Annual Report on Funding Recommendations

Fiscal Year 2001

Report Number FTA-TBP10-00-01

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

2000

Prepared by:
Federal Transit Administration

Available from:
Federal Transit Administration
Office of Policy Development, TBP-10
400 7th Street, SW, Room 9310
Washington, DC 20590

http://www.fta.dot.gov

Annual Report on New Starts

Number C-00-03
03-06-00

U.S. Department of Transportation
Federal Transit Administration

Deputy Administrator

400 Seventh St. S.W.
Washington, D.C.
20590

Dear Colleague:

I am pleased to provide you with a copy of the 2000 edition of the Federal Transit Administration's *Annual Report on New Starts,* which we have prepared in response to the requirements of 49 U.S.C. 5309(o)(1). This report was approved by Secretary of Transportation Rodney E. Slater on 14arch 6, 2000.

As required under §5309(o)(1), this report makes recommendations for the allocation of funds for new fixed guideway systems and extensions ("new starts") for Federal Fiscal Year (FY) 2001. This report is a collateral document to the President's annual budget submission to Congress. Thirty-eight projects are recommended for funding in FY 2001; of these, 14 have existing Federal funding commitments under Full Funding Grant Agreements (FFGAs), new FFGAs are pending for three, 11 are expected to be ready to negotiate FFGAs before the end of FY 2001 (September 30, 2001), and ten are nearing the final stages of preliminary engineering.

In addition, this report provides useful summaries of all proposed new starts projects authorized by TEA-21. For those in preliminary engineering and final design, an assessment is made of the degree to which they meet the project evaluation criteria as required under §5309(e). For those undergoing alternatives analysis, a brief summary of current activities is provided. The project information contained in this report is current as of November 1999.

We look forward to working with Congress as the appropriations process moves forward. If you have any questions regardinq the content of this report, please do not hesitate to contact me.

Sincerely,

Nuria I. Fernandez
Acting Administrator

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 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 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 2001.

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 2001. 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 2001 proposes that $1,058.40 million be made available for the §5309 major capital investment program. After setting aside a percentage of these funds for oversight activities as specified in §5327, and for ferry capital projects in Alaska or Hawaii as required by §5309(m)(5)(A), $1,040.14 million is available for project grants. This report recommends funding for 38 projects in FY 2001; of these, 14 have existing Federal funding commitments in the form of Full Funding Grant Agreements (FFGAs), FFGAs are pending for three, 11 are expected to be ready for FFGAs before the end of FY 2001 (i.e., September 30, 2001), and ten are nearing the final stages of preliminary engineering.

Transportation Equity Act for the 21st Century (TEA-21)

On June 9, 1998, the Transportation Equity Act for the 21st Century (TEA-21), Public Law 105-178, which reauthorizes Federal surface transportation programs through 2003, was enacted. For new starts, TEA-21 leaves prior Federal law and policy largely intact, including the basic project justification criteria and the multiple-measure method of project evaluation. However, a number of significant changes were introduced to the Federal Transit Administration's New Starts Program.

Among the provisions of TEA-21 affecting FTA's new starts program was language revising §5309(e) to codify many of the principles of FTA's New Starts Policy, which was published in the *Federal Register* on December 19, 1996 (61 FR 67093) and amended on November 12, 1997 (62 FR 60756). Aspects of the new starts policy which are now written as law, but **which remain the same as past policy and practice**, include the following:

- Proposed new starts projects must be based on the results of alternatives analysis and preliminary engineering.
- FTA must approve entry into preliminary engineering.
- FTA must find that proposed projects are "justified," based on a "comprehensive review" of several criteria (cost-effectiveness, operating efficiencies, mobility improvements, and environmental benefits) which remain unchanged; a variety of additional considerations that must be taken into account (including congestion relief, air quality, energy consumption, the mobility of transportation dependent persons, economic development, and transit supportive land use policies and patterns) are also unchanged.
- FTA must find that projects are supported by an acceptable degree of local financial commitment; the basis for making this finding (stable and dependable financing sources to construct, maintain, and operate the project) is not changed, and the considerations which are to be taken into account are also largely unchanged.
- Projects are to be funded using FFGAs, which specify the project to be constructed and the maximum amount of Federal funds which will be made available for the project.
- The criteria do not apply to projects which require less than $25.00 million in §5309 funds, or which are completely funded with flexible Title 23 (highway program) funds.
- FTA's recommendations to Congress regarding projects must be presented in an Annual Report produced in concert with the President's annual budget.

In addition to these principles, however, TEA-21 introduced a number of important changes to the way FTA manages and implements the new starts program. Among the most **significant changes** are the following:

- Integration of the Major Investment Study (MIS) concepts into the joint planning and environmental regulations issued by FTA and the Federal Highway Administration (FHWA) (23 CFR Part 450 and 23 CFR Part 771), elimination of the MIS as a separate requirement, and streamlining of the environmental process.
- A requirement for FTA to establish overall project ratings of "highly recommended," "recommended," or "not recommended."
- A requirement for FTA approval before a project can advance from preliminary engineering to final design (in addition to the existing requirement for approval to initiate preliminary engineering).
- A requirement for FTA to publish regulations on the manner in which proposed projects will be evaluated and rated.

Other **important changes** include:

- The addition of several statutory "considerations" to the project evaluation process, including the cost of sprawl, infrastructure cost savings due to compact land use, population density and current transit ridership in a corridor, and the technical capacity of the grantee to undertake the project.
- A provision expressly prohibiting FTA from considering the dollar value of mobility improvements.
- The elimination of the exemptions from the project evaluation process for proposed projects that require less than one-third of the project funding from 49 USC §5309 or are part of a State Improvement Plan for air quality. The exemption remains for projects requiring less than $25 million in 49 USC §5309 funding. (Projects for which FFGAs are already in place are not subject to re-evaluation.)
- For evaluating local financial commitment, the consideration of local funding beyond the required non-Federal share has been incorporated into statute.
- A second annual report to Congress, in addition to the existing "report on funding levels and allocations of funds," is now required. This new "Supplemental Report on New Starts," due each August, will include updated ratings for projects that have completed the alternatives analysis and preliminary engineering stages of development since the date of the last *Annual Report on New Starts*.
- A provision limiting the amount of funds made available every year for proposed projects in alternatives analysis or preliminary engineering to 8 percent of total new starts funding for that year.
- A requirement for an annual review of FTA’s project evaluation and rating process and procedures by the General Accounting Office.

Implementation of TEA-21

The majority of the changes to the new starts program noted above will be implemented through the rulemaking process. Under 49 USC §5309(e)(5), as added by TEA-21, FTA is required to publish "regulations on the manner in which [FTA] will evaluate and rate" proposed new starts projects. This rule will define the summary project ratings of "recommended," "highly recommended," and "not recommended," as required by TEA-21, implement the revisions to the multiple measures for project justification, describe how FTA will use the summary ratings to approve entry into preliminary engineering and final design, and discuss the relationship of the project evaluation process to the planning and project development process.

Due to the fact that the Final Rule has not been published, the project evaluations and funding recommendations for FY 2001 are based on FTA's existing process, as published in the *Federal Register* on December 19, 1996 and amended on November 12, 1997 (61 FR 67093-106 & 62 FR 60756-58), modified slightly to account for the increased emphasis on land use by TEA-21 and the prohibition against placing a dollar value on mobility improvements.

The New Starts Rulemaking Process

On April 7, 1999, FTA published a Notice of Proposed Rulemaking (NPRM) in response to the TEA-21 requirement that the Department issue regulations on the manner in which new starts projects proposed for funding under §5309 will be evaluated and rated (64 FR 17062-71). The docket was open for public comment through July 6, 1999, though late-filed comments were accepted through July 19. In general, the NPRM retained the basic "multiple-measure method" for evaluating the statutory criteria for project justification and local financial commitment, described how each factor would be combined into overall ratings for justification and finance, and how those ratings would in turn determine the statutory overall project rating of "highly recommended," "recommended," or " not recommended." It also described how these ratings would be used to approve entry into preliminary engineering and final design, as required under TEA-21.

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. The docket is also available online through DOT's Docket Management System (DMS), at http://regulations.gov.

While comments were submitted on virtually every aspect of the proposed rule, most of them centered around four "key" issues: the measure for cost effectiveness, the measure for mobility improvements, the continued use of the TSM (Transportation System Management) alternative for evaluation purposes, and the overall project ratings introduced by TEA-21 ("highly recommended," "recommended," and "not recommended").

The most commented-upon issue by far was the measure for evaluating cost effectiveness. The NPRM solicited comment on the retention of FTA's historical "cost per new rider" (or more properly, incremental cost per incremental rider) measure to indicate cost effectiveness, and asked if there were other measurements. The 23 comments received in response to this question were unanimous in their assertion that the measure should "roll up" additional benefits beyond incremental cost per new rider. The consensus was that the focus on new riders ignores benefits to other riders, which in turn may bias the measure against older cities with "mature" transit systems where the focus of a new start may be on improving service, not attracting new riders.

The proposed rule also retained the existing measure for evaluating the mobility improvements of a proposed new start. The current measure is based on 1) projected travel time savings and 2) the number of low-income households within ½-mile of the proposed stations. Of the 15 comments that specifically addressed the low-income mobility measure, ten recommended that it address destinations as well as households, arguing that a system that is located near low-income households is of little use to residents unless it can also provide access to employment centers and other activity centers.

The issue of the Transportation Systems Management (TSM) alternative generated nearly as much comment as the cost effectiveness measure. The NPRM proposed to continue the existing requirement that all proposed new starts be evaluated against both a no-build and TSM alternative. This requirement generated 13 comments, all of them opposed to retaining the TSM. Most of the commenters felt that it was unnecessarily burdensome to maintain a TSM alternative, 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 most common suggestion was that if FTA retains a requirement for a TSM alternative, it should be dropped after alternatives analysis has resulted in the selection of a locally-preferred alternative.

The fourth issue that generated significant comment concerned the overall project ratings. Section 3009(e) of TEA-21 requires FTA to assign summary ratings of "highly recommended," "recommended," or "not recommended" to each proposed new starts project, and to use these ratings to approve advancement through the project development stages and for FFGAs. FTA has used these ratings as an indicator of project merit, with annual funding recommendations based on these ratings as well as project readiness. Thus, a project with a rating of "recommended" or higher would be eligible for a funding recommendation if it has been sufficiently developed for a Federal commitment. In comments to the NPRM, the industry expressed confusion regarding the use of these ratings, as well as concerns that a rating of "not recommended" would be misinterpreted as an indication that the proposed project had no merit, and would erode both local support and funding.

FTA is in the process of evaluating these and other comments to the proposed rule, and it must be stressed that the comment period is closed. FTA is working to issue the rule in spring 2000, in time for the 2001 edition of this report (which will contain funding recommendations for FY 2002).

Principles for Allocation of Funds

The funding recommendations contained in this report are the result of an extensive project development and evaluation process. All of the projects recommended for funding have completed this process, have been found by FTA to be worthy of a Federal funding commitment based on a comprehensive review of project justification and local financial commitment, and have either been issued FFGAs already or are strong candidates for FFGAs in the coming year.

To be eligible for new starts funding, proposed projects must complete the appropriate steps in the planning and project development process, as described in §§5303-5306 and §5309, and receive a rating of "recommended" or higher in the most recent FTA evaluation.

Planning and Project Development Process

To be eligible for FTA capital investment funds for a new starts project, the proposed project must emerge from the metropolitan and/or Statewide planning process. Local officials must perform a corridor-level analysis of mode and alignment alternatives. This **alternatives analysis** will provide information on the benefits, costs, and impacts of alternative strategies, leading to the selection of a locally-preferred solution to the community's mobility needs. (The FTA/FHWA planning and environmental regulations (23 CFR Parts 450 and 771), which required a Major Investment Study (MIS) that fulfilled the requirement for alternatives analysis, are being revised in accordance with TEA-21.)

When the sponsoring agency for a new starts project desires to initiate the **preliminary engineering** phase of project development, it must submit a request to the appropriate FTA regional office. The request must provide information on the metropolitan and/or Statewide plan that identifies the project, including the adoption of the project into the metropolitan transportation plan and the programming of the preliminary engineering activity in the Transportation Improvement Plan (TIP). The request must also address the project justification and local financial commitment criteria outlined below. (This information is normally developed as part of an alternatives analysis.) FTA will then evaluate the proposed project as required by 49 USC §5309(e)(6) and determine whether or not to advance the project into preliminary engineering. FTA approval to initiate preliminary engineering is not a commitment to fund preliminary engineering, final design, or construction.

During the preliminary engineering phase, local project sponsors refine the design of the proposal, taking into consideration all reasonable design alternatives. The process results in estimates of project costs, benefits and impacts in which there is a higher degree of confidence. In addition, requirements under the National Environmental Policy Act (NEPA) are completed (for new starts, this will normally entail the completion of an environmental impact statement), project management concepts are finalized, and any required local funding sources are put in place. Information on project justification and the degree of local financial commitment will be continually updated and reported as appropriate. As part of their preliminary engineering activities, localities are encouraged to consider policies and actions designed to enhance the benefits of the project and its financial feasibility.

Final design is the last phase of project development, and may include right-of-way acquisition, utility relocation, and the preparation of final construction plans (including construction management plans), detailed specifications, construction cost estimates, and bid documents. The final design stage cannot be initiated until environmental requirements have been satisfied, as evidenced by a Record of Decision (ROD) or a Finding of No Significant Impact (FONSI). Consistent with 49 USC §5309(e)(6), FTA will approve entry into final design based on the results of the project evaluation process.

is the last phase of project development, and may include right-of-way acquisition, utility relocation, and the preparation of final construction plans (including construction management plans), detailed specifications, construction cost estimates, and bid documents. The final design stage cannot be initiated until environmental requirements have been satisfied, as evidenced by a Record of Decision (ROD) or a Finding of No Significant Impact (FONSI). Consistent with 49 USC §5309(e)(6), FTA will approve entry into final design based on the results of the project evaluation process.

The Criteria

As proposed new starts projects proceed through the stages of the planning and project development process, they are evaluated against the full range of criteria for project justification and local financial commitment contained in §5309(e). In both cases, FTA relies on a multiple-measure approach to assign ratings; these ratings are updated throughout the preliminary engineering and final design processes, as information concerning costs, benefits, and impacts is refined. The results of these evaluations are used to make the required approvals for entry into preliminary engineering and final design, to execute an FFGA, and to make annual funding recommendations to Congress.

While TEA-21 made a number of significant changes to the new starts program, as noted earlier in this report, it left the statutory criteria for project justification and local financial commitment largely intact. Aside from the prohibition against establishing dollar values for mobility improvements, most of the changes to the criteria themselves involved additions to the "considerations" that FTA must take into account when evaluating project justification.

TEA-21 retains the following criteria for evaluating project justification:

- Mobility improvements
- Environmental benefits
- Operating efficiencies
- Cost effectiveness

Based on the emphasis placed on land use issues by both TEA-21 and the earlier Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), FTA has also established criteria for evaluating **transit-supportive existing land use policies and future patterns**. Consistent with §5309(e)(3)(H), FTA also includes a variety of "**other factors**" when evaluating project justification, including a) the degree to which the policies and programs (local transportation planning, programming and parking policies, etc.) are in place as assumed in the forecasts, b) project management capability, and c) additional factors relevant to local and national priorities and relevant to the success of the project.

Section 5309(e)(1)(C) requires that proposed projects also be supported by an acceptable degree of local financial commitment, including evidence of stable and dependable financing sources to construct, maintain and operate the system or extension. Again, TEA-21 retains the basic criteria and the statutory considerations. The only significant revision is that consideration of local funding beyond the required minimum, already an FTA consideration when rating projects, has been incorporated into statute. The criteria for evaluation of the local financial commitment to a proposed project are:

- The proposed share of total project costs from sources other than §5309, including Federal formula and flexible funds, the local match required by Federal law, and any additional capital funding ("overmatch");
- The strength of the proposed capital financing plan; and
- The ability of the sponsoring agency to fund operation and maintenance of the entire system as planned, including existing service, once the guideway project is built.

The Evaluations

As noted above, FTA evaluates proposed new starts projects against the full range of criteria for both project justification and local financial commitment, using a multiple-measure method. **Project evaluation is an ongoing process;** as proposed new starts proceed through the project development process, information concerning costs, benefits, and impacts is refined, and the ratings updated to reflect new information. However, the ratings reported in this document are final for purposes of the President's budget request.

For each of the project justification criteria, the proposed new start is evaluated against both a no-build and a Transportation System Management (TSM) alternative (a package of low to moderate cost improvements designed to make more efficient use of an existing transportation system). For each proposed project, FTA assigns one of five descriptive ratings ("high," "medium-high," "medium," "low-medium," or "low") for each of the five criteria, with "other factors" considered as appropriate. The same is true for the three factors used to evaluate local financial commitment.

Perhaps the most significant change to the project evaluation process brought by TEA-21 is the requirement to establish summary ratings for each proposed project. Consistent with §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 financial rating factors and project justification criteria are combined into overall "finance" and "justification" ratings, which in turn are combined to produce the summary ratings.

In evaluating the project justification criteria, FTA gives primary consideration to the measures for transit supportive land use, cost effectiveness, and mobility improvements to arrive at the combined "justification" rating. For local financial commitment, the measures for the proposed local 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 finance and justification. To be "highly recommended," a proposed project must be rated higher than "medium" for both finance and justification. Proposed projects not rated at least "medium" in both finance and justification will be rated as "not recommended."

These ratings are used both to approve entry into preliminary engineering and final design, as required under §5309(e)(6), and to recommend proposed projects for Federal funding commitments. A proposed project must receive a rating of at least "recommended" in order to be approved for any of these purposes.

The permanent approach FTA will use to assign these summary ratings will be detailed in the upcoming regulation on project evaluation required by TEA-21 and incorporated into 49 USC §5309(e)(5). In the absence of a Final Rule, however, FTA must still use the principles established by TEA-21 to evaluate proposed new starts, assign project ratings, and recommend funding for FY 2001. Therefore, the project ratings and funding recommendations 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 & 62 FR 60756-58). The only significant change is that, due to the TEA-21 provision, the *value* of travel time savings is no longer reported for mobility improvements; instead, travel time savings is reported in terms of hours.

The results of the project evaluation process for the FY 2001 recommendations are reported in Table 1. Ratings are established for proposed projects that are in preliminary engineering and final design only; projects undergoing alternatives analysis typically have not developed sufficient information for meaningful evaluation. Also not listed are projects for which FFGAs have already

been issued, as the decision to commit to a project represents the final determination of project justification.

Appendix A provides a more detailed profile for each project for which an FFGA has been issued, as well as for projects in final design and preliminary engineering. Profiles for projects with FFGAs include a description, status, list of funding sources and map. Profiles for projects in final design and preliminary engineering include a description, status, list of funding sources, map, and a presentation of the project evaluation criteria and ratings. Each of these profiles includes a summary description which highlights the overall project ratings and presents key descriptive, cost and ridership data for each proposed new starts project compared to the no-build alternative.

Appendix B provides a brief description and status for other planning studies and projects which were authorized in Section 3030 of TEA-21, but which have not yet entered preliminary engineering.

It is important to note that a *rating* of "recommended" does not translate directly into a *funding* recommendation in any given fiscal year. Rather, the overall project ratings are intended to reflect overall project merit. Proposed projects that are rated "recommended" or "highly recommended," *and* have been sufficiently developed for consideration of a Federal funding commitment, will be *eligible* for funding recommendations in the Administration's proposed budget.

Table 1: Summary of New Start Project Ratings for FY 2000 Budget

In determining which projects can be expected to be ready for FFGAs and thus be recommended for funding in the Administration's budget proposal, FTA applied more strict readiness and technical capacity tests for FY 2001 than have been used in the past. To ensure that the recommended projects are fully developed, FTA took additional steps to assure that no outstanding project scope or cost issues remained (e.g., rail right of way acquisition issues), and that there were no local financial commitment issues outstanding. In addition, FTA considered: 1) the degree to which the agency has a satisfactory plan to manage the existing bus fleet, to ensure no degradation of service for users of the current system; 2) compliance with the Americans with Disabilities Act of 1990 (ADA), including financial commitments necessary to maintain accessible service, make necessary improvements, and comply with key station requirements; and 3) satisfactory Air Quality Conformity status of the region.

As noted above, project evaluation is an ongoing process. The ratings contained in this report are based on project information available through November 1999. 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 for purposes of this report, as well as at the time a request is made to enter preliminary engineering or final design, or to enter into an FFGA. It must be stressed, however, that the ratings reported in this document are *final* for purposes of the President's budget request to Congress. Updated project information and ratings will be reviewed as part of the budget development process for the *next* fiscal year.

Principles for Funding Recommendations

As noted above, the project ratings established by TEA-21 are intended to reflect overall project merit; proposed projects that are rated as "recommended" or higher are *eligible* for Federal funding. Thus, a *rating* of "recommended" does not translate directly into a *funding* recommendation or commitment in any given year. To be recommended for funding in this report, proposed projects rated as "recommended" or "highly recommended" must also be sufficiently developed for consideration of an FFGA.

The following general principles are also applied when determining annual funding allocations among proposed new starts:

- Any project recommended for new funding commitments should meet the project justification, finance, and process criteria established by §5309(e) and be consistent with Executive Order 12893, "Principles for Federal Infrastructure Investments," issued January 26, 1994.
- Existing FFGA commitments should be honored before any additional funding recommendations are made, to the extent that funds can be obligated for these projects in the coming fiscal year.
- The FFGA defines the terms of the Federal commitment to a specific project, including funding. Upon completion of an FFGA, the Federal funding commitment has been fulfilled. Additional project funding will not be recommended. Any additional costs beyond the scope of the Federal commitment are the responsibility of the grantee.
- Funding for initial planning efforts such as alternatives analysis is provided through the §5303 Metropolitan Planning or §5307 Urbanized Area Formula Grants programs; §5309 funds should not be used for this purpose.
- Firm funding commitments, embodied in FFGAs, should not be made until the final design process has progressed to the point where costs, benefits, and impacts are accurately known.
- Funding should be provided to the most worthy projects to allow them to proceed through the process on a reasonable schedule, to the extent that funds can be obligated to such projects in the upcoming fiscal year. The results of the project evaluation process and resulting finance, justification, and overall ratings determine whether particular projects are "worthy."

Table 1a

Table 1-A:
Summary of FY 2001 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
Final Design						
Dallas-Ft. Worth (Trinity Railway Express-Phase II)	$160.6 (YOE)	$62.4	39%	**Recommended**	Medium	Medium
Ft. Lauderdale (Tri-Rail Commuter Upgrade)	$327.0 (YOE)	$$110.5	34%	**Recommended**	Medium	Medium
Little Rock (River Rail Project) *	$13.2 (YOE)	$8.6	65%	**N/A**	N/A	N/A
Los Angeles-San Diego (LOSSAN Rail Corridor Improvement Project)	$35.7 (1999)	$24.1	68%	**N/A**	N/A	N/A
New Orleans (Canal Streetcar Spine)	$139.4 (YOE)	$111.5	80%	**Not Recommended**	Low	Medium
Newark (Newark Rail Link, MOS-1)	$207.7 (YOE)	$142.0	68%	**Highly Recommended**	Medium-High	Medium-High
Northern New Jersey (Hudson-Bergen MOS-2)	$1,112.8 (YOE)	$721.6	65%	**Recommended**	Medium	Medium
Pittsburgh (Stage II LRT Priority Program)	$383.7 (YOE)	$100.2	26%	**Recommended**	Medium-High	Medium
San Diego (Mission Valley East LRT Extension)	$431.0 (YOE)	$330.0	77%	**Highly Recommended**	Medium-High	Medium-High
Preliminary Engineering						
Austin (Austin Area LRT System)	$739.0 (YOE)	$369.5	50%	**Recommended**	Medium-High	Medium
Baltimore (Central Corridor Light Rail Double Tracking	$153.7 (YOE)	$120.0	78%	**Recommended**	Medium-High	Medium
Boston (South Boston Piers Transitway Phase II)	$363.7 (1996)	$291.0	80%	**Not Recommended**	Low	Medium
Chicago (Douglas Branch Reconstruction)	$450.8 (YOE)	$320.1	71%	**Highly Recommended**	Medium-High	Medium-High

Chicago (CTA Ravenswood Line Expansion)	$327.1 (YOE)	$245.5	75%	**Highly Recommended**	Medium-High	High
Chicago (Metra Central Kane Corridor)	$93.0 (YOE)	$54.3	58%	**Recommended**	Medium-High	Medium
Chicago (Metral North Central Corridor)	$177.9 (YOE)	$110.9	62%	**Recommended**	Medium-High	Medium
Chicago (Metra South West Corridor Commuter Rail)	$165.5 (YOE)	$103.9	63%	**Highly Recommended**	Medium-High	Medium-High
Cincinnati (I-71 Corridor)	$874.7 (YOE)	$431.2	49%	**Not Recommended**	Low-Medium	Low-Medium
Cleveland (Euclid Corridor Improvement Project)	$220.0 (YOE)	$135.0	61%	**Recommended**	Medium-High	Medium
Denver (Southeast Corridor LRT)	$882.5 (YOE)	$525.0	60%	**Recommended**	Medium-High	Medium
Hartford (New Britain-Hartford Busway)	$80.0 (YOE)	$51.6	65%	**Recommended**	Medium	Medium
Houston (Downtown to Astrodome Corridor Light Rail)	$300.0 (YOE)	$64.9	22%	**Recommended**	Medium-High	Medium
Kansas City, Johnson County (I-35 Commuter Rail) *	$30.9 (YOE)	$24.8	80%	**N/A**	N/A	N/A
Las Vegas (Resort Corridor Fixed Guideway MOS)	$568.0 (YOE)	$155.0	27%	**Recommended**	Medium	Medium-High
Maryland (MARC Commuter Rail Improvements Project)	$85.1 (YOE)	$40.9	48%	**N/A**	N/A	N/A
Memphis (Medical Extension Center)	$69.1 (YOE)	$55.3	80%	**Recommended**	Medium	Medium
Miami (East-West Multimodal Corridor)	$2,023 (YOE)	$808.0	40%	**Not Recommended**	Low	Medium
Miami (North Corridor)	$615.2 (YOE)	$430.6	70%	**Not Recommended**	Low	Medium
Miami (South Miami-Dade Busway Extension)	$87.8 (YOE)	$61.3	70%	**Recommended**	Medium	Medium
Minneapolis (Hiawatha Corridor LRT)	$548.6 (YOE)	$274.3	50%	**Recommended**	Medium-High	Medium
Nashville (East Commuter Rail Project) *	$30.0 (YOE)	$20.9	70%	**N/A**	N/A	N/A
New York (Long Island Rail Road East	$4,350.0 (YOE)	$2,175.0	50%	**Recommended**	Medium	Medium

Side Access Project)						
Norfolk (Norfolk - Virginia Beach Corridor LRT)	$524.6 (YOE)	$288.5	55%	**Not Recommended**	Low	Low-Medium
Orange County (The Centerline Orange County Rail Corridor)	$2,015.8 (YOE)	$1,009.1	50%	**Recommended**	Medium-High	Medium
Phoenix (East Valley Light Rail Transit)	$883.9 (YOE)	$441.9	50%	**Not Recommended**	Low-Medium	Not Rated
Portland (Interstate MAX LRT Extension)	$350.0 (YOE)	$257.5	73%	**Highly Recommended**	High	High
Raleigh (Phase I Triangle Regional Rail Project)	$284.0 (YOE)	$111.0	39%	**Not Recommended**	Low-Medium	Medium
Salt Lake City (CBD to University LRT)	$105.8 (YOE)	$84.6	80%	**Recommended**	Medium	Medium
San Diego (Mid Coast Corridor Project)	$123.0 (YOE)	$48.3	39%	**Highly Recommended**	Medium-High	Medium-High
San Diego (Oceanside Escondido Rail Project)	$253.5 (YOE)	$152.1	60%	**Highly Recommended**	Medium-High	Medium-High
San Francisco (Third Street Light Rail Project Phase I)	$500.1 (YOE)	$0.0	0%	**Recommended**	Medium-High	Medium
San Juan (Tren Urbano, Minillas Extension)	$478.3 (YOE)	$382.6	80%	**Recommended**	Medium	Medium-High
Seattle (Central Link LRT MOS)	$1,500.0 (YOE)	$500.0	33%	**Highly Recommended**	Medium-High	Medium
Seattle (Everett to Seattle Commuter Rail) *	$104.0 (YOE)	$24.9	24%	**N/A**	N/A	N/A
Seattle (Lakewood-to-Tacoma Commuter Rail) *	$86.0 (YOE)	$24.9	29%	**N/A**	N/A	N/A
Tampa (Tampa Bay Regional Rail)	$953.8 (YOE)	$476.9	50%	**Not Recommended**	Low-Medium	Medium
Washington, D.C. (Dulles Corridor Rapid Transit)	$279.7 (YOE)	$217.8	78%	**Recommended**	Medium	Medium
Washington, D.C. / Maryland (Largo Extension)	$433.9 (YOE)	$260.3	60%	**Recommended**	Medium	Medium

* These projects are not rated based upon the exemption granted to projects where the anticipated Section 5309 New Starts share of the total estimated Capital Cost is below $25 million.

Table 1b

Table 1-B:
Summary of FY 2001 New Starts Ratings

Phase and City (Project)	Overall Project Rating	Financial Rating	Financial Rating Criteria		Project Justification Rating	Project Justification Criteria				
			Capital Finance Rating	Operating Finance Rating		Mobility Improvement Rating	Environment Benefits Rating	Operating Efficiency Rating	Cost Effectiveness Rating	Land Use Rating
Final Design										
Dallas-Ft. Worth (Trinity Railway Express-Phase II)	*Recommended*	*Medium*	Medium	Medium	*Medium*	Not Rated	Medium	Not Rated	Medium-High	Medium
Ft. Lauderdale (Tri-Rail Commuter Upgrade)	*Recommended*	*Medium*	Medium	Medium	*Medium*	Medium-High	Low	Low	Low-Medium	Medium
Little Rock (River Rail Project) *	*N/A*	*N/A*	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A
Los Angeles-San Diego (LOSSAN Rail Corridor Improvement Project) *	*N/A*	*N/A*	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A
New Orleans (Canal Streetcar Spine)	*Not Recommended*	*Low*	Low	Low	*Medium*	Low-Medium	Medium	High	High	Medium
Newark (Newark Rail Link, MOS-1)	*Highly Recommended*	*Medium-High*	Medium-High	Medium-High	*Medium-High*	Low-Medium	Medium	Medium	Medium-High	Medium-High
Northern New Jersey (Hudson-Bergen	*Recommended*	*Medium*	Medium	Medium	*Medium*	Medium	Medium	Medium	Low	Medium-High

MOS-2)										
Pittsburgh (Stage II LRT Priority Program)	*Recommended*	*Medium-High*	Medium-High	Medium-High	*Medium*	Low-Medium	High	High	Medium	Medium
San Diego (Mission Valley East LRT Extension)	*Highly Recommended*	*Medium-High*	High	Medium-High	*Medium-High*	Medium	High	Medium	Medium	Medium-High
Preliminary Engineering										
Austin (Austin Area LRT System)	*Recommended*	*Medium-High*	Medium-High	Medium	*Medium*	Medium	Medium	Medium	Medium	Medium
Baltimore (Central Corridor Light Rail Double Tracking)	*Recommended*	*Medium-High*	High	Medium-High	*Medium*	Medium	High	Medium	Medium-High	Low-Medium
Boston (South Boston Piers Transitway Phase II)	*Not Recommended*	*Low*	Low	Low-Medium	*Medium*	Low-Medium	Medium	Medium	Low-Medium	High
Chicago (Douglas Branch Reconstruction)	*Highly Recommended*	*Medium-High*	Medium-High	Medium	*Medium-High*	Medium	High	Medium	Medium	High
Chicago (CTA Ravenswood Line Expansion)	*Highly Recommended*	*Medium-High*	Medium-High	Medium	*High*	Medium-High	High	Medium	High	High
Chicago (Metra Central Kane Corridor)	*Recommended*	*Medium-High*	Medium-High	High	*Medium*	Medium-High	High	Medium	Low-Medium	Low-Medium
Chicago (Metra North Central Corridor)	*Recommended*	*Medium-High*	Medium-High	High	*Medium*	Medium	Medium	Medium	Medium	Medium
Chicago (Metra South West	*Highly Recommended*	*Medium-High*	Medium-High	High	*Medium-High*	High	Medium	Medium	Medium-High	Medium

Corridor Commuter Rail)										
Cincinnati (I-71 Corridor)	*Not Recommended*	*Low-Medium*	Low-Medium	Low	*Low-Medium*	Medium	Medium	Medium	Low-Medium	Low-Medium
Cleveland (Euclid Corridor Improvement Project)	*Recommended*	*Medium-High*	Medium-High	Medium-High	*Medium*	Medium-High	Medium	Medium	Low	Medium-High
Denver (Southeast Corridor LRT)	*Recommended*	*Medium-High*	Medium-High	Medium-High	*Medium*	Medium	Medium	Medium	Low-Medium	Medium
Hartford (New Britain-Hartford Busway)	*Recommended*	*Medium*	Medium	Medium	*Medium*	Medium-High	High	Low	High	Low-Medium
Houston (Downtown to Astrodome Corridor Light Rail)	*Recommended*	*Medium-High*	Medium-High	Medium-High	*Medium*	Medium	Medium	Medium	Low-Medium	Medium
Kansas City, Johnson County (I-35 Commuter Rail) *	*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)	*Recommended*	*Medium*	Medium	Medium	*Medium-High*	Medium	Medium	High	High	Medium
Maryland (MARC Commuter Rail Improvements Projects) *	*N/A*	*N/A*	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A
Memphis (Medical Center Extension)	*Recommended*	*Medium*	Medium-High	Medium	*Medium*	Not Rated	Medium	Medium	High	Medium
Miami	*Not*	*Low*	Low	Low	*Medium*	Medium	Medium	Mediu	Low-	Mediu

(East-West Multimodal Corridor)	*Recommended*							m	Medium	m-High
Miami (North Corridor)	*Not Recommended*	*Low*	Low	Low	*Medium*	Medium	High	Medium	Low-Medium	Medium
Miami (South Miami-Dade Busway Extension)	*Recommended*	*Medium*	Medium	Medium	*Medium*	High	Medium	High	Medium	Low-Medium
Minneapolis (Hiawatha Corridor LRT)	*Recommended*	*Medium-High*	Medium-High	Medium	*Medium*	Low-Medium	High	Medium	Low-Medium	Medium-High
Nashville (East Commuter Rail Project) *	*N/A*	*N/A*	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A
New York (Long Island Rail Road East Side Access Project)	*Recommended*	*Medium*	Medium	Medium-High	*Medium*	Medium	Medium	Not Rated	Low	High
Norfolk (Norfolk-Virginia Beach Corridor LRT)	*Not Recommended*	*Low*	Low	Low	*Low-Medium*	Low	Medium	High	Low-Medium	Low-Medium
Orange County (The Centerline Orange County Rail Corridor)	*Recommended*	*Medium-High*	Medium-High	Medium-High	*Medium*	Medium-High	Medium	High	Medium	Medium
Phoenix (East Valley Light Rail Transit)	*Not Recommended*	*Low-Medium*	Low-Medium	Low	*Not Rated*	Not Rated	Not Rated	Not Rated	Not Rated	Medium
Portland (Interstate MAX LRT Extension)	*Highly Recommended*	*High*	High	High	*High*	High	High	Medium	Medium-High	High
Raleigh (Phase I Triangle	*Not Recommended*	*Low-Medium*	Low-Medium	Low-Medium	*Medium*	Not Rated	Medium	High	Medium	Medium

Regional Rail Project)										
Salt Lake City (CBD to University LRT)	*Recommended*	*Medium*	Medium-High	Medium	*Medium*	Low-Medium	Medium	Medium	Medium-High	Medium
San Diego (Mid Coast Corridor Project)	*Highly Recommended*	*Medium-High*	Medium-High	Medium-High	*Medium-High*	Medium	High	Medium	High	Medium
San Diego (Oceanside Escondido Rail Project)	*Highly Recommended*	*Medium-High*	Medium-High	Medium-High	*Medium-High*	Medium-High	Medium	Medium	High	Medium
San Francisco (Third Street Light Rail Project Phase 1)	*Recommended*	*Medium-High*	Medium-High	Medium	*Medium*	Medium-High	Medium	Medium	Low	High
San Juan (Tren Urbano, Minillas Extension)	*Recommended*	*Medium*	Medium	Medium-High	*Medium-High*	High	Medium	Medium	Medium	Medium-High
Seattle (Central Link LRT MOS)	*Highly Recommended*	*Medium-High*	High	Medium	*High*	Medium	High	Medium	High	High
Seattle (Everett to Seattle Commuter Rail) *	*N/A*	*N/A*	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A
Seattle (Lakewood to Tacoma Commuter Rail) *	*N/A*	*N/A*	N/A	N/A	*N/A*	N/A	N/A	N/A	N/A	N/A
Tampa (Tampa Bay Regional Rail)	*Not Recommended*	*Low-Medium*	Low-Medium	Low-Medium	*Medium*	Low-Medium	High	High	Medium-High	Low-Medium
Washington DC (Dulles Corridor Rapid	*Recommended*	*Medium*	Medium	Medium	*Medium*	Medium	High	Medium	Low-Medium	Low-Medium

Transit)										
Washington DC/MD (Largo Extension)	*Recommended*	*Medium*	Medium	Medium-High	*Medium*	Medium	High	Medium	Medium	Medium-High

* These projects are not rated based upon the exemption granted to projects where the anticipated Section 5309 New Starts share of the total estimated Capital Cost is below $25 million.

Table 1c

Table 1-C:
Summary of FY 2001 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
Final Design				
Dallas-Ft. Worth (Trinity Railway Express - Phase II)	*Medium*	39%	Medium	Medium
Ft. Lauderdale (Tri-Rail Commuter Upgrade)	*Medium*	34%	Medium	Medium
Little Rock (River Rail Project) *	*N/A*	65%	N/A	N/A
Los Angeles-San Diego (LOSSAN Rail Corridor Improvement Project) *	*N/A*	68%	N/A	N/A
New Orleans (Canal Streetcar Spine)	*Low*	80%	Low	Low
Newark (Newark Rail Link, (MOS-1)	*Medium-High*	68%	Medium-High	Medium-High
Northern New Jersey (Hudson-Bergen MOS-2)	*Medium*	65%	Medium	Medium
Pittsburgh (Stage II LRT Priority Program)	*Medium-High*	26%	Medium-High	Medium-High
San Diego (Mission Valley East LRT Extension)	*Medium-High*	77%	High	Medium-High
Preliminary Engineering				
Austin (Austin Area LRT System)	*Medium-High*	50%	Medium-High	Medium
Baltimore (Central Corridor Light Rail Double Tracking)	*Medium-High*	78%	High	Medium-High
Boston (South Boston Piers Transitway Phase II)	*Low*	80%	Low	Low-Medium
Chicago (Douglas Branch Reconstruction)	*Medium-High*	71%	Medium-High	Medium
Chicago (CTA Ravenswood Line Expansion)	*Medium-High*	75%	Medium-High	High
Chicago (Metra Central Kane Corridor)	*Medium-High*	58%	Medium-High	Medium
Chicago (Metra North Central Corridor)	*Medium-High*	62%	Medium-High	High
Chicago (Metra South West Corridor Commuter Rail)	*Medium-High*	63%	Medium-High	High
Cincinnati (I-71 Corridor)	*Low-Medium*	49%	Low-Medium	Low
Cleveland (Euclid Corridor	*Medium-*	61%	Medium-High	Medium-High

Improvement Project)	*High*			
Denver (Southeast Corridor LRT)	*Medium-High*	60%	Medium-High	Medium-High
Hartford (New Britain-Hartford Busway)	*Medium*	65%	Medium	Medium
Houston (Downtown to Astrodome Corridor Light Rail)	*Medium-High*	22%	Medium-High	Medium-High
Kansas City, Johnson County (I-35 Commuter Rail) *	*N/A*	80%	N/A	N/A
Las Vegas (Resort Corridor Fixed Guideway MOS)	*Medium*	27%	Medium	Medium
Maryland (MARC Commuter Rail Improvements Projects)	*N/A*	48%	N/A	N/A
Memphis (Medical Center Extension)	*Medium*	80%	Medium-High	Medium
Miami (East-West Multimodal Corridor)	*Low*	40%	Low	Low
Miami (North Corridor)	*Medium*	70%	Medium	Medium
Miami (South Miami-Dade Busway Extension)	*Medium*	70%	Medium	Medium
Minneapolis (Hiawatha Corridor LRT)	*Medium-High*	50%	Medium-High	Medium
Nashville (East Commuter Rail Project) *	*N/A*	70%	N/A	N/A
New York (Long Island Rail Road East Side Access Project)	*Medium*	50%	Medium	Medium-High
Norfolk (Norfolk - Virginia Beach Corridor LRT)	*Low*	55%	Low	Low
Orange County (The Centerline Orange County Rail Corridor)	*Medium-High*	50%	Medium-High	Medium-High
Phoenix (East Valley Light Rail Transit)	*Low-Medium*	50%	Low-Medium	Low
Portland (Interstate MAX LRT Extension)	*High*	73%	High	High
Raleigh (Phase I Triangle Regional Rail Project)	*Low-Medium*	39%	Low-Medium	Low-Medium
Salt Lake City (CBD to University LRT)	*Medium*	80%	Medium-High	Medium
San Diego (Mid Coast Corridor Project)	*Medium-High*	39%	Medium-High	Medium-High
San Diego (Oceanside Escondido Rail Project)	*Medium-High*	60%	Medium-High	Medium-High
San Francisco (Third Street Light Rail Project Phase 1)	*Medium-High*	0%	Medium-High	Medium-High
San Juan (Tren Urbano, Minillas Extension)	*Medium*	80%	Medium	Medium-High
Seattle (Central Link LRT MOS)	*Medium-High*	33%	High	Medium

Seattle (Everett to Seattle Commuter Rail) *	*N/A*	24%	N/A	N/A
Seattle (Lakewood-to-Tacoma Commuter Rail) *	*N/A*	29%	N/A	N/A
Tampa (Tampa Bay Regional Rail)	*Low-Medium*	50%	Low-Medium	Low-Medium
Washington DC (Dulles Corridor Rapid Transit)	*Medium*	78%	Medium	Medium
Washington DC/MD (Largo Extension)	*Medium*	60%	Medium	Medium-High

* These projects are not rated based upon the exemption granted to projects where the anticipated Section 5309 New Starts share of the total estimated Capital Cost is below $25 million.

