MIS evaluated six alternatives, ranging from the No-build to a fully automated fixed guideway system. The MIS was completed in December 1997 and recommended Light Rail Transit (LRT) as the Locally Preferred Alternative (LPA). The MIS also recommended a number of steps that would both prepare for the

eventual introduction of LRT and immediately improve the current public transit system on the Peninsula. This included providing an enhanced bus system, developing transit-supportive land use, and protecting future right-of-way along the CSX Corridor, supporting regional transit initiatives, and developing a stronger funding base for transit in the Hampton Roads area. The Transportation District Commission of Hampton Roads, in cooperation with local and state officials, is planning to enter into the environmental review process for the LPA in early 2001.

## Toledo - Central Business District to Zoo

### **Toledo, Ohio**

The Toledo Metropolitan Area Council of Governments (TMACOG) is planning to conduct an Alternatives Analysis (AA) study to examine transportation options in an approximately four-mile proposed corridor in Toledo. The study will examine the potential of a fixed guideway circulator in downtown Toledo to connect major activity centers including the Toledo convention center, science museum and Amtrak rail station. The study will also examine the potential of fixed guideway transit in radial corridors leading from downtown Toledo to the Toledo Zoo and Toledo art museum, which would connect with the downtown circulator. Through FY 2001, Congress has appropriated \$0.99 million in Section 5309 New Starts funds for this effort.

## Georgetown-Ft. Lincoln

### **Washington, D.C. Metropolitan Area**

The District of Columbia, in cooperation with the Washington Metropolitan Area Transit Authority, is planning to conduct an Alternatives Analysis Study for a fixed guideway rail transit system operating from Georgetown to Ft. Lincoln New Town in Washington, D.C. The proposed corridor extends approximately 6.5 miles from Georgetown via M Street in northwest, to the new Washington Convention Center at Mt. Vernon Square (currently under construction) and then continues along the New York Avenue corridor to Ft. Lincoln near South Dakota Avenue in northeast Washington, D.C. The proposed rail line would support existing and planned housing and economic development at the new Convention Center, New York Avenue and Ft. Lincoln as well as provide alternative transit to Georgetown's commercial and residential areas. The proposed alignment would provide east-west crosstown rail transit service north of existing Metrorail lines in downtown Washington, D.C. and would provide potential connections to existing Metrorail service in the vicinity of Mt. Vernon Square and New York Avenue. The study will also consider alternative alignments, station locations, terminal locations and alternative modes of transit operation.

## Maryland Route 5 Corridor (Waldorf Corridor Study)

### **Washington, D.C. Metropolitan Area**

The Maryland Mass Transit Administration (MTA) is currently conducting the Maryland Route 5/Waldorf Corridor study. The study is one of several recommendations resulting from the US 301 South Corridor Transportation Study, a Major Investment Study (MIS) that was completed in 1996. The study corridor extends approximately 19.5 miles from inside the Capital Beltway in Prince George's County, Maryland along Maryland Route 5 and continues along US 301 and the Pope's Creek Branch freight rail line to White Plains in Charles County, Maryland. The alignment connects to the Washington Metrorail system at the Branch Avenue Metrorail Station, which is currently completing construction. The purpose of the study is to identify a future light rail transit (LRT) alignment, station sites, and a maintenance yard, which can be reserved for development of an LRT system. Information on the environmental features, roadway improvements and utilities has been collected. Preliminary corridor ridership is projected at 25,000 total daily trips for the year 2020, based on the US 301 South Corridor Transportation Study. The proposed LRT is

anticipated to provide access to jobs in downtown Washington, D.C., and its surrounding suburban areas by connecting to the regional Metrorail system. Through FY 2001, Congress has appropriated \$0.99 million in Section 5309 New Starts funds for this effort.