Table 1d

Table 1-D: Summary of Fiscal Year 2001 New Starts Ratings

Phase and City (Project)	Project Justification Rating	Mobility Improvement Rating	Mobility Improvements			Environment Benefits Rating	Environmental Benefits					
			Annual Travel Time Savings (millions hours)		Low Income Households within ½ mile		Annual Reduction in Greenhouse Gas Emmissions (tons CO2)		Annual Reduction in Regional Energy Consumption (million BTU's)		EPA Classification	
			New Start Versus:				New Start Versus:		New Start Versus:		Ozone	Carbon Monoxide
			No-Build	TSM			No-Build	TSM	No-Build	TSM		
Final Design												
Dallas-Ft. Worth (Trinity Railway Express - Phase 2)	**Medium**	Not Rated	N/A	N/A	407	Medium	-118	-563	-11238	-7492	Serious Non-Attainment	Non-Attainment
Ft. Lauderdale (Tri-Rail Commuter Upgrade)	**Medium**	Medium-High	11.2	N/A	10,892	Low	734	N/A	15,001	N/A	Attainment	Maintenance
Little Rock (River Rail Project) *	**N/A**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Los Angeles-San Diego (LOSSAN Rail Corridor Improvement Project) *	**N/A**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
New Orleans (Canal Streetcar Spine)	**Medium**	Low-Medium	0.2	0.2	5,888	Medium	-1749	-635	-20595	-2270	Attainment	Maintenance
Newark	**Medium-**	Low-	0.3	N/	3,645	Medium	-	N/A	-	N/A	Severe	Moderate

(Newark Rail Link, MOS-1)	**High**	Medium		A			2740		22090		Non-Attainment	Non-Attainment
Northern New Jersey (Hudson-Bergen MOS-2)	**Medium**	Medium	2.2	N/A	10,730	Medium	-3645	N/A	-40962	N/A	Severe Non-Attainment	Moderate Non-Attainment
Pittsburgh (Stage 2 LRT Priority Program)	**Medium**	Low-Medium	0.7	0.6	3,622	High	-10480	-6930	-131859	-89696	Moderate Non-Attainment	Not Classified
San Diego (Mission Valley East LRT Extension)	**Medium-High**	Medium	1.9	N/A	1,049	High	-11659	N/A	-151155	N/A	Serious Non-Attainment	Moderate Non-Attainment
Preliminary Engineering												
Austin (Austin Area LRT System)	**Medium**	Medium	2.6	2.1	4,446	Medium	-2295	-278	-1575	-27941	Attainment	Attainment
Baltimore (Central Corridor Light Rail Double Tracking)	**Medium**	Medium	0.6	N/A	7,315	High	-8170	N/A	-105178	N/A	Severe Non-Attainment	Attainment
Boston (South Boston Piers Transitway Phase 2)	**Medium**	Low-Medium	0.5	N/A	1,043	Medium	-3833	N/A	-47367	N/A	Serious Non-Attainment	Attainment
Chicago (Douglas Branch Reconstruction)	**Medium-High**	Medium	4.7	2.6	10,056	High	-24046	-19262	-293194	-227522	Severe Non-Attainment	Attainment
Chicago (CTA Ravenswood Line Expansion)	**High**	Medium-High	2.7	N/A	11,544	High	-18911	N/A	-235320	N/A	Severe Non-Attainment	Attainment
Chicago (Metra Central Kane Corridor)	**Medium**	Medium-High	0.3	0.8	1	High	-14390	-10624	-188315	-138867	Severe Non-Attainment	Attainment
Chicago	**Medium**	Medium	1.6	1.3	3,811	Medium	-	-	-	-	Severe	Attainme

(Metra North Central Corridor)							9433	4166	123963	54964	Non-Attainment	nt
Chicago (Metra South West Corridor Commuter Rail)	**Medium-High**	High	5.6	6.2	844	Medium	-10977	-12401	-143953	-162231	Severe Non-Attainment	Attainment
Cincinnati (I-71 Corridor)	**Low-Medium**	Medium	1.6	0.8	13,877	Medium	4360	-1969	61,120	-19201	Moderate Non-Attainment	Attainment
Cleveland (Euclid Corridor Improvement Project)	**Medium**	Medium-High	10.7	0.0	12,406	Medium	-8481	N/A	-76146	N/A	Maintenance	Attainment
Denver (Southeast Corridor LRT)	**Medium**	Medium	4.0	3.4	1,906	Medium	-5177	-7905	2340	43288	Transitional Non-Attainment	Serious Non-Attainment
Hartford (New Britain-Hartford Busway)	**Medium**	Medium-High	2.6	0.7	4,381	High	-12158	-9086	-160084	-119449	Serious Non-Attainment	Attainment
Houston (Downtown to Astrodome Corridor Light Rail)	**Medium**	Medium	1.2	N/A	1,800	Medium	-7074	N/A	-82867	N/A	Severe Non-Attainment	Attainment
Kansas City, Johnson County (I-35 Commuter Rail) *	**N/A**	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)	**Medium-High**	Medium	26.7	2.4	3,393	Medium	-24440	15366	-274682	202389	Attainment	Serious Non-Attainment
Maryland (MARC Commuter Rail Improveme	**N/A**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

nts Project)												
Memphis (Medical Center Extension)	**Medium**	Not Rated	N/A	N/A	2,700	Medium	177	177	2,318	2,318	Maintenance	Maintenance
Miami (East-West Multimodal Corridor)	**Medium**	Medium	10.1	N/A	849	Medium	-265	N/A	-3257	N/A	Maintenance	Attainment
Miami (North Corridor)	**Medium**	Medium	0.8	0.8	1,383	High	-10846	-17629	-126659	-213760	Maintenance	Attainment
Miami (South Miami-Dade Busway Extension)	**Medium**	High	3.2	2.9	760	Medium	-4578	-5582	-60754	-72818	Maintenance	Attainment
Minneapolis (Hiawatha Corridor LRT)	**Medium**	Low-Medium	1.0	0.4	3,358	High	-9378	-10404	-106273	-117577	Attainment	Attainment
Nashville ((East Commuter Rail Project) *	**N/A**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
New York (Long Island Rail Road East Side Access Project)	**Medium**	Medium	7.4	5.7	3,681	Medium	80261	97356	1305826	1531344	Severe Non-Attainment	Moderate Non-Attainment
Norfolk (Norfolk-Virginia Beach Corridor LRT)	**Low-Medium**	Low	0.4	0.3	1,447	Medium	-5705	9724	-64640	115716	Attainment	Attainment
Orange County (The Centerline Orange County Rail Corridor)	**Medium**	Medium-High	13.3	6.3	17,506	Medium	-26745	-4267	37744	-85779	Extreme Non-Attainment	Serious Non-Attainment
Phoenix (East Valley	**Not Rated**	Not Rated	N/A	N/A	4,040	Not Rated	N/A	N/A	N/A	N/A	Serious Non-Attainme	Serious Non-Attainme

Light Rail Transit)											nt	nt
Portland (Interstate MAX LRT Extension)	**High**	High	17.4	0.8	3,226	High	-33873	-3553	-433413	13808	Attainment	Attainment
Raleigh (Phase I Triangle Regional Rail Project)	**Medium**	Not Rated	N/A	N/A	1,325	Medium	N/A	1168	N/A	N/A	Moderate Maintenance	Maintenance
Salt Lake City (CBD to University LRT)	**Medium**	Low-Medium	0.2	-0.2	3,105	Medium	-8283	-6373	-52997	-27793	Maintenance	Non-Attainment
San Diego (Mid Coast Corridor Project)	**Medium-High**	Medium	0.8	N/A	405	High	13425	N/A	-175016	N/A	Serious Non-Attainment	Moderate Non-Attainment
San Diego (Oceanside Escondido Rail Project)	**Medium-High**	Medium-High	1.4	0.7	1,706	Medium	-4070	-2113	-54464	-29045	Serious Non-Attainment	Moderate Non-Attainment
San Francisco (Third Street Light Rail Project Phase 1)	**Medium**	Medium-High	N/A	1.3	5,988	Medium	N/A	-3503	N/A	16,661	Maintenance	Non-Attainment
San Juan (Tren Urbano, Minillas Extension)	**Medium-High**	High	33.8	0.9	4,349	Medium	-48564	4538	-488977	87,590	Attainment	Attainment
Seattle (Central Link LRT MOS)	**High**	Medium	N/A	12.8	7,879	High	N/A	-32758	N/A	-407589	Maintenance	Maintenance
Seattle (Everett to Seattle Commuter Rail) *	**N/A**	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tampa (Tampa Bay Regional Rail)	**Medium**	Low-Medium	2.1	1.7	6,053	High	-368	-251	-233738	-164625	Attainment	Attainment

Washington DC (Dulles Corridor Rapid Transit)	**Medium**	Medium	2.1	1.9	237	High	-1712	-10890	-59723	-68820	Serious Non-Attainment	Moderate Non-Attainment
Washington DC/MD (Largo Extension)	**Medium**	Medium	1.7	1.1	46	High	-2740	-10370	-19499	-6418	Serious Non-Attainment	Moderate Non-Attainment

* These projects are not rated based upon the exemption granted to projects where the anticipated Section 5309 New Starts share of the total estimated Capital Cost is below $25 million.

Table 1d Continued

Summary of Fiscal Year 2001 New Starts Ratings

Phase and City (Project)	Operating Efficiency Rating	Operating Efficiencies			Cost Effectiveness Rating	Cost Effectiveness		Land Use Rating
		Systemwide Operating Cost per Passenger Mile				Incremental Cost per Incremental Passenger		
		No-Build	TSM	New Start		New Start Versus No Build	New Start Versus TSM	
Final Design								
Dallas-Ft. Worth (Trinity Railway Express - Phase 2)	Not Rated	N/A	N/A	N/A	Medium-High	$4.60	$9.80	Medium
Ft. Lauderdale (Tri-Rail Commuter Upgrade)	Low	$0.28	N/A	$0.35	Low-Medium	$13.80	N/A	Medium
Little Rock (River Rail Project) *	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Los Angeles-San Diego (LOSSAN Rail Corridor Improvement Project) *	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
New Orleans (Canal Streetcar Spine)	High	$0.76	$0.71	$0.59	High	$4.40	$5.40	Medium
Newark (Newark Rail Link, MOS-1)	Medium	$0.47	N/A	$0.46	Medium-High	$8.80	N/A	Medium-High
Northern New Jersey (Hudson-Bergen MOS-2)	Medium	$0.29	N/A	$0.27	Low	$22.10	N/A	Medium-High
Pittsburgh (Stage 2 LRT Priority Program)	High	$0.35	$0.37	$0.31	Medium	$11.80	$7.90	Medium
San Diego (Mission Valley East LRT Extension)	Medium	$0.19	N/A	$0.19	Medium	$10.40	N/A	Medium-High
Preliminary Engineering								
Austin (Austin Area LRT System)	Medium	$1.18	$1.15	$1.14	Medium	$11.70	$12.30	Medium
Baltimore (Central Corridor Light Rail Double Tracking)	Medium	$0.60	N/A	$0.59	Medium-High	$8.70	N/A	Low-Medium
Boston (South Boston Piers Transitway Phase 2)	Medium	$0.58	N/A	$0.58	Low-Medium	$15.60	N/A	High
Chicago (Douglas Branch Reconstruction)	Medium	$0.20	$0.21	$0.21	Medium	$11.70	$13.70	High
Chicago (CTA	Medium	$0.21	N/A	$0.20	High	$3.50	$0.00	High

Ravenswood Line Expansion)								
Chicago (Metra Central Kane Corridor)	Medium	$0.23	$0.23	$0.22	Low-Medium	$13.70	$16.80	Low-Medium
Chicago (Metra North Central Corridor)	Medium	$0.23	$0.23	$0.23	Medium	$8.90	$11.40	Medium
Chicago (Metra South West Corridor Commuter Rail)	Medium	$0.22	$0.22	$0.22	Medium-High	$8.90	$8.60	Medium
Cincinnati (I-71 Corridor)	Medium	$0.47	$0.46	$0.47	Low-Medium	$15.50	$17.60	Low-Medium
Cleveland (Euclid Corridor Improvement Project)	Medium	$0.63	N/A	$0.63	Low	$26.90	N/A	Medium-High
Denver (Southeast Corridor LRT)	Medium	$0.37	$0.39	$0.37	Low-Medium	$18.40	$14.80	Medium
Hartford (New Britain-Hartford Busway)	Low	$0.68	$0.74	$0.78	High	$5.50	$4.30	Low-Medium
Houston (Downtown to Astrodome Corridor Light Rail)	Medium	$0.42	N/A	$0.42	Low-Medium	$20.00	N/A	Medium
Kansas City, Johnson County (I-35 Commuter Rail) *	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Las Vegas (Resort Corridor Fixed Guideway MOS)	High	$0.35	$0.37	$0.33	High	$3.70	$0.70	Medium
Maryland (MARC Commuter Rail Improvements Projects)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Memphis (Medical Center Extension)	Medium	$0.42	N/A	$0.44	High	$5.20	N/A	Medium
Miami (East-West Multimodal Corridor)	Medium	$0.35	N/A	$0.36	Low-Medium	$18.90	N/A	Medium-High
Miami (North Corridor)	Medium	$0.45	$0.45	$0.43	Low-Medium	$15.50	$21.50	Medium
Miami (South Miami-Dade Busway Extension)	High	$0.53	$0.52	$0.49	Medium	$11.70	$14.20	Low-Medium
Minneapolis (Hiawatha Corridor LRT)	Medium	$0.35	$0.35	$0.36	Low-Medium	$19.00	$19.20	Medium-High
Nashville (East Commuter Rail Project) *	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
New York (Long Island Rail Road East Side Access Project)	Not Rated	N/A	N/A	N/A	Low	$34.50	$32.20	High
Norfolk (Norfolk-Virginia Beach Corridor	High	$0.73	$0.79	$0.63	Low-Medium	$16.40	$15.10	Low-Medium

LRT)								
Orange County (The Centerline Orange County Rail Corridor)	High	$0.40	$0.42	$0.36	Medium	$6.80	$11.90	Medium
Phoenix (East Valley Light Rail Transit)	Not Rated	N/A	N/A	N/A	Not Rated	N/A	N/A	Medium
Portland (Interstate MAX LRT Extension)	Medium	$0.42	$0.38	$0.38	Medium-High	$3.10	$9.70	High
Raleigh (Phase 1 Triangle Regional Rail Project)	High	N/A	$0.58	$0.44	Medium	N/A	$11.60	Medium
Salt Lake City (CBD to University LRT)	Medium	$0.30	$0.30	$0.30	Medium-High	$6.00	$9.30	Medium
San Diego (Mid Coast Corridor Project)	Medium	$0.22	N/A	$0.22	High	$3.20	N/A	Medium
San Diego (Oceanside Escondido Rail Project)	Medium	$0.10	$0.10	$0.10	High	$4.40	$6.40	Medium
San Francisco (Third Street Light Rail Project Phase 1)	Medium	N/A	$0.55	$0.55	Low	N/A	$38.90	High
San Juan (Tren Urbano, Minillas Extension)	Medium	$0.25	$0.29	$0.29	Medium	$7.10	$12.60	Medium-High
Seattle (Central Link LRT MOS)	Medium	N/A	$0.47	$0.45	High	N/A	$3.30	High
Tampa (Tampa Bay Regional Rail)	High	$0.50	$0.54	$0.44	Medium-High	$8.50	$8.40	Low-Medium
Washington DC (Dulles Corridor Rapid Transit)	Medium	$0.31	$0.31	$0.29	Low-Medium	$11.90	$19.60	Low-Medium
Washington DC/MD (Largo Extension)	Medium	$0.38	$0.38	$0.38	Medium	$9.30	$11.60	Medium-High

* These projects are not rated based upon the exemption granted to projects where the anticipated Section 5309 New Starts share of the total estimated Capital Cost is below $25 million.

New Starts Allocations and Recommendations

The President's budget for FY 2001 proposes that $1,058.40 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 authorized by §5327, and for other purposes specified by §5309(m)(5)(A), a total of $1,040.14 million remains available for projects. Of this amount, a total of $639.29 million will be allocated among the 14 projects with existing Federal commitments, according to the amounts specified in Attachment 6 of their respective FFGAs. An additional $105.00 million will be allocated among three projects for which FFGAs are currently pending, and $211.17 million will be allocated among 11 projects that are expected to be ready for FFGAs before the end of FY 2001 (i.e., September 30, 2001). As authorized under §5309(m)(2), the remaining $84.67 million will be made available for preliminary engineering activities, with specific funding recommendations for ten projects. Complete descriptions of these projects can be found in Appendix A.

Table 2 summarizes the recommendations for FY 2001 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 1999 and prior year funds that have been obligated by each project, and the third column shows any unobligated amounts as of the end of FY 1999. The fourth column shows the amount of funds available as a result of the FY 2000 DOT Appropriations Act (adjusted for the oversight takedown). The fifth column shows the FY 2001 funding recommendations contained in the President's budget request, and the sixth 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.

Please note that a *rating* of "recommended" does not translate directly into a *funding* recommendation; rather, it is an indication of overall project merit. Note also that project evaluation is an ongoing process, and ratings may change as project development continues and new information becomes available. Finally, no rating is shown for projects with existing FFGAs. For those projects with existing FFGAs issued prior to TEA-21, the statutory determination of project justification was made at the time the Federal commitment was issued, under the requirements in effect at the time. Under TEA-21, §5309(e)(7) requires the Secretary to enter into FFGAs based on the ratings assigned under the new starts project evaluation process; thus, no FFGA will be issued for a project that is not rated at least "recommended." In both cases, the issuance of the FFGA represents the conclusion of the new starts evaluation process. It should be noted, however, that FTA continues to monitor projects that are proceeding under FFGAs through its project management oversight process.

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 overruns 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).

Table 2: FY 2001 New Starts Funding Recommendations

Table 2

Fiscal Year 2001 Funding for New Starts Projects (Millions of Dollars)

City/Project	Overall Project Rating	Fiscal Year 1999 and Prior Year Earmarks		Fiscal Year 2000 Earmarks[2]	Fiscal Year 2001 Recommended Funding	Remaining FFGA Funding	Total Recommended Funding
		Obligated	Unobligated				
Totals by Phase							
Existing Full Funding Grant Agreements		$3,136.87	$233.24	$619.55	$639.29	$1,669.19	$5,899.58
Pending Full Funding Grant Agreements		$63.24	$12.42	$41.21	$105.00		
Proposed Full Funding Grant Agreements		$42.44	$34.58	$94.25	$211.17		
Other Projects in Final Design		$64.85	$55.65	$1.96			
Preliminary Engineering Recommendations		$53.02	$14.90	$33.59	$84.67		
Other Projects in Preliminary Engineering		$68.12	$106.58	$60.83			
Additional Fiscal Year 2000 Earmarks				$92.91			
Ferry Capital Projects (AK or HI) (??5309(m)(5)(A)				$10.20	$10.32		
Oversight Activities				$7.35	$7.94		
Grand Total		**$3,428.55**	**$457.37**	**$961.85**	**$1,058.40**	**$1,669.19**	**$5,899.58**

Existing Full Funding Grant Agreements							
Atlanta - North Springs	FFGA	$249.87	$0.00	$44.29	$25.00 (5)	$51.39 (5)	$370.54 (5)
Boston - South Boston Piers Transitway Phase 1	FFGA	$188.30	$53.58	$52.88	35.97	FFGA Complete	$330.73
Dallas - North Central LRT Extension	FFGA	$43.21	$0.00	$49.05	$70.00	$170.73	$333.00
Denver - Southwest Corridor LRT	FFGA	$65.46	$0.00	$34.34	$20.20	FFGA Complete	$120.00
Houston - Regional Bus Plan	FFGA	$327.33	$110.17	$51.77	$10.74	FFGA Complete	$500.01
Los Angeles - North Hollywood	FFGA	$617.19 (6)	$0.00	$52.98 (6)	$50.00	$696.33	$1,416.49
Maryland - MARC Extension to Frederick	FFGA	$137.80	$0.00	$0.69	FFGA Complete		$138.51 (one)
Northern New Jersey - Hudson-Bergen LRT MOS-1	FFGA	$158.82	$69.48	$97.13	$121.00	$157.66	$604.09
Portland - Westside/Hillsboro LRT	FFGA	$619.01	$0.00	$10.85	$0.21	FFGA Complete	$630.07
Sacramento - South LRT Extension	FFGA	$53.46	$0.00	$24.53	$35.20	FFGA Complete	$113.19 (one)
Salt Lake City - North-South LRT	FFGA	$206.07	$0.00	$37.21	$0.72	FFGA Complete	$243.99 (one)
San Francisco - BART Extension to SFO Airport	FFGA	$153.42	$0.00	$63.77	$80.00	$452.81	$750.00
San Jose -	FFGA	$150.88	$0.00	$19.62	$12.25	FFGA	$182.75

Tasman West LRT						Complete	
San Juan - Tren Urbano	FFGA	$53.23	$0.00	$31.39	$118.00	$109.74	$312.37 (one)
St. Louis - Metrolink St. Clair Extension	FFGA	$112.83	$0.00	$49.05	$60.00	$30.53	$252.41 (one)
Subtotal		**$3,136.87**	**$233.24**	**$619.55**	**$639.29**	**$1,669.19**	**$5,899.58**
Pending Full Funding Grant Agreements							
Fort Lauderdale - Tri-Rail Commuter Rail Upgrade	Recommended	$51.29	$3.97	$9.81	$30.00		
Newark Rail Link (MOS-1)	Highly Recommended	$11.95	$5.96	$11.77	$10.00		
San Diego - Mission Valley East LRT Extension	Highly Recommended	$0.00	$2.49	$19.62	$65.00		
Subtotal		**$63.24**	**$12.42**	**$41.21**	**$105.00**		
Proposed Full Funding Grant Agreements							
Baltimore - Central LRT Double-Tracking	Recommended	$0.99	$0.00	$4.66	$10.00		
Chicago - Douglas Branch Reconstruction	Highly Recommended	$1.49	$0.00	$3.43	$17.00		
Chicago - Metra South West Corridor Commuter Rail	Highly Recommended	$1.00	$1.98	$1.73 (4)	$10.00		
Denver - Southeast Corridor LRT	Recommended	$0.00	$0.50	$2.94	$20.00		

Memphis - Medical Center Extension	Recommended	$5.75	$2.18	$2.45	$14.17		
Minneapolis - Hiawatha Corridor LRT	Recommended	$10.34	$16.99	$41.99	$20.00		
Northern New Jersey - Hudson-Bergen MOS-2	Recommended	$0.00	$0.00	$0.00	$0.00		
Pittsburgh - Stage 2 LRT Reconstruction	Recommended	$0.00	$3.97	$7.85	$20.00		
Portland - Interstate MAX LRT Extension	Highly Recommended	$5.96	$3.00	$0.00	$40.00		
Salt Lake City - CBD to University LRT	Recommended	$0.00	$4.96	$0.00	$15.00		
Seattle - Central Link LRT (MOS)	Highly Recommended	$16.91	$0.00	$24.53	$35.00		
Washington DC/MD - Largo Extension	Recommended	$0.00	$0.99	$4.66	$10.00		
Subtotal		**$42.44**	**$34.58**	**$94.25**	**$211.17**		
Other Projects in Final Design							
Dallas-Ft. Worth - Trinity Railway Express	Recommended	$26.53	$19.88	$0.00			
Los Angeles - LOSSAN Rail Corridor Improvement Project	Not Rated	$19.89	$0.00	$0.98			
New Orleans - Canal Streetcar Spine	Not Recommended	$18.43	$35.77	$0.98			

San Juan - Minillas Extension	Recommended	$0.00	$0.00	$0.00			
Subtotal		**$64.85**	**$55.65**	**$1.96**			
Preliminary Engineering Recommendations							
Chicago - Metra Commuter Rail (North Central/UP West)	Recommended	$1.99	$3.97	$22.80 (4)	$10.00		
Chicago - Ravenswood Line Expansion	Highly Recommended	$1.49	$0.00	$3.43	$8.80		
Cleveland - Euclid Corridor Improvement Project	Highly Recommended	$1.80	$1.99	$0.98	$8.80		
Little Rock - River Rail Project	Not Rated	$1.99	$0.99	$0.00	$5.67		
Maryland - MARC Commuter Rail Improvements	Not Rated	$1.99	$0.99	$1.47	$10.00		
Miami - South Miami-Dade Busway Extension	Recommended	$0.00	$0.00	$0.00	$8.80		
Nashville - East Corridor Commuter Rail	Not Rated	$0.00	$0.99	$0.98	$8.80		
New York - LIRR East Side Access	Recommended	$43.76	$0.00	$1.96	$10.00		
New York - Second Avenue Subway	Not Rated	$0.00	$0.00	$0.00	$5.00		

San Diego County - Oceanside-Escondido Rail Project	Highly Recommended	$0.00	$5.97	$1.96	$8.80		
Subtotal		**$53.02**	**$14.90**	**$33.59**	**$84.67**		
Other Projects in Preliminary Engineering							
Austin - Northwest/North Central Corridor	Recommended	$0.00	$1.99	$0.98			
Boston - South Boston Piers Transitway Phase 2	Not Recommended	$0.00	$0.00	$0.00			
Cincinnati - I-71 Corridor	Not Recommended	$7.00	$1.79	$0.98			
Kansas City - Johnson County I-35 Commuter Rail	Not Rated	$0.00	$0.99	$0.98			
Hartford - New Britain-Hartford Busway	Recommended	$0.00	$1.49	$0.00			
Houston - Downtown to Astrodome Light Rail	Recommended	$2.98	$0.00	$2.94			
Las Vegas - Resort Corridor Fixed Guideway MOS	Recommended	$4.98	$3.97	$3.43 (3)			
Miami - East/West Corridor	Not Recommended	$6.47	$2.98	$1.47			
Miami - North 27th Avenue Corridor	Not Recommended	$8.95	$2.98	$0.00			

Norfolk - Norfolk-Virginia Beach LRT Corridor	Not Recommended	$9.93	$0.00	$0.98			
Orange County - Centerline Rail Corridor	Recommended	$4.97	$2.49	$0.98			
Phoenix - East Valley Light Rail	Not Recommended	$3.99	$4.96	$4.91			
Raleigh - Regional Transit Plan Phase 1	Not Recommended	$1.99	$21.90	$7.85			
San Diego - Mid Coast Corridor	Highly Recommended	$2.94	$3.48	$4.91			
San Francisco - Thrid Street Light Rail Phase 1	Recommended	$0.00	$0.00	$0.00			
Seattle - Everett-Seattle Sounder Commuter Rail	Not Rated	$8.97	$40.69	$4.91			
Tampa - Tampa Bay Regional Rail	Not Recommended	$4.96	$0.00	$0.98			
Washington, DC - Dulles Corridor Rapid Transit	Recommended	$0.00	$16.87	$24.53			
Subtotal		**$68.12**	**$106.58**	**$24.53**			

Note: Totals may not add due to rounding.

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

(2) New starts allocations for FY 2000 have been reduced by 1.15 percent as a result of the government-wide recissions in discretionary budget authority under Section 301(a) of the FY 2000 Consolidated Appropriations Act (PL 106-113).

(3) An additional $1,488,750 in lapsed FY 1995 new starts funds is made available to the Clark County, Nevada Fixed Guideway Project under PL 106-69.

(4) Represents allocation of $24.53 million in FY 2000 funds for "Metra Commuter Rail Project" by grantee.

(5) Reflects proposed amendment to FFGA. See text.

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

Existing Federal Funding Commitments

Fifteen projects have existing FFGAs that commit FTA to provide specified levels of major capital investment funding. One of these projects, the Maryland MARC commuter rail extension from Point of Rocks to Frederick, is not included in the funding recommendations because the FY 2000 appropriation fulfilled the Federal funding commitment. The remaining 14 projects will require a total of $639.29 million in FY 2001. The status of these projects and the individual funding recommendations for FY 2001 are described below. For six of these projects, the funding recommendation represents the amount specified in Attachment 6 of the FFGA for FY 2001. For seven of these projects, the recommendation is based on the total remaining Federal funding commitment needed to complete the project; i.e., the amount outstanding as a result of prior year appropriations that were less than the amounts scheduled in Attachment 6 of their respective FFGAs. For one project, the recommendation reflects the remaining commitment, plus additional funds needed in FY 2001 under a proposed amendment to the FFGA. 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.

Atlanta/North Springs

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is constructing a 1.9-mile, 2-station extension of the North Line from the Dunwoody station to North Springs. When completed, 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 October 28, 1999, FTA notified Congress of its intent to revise the scope of this project 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. These changes will increase the total project cost to $463.18 million, and the Federal share to $370.54 million. Of the $65.53 million increase in Federal funding, $10.67 million will be applied from unexpended funds identified from cost savings on the Dunwoody section of the North Line extension. This amendment is pending.

Of the original $305.01 million commitment, a total of $249.87 million has been appropriated through FY 1999. The FY 2000 appropriation provided an additional $44.29 million, leaving $10.85 million required to fulfill the terms of the original FFGA for this project. In order to fulfill the original commitment, and in anticipation of the FFGA amendment, $25.00 million in new starts funding is recommended for this project in FY 2001. This amount includes the $10.85 million remaining under the original FFGA.

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 is planned to 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 1999, a total of $241.88 million has been provided for this project. The FY 2000 appropriation provided an additional $52.88 million. This leaves $35.97 million required to complete the Federal commitment to this project. It is recommended that these remaining funds be provided in FY 2001 to complete the FFGA. This phase of the transitway is expected to open in December 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 first new starts project to be issued an FFGA under the TEA-21 criteria, this project has received a "high" financial rating and is rated "medium" for justification, resulting in an overall project rating of "recommended."

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 November 5, 1999, which will provide a total of $333.00 million in §5309 new starts funding. Through FY 1999, a total of $43.21 million has been provided to this project, with an additional $49.05 million appropriated in FY 2000. This leaves $240.73 million required to complete the Federal funding commitment. As specified in Attachment 6 of the FFGA for this project, it is recommended that $70.00 million be provided to this project in FY 2001, with the remaining $170.73 million to be provided in future years.

Denver/Southwest Corridor LRT

The Regional Transit District (RTD) in Denver is constructing an 8.7-mile light rail extension between Denver and Littleton. The line 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 is $176.32 million. This extension is expected to serve 8,400 daily passengers when it opens for revenue service in July 2000, with an estimated 22,000 daily riders by 2015.

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 1999, a total of $65.46 million has been provided to this project, with an additional $34.34 million appropriated in FY 2000. This leaves $20.20 million required to complete the Federal funding commitment. It is recommended that these remaining funds be provided in FY 2001 to complete the FFGA.

Houston/Regional Bus Plan

Houston Metro's $625.00 million Regional Bus Plan consists of a package of improvements to its existing bus system. The package 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 $437.50 million has been provided through FY 1999; the FY 2000 appropriation provided an additional $51.77 million. The FY 2001 budget recommends that the remaining $10.74 million 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 Metro Rail Red Line Project in Los Angeles 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 the MTA 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 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, the MTA 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. The MTA is currently conducting further studies of transit investment options in the Eastside and Mid-City corridors, and is likely to announce recommendations in early 2000. Once the MTA identifies viable projects in these corridors, FTA will consider the prior Federal commitment under the MOS-3 FFGA as an "other factor" for rating and evaluation purposes, 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 is proceeding as scheduled and will open in May 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, leaving $99.22 million remaining to complete the commitment under the revised FFGA for this project. It is recommended that $50.00 million be provided to the North Hollywood segment of MOS-3, as specified in the FFGA, with the remaining $49.22 million to be provided in future years.

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 was provided in FY 1999 and FY 2000 for further study of alternatives to these segments. This is in addition to the $581.82 million provided to the North Hollywood segment, which brings total appropriations to date for the original MOS-3 project to $670.16 million, leaving $746.33 million of the original MOS-3 FFGA commitment remaining.

Maryland/MARC Extension to Frederick

The Mass Transit Administration of Maryland (MTA) is extending the Maryland Commuter Rail (MARC) system from Point of Rocks to Frederick, Maryland. This extension will provide service from suburban Montgomery and Frederick counties to Baltimore, Maryland and Washington, D.C. The project involves track, signal, and station and yard improvements along an existing freight line. In addition, MTA is embarking on a major procurement of additional commuter rail coaches and locomotives needed to meet anticipated systemwide demand on the MARC system and provide service on this extension. The total cost of the project is estimated at $131.60 million. Manufacturing of the coaches is underway, and delivery has begun. The locomotive procurement is being undertaken jointly with Amtrak. Protracted negotiations with CSXT over right-of-way purchase terms have resulted in project delays; MTA now expects to begin MARC service on the Frederick extension by 2001.

An FFGA for the Frederick extension and system improvements was issued on June 19, 1995, committing a total of $105.25 million to complete the project. This does not include $33.26 million in FY 1994 and prior year funding appropriated before the FFGA, which brings total Federal funding for this project to $138.51 million. Through FY 1999, a total of $137.80 million has been appropriated for this project. The FY 2000 appropriation provided an additional $689,701, completing the Federal commitment to this project under the original FFGA. Therefore, no additional funding for this project is required in FY 2001.

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 34th 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 entire Hudson-Bergen project is a major component of the Urban Core program of interrelated projects defined in ISTEA and TEA-21, designed to enhance mobility significantly in the Northeastern New Jersey area. These projects were specifically exempt from the FTA new starts evaluation criteria by ISTEA, and again by TEA-21.

The Department issued an FFGA on October 15, 1996 that commits $604.09 million in §5309 new starts funding for MOS-1. Through FY 1999, a total of $228.30 million has been appropriated for this project. The FY 2000 appropriation provided an additional $97.13 million, leaving $278.66 million needed to complete the Federal commitment. It is recommended that $121.00 million be provided in FY 2001, in accordance with Attachment 6 of the FFGA for this project. The remaining $157.66 million needed to complete the Federal funding commitment would be provided in future years. This project is scheduled to open for revenue service in July 2000.

Portland/Westside-Hillsboro LRT

On September 12, 1998 the Tri-County Metropolitan Transportation District (Tri-Met) in Portland, Oregon officially opened the 17.7-mile extension of the MAX light rail system between downtown Portland and downtown Hillsboro. The total cost of this project was $963.52 million. This line includes 20 new stations and nine park-and-ride lots. The route includes a 3-mile twin-tube tunnel under the West Hills, essentially paralleling the Sunset Highway. Service is provided by 42 low-floor light rail vehicles, the first to be placed in service in the United States.

The original FFGA for this project was issued in September 1992, for an 11.7-mile segment to S.W. 185th Avenue in Washington County, and was amended in December 1994 to include the remaining 6-mile segment to Hillsboro. Consistent with Congressional authorization, it was amended again on November 1, 1996 to commit a total of $630.06 million in §5309 new starts funding to the entire "Westside-Hillsboro" project. Of this, $619.01 million has been provided in FY 1999 and prior years. The FY 2000 appropriation provided an additional $10.85 million, leaving $210,000 required to complete the Federal commitment to this project. It is recommended that this final funding increment be provided in FY 2001.

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. The total estimated capital cost of the MOS is estimated at $222.00 million. Final design activities commenced on July 1, 1997, and construction began in November 1999. The project is projected to open for revenue service by September 2003.

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 $53.46 million in FY 1999 and prior year funding has been allocated to this project. An additional $24.53 million was appropriated in FY 2000, leaving $35.20 million required to complete the Federal commitment to this project. It is recommended that these remaining funds be provided in FY 2001 to fulfill the terms of the FFGA.

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 $206.07 million has been appropriated in FY 1999 and prior years. The FY 2000 appropriation provided an additional $37.21 million for this project, leaving $720,000 needed to complete the Federal commitment. The FY 2001 budget recommends that these remaining funds be provided to fulfill the terms of the FFGA for this project.

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 8.2-mile, 4-station extension of the BART rapid transit system to serve San Francisco International Airport (SFO). The project consists of a 7.4-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 0.8-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 1999, a total of $153.42 million has been allocated to this project. An additional $63.77 million was provided in FY 2000, leaving $532.81 million of the total commitment remaining. In accordance with Attachment 6 of the FFGA for this project, it is recommended that $80.00 million be provided in the FY 2001 budget to keep this project progressing on schedule. The remaining $452.81 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 planning 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 1of this project on July 2, 1996, providing a total of $182.75 million in §5309 new starts funding. A total of $150.88 million was provided in FY 1999 and prior years, and an additional $19.62 million was provided in FY 2000. This leaves $12.25 million needed to complete the Federal commitment to this project. It is recommended that these remaining funds be provided in FY 2001.

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. This type of procurement is expected to expedite the implementation of the project and develop the institutional capability needed to operate 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 $1,653.00 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 $53.23 million in §5309 funds has been allocated to the Tren Urbano project in FY 1999 and prior years, and an additional $31.39 million was appropriated in FY 2000. This leaves $227.74 million needed to complete the FFGA. In accordance with Attachment 6 of the FFGA, it is recommended that $118.00 million be provided to this project in FY 2001, with the remaining $109.74 million to be provided in future years.

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. 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 May 2001. The total cost of this project 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. This 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 1999, a total of $112.83 million has been appropriated for this project. The FY 2000 appropriation provided an additional $49.05 million, leaving $90.53 million needed to fulfill the original Federal funding commitment. In accordance with the FFGA, it is recommended that $60.00 million be provided to this project in FY 2001, with the remaining $30.53 million to be provided in future years.

Pending Federal Funding Commitments

In addition to the funding recommendations for existing Federal commitments discussed above, new FFGAs are pending for three additional projects. In anticipation of these commitments, FTA recommends that a total of $105.00 million be allocated among these projects in FY 2001. 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 2001.

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 new riders. This project is rated "medium" for both finance and justification, giving it an overall rating of "recommended."

The Double Track Corridor Improvement Program Segment 5 Project is approximately 44.31 miles long and includes upgrading 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.

To date, 9.6 miles of the Double Track Corridor Improvement Project have been completed, including a station at Miami International Airport, which will be the cornerstone of the future Miami Intermodal Center. An additional 7.0 miles are scheduled to be completed in early 2000.

The Tri-Rail Commuter Rail Upgrade (described as the Ft. Lauderdale-West Palm Beach-Miami Tri-County Commuter Rail) is authorized for final design and construction by Section 3030(a)(27) of TEA-21. Tri-Rail estimates the total cost of this project at $327.00 million, of which $110.50 million (34 percent) would come from the §5309 new starts program. A total of $55.26 million in §5309 new starts funding has been appropriated for the Tri-Rail Commuter Rail Upgrade through FY 1999; of which Tri-Rail has allocated $1.00 million to the Segment 5 project. An additional $9.81 million was provided in FY 2000, which will also be used for Segment 5.

An FFGA for the Double Track Corridor Improvement Program Segment 5 Project is pending. The total amount of the Federal commitment will be determined at the time the FFGA is issued. In preparation for this commitment, it is recommended that $30.00 million be provided to this project in FY 2001.

Newark/Newark Rail Link (MOS-1)

The New Jersey Transit Corporation (NJ Transit) is planning an 8.8-mile, 16-station light rail system linking the cities of Newark and Elizabeth, New Jersey. NJ Transit intends to implement the project in three stages, or "minimum operable segments" (MOS). The first segment, MOS-1, is a one-mile, five-station extension of the existing 4.3-mile Newark City Subway light rail line,

running from Broad Street Station in Newark to Newark Penn Station. 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 capital cost of MOS-1 is estimated at $207.70 million, including associated stations, vehicles and a vehicle maintenance facility. NJ Transit is expected to seek $141.95 million (68 percent) from FTA §5309 new starts funds. The Newark-Elizabeth MOS-1 segment is expected to serve 13,300 average weekday boardings by 2015, with 6,400 daily new riders expected. NJ Transit projects that the entire 8.8-mile line will carry 24,900 riders per day in 2015.

The Draft Environmental Impact Statement (DEIS) for all three stages of the full build alternative was completed in January 1997. The Final Environmental Impact Statement (FEIS), which addressed only the MOS, was completed in October 1998. The Federal Transit Administration signed a Record of Decision (ROD) for the MOS in November 1998. Environmental work on the other segments of the Newark-Elizabeth Rail Link awaits completion of ongoing planning activities.

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. Through FY 1999, Congress has appropriated $17.91 million in §5309 funds for the New Jersey Urban Core Newark-Elizabeth Rail Link Project. An additional $11.77 million was provided in FY 2000.

The Urban Core project, including the Newark Rail Link, was exempt from evaluation under the statutory project justification criteria by Section 3031(c) of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). This exemption continues under TEA-21. However, NJ Transit has provided data to FTA for evaluation, which provides a basis for supporting a Federal commitment and a funding recommendation for FY 2001. The Newark Rail Link MOS has received a rating of "medium-high" for both justification and finance, earning an overall rating of "highly recommended."

An FFGA is pending for the Newark Rail Link MOS-1 project. The total amount of the Federal commitment will be determined at the time the FFGA is issued. In anticipation of this commitment, it is recommended that $10.00 million be provided to this project in FY 2001.

San Diego/Mission Valley East LRT Extension

The Metropolitan Transit Development Board (MTDB) is planning 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 would 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 total project capital cost is estimated at $431.00 million, of which MTDB is expected to request $330.00 million (77 percent) in §5309 new starts funds. The system is expected to serve approximately 10,800 average weekday boardings in the corridor by 2015, and 7,400 daily new riders. The San Diego region is a serious nonattainment area for ground-level ozone, and a moderate nonattainment area for carbon monoxide. The 5.9-mile corridor runs parallel to Interstate 8 in eastern San Diego and La Mesa. The corridor 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. The MTDB is in good financial condition and has

historically relied on its stable and reliable funding sources, placing minimal reliance on Federal funding assistance. This project is rated "medium-high" for both finance and justification, earning it an overall rating of "highly recommended."

The Major Investment Study/Draft Environmental Impact Statement (DEIS) was completed in May 1997, fulfilling the requirement for alternatives analysis. The Locally Preferred Alternative was selected by the Metropolitan Transit Development Board in October 1997 with concurrence from the San Diego Association of Governments (SANDAG). FTA approved entry into preliminary engineering in March 1998, and preliminary engineering was completed in July 1998. This abbreviated schedule was made possible by the extensive public involvement and detailed analyses undertaken during the planning stages, streamlining much of the work that would traditionally be undertaken during preliminary engineering and preparation of the Final Environmental Impact Statement (FEIS). The FEIS is complete, the Record of Decision (ROD) was issued in August 1998, and approval to enter Final Design was granted by FTA in October 1998.

This project was authorized for final design and construction by Section 3030(a)(76) of TEA-21. Through FY 1999, Congress has appropriated $2.49 million in §5309 new starts funds for this project, and an additional $19.62 million was provided in FY 2000. Based on the results of the project evaluation process required under §5309(e), this project has been rated "medium-high" for both finance and project justification, resulting in an overall project rating of "highly recommended."

An FFGA for the Mission Valley East project is pending. The total amount of the Federal commitment will be determined at the time it is issued. In preparation for this expected commitment, it is recommended that $65.00 million be provided for this project in FY 2001.

Proposed Funding Commitments

In addition to the funding recommendations for the existing and pending Federal commitments discussed above, 12 proposed projects are expected to be ready for FFGAs before the end of FY 2001 (i.e., September 30, 2001). One of these, the Hudson-Bergen MOS-2 light rail project in northern New Jersey, is ready for a Federal commitment but does not require §5309 new starts funding in FY 2001. The remaining 11 projects will require specific funding amounts in FY 2001. In anticipation of these new commitments, FTA recommends that a total of $211.17 million be allocated among these projects in FY 2001. 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 2001.

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 an additional 15 trains, which would 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.

FTA approved MTA's request to enter preliminary engineering in January 1999. The project has been divided into two segments for environmental review purposes. The environmental review process has been completed for the Southern segment, from Cromwell Station to Hamburg Street, and a Finding of No Significant Impact (FONSI) is expected in early 2000. The Northern segment, North Avenue to Timonium, is expected to complete the environmental review process by the spring of 2000. MTA is expected to request FTA approval to enter final design upon completion of all environmental reviews.

Section 3030(a)(42) of TEA-21 authorizes the "Maryland – Light Rail Double Track" for final design and construction. A total of $0.99 million in §5309 new starts funds has been appropriated for this project through FY 1999, and an additional $4.66 million was provided in FY 2000.

FTA anticipates that the MTA 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 $10.00 million be provided to this project in FY 2001.

Chicago/Douglas Branch Reconstruction

The Chicago Transit Authority (CTA) is proposing a complete reconstruction of the Douglas Branch. 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 turn of the last 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, and declining service.

This project is included in the financially constrained long range regional transportation plan developed by the Chicago Area Transportation Study (CATS), the local Metropolitan Planning Organization. The Douglas Branch Reconstruction project was approved for preliminary engineering in the fall of 1999.

The total capital cost of the project is estimated at $450.80 million, of which the CTA is expected to seek $320.10 million (71 percent) in §5309 new starts funds. 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 reconstruction project is rated medium-high for both justification and local financial commitment, earning it an overall rating of "highly recommended."

The Douglas Branch is authorized for final design and construction by Section 3030(a)(106) of TEA-21. A total of $1.49 million in §5309 new starts funds has been appropriated for this project through FY 1999, and an additional $3.43 million was provided in FY 2000.

FTA anticipates that the CTA will be ready for an FFGA for this project by 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 $17.00 million be provided to this project in FY 2001.

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 179th 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.

Metra completed a Major Investment Study (MIS) that resulted in the selection of this project in August 1998. The MIS fulfills the statutory requirement for an alternatives analysis. The South West Corridor project has been incorporated into the metropolitan planning organization's 2020 long-range transportation plan and the Transportation Improvement Program. FTA approved entry into preliminary engineering in December 1998.

The South West corridor, located along the former Norfolk Southern railroad right-or-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 new riders, by 2020. Northeastern Illinois is classified as a "severe" nonattainment area for ozone. The total capital cost of this project is estimated at $165.50 million, of which Metra is expected to seek $103.86 million (63 percent) in §5309 new starts funds. 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 1999, a total of $2.98 million has been provided for this project, and Metra allocated an additional $1.73 million from its overall FY 2000 new starts appropriation. FTA estimates that Metra 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 $10.00 million be provided to this project in FY 2001.

Denver/Southeast Corridor LRT

The Regional Transportation District (RTD) in Denver and the Colorado Department of Transportation (CDOT) are proposing a 19-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 RTD, CDOT, and the Denver Regional Council of Governments (DRCOG) completed a major investment study (MIS) for this corridor in July 1997, fulfilling the requirement for alternatives analysis. The MIS resulted in the selection of a multimodal package of highway and transit improvements, including this project. The Southeast Corridor light rail project is included in DRCOG's 2020 Long Range Regional Transportation Plan. FTA approved entry into preliminary engineering in the spring of 1998; a Final Environmental Impact Statement is expected in December 1999, and a Record of Decision (ROD) in early 2000. RTD estimates that this project will be ready to open for service in 2007.

The total capital cost of the Southeast Corridor is estimated at $882.50 million, of which RTD is expected to seek $525.00 million (60 percent) in §5309 new starts funds. The RTD estimates that by 2020 the Southeast Corridor light rail line will serve a total of 38,100 average weekday boardings, and 12,900 daily new riders. The zoning requirements needed to implement the RTD's Transit Station Development Program, which requires sidewalks, landscaping, transit-friendly site design, mixed-use development, and trip reduction programs, are in place at all but one of the Denver stations. The "Action Agenda" of Denver's Comprehensive Plan endorses the improvement of pedestrian-oriented streets. The RTD is in solid financial condition, and most of the local funding needed to carry out this project has been committed. In November 1999, voters

approved a local referendum authorizing RTD to incur debt to construct the Southeast LRT, and extended an exemption from State restrictions on revenue retention. This project has a financial rating of "medium-high" and is rated "medium" for justification, earning an overall rating of "recommended."

Section 3030(a)(23) of TEA-21 authorized this project for final design and construction. A total of $0.50 million in §5309 new starts funds has been appropriated for this project through FY 1999, and an additional $2.94 million was provided in FY 2000.

FTA anticipates that the RTD 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 $20.00 million be provided to this project in FY 2001.

Memphis/Medical Center Extension

The Memphis Area Transit Authority (MATA), in cooperation with the City of Memphis, is proposing to build a 2.5-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. 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 entry into preliminary engineering in April 1998. A Supplemental Environmental Assessment is being prepared to document changes to the proposed project and to incorporate updated data developed during the preliminary engineering process. Completion of preliminary engineering and the environmental assessment is anticipated in early 2000, and FTA expects a request for approval to enter final design shortly thereafter.

The total capital cost of the project is estimated at $69.10 million, of which MATA is expected to seek $55.30 million (80 percent) in §5309 new starts funding. MATA estimates that this extension will serve 4,200 average daily boardings and 1,700 new riders by 2020. This project is rated "medium" for both finance and justification, resulting in an overall project rating of "recommended."

The Memphis Corridor was authorized for final design and construction by Section 3030(a)(43) of TEA-21. A total of $7.93 million in §5309 new starts funds has been appropriated for this project through FY 1999, and an additional $2.45 million was provided in FY 2000.

FTA anticipates that MATA 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 $14.17 million be provided to this project in FY 2001.

Minneapolis/Hiawatha 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 11.5-mile, 15-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 5th 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 0.8 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 Hiawatha Avenue light rail project is included in the region's financially-constrained Transportation Improvement Program and the Long-Range Transportation Plan. A Final Environmental Impact Statement (FEIS) was completed and a Record of Decision issued in February 1985. FTA approved entry into preliminary engineering in January 1999, and Metro Transit completed a re-evaluation of the 1985 FEIS in August 1999. FTA is currently reviewing Metro Transit's request for approval to enter final design.

The total capital cost for the Hiawatha Avenue light rail line is estimated at $548.60 million, of which Metro Transit is expected to seek $274.30 million (50 percent) from the §5309 new starts program. The line is expected to serve 24,600 average daily boardings and 9,300 new riders by 2020. The Twin Cities region has been experiencing steady population and economic growth, and the Minneapolis CBD is growing at a rate significantly higher than the region overall. Nearly 200,000 jobs and 70,000 residents are within ½-mile of the Hiawatha Avenue line, with population expected to grow by 25 percent and employment by 37 percent in the next 20 years. This project is rated "medium-high" for finance and "medium" for justification, earning an overall rating of "recommended."

Section 3030(a)(91) of TEA-21 authorizes the "Twin Cities – Transitway Corridors" for final design and construction. A total of $27.33 million in §5309 new starts funds has been appropriated for this project through FY 1999, and an additional $41.99 million was provided in FY 2000.

FTA anticipates that Metro Transit will be ready for an FFGA for this project by 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 $20.00 million be provided to this project in FY 2001.

Northern New Jersey/Hudson-Bergen MOS-2

NJ Transit is proposing to construct a second Minimum Operable Segment (MOS-2) of the Hudson-Bergen LRT system. The full Hudson-Bergen project is a $2.00 billion, 20.1-mile, 30-station light rail line from the Vince Lombardi Park-and-Ride lot in Bergen County to West Fifth Street in Bayonne, Hudson County, serving the high-density commercial and residential centers in Hoboken and Jersey City and connecting with ferries and the PATH and NJ Transit commuter rail lines. Construction of MOS-1, a 9.6-mile, 16-station light rail line from the Hoboken Terminal to 34th Street in Bayonne and Westside Avenue in Jersey City, is proceeding under an FFGA and is nearing completion.

The Hudson-Bergen MOS-2 project is a 6.1-mile, 7-station segment running north from Hoboken Terminal to the Tonnelle Avenue park-and-ride lot in North Bergen, and south to 22nd Street in Bayonne. The total capital cost of MOS-2 is estimated at $1,112.80 million, of which NJ Transit is expected to seek $721.60 million (65 percent) in §5309 new starts funds. The 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. Estimated ridership in 2010 is 34,900 average weekday boardings and 24,100 daily new

riders. This project is rated "medium" for both project justification and local financial commitment, resulting in an overall rating of "recommended."

NJ Transit is seeking a Federal funding commitment to the Hudson-Bergen MOS-2 project, which is expected to be ready for an FFGA before the end of FY 2001. The MOS-2 project will not require funding from the §5309 new starts program until FY 2004; however, issuing an FFGA now would provide NJ Transit with the authority to borrow funds to begin construction as soon as MOS-1 is complete, under the same turnkey contract. This would permit 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. Therefore, while FTA intends to enter into an FFGA for the Hudson-Bergen MOS-2 project, no §5309 new starts funding recommendation is required for this project in FY 2001.

Pittsburgh/Stage II LRT Reconstruction

The Port Authority of Allegheny County ("Port Authority," formerly "PATransit" or "PAT") 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 Overbook 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 6.3 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 remaining portions of the original Stage II LRT project will be undertaken as local funding becomes available.

The total capital cost of the Stage II LRT Priority Program is estimated at $383.73 million, of which Port Authority is expected to seek $100.20 million (26 percent) in §5309 new starts funds. Ridership is estimated at 24,000 average weekday boardings, with 9,800 new riders projected. The alignment serves older, small neighborhoods that were developed during the streetcar era, and are oriented towards the trolley line. Approximately 32,000 people live within ½-mile of the Stage II stations. The project would reconnect these areas with Pittsburgh's relatively compact and high-density CBD, a regional employment center that includes retail, cultural, and entertainment activities, several colleges, and some housing. Nearly all of the 120,000 jobs within the CBD are within ½-mile of LRT and busway stations. The mountainous topography surrounding the city acts to contain sprawling development. The Stage II LRT project is rated "medium" for both project justification and finance, earning an overall project rating of "recommended."

Section 3030(a)(98) authorizes the "Pittsburgh – Stage II Light Rail" project for final design and construction. Through FY 1999, a total of $3.97 million has been appropriated for this project, and an additional $7.85 million was provided in FY 2000. Port Authority is expected to be ready for an FFGA for the Stage II LRT Priority Program 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 $20.00 million be provided to this project in FY 2001.

Portland/ Interstate MAX LRT Extension

The Tri-County Metropolitan Transit District of Oregon (Tri-Met) is planning a 5.6-mile, 10-station extension of the Metropolitan Area Express ("MAX") light rail system, which will connect the Portland's central business district with the regional Exposition Center in north Portland. Riders will be able to transfer between the North Corridor 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. Tri-Met estimates that the North Corridor extension will serve 18,100 average weekday boardings and 8,400 new riders by 2020. The total capital cost of this project is estimated at $350.00 million, of which Tri-Met is expected to seek $257.50 million (73 percent) from the FTA §5309 new starts program.

This project evolved from the proposed 12-mile South-North light rail line after voters rejected an affirmation of a previously-approved general obligation bond measure that would have funded construction. In response to the vote, Tri-Met reevaluated alternative alignments and funding strategies to implement the system. In June 1999, Tri-Met adopted the North Corridor–Interstate MAX and the City of Portland approved a resolution committing $30.00 million to the project.

FTA approved entry into preliminary engineering for the South-North project in April 1996. The Final Environmental Impact Statement was completed in October 1999, and FTA anticipates a Record of Decision in early 2000. A request for approval to enter final design is expected shortly thereafter.

Section 3030(a)(66) of TEA-21 authorizes the "Portland South-North Corridor (Interstate MAX)" project for final design and construction. A total of $8.96 million in §5309 new starts funds has been appropriated for this project through FY 2000. FTA anticipates that Tri-Met 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 $40.00 million be provided to this project in FY 2001.

Salt Lake City/CBD to University LRT

The Utah Transit Authority (UTA) is proposing to construct 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 Wasatch Front Regional Council (WFRC) completed a major investment study and issued a Draft Environmental Impact Statement in July 1997 for the originally-proposed West-East corridor, fulfilling the requirement for alternatives analysis. FTA approved entry into preliminary engineering in January 1998. The Final Environmental Impact Statement was published in January 1999, and the Record of Decision is expected in early 2000. UTA is conducting an Environmental Reassessment Report to reflect the decision to pursue the 2.5-mile University Corridor line.

The total capital cost of the University Corridor line is estimated at $105.75 million, of which UTA is expected to seek $84.60 million (80 percent) in §5309 new starts funding. Ridership is forecast at 7,600 average weekday boardings in 2020, with 3,100 daily new riders. The central business district and the University are major trip generators, and the line passes through an active urban-scale commercial corridor surrounded by medium-density residential and mixed-use development. The connection with the North/South line links the corridor to higher-intensity activity centers, such as the Delta Center and the Salt Palace Convention Center. This project is

rated "medium" for both finance and project justification, resulting in an overall rating of "recommended."

Section 3030(a)(72) of TEA-21 authorizes the "Salt Lake City – Light Rail (Airport to the University)" project for final design and construction. A total of $4.96 million in §5309 new starts funds has been appropriated for this project through FY 2000. FTA anticipates that UTA 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 $15.00 million be provided to this project in FY 2001.

Seattle/Central Link LRT (MOS)

The Central Puget Sound Regional Transit Authority (Sound Transit) is planning a 23.5-mile, 23-station light rail transit project 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 first MOS will consist of a 7.2-mile, 10-station line running southwest from NE 45th Street to South Lander Street, operating over a combination of new, exclusive right-of-way and through the Downtown Seattle Transit Tunnel. The total cost of the MOS is estimated at $1,500.00 million, of which Sound Transit is expected to seek $500.00 million (33 percent) in §5309 new starts funding. Ridership for the MOS is estimated at 87,200 average daily boardings and 39,800 daily new riders.

The *Link* LRT system is one element of Sound Transit's voter-approved ten year, $3.914 billion *Sound Move* regional transit plan, which 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 entire 23.5-mile *Link* LRT is expected to serve 156,400 daily riders by 2020. The total capital cost of the complete system as proposed is estimated to be $3.1 billion.

The RTA Board adopted the *Sound Move* regional transit plan in May 1996. Voters approved $3.914 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. Sound Transit is expected to request FTA approval to enter final design for MOS-1 in early 2000.

The Seattle Sound Move Corridor, of which *Link* is one element, was authorized for final design and construction by Section 3030(a)(85) of TEA-21. Through FY 1999, Congress has appropriated $16.91 million in §5309 new starts funds for *Sound Move*. An additional $24.53 million was appropriated for the *Link* LRT in FY 2000.

The *Link* LRT MOS-1 has been rated "medium-high" for finance and "high" for project justification, based on FTA's evaluation under §5309(e). This results in an overall project rating of "highly recommended." FTA anticipates that Sound Transit will be ready for an FFGA for MOS-1 of the *Link* LRT 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 $35.00 million be provided for this project in FY 2001.

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 will manage the project through preliminary engineering, and WMATA will undertake final design and construction. MTA and WMATA expect this extension to open for service by September 2004.

The Largo Extension was approved as an addition to the original 103-mile Metrorail system in February 1997, and is included in the National Capitol Region's Constrained Long Range Plan. FTA approved entry into preliminary engineering in February 1996. The Final Environmental Impact Statement was completed in September 1999, with a Record of Decision expected in early 2000. WMATA will assume responsibility for managing the project upon submission of a request to FTA for approval to enter final design.

The total capital cost of the Largo Extension of the Metrorail system is estimated at $433.90 million, of which MTA is expected to seek $260.30 million (60 percent) in §5309 new starts funding. The line will serve the suburban Maryland communities of Landover, Largo and Lottsford, providing direct service to downtown Washington, D.C. The corridor passes through an area of medium-density suburban residential development interspersed with multi-family housing, office parks, civic uses, two major sports/entertainment complexes, recreational parks, and undeveloped land. Ridership is estimated at 28,500 average weekday boardings by 2020, and 16,400 daily new riders. The Prince George's County general plan encourages concentration of land use around station areas, and plans for those areas are consistent with the State's Smart Growth Initiative. Several joint development opportunities are under consideration. The Maryland Transportation Trust Fund would provide the local funding required for this project. The Largo Extension has been rated "medium" for both local financial commitment and project justification, earning an overall project rating of "recommended."

This project is authorized by Section 3030(a)(94) of TEA-21 for final design and construction. A total of $0.99 million has been appropriated through 1999, and an additional $4.66 million was provided in FY 2000. FTA anticipates that MTA and WMATA will be ready for an FFGA for the Largo Extension 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 $10.00 million be provided for this project in FY 2001.

Funding for Preliminary Engineering

TEA-21 established a new provision limiting the amount of §5309 funds that can be used for purposes other than final design and construction to 8 percent of total annual new starts funds. For FY 2001, this amounts to $84.67 million that can be used for planning and preliminary engineering purposes. The Administration's FY 2001 budget recommends that these funds be allocated among the following ten projects. Current information indicates that these projects are among the strongest candidates in the new starts pipeline, based on the project ratings and degree of development.

Chicago/Metra Commuter Rail Projects

In addition to the South West Corridor project discussed earlier in this report, Chicago's Metra commuter rail division is planning additional extensions and improvements on its Union Pacific West and North Central Service lines. Specifically, Metra plans to extend the Union Pacific West line from Geneva to Elburn, Illinois, and to construct 12 miles of an additional (i.e., second) mainline track along the North Central Service 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 $93.04 million, of which Metra is expected to seek $54.31 million (58 percent) 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."

As part of the proposed North Central Corridor project, Metra would construct a 12-mile second mainline track along the existing North Central Service commuter rail line. In addition to the second mainline track, this project includes track and signal upgrades, construction of five new stations and parking facilities, expansion of an existing rail yard, and the purchase of one new diesel locomotive and eight bi-level passenger cars. The 53-mile North Central Service provides service from downtown Chicago through suburban Lake County to Antioch, Illinois, on the Wisconsin border. The corridor includes the two most significant employment hubs 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. The total capital cost is estimated at $117.90 million, of which Metra is expected to seek $110.90 million (62 percent) from the §5309 new starts program. This project has been rated "medium" for project justification and "medium-high" for finance, earning an overall rating of "recommended."

Metra initiated major investment studies (MISs) for both of these projects in April 1997, fulfilling the statutory requirement for an alternatives analysis. Both MISs were completed in August 1998, and both are included in the MPO's long-range transportation plan and Transportation Improvement Program. FTA approved entry into preliminary engineering for both of these

projects in December 1998. The preliminary engineering and environmental review process is expected to be completed during the summer of 2000.

Section 3030(a)(10) of TEA-21 authorizes the North Central project for final design and construction, and the Union Pacific West extension is authorized under Section 3030(a)(13). Through FY 1999, a total of $5.96 million was provided for these projects. An additional $24.53 million was provided in FY 2000, of which Metra allocated $22.80 million to these two projects. In order to continue their development, FTA recommends that a total of $10.00 million be provided to both of these projects in FY 2001, to be allocated by Metra according to its priorities.

Chicago CTA/Ravenswood Line Expansion

The Chicago Transit Authority (CTA) is planning station expansions and track improvements to increase capacity on the 9.3-mile, 19-station Ravenswood Line, also known as the Brown Line. Built between 1900 and 1907, the line extends from Ravenswood on the north side of Chicago, past Wrigley Field to the downtown "Loop." There are approximately 90,000 jobs and 200,000 residents within walking distance of the line, not including the CBD, which carries approximately 104,000 riders on a typical weekday. The size of the century-old stations and platforms prevents the CTA from increasing the capacity of the line in response to increased demand for service. The proposed project would expand stations and platforms and straighten curves on the line, which would permit the CTA to increase service by operating eight-car trains.

This project is included in the financially constrained long range regional transportation plan developed by the Chicago Area Transportation Study (CATS), the local metropolitan planning organization, and was added to the Transportation Improvement Program in January 1999. The Ravenswood Line Expansion Project was approved for preliminary engineering in the fall of 1999.

The total capital cost of the Ravenswood expansion project is estimated at $327.00 million, of which the CTA is expected to seek $245.50 million (75 percent) in §5309 new starts funds. The line serves a dense corridor with mixed commercial, residential, and retail development, three major hospitals and a university, and a large CBD with nearly 340,000 jobs. This project has been rated "high" for justification and "medium-high" for local financial commitment, resulting in an overall project rating of "highly recommended."

The Ravenswood Line Expansion is authorized for final design and construction by Section 3030(a)(11) of TEA-21. A total of $1.49 million in §5309 new starts funds has been provided to this project through FY 1999. An additional $3.43 million was provided in FY 2000. In order to further the development of this project, it is recommended that $8.80 million be provided in FY 2001.

Cleveland/Euclid Corridor Improvement Project

The Greater Cleveland Regional Transit Authority (GCRTA) is planning a 9.8-mile transit corridor along Euclid Avenue from Public Square in downtown Cleveland east to University Circle. The Euclid Corridor Improvement Project includes the creation of a 2.43-mile exclusive bus rapid transit (BRT) segment in the center median along Euclid Avenue from Public Square to University Circle; improvements to East 17th and East 18th Streets; and the creation of a "Transit Zone" with exclusive transit lanes on St. Clair and Superior Avenues. The BRT would be served by 60-foot electric trolleybuses with doors on both the right and left sides of the bus for passenger boarding and unloading; these vehicles would provide exclusive service on the BRT segment, and share the rest of the corridor with conventional buses.

Originally known as the "Dual Hub Corridor," GCRTA initially planned a rail link between downtown Cleveland and University Circle; the Euclid Corridor project was the TSM alternative developed as part of the project evaluation process. Instead of selecting the proposed rail project,

however, in November 1995 the GCRTA Board of Trustees selected the Euclid Corridor Improvement Project as the locally-preferred alternative for the corridor. The Northeast Ohio Areawide Coordinating Council (the MPO) adopted a resolution in support of this project. This project entered final design in September 1996.

The total capital cost of the Euclid Corridor Improvement Project is estimated at $220.00 million, of which the GCRTA proposes to seek $135.00 million (61 percent) in §5309 new starts funds. The ECIP is expected to carry 29,500 average weekday boardings by 2025, and 2,400 daily new riders. An economic development plan has been developed in conjunction with this project, along with a set of streetscape design guidelines for the corridor to create a pedestrian-friendly environment. The business community has developed a proposal for rezoning the corridor to convert industrial areas to office uses and consolidating commercial and residential activities, and a privately commissioned study focuses on ways to revitalize retail activity. The Ohio Legislature and GCRTA have committed 80 percent of the funds from sources other than the §5309 new starts program, and the operating funds are considered stable and reliable. This project has a financial rating of "medium-high" and is rated "medium" for justification, earning an overall rating of "recommended."

Section 3030(a)(17) of TEA-21 authorized this project, described as the "Euclid Corridor Extension," for final design and construction. A total of $3.79 million in §5309 new starts funds has been provided for this project through FY 1999, and an additional $0.98 million was provided in FY 2000. In order to continue the development of this project, FTA recommends that $8.80 million be provided in FY 2001.

Little Rock/River Rail Project

The Central Arkansas Transit Authority (CATA) is planning a 2.5-mile, 8-station vintage streetcar circulator system, traveling on existing right-of-way, that will connect the Alltel Arena, the River Market, and the Convention Center in downtown Little Rock to the communities of North Little Rock and Pulaski County. The line would also serve the site of the William Jefferson Clinton Presidential Library. Service would be provided with seven replica streetcars operating on a single track and powered by an overhead catenary.

The Little Rock River Rail Project was authorized by Section 3030(a)(36) of TEA-21 for final design and construction. A feasibility study was completed in 1997; no formal major investment study was conducted due to the limited scale of the project, the use of existing streets and rail right-of-way, and the low cost. FTA granted approval to enter preliminary engineering in May 1998, and final design in September 1999.

The total capital cost of this project is estimated to be $13.20 million, of which CATA proposes to seek $8.60 million (65 percent) in §5309 new starts funds. Through FY 2000, Congress has appropriated $2.98 million for this project. Under §5309 (e)(8)(A), proposed new starts projects requiring less than $25.00 million in funds from the §5309 new starts program are exempt from the project evaluation process, and CATA has not submitted project evaluation data to FTA. Thus, there is no overall rating for this project. In order to provide the remainder of the Federal funds required to complete this project, it is recommended that $5.67 million be provided in FY 2001.

Maryland/MARC Commuter Rail Improvements

The Maryland Mass Transit Administration is proposing a series of major capital improvements for the Maryland Commuter Rail (MARC) system serving the Baltimore, MD and Washington, DC metropolitan areas. This proposed project includes the MARC Mid-day Storage Facility, the Penn-Camden Connection, and the Silver Spring Intermodal Transit Center. Total estimated

capital costs for this project is $85.10 million, of which MTA is expected to seek $40.90 million (48 percent) in §5309 new starts funds.

The Mid-Day Storage Facility would be used for mid-day equipment layover, minor repairs, daily servicing and inspections of commuter rail trains within the Amtrak Yard at Union Station in Washington, D.C. Platforms that are currently used to store these trains are needed by Amtrak for its new high-speed trains. The Penn-Camden Connection is a six-mile connection between MARC's Camden Station and Amtrak's Northeast Corridor that would provide access to a planned maintenance facility. This improvement would provide a new route for reverse-peak service on the Camden Line and permit special trains serving events at the Camden Yards and PSINet Stadium to resume. The Intermodal Transit Center project would relocate the MARC station in Silver Spring, Maryland to the existing Silver Spring Metrorail station, creating a full-service transit center at a major hub of activity. The transit center will permit safe and convenient passenger transfers among commuter rail, Metrorail, commuter and local bus service, and taxi, bicycle, pedestrian and automobile modes of travel.

The components of the proposed MARC Commuter Rail Improvements project 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 preferred alignment for the MARC Penn-Camden Connection was selected in the 1995 MARC Master Plan Study, and a Categorical Exclusion on the MARC Silver Spring Intermodal Center is pending.

Section 3030(g)(2) of TEA-21 authorizes this project as part of the Frederick extension, and it will permit service improvements necessary to take full advantage of that extension. No summary rating has been assigned to this project. It was authorized as an addition to the Frederick extension, which was evaluated and issued an FFGA under the criteria and procedures in effect under ISTEA, and project sponsors have not yet provided sufficient information to rate the Commuter Rail Improvements project. Further, the proposed share of Federal funding from the §5309 new starts program is less than $25.00 million for each of the individual improvements, which would render them exempt from evaluation if MARC proceeds on each of the three project components separately. However, since this is a single project as authorized in TEA-21, it must be evaluated and rated according to §5309(e) in order to be eligible for an FFGA. A total of $2.98 million has been provided to MARC Commuter Rail Improvements project in FY 1999 and prior years, and an additional $1.47 million was appropriated in FY 2000. In order to further the development of this project, it is recommended that $10.00 million be provided in FY 2001.

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 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 $87.80 million, of which MDTA is expected to seek $61.30 million (70 percent) in §5309 new starts funding. The extension is expected to serve an average of 8,800 average weekday boardings and 3,000 daily new riders. The State of Florida has enacted an urban growth boundary which contains urban development to a 12-mile wide area of land between the Atlantic coast of Florida and the Everglades. This makes the land along the proposed South Busway extension one of the last undeveloped areas in South Florida and creates tremendous growth pressure in the area. The population in the South Busway corridor is expected to increase 155 percent by 2015, and employment by 21 percent. This project has been rated "medium" for both finance and project justification, earning an overall rating of "recommended."

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. Final design on a five-mile portion of the South Busway is underway, and the remaining 6.5 mile segment is undergoing preliminary engineering.

Section 3030(a)(46) of TEA-21 authorizes the Miami South Busway Extension for final design and construction. To date, no §5309 new starts funds have been appropriated for this project. In order to support continued development of the South Busway Extension, it is recommended that $8.80 million be provided to this project in FY 2001.

Nashville/East Corridor Commuter Rail

The Metropolitan Transit Authority (MTA) and Regional Transportation Authority (RTA) of Nashville, Tennessee are planning 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 system would operate on an existing rail line owned by the Nashville and Eastern Railroad Company (N&E), a governmental entity comprised of the Tennessee Department of Transportation, Wilson County, Lebanon, Mt. Juliet, and the Metropolitan Government of Nashville and Davidson County. Rolling stock and maintenance facilities would be leased from N&E.

The MTA and RTA initiated a study in 1996 to explore potential commuter rail service in the Nashville region. Six corridors were selected for further evaluation, and a 1998 study analyzed the capital costs for the three that were most promising. The East Corridor has been selected by the community as the first of these to be implemented. The East Corridor project was included in the regional long range transportation plan in September 1999, and FTA approved entry into preliminary engineering on November 30, 1999.

The total capital cost of this project is estimated at $30.00 million, of which MTA and RTA are expected to seek $20.90 million (70 percent) in new starts funding. Ridership is estimated at 1,400 average weekday boardings by 2006, and 700 daily new riders. Because the amount of §5309 new starts funding is less than $25.00 million, this project is exempt from the statutory evaluation process by §5309(e)(8)(A); no overall project rating has been assigned. The East Corridor project has a strong local backing; the Nashville area Commuter Rail Task Force includes the Nashville Chamber of Commerce, area business leaders, the metropolitan planning organization, the MTA and RTA, the Tennessee State Department of Transportation, CSX Railroad, and the N&E Rail Authority. All of these stakeholders were involved the selection of this project, which grew out of a study of six potential alternatives, as the local priority.

Section 3030(a)(50) of TEA-21 authorizes the "Nashville Commuter Rail" project for final design and construction. Through FY 2000, a total of $1.97 million has been appropriated for this project. In order to support the continued development of this locally-driven project, it is recommended that $8.80 million be provided to this project in FY 2001.

New York/LIRR East Side Access

The Metropolitan Transportation Authority (MTA) in New York City is the lead agency in a proposal to increase the capacity of the commuter lines of the Long Island Rail Road (LIRR) and provide direct access from suburban Long Island and Queens to Midtown Manhattan. The East Side Access project would involve the construction of a 4,600-foot tunnel from the LIRR Main Line in Sunnyside, Queens to the lower level of the existing tunnel under the East River at 63rd Street, and a 5,000-foot tunnel under Park Avenue from the 63rd Street tunnel into a new

terminal on the lower level of Grand Central Terminal. As part of this project, a new passenger station would be constructed at Sunnyside Yard to serve the growing Long Island City business district.

Overall, more than 351,000 average weekday boardings to both Penn Station and Grand Central Terminal would benefit directly from the LIRR East Side Access project by 2020, including 162,000 daily boardings serving Grand Central Terminal, 161,000 daily boardings serving Penn Station, and 5,500 daily boardings at the proposed Sunnyside station. The Grand Central Terminal is located in a uniquely high-density setting, where transit and walking are the dominant modes of transportation. Nearly 500,000 employees work within a ½-mile radius of the proposed station at the Grand Central Terminal. Future land use in the Manhattan central business district will continue to be shaped by dense office development; by 2020, population in the Grand Central Terminal area is forecast to increase by 4.4 percent, and employment by 21.3 percent. A trend toward more and upgraded office use in underway in Long Island City, near the proposed Sunnyside station. Zoning changes are pending that will permit four to five large office towers to be constructed in the area. New York City also grants zoning density bonuses for developer improvements to local transit, such as integrating station entrances into the proposed development. Total capital costs for this project are estimated at $4,350.00 million, of which MTA is expected to seek $2,175.00 million (50 percent) in §5309 new starts funds. This project has been rated "medium" for both finance and project justification, resulting in an overall project rating of "recommended."

A Major Investment Study was completed in March 1998, and the LIRR East Side Access project was endorsed by the New York Metropolitan Transportation Council (the local MPO) in June 1998. FTA approved this project for preliminary engineering in September 1998. MTA anticipates completion of the Draft Environmental Impact Statement (EIS) in January 2000, the Final EIS by June 2000, and a Record of Decision by September 2000.

Section 3030(a)(54) authorizes the LIRR East Side Access project for final design and construction. Through FY 1999, Congress has appropriated $43.76 million in §5309 new starts funds for the LIRR project; an additional $1.96 million was provided in FY 2000. In order to support continued development of this project, FTA recommends that a total of $10.00 million be provided in FY 2001, to be allocated according to local priorities.

New York/2nd Avenue Subway

MTA and New York City Transit (NYCT) are also studying options to improve mobility in the north-south corridor of Manhattan's East Side, from South Ferry to 125th Street with potential connections in the Bronx. The East Side currently has only one rapid transit line, the Lexington Avenue line, which carries approximately 288,000 daily passengers to Manhattan and has been experiencing severe overcrowding. Options under consideration include a no-build scenario, a TSM alternative, and two new starts options. Both of the new starts options involve a new subway line under Second Avenue, which would permit express service from the Broadway Line to the 125th Street Station on the Lexington Avenue Line. One of these options would add to this a light rail line serving the Lower East Side and Lower Manhattan. Preliminary estimates put the total capital cost at $3.6 billion to $4.6 billion, depending on whether the light rail line is included. This project is included in the MPO's long-range transportation plan, and the MTA Board programmed $700.00 million for environmental work, preliminary engineering, final design and initial construction activities. The major investment study and environmental work is scheduled to be completed in 2000.

The Second Avenue Subway is authorized for alternatives analysis and preliminary engineering as the "Manhattan East Side Link" under Section 3030(b)(39). No funds have been appropriated to date for the Second Avenue Subway. This project is closely related to the LIRR East Side Access project discussed above. By providing an alternative to the overburdened Lexington

Avenue Line for East Side commuters, the Second Avenue Subway would improve service to LIRR passengers who transfer to the Lexington Avenue Line at Grand Central Terminal. In order to permit local decisionmakers to more fully study the potential benefits of this project, analysis of the Second Avenue Subway project must proceed in concert with work on the LIRR East Side Access project. In order to support this continued development, it is recommended that $5.00 million be provided to the Second Avenue Subway in FY 2001.

San Diego/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 would 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. Advanced planning was completed in December 1995, and the Environmental Assessment/Supplemental Environmental Impact Report was completed in early 1997. FTA expects NCTD to request approval to enter final design in early 2000.

The total capital cost for this project is estimated at $253.50 million, of which NCTD is expected to seek $152.10 million (60 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 1999, Congress has appropriated $5.97 million in §5309 new starts funds for this project, and an additional $1.96 million was provided in FY 2000. In order to support continued development of this project, it is recommended that $8.80 million be provided for this project in FY 2001.

Conclusion

The proposed new starts funding level of $1,058.40 million is based on the guaranteed funding level authorized by TEA-21 for FY 2001, and accounts for the following factors:

- The scheduled funding levels for the 14 projects with existing FFGAs (with additional amounts to complete the Federal commitment, where appropriate), plus an anticipated amendment for the Atlanta North Springs project;
- The anticipated funding needs of the three projects for which FFGAs are pending;
- The anticipated funding needs of the 11 projects that are expected to be ready for FFGAs by the end of FY 2001 (the 12th project, Hudson-Bergen MOS-2, requires no new starts funding in FY 2001);
- The TEA-21 provision authorizing eight percent of total new starts funding for activities other than final design and construction;
- The TEA-21 authorization for ferry projects in Alaska or Hawaii; and
- Project oversight activities within FTA.

Specifically, we recommend the following allocations of §5309 new starts funding in FY 2001 for projects with existing Federal funding commitments:

- $25.00 million for the MARTA North Line Extension in Atlanta, based on the anticipated funding needs under the expected amendment to the existing FFGA for this project in FY 2001;
- $35.97 million for Phase 1 of the South Boston Piers Transitway, based on the remaining funds required to complete the Federal commitment in FY 200I;
- $70.00 million for the North Central LRT Extension in Dallas, according to the funding schedule specified in Attachment 6 of the FFGA for this project;
- $20.20 million for the Southwest LRT in Denver, based on the funding schedule specified in Attachment 6 of the FFGA for this project and the remaining funds required to complete the Federal commitment in FY 2001;
- $10.74 million for the Houston Regional Bus Plan, based on the remaining funds required to complete the Federal commitment in FY 2001;
- $50.00 million for the North Hollywood Red Line Extension in Los Angeles, based on the funding schedule specified in Attachment 6 of the MOS-3 FFGA;
- $121.00 million for the Hudson-Bergen light rail project in New Jersey, based on the funding schedule specified in Attachment 6 of the FFGA for this project;
- $209,232 to complete the Federal commitment to the Westside LRT in Portland;
- $35.20 million for the South Corridor light rail project in Sacramento, based on the funding schedule specified in Attachment 6 of the FFGA for this project and the remaining funds required to complete the Federal commitment in FY 2001;
- $718,006 to complete the Federal commitment to the South LRT project in Salt Lake City;
- $80.00 million for the extension of San Francisco's BART rail system to San Francisco International Airport, as specified in Attachment 6 of the FFGA for this project;
- $12.25 million for the Tasman LRT West Extension in San Jose, based on the funding schedule specified in Attachment 6 of the FFGA for this project and the remaining funds required to complete the Federal commitment in FY 2001;

- $118.00 million for the Tren Urbano rapid-rail project in San Juan, Puerto Rico, as specified in Attachment 6 of the FFGA for this project; and
- $60.00 million for the St. Clair County light rail project in St. Louis, based on the funding schedule specified in Attachment 6 of the FFGA for this project.

We recommend the following allocations of §5309 new starts funding in FY 2001 for the three projects for which Federal funding commitments are currently pending:

- $30.00 million for upgrades to the Tri-Rail Commuter Rail system in Ft. Lauderdale;
- $10.00 million for the Newark Rail Link in Newark, New Jersey; and
- $65.00 million for the Mission Valley East light rail extension in San Diego;

In addition to these, we also recommend that funding be provided to 11 projects in anticipation of Federal commitments expected to be made before the end of FY 2001, as follows:

- $10.00 million for the Central Corridor LRT double-track project in Baltimore;
- $17.00 million for the CTA Douglas Branch Reconstruction project in Chicago;
- $10.00 million for the Metra South West Commuter Rail project in Chicago;
- $20.00 million for the Southeast Corridor light rail project in Denver;
- $14.17 million for the Medical Center Extension of the Memphis light rail system;
- $20.00 million for the Hiawatha Corridor Transitway in Minneapolis;
- $20.00 million for the Stage II LRT Reconstruction project in Pittsburgh;
- $40.00 million for the Interstate MAX extension in Portland;
- $15.00 million for the University Corridor LRT in Salt Lake City;
- $35.00 million for the Central Link LRT in Seattle; and
- $10.00 million for the extension of the Washington, DC Metrorail system to Largo, Maryland.

Finally, as authorized by §5309(m)(2), we recommend that a total of $84.67 million be provided for preliminary engineering activities. The following allocations are recommended:

- $10.00 million for the Metra North Central and Union Pacific West commuter rail projects in Chicago, to be allocated according to local priorities;
- $8.80 million for improvements to the CTA Ravenswood Line in Chicago;
- $8.80 million to continue development of the Euclid Corridor busway in Cleveland;
- $5.67 million to complete the River Rail project in Little Rock;
- $10.00 million to continue development of planned improvements to the MARC commuter rail system in Maryland, to be allocated according to local priorities;
- $8.80 million for the Miami South Busway extension;
- $8.80 million for the East Corridor Commuter Rail project in Nashville;
- $10.00 million to further development of the Long Island Rail Road East Side Access project in New York City;
- $5.00 million to further development of the 2nd Avenue Subway project in New York City; and
- $8.80 million for the Oceanside-Escondido passenger rail project in San Diego County.

These amounts, plus $10.32 million for ferry capital projects as specified by §5309(m)(5)(A), and $7.94 million for FTA oversight activities as provided under §5327(c), equal the total FY 2000

funding request of $1,058.40 million for the §5309 new starts program, which is the guaranteed amount of funding authorized by TEA-21.

Preface

The New Start project profiles presented in this Appendix provide background information supporting the Department of Transportation's New Start funding recommendations for FY 2001. The Department's funding recommendations are being provided to the Congress pursuant to 49 U.S.C. 5309(o)(1) (formerly Section 3(j) of the Federal Transit Act) The funding recommendations are based in part on the decision criteria defined in 49 U.S.C. 5309(e) (formerly Section 3(i)(1) of the Federal Transit Act).

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 included 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 FY 2000 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 New Starts 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, FTA issued a revised and comprehensive *Technical Guidance on Section 5309 New Starts Criteria*. In addition, FTA has have offered national workshops throughout 1998 and 1999 to offer technical assistance.

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 2001 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 1999. 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 regulations currently under development will specify FTA's approach to project evaluation and assignment of summary ratings. In the absence of a Final Rule, however, FTA must still use the principles established by TEA-21 to evaluate proposed new starts and assign project ratings for FY 2001. Therefore, 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 FT 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

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 or 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 (NOx), volatile organic compounds (VOC) or hydrocarbons (HC), particulate matter (PM10), and carbon dioxide (CO2).

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 previously applied "cost per new rider" index has been replaced by a revised measure, 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 operating cost divided by the forecast change in annual transit system ridership, comparing the New Start to the No-Build and TSM alternatives. The new cost-per-incremental rider measure has been revised from the previously applied index in that it no longer subtracts the value of travel time savings from annualized incremental costs (travel time savings are now reported separately under mobility improvements).

Transit Supportive Existing Land Use and Future Patterns

Assessment of land use is a new criteria and measure, introduced in the spirit of ISTEA and 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 2001 evaluations were supported by reviews conducted by FTA's contractors: Booz-Allen & Hamilton, Inc., Cambridge Systematics, Inc, 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 2001 evaluations were supported by reviews conducted by FTA's contractors: Booz-Allen & Hamilton, Inc., KPMG Peat Marwick, 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

Final Design	High	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.
	Medium-High	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.

	Medium	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.
	Low-Medium	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.
	Low	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.
Preliminary Engineering	High	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.
	Medium-High	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.
	Medium	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.
	Low-Medium	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.
	Low	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

Final Design	High	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.
	Medium-High	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.
	Medium	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.
	Low-Medium	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.
	Low	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.
Preliminary Engineering	High	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.
	Medium-High	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.
	Medium	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.
	Low-Medium	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.
	Low	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 and Future Patterns

1. Existing Land Use

Preliminary Engineering and Final Design	High	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.
	Medium	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.
	Low	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

Preliminary Engineering and Final Design	High	Adopted and enforceable urban containment and growth management policies are in place. Existing and planned densities and market trends are strongly compatible with transit.
	Medium	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.
	Low	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

Preliminary Engineering and Final Design	High	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.
	Medium	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.
	Low	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

Preliminary Engineering	High	Significant progress is being made toward preparing and adopting station area plans and related zoning.
	Medium	Initial efforts have begun to prepare station area plans and relating zoning.
	Low	Limited consideration has been given to preparing station area plans and related zoning.
Final Design	High	Detailed station area plans and related local zoning and land use regulations have been adopted.
	Medium	Significant progress is being made toward preparing and adopting station area plans and relating zoning.
	Low	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

Preliminary Engineering	High	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.
	Medium	Efforts to prepare local capital improvement programs and development initiatives that support station area plans have begun. Private/institutional initiatives are moderately supportive.
	Low	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.
Final Design	High	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.
	Medium	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.
	Low	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

Preliminary	High	Moderate amount of transit supportive housing and employment

Engineering		development is occurring in the corridor.
	Medium	Proposals for transit supportive housing and employment development in the corridor are being received.
	Low	Limited progress, to date, toward achieving transit supportive development in the corridor.
Final Design	High	Significant amount of transit supportive housing and employment development is occurring in the corridor.
	Medium	Moderate amount of transit supportive housing and employment development is occurring in the corridor.
	Low	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 Line Extension

North Springs (North Line Extension)

Atlanta, Georgia

(November 1999)

Description	The Metropolitan Atlanta Rapid Transit Authority (MARTA) is constructing a 1.9-mile, two-station extension of the North Line from just north of the Dunwoody Station to North Springs. The extension will connect with the North Line segment from Buckhead to Dunwoody, which opened in June 1996. This 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 now estimated to cost $463.18 million due to changed conditions and associated scope enhancements to the project, including an additional 28 rail cars. Daily ridership on the rail extension in the year 2005 is estimated at 33,000 riders, including 11,000 new riders.
Status	In December 1994, MARTA and FTA entered into a Full Funding Grant Agreement (FFGA) in the amount of $305.01 million in Section 5309 New Start funds for the extension from Dunwoody through North Springs. TEA-21 Section 3030(a)(3) authorized the Atlanta North Line Extension for final design and construction. Through FY 2000, a total of $294.16 million in Section 5309 New Start funds has been provided to this project ($275.79 million in Congressional appropriations and $18.37 million in prior year deobligated funds). 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 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 commitment to the North Line extension of $370.54 million. The adjusted local share is now $92.64 million.