## Washington-Richmond Corridor Improvements

### Washington, DC Metropolitan Area

Due to increased congestion throughout the Washington, D.C. metropolitan region, the Virginia Railway Express (VRE) is proposing to expand commuter rail service to include the entire Washington, D.C.-Richmond, Virginia corridor. VRE currently operates commuter rail service between Washington, D.C. and Fredericksburg, Virginia. The Virginia Department of Rail and Public Transportation (VDRPT) initiated the Washington, D.C.-Richmond, Virginia - Rail Corridor Study to identify specific improvements required to increase the maximum speed of passenger trains and to reduce the running time between Washington, D.C. and Richmond, Virginia, thus making it feasible for commuter rail service. The Commonwealth's Corridor Study, completed in April 1996, recommended a six-phase rail improvement program along the existing CSX right-of-way. The improvements include, but are not limited to, straightening certain curve tracks, adding new signals, rail-crossing safety measures, constructing new track in several areas of the existing right-of-way, incrementally adding a third track, and purchasing new rolling stock and passenger facilities. To date, the Commonwealth has allocated \$13 million for the initial phase of the proposed project. Through FY 2001, Congress has appropriated \$12.07 million in Section 5309 New Starts funds for this effort. In addition to the Commonwealth's initiative, the Federal Railroad Administration completed a congressionally requested study of the Washington-Richmond corridor in May 1999. The study, developed in coordination with VDRPT, VRE and other regional transportation agencies, focused on the capital requirements for commuter rail service and intercity passenger rail service along the corridor.

## Wilmington Transit Connector

### Wilmington, Delaware

The Delaware Department of Transportation and the City of Wilmington conducted a study to address transportation needs between major employment, commercial and entertainment venues in the city. The locally preferred alternative is a trolley line, approximately 2.1 miles in length, 0.6 miles of exclusive right-of-way. Total capital costs are currently estimated at \$37 million. No environmental work has been undertaken for this effort. Work is underway, in consultation with FTA, in revising and supplementing the existing materials to support a request to FTA for entry into preliminary engineering. Through FY 2001, Congress has appropriated \$5.93 million in New Starts funds for this effort.

## Other Project Authorizations for FY 2001

### Burlington - Bennington Rail Corridor

#### Burlington-Bennington, Vermont

The Burlington to Bennington Corridor is approximately 110 miles long. Vermont has received approximately \$13 million in Federal Highway Administration High Priority Project funds over the last few years. These funds were used for right-of-way improvements along the corridor. The final connection of this project will be from Albany to Burlington – estimated to cost between \$50 million and \$60 million. At this time, the State of Vermont is in the process of defining the project. Through FY 2001, Congress has appropriated \$1.98 million in Section 5309 New Starts funds to this effort. This effort was not authorized in TEA-21.

## Calais Branch Rail Line Regional Transit Program

### Calais, Maine

As part of the Regional Transit Program, the Maine Department of Transportation is proposing to initiate transit service along a 45-mile abandoned rail right-of-way between Bangor and Bar Harbor. The purpose of the project is to reduce seasonal congestion by providing an alternative mode of travel to Mt. Desert Island, Bar Harbor and Acadia National Park. The project is currently in the initial planning and environmental phase. Through FY 2001, Congress has appropriated \$1.48 million in Section 5309 New Starts funds for this effort. This effort was not authorized in TEA-21.

## Dayton Aviation Heritage Corridor Transportation/Light Rail Study

### Dayton, Ohio

The Miami Valley Regional Planning Commission is conducting a Major Investment Study of transportation options along a corridor linking the core sites of the Dayton Aviation Heritage National Historical Park. The Park was established by Congress in 1992 by the Dayton Heritage Preservation Act. The corridor, which generally runs in an east-west direction through downtown Dayton, includes the Wright Brothers Cycle Company shop, the Paul Lawrence Dunbar House and the U.S. Air Force Museum at Wright/Patterson Air Force Base. Alternatives currently under consideration include diesel bus, electric trolley bus and light rail. Through FY 2001, Congress has appropriated \$1.97 million in Section 5309 New Starts funds for this effort. This effort was not authorized in TEA-21.