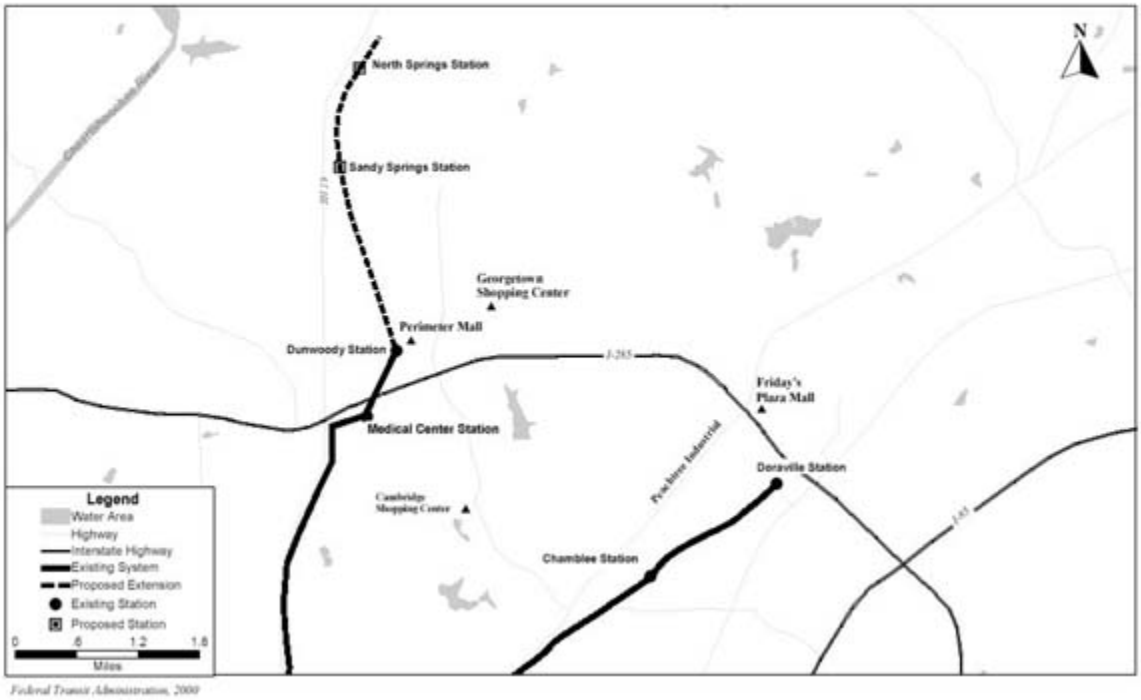
Reported in $YOE		
Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: §5309 New Starts (FFGA commitment)	$370.54	$294.16 million appropriated through FY 2000
Local: Regional Sales Tax	$92.64	N/A
TOTAL	**$463.18**	

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 FFGA. The cost of the enhancements are included in the funding totals displayed above.

North Line Extension

Atlanta, GA



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

South Boston Piers Transitway -- Phase I

Boston, Massachusetts

(November 1999)

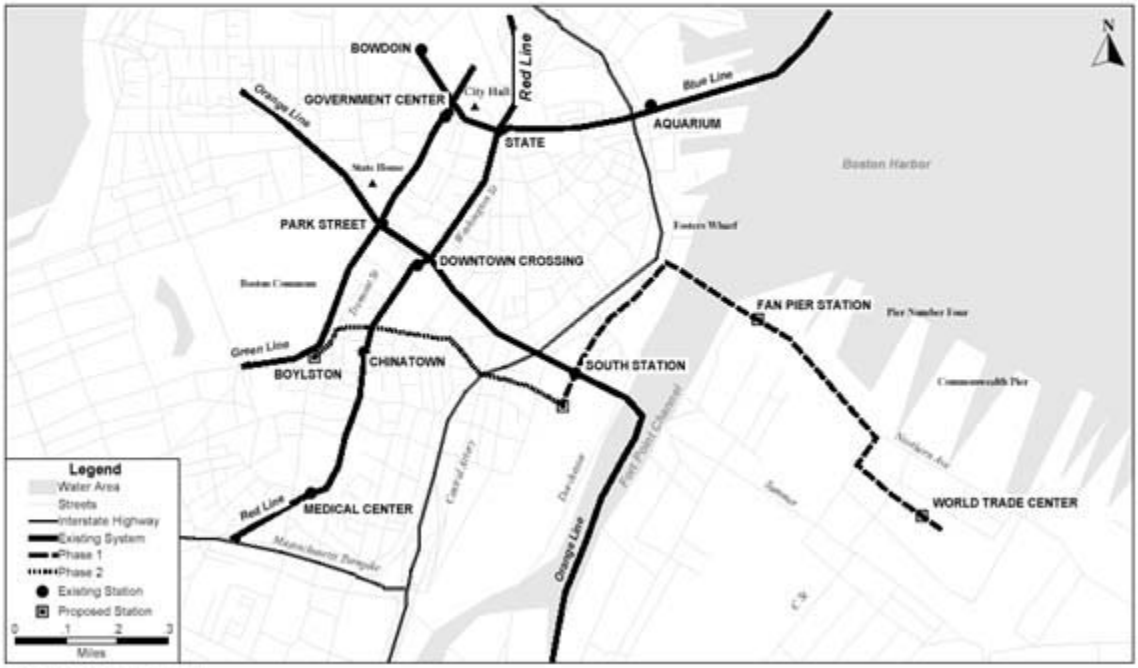
Description	The Massachusetts Bay Transportation Authority (MBTA) is developing an underground transitway connecting the MBTA's existing transit system with the South Boston Piers area. The Piers area, which is connected to Boston's central business district by three local bridges, is undergoing significant 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 1.0 mile tunnel connector between South Station and the World Trade Center, is now currently estimated to cost $601 million (in escalated dollars) accordingly to a recently submitted recovery plan. The need for a recovery plan was caused by significant cost growth and delays in the project 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.
Status	The MBTA completed the alternatives analysis process and selected a locally preferred alternative in February 1993. The final EIS was published in December 1993. The project is under construction. In November 1994, the 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 agreement 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 2002. Through FY 2000, Congress has appropriated $294.76 million in Section 5309 new starts funds for the South Boston Piers Transitway.

Reported in $YOE

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts FFGA Amount	$330.73	$294.76 million appropriated through FY 2000
State: Bond Funds	$120.20	N/A
Total:	**$601.00**	for Phase I

South Boston Piers Transitway, Phase I

Boston, MA



Federal Transit Administration, 2000

Dallas, North Central LRT Extension

North Central LRT Extension

Dallas, Texas

(November 1999)

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, measures 12.5 miles long 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 on October 6, 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 2000, Congress has appropriated $92.27 million in section 5309 new start funds to this project.

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start (FFGA Amount)	$333.00	$92.27 million appropriated through FY 2000
Local: 1% Local Sales Tax	$184.20	N/A
Total:	**$517.20**	

Note: Totals may not add due to rounding.

North Central LRT

Dallas, TX

Federal Transit Administration, 2000

Denver, Colorado/Southwest LRT

Southwest Corridor LRT

Denver, CO

(November 1999)

Description	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. 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.
Status	FTA issued the Final Environmental Impact Statement (FEIS) for the project in February 1996 and signed the Record of Decision 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. TEA-21 Section 3030(a)(24) authorized the Denver Southwest LRT for final design and construction. Through FY 2000, Congress has appropriated $98.46 million in Section 5309 New Start funds. An additional $1.34 million was provided in FY 1997 from reprogrammed funds for a total of $99.796 million made available to the project. Construction is underway and is the project is on schedule to be completed in July 2000.

Southwest Corridor Summary Description

(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal:		
Section 5309 New Start (FFGA Amount)	$120.00	$99.796 million appropriated through FY 2000
Section 5307	$18.88	$18.00 million in Flexible Funds
Local:		
RTD Sales and Use Tax and in-kind contributions	$37.44	N/A
Total:	**$176.32**	

Note: Totals may not add due to rounding.

Southwest LRT

Denver, CO

Maryland/MARC Frederick Extension and Rolling Stock Procurement

MARC Frederick Extension and Rolling Stock Procurement

Maryland

(November 1999)

Description

The Mass Transit Administration of Maryland (MTA) is extending the Maryland Commuter Rail (MARC) system to provide service from Point of Rocks to Frederick, Maryland. The MARC system presently consists of two lines between Washington, D.C. and Baltimore, Maryland, (one of which extends into north of Baltimore and Perryville, Maryland) and a third line between Washington, D.C. and Brunswick, Maryland, with extended service into Martinsburg, West Virginia. The Frederick extension involves track, signal, and station/yard improvements on an existing freight line. In addition to the extension, MTA has embarked on a major procurement of additional commuter rail coaches and locomotives for MARC to meet anticipated system-wide demand. The estimated cost of the project covered by the Full Funding Grant Agreement is $131.6 million. Ridership forecast for 2015 is 1,600 daily passengers on the Frederick Extension.

Status

In June 1995, MARC was awarded an FFGA for $105.25 million in Section 5309 New Start funds. TEA-21 Section 3030(a)(41) authorizes MARC Commuter Rail Improvements for final design and construction. Through FY 2000, $105.25 million has been appropriated pursuant to the FFGA to this project, fulfilling the commitment. An additional $33.26 million not covered by the FFGA was appropriated by Congress for MARC commuter rail improvements in prior years.

An Environmental Assessment for the Frederick Extension was completed, which resulted in a Finding of No Significant Impact. Two station sites have been selected and Final Design is underway. The FFGA committed $38.7 million in Section 5309 New Start Funds for the Frederick Extension (out of the total FFGA amount of $105.25 million). MTA expects to begin MARC commuter rail service on this extension by 2001. This represents a significant delay caused by protracted negotiations between MARC and CSXT, the owner of most of the right-of-way for the extension.

In December 1994, the MTA began steps to purchase up to 50 bi-level commuter rail cars and six electric locomotives for systemwide capacity improvements throughout the MARC Commuter Rail System. Manufacture of the coaches and locomotives is underway and deliveries are in progress. MTA has also completed bridge clearance work near Union Station in Washington, D.C., to accommodate the bi-level cars. The clearance work was not part of the FFGA. The procurement of the locomotives is being accomplished as a joint procurement with Amtrak.

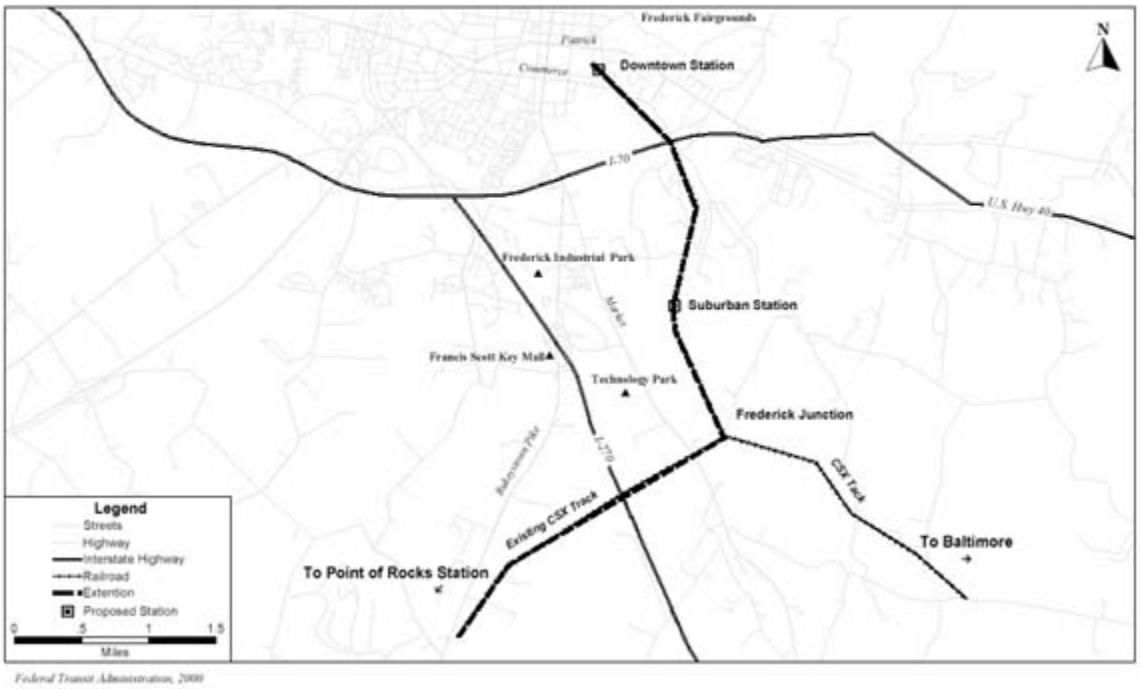
TEA-21 Section 3030(g)(2) authorizes the expansion of the scope of MARC extensions to include capacity and efficiency improvements through construction of a Penn-Camden Connection, additional MARC maintenance and storage facilities, other capacity related improvements, and the Silver Spring Intermodal Center. FTA funding for these scope additions will be addressed in the proposed FY 2001 budget.

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts FFGA Amount	$105.25	$105.25 million appropriated through FY 2000
Local:	$26.31	N/A
Total:	**$131.56**	

Note: An additional $33.26 million was appropriated before the FFGA for the other MARC system improvements, bringing total Section 5309 appropriations to $138.5 million. Totals may not add due to rounding.

MARC Extension - Point of Rocks to Frederick

Point of Rocks - Frederick, MD



Federal Transit Administration, 2009

Northern New Jersey/Hudson-Bergen MOS-1

Hudson-Bergen (MOS-1)

Northern New Jersey

(November 1999)

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 34th Street Bayonne and Westside Avenue in Jersey City. MOS-1 is expected to cost $992.14 million (escalated dollars) and to 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 to 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 start 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. An Environmental Assessment (EA) was completed on the impacts resulting from this proposed change and submitted to the FTA in August 1998. Public review of the EA has been completed. 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 raises the number of stations for the full project from 26 to 30 stations.

The Hudson-Bergen LRT project is one of eight elements eligible for funding as part of the New Jersey Urban Core Project. Through FY 2000, Congress has appropriated $325.43 million in Section 5309 New Starts funds to the Hudson-Bergen MOS-1.

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. The revenue operation date for the segment to Exchange Place (Phase A) is scheduled for July 2000. Full service to the Hoboken Terminal will initiate in 2002.

Locally Proposed Financing Plan

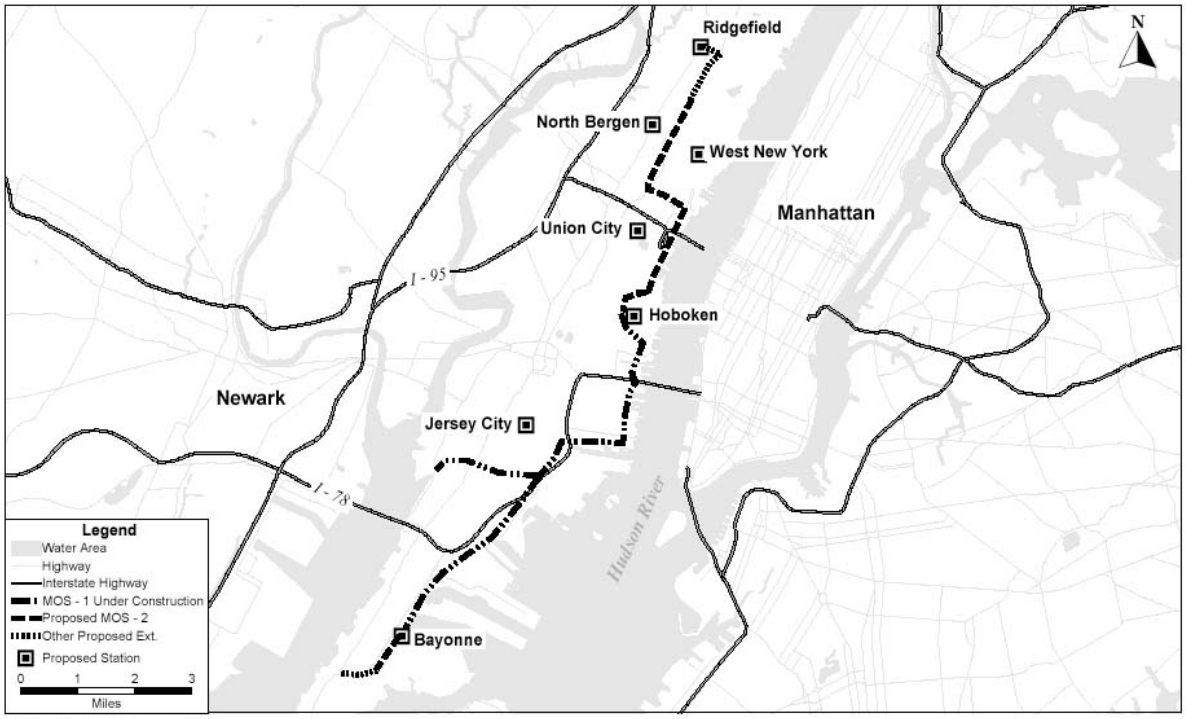
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts (FFGA Amount)	$604.09	$325.43 million appropriated through FY 2000
Federal: Section 5307 Formula	$281.65	
State:	$106.40	
Total:	**$992.14**	

Note: Totals may not add due to rounding.

Hudson - Bergen Waterfront LRT System

Northern New Jersey



Federal Transit Administration, 2000

Houston, Texas/Regional Bus Plan

Regional Bus Plan

Houston, Texas

(November 1999)

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 & ride lots, bus acquisitions, bus service expansion, and supporting facilities. Houston's Metro has pledged an additional $375.0 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 $10.74 million remains to be appropriated. Through FY 2000, Houston Metro has received $489.26 million in Section 5309 New Starts funds for the project.

Locally Proposed Financing Plan

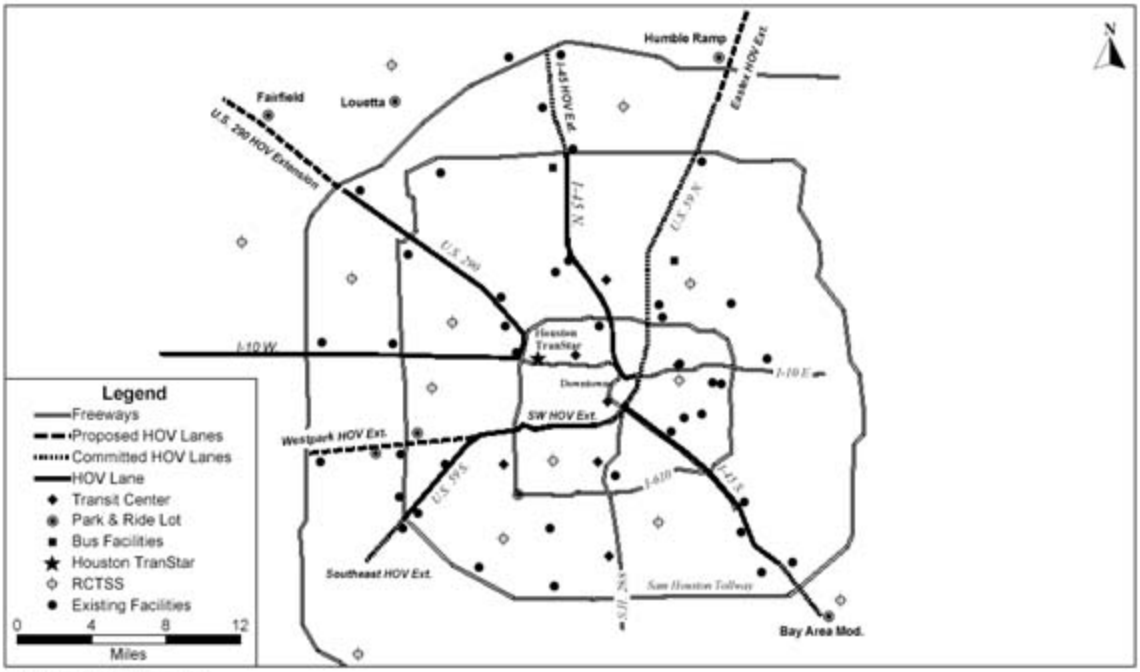
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts FFGA Amount	$500.00	$489.26 million appropriated through FY 2000
Local: Houston Metro	$125.00	N/A
Total:	**$625.00**	

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, TX



Federal Transit Administration, 2000

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

MOS-3 Extensions of Metro Rail

Los Angeles, California

(November 1999)

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" (MOSs). 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 is currently under construction with a June, 2000 projected opening.

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 this extension is estimated to be 26,000 daily boardings in 2010.
2. The *Eastside Extension* is 3.7 miles in length with four stations, originally designed as subway. It would extend MOS-1 from Union Station 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. Work on this extension was indefinitely suspended in 1998 pending completion of the Regional Transit Alternatives Analysis.
3. The *Mid-City Extension* would 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. Work on this extension was indefinitely suspended in 1998 pending completion of the Regional Transit Alternatives Analysis.

Status

LACMTA and FTA signed an FFGA for MOS-3 in May 1993 which provided $1.23 billion in Section 5309 New Start funds for the three extensions of MOS-3. Subsequently, the FFGA was 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 Start 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 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 already under construction. The MTA subsequently submitted a Recovery 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) 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 previously allocated to the Eastside and Mid-City Extensions to the implementation of RTAA recommendations, including the LACMTA Accelerated Bus Procurement Plan. The MTA is currently conducting further studies of transit investment options in the Eastside and Mid-City corridors and is likely to announce recommendations in early 2000. Once the LACMTA identifies viable projects in these corridors, FTA will reevaluate the proposed investments, as required under 49 U.S.C.5309(e).

Through 2000, Congress has appropriated $581.82 million in New Start 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 & 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 2000 new starts commitment remaining to MOS-3 is $746.33 million. This includes $99.22 million for North Hollywood and $647.11 million for the Mid-City and East Side corridors.

North Hollywood Restated & Revised FFGA

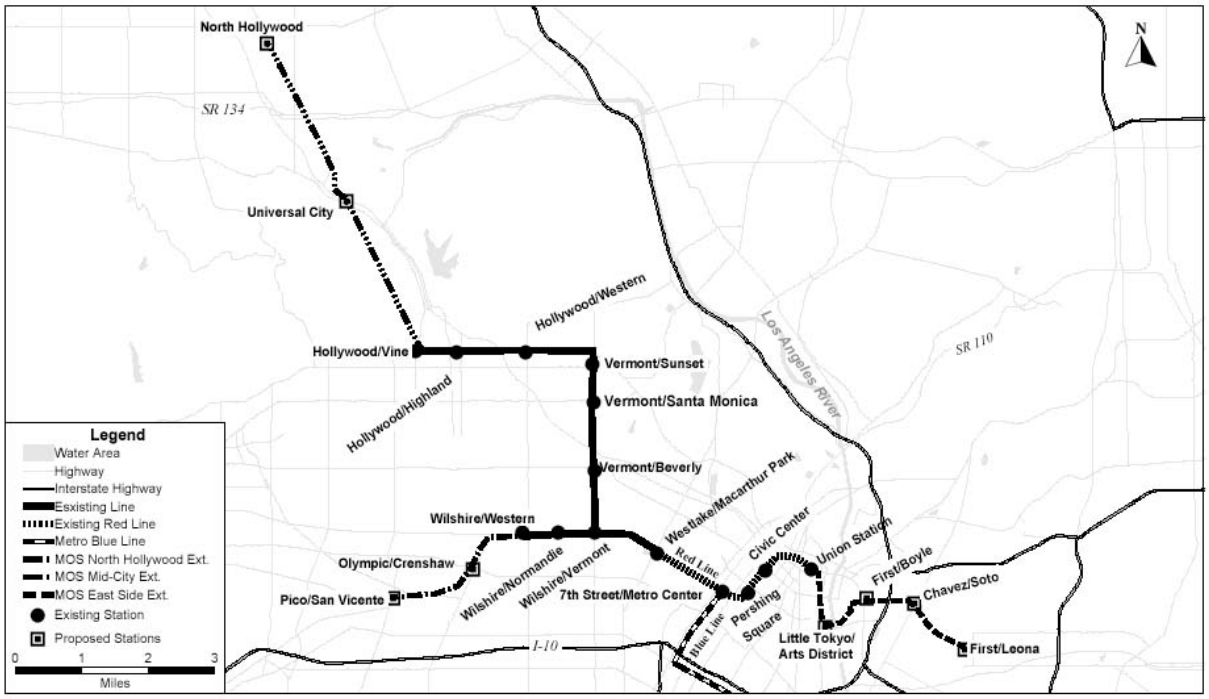
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: Section 5309 New Start	$681.04	$670.16 million appropriated through FY 2000
Federal: Flexible Funds	$245.60	N/A
Local:	$384.18	N/A
Total:	**$1,310.82**	

Note: Totals may not add due to rounding. The $670.16 million appropriations total includes $581.82 million for North Hollywood, $76.48 million in Section 5309 funds expended for the now-suspended Mid-City and East Side subway segments of MOS-3 and $11.86 million appropriated in FY 1999 & 2000 for further studies of alternatives for the Mid-City and East Side corridors.

MOS-3 Segments of Metro Rail

Los Angeles, CA



Federal Transit Administration, 2000

Portland, Oregon/Westside-Hillsboro Corridor

Westside-Hillsboro LRT

Portland, Oregon

(November 1999)

Description

On September 12, 1998, the Tri-County Metropolitan Transportation District of Oregon's (Tri-Met) opened the Westside-Hillsboro Light Rail Project, which extended the existing MAX system from the existing terminus in downtown Portland west to downtown Hillsboro. The route includes a three-mile twin tube tunnel under Portland's West Hills. The project is 17.7 miles long with 20 stations, nine park and ride lots, and parking spaces for approximately 3,800 automobiles. The project cost $963.52 million and includes 42 low-floor light rail vehicles, the first low-floor light rail vehicles in service in the United States. Since its opening, the Westside line is now serving 23,000 passengers on an average weekday.

Status

The project opened on-time and within budget on September 12, 1998. Ridership is exceeding expectations. The last six low-floor light rail vehicles have been delivered.

In September 1992, FTA and Tri-Met entered into a Full Funding Grant Agreement (FFGA) for the segment from downtown Portland to 185th Avenue, approximately 11.7 miles. The section 5309 new start share for this segment was $515.99 million. Final design and construction for the Hillsboro extension commenced in August 1994. Consistent with Section 325 of the Fiscal Year 1992 Department of Transportation and Related Agencies Appropriations Act (P.L. 102-143), a restated FFGA with a Federal commitment of $590.06 million was signed in December 1994. The 1994 FFGA for the Westside-Hillsboro project provided an additional commitment of New Start funds of $74.06 million to fund one-third of the 6-mile Hillsboro extension.

In 1996 Congress authorized a further $40.00 million for the project. FTA amended the FFGA to reflect this additional authorization in November 1996, increasing the total commitment to $630.06 million in Section 5309 New Start funds. Through FY 2000, Congress has appropriated $629.85 million for the project, leaving a balance of $0.21 million to satisfy the FFGA commitment.

Locally Proposed Financing Plan

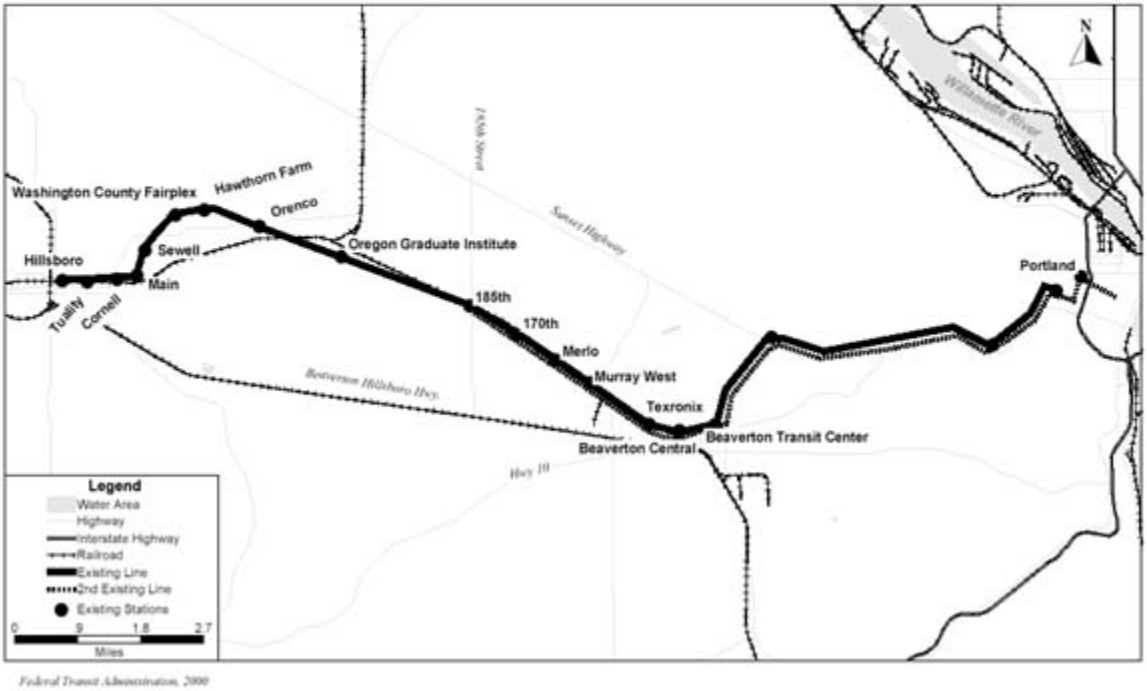
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start FFGA Amount	$630.06	$629.85 million appropriated through FY 2000
Federal: Section 5307	$30.00	
Federal: Flexible Funds	$44.00	
Local:	$259.46	
Total:	**$963.52**	

Note: Totals may not add due to rounding.

Westside - Hillsboro Corridor

Portland, OR



Federal Transit Administration, 2000

Sacramento, California/South Corridor LRT

South LRT Extension

Sacramento, California

(November 1999)

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 EIS for the project was completed in September 1994. The preferred alternative was selected in March 1995. The Final Environmental Impact Statement (FEIS) was completed in February 1997. In March 1997, FTA issued a Record of Decision for the South Corridor MOS, and in June 1997, FTA and RT entered into a Full Funding Grant Agreement 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 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 2000, Congress has appropriated $77.99 million in Section 5309 new start funds for the project of which $76.0 million is covered under the FFGA.

Locally Proposed Financing Plan

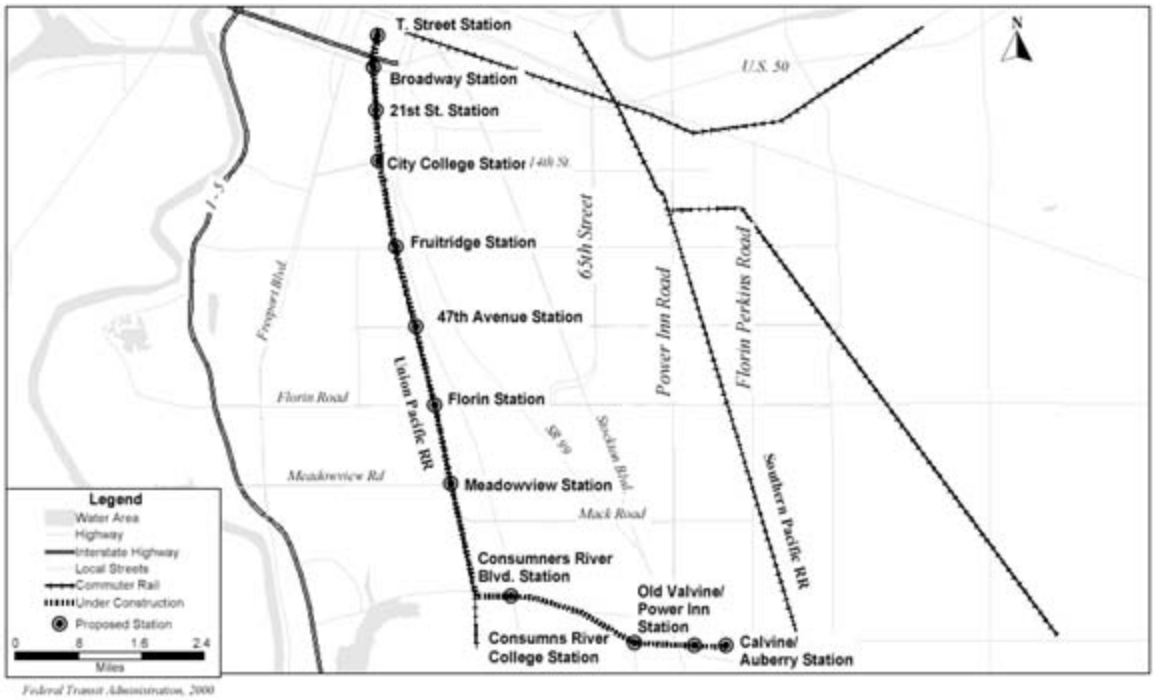
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts	$111.20	$76.00 million appropriated through FY 2000
State/Local:	$110.80	
Total:	**$222.00**	

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 $77.99 million.

South Corridor LRT

Sacramento, CA



Federal Transit Administration, 2000

Salt Lake City, Utah/North-South LRT

North-South LRT

Salt Lake City, Utah

(November 1999)

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

In August 1995, FTA and UTA entered into a Full Funding Grant Agreement (FFGA) for $237.39 million in Section 5309 New Start funds. TEA-21 Section 3030(a)(74) authorized the South LRT for final design and construction. Through FY 2000, 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 prior to the FFGA.

FTA issued the Final Environmental Impact Statement (FEIS) for the project in September 1994 and signed the Record of Decision in November 1994. Construction of the project has been completed and regular service on the line commenced on December 6, 1999.

Locally Proposed Financing Plan

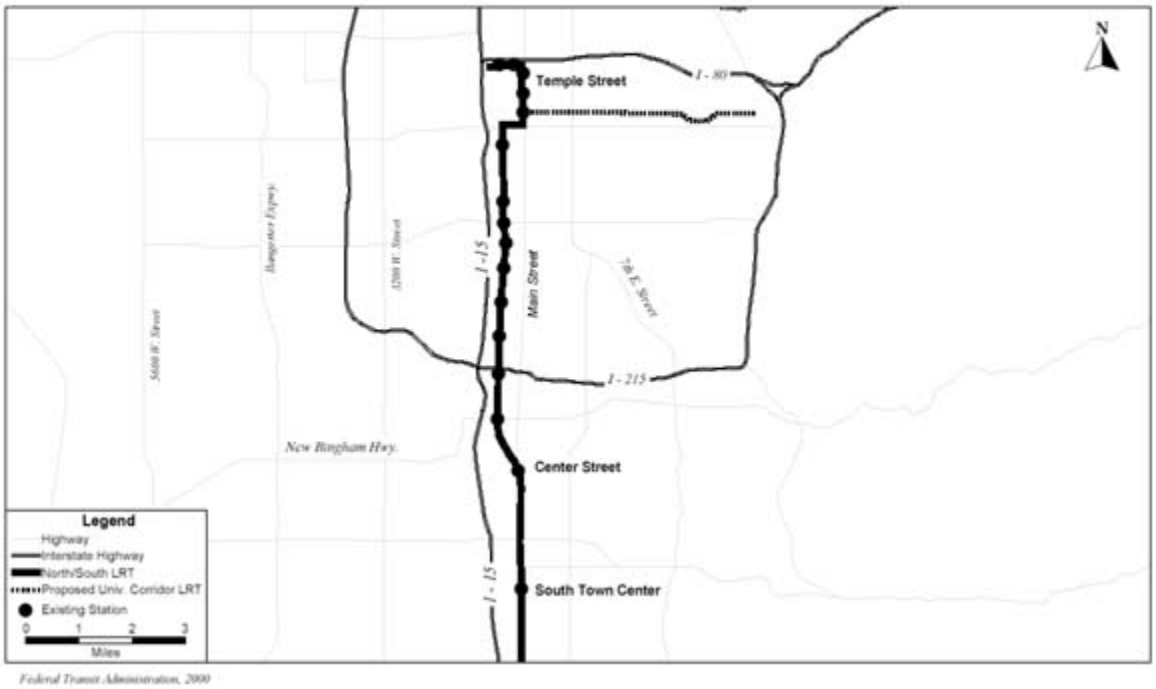
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: Section 5309 New Start	$237.39	$236.68 million appropriated through FY 2000
Federal: Section 5309 Bus	$4.00	
Local:	$71.10	
Total:	**$312.49**	

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

North-South LRT

Salt Lake City, UT



Federal Transit Administration, 2000

San Francisco, California/BART to San Francisco International Airport

BART Extension to San Francisco International Airport

San Francisco, California

(November 1999)

Description

The Bay Area Rapid Transit (BART) and San Mateo County Transit District (SamTrans) are constructing an 8.2-mile, 4-station, BART extension which 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). This project is now 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 68,600 trips per day 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 start funds. TEA-21 section 3030(a)(79) authorized the BART to SFO project for final design and construction.

Through FY 2000, $217.2 million has been appropriated to the BART-SFO Extension.

The BART-SFO project is participating in the FTA Turnkey Demonstration Program, initiated under ISTEA 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
Federal: Section 5309 New Start	$750.00	$217.2 million appropriated through FY 2000
Federal: San Francisco International Airport	$113.00	
State:	$152.00	
Local:	$468.20	
Subtotal:	*$1,483.20*	
Available CAPRA:	$27.00	
Total Project with CAPRA:	**$1,510.20**	

Note: Totals may not add due to rounding.

BART to Airport Extension

San Francisco, CA

Federal Transit Administration, 2000

St. Louis, Missouri/Metrolink St. Clair Extension

Metrolink St. Clair Extension

St.Louis, Missouri Metropolitan Area

(November 1999)

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, IL, serving the Belleville Area College (BAC), Scott Air Force Base and Mid America Airport. A 17.4 mile "Minimum Operable Segment" (MOS) terminates at BAC. The MOS includes 8 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 (escalated 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 Environmental Impact Statement for the full 26-mile project was completed in August 1996 and a Record of Decision was issued in September 1996. Section 5309 funds were made available in October 1996 to provide design and construction as far as BAC and an FFGA was awarded for that segment on October 17, 1996. The agreement authorized Bi-State to design and construct the MOS to BAC, with provisions for extending the system to Mid-America Airport should funding become available at a later date.

The Full Funding Grant Agreement (FFGA) awarded by FTA provided a commitment of $243.93 million in section 5309 new start funds contributing to the total estimated cost of $339.20 million (escalated dollars). The St. Clair County Transit District is providing $95.3 million in local funds from a 3/4 cent county sales tax.

Two additional operable segments of the complete St. Clair County Corridor - Phase IIB, which extends the line 3.6 miles from BAC to Scott Air Force Base, and Phase 2C, which further extends the system by 5.0 miles to Mid America Airport - are currently in the final design phase of project development.

Through FY 2000, Congress has appropriated $153.4 million in Section 5309 New Start funds for the FFGA covered Minimum Operable Segment portion of the project. An additional $8.5 million in Section 5309 New Start funds were previously appropriated but not included in the FFGA scope.

Locally Proposed Financing Plan

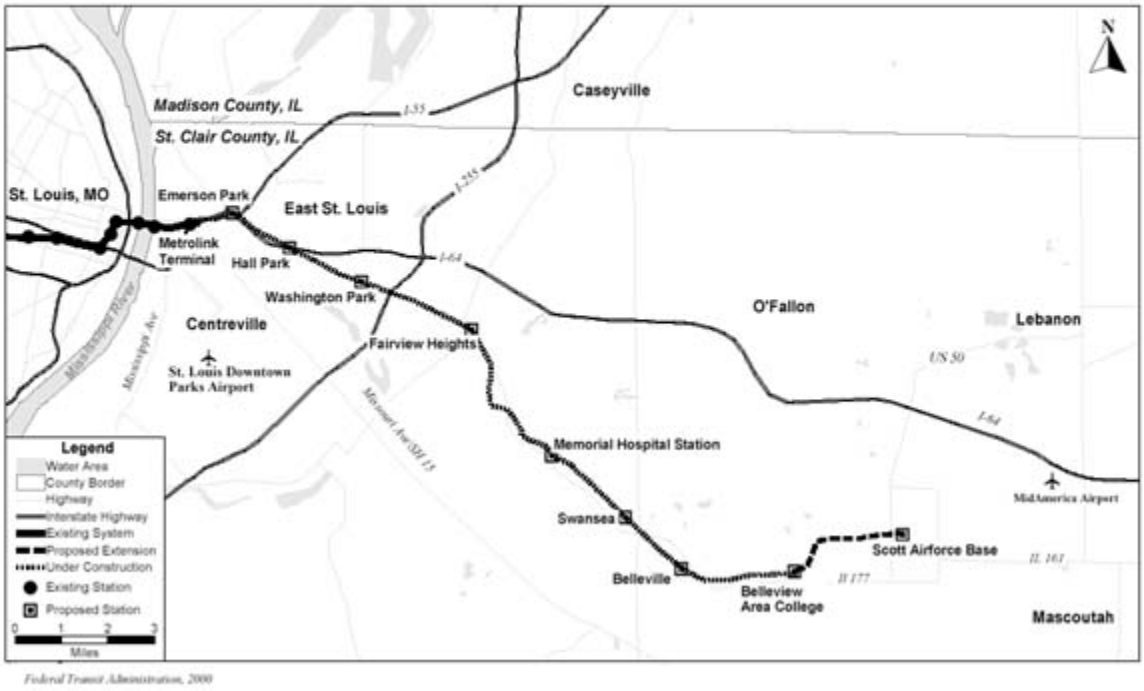
(Reported in $1996)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts FFGA Amount	$243.93	$153.4 million appropriated through FY 2000; an additional $8.5 million not included in FFGA also appropriated to the project
Local: ¾% Sales Tax	$95.27	
Total:	**$339.20**	MOS Only

Note: Totals may not add due to rounding.

St. Clair County, Illinois LRT

St. Louis, MO



San Jose, California/Phase 1 Tasman LRT West Extension

Tasman West LRT

San Jose, California

(November 1999)

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 invalidation of the Measure A sales tax lead 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 ISTEA 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 start 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 2000, Congress has appropriated $170.50 million of section 5309 new start funds to the project. The East Extension is being completed with State and local Measure A funding.

Locally Proposed Financing Plan

(Reported in $YOE)

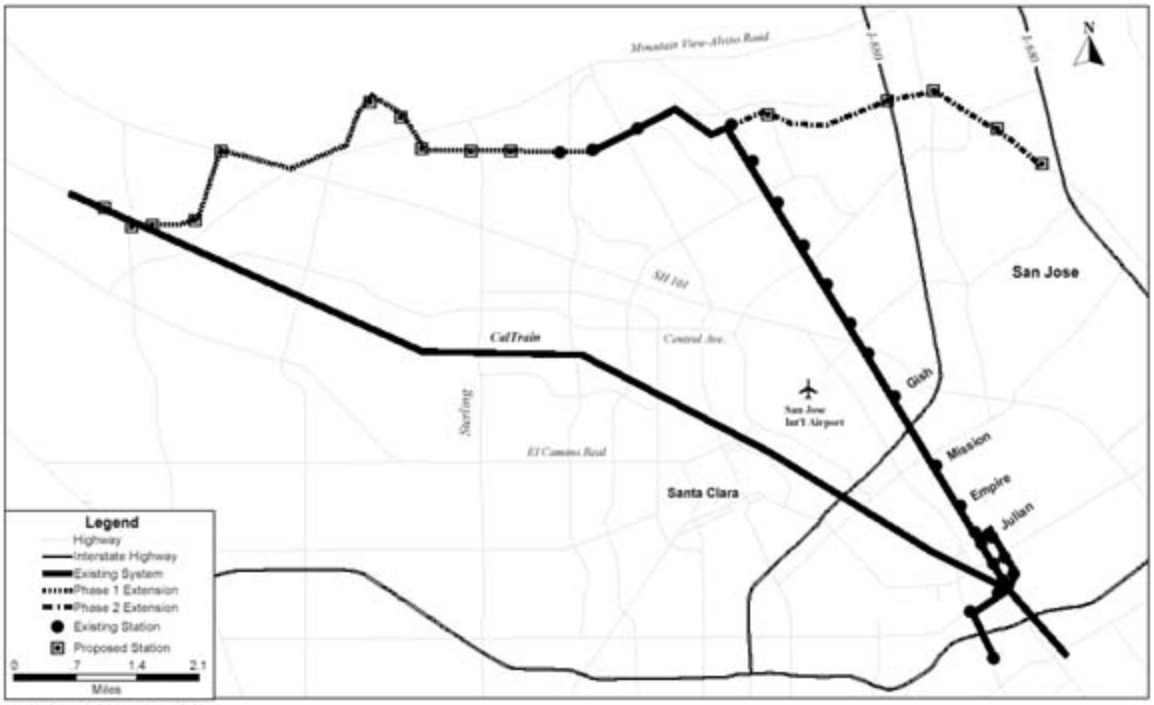
Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start FFGA Amount	$182.75	($170.50 million appropriated through FY 2000
Federal: Congestion Relief Program*	$37.25	
Federal: CMAQ	$15.92	
Federal: STP	$8.79	
State:	$54.02	
Local:	$26.28	
Total:	**$325.00**	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.

Phase 1 Tasman LRT Westside Extension

San Jose, CA



Federal Transit Administration, 2000

San Juan, Puerto Rico/Tren Urbano

Tren Urbano

San Juan, Puerto Rico

(November 1999)

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 totals $1,250.0 million (escalated dollars). The cost of the project is now estimated at $1,653.0 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 Full Funding Grant Agreement (FFGA) for the Tren Urbano project providing a Federal commitment of $307.40 million in Section 5309 New Start funds out of a total project cost of $1.250 billion. The cost of the project is now estimated at $1,653.0 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.

The local share funding for the project is being provided by local revenues from the Puerto Rico Highway and Transportation Authority (PRHTA). 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 2000, Congress has appropriated $79.67 million in section 5309 new start 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

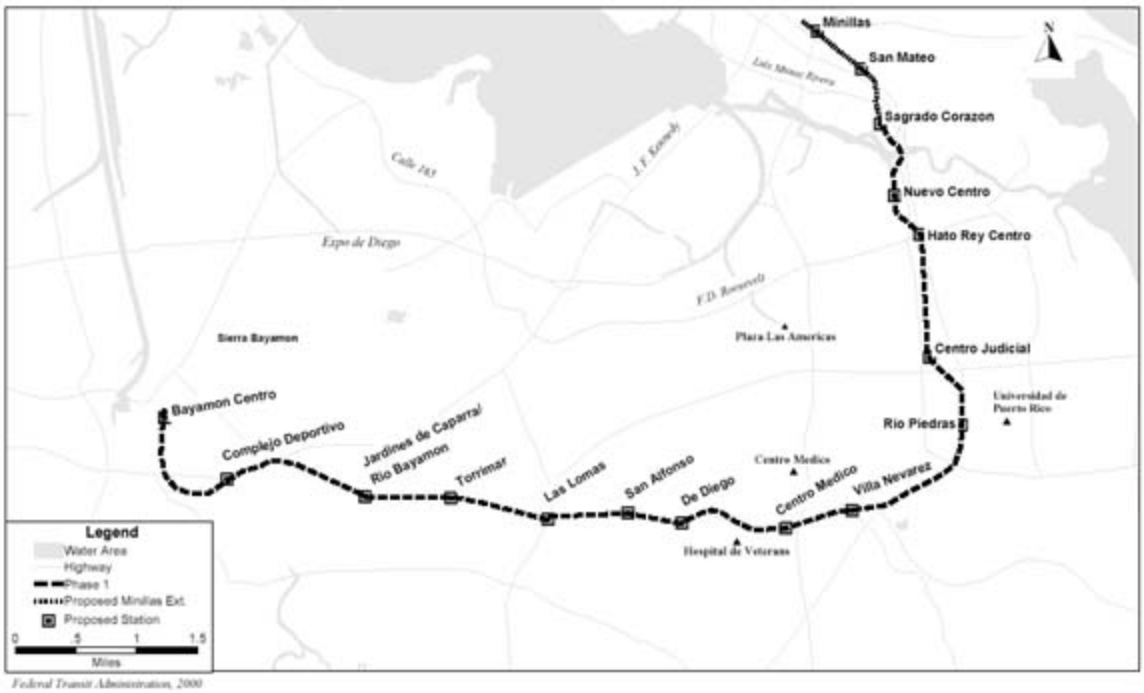
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts FFGA Amount	$307.41	$79.67 million appropriated through FY 2000
Federal: Section 5307	$141.00	
Federal: Flexible Funding	$259.90	
Local: Local Funding	$945.00	
Total:	**$1,653.31**	

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 $84.63 million. Totals may not add due to rounding.

Tren Urbano

San Juan, Puerto Rico



Federal Transit Administration, 2000

Projects in Final Design

Dallas-Ft. Worth, Texas/RAILTRAN Phase II

Trinity Railway Express RAILTRAN Phase II

Dallas, Ft. Worth, Texas (Final Design)

(November 1999)

Description

Phase II of the Trinity Railway Express (formerly RAILTRAN) project will provide additional commuter rail service on 25 miles of 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. Phase II is estimated to carry 10,950 daily riders in the year 2010. The Fort Worth Transportation Authority (FWTA) has estimated total project costs in year of expenditure (YOE) at $160.6 million, with an estimated Section 5309 New Starts share of $62.4 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.

Trinity Railway Express Phase II Summary Description

Proposed Project:	Commuter Rail 25 miles, 5 stations
Total Capital Cost ($YOE):	$160.60 million
Section 5309 Share ($YOE):	$62.40 million
Annual Operating Cost ($YOE):	$9.20 million
Ridership Forecast (2010):	11,000 daily boardings 5,000 daily new riders
FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium**

FY 2001 Overall Project Rating:	Recommended

The overall project rating of *Recommended* is based on the adequacy of the project's justification criteria and local financial commitment to the project. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 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 outermost segment of Phase II is scheduled to open in September 2000 with service to Richmond Hills; service to downtown Ft. Worth is scheduled to begin in early 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 2000, Congress has appropriated $46.41 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*.

This project is rated as being in final design. The project will be re-evaluated in next year's *Annual Report on New Starts*.

Justification

The *Medium* project justification rating is based on the project's cost-effectiveness and the adequacy of its other reported criteria.

Mobility Improvements

Rating: Not Rated

FWTA did not provide information on travel time savings in conformance with *FTA's Technical Guidance on Section 5309 New Starts Criteria*.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	57.90 million hours	17.80 million hours

There are an estimated 407 low-income households within a ½ mile radius of the proposed five stations, roughly 22 percent of total households within a ½ mile of proposed stations.

Environmental Benefits

Rating: Medium

Dallas/Fort Worth is classified as a "serious" non-attainment area for ozone. FWTA estimates that TRE Phase II would result in the following annual emissions reductions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 4 annual tons	decrease of 4 annual tons
Nitrogen Oxide (NOx)	decrease of 13 annual tons	decrease of 13 annual tons
Volatile Organic Compounds (VOC)	decrease of 121 annual tons	decrease of 115 annual tons
Particulate Matter (PM_{10})	decrease of 3 annual tons	decrease of 3 annual tons
Carbon Dioxide (CO_2)	decrease of 852 annual tons	decrease of 563 annual tons

FWTA estimates that TRE Phase 2 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 (millions)	decrease of 11,238 million annual BTU	decrease of 7,492 million annual BTU

Operating Efficiencies

Rating: Not Rated

FWTA did not provide information on operating efficiencies.

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

Cost Effectiveness

Rating: Medium-High

FWTA estimates the following cost effectiveness indices.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*

Incremental Cost per Incremental Passenger	$4.60	$9.80

Values reflect 2010 ridership forecast and 1997 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Medium

The *Medium* land use rating reflects moderate development in downtown Fort Worth and CentrePort and enhancement of transit supportive policies within the corridor.

Existing Conditions: The primary population and employment concentrations along the corridor exist in downtown Fort Worth. Downtown Fort Worth contains relatively high densities of office space and the first phases of new housing development. The CentrePort development, in the center of the corridor, and downtown Dallas, at the eastern end of the Phase I line, are the other primary activity centers in the corridor. The lack of restrictions on use and the presence of housing subsidies within the Fort Worth CBD are supportive of a mix of land uses. Density and land use mixing are generally low among the remainder of the corridor.

Future Plans and Policies: Fort Worth is establishing plans to focus development in its downtown, and is also amending its zoning ordinance to support transit-oriented development. Zoning changes have also allowed new housing developments to proceed under construction in downtown Fort Worth. Other provisions would include dense development with a mix of uses clustered around transit stops. The Downtown Fort Worth Strategic Action Plan supports the establishment of a housing community development corporation, the expanded presence of retail activities, and several urban design guidelines and street environment improvement which generally support transit oriented development goals. New redevelopment projects concentrating on the Lancaster Boulevard area and the Intermodal Transportation Center in Downtown Fort Worth indicate more serious attention to more focused efforts to develop in the terminal station area. Employment center designation near the proposed Intermodal Center in the Fort Worth CBD is the strongest means to support high density, mixed use land development patterns in the entire corridor. There are no adopted policies to limit the spatial growth of development or to promote infill development in the municipalities along the commuter rail corridor. Development at the CentrePort business complex incorporates a variety of uses and large campus-style office buildings; housing in the development is complete. Concessions to pedestrian accessibility and amenities are limited.

Local Financial Commitment

Proposed Non-New Starts Share of Total Project Costs: 61%

The project's financial plan proposes to utilize $62.4 million (39 percent of total project costs) in Section 5309 New Start funds, $40.4 million (25 percent) in Federal flexible funds, $16.1 million in ISTEA Section 1108 Highway funds (10 percent), $1.1 million in Section 5307 Formula funds, and $41.8 million (26 percent) in State and local funds.

Stability and Reliability of Capital Financing Plan

Rating: Medium

The *Medium* capital finance plan rating reflects the lack of detail regarding FWTA's submitted financial plan and other financial assessment documentation. FWTA is in sound financial condition, as are other project funding sources.

Agency Capital Financial Condition: FWTA faces only modest capital investment commitments beyond Phase II of the Trinity Rail Express project. DART and the RAILTRAN authority are both strong from the viewpoint of meeting their funding commitments to the project. FWTA also has strong surplus balances to cover unexpected cost overruns. No information was submitted outlining FWTA's long-term capital replacement plans.

Capital Costs Estimates and Contingencies: The capital cost estimates are reasonable given the size and scope of the project. Project costs have increased by more than 4.5% over the past year from $153.5 million to $160.6 million, reflecting redesign of the ITC. Although FWTA has strong surplus balances to cover unexpected cost overruns, FWTA did not submit any documentation to demonstrate provision of contingencies for cost overruns.

Existing Funding: All proposed project funding sources exist though all are not committed. FWTA has entered into an Interlocal Agreement between DART, RAILTRAN, Tarrant County and local cities although exact annual funding amounts have not been specified. FWTA's 0.5% local sales tax is the primary revenue source for covering FWTA's annual operating deficit and also serves as a primary source of capital funds. Projected revenue from this source is sufficient to cover FWTA's share of project capital and operating costs without posing significant funding risk to FWTA's ongoing bus operations. FWTA historically has had more than sufficient cash balances to meet any sales tax shortfalls.

All proposed project funding sources exist though all are not committed. FWTA has entered into an Interlocal Agreement between DART, RAILTRAN, Tarrant County and local cities although exact annual funding amounts have not been specified. FWTA's 0.5% local sales tax is the primary revenue source for covering FWTA's annual operating deficit and also serves as a primary source of capital funds. Projected revenue from this source is sufficient to cover FWTA's share of project capital and operating costs without posing significant funding risk to FWTA's ongoing bus operations. FWTA historically has had more than sufficient cash balances to meet any sales tax shortfalls.

New Funding: A private right-of-way donation, representing 0.1% of project costs, is the only new funding source proposed for the project.

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* operating finance plan rating reflects insufficient detail with which to evaluate the appropriateness of project operating and maintenance cost estimates.

Agency Operating Financial Condition: No recent financial records were provided by which to evaluate FWTA's operating financial performance. However, NTD data suggest a flat farebox recovery ratio of approximately 17% for FWTA bus services and zero annual operating balances. DART and RAILTRAN are both considered strong in meeting their funding commitments to the project. Operations of the completed commuter rail line have been contracted out to a private operator.

Operating Cost Estimates and Contingencies: FWTA projects annual operating costs of $9.2 million beginning in FY 2000, which are considered reasonable given the system size and type of service (i.e., commuter rail). However, the documentation submitted provides little detail with which to evaluate the appropriateness of project operating and maintenance cost estimates. A significant surplus balance is included in the cash flow submission, providing more than sufficient reserves to cover any realistic cost overrun situation.

Existing Funding: Assuming periodic fare increases, the projected annual growth rate of passenger fares is not unreasonable. FWTA's financial plan anticipates a 43.5% farebox recovery ratio for the TRE initial operations (FY 2001). While not unreasonable for a mature commuter rail system, this level is optimistic for initial operations. The operating subsidy will be funded entirely from FWTA's dedicated sales tax, which provides sufficient capacity and reliability in meeting both the operating and capital needs of the project.

New Funding: No new funding sources are proposed for the project.

Locally Proposed Financing Plan

(Reported in $YOE)

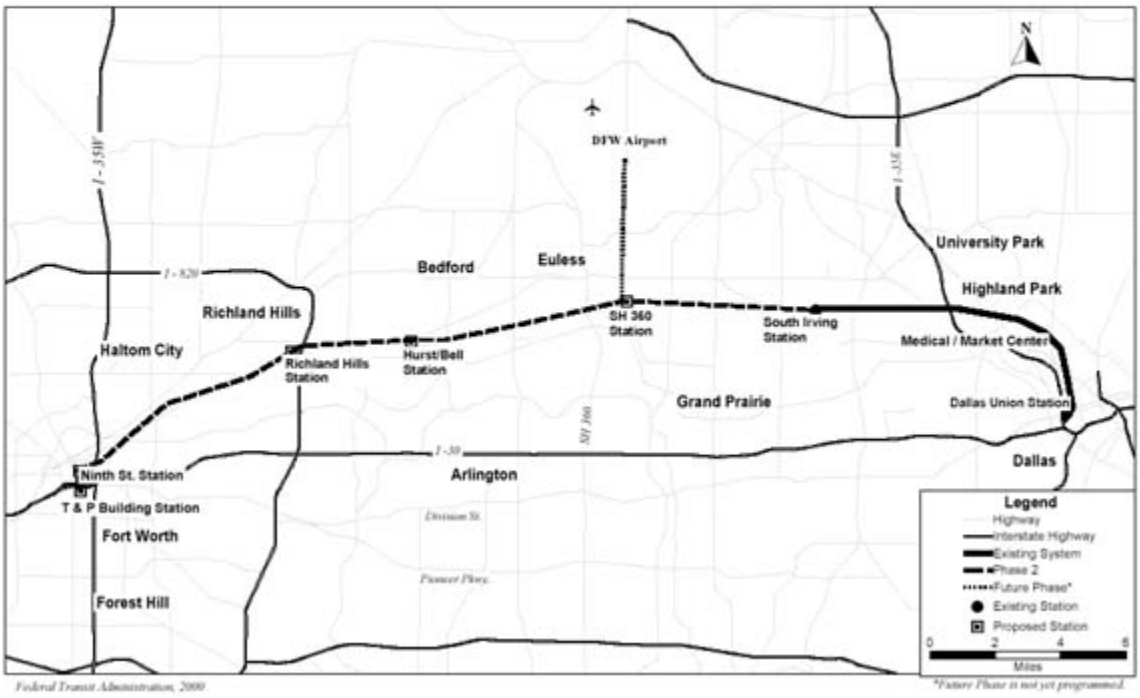
Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal:		
Section 5309 New Starts	$62.40	$46.41 million appropriated through FY 2000
Section 5307 Formula	$1.10	N/A
Flexible Funds (CMAQ & STP)	$40.40	N/A
ISTEA Section 1108 Highway Funds (ITC)	$16.10	N/A
Local:		
FWTA	$21.30	N/A
DART	$8.10	N/A
Tarrant County & Cities	$6.50	N/A
Railtran	$4.60	N/A
Other:		
Private - ROW	$0.10	N/A

Total:	**$160.60**

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, TX



Fort Lauderdale, Florida/Tri-County Commuter Rail

Tri-Rail Commuter Rail Upgrades

Ft. Lauderdale, West Palm Beach and Miami, Florida

(November 1999)

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. This area has a population of over four million, nearly one-third of the total population of 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 facility, 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 one-hour headways that now exist.

The Double Track Corridor Improvement Program Segment 5 project is approximately 44.3 miles long and includes upgrading the existing grade crossing system along the entire 71.7 mile commuter rail line. Previous improvements made to four other segments of the line are not included in this 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 7.0 miles is are scheduled forto be completioned 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) by 2005.

Total project cost for the proposed project is $327.0 million (escalated), with a proposed Section 5309 New Starts share of $110.5 million (escalated). Tri-Rail estimates that the average weekday boardings would be 42,100 with an estimated 10,200 daily new riders in 2015.

Tri-County Commuter Rail Summary Description

Proposed Project	Commuter Rail Double Tracking and Station Modifications 71.7 miles, 19 stations
Total Capital Cost ($YOE)	$327.00 million
Section 5309 Share ($YOE)	$1130.58 million
Annual Operating Cost ($1997)	$46.80 million

Ridership Forecast (2015)	42,100 average weekday boardings 10,200 daily new riders
FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The overall rating of *Recommended* is based on the project's strong mobility improvements and the adequate transit supportive land use along the corridor, as well as the adequacy of the project's 'financial plan. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 Tri-Rail system was created in 1989 as a traffic mitigation project during the State widening of Interstate 95. Environmental requirements for the Tri-County Commuter Rail improvements were satisfied with categorical exclusions.

The proposed Tri-Rail double track corridor improvement project will be implemented in five segments/phases. Phase I, an 8.14-mile portion between Pompano Beach and Broward Boulevard began in Spring 1995 and was completed in April 1997. Phase II, completed in Spring 1998, is a 1.5-mile southern extension which terminates at the New Miami International Airport Station, adjacent to the site of the proposed Miami Intermodal Center. Construction of Phase III, 6.97 miles from south of the proposed Boca Raton/Glades Road Station to south of the Pompano Beach Station, began in March 1998 and is scheduled tforo be completioned by January 2000.

Segment 5 covers all remaining double-tracking and other improvements to the corridor, specifically the installation of 44.31 miles of a second mainline track system within the existing right-of-way. The project includes modifications and renovations to nine existing stations, the construction of two new stations, the closing of two existing stations, and the upgrading of grade crossings. Segment 5 is scheduled for completion in 2005. Tri-Rail is currently negotiating a full-funding grant agreement with FTA to implement Segment 5 of the Double Track Corridor Improvement Program.

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 2000, Congress has appropriated $65.07 million in Section 5309 New Starts funding for this project. To date, Tri-Rail has also utilized $11.5 million of apportioned Fixed Guideway Modernization monies for this project, $24.1 million of Section 5307 formula funds, and $38.2 million in State funds, for a total of $134.6 million.

Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria.* Improvements included in Tri-Rail's capital improvement program along the entire 71.7-mile system were used to develop the criteria. Tri-Rail indicates that no TSM alternative was advanced in the project development process; therefore criteria comparing the New Start to the TSM alternative are not available (N/A).

FTA has evaluated this project as being in final design.

Justification

The *Medium* project justification rating reflects the project's strong mobility improvements and positive transit supportive land use policies, although the project's cost effectiveness is below average.

Mobility Improvements

Rating: Medium-High

The 71.7-mile system is to serve 42,100 average weekday boardings and 10,200 daily new riders by 2015. Tri-Rail estimates the following annual travel time savings for the project.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	11.20 million hours	N/A

Based on 1990XX census data, there are an estimated 10,892XX low-income households within a ½ mile radius of the 19 stations, approximately 16XX percent of the total households within a ½ mile radius of the stations.

Environmental Benefits

Rating: Low

Air Quality in the three metropolitan areas of West Palm Beach, Fort Lauderdale, and Miami, has recently been reclassified to attainment/maintenance. Tri-Rail estimates that in the year 2015, the project would result in the following changes in emissions compared to the No-Build alternative.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 89 annual tons	N/A
Nitrogen Oxide (NO_x)	increase of 88 annual tons	N/A
Hydrocarbons (HC)	decrease of 6 annual tons	N/A
Particulate Matter (PM_{10})	decrease of 21 annual tons	N/A

Carbon Dioxide (CO_2)	increase of 734 annual tons	N/A

Tri-Rail estimates that in 2015, the Commuter Rail improvements will result in the following increases in regional energy consumption (measured in British Thermal Units—BTU).

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	increase of 15,001 million annual BTU	N/A

Operating Efficiencies

Rating: Low

Tri-Rail estimates an increase in the systemwide operating cost per passenger mile in the year 2015.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2015)	$0.28	N/A	$0.35

Values reflect 2015 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: High

Tri-Rail estimates the following cost effectiveness index.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$13.80	N/A

Values reflect 2015 ridership forecast and 1999 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Medium

The *Medium* rating reflects the existence of moderate densities along the corridor and several policies contained in the Palm Beach, Broward and Miami-Dade County Comprehensive Plans which promote transit-supportive land use.

Existing Conditions: The proposed corridor area has a population of over four million, nearly one-third of the total population of Florida. The corridor runs through the central business districts of Palm Beach, Fort Lauderdale, and Miami. These CBDs contain moderate densities and several high trip generators including Atlantic University, Palm Center Mall, and Mizner Park, and three international airports. Residential development tends to reflect low to medium densities.

Plans and Policies: The corridor counties have recently amended their comprehensive plans to accommodate transit-supportive land development policies. The Miami-Dade County Comprehensive Development Master Plan (CDMP) requires high concentrations and mixes of uses near rail stations. Development of station area policies and plans are underway and master plans for joint development is being proposed. Dade County has a formal master planning process to address station area design and improving pedestrian connections between stations and neighborhoods.

Local planning agencies and the Florida Department of Community Affairs have developed policies supporting both urban infill and the prevention of urban sprawl. Implementation of these policies depends on the actions of individual jurisdictions. Parking policies in the corridor have not yet been addressed.

Local Financial Commitment

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 66%

Tri-Rail's proposed financial plan assumes $110.530.8 million (34 percent) in Section 5309 New Start funds, $14.933.0 million in Section 5307 funds (5 percent), $19.3 million in Section 5309(m)(1)(A) funding (6 percent), $40.0 million in FHWA NHIR funds (12 percent), $5.0 million in CMAQ/STP funds from the Dade MPO funds (2 percent), $9.0 million in CMAQ funds from the Broward MPO (3 percent) $8.2 million in Palm Beach MPO CMAQ funds (3 percent), and $65.1 million in FDOT Transportation Trust Funds. Additionally, CSXT has agreed to provide $55 million (17 percent) to the project.

Stability and Reliability of Capital Financing Plan

Rating: Medium

The *Medium* rating reflects the commitment of funds from the Florida Department of Transportation to the proposed Tri-Rail Double Track Corridor Improvement Program. Additionally, the Memorandum of Understanding (MOU) between Tri-Rail and CSX Transportation, allocating $55 million, demonstrates private sector support for the project.

Agency Financial Condition: The Tri-County Commuter Rail is in sound financial condition. The commitment of $104.9 million from the FDOT and the additional private sector contribution of $55.2 million proposed by CSX Transportation will enable the Tri-Rail capital program to finance the non-Federal share of the project costs.

Cost Estimates and Contingencies: The construction costs for the Double Track Improvement Program appear to be reasonable given the nature and magnitude of the project. Construction costs estimates done by Tri-Rail are based upon a series of similar projects already undertaken by Tri-Rail. Tri-Rail has developed MOU's between FDOT and CSX Transportation to provide funding in the event those insufficient federal funds is appropriated. The MOU between FDOT and Tri-Rail includes a request to accelerate funds to cover potential cost short falls in the Federal New Starts funding. The MOU between CSX and Tri-Rail will also provide short term financing for any shortfalls.

Existing and Committed Funding: The Florida Department of Transportation has committed $104.9 million for the Tri-Rail Project. Additionally, the FDOT "Five-Year Work Program" (2000-2005) programs $69.9 million in State funds and $35 million in federal highway funds. The $217.0

million in non-Section Section 5309 New Starts project costs (66%) has been committed and programmed by the State and local agencies.

New and Proposed Funding: No new sources of funding are proposed.

Stability and Reliability of Operating Financing Plan

Rating: Medium

The *Medium* rating reflects the stability of Tri-Rail's operating and maintenance plan. Tri-Rail has a dedicated operating revenue stream and contingency plan to support the Segment 5 Project.

Agency Financial Condition: The Tri-County Commuter Rail is in sound financial condition. Tri-Rail's operation and maintenance costs are funded with a mixture of farebox revenues, Federal, State and local funds.

Operating Costs and Contingencies: A 25 percent farebox recovery is needed for the operation of the Segment 5 Project. Over the last two years, Tri-Rail has increased its recovery rate and has experienced 27 percent Farebox Recovery Ratio. The increased services resulting from the double-track project may produce increased ridership and provide an increase in farebox revenue.

Existing and Committed Funding: System operations are proposed to be funded with fare revenues. The State is required to fund up to 50 percent of Tri-Rail's net operating budget, with the stipulation that its total contribution does not exceed the local contribution of the three counties.

New and Proposed Sources: No new funding sources are proposed in the financial plan.

Locally Proposed Financing Plan

(Reported in $YOE)

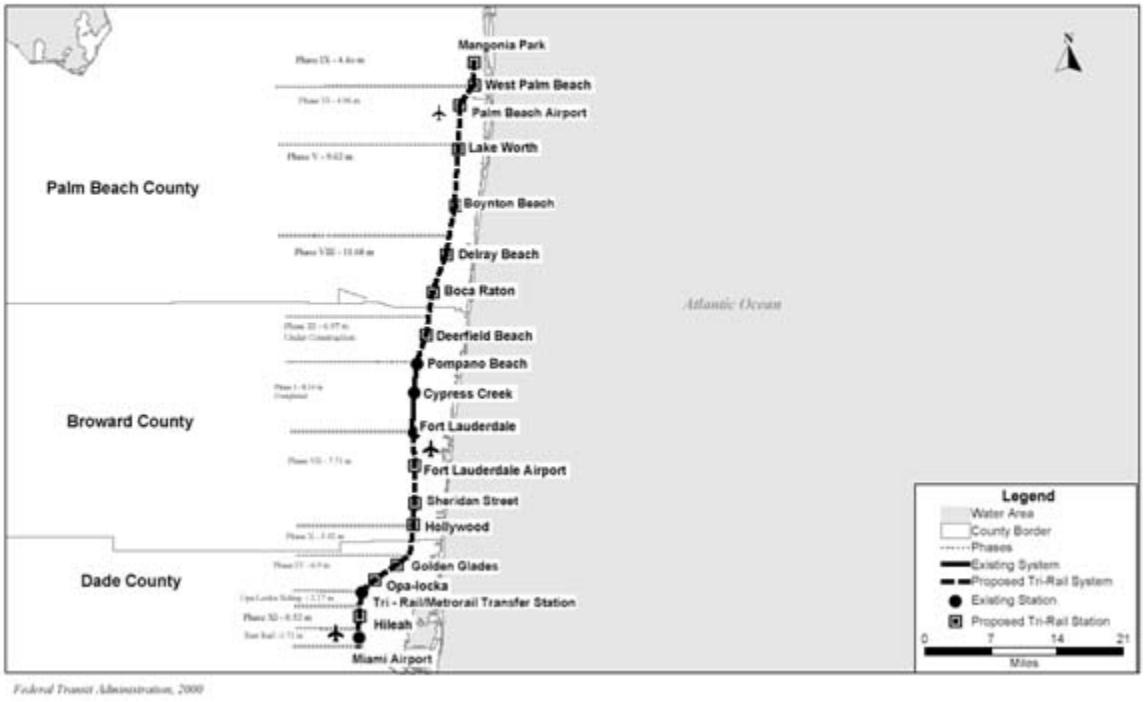
Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$110.50	$65.07 million appropriated through FY 2000
Section 5307	$14.90	N/A
Section 5309(m)(1)(A)	$19.30	N/A
FHWA NHIR Funds	$40.00	N/A
State:		
FDOT Transportation Trust Fund	$65.20	N/A

Local:		
Dade MPO CMAQ/STP	$22.20	N/A
Private Sector	$55.00	N/A
Total:	**$327.00**	

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

Tri-County Commuter Rail

Fort Lauderdale, FL



Federal Transit Administration, 2000

Little Rock, Arkansas/River Rail Project

Little Rock River Rail Project

Little Rock, Arkansas

(November 1999)

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. Phase I of the proposed system will include 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. Phase II of the project includes a proposed 0.4 mile extension along existing right-of-way to the William Jefferson Clinton Presidential Library site.

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

Proposed Project	Vintage Streetcar System 2.5 miles, 8 stations
Total Capital Cost ($YOE)	$13.20 million
Section 5309 Share ($YOE)	$8.60 million
Annual Operating Cost ($YOE)	$0.70 million
Ridership Forecast (2020)	1,000 average weekdays 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 2000, Congress has appropriated $2.98 million in Section 5309 New Starts funds to this project.

Locally Proposed Financing Plan

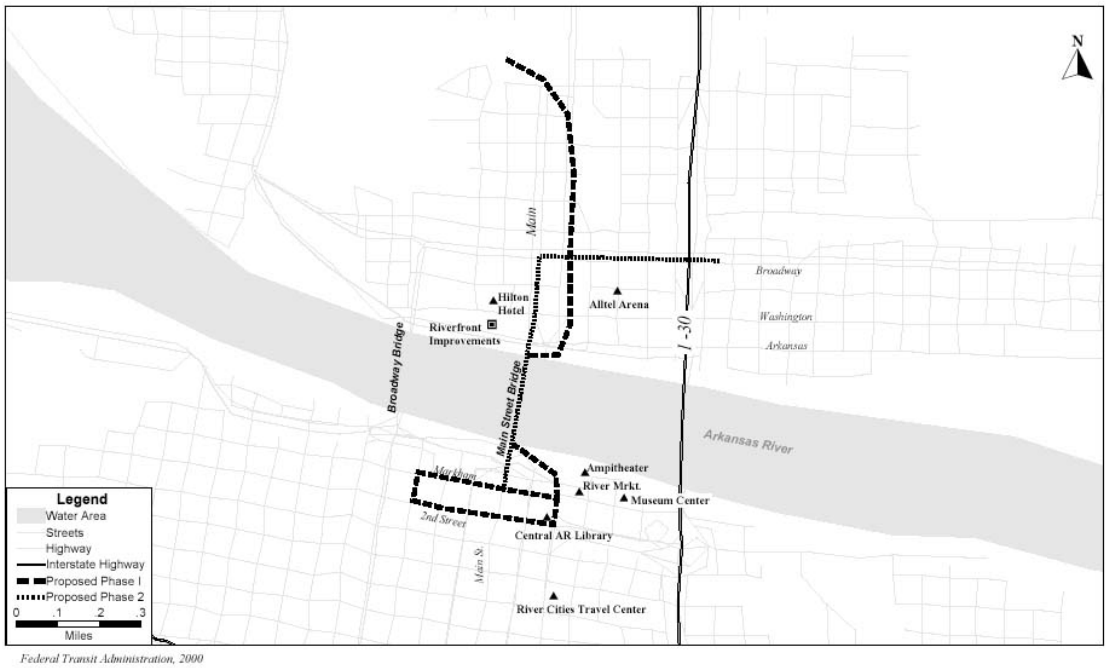
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start	$8.60	$2.98 million appropriated through FY 2000
Federal: STP / FHWA Section 1602	$2.00	N/A
Local:	$2.60	N/A
Total:	**$13.20**	

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 Project

Little Rock, AR



Federal Transit Administration, 2000

Los Angeles - San Diego County, California/LOSSAN Rail Corridor Improvements

LOSSAN Rail Corridor Improvements

Los Angeles and San Diego County, CA

(November 1999)

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)).

LOSSAN Rail Corridor Summary Description

Proposed Project	Intercity Rail Improvements (2 station-area improvements and roadbed stabilization)
Total Capital Cost ($1999)	$35.70 million
Section 5309 Share ($1999)	$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 appropriated 0.99 million in New Starts funding for the San Diego LOSSAN Corridor project in FY 2000.

TEA-21 Section 3030(b)(26) authorizes the "LOSSAN Rail Corridor" for Alternatives Analysis and Preliminary Engineering.

Locally Proposed Financing Plan

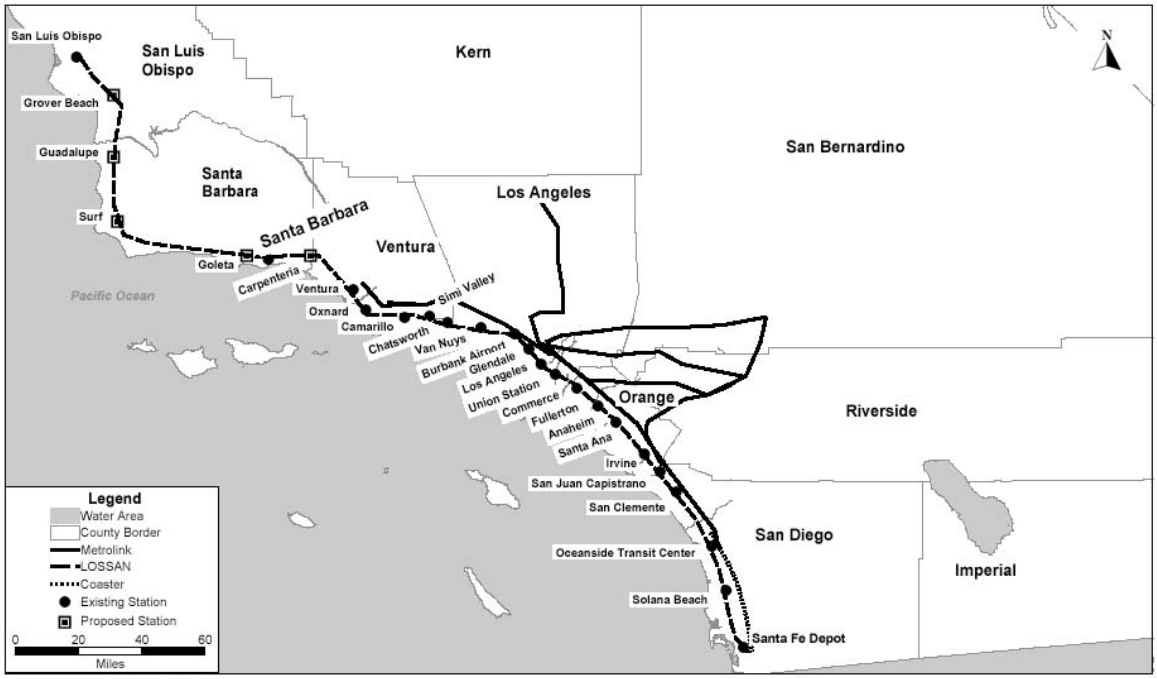
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: Section 5309 New Start	$24.10	$0.99 million appropriated through FY 2000; $19.89 million appropriated for prior improvements
Local:	$11.60	N/A
Total:	**$35.70**	

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

LOSSAN Rail Corridor Improvement Project

Los Angeles - San Diego, CA



Federal Transit Administration, 2000

New Orleans, Louisiana/Canal Streetcar Spine

Canal Streetcar Spine

New Orleans, Louisiana

(November 1999)

Description

The Regional Transit Authority (RTA) is developing a 5.5-mile streetcar project in downtown New Orleans. The Canal Streetcar Spine 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 capital cost estimate submitted to FTA for evaluation is $139.4 million (escalated dollars), although costs are currently being refined by the RTA. 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

Proposed Project	Light Rail Streetcar 5.5 miles in length, 37 stations
Total Capital Cost ($YOE)	$139.40 million
Section 5309 Share ($YOE)	$111.50 million
Annual Operating Cost ($1998)	$4.25 million
Ridership Forecast (2015)	31,400 average weekday boardings 5,300 daily new riders
FY 2001 Financial Rating:	**Low**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Not Recommended**

The overall project rating of *Not Recommended* is based on the lack of local funding to construct and operate the project *at this time*. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 Spine and the Carrolton 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 on August 28, 1997. The RTA initiated Final Design on the Canal Streetcar Spine in September 1997. Project start-up is anticipated in November 2002.

TEA-21 Section 3030(a)(51) authorizes the New Orleans Canal Streetcar project for final design and construction. Through FY 2000, 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. The project will be re-evaluated for next year's *Annual Report on New Starts*.

Justification

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

Mobility Improvements

Rating: Low-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. *No-Build*	New Start vs. *TSM*
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 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. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 192 annual tons	decrease of 154 annual tons
Nitrogen Oxide (NOx)	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_{10})	decrease of 1 annual ton	decrease of 1 annual ton
Carbon Dioxide (CO_2)	decrease of 1,749 annual tons	decrease of 635 annual tons

RTA estimates that in 2015, the Canal Streetcar Spine project 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 (millions)	decrease of 20,595 million annual BTU	decrease of 2,270 million annual BTU

Operating Efficiencies

Rating: High

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)	$0.76	$0.71	$0.59

Values reflect 2015 ridership forecast and 1997 dollars.

Cost Effectiveness

Rating: High

RTA estimates the following cost effectiveness indices:

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
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 progress made in the development of transit-supportive land use policies and plans along the corridor based on the adoption of the New Orleans Land Use Plan and the current effort to revise zoning regulations in accordance with the plan.

Existing Conditions: The proposed Canal Streetcar Spine 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. CBD employment is 122,000, with a density of 153 workers per acre. Approximately 83,000 jobs are within ½ mile of the Canal Street Corridor in the CBD area, at a density of 40,000 jobs per square mile. An estimated 38,000 people live within ½ mile of the proposed line, at an average density of 6,800 persons per square mile. In the central third of the corridor, population density is approximately 10,600 persons per square mile. Residences are primarily single or two-family detached houses with long, narrow lots; there are some pockets of higher density residential use, including two- to three-story apartment buildings built as early urban renewal projects. The CBD includes a high-density mix of office, retail, hotels, and leisure attractions. Adjacent to the CBD are the riverfront and the French Quarter historic district which include tourist and leisure attractions. There are approximately 40,000 parking spaces in the CBD; cost for off-street parking ranges from $2.25 to $7.00 per day. Zoning ordinances establish parking caps for new development in the CBD that are considered quite restrictive. Outside the CBD, the corridor is a mix of neighborhood commercial development surrounded by dense residential neighborhoods. Beyond the CBD, trip generators include three colleges and universities, two city offices, and a hospital; City Park is a significant trip generator itself and includes the New Orleans Museum of Art as well as a variety of other recreational and leisure activities. The entire corridor contains sidewalks and pedestrian crossings. Streets are generally tree lined with on-street parking and small building setbacks. Outside the CBD, parking is available at no cost on the street or on small surface lots.

Future Plans and Policies: The recently adopted New Orleans Land Use Plan is a positive effort, and is expected to result in zoning revisions that are more conducive to preserving/enhancing the existing desirable elements of the corridor while better facilitating 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. The market is currently sustaining continued residential and hotel conversions in the CBD. 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 the city and state economic development program; incentives include tax exemptions or credits for construction, rehabilitation and job creation. The city is an applicant for an Empowerment Zone designation. The city planning process and its Land Use Plan have greatly improved public/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 $111.5 million (80 percent of total project costs) in Section 5309 New Start funds, $15.0 million (11 percent) in State toll credits, and $12.9 million (9 percent) in local and other funds.

Stability and Reliability of Capital Financing Plan

Rating: Low

The *Low* capital finance plan rating reflects the concerns regarding RTA's financial condition and its lack of demonstrated financial capacity to undertake the proposed project.

Agency Capital Financial Condition: RTA has experienced negative operating balances for three of the past four fiscal years according to audited financial statements; recent audits do not indicate substantial changes in RTA's financial situation. These past trends raise concerns regarding RTA's projection of an operating surplus from which to fulfill its capital match for major investments. Although the 20-year capital plan is balanced, it does not reflect stability and availability of state or local fund sources, nor does it define specific capital project needs over the period. Recent cost reduction strategies have resulted in cut backs to bus service, staffing, and administrative expenses. RTA is also pursuing development of the Desire Streetcar Project estimated at $70 million, to be developed in 2002 with completion scheduled in 2004; bus replacement is indicated in 2008, 2011 and 2015, consistent with the relatively young age of the bus fleet. The ongoing capital plan reflects heavy reliance on Federal funds to cover a high level of all capital needs.

Capital Cost Estimates and Contingencies: Over the past three years, the project cost estimate has gone from $136 million for evaluation for FY 1999, to $154 million in FY 2000, back to $139 million in FY 2001. RTA has indicated that refinements in final design accounts for this oscillation in costs. No information is provided to indicate how RTA will handle unexpected cost overruns.

Existing Funding: Only the City's right-of-way donation represents committed funding. This $3.2 million contribution, 2 percent of total project costs and 11 percent of the local share, has been finalized with agreements between the City and RTA. RTA plans revenues of $8.7 million from its operating budget; however, the required operating surplus is tentative at present. These funds represent 6 percent of total project costs and 31 percent of the local share.

New Funding: The State's toll credits program is currently being established in consultation with FTA; once approved, it is considered to be a reliable funding source, although its actual cash contributions are uncertain. A private contribution of materials valued at $1 million has not yet been secured.

Stability and Reliability of Operating Financing Plan

Rating: Low

The *Low* operating finance plan rating reflects the past trend of negative operating balances experienced by RTA, declining ridership in recent years, and questionable fare revenue expectations.

Agency Operating Financial Condition: RTA has experienced negative operating balances for three of the past four fiscal years accoridng to audited financial statements; recent audits do not indicate substantial changes in RTA's financial situation. RTA's ridership declines may present challenges to fare revenue projections, which are expected to increase at an average annual rate of 2.5 percent; RTA's cash flow provides for fare increases every three years beginning in 2002. Retail sales tax sources are stable, and the projected growth rate is well within historical trends; applicability of a local hotel tax for transit is presently in dispute.