## Downtown Detroit to Metro Airport Rail Study

### Detroit, Michigan

In late summer 2000, the Southeast Michigan Council of Governments began a study of the feasibility of implementing rail service between downtown Detroit and the Detroit Metropolitan Airport. The study will examine five alternative routes/modes for providing service between the airport and downtown Detroit, estimate potential ridership, costs and impediments and conclude with a recommendation of which, if any, of the alternatives should be carried into the next phase of analysis. This phase of the study will be completed in mid-2001. The next phase of the study will take the alternatives from Phase I and perform further detailed analysis to see if rail service between Detroit and Metro Airport is warranted and, if so, which corridor would represent the best alignment/mode for such a service. The analysis will determine if rail service is worth pursuing further and will include the development of a business plan outlining the potential economic benefits of a proposed system. Through FY 2001, Congress has appropriated \$0.49 million in Section 5309 New Starts funds for this effort. This effort was not authorized in TEA-21.

## Central Florida Commuter Rail

### Florida

The Central Florida Regional Transit Authority (Lynx), the Florida Department of Transportation (FDOT), and METROPLAN Orlando, the regional Metropolitan Planning Organization, are conducting an Alternatives Analysis study to consider various alignments and technologies for a major transit capital investments in the I-4 corridor, north of Orlando. The study is considering various light rail transit alternative alignments in a 20 mile corridor from downtown Orlando, through the communities of Winter Park and Maitland in Orange County and Altamonte Springs, Longwood, Lake Mary, and Sanford in Seminole County. A locally preferred alternative is anticipated to be selected in the spring of 2001. Through FY 2001, Congress has appropriated \$2.97 million for the Central Florida Commuter Rail project.

## Dock Improvements

### **Homer, Alaska**

The Alaska Marine Highway System is planning to initiate terminal improvements in Homer, Alaska. Environmental information has been completed and submitted to FTA for review. An application for Federal financial assistance has also been submitted. Through FY 2001, Congress has appropriated \$30 million in New Starts funds for the development of new ferry service for the Alaska and Hawaii areas.

## Commuter Rail Feasibility Study

### **Knoxville-Memphis, Tennessee**

The Tennessee Department of Transportation is planning to evaluate the feasibility of re-initiating freight service on an abandoned rail right-of-way along an east-west railroad from Knoxville to Memphis. The potential for future passenger rail service will also be explored. Ownership of a potential rail line has not been determined. Through FY 2001, Congress has appropriated \$0.49 million in New Starts funds for this effort. This effort was not authorized in TEA-21.

## Northern Indiana Commuter Rail District's South Shore Service

### **Northern Indiana**

The Northern Indiana Commuter Transportation District (NICTD) is nearing completion of a project that will provide new rail cars for expanded services on the South Shore Commuter Rail Line. The project, which is funded in part with \$12.87 million in New Starts funds, will result in the procurement of ten multiple unit, electrically-powered commuter rail cars that will be compatible with NICTD's current fleet of 58 rail cars. The new cars will allow NICTD to provide additional train service during both peak and off-peak times. The first two cars of the ten-car procurement were delivered to NICTD in October 2000 and, as of November 2000, were undergoing final fitting and testing. The two rail cars are anticipated to enter revenue service in early 2001. The remaining eight cars will be delivered and begin revenue service by the end of 2001. Through FY 2001, Congress has provided \$14.84 million in Section 5309 New Starts funds for the project. This effort was not authorized in TEA-21.

## Valdez Dock Improvements

### **Valdez, Alaska**

The Alaska Marine Highway System has developed a transportation plan for South Central Alaska. Based upon the plan, the Marine Highway System is planning to initiate terminal improvements in Valdez, Alaska. Environmental information has been completed and submitted to FTA for review. An application for Federal financial assistance has also been submitted. Through FY 2001, Congress has appropriated \$30 million in New Starts funds for the development of new ferry service for the Alaska and Hawaii areas.