Operating Cost Estimates and Contingencies: RTA estimates an annual operating and maintenance budget of $4.25 million ($1998). RTA's operating and maintenance costs are projected to increase at an average of 2.7 percent from 1999 through 2018. This is consistent with the 2.7 percent average annual rate of increase in operating expenses demonstrated from 1991 through 1996, which considers reductions in operating expenses of 7 percent in 1996. No information is provided for how RTA expects to handle potential future operating deficits.

Existing Funding: Retail sales tax revenues are stable with reasonable growth projections; these constitute approximately 50 percent of RTA operating funds. Operating balance trends present concern of RTA's capacity to fulfill its operating needs.

New Funding: A one percent hotel tax may be an applicable funding source, pending resolution of litigation. No other new sources of funding are identified.

Locally Proposed Financing Plan

(Reported in $YOE)

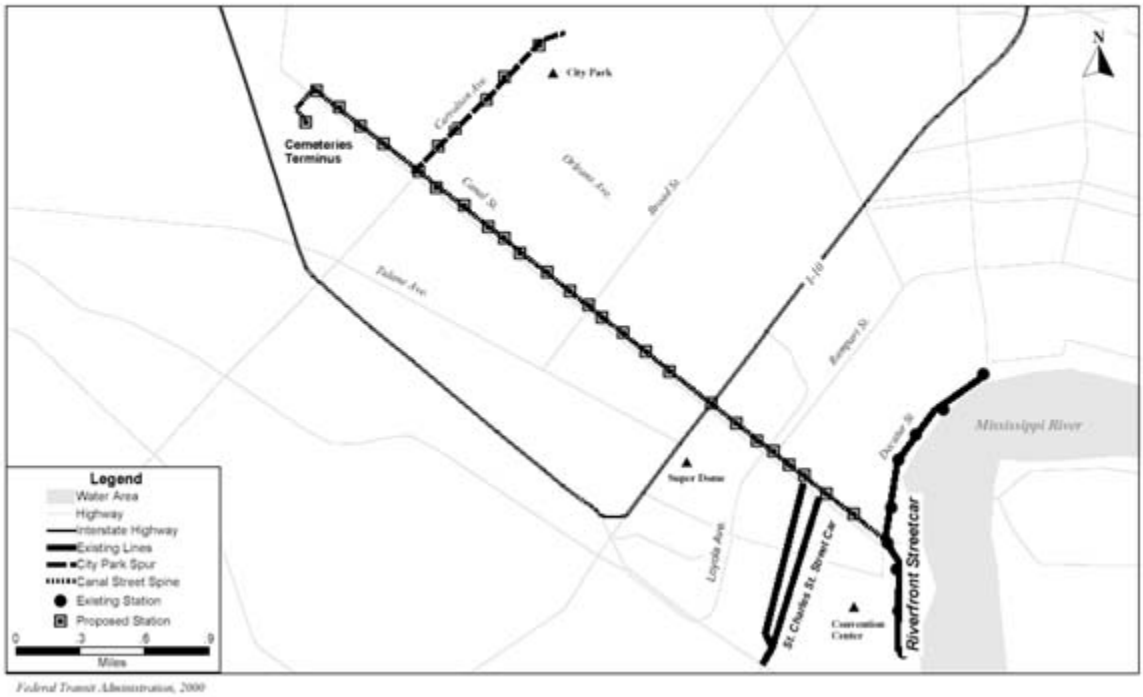
Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$111.50	$55.18 million appropriated through FY 2000
State:		
State Toll Credits	$15.00	
Local:		
City of New Orleans (Right-of-Way)	$3.20	
Regional Transit Authority (RTA) Capital March	$8.70	

Materials Donations (Poles)	$1.00	
Total:	**$139.40**	

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 Spine

New Orleans, LA



Northern New Jersey/Newark Rail Link

Newark Rail Link (MOS-1)

Northern New Jersey

(November 1999)

Description

The New Jersey Transit Corporation (NJ Transit) is proposing a one mile, five station Minimum Operable Segment (MOS) of an 8.8-mile, 16 station light rail transit (LRT) system which will eventually link Newark and Elizabeth, New Jersey. The MOS will function as an extension of the existing 4.3 mile Newark City Subway light rail line, running from Broad Street Station 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 capital cost of $694.0 million (1995 dollars) and will carry 24,900 average weekday boardings per day in 2015.

Newark Rail Link Summary Description

Proposed Project	Light Rail Transit (Minimum Operable Segment) 1 mile, 5 stations
Total Capital Cost ($YOE)	$207.7 million
Section 5309 New Starts Share ($YOE)	$141.9 million
Annual Operating Cost ($1996)	$2.3 million
Ridership Forecast (2015)	13,300 average weekday boardings 6,400 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium-High**
FY 2001 Overall Project Rating:	**Highly Recommended**

The overall project rating of *Highly Recommended* is based on the project's strong cost-effectiveness and transit supportive land use, 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 1999**. 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 Newark-Elizabeth Rail Link is being advanced in three stages: the MOS, a one mile connection between the Broad Street Station and Newark Penn Station; the second segment, a one mile line from Newark Penn Station to Camp Street in downtown Newark; and the third segment, a seven mile LRT line from downtown Newark to Elizabeth, including a station serving Newark International Airport. The Draft Environmental Impact Statement (DEIS) covering all three stages of the full build alternative was completed in January 1997. The Final Environmental Impact Statement (FEIS), which addressed only the MOS, was completed in October 1998. The Federal Transit Administration signed the Record of Decision (ROD) for the MOS in November 1998. Negotiations between FTA and NJTransit on a Full Funding Grant Agreement for the NERL MOS-1 are underway. Environmental work on the other segments of the Newark-Elizabeth Rail Link awaits completion of ongoing planning efforts.

TEA-21 Section 3030(a)(57) authorized 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 (ISTEA) which stated:

[F]or the purpose 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 2000, Congress has appropriated $29.68 million in Section 5309 New Starts funds for the New Jersey Urban Core Newark-Elizabeth Rail Link Project.

Evaluation

Under Section 3031(c) of the Intermodal Surface Transportation Efficiency Act of 1991, the Newark-Elizabeth Rail Link, as part of the New Jersey Urban Core Project, was exempted from the New Starts criteria. This exemption has been continued under TEA-21. Although exempted, NJ Transit provided selective data on the MOS for the FY 2000 and FY 2001editions of the *Annual Report on New Starts*. Data in the criteria tables below reflect consolidated New Starts project justification information that NJ Transit submitted for the FY 2000 and 2001 reports. No information was submitted on a TSM alternative. N/A indicates that information is not available for specific criteria at this time.

FTA has evaluated this project as being in final design.

Justification

The *Medium-High* project justification criteria reflects the project's strong cost effectiveness and transit supportive land use.

Mobility Improvements

Rating: Low-Medium

NJ Transit estimates that in the year 2015, 13,300 average weekday boardings, including 6,400 daily new riders, will use the proposed Newark-Elizabeth Rail Link (NERL) MOS-1 project. NJ Transit estimates the following annual travel time savings for MOS-1:

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	0.3 million hours	N/A

Based on 1990 census data, there are an estimated 3,645 low-income households within a ½ mile radius of the proposed five stations. This represents approximately 33 percent of the total households within a ½ mile radius of the proposed stations.

Environmental Benefits

Rating: Medium

Northern New Jersey is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. NJ Transit estimates that in 2015, implementation of the initial MOS would result in the following emission reductions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 101 annual tons	N/A
Nitrogen Oxide (NOx)	decrease of 7 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 24 annual tons	N/A
Particulate Matter (PM_{10})	N/A	N/A
Carbon Dioxide (CO_2)	decrease of 2,740 annual tons	N/A

NJ Transit estimates that implementation of the initial MOS would result in the following annual savings in regional energy consumption (measured in British Thermal Units – BTU).

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 22,090 million annual BTU	N/A

Operating Efficiencies

Rating: Medium

NJ Transit projects a slight decrease in systemwide operating cost per passenger mile for the MOS compared to the No-Build alternative.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2015)	$0.47	N/A	$0.46

Values reflect 2015 ridership forecast and 1996 dollars.

Cost Effectiveness

Rating: Medium-High

NJ Transit projects the following cost effectiveness index for NERL MOS-1:

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$8.80	N/A

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 the high densities and transit-supportive environment of Newark's central business district (CBD) – located along the proposed alignment – that have contributed to the area's high transit mode share. The rating also acknowledges both the City and State's role – via corridor policies and incentives – to promote a transit-supportive environment.

Existing Conditions: The initial Minimum Operable Segment of the proposed light rail line will pass through the Newark CBD. Adjacent land uses are primarily commercial, institutional (universities) and civic/cultural (churches, performing arts center, parkland, etc). Major employers are concentrated around Penn Station and scattered throughout the rest of the corridor. Total employment in the Newark CBD was 63,800 in 1990 (37 percent of total Newark employment). Transit work-trip mode share for the Newark CBD was 36 percent in 1990. Existing high trip generators include office complexes, a major intermodal rail and bus hub; Rutgers University and Seton Hall Law School; and the NJ Performing Arts Center. The NJ State Development and Redevelopment Plan (SDRP) establishes State- level planning policy. The plan divides the state into planning areas and central places and creates density and land use controls to promote concentration of new development in towns and urban centers. However, the SDRP is not enforceable. Instead, it relies on municipal compliance and cooperation. In 1998, state legislation was introduced to (1) reduce financial assistance to municipalities that do not adopt SDRP policies; and (2) prevent planned development in one municipality from affecting neighboring municipalities. This action indicates "building pressures to limit urban sprawl" in New Jersey. Tax abatements are also available to promote urban redevelopment.

Future Plans and Policies: A master plan for the Penn Station area in downtown Newark was completed in 1998. The plan includes Design Guidelines that are supportive of transit-oriented, pedestrian-friendly development. The plan contains enforceable design guidelines that regulate the land use and physical form of development in the area. Guidelines supportive of transit-oriented, pedestrian –friendly development include: (1) permission of mixed uses; (2) mandated

or encouraged ground floor uses including retail and community facilities; (3) streetwall regulations to establish a uniform street edge; and (4) restriction of curb cuts. An open space network is also proposed, including pedestrian corridors and plazas, as are improvements to pedestrian circulation and the streetscape environment. As part of MOS-1, conceptual plans that include pedestrian amenities have been developed for the proposed Broad Street and Washington Park Stations.

The Centre Street station is being designed to integrate with adjacent development and to allow air rights construction above the station. A number of capital improvements are either planned or underway to increase the pedestrian-friendliness of new development. These include two projects to aid pedestrian access and flow in the vicinity of Penn Station and redevelopment of the Passaic River waterfront, including a park with pedestrian connections to adjacent areas. A new concourse at Penn Station is scheduled to open in late 1999. New public parking is not permitted under the Penn Station Master Plan. New downtown parking in support of commercial construction is limited to one space per 1,000 square feet of office space, and is limited to structures.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 32%

The financial strategy for the initial Minimum Operable Segment of the proposed Newark-Elizabeth Rail Link includes $141.9 million (68 percent of total project costs) in Section 5309 New Starts funding, $25.3 million (12 percent) in FTA Section 5307 Urbanized Area formula funds, $39.8 million (19 percent) in NJ Transportation Trust Fund revenues, and $0.7 (1 percent) in Port Authority of New York & New Jersey funds.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the sound financial condition of NJ Transit and the agency's strong dedicated revenue source (NJ Transportation Trust Fund - TTF). These funds are allocated by the state on an annual basis and are provided via fuel taxes.

Agency Capital Financing Condition: NJ Transit is in good financial condition. Currently, the State provides the agency with $300 million annually in capital funding, via the TTF; the State Commissioner of Transportation has approved an increase in TTF annual allocations to $410 million beginning in 2001. Federal sources are projected to account for less than 50 percent of the agency's FY 2000-FY 2004 capital program. Historically, these projections are consistent with the agency's reliance on Federal funding sources in prior years.

Capital Cost Estimates and Contingencies: Capital cost estimates for the project have increased by 38 percent over the last year. These changes are the result of cost escalation due to project development delays and more precise final design estimates. The current cost estimate is considered reasonable given the project's size and alignment.

Existing and Committed Funding: At this time, all non-New Starts funding is committed to the project. The use of Section 5307 funds as a "soft match" is based on a provision of ISTEA

(Section 1044 of Title 23 and continued under TEA-21) that allows states to count toll revenues collected and used on roadway facilities as a component of non-Federal matching funds.

New and Proposed Sources: No new sources are proposed for the NERL MOS-1 project.

Stability and Reliability of Operating Finance Plan

Rating: Medium-High

The *Medium-High* rating reflects NJ Transit's healthy operating condition. Revenues to operate MOS-1 of the proposed NERL project are considered strong.

Agency Operating Condition: The operating condition of NJ Transit is considered strong. The agency is required by State law to maintain a balanced budget. In FY 1999, the agency's operations generated a surplus of $20.7 million in revenues from fares, State Operating Assistance and other sources.

Operating Cost Estimates and Contingencies: Annual operating costs for MOS-1 are estimated at $2.3 million ($1996). Operating cost estimates are considered reasonable. The 20-year cash flow analysis provided by NJ Transit incorporates rates of growth in farebox revenues (3.5 percent per year) that slightly exceed current trends. This assumption reflects historically high rates of ridership growth. Excluding farebox revenues, combined revenues from the two other principal sources of operating funds – State Operating Assistance and Reimbursements – are projected to rise at just over three percent per year, slightly less than the rate of increase since 1990. However, the cash flow assumptions do not identify specific service requirements nor functional components of operating costs (e.g., introduction of new service, maintenance requirements).

Existing and Committed Funding: All of the proposed sources of operating funds are existing and are considered stable and committed. Operations of NERL MOS-1 are anticipated to require less than $0.2 million in operating subsidies per year.

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

Locally Proposed Financing Plan

(Reported in $YOE)

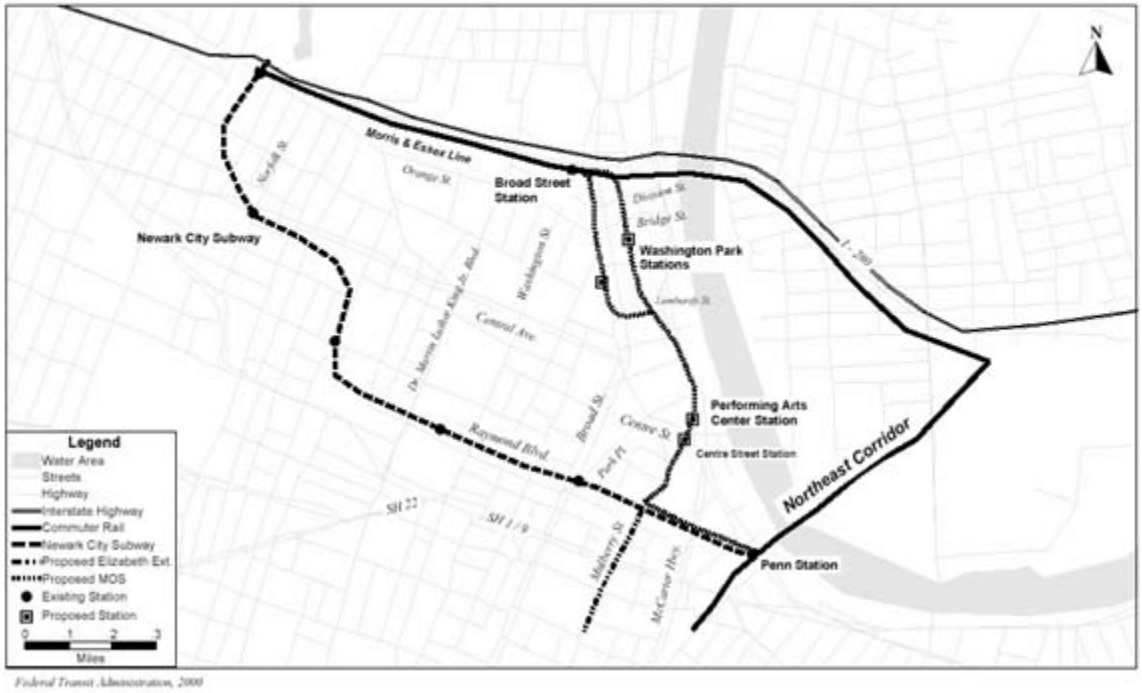
Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$141.9	$29.68 million appropriated through FY 2000.
Section 5307 Urbanized Area Formula Funds	$25.3	

State:		
New Jersey Transportation Trust Fund	$39.8	
Port Authority of NY & NJ	$0.7	
Total:	**$207.7**	

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

Newark - Elizabeth Rail Link

Northern New Jersey



Federal Transit Administration, 2000

Northern New Jersey/Hudson-Bergen MOS-2

Hudson-Bergen Waterfront Light Rail Transit System
Minimum Operable Segment-2 (MOS-2)
(A New Jersey Urban Core Project) Hudson-Bergen MOS-2

Northern New Jersey (Final Design)

(November 1999)

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 Tonnelle Avenue Park-and-Ride lot in North Bergen and 1.0 mile south from 34th Street to 22nd Street in Bayonne. The total capital cost of MOS-2 is estimated at $1,112.8 million (escalated dollars), including borrowing costs. MOS-2, like the initial Minimum Operable Segment (MOS-1) 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 subsidy. MOS-2 is anticipated to carry 34,900 average weekday boardings in 2010.

The full Hudson-Bergen LRT, which includes a 4.7 mile long MOS-3, is a $2.0 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 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.

Hudson-Bergen Waterfront Summary Description

Proposed Project	Light Rail Transit line (MOS-2) 6.1 miles, 7 stations
Total Capital Cost ($YOE)	$1,112.8 million
Section 5309 New Starts Share ($YOE)	$721.6 million
Annual Operating Cost ($YOE)	$39.9 million
Ridership Forecast (2010)	34,900 average weekday boardings 24,100 daily new riders

FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the strong transit supportive land use along the MOS-2 alignment and the adequacy 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 1999.** 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 Final Environmental Impact Statement for the full Hudson-Bergen Waterfront LRT was issued in August 1996. FTA issued a Record of Decision in October 1996. Later the same month, FTA signed a Full Funding Grant Agreement committing $604.09 million of Section 5309 New Starts funds to support the 9.32-mile MOS-1. The Hudson-Bergen LRT project is one of eight elements eligible for funding as part of the New Jersey Urban Core Project. Through FY 2000, Congress has appropriated $326.57 million in Section 5309 New Starts funds to MOS-1 of the Hudson-Bergen LRT.

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 for the revised Hoboken Alignment in June 1999.

Evaluation

Under 3031(c) of the Intermodal Surface Transportation Efficiency Act of 1991, the Hudson-Bergen LRT, as part of the New Jersey Urban Core Project, was exempted from evaluation against the New Starts criteria. This exemption has been continued under TEA-21. Although exempted, NJ Transit provided data on MOS-2 for the FY 2000 and the FY 2001 New Starts Reports. N/A indicates that information is not available for specific criteria at this time.

FTA has evaluated this project as being in final design.

Justification

The *Medium* project justification rating reflects the adequate anticipated travel time savings benefits and the transit-supportive land use within the project corridor.

Mobility Improvements

Rating: Medium

NJ Transit estimates 34,900 average weekday boardings, including 24,100 new riders, will use the MOS-2 in 2010. NJ Transit estimates the following travel time savings for the HBLRTS (MOS-2):

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	2.2 million hours	N/A

Based on 1990 census data, there are an estimated 10,730 low-income households within a ½ mile radius of the alignment for HBLRTS MOS-1 and MOS-2. This represents 16 percent of the total households within a ½ mile radius of the proposed stations.

Environmental Benefits

Rating: Medium

Northern New Jersey is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. NJ Transit estimates that in the year 2010, implementation of the HBLRTS (MOS-2) would result in the following emission reductions:

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 639 annual tons	N/A
Nitrogen Oxide (NOx)	decrease of 34 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 62 annual tons	N/A
Particulate Matter (PM_{10})	decrease of 34 annual tons	N/A
Carbon Dioxide (CO_2)	decrease of 4,078 annual tons	N/A

NJ Transit estimates that implementation of HBLRTS (MOS-2) would result in the following annual reductions in regional energy consumption (measured in British Thermal Units – BTUs):

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 40,962 million annual BTU	N/A

Operating Efficiencies

Rating: Medium

NJ Transit projects a reduction in systemwide operating cost per passenger mile for HBLRTS (MOS-2) compared to the No-Build alternative.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2010)	$0.29	N/A	$0.27

Values reflect 2010 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Low

NJ Transit projects the following cost effectiveness index for the HBLRTS MOS-2 project:

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$22.10	N/A

Values reflect 2010 ridership forecast and 1999 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Medium-High

The *Medium-High* land use rating reflects the existing high densities of the HBLRTS (MOS-2) corridor, along with the comprehensive planning efforts being undertaken by both the State and the individual municipalities that are anticipated to benefit from the proposed project. The rating also acknowledges the relatively low densities that characterize the northern portion of the alignment.

Existing Conditions: The proposed HBLRTS (MOS-2) project extends from the downtown Jersey City area north to the Tonnelle Avenue park-and-ride lot in North Bergen, also serving parts of Hoboken, Weehauken, Union City, and West New York. The area is densely developed, largely residential in nature, and consists of two-plus family residences, including a significant concentration of apartment complexes and some high-rise apartments. In the year 2010, total residential population in the MOS-2 service area is forecast to reach 40,000. MOS-2 serves some of the area's highest residential densities in Hudson County, with many areas such as Union City/West New York at over 30 units per gross acre. Areas of Hoboken and Jersey City are also at a density of 11-30 housing units per gross acre. The downtown Jersey City area contains the largest concentration of office development in Hudson County (26,000 jobs in 1990 or about 17 percent of the 150,000 jobs served by MOS-2). Downtown Jersey City is also forecast to account for the majority of office growth in the County by 2010. In addition, in the year 2020, downtown Jersey City will have 35 percent of the 200,000 jobs in the six towns along the MOS-2 alignment. Through PATH and ferry connections, MOS-2 is anticipated to also serve the Manhattan central business district (2 million jobs). The Manhattan CBD is expected to account for 40-50 percent of the ridership on MOS-2.

Other towns along the MOS-2 alignment currently have significantly less employment. Specifically, along the northern portion of the alignment (West New York and North Bergen), the project appears to serve areas of relatively low employment density (0-4 jobs/acre).

In terms of parking, Jersey City, unlike suburban locations, does not specify a particular amount of parking per 1,000 feet of development. Instead, a low minimum of 0.9 spaces of 1,000 gross floor area of office space is the only requirement. This minimum level of parking supports approximately 30 percent auto share. In Union City, Hoboken, North Bergen and West New York, residential parking is at a premium, with much parking occurring on-street.

Future Plans and Policies: NJ Transit has developed two sets of design guidelines for transit-oriented development. The first is a design manual, *Planning for Transit-Friendly Land Use: A Handbook for New Jersey Communities.* The manual includes implementation tools for station area planning aimed at establishing transit-supportive land use objectives and development principles. The second set of guidelines, contained within the *Urban Design Guidelines Handbook*, was developed as part of the design of the HBLRTS. In addition, the *Hudson County Strategic Revitalization Plan* indicates several initiatives to promote pedestrian-friendly development. These include the Hudson Waterfront Walkway, transit-friendly design standards, and the Streetscape Improvement Program funded by the Jersey City Economic Development Corporation. The plan also includes policies for providing tax incentives for high-density development. Jersey City and several other municipalities have used the power of redevelopment to declare areas blighted. These areas are then awarded 20-year tax abatements for new development. This has been done to encourage the viablity of new development, most of which has been high density. In addition, parts of Jersey City, Union City, West New York and North Bergen have been designated Urban Enterprise Zones (UEZ). Their UEZ designation allows retail and certain office equipment purchases to be subject to only a three percent sales tax instead of the normal six percent. The revenues from sales taxes in these zones can be used for investment in improvements, such as streetscapes, sidewalks, marketing, etc.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 35%

The financial strategy for the second Minimum Operable Segment of the proposed Hudson-Bergen Light Rail Transit System includes $721.6 million (65 percent) in Section 5309 New Starts funding, $273.8 million (24 percent) in Section 5307 formula funds, $117.4 million (11 percent) in NJ Transportation Trust Fund annual allocations.

Stability and Reliability of Capital Financing Plan

Rating: Medium

The *Medium* rating reflects the sound financial condition of NJ Transit and the agency's strong, permanent source of capital funding.

Agency Capital Financial Condition: NJT is in sound financial condition with the New Jerset Transportation Trust Fund (TTF) providing a stable and reliable source of capital funding. Over the past eleven years, 43 percent of the agency's capital funding has come from the TTF. An average annual growth rate of three percent in Federal formula funds and growth in TTF funds of less than one percent annually, is currently anticipated.

Capital Cost Estimates and Contingencies: The 20-year cash flow projections submitted by NJ Transit incorporate moderate rates of growth in capital funding. The agency did not provide

documentation to substantiate the reasonability of capital costs estimates, escalation rates or contingency factors related to HBLRTS (MOS-2) to FTA for evaluation.

Existing and Committed Funding: $41.9 million in FY 1999 Section 5307 formula and NJ TTF funds has been appropriated by the State legislature to HBLRTS (MOS-2), with another $201.2 million programmed for the project in NJTransit's FY 2000 - FY 2004 capital plan. The use of Section 5307 funds as non-Federal share is based on a provision of ISTEA (Section 1044 of Title 23 and continued under TEA-21) that allows states to count toll revenues collected and used on roadway facilities as a component of non-Federal matching funds. NJ Transit will program the remainder of non-New Starts funding in its next capital plan.

New and Proposed Sources: No new funding sources are proposed for implementation of the HBLRTS (MOS-2).

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* rating reflects NJ Transit's healthy operating condition. The rating also acknowledges the absence of information specific to the operation of the proposed project, including an operating contingency plan.

Agency Operating Condition: The operating condition of NJ Transit is considered strong. The agency is required by State law to maintain a balanced budget. In FY 1999, the agency's operations generated a surplus of $20.7 million in revenues from fares, State Operating Assistance and other sources.

Operating Cost Estimates and Contingencies: Annual operating costs are estimated at

$39.9 million (escalated dollars), which would represent less than 3 percent of NJTransit's total systemwide operating budget. NJTransit generates over 50 percent of systemwide operating revenues from the farebox. The agency did not provide operating cost contingencies specific to the HBLRTS MOS-2 project.

Existing and Committed Funding: The 20-year cash flow analysis incorporates rates of growth in farebox revenues (average 3.5 percent) that slightly exceeds current trends. NJ Transit has not experienced a fare increase over the last nine years. Combined revenues from the other two principal sources of funding for the agency's operations – State Operating Assistance and Reimbursements – are projected to rise at just over 3 percent per year, slightly less than the rate of increase since 1990. These sources are existing and are considered adequate to operate the proposed HBLRTS MOS-2 project.

New and Proposed Sources: No new operating revenue funding sources are proposed for the project.

Locally Proposed Financing Plan

(Reported in $YOE)

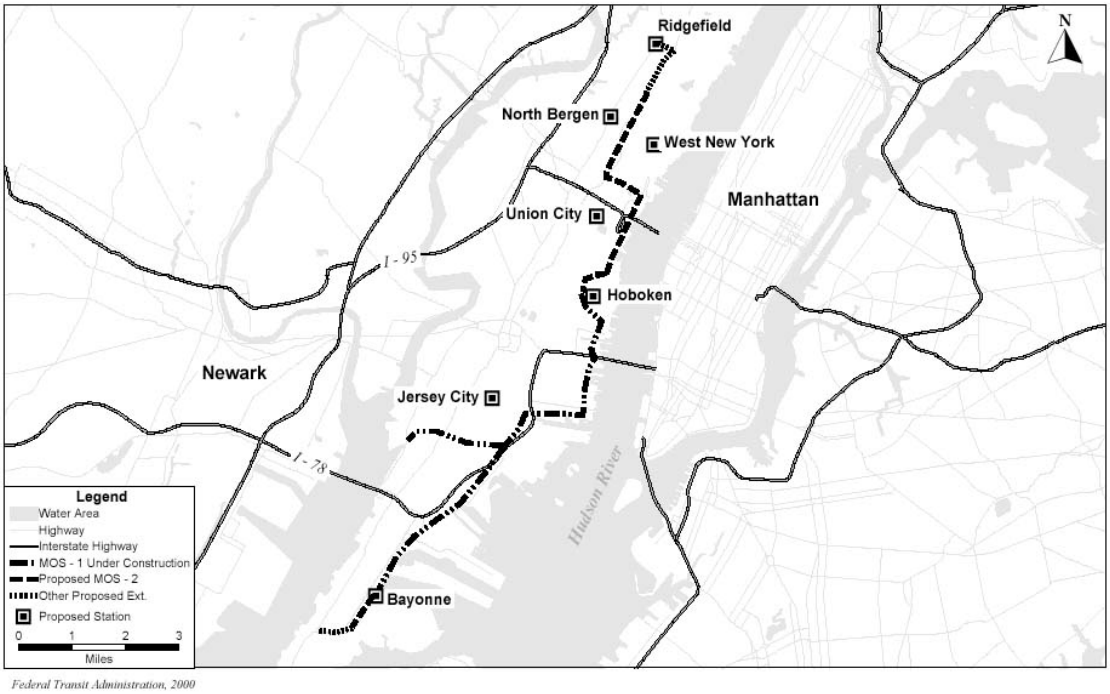
Proposed Source of Funds	Total Funding	Appropriations to Date

	($million)	
Federal:		
Section 5309 New Starts	$721.6	No appropriations to date for HBLRTS (MOS-2).
Section 5307 Formula Funds	$273.8	
State and Local:		
Transportation Trust Fund	$117.4	
Other	$221.6	To be identified before publication of the Annual Report of New Starts.
Total:	**$1,112.8**	

Note: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions. Any errors are due to rounding.

Hudson - Bergen Waterfront LRT System

Northern New Jersey



Federal Transit Administration, 2000

Pittsburgh, Pennsylvania/Stage II LRT Reconstruction

Pittsburgh Stage II LRT Reconstruction

Pittsburgh, Pennsylvania

(November 1999)

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 2400 park and ride lots, and purchase 28 new light rail vehicles.

During 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 2400 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 $383.7 million (in escalated dollars).

Pittsburgh Stage II Light Rail Transit Summary Description

Proposed Project	Light Rail Line; reconstruction of former rail (trolley) lines; 10.7 miles, 21 stations
Total Capital Cost ($YOE)	$383.7 million
Section 5309 Share ($YOE)	$100.2 million
Annual Operating Cost ($1997)	$35.1 million
Ridership Forecast (2015)	24,000 average daily boardings 9,800 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the project's generally adequate justification criteria and strong capital and operating finance plans. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 Federal Transit Administration issued a Finding of No Significant Impact for the project in February 1996. Environmental documentation for the park and ride lots, which was not included in the Environmental Assessment, is under review. Preliminary Engineering was completed in April 1998; final design, including vehicle procurement, is underway. The project is included in the financially constrained long range plan adopted by the Southwest Pennsylvania Regional Planning Commission, the Pittsburgh area MPO.

TEA-21 Section 3030(a)(98) authorizes the "Pittsburgh – Stage II Light Rail" for final design and construction. Through FY 2000, Congress has appropriated $11.82 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 has been reported and evaluated on the Stage II LRT Priority Program. N/A indicates that the data are not available for a specific measure.

FTA has evaluated this project as being in final design.

Justification

The *Medium* project justification rating reflects the project's adequate cost effectiveness and transit supportive land use, strong environmental benefits, and relatively weak mobility improvements.

Mobility Improvements

Rating: Low-Medium

PAAC estimates that the Stage II LRT Priority Program 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)	0.7 million	0.6 million

Based on 1990 Census data, there are an estimated 3622 low-income households within a ½ mile radius of proposed boarding points for the Stage II Priority Program.

Environmental Benefits

Rating: High

The Pittsburgh Metropolitan Area is a moderate non-attainment area for ozone. PAAC estimates that in 2015, the Stage II LRT Priority Program would result in the following annual emissions reductions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 82 annual tons	decrease of 55 annual tons
Nitrogen Oxide (NOx)	decrease of 10 annual tons	decrease of 6 annual tons
Volatile Organic Compounds (VOC)	decrease of 11 annual tons	decrease of 7 annual tons
Particulate Matter (PM_{10})	decrease of 1 annual ton	0
Carbon Dioxide (CO_2)	decrease of 10,480 annual tons	decrease of 6,930 annual tons

In 2015, the Stage II LRT Priority Program is estimated to 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 (millions)	decrease of 131,859 million annual BTU	decrease of 89,696 million annual BTU

Operating Efficiencies

Rating: High

PAAC estimates the following costs per passenger mile for the project.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile	$0.35	$0.37	$0.31

Values reflect 2015 ridership forecast and 1998 dollars.

Cost Effectiveness

Rating: Medium-High

PAAC estimates the following cost effectiveness indices.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$11.80	$7.90

Values reflect 2015 ridership forecast and 1998 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Medium

The *Medium* land use rating reflects transit supportive enhancements of the City of Pittsburgh's land use policies despite the only moderate residential and employment densities in most of the corridor outside of the CBD.

Existing Conditions: The Stage II LRT alignment traverses older, small neighborhoods originally developed in the streetcar era with an orientation to the trolley line, as well as some forested areas and small-scale commercial developments, particularly in outlying areas. The relatively compact and high-density CBD is a regional employment center and includes retail, cultural, and entertainment activities, several colleges, and some residences. Total CBD employment is approximately 120,000 with nearly all of this within ½ mile of LRT and busway stations. Roughly half of downtown parking spaces are in fringe areas in accordance with the Pittsburgh Downtown Plan.

Most land uses along the corridor outside the CBD are low to medium density residential and a few commercial developments and institutional uses; a regional shopping mall is the only major trip generator outside the CBD. The hilly topography constrains growth within the already built-up corridor. There are approximately 32,500 thousand people living within ½ mile of Stage II stations. Paths and stairways connect adjacent neighborhoods to transit stations.

Future Plans and Policies: The Pittsburgh Urban Zoning Code permits high-intensity transit supportive development in the CBD as well as relatively high intensity residential development in city neighborhoods. Zoning has recently been revised to ensure that new developments include pedestrian-friendly design and provide access to transit facilities; some density bonuses are available. Pittsburgh has implemented a tax increment financing district for a new office development to support a new rail station. A few projects have been approved and proposals received for development along the Port Authority's Stage I and Stage II LRT lines, although the scale of these projects is small. Current opportunities for development are limited and local municipalities do not promote significantly changing the nature or scale of development in the corridor or adjacent to transit stations. Local governments emphasize attracting new growth and redeveloping older communities rather than controlling development. Two municipalities in the corridor have adopted zoning to facilitate higher-intensity commercial and residential uses in station areas.

Local Financial Commitment

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 74 %

The project's financial plan proposes $100.20 million (26 percent of total project costs) in Section 5309 New Starts funding. Non-New Starts funding is proposed as follows: $113.2 million (30 percent) in Section 5309 Fixed Guideway Modernization formula funds, $3.9 million (1 percent) in STP flexible funds, $111.8 million (29 percent) in Port Authority Act 26 bonds, $45.8 million (12 percent) in State bonds, and $8.9 million (2 percent) in Allegheny County

Capital Improvement Bonds. In sum, project costs would be approximately 57 percent Federally funded, with $166.4 million or 43 percent funding from State and local sources.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the strong financial condition of the PAAC and reliability of proposed funding sources, as well as the financial viability of the reduced cost project. During 1999, PAAC reconfigured its rail improvement program to match the availability of funds and scaled the new starts project back from $512.5 million reported for FY 2000 to the current $383.73 million Stage II Priority Program project.

Agency Capital Financial Condition: The PAAC is a conservatively managed and financially strong transit agency. Long term debt, backed by Act 26 revenues, represented only about two percent of total assets in 1998. PAAC has recently issued another $66.8 million in 10-year debt for bus fleet replacement. PAAC plans to soon issue $203.5 million in 30-year debt backed by Act 26 revenues, $111.78 million of which will be used in financing the New Starts project. The cumulative debt from these bond issues, which is equivalent to about twenty percent of total assets, is not excessive. PAAC's most recent bond issue received an Aaa rating from Moody's. Allegheny County's financial condition, for capital financing purposes, is viewed as stable. Pennsylvania's financial condition is very strong, with low debt levels and budget surpluses. Its general obligation bonds have been AA rated by both Moody's and Standard and Poor's. Overall, PAAC is viewed as having the financial capability and managerial wherewithal to see successful conclusion of its planned capital program including: Phase I of the MLK East Busway Extension; Phase I Airport Busway/Wabash HOV Facility, scheduled to be completed in 2001; completion of the full modernization of Stage I and II components not included as part of the new starts project; and the Stage II LRT New Starts project.

Capital Cost Estimates and Contingencies: The capital cost estimate for the project has decreased by $128.77 million, or 25 percent, from last year despite presumed 4 percent escalation. This reduction is due to the scaling back of imminently planned rebuilding of Stage II track. Rebuilding of the 1.3 mile Drake Line is being eliminated from the New Starts project, and only .85 miles of the 5.3-mile Library Line track will now actually be rebuilt. However, the power system on the Library Line is being upgraded to remove restrictions on the operating number of LRVs, and the rest of the track will be refurbished somewhat. Overall, the capital cost analysis for the project is reasonable and the funding plan is sound.

Existing and Committed Funding: All non-New Starts funding for the project is committed. PAAC is rebuilding and rehabilitating an existing rail system and, consequently, has banked $96.3 million of its Section 5309 Fixed Guideway Modernization formula funds over the last seven years for Stage II LRT and is committing another $16.9 million in future Fixed Guideway funds for Stage II LRT. This accounts for nearly all of PAAC's Fixed Guideway formula money over the next five years (including 1999), the period during which PAAC plans to complete the Stage II LRT. PAAC proposes to use only $3.9 million in Federal flex funds, all of which have been committed (last year's proposal was to use $125.7 million from this source). PAAC plans to issue $203.5 million in tiered 30-year bonds that are backed by dedicated revenues received annually from the Commonwealth of Pennsylvania; $111.78 million of these funds will be used for the project. Funding from the Commonwealth of Pennsylvania has been approved in the State's 12-year transit plan. Allegheny County provides a one-to-five ratio match for its share of Fixed Guideway and other Federal funds requiring a twenty percent local match. The New Starts funding proposal is equal to the TEA-21 project authorization.

New and Proposed Sources: No new funding sources are proposed for the project.

Stability and Reliability of Operating Finance Plan

Rating: Medium-High

The *Medium-High* rating reflects the financial soundness of the PAAC and the reliability of State support of transit operating subsidies.

Agency Operating Financial Condition: PAAC has been running a small budget surplus for the past two years. The 20-year operating cash flow analysis shows substantial operating surpluses building through 2010, then declining in the outyears. Farebox revenues are projected to cover 21 percent of total operating expenses, which is consistent with historical values. Although local area population has actually declined slightly over the previous six years, total internally generated revenues at PAAC have remained stable. Projections of increased annual revenues generated by increased daily ridership are reasonable. In addition to dedicated local revenue sources, PAAC's operating expenses are covered by a combination of other State and Federal funding sources. Overall, the Stage II LRT Priority Program would provide a small net improvement in system wide operations resulting in cost efficiencies.

Operating Cost Estimates and Contingencies: Projected 2 – 3 percent per year increases in system wide operating costs and operating assistance are considered reasonable. Efficiencies derived from the project's system modernization and improvements will reduce overall system operating and maintenance costs. The rebuilt Overbrook Line will replace inefficiently configured bus routes, operations on the Library Line will be improved, 11 new or improved miles of the Stage II service will be integrated with the 13-mile Stage I line, and the entire integrated LRT system will be modernized. Escalation factors for operating costs are not identified. Operating plans include little provision for covering unanticipated circumstances that would negatively impact net operating income.

Existing and Committed Funding: Twelve percent of total operating expenses are covered by dedicated State formula funds backed by a variety of taxes. Further, a fixed percentage of total State operating assistance, covering 26 percent of PAAC operating expenses, must be directly appropriated from the State budget annually. Allegheny County must match every three State dollars with one of its own for operating assistance.

New and Proposed Sources: No new funding sources are proposed for the project.

Locally Proposed Financing Plan

(Reported in $YOE)

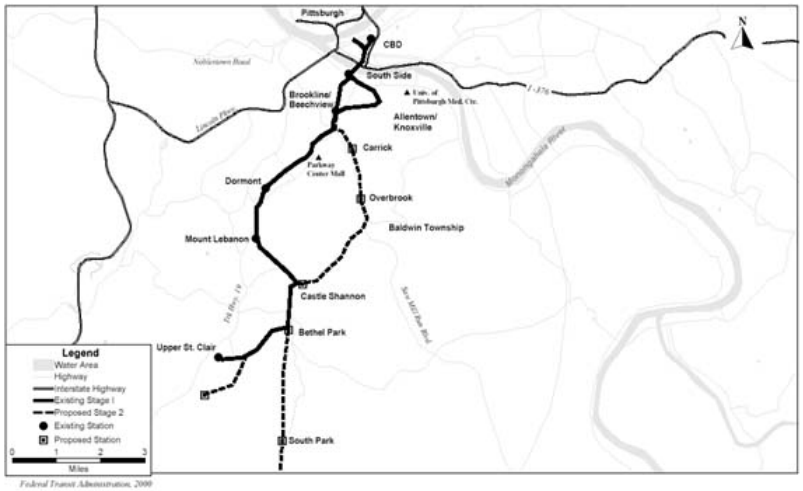
Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$100.2	$11.82 million appropriated through FY

		2000
Section 5309 Fixed Guideway Modernization	$113.20	$96.3 million appropriated through FY 2000
STP - Flexible Funds	$3.9	
State:		
Commonwealth of Pennsylvania - State Bonds	$45.8	
Local:		
PAAC - Act 26 Bonds	$111.8	
Allegheny County - Capital Improvement Bonds	$8.9	
Total:	**$383.7**	

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

Pittsburgh Stage II LRT Priority Program

Pittsburgh, PA



San Diego, California/Mission Valley East LRT Extension

Mission Valley East LRT Extension

San Diego, California

(November 1999)

Description

The Metropolitan Transit Development Board (MTDB) is planning to build a 5.9-mile Mission Valley East Light Rail Transit (LRT) extension of its Blue Line. The project would extend the existing system from its current termini east of Interstate 15 to the City of La Mesa, where it would connect to the existing Orange Line near Baltimore Drive. The line would serve four new stations at Grantville, San Diego State University (SDSU), Alvarado Medical Center and 70th Street, as well as two existing stations at Mission San Diego and Grossmont Center. The proposed project would include elevated, at-grade, and tunnel portions and provide two park and ride lots and a new access road between Waring Road and the Grantville Station. The total project capital cost is $431.0 million (escalated dollars). The project is expected to serve approximately 10,800 average weekday boardings in the corridor by 2015.

Mission Valley East Summary Description

Proposed Project	Light rail extension 5.9 miles, 4 stations
Total Capital Cost ($YOE)	$431.0 million
Section 5309 Share ($YOE)	$330.0 million
Annual Operating Cost ($YOE)	$6.8 million
Ridership Forecast (2015)	10,800 average daily boardings 7,400 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium-High**
FY 2001 Overall Project Rating:	**Highly Recommended**

The overall project rating of *Highly Recommended* is based primarily on the strong transit supportive land use policies in place along the proposed extension and the high level of local funding committed to construct and operate the project. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 Major Investment Study/Draft Environmental Impact Statement (DEIS) was completed in May 1997. The Locally Preferred Alternative was selected by the Metropolitan Transit Development Board in October 1997 with concurrence from the San Diego Association of Governments (SANDAG, the local metropolitan planning organization). FTA approval to enter the preliminary engineering (PE) phase of project development was granted in March 1998. Preliminary engineering was completed in July 1998. This 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 be undertaken in the PE phase. The Final Environmental Impact Statement (FEIS) was completed and the Record of Decision (ROD) was issued in August 1998. FTA approval to enter final design was granted in October 1998. Negotiations between FTA and the MTDB for a Full Funding Grant Agreement are underway.

Section 3030(a)(76) of the Transportation Equity Act for the 21st Century (TEA-21) authorized the project for final design and construction. Through FY 2000, Congress has appropriated $22.11 million in Section 5309 New Starts funds to this 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, the MTDB did not provide information on a TSM alternative. 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 high number of significant trip generators along the corridor and the active land use planning and development efforts of local agencies and institutions, as well as the adequacy of all other justification criteria.

Mobility Improvements

Rating: Medium

The 5.9 mile extension is expected to serve 10,800 average weekday boardings and 7,400 daily new riders by 2015. MTDB estimates the following annual travel time savings.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	1.9 million	N/A

Based on 1990 census data, there are an estimated 1,049 low-income households within a ½ mile radius of the proposed four stations, roughly 18 percent of total households within ½ 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 projects the following annual emissions reductions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 166 annual tons	N/A
Nitrogen Oxide (NOx)	decrease of 23 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 15 annual tons	N/A
Particulate Matter (PM_{10})	decrease of 2 annual tons	N/A
Carbon Dioxide (CO_2)	decrease of 11,659 annual tons	N/A

MTDB estimates that in 2015, the LRT 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 (millions)	decrease of 151,155 million annual BTU	N/A

Operating Efficiencies

Rating: Medium

MTDB estimates the following systemwide operating cost per passenger mile in the year 2015 for the Mission Valley East extension and the No-Build alternative.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2015)	$0.19	N/A	$0.19

Values reflect 2015 ridership forecast and 1997 dollars.

Cost Effectiveness

Rating: Medium

MTDB estimates the following cost effectiveness measure:

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$10.40	N/A

Values reflect 2015 ridership forecast and 1997 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Medium-High

The *Medium-High* land use rating reflects the high number of significant trip generators along the corridor and the active land use planning and development efforts of local agencies and institutions.

Existing Conditions The corridor runs parallel to Interstate 8 in eastern San Diego and La Mesa. The 5.9 mile extension is characterized by a mix of low- to moderate-density industrial, commercial, and residential uses, but includes several major activity centers such as San Diego State University, the Grossmont Regional shopping center, San Diego State University (SDSU), Kaiser Hospital, the Alvarado Medical Center, and the Grantville employment area. Over 24,000 jobs and nearly 10,000 housing units, are located within ½ mile of proposed station sites. The entire LRT corridor (La Mesa to Downtown San Diego) contains over 160,000 jobs, and is expected to contain nearly 200,000 jobs by 2010. Parking is restricted in the corridor east of the Stadium, especially in the area surrounding SDSU. Existing zoning in the corridor is generally 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 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 for joint use and joint development of its properties.

The City of San Diego and the San Diego State University Foundation have undertaken a 59 acre mixed-use, pedestrian-oriented urban village redevelopment project adjacent to the SDSU campus. SDSU plans to integrate the LRT station into the heart of the redevelopment project. Other local plans along the corridor have responded to regional supports for transit-oriented development. The Grossmont Specific Plan, adopted by the City of La Mesa, proposes the joint development with MTDB of a complex of high intensity office, retail, and housing on an MTDB-owned site.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 23%

The financial plan includes $330.0 of Section 5309 New Starts funds (77 percent), $13.7 million of CMAQ flexible funds (3 percent), $67.8 million in State funds (16 percent), and $19.5 million in local funding (5 percent). State and local contributions to the complete LRT trolley system

currently in place in the San Diego metropolitan area constitutes approximately 92 percent of the total system cost.

Stability and Reliability of Capital Financing Plan

Rating: High

The *High* rating reflects the sound financial condition of the MTDB and the agency's strong dedicated revenue sources.

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 increased by nearly 20 percent since November 1998. These changes are the result of value engineering and other cost analysis completed in the last year. Project cost estimates and contingencies are reasonable.

Existing and Committed Funding: All $101 million in non-New Starts funding is committed to the project. The MTDB has documented adequate commitment from the State of California for nearly $68 million in State Gas Tax revenues. MTDB's TransNet revenue is a stable and reliable funding source and is committed to the Mission Valley East Extension project.

New and Proposed Sources: Only existing sources are proposed for construction of the Mission Valley East Extension.

Stability and Reliability of Operating Finance Plan

Rating: Medium-High

The *Medium-High* rating reflects the MTDB's strong operating condition. Revenues to operate the proposed Mission Valley East 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 financial problems.

Operating Cost Estimates and Contingencies: Annual project operating costs are estimated at $6.8 million in 2015 (escalated dollars), which appears 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 systemwide cash flow indicates moderate positive operating balances to address potential operating cost overruns.

Existing and Committed Funding: All of the project's proposed sources of operating funding are considered existing and committed. MTDB has a very ambitious system expansion plan for the next 20 years. MTDB's operating plan forecasts an increase in its farebox recovery ratio from 47 percent in 1998 to 58 percent by 2015. This rate of increase assumes a 5 percent annual increase in fare revenues, which is optimistic. State Transit Development Act and Transit Assistance revenues cover approximately 30 percent and 4 percent, respectively, of MTDB's operating costs. TransNet is proposed to contribute 8 percent of project operating costs through

2008, at which point the source is terminated. Additional funding for operations come from various local sources and are considered stable and committed.

New and Proposed Sources: Proposed operating revenue sources currently exist. San Diego State University is contributing some operating revenue to MTDB.

Locally Proposed Financing Plan

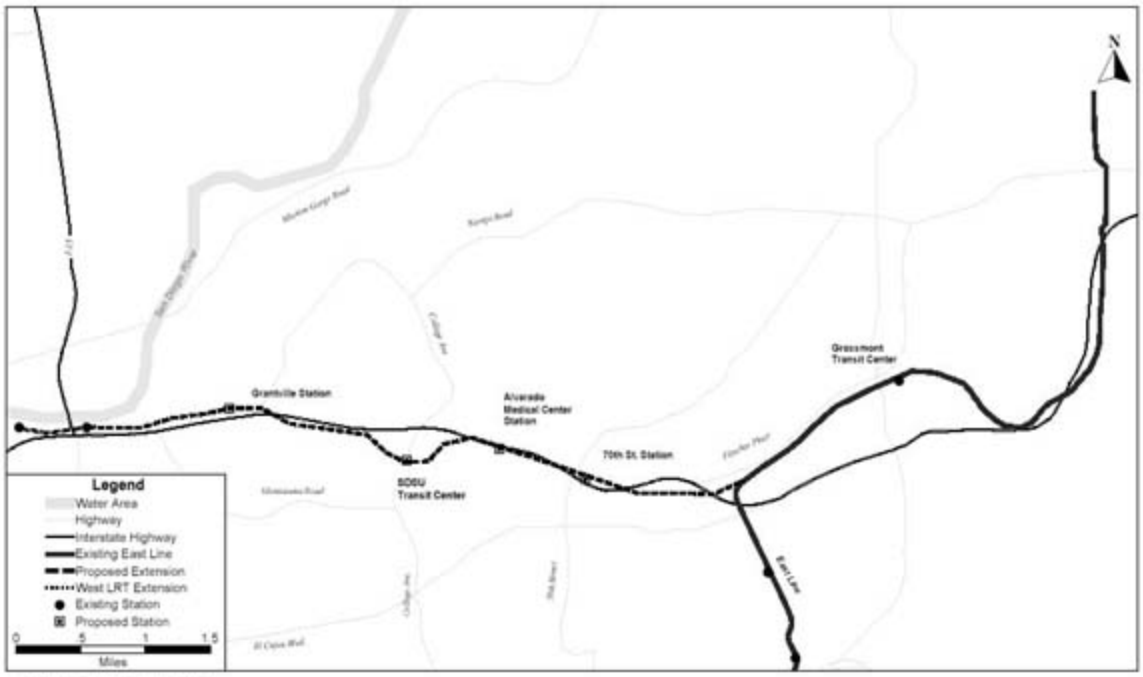
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$330.0	$22.11 million appropriated through FY 2000
Flexible Funds (CMAQ)	$13.7	
State:		
TCI	$4.1	
TSM	$0.8	
STIP	$62.9	
Local:		
TransNet Sales Tax	$19.5	$1.0 million in-kind ROW donation not included in total
Total:	**$431.0**	

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, CA



Federal Transit Administration, 2000

Projects in Preliminary Engineering

Austin, Texas/Light Rail Corridors

Austin Light Rail Corridors

Austin, Texas

(November 1999)

Description

The Austin Capital Metropolitan Transportation Authority (Metro) is proposing to develop a light rail transit (LRT) system in the North/South Central Corridor with phased implementation in the Southeast Corridor.

The initial phase of the locally preferred alternative for light rail development includes 20.0 miles serving a total of 26 stations. This phase includes an 18-mile LRT system, operating along the existing railroad right-of-way owned by Capital Metro from McNeil Road to Lamar at Airport in north Austin, then operating on-street through downtown Austin to Ben White Boulevard in south Austin. The initial phase also includes a 2.0 mile LRT line serving 5 stations from the Central Business District to 5th and Pleasant Valley in east Austin. The 20-mile initial phase is estimated to cost $1,085.8 million (in escalated dollars).

Capital Metro is further proposing a phased implementation of the Austin Area LRT System with development of a 14.6 mile Minimum Operable Segment (MOS) 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

Proposed Project	14.6 mile, 16 station LRT Minimum Operable Segment
Total Capital Cost ($YOE)	$739.00 million
Section 5309 New Starts Share ($YOE)	$369.50 million
Annual Operating Cost ($YOE)	$23.40 million
Ridership Forecast (2025)	37,400 average weekday boardings (17,100 daily new riders)

FY 2001 Finance Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the project's adequate cost-effectiveness and transit-supportive land use, as well as its strong capital and operating financing plans *for this early stage of project development*. The overall project rating applies to this *Annual New Starts Report* **and reflects conditions as of November 1999.** 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. Capital Metro plans to initiate environmental studies in early 2000 for the proposed 20.0 mile initial phase, and to focus the first phase of preliminary engineering on the 14.6 mile MOS. The Capital Metro Board has committed to hold a voter referendum on the service area's preferences regarding light rail no later than November 2000.

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 2000, Congress has appropriated $2.97 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_2)	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. Currently, only minimal development exists along the northern portion of the MOS between McNeil Road and Howard Lane.

By 2025, employment along the MOS is expected to grow to 145,400, while population in the MOS is expected to grow to 109,500. CBD employment is anticipated to increase from 70,000 in 1997 to 86,500 in 2025. Strong growth is occurring in the Austin metropolitan area in general; by 2025, population is estimated to exceed 1.9 million and employment is estimated in excess of 1.1 million. Much of this growth is focused in a north-south corridor, specifically to the north and northwest of central Austin.

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.

14,000 parking spaces for a total campus population of 70,000. There are no specific restrictions on parking outside the CBD.

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, land use plans and development incentives around proposed transit station areas, and a Traditional Neighborhood Development ordinance encouraging higher density, mixed use and transit-oriented development.

The City's Neighborhood Planning Initiative is the primary tool to implement land use policies. Through the development of community-based neighborhood plans, the city will attempt to integrate the goals of the Smart Growth Initiative into land use, zoning, and capital improvement decisions. The Austin City Council's draft downtown design guidelines call for creating mixed-use development, maintaining a fine-grained grid, and creating a more pedestrian-oriented streetscape.

There have been extensive efforts to encourage active public and organizational involvement. A Citizen's Planning Committee, appointed by the Austin City Council, has recommended and implemented a significant emphasis on integrated transportation and land use planning. The University has implemented an extensive Community Vision Project, including design workshops and site committee meetings. Numerous private sector organizations and institutions have actively participated in local planning efforts. And the Austin Area in Motion (AIM) program actively engaged citizens in planning decisions. Station planning activities will be refined during the preliminary engineering phase with the City of Austin, MPO, neighborhood organizations, and TxDOT.

A downtown ordinance provides flexibility from parking and other zoning requirements near station areas. Within the CBD, the parking minimum is 20 percent and the maximum is 60 percent of normal requirements to encourage transit use, and no parking is required for buildings of less than 4,000 square feet. The city is conducting a comprehensive parking study and developing a parking management plan for the Austin Downtown Area.

Other Factors

Economic Impact Analysis: In conjunction with recent planning efforts undertaken to refine the locally preferred alternative, Capital Metro also examined the economic costs and benefits of the fixed guideway investment in the Austin region. The goal of this assessment was to estimate the recommended alignment's impact on congestion management, affordable mobility and pedestrian-oriented development. The study concluded that the recommended transit alignment for the 20 mile locally preferred alternative would yield estimated net economic benefits, exceeding total estimated investment and life-cycle costs, of $384.8 million. The study concludes that the project would yield a real rate of return on investment of approximately 8.4 percent. The MOS is estimated to yield net economic benefits of $323.7 million, representing a real rate of return of 9.7 percent.

Local Financial Commitment

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: Medium-High

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 current 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. The Capital Metro Board action in October 1999 indicated strong policy support for commitment of local sales tax funds to the proposed financing plan. Specific programming of funds is planned as soon as voter preferences have been affirmed through a referendum. The Capital Metro Board has approved the funding necessary to proceed with preliminary engineering and the preparation of an environmental impact statement.

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: 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 in 2000.

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. 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 in 2000.

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 in preliminary engineering.

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. A 30-year cash flow analysis illustrates that ongoing system transit and paratransit operations, system capital replacment needs, as well as LRT operations for the MOS can be financed with currently available sources.

New and Proposed Sources: All proposed operating revenue sources currently exist. No new or proposed sources are needed.

Locally Proposed Financing Plan

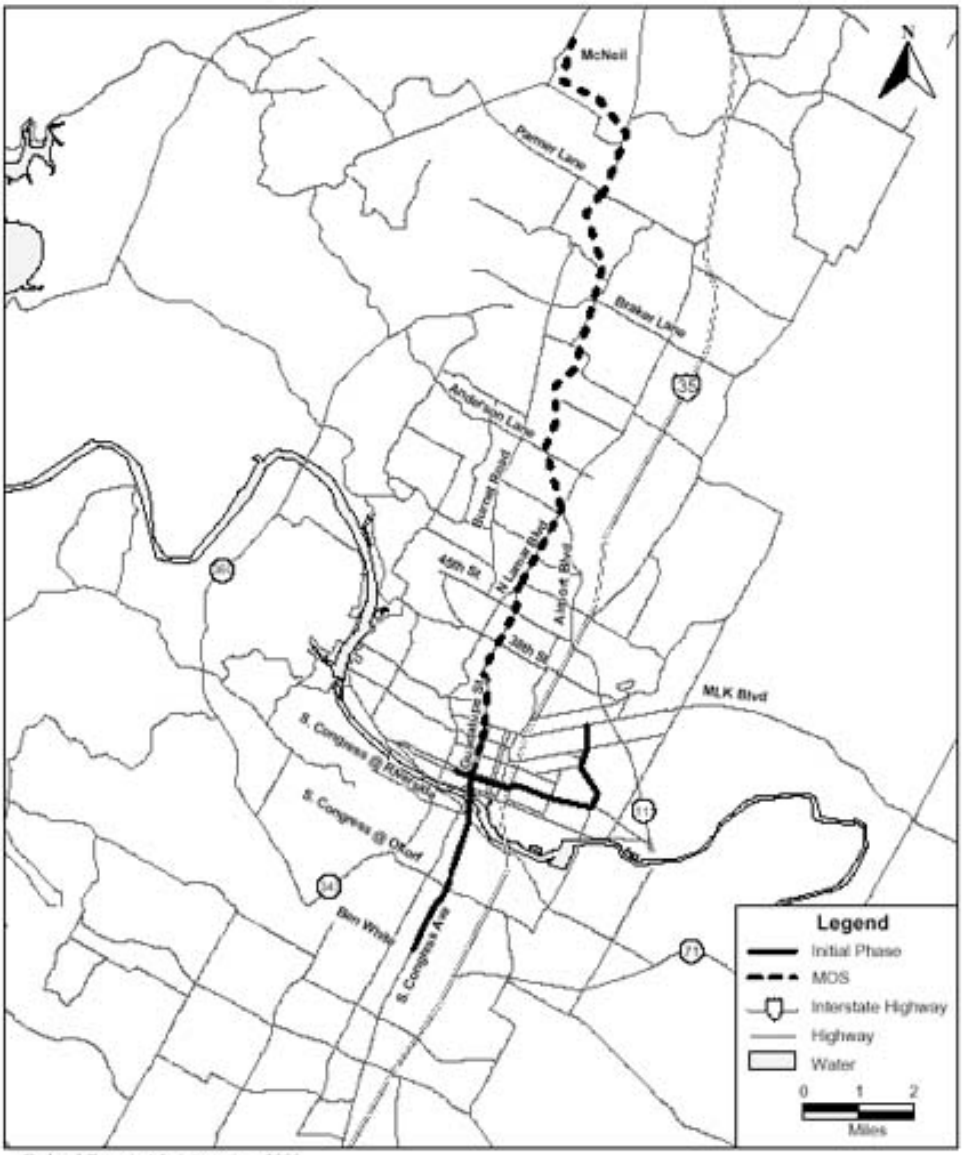
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start	$369.50	$2.97 million appropriated through FY 2000
Local: Cash Reserves (from sale tax revenues)	$103.70	N/A
Dedicated 1% sales tax revenues	$265.80	N/A
TOTAL	**$739.00**	

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

Baltimore, Maryland/Baltimore Central Light Rail Double Tracking

Central LRT Double Tracking

Baltimore, MD

(November 1999)

Description

The Maryland Mass Transit Administration proposes to construct 9.4 miles of double track to upgrade designated areas of the Baltimore Central Corridor Light Rail Line (CCLRL) that are currently single track. The CCLRL 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 proposed project will double track eight sections of the CCLRL between Timonium and Cromwell Station/Glen Burnie. Although no new stations are required, the addition of a second track will require construction of additional station platforms at four stations. 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 included in the double track project are bridge and crossing improvements, 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 MTA estimates the total cost of these improvements at $153.7 million (in escalated dollars). In 2020, average weekday boardings are estimated at 44,000, with an estimated 6,800 daily new riders.

Proposed Project	Light rail line double tracking 9.4 miles, new platforms at 4 stations.
Total Capital Cost ($YOE)	$153.70 million
Section 5309 Share ($YOE)	$120.00 million
Annual Operating Cost ($1997)	$8.4 million
Ridership Forecast (2020)	44,000 average weekday boardings 6,800 daily new riders
FY 2001 Finance Rating:	**Medium-High**
FY 2001 Project Justification	**Medium**

Rating:	
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the project's strong estimated cost effectiveness and demonstrated local financial commitment. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999**. 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 original Central Corridor Light Rail Line (CCLRL) 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 CCLRL, 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.

In January 1999, FTA approved Maryland MTA's request to enter preliminary engineering. The project has been divided into two segments for environmental review purposes. The environmental review phase for the Southern segment, Cromwell Station to Hamburg Street, has been completed with a Finding of No Significant Impact (FONSI) expected by January 2000. The PE phase and a FONSI for the Northern segment, North Avenue to Timonium, is anticipated to be completed in spring 2000. Upon completion of all environmental reviews, MTA is expected to request FTA approval to enter final design.

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 2000, Congress has appropriated $5.65 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 were submitted on the entire 29 mile CLRL corridor. While only certain sections of the line are being improved, criteria ratings are provided for the entire line, unless otherwise noted, since double-tracking sections are scattered throughout the system and will affect service for the entire system. With FTA's permission, the MTA did not provide criteria on a TSM alternative. N/A indicates that the 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 strong cost-effectiveness but relatively weak transit-supportive land use.

Mobility Improvements

Rating: Medium

MTA estimates that the project will serve 44,000 average weekday boardings and attract 6,800 daily new riders by 2020, and would result in the following annual travel time savings.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	0.6 million hours	N/A

Based on 1990 Census data, there are an estimated 7,315 low-income households within a ½ mile radius of 29 stations along the proposed double track project.

Environmental Benefits

Rating: High

The Baltimore Metropolitan Area is a severe non-attainment area for ozone. MTA estimates that in 2020, the CLRL double tracking would result in the following annual emissions reductions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	reduction of 301 annual tons	N/A
Nitrogen Oxide (NO_x)	reduction of 2,700 annual tons	N/A
Volatile Organic Compounds (VOC)	reduction of 210 annual tons	N/A
Particulate Matter (PM_{10})	No Change	N/A
Carbon Dioxide (CO_2)	reduction of 8,170 annual tons	N/A

MTA estimates that in 2020, 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 105,178 million BTU	N/A

Operating Efficiencies

Rating: Medium

MTA estimates the following systemwide operating cost per passenger mile in the year 2020 for the CCLRL double tracking project and the No-Build alternative.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2025)	$0.60	N/A	$0.59

Cost Effectiveness

Rating: Medium-High

MTA estimates the following cost effectiveness index for the project.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$8.70	N/A

Note: 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 that although land use in the City of Baltimore remains fairly transit-supportive, adjacent counties along the corridor have not yet undertaken significant policy measures to increase transit supportive development in their jurisdictions.

Existing Conditions: The Central Corridor Light Rail Line traverses low to moderate density suburban communities, a portion of the Baltimore CBD, and several entertainment and sports centers and tourist attractions. A total of 160,000 employees and 44,000 residents are located within ½ mile of the ten central Baltimore City stations, at densities of 78 and 22 per acre, respectively. Pedestrian accessibility in the city is generally good, with a densely gridded street network. The City of Baltimore has undertaken some revitalization efforts including streetscape improvements in the downtown area. A number of redevelopment and restoration activities are underway or planned in the City near the light rail corridor. The State of Maryland has undertaken programs to improve pedestrian access in station areas. Parking policies and incentives related to transit are currently weak or non-existent. Additional parking has been recommended in the Baltimore CBD in order to increase the economic competitiveness of the area.

Elsewhere in the corridor, the character of commercial and residential development is generally suburban, at low to moderate densities. As a freight corridor, pedestrian access is frequently limited by a lack of sidewalks, due to the presence of adjacent freeways and/or railroad tracks, arterial crossings, and circuitous street systems. The State of Maryland has taken the lead in growth management with the 1996 passage of its Smart Growth Initiative. Existing or planned growth management policies for outlying areas restrict the extent of urban development and urban service provision, but contain relatively weak policies to concentrate development in transit station areas. Commercial redevelopment of formerly industrial areas is continuing to occur at the north end of the corridor. While there have been some activities to improve pedestrian access to these developments, a particular concentration of activity near light rail stations is not noted.

Future Plans and Policies: Current market forces indicate a general outward migration of population from the central city. Employment is forecasted to increase slightly in the CBD and corridor but at a slower rate than regional employment growth. Existing policies to encourage transit-oriented development are generally weak. Baltimore City has undertaken some revitalization efforts, including streetscape improvements in the downtown area. The City of Baltimore has initiated a $350 million West Side Urban Renewal Project to redevelop 18 square blocks of the Howard Street Corridor. Proposed policies would increase the minimum required parking for new development and increase the number of parking structures; however, greater emphasis on parking management would promote transit use.

Anne Arundel County has designated Transit-Oriented Development areas although with relatively modest development targets. Baltimore County has designated an employment center that includes a number of stations. Existing zoning does not generally support increased development in station areas. Design guidelines specifically for station areas have not been developed. Anne Arundel County is in the process of revising its zoning ordinances consistent with the recently adopted general plan, which should allow for mixed-use, possibly higher densities, and improved pedestrian access in station areas. Baltimore County and Baltimore City may revise zoning ordinances in the near future, consistent with general plan revisions that are currently being developed. These plans address the state's Smart Growth Initiative and contain some provisions aimed at coordinating development with transit. The state's long-range transportation plan has been finalized. The MTA has undertaken activities in a few station areas to integrate development with station areas and facilitate additional station area development.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 22%

MTA's financial plan proposes to use $120 million (78 percent of total project costs) in Section 5309 New Starts funds; $3.0 million (2 percent) is proposed from Section 5307 Urban Formula funds and $30.7 million (20 percent) of State funds is also proposed. Section 3030(g)(1)(C) of TEA-21 specifies the 80 percent Federal share for this project, in recognition of previous State and local contributions for all phases of the CCLRL including the State's prior 100 percent investment in the CCLRL main line. Taking these previous local investments into consideration results in an overall 33 percent Federal investment in the Central Corridor Light Rail system.

Stability and Reliability of Capital Financing Plan

Rating: High

The *High* capital finance plan rating reflects the strong financial condition of the Maryland Department of Transportation, parent agency of the Mass Transit Administration, and the State's demonstrated financial commitment to the project.

Agency Capital Financial Condition: All capital transportation investments in the State of Maryland are locally financed entirely through the Maryland Transportation Trust Fund (MTTF) administered by the Maryland Department of Transportation (MDOT). As of June 30, 1999, MDOT had outstanding bond debt totaling $749 million; its overall debt limit equals $1.2 billion. The debt is rated Aa2 by Moody's Investor Services, AA by Standard and Poor's Corporation, and AA by Fitch IBCA, Inc., which are among the highest ratings awarded to transportation agencies.

Capital Cost Estimates and Contingencies: The capital cost estimate for this project has remained constant, accounting for 3 percent inflation. Adequate contingencies built into project cost estimates provide some security against the risk of cost overruns. Beyond this, MDOT's Transportation Trust Fund is considered secure and has additional capability to issue debt should the need arise.

Existing and Committed Funding: All non-Federal funding for the project has been committed. The State has committed $30.74 million over the six years scheduled for the project carried forward in its FY 2000 – FY 2005 Consolidated Transportation Program as the local match, funded by the Maryland Transportation Trust Fund. The Maryland Transportation Trust Fund, with its additional bonding capacity, provides a stable revenue source for capital projects throughout the State. An additional $2.95 million of Section 5307 formula funds has also been programmed to this project.

New and Proposed Sources: No new sources of funding are proposed for the project.

Stability and Reliability of Operating Finance Plan

Rating: Medium-High

The *Medium-High* operating finance plan rating reflects the reliable State support of transit operating subsidies and the financial soundness of MTA operations.

Agency Operating Financial Condition: All activities of MDOT are supported by the MTTF, including debt service, maintenance, operations and administration. Revenues allocated to the MTTF exceed $2 billion annually. MDOT is able to balance anticipated expenditures with projected revenues, despite the fact that the MTTF does not depend on inflation-sensitive revenue sources. MTA's systemwide operating budget in 2003 is anticipated at $275.2 million. The MTA reports farebox revenues accounting for 32 percent of total revenue in FY 1997. Between 1990 and 1997, MTA's operating expenses increased by 64 percent, or at an average rate of 7.3 percent annually. MTA's operating revenues kept pace with increasing expenses and increased by 50 percent during the same time period.

Operating Cost Estimates and Contingencies: Systemwide annual operating and maintenance costs are estimated to increase by $8.4 million with the double tracking improvements, based on the number of additional trains to be operated at reduced headways. The estimated increase in operating and maintenance costs constitutes an increase of less than 1 percent over the MTTF's FY 2004 projected operating costs. Typically, the MTA has offset cost increases with bus service

mile reductions and cost containment programs. Overall, cost increases have been less than general inflation.

Existing and Committed Funding: Total operating expenses are covered by the Maryland Transportation Trust Fund, including debt service, maintenance, operations and administration. Operations and maintenance of the Central Corridor Light Rail system have been fully programmed in the State CTP.

New and Proposed Sources: No new funding sources are proposed for the project.

Locally Proposed Financing Plan

(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start	$120.00	$1.00 million appropriated through FY 1999
State: MDOT/TFF	$30.00	N/A
Total	**$150.00**	

Locally Proposed Financing Plan

(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start	$120.00	$5.65 million appropriated through FY 2000
Federal: Section 5307 Formula Funds	$3.00	N/A
State: Maryland DOT/Transportation Trust Fund	$30.70	N/A
Total	**$153.70**	

Baltimore Central Corridor Light Rail Double Track

Baltimore, MD

Federal Transit Administration, 2000

Boston, Massachusetts/South Boston Piers Transitway - Phase II

South Boston Piers Transitway - Phase II

Boston, Massachusetts

(November 1999)

Description

The Massachusetts Bay Transportation Authority (MBTA) is building Phase I of an underground Transitway connecting the MBTA's existing transit system with the South Boston Piers area, located adjacent to Boston's central business district. 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. Phase I will connect South Station – which is the terminus of the MBTA's south side commuter rail operations, the terminus of Amtrak's Northeast Corridor service, a major bus station, and a station on the MBTA's Red Line – to the World Trade Center in the Piers area. 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 $363.70 million (in 1996 dollars).

South Boston Piers Transitway - Phase II Summary Description

Proposed Project	Underground Transitway 0.5 miles in length; 2 stations
Total Capital Cost ($1996)	$363.70 million
Section 5309 Share ($1996)	$291.00 million
Annual Operating Cost ($1996)	$0.60 million
Ridership Forecast (2010)	37,000 average daily boardings; (6,500 daily new riders)
FY 2001 Finance Rating:	**Low**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Not Recommended**

The overall project rating of *Not Recommended* is based on the project's lack of an updated financial plan and lack of committed local funding. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 February 1993, the MBTA completed alternatives analysis and selected a 1.5- mile underground transit tunnel from Boylston Station to the World Trade Center combined with surface bus operations as the locally preferred alternative. This alternative is referred to as the Full Build Transitway, which was proposed to be constructed in two phases. The Final Environmental Impact Statement was completed in December 1993. FTA issued a Record of Decision in May 1994 applicable to the Full Build Transitway.

In 1994, FTA signed a Full Funding Grant Agreement for $330.73 million, including a contingent commitment for $53.00 million, with the MBTA for Phase I of the Transitway. Phase I is now estimted to open in 2003.

Section 3030(a)(86) of the Transportation Efficiency Act for the 21st Century (TEA-21) authorizes the "South Boston – Piers Transitway" for final design and construction, with no distinction between Phase I and Phase II. No funds have been appropriated for Phase II.

Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Phase II of the Transitway project was never analyzed as a stand alone segment; hence, the basis of comparison for calculating the new starts criteria for Phase II is against the Phase I of the Transitway. Therefore, Phase II is considered the New Start and Phase I the "no build" 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 very strong transit supportive land use along the Transitway corridor, which off-sets the project's poor cost-effectiveness.

Mobility Improvements

Rating: Low-Medium

The 0.5-mile extension is expected to serve 37,000 average weekday boardings and 6,500 daily new riders by 2010. MBTA estimates the following annual travel time savings.

Mobility Improvements	New Start vs. *No- Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	0.5 million hours	N/A

Based on 1990 Census data, the area has an estimated 1,043 low-income households within a ½ mile radius of the proposed transitway tunnel extension, equivalent to 27 percent of total households.

Environmental Benefits

Rating: Medium

Metropolitan Boston is a serious non-attainment area for ozone. MBTA estimates the following emission reductions in 2010.

Criteria Pollutant	New Start vs. *No- Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	reduction of 68 annual tons	N/A
Nitrogen Oxide (NOx)	reduction of 14 annual tons	N/A
Volatile Organic Compounds (VOC)	reduction of 8 annual tons	N/A
Particulate Matter (PM_{10})	No Change	N/A
Carbon Dioxide (CO_2)	reduction of 4,784 annual tons	N/A

MBTA estimates that in 2010 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 47,367 million BTU	N/A

Operating Efficiencies

Rating: Medium

MBTA estimates the following systemwide operating costs per passenger mile in 2010 for Phase II of the South Boston Piers Transitway and the No-Build alternative.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2010)	$0.58	N/A	$0.58

Note: Values reflect 2010 ridership forecast and 1996 dollars.

Cost Effectiveness

Rating: Low-Medium

MBTA estimates the following cost effectiveness index.

Cost Effectiveness	New Start vs. *No- Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$15.60	N/A

Note: Values reflect 2010 ridership forecast and 1996 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: High

The High land use rating reflects strong existing land use and transit-supportive policies in the corridor. Construction and development proposals are consistent with existing high density and land uses. The city and MBTA continue to demonstrate progress in planning and implementing development projects that provide a transit supportive mix of residential, office, and civic space.

Existing Conditions: The South Boston Piers Transitway study area includes downtown Boston and the South Boston Piers/Fort Point Channel area. Dense concentrations of population are found in downtown Boston--residential densities near 28 person per acre. The Urban Core (which includes the Boston peninsula east of Massachusetts Avenue) contains 17 to 19 percent of total regional employment, the largest concentration within the entire metropolitan area. Boston's Urban Core has increased its employment by 22 percent between 1970 and 1990. The Transitway corridor is zoned for mixed-use, high-density development. The Piers area is less intensely developed than the CBD but contains some renovated office development, a recently completed Federal Courthouse, the World Trade Center, a new hotel, and medium-and high-end residential development. Several projects are currently under construction in the area.

Plans and Policies: The Boston Downtown Transportation Plan and various local economic and land use policies promote transit-supportive development in the CBD and South Boston Piers area. The Boston Redevelopment Authority has completed the Seaport Public Realm Plan to guide the development of the Seaport District, specifying development of a mix of residential, office, and civic space while maintaining the industrial character of the area. Land use policies and market demands in the CBD and Piers area have fostered several development projects. Lafayette Corporate Center is now complete with full occupancy. The Boston Convention and Exhibition Center in the Seaport District and Millennium Place near Chinatown are under construction. A 268- room hotel and a 43,000 square foot YMCA facility are also planned near the Chinatown station; other planned development includes housing, manufacturing, research and development, tourism, recreation, retail, food services, visual arts, and maritime industries. Specific growth management policies are indirect and rely upon concentrations of development in the downtown core rather than limitations of development throughout the region. Parking has been drastically reduced for commuters due to a freeze on the number of allowable parking spaces for commercial development within the CBD and the South Boston Piers area, further fostering transit-oriented development. Designated Economic Development Areas, located around the proposed Courthouse Station, allow the greatest development density in the project area and contain the Transitway alignment.

Other Factors

FTA BRT Demonstration Program: In August 1999, the Silver Line was designated as one of FTA's ten 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: 20%

The financial plan includes $291.00 million (80 percent) in Section 5309 New Starts funds and $72.70 million (20 percent) in unspecified State and Local funds. Both amounts are estimated in 1996 dollars.

Stability and Reliability of Capital Financing Plan

Rating: Low

The *Low* capital finance plan rating reflects the lack of a submitted financial plan and other financial information for the project or the MBTA system.

Agency Financial Condition: The materials submitted by the MBTA are dated and do not provide a clear indication of the agency's current financial condition. The 1993 FEIS report outlines steps to be undertaken by MBTA to reduce expenses by $40 million annually through structural changes and privatization initiatives. MBTA is currently developing a recovery plan for the Phase I segment of the South Boston Piers Transitway.

Cost Estimates and Contingencies: The project's capital cost estimates cannot be accurately determined given the information provided by MBTA. The capital plan submitted in prior years provides no indication of the presence of contingency factors or other protection against cost overruns.

Existing and Committed Funding: Based on submitted financial information, no local funding is yet committed to Phase II of the Transitway. MBTA has the authority to issue bonds to address capital needs but there is no evidence of how existing revenue sources would service the debt incurred for the project.

New and Proposed Sources: No new funding sources were identified for the construction of Phase II Transitway project.

Stability and Reliability of Operating Finance Plan

Rating: Low-Medium

The *Low-Medium* rating reflects only marginally higher O&M costs for Phase II over Phase I. The existing financial plan does not provide sufficient detail to analyze these costs or their supporting assumptions.

Agency Financial Condition: The MBTA is in adequate operating condition. In recent years, MBTA has undertaken significant measures to contain operating costs. As a result, the MBTA

has experienced positive operating balances and increasing farebox recovery ratios (from 21 percent in 1990 to 36 percent in 1995).

Cost Estimates and Contingencies: Annual operating costs for Phase II are estimated at $1.5 million. The MBTA did not provide documentation of cost assumptions, escalation factors, or contingencies.

Existing and Committed Funding: MBTA operations are funded through a combination of fare revenues, state assistance, local assessments and Federal aid. Submitted financial materials do not indicate the ability of these sources to cover additional operating expenses related to the Phase II project.

New and Proposed Sources: No new sources of operating funding are proposed for the project.

Locally Proposed Financing Plan

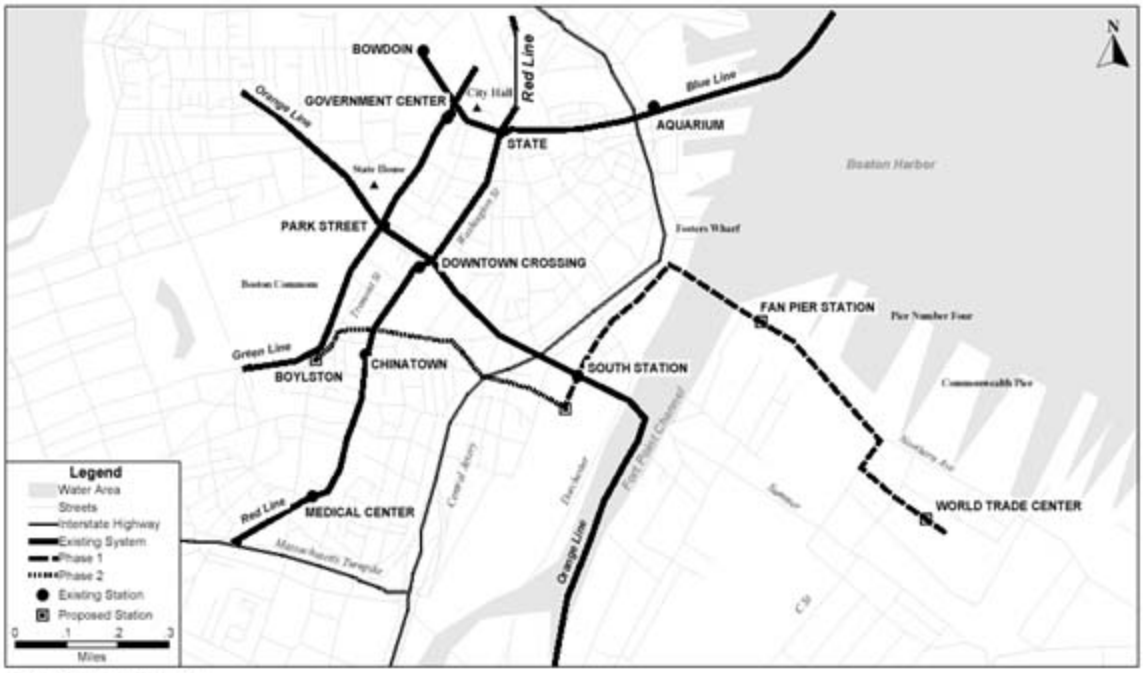
(Reported in $1996)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start	$291.00	$295.49 million appropriated to Phase I through FY 2000 $0.00 appropriated to Phase II through FY 2000
State/Local: Unspecified	$72.70	N/A
Total:	**$363.70**	

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

South Boston Piers Transitway, Phase II

Boston, MA



Federal Transit Administration, 2000

Chicago, Illinois/Douglas Branch Reconstruction Project

Douglas Branch Reconstruction Project

Chicago, Illinois

(November 1999)

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 20th Century with several improvements and 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 $450.8 million (escalated dollars).

Douglas Branch Reconstruction Project Summary Description

Proposed Project	Reconstruction of heavy rail line 6.6 miles, 11 stations
Total Capital Cost ($YOE)	$450.80 million
Section 5309 Share ($YOE)	$320.10 million
Annual Operating Cost ($1997)	$3.10 million (in addition to current Douglas Branch operating costs)
Ridership Forecast (2020)	6,000 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium-High**
FY 2001 Overall Project Rating:	**Highly Recommended**

Highly Recommended rating is based on the strongly transit supportive land use along the corridor and the demonstrated local financial commitment to the project. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 Douglas Branch Reconstruction Project in the region's financially constrained long range transportation plan. CTA is currently completing an examination of the environmental impacts and benefits of the proposed project. This engineering-level work is scheduled for completion in early 2000.

Section 3030(a)(106) of the Transportation Equity Act for the 21st Century (TEA-21) authorizes the "Douglas Branch [CTA]" for final design and construction. Through FY 2000, 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.*

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 land use in the Douglas Branch corridor and the adequacy of all other justification measures.

Mobility Improvements

Rating: Medium

The CTA estimates that the Douglas Branch improvements will attract 6,000 daily new riders in 2020, and that the project will realize the following travel time savings in comparison with the No-Build and TSM alternatives.

Mobility Improvements	New Start vs. *No- Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	4.7 million hours	2.6 million hours

Based on 1990 census data, there are an estimated 10,056 low-income households within a ½ mile radius of the Douglas Branch Line. This represents 30 percent of the total number of households within a ½ mile radius of the Douglas Branch Line.

Environmental Benefits

Rating: High

Northeastern Illinois (which includes the Chicago metropolitan area) is classified as being in "severe" nonattainment for ozone. The region is in attainment for carbon monoxide (CO) and particulate matter (PM10). CTA estimates that in the year 2020, the Douglas Branch Reconstruction project will result in the following emissions reductions:

Criteria Pollutant	New Start vs. *No- Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	reduction of 420 annual tons	reduction of 253 annual tons
Nitrogen Oxide (NOx)	reduction of 86 annual tons	reduction of 73 annual tons
Volatile Organic Compounds (VOC)	reduction of 52 annual tons	reduction of 33 annual tons
Particulate Matter (PM_{10})	No Change	No Change
Carbon Dioxide (CO_2)	reduction of 24,046 annual tons	reduction of 19,262 annual tons

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. *No- Build*	New Start vs. *TSM*
BTU (million)	reduction of 293,194 million BTU	reduction of 227,522 million BTU

Operating Efficiencies

Rating: Medium

CTA estimates the following systemwide operating costs 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)	$0.20	$0.21	$0.21

Values reflect 2020 ridership forecast and 1997 dollars.

Cost Effectiveness

Rating: Medium

CTA estimates the following cost effectiveness indices:

Cost Effectiveness	New Start vs. *No- Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$11.70	$13.70

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 strong existing urban character of the Chicago central business district (CBD) and the high level of employment and transit-supportive environment that characterizes the corridor.

Existing Conditions: The Douglas Branch of CTA's Blue Line has been in operation for nearly 100 years, and serves neighborhoods that originally developed around the transit system. The corridor contains an estimated 54,000 jobs and 115,000 residents within a ½ mile radius of station areas. Densities are high, averaging 9,100 jobs and nearly 20,000 persons per square mile. The University of Illinois at Chicago (25,000 students) is a major trip generator. The line serves a large, dense CBD with an estimated 339,000 jobs. After "looping" through the CBD, the Blue Line also extends to O'Hare International Airport corridor (100,000 jobs), and the Medical Center Complex (70,000 jobs).

The six-county metropolitan area is forecast to grow by 25 percent and 37 percent, in population and employment, respectively, between 1990 and 2020. Forecasts indicate growth rates of 20 percent and 18 percent for population and employment, respectively, in the Douglas Branch corridor. Employment in the Chicago CBD is forecast to increase by 18 percent through 2020.

Parking requirements in the CBD range up to one space per 2,500 sq. ft. for all floor area over 700,000 sq. ft. (increments of floor area up to this amount have lower parking requirements – e.g., parking is not required for the first 140,000 sq. ft. of floor area). Chicago zoning ordinances provide bonuses in reduced parking requirements and increased floor-to-area ratios for direct connections to transit, open space, and arcades.

Future Plans and Policies: The Northeastern Illinois Planning Commission has initiated a three-year effort to develop and advocate a Regional Growth Strategy for Chicago and Northeastern Illinois. Policies call for renewed growth and investment in disinvested areas, as well as cost-effective public investment and high standards of environmental protection in conjuction with new development or redevelopment. A major challenge of this effort is to work with the myriad of governmental, private sector, civic and other interests in the region to identify mutually beneficial actions. Chicago's Downtown Parking Policies (adopted 1989) call for striking a balance between the need for off-street parking and the creation of a "healthful, people-oriented downtown." Recommendations include maintaining a "transit first" orientation in transportation planning; providing close-in, short-term parking serving visitors and shoppers; permitting non-accessory and major accessory facilities only in strategically located "zones of accessibility" (outside of the inner core area); and codifying siting and design guidelines to minimize the impact of parking facilities. Design guidelines and policies emphasize site layout and landscaping to minimize the visual impact of parking on the urban environment.

Other Factors

Empowerment/Enterprise Zone: The Douglas Branch Corridor passes through a Federal Empowerment Zone and state-designated Enterprise Zone. Empowerment Zone incentives include employer wage credits, tax deductions, and tax-exempt bond financing for business

expansion. There are five existing stations adjacent to an Empowerment Zone. Enterprise Zone benefits include various tax exemptions, reductions, and credits for firms locating in the zone. Eight stations are located near an Enterprise Zone.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 29%

The financial strategy for the proposed reconstruction of the Douglas Branch (Blue Line) project includes $320.1 million (71 percent of total project costs) in Section 5309 New Starts funding, $28.8 million (6 percent) in Section 5307 formula funds, $99.1 million (22 percent) in Illinois DOT bonds, and $2.8 million (1 percent) in RTA bonds.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the sound financial condition of CTA and the agency's strong dedicated revenue sources. The rating also acknowledges the commitment of both the RTA and the Illinois DOT to provide funding for the local match of the Douglas Branch Reconstruction Project.

Agency Capital Financial Condition: The CTA, RTA, and State of Illinois are considered to be in sound financial condition. The CTA receives funding for both capital and operating expenses from the Regional Transportation Authority (RTA) of Northeastern Illinois.

Capital Cost Estimates and Contingencies: Capital cost estimates for the Douglas Branch Reconstruction project are considered reasonable. However, CTA did not provide definitive documentation to evaluate escalation rates or provisions to address cost overruns or proposed funding shortfalls.

Existing and Committed Funding: All non-Federal funding for the project is considered committed. The RTA has made available $99.1 million in state funding for the project, consisting of Series B Transportation bond revenues authorized in recent State legislation and proceeds from the state-supported Strategic Capital Improvement Program. RTA has committed $2.7 million in additional bond revenue.

New and Proposed Sources: No new funding sources are proposed for the 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 Blue Line.

Agency Operating Condition: The operating condition of the CTA is sound. The CTA receives funding for operations from the RTA, including revenue generated from RTA's dedicated sales tax, and recovers 45 percent of costs at the farebox. According to the CTA's FY 1999 proposed budget, the agency expects to generate $411 million in revenue. This represents an increase of $6.3 million (1.6 percent) over the FY 1998 budget.

Operating Cost Estimates and Contingencies: CTA did not provide information on operating and maintenance costs specific to the Douglas Branch project, or escalation rates and contingency factors associated with the project. According to an analysis of projected systemwide operating costs, the proposed improvement will increase system costs by $3.1 million vs the No-Build alternative.

Existing and Committed Funding: No project-specific operations and maintenance plan was submitted for the Douglas Branch line. However, the proposed improvement will increase annual systemwide operating costs by $3.1 million, or less than one percent of CTA's annual operating budget. CTA expects to receive $800 million in RTA sales tax, farebox, and additional revenues for system operations in FY 1999. Sales tax revenue is considered a reliable funding source since it responds to both growth in the economy and price level inflation.

New and Proposed Sources: No new funding sources are proposed for the operation of the Douglas Branch (Blue Line) project.

Locally Proposed Financing Plan

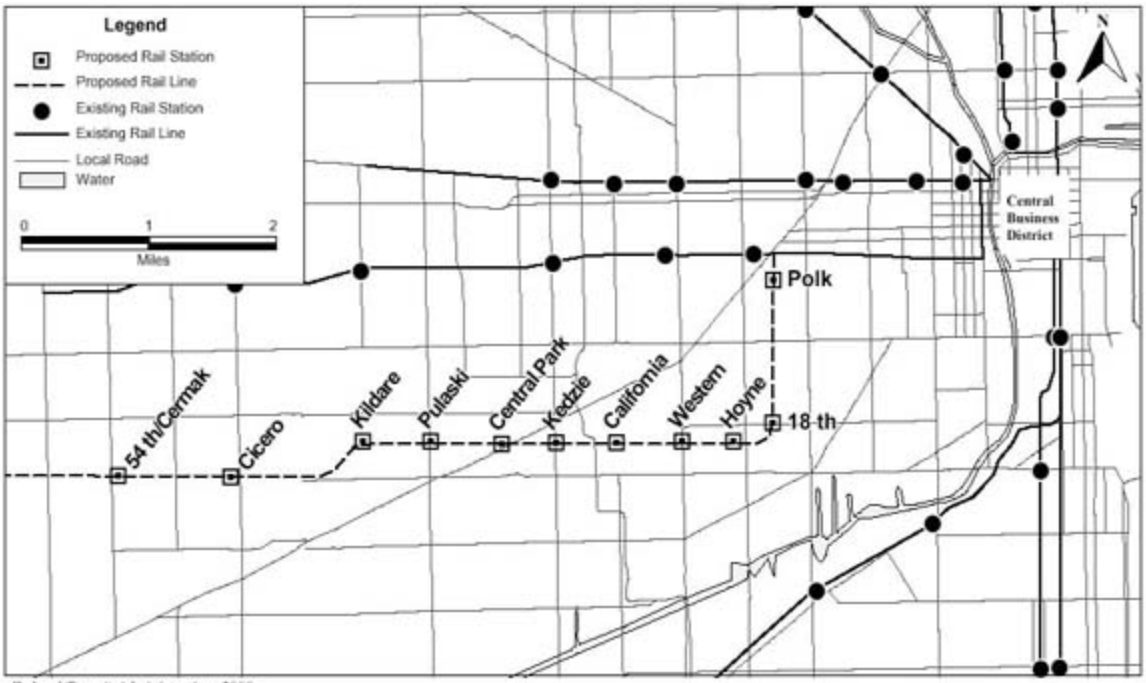
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: §5309 New Starts	$320.10	$4.92 million appropriated through FY 2000
Federal: §5307 Formula/CMAQ	$28.80	N/A
State: Illinois DOT	$99.10	N/A
Local: RTA Bonds	$2.80	N/A
Total:	**$450.80**	

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

Douglas Branch Reconstruction Project

Chicago, IL



Federal Transit Administration, 2000

Chicago, Illinois/Ravenswood Line Expansion Project

Ravenswood Line Expansion Project

Chicago, Illinois

(November 1999)

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

Proposed Project	Capacity expansion of existing heavy rail line and related capital improvements; 9.3 miles, 19 stations
Total Capital Cost ($YOE)	$327.00 million
Section 5309 New Starts Share ($YOE)	$245.50 million
Annual Operating Cost ($1997)	$2.40 million decrease from current Ravenswood Line operating expenses
Ridership Forecast (2020)	12,100 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**High**
FY 2001 Overall Project Rating:	**Highly Recommended**

The *Highly Recommended* rating is based on the project's strong cost effectiveness, transit-supportive land use conditions and capital and operating plans. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 Extension project in the region's financially constrained long range transportation plan. CATS subsequently included the project in the 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. This work is scheduled for completion in early 2000.

Section 3030(a)(11) of the Transportation Equity Act for the 21st Century (TEA-21) authorizes the "Ravenswood Line Extension [CTA]" for final design and construction. Through FY 2000, 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

CTA estimates 12,100 daily new riders on the Ravenswood Line in 2020, and the following travel time savings vs the No-Build alternative.

Mobility Improvements	**New Start vs. *No- Build***	**New Start vs. *TSM***
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" nonattainment 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. *No- Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	reduction of 270 annual tons	N/A
Nitrogen Oxide (NOx)	reduction of 61 annual tons	N/A
Volatile Organic Compounds (VOC)	reduction of 34 annual tons	N/A
Particulate Matter (PM_{10})	No Change	N/A
Carbon Dioxide (CO_2)	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. *No-Build*	New Start vs. *TSM*
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. *No- Build*	New Start vs. *TSM*
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 Share of Total Project Costs: 25%

The financial strategy for the proposed Ravenswood Capacity Expansion project includes $245.5 million (75 percent of total project costs) in Section 5309 New Starts funds,

$14.0 million (5 percent) in Section 5307 Formula funds and $66.7 million (20 percent) in Illinois DOT bonds

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the sound financial condition of CTA and the agency's strong dedicated revenue sources. The rating also acknowledges the commitment of both the RTA and the Illinois DOT to provide funding for the local match of the Ravenswood Line Expansion Project.

Agency Capital Financial Condition: The CTA, RTA, and State of Illinois are considered to be in sound financial condition. The CTA receives funding for both capital and operating expenses from the Regional Transportation Authority (RTA) of Northeastern Illinois.

Capital Cost Estimates and Contingencies: Capital costs estimates for the project are considered reasonable. However, the agency did not provide FTA with definitive documentation to evaluate escalation rates or provisions to address cost overruns or projected funding shortfalls.

Existing and Committed Funding: All non-New Starts funding for the project is considered committed to the project. The Illinois DOT is scheduled to contribute approximately $66.7 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). It should be noted that the construction schedule for the project exceeds the lifespan of the current CIP, and an additional capital funding commitment will be needed by 2004.

New and Proposed Sources: No new sources are proposed for the proposed Ravenswood improvements.

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.

Agency Operating Condition: The operating condition of the CTA is sound. The CTA receives funding for operations from the RTA, including revenue generated from RTA's dedicated sales tax, and recovers 45 percent of costs at the farebox. According to the CTA's FY 1999 proposed budget, the agency expects to generate $411 million in revenue. This represents an increase of $6.3 million (1.6 percent) over the FY 1998 budget.

Operating Cost Estimates and Contingencies: CTA did not provide information on operating and maintenance costs specific to the Ravenswood project, or escalation rates and contingency factors associated with the project. However, an analysis of CTA's estimated systemwide operating costs reveals that the proposed Ravenswood Line improvements will result in a $2.4 million savings in systemwide operations in 2020.

Existing and Committed Funding: No project-specific operations and maintenance plan was submitted for the Ravenswood Line Expansion Project. However, CTA analysis indicates that no additional operating funds are necessary. CTA expects to receive $800 million in RTA sales tax, farebox, and additional revenues for system operations in FY 1999. The sales tax is considered a reliable funding source since it responds to both growth in the economy and price level inflation.

New and Proposed Sources: No new sources of operating funding have been proposed for the Ravenswood line.

Locally Proposed Financing Plan

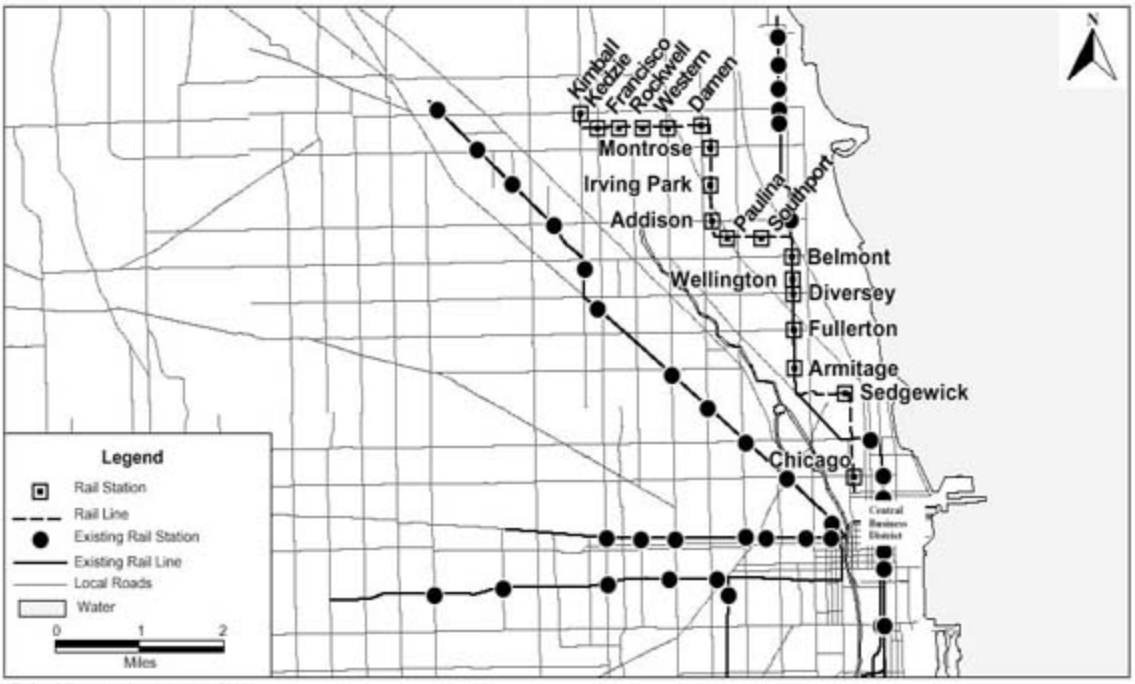
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: §5309 New Starts	$245.50	$4.92 million appropriated through FY 2000
Federal: §5307 (Formula/CMAQ)	$14.00	N/A
State: Illinois DOT Bonds	$66.70	N/A
Total:	**$327.00**	

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 Project

Chicago, IL



Federal Transit Administration, 2000

Chicago, Illinois/Central Kane Corridor Commuter Rail

Central Kane Corridor

Chicago, Illinois

(November 1999)

Description

Metra, the commuter rail division of the Regional Transportation Authority (RTA) of northeastern Illinois, is proposing an 8-mile extension to the existing 36-mile Union Pacific West (UPW) Line (also known as the Central Kane Corridor). 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 action 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 $93.04 million (escalated dollars). Metra estimates that 3,900 average weekday boardings on the entire UPW line in the year 2020.

Proposed Project	Commuter Rail Line (extension and multiple improvements) 8 miles, 2 stations
Total Capital Cost ($YOE)	$93.00 million
Section 5309 Share ($YOE)	$54.30 million
Annual Operating Cost ($YOE)	$3.90 million
Ridership Forecast (2020)	3,900 average weekday boardings 2,700 daily new riders
FY 2001 Finance Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The overall project rating of *Recommended* is based on the project's strong mobility improvements and environmental benefits 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 1999**. 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 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 job market. 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 Central Kane Corridor. The PE/environmental review process is scheduled for completion in Summer 2000.

Section 3030(a)(13) of the Transportation Equity Act for the 21st Century (TEA-21) authorizes the "West Line Extension" for final design and construction. Through FY 2000, Congress has appropriated $11.32 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*. For reporting purposes, Metra provided criteria for an "Existing Airport Improvements (EAI)" socio-demographic scenario. Data from the EAI socio-demographic were used to evaluate the proposed new start project against both the No-build and TSM alternatives. N/A indicates that information for a specific criterion 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 *Medium* project rating reflects strong mobility improvements and environmental benefits of the proposed project while noting 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 Central Kane Corridor commuter rail line in the year 2020. Metra estimates the following annual travel time savings for the project:

Mobility Improvements	New Start vs. *No- Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	0.3 million hours	0.8 million hours

Based on 1990 census data, there is one (1) estimated 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_{10}). Metra estimates that in the year 2020, the proposed project would result in the following emissions reductions:

Criteria Pollutant	New Start vs. *No- Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	reduction of 215 annual tons	reduction of 154 annual tons
Nitrogen Oxide (NOx)	reduction of 36 annual tons	reduction of 26 annual tons
Hydrocarbons (HC)	reduction of 3 annual tons	increase of 5 annual tons
Particulate Matter (PM_{10})	No Change	No Change
Carbon Dioxide (CO_2)	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. *No- Build*	New Start vs. *TSM*
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

Note: 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. *No- Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$13.70	$16.80

Note: 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 Central Kane Corridor, but acknowledges the proactive efforts being undertaken by Metra, the Regional Transportation Authority, 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 Waubonsee 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. 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.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 42%

The financial strategy for the proposed Central Kane Corridor commuter rail extension project includes $54.3 million (58 percent of total project costs) in Section 5309 New Starts funds and $38.7 million (42 percent) in State and local funds.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the sound financial condition of Metra and the agency's positive dedicated revenue sources, and that most of the proposed non-Section 5309 New Starts share of project costs is committed.

Agency Capital Financial Condition: Metra is in sound financial condition. 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; and the agency's portion of the RTA sales tax revenues that exceed Metra's operating expenses. In addition, in 1999, the Illinois legislature passed additional authorization for the Strategic Capital Improvement Program (SCIP) bonds in the amount of $1.3 billion, of which Metra's share is $585 million. An additional $300 million bonding authority was also included in the Illinois legislative package. Metra's share of the increased bonding authority is $135 million.

Capital Cost Estimates and Contingencies: Capital cost estimates for the Central Kane Corridor project are considered reasonable given the project's size and alignment.

Existing and Committed Funding: All non-Section 5309 New Starts funds are considered committed to the proposed project. Programmed resources include SCIP bond program revenues ($13.4 million); sales tax allocations ($20.7 million); and funding from participating municipalities ($4.6 million).

New and Proposed Sources: Only existing sources are proposed for the project.

Stability and Reliability of Operating Finance Plan

Rating: High

The *High* rating reflects the strong operating condition of Metra (the third largest commuter rail system in the country). The projected annual operating and maintenance costs needed for the project represent a minimal impact on Metra's overall operations.

Agency Operating Condition: Metra is projecting systemwide operating budgets through the year 2001 that represent a 55 percent revenue recovery ratio. The proposed project is anticipated to require an additional operating subsidy of $1.3 million (escalated dollars). This estimate represents a 0.8 percent increase in operating assistance requirements. Metra's share of RTA sales tax revenues – for the Central Kane Corridor project - is projected to increase by approximately 4 percent during this time period.

Operating Cost Estimates and Contingencies: Annual operating and maintenance costs are estimated at $3.9 million (escalated dollars) per year. Operating and maintenance cost escalation factors are reasonable.

Existing and Committed Funding: All of the proposed project's sources of operating funds (sales tax revenues) are existing and committed. Sales tax revenues, which are Metra's primary source of non-operating revenue has been forecast - by an independent economic consulting firm – to grow at an annual rate of 4.5 percent through the year 2018. The sales tax is considered a reliable funding source since it responds to both growth in the economy and price level inflation. The project's estimated annual operating deficit of $1.3 million represents less than a 1% increase in systemwide operating assistance requirements. Metra anticipates that the deficit will be covered through the RTA sales tax.

New and Proposed Sources: No new operating revenues are proposed for the project.

Locally Proposed Financing Plan

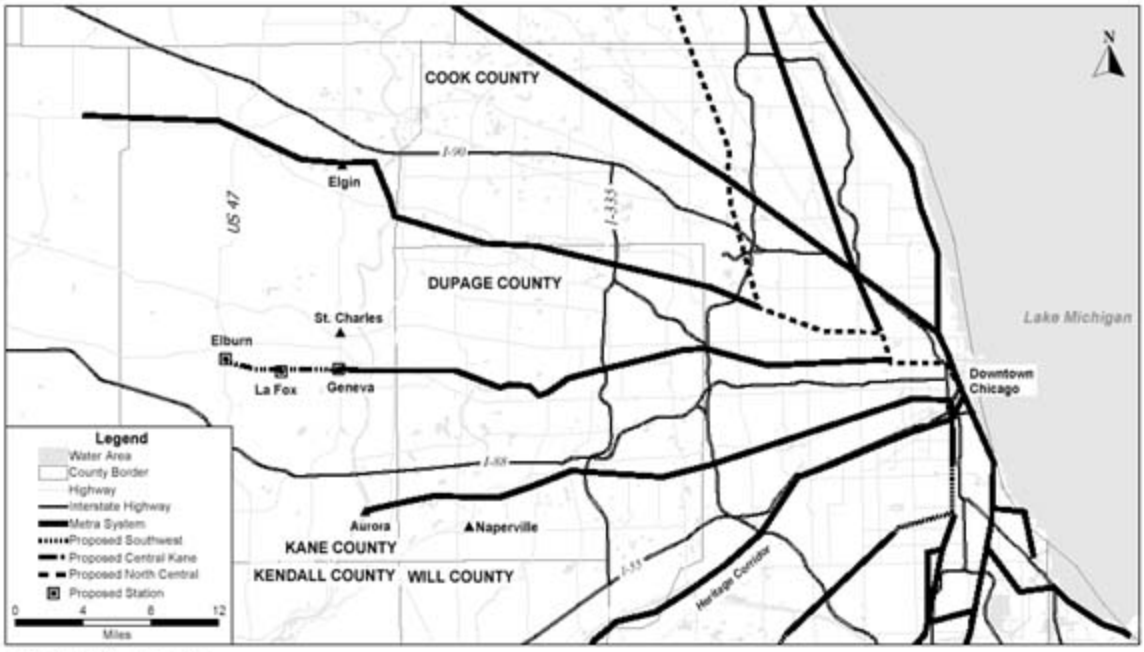
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start	$54.30	$11.32 million appropriated through FY 2000
State: SCIP Bonds	$13.40	N/A
Local: Metra	$20.70	N/A
Local: Municipality Contributions	$4.70	N/A
Total:	**$93.00**	

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

Central Kane Corridor

Chicago, IL



Federal Transit Administration, 2000

Chicago, Illinois/North Central Corridor Commuter Rail

North Central Corridor Commuter Rail

Chicago, Illinois

(November 1999)

Description

Metra, the commuter rail division of the Regional Transportation Authority (RTA) of northeastern Illinois, is proposing to construct 12 miles of an additional (second) mainline 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 $177.9 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

Proposed Project	Commuter Rail Line (upgrade, multiple improvements) 12 miles, 5 stations
Total Capital Cost ($YOE)	$177.90 million
Section 5309 New Starts Share ($YOE)	$110.90 million
Annual Operating Cost ($YOE)	$6.70 million
Ridership Forecast (2020)	8,400 average weekday boardings 8,000 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

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 1999.** 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.**

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. The PE/environmental review process is scheduled for completion in Summer 2000.<

Section 3030(a)(10) of the Transportation Equity Act for the 21st Century (TEA-21) authorizes the "North Central Upgrade – Commuter Rail [Metra]" for final design and construction. Through FY 2000, Congress has appropriated $17.45 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*. For reporting purposes, Metra provided criteria for the "Existing Airport Improvements (EAI)" socio-demographic scenario. Data from the EAI socio-demographic scenario was used to evaluate the proposed new start project against both the No-build and TSM alternatives. N/A indicates that information for a specific criterion 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 *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. *No- Build*	New Start vs. *TSM*
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" nonattainment for ozone. The region is in attainment for carbon monoxide (CO) and particulate matter (PM10). 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. *No- Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	reduction of 159 annual tons	reduction of 78 annual tons
Nitrogen Oxide (NOx)	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_{10})	N/A	N/A
Carbon Dioxide (CO_2)	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. *No- Build*	New Start vs. *TSM*
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. *No- Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$8.90	$11.40

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 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. Parking requirements are generally the responsibility of individual municipalities along the NCC. 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.

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 Share of Total Project Costs: 36%

The financial strategy for the proposed North Central Corridor project includes $110.9 million (64 percent of total project costs) in Section 5309 New Starts funds and $67.0 million (36 percent) in State and local funds.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the sound financial condition of Metra and the agency's positive dedicated revenue sources, and that most of the proposed non-Section 5309 share of project costs is committed.

Agency Capital Financial Condition: Metra is in sound financial condition. The agency has two revenue sources that are available for funding capital projects: a five percent fare increase, introduced in 1989 and dedicated to capital improvements; and the agency's portion of the RTA sales tax revenues that exceed Metra's operating expenses. In addition, in 1999, the Illinois legislature passed additional authorization for the Strategic Capital Improvement Program (SCIP) bonds in the amount of $1.3 billion, of which Metra's share is $585 million. An additional $300 million in RTA bonding authority was also included in the Illinois legislative package. Metra's share of the increased bonding authority is $135 million.

Capital Cost Estimates and Contingencies: Capital cost estimates for the North Central Corridor project are considered reasonable given the project's size and alignment.

Existing and Committed Funding: All non-Section 5309 New Starts funds are considered committed to the proposed project. Programmed resources include SCIP bond program revenues ($27.1 million); sales tax allocations ($19.7 million); and funding from participating municipalities ($19.9 million).

New and Proposed Sources: No new funding sources are proposed for the project.

Stability and Reliability of Operating Finance Plan

Rating: High

The *High* rating reflects the strong operating condition of Metra (the third largest commuter rail system in the country). The projected annual operating and maintenance costs needed for the project represent a minimal impact on Metra's overall operations.

Agency Operating Condition: Metra is projecting systemwide operating budgets through the year 2001 that represent a 55 percent revenue recovery ratio. The proposed North Central improvements are anticipated to require an additional operating subsidy of $0.34 million (escalated dollars). This estimate represents a 0.9 percent increase in operating assistance requirements. Metra's share of RTA sales tax revenues – for the North Central Corridor project - is projected to increase by approximately 0.2 percent during this time period.

Operating Costs Estimates and Contingencies: Annual operating and maintenance costs are estimated at $6.73 million (escalated dollars). Operating and maintenance cost escalation factors are reasonable.

Existing and Committed Funding: All of the proposed project's sources of operating funds (sales tax revenues) are existing and committed. Sales tax revenues, which are Metra's primary source of non-operating revenue has been forecast – by an independent economic consulting firm – to grow at an annual rate of 4.5 percent through the year 2018. The sales tax is considered a reliable funding source since it responds to both growth in the economy and price level inflation.

The project's estimated annual operating deficit of $0.34 million represents a minimal impact on the systemwide operating assistance requirements. Metra anticipates that the deficit will be covered through the RTA sales tax.

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

Locally Proposed Financing Plan

(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts	$110.90	$17.45 million appropriated through FY 2000
State: SCIP Bonds	$27.40	N/A
Local: Metra	$19.70	N/A
Local: Municipality Contributions	$19.90	N/A
Total:	**$177.90**	

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

Chicago, IL

Federal Transit Administration, 2009

Chicago, Illinois/Southwest Corridor Commuter Rail

South West Corridor Commuter Rail

Chicago, Illinois

(November 1999)

Description

Metra, the commuter rail division of the Regional Transportation Authority (RTA) of northeastern Illinois, is proposing to construct 11 additional miles to an existing 29- mile corridor connecting Union Station in downtown Chicago to 179th Street in Orland Park, Illinois. The proposed project would extend commuter rail service from Orland Park southwest to Manhattan, Illinois. The proposed action also includes the construction of three miles of a second mainline track, two additional stations and 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 plans to purchase two diesel locomotives and 13 bi-level passenger cars. Finally, the proposed project also includes the relocation of the downtown Chicago terminal from Union Station to the LaSalle Street Station, also in Chicago. The total estimated capital cost for these South West Corridor improvements is $165.44 million (escalated dollars).

The South West Corridor is an 11-mile area located along either side of the Metra South West Service (formerly Norfolk Southern railroad) between the southwest side of Chicago and Orland Park in Cook County. The corridor also encompasses the central and southwest portions of Will County, including the former Joilet Arsenal property. The corridor includes the most significant hub of employment in the six-county northeastern Illinois region, namely, the Chicago Central Business District (CBD). Metra estimates 13,800 average weekday boardings, including 7,600 daily new riders, using the full South West Corridor line (including the 11-mile extension) in the year 2020.

South West Corridor Summary Description

Proposed Project	Commuter Rail Line (extension, multiple line improvements) 11 miles, 2 new stations
Total Capital Cost ($YOE)	$165.50 million
Section 5309 New Starts Share ($YOE)	$103.90 million
Annual Operating Cost ($YOE)	$7.80 million
Ridership Forecast (2020)	13,800 average weekday boardings 7,600 daily new riders

FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium-High**
FY 2001 Overall Project Rating:	**Highly Recommended**

The overall project rating of *Highly Recommended* is based on the project's strong cost-effectiveness and mobility improvements 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 1999.** 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 April 1997, Metra initiated a Major Investment Study (MIS) for the South West 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 along the corridor to employment in the Chicago CBD. 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 R1, which provides for the upgrade of commuter rail service on the South West Corridor with an extension to Manhattan, Illinois. The LPA was included in the Chicago Area Transportation Study's, (the local Metropolitan Planning Organization) 2020 Long-Range Transportation Plan and Transportation Improvement Program in November 1997.

In December 1998, FTA approved the South West Corridor to initiate preliminary engineering and the environmental review process of project development. The PE/environmental review process is scheduled for completion in Summer 2000.

Section 3030(a)(12) of TEA-21 authorizes the "Southwest Extension [Metra]" for final design and construction. Through FY 2000, Congress has appropriated $4.69 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*. For reporting purposes, criteria are reported for the "Existing Airport Improvements (EAI)" socio-demographic forecast scenario. Data from the EAI socio-demographic scenario was used to evaluate the proposed new start project against both the No-build and TSM alternatives. N/A indicates that information for a specific criterion was not available.

FTA has rated 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 strong cost- effectiveness and mobility improvements, as well as adequate transit-supportive land use.

Mobility Improvements

Rating: High

Metra estimates 13,800 average weekday boardings, including 7,600 daily new riders, on the

South West Corridor project in 2020. Metra estimates the following annual travel time savings for the South West Corridor:

Mobility Improvements	New Start vs. *No- Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	5.60 million hours	6.10 million hours

Based on 1990 census data, there are an estimated 844 low-income households within a ½ mile radius of the affected existing and proposed stations. This represents six percent of the total number of households within a ½ mile radius of the proposed stations.

Environmental Benefits

Rating: Medium

Northeastern Illinois is classified as being in "severe" nonattainment for ozone and is in attainment for carbon monoxide and particulate matter (PM_{10}). 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. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	reduction of 175 annual tons	reduction of 185 annual tons
Nitrogen Oxide (NOx)	reduction of 26 annual tons	reduction of 30 annual tons
Hydrocarbons (HC)	increase of 27 annual tons	increase of 26 annual tons
Particulate Matter (PM_{10})	No Change	No Change
Carbon Dioxide (CO_2)	reduction of 10,977 annual tons	reduction of 12,401 annual tons

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

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (million)	reduction of 143,953 million BTU	reduction of 162,231 million BTU

Operating Efficiencies

Rating: Medium

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

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile ($1997)	$0.22	$0.22	$0.23

Values reflect 2020 ridership forecast and 1997 dollars.

Cost Effectiveness

Rating: Medium-High

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

Cost Effectiveness	New Start vs. *No- Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$8.90	$8.60

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 current low-to-moderate density, single family residential land uses and the generally non-binding transit- supportive corridor policies that characterize most of the Southwest Corridor. However, the rating also acknowledges the proactive efforts of the local municipalities within the corridor (e.g., Village of Manhattan) in developing future transit-oriented development within the proposed corridor.

Existing Conditions: The South West Corridor covers an area generally defined by the Norfolk Southern Railroad, between Chicago and Orland Park, as well as the southwest portion of Will County. The northern segment of the corridor is largely built-out and includes Chicago's central business district (CBD). The urbanized areas on Chicago's southwest side and the older areas of Oak Lawn, Chicago Ridge and Worth are also built-out to allowable densities. The population of the Southwest Corridor grew approximately 2 percent between 1980 and 1990. Most of this growth occurred in the southern half of the corridor (from the Palos area south). Growth of between 23 and 27 percent is forecast for the corridor between 1990 and 2020. Corridor employment is forecast to grow 28 to 30 percent in the period from 1990 to 2020, with employees

increasing by 17 percent in the Chicago CBD and 56–64 percent in areas outside of downtown Chicago. A major trip generator in the corridor is the Chicago CBD (390,000 jobs). The Orland Square Shopping Mall and the Chicago Ridge Mall are within the corridor's station areas. Major institutional uses include the Palos Community Hospital, the Christ Community Hospital, and several community colleges.

Future Plans and Policies: Manhattan Station is promoting development to preserve its historic and architectural character. The Village has a policy promoting an increase in the number of housing units within walking distance of all the community's commuter rail stations. Higher density residential use is planned for the Southwest quadrant of the Orland Park/153rd Street station area. The Village has established separate streetscape and façade improvement programs for its Old Orland area. The Village is currently acquiring key parcels of land in the district to implement its plan. The Village's Comprehensive Plan recommends the redevelopment of the Johnson Lumber Yard, adjacent to the station, to commercial use, using a neo-traditional, pedestrian- oriented focus. With the exception of the City of Chicago, current zoning ordinances for proposed and existing Metra stations do not support the increased development density or enhance demonstrably the transit-friendly character of station areas.

The Village of Manhattan has a strong comprehensive plan that seeks to balance growth and discourage sprawl-type development. The Manhattan station is located within an historic district. The land use component identifies three priority land use designations, which would allow varying intensities of development. These include greenbelt, low-density transition, and suburban living/shopping/employment. The low-density transition concept recommends creative land use planning techniques that will allow the clustering of homes away from the greenbelt, thereby preserving required open space. The Village of Orland Park anticipates that the area within its planning jurisdiction will be fully developed. The community's plan emphasizes the need to strengthen neighborhoods by establishing distinctive housing environments with a unique character. An extensive network of open space in the corridor is proposed as part of the Orland Park plan.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 37%

The financial strategy for the proposed South West Corridor commuter rail project includes $103.86 million (63 percent of total project costs) in Section 5309 New Starts funds and

$61.58 million (37 percent) in State and local funds.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the sound financial condition of Metra and the agency's positive dedicated revenue sources, and that most of the proposed non- Section 5309 New Starts share of project costs is committed.

Agency Capital Financial Condition: Metra is in good financial condition. The agency has two sources that are available for funding capital projects: a five percent fare increase, introduced in

1989 and dedicated to capital improvements; and the agency's portion of the RTA sales tax revenues that exceed Metra's operating expenses. In addition, in 1999, the Illinois legislature passed additional authorization for the Strategic Capital Improvement Program (SCIP) bond program in the amount of $1.3 billion, of which Metra's share is $585 million.

An additional $300 million in RTA bonding authority was also included in the Illinois legislative package. Metra's share of the bonding authority is $135 million.

Capital Cost Estimates and Contingencies: Capital cost estimates for the proposed South West Corridor commuter rail project are considered reasonable given the project's size and alignment.

Existing and Committed Funding: All non-Section 5309 New Starts funds are considered committed to the proposed project. Programmed resources include SCIP bond program revenues ($25.7 million); sales tax allocations ($33.1 million); and funding from participating municipalities ($2.8 million).

New and Proposed Sources: Only existing sources are proposed for the project.

Stability and Reliability of Operating Finance Plan

Rating: High

The *High* rating reflects the strong operating condition of Metra (the third largest commuter rail system in the country). The operating and maintenance costs needed represent a minimal impact on Metra's overall operations.

Agency Operating Condition: Metra is projecting operating budgets through the year 2001 that represent a 55 percent revenue recovery ratio. The South West Corridor project is anticipated to require an additional operating subsidy of $1.71 million (escalated dollars). This estimate represents a 0.8 percent increase in systemwide operating assistance requirements. Metra's share of RTA's sales tax revenues – for the Southwest Corridor - are projected to increase by approximately 0.4 percent during this time period.

Operating Cost Estimates and Contingencies: Annual operating and maintenance costs are estimated at $7.8 million (escalated dollars). Metra anticipates that the deficit will be covered through the RTA sales tax. Operating and maintenance cost escalation factors are reasonable.

Existing and Committed Funding: All of the proposed project's sources of operating funds (sales tax revenues) are existing and committed. Sales tax revenues, which are Metra's primary source of non-operating revenue has been forecast – by an independent economic consulting firm – to grow at an annual rate of 4.5 percent through the year 2018. The sales tax is considered a reliable funding source since it responds to both growth in the economy and price level inflation. The project's annual operating deficit of $1.71 million represents less than a one percent increase in systemwide operating assistance requirements. Metra anticipates that the deficit will be covered through the RTA sales tax.

New and Proposed Sources: No new operating revenues are proposed for the project.

Locally Proposed Financing Plan

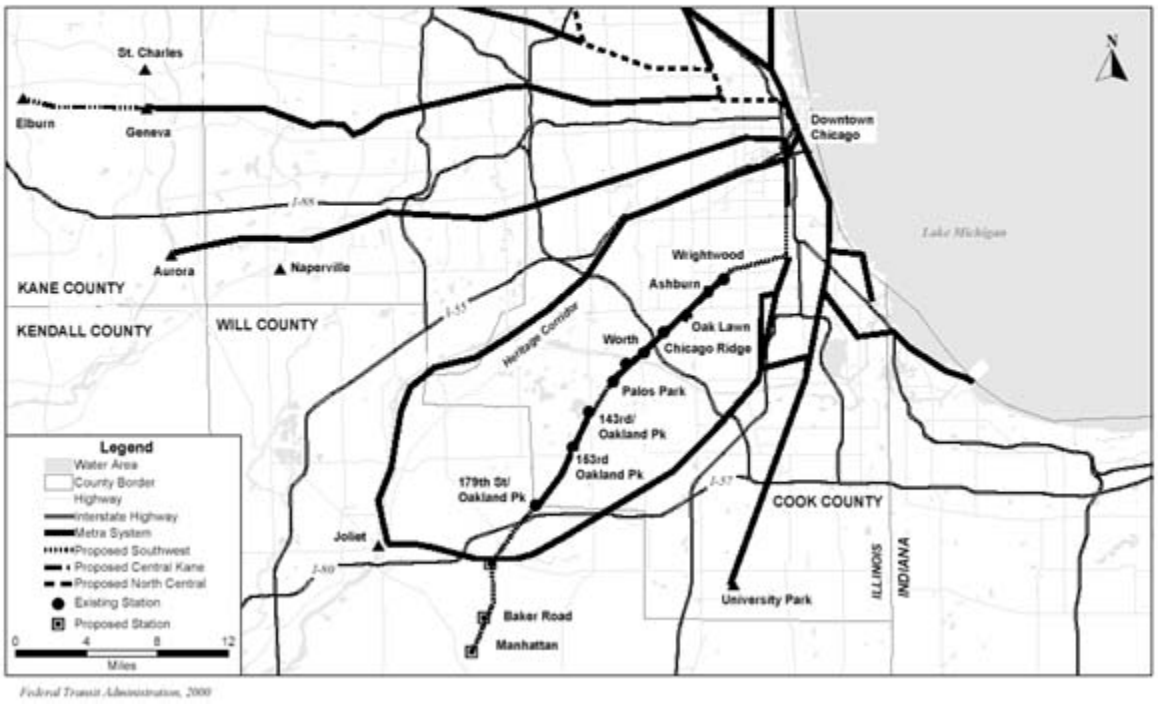
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts	$103.90	$4.71 million appropriated through FY 2000
State: SCIP Bonds	$25.70	N/A
Local: Metra	$33.10	N/A
Local: Municipality Contributions	$2.80	N/A
Total:	**$165.50**	

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

Southwest Corridor

Chicago, IL



Federal Transit Administration, 2000

Cincinnati, Ohio/Interstate 71 Corridor

Interstate 71 Corridor

Cincinnati, Ohio

(November 1999)

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 extending 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 12th 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

Proposed Project	Light Rail Transit (LRT) Line (MOS- 1); 19 miles, 24 stations
Total Capital Cost ($YOE)	$874.70 million
Section 5309 Share ($YOE)	$431.20 million
Annual Operating Cost ($1999)	$18.00 million
Ridership Forecast (2020)	23,800 average weekday boardings 17,600 daily new riders
FY 2001 Financial Rating:	**Low-Medium**
FY 2001 Project Justification Rating:	**Low-Medium**
FY 2001 Overall Project Rating:	**Not Recommended**

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 1999.** 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 March 2000.

Section 3030(b)(66) of TEA-21 authorizes the "Cincinnati/Northern Kentucky Northeast Corridor" for final design and construction. Through FY 2000, 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 the preliminary engineering phase of project development. 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 transit supportive land use.

Mobility Improvements

Rating: 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. *No- Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	1.60 million hours	0.80 million hours

Based on 1990 census data, there are an estimated 13,877 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. *No-Build*	New Start vs. *TSM*
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_{10})	reduction of 1 annual ton	reduction of 1 annual ton
Carbon Dioxide (CO_2)	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. *No-Build*	New Start vs. *TSM*
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. *No-Build*	New Start vs. *TSM*
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: Low-Medium

The *Low-Medium* land use rating reflects only marginal existing transit-supportive corridor policies, but acknowledges the positive existing land use elements of the proposed corridor, including several high trip generators.

Existing Conditions: Total population within a ½ mile radius of stations located near the 19-mile MOS of the proposed light rail project is estimated at 73,700. The MOS serves the Cincinnati central business district (CBD) where total employment is estimated at 79,700 (8.5 percent of the metropolitan region). CBD employment density is estimated at 217 jobs per acre. The proposed station areas encompass a variety of high trip generators, including two universities (University of Cincinnati – 30,000 students; Xavier University – 6,000 students), a new stadium and baseball park, several major hospitals, suburban malls and office parks. There are an estimated 37,800 housing units located near the proposed station areas of the initial MOS. Currently, there are few pedestrian amenities along the proposed alignment, although there are some areas with substantial pedestrian use, including the Northern Kentucky and Cincinnati CBD/stadium areas and the univeristy/medical areas. 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. Currently, employment in the corridor represents 28 percent of regional employment. Between 1995 and 2020, this percentage is expected to decrease to 25 percent as regional employment grows faster than employment in the proposed corridor. In July 1998, a commission was formed in the eight-county tri-state region to address the connection between land use and transportation. 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. The City of Cincinnati has begun to examine potential changes to the area's current zoning code. There are plans for development along several portions of the corridor, including the Ohio riverfront and in the Covington and Cincinnati CBDs. In addition, a plan is being developed for the proposed station area around Xavier University.

Other Factors

Empowerment Zone: A portion of the proposed Interstate 71 corridor is pending designation as a Federal Urban Empowerment Zone (UEZ). Housing, development and transportation policies are described in the nomination plan submitted to the U.S. Department of Housing and Urban Development. The designated UEZ area would encompass six proposed light rail station areas.

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-Medium

The *Low-Medium* rating reflects the lack of commitment of non-Federal funds and the absence of a local entity to build and operate the proposed light rail project. However, the rating also acknowledges the recent efforts by OKI, SORTA and the Transit Authority of Northern Kentucky (TANK) to enter into an interlocal agreement to oversee the preliminary engineering/environmental review phase of project development.

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. The financial condition of the two transit operators (SORTA and TANK) are considered sound.

Capital Cost Estimates and Contingencies: The capital cost estimates for the proposed project are considered reasonable given the project's size, scope, and phase of development. Contingency factors applied to the project are adequate.

Existing and Committed Funding: At this time, no non-Federal funding is yet committed to the MOS-1. The region (Ohio and Kentucky) in which the proposed light rail 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. OKI has established the Metropolitan Mobility Alliance to study and determine a mechanism for financing the local share of capital costs associated with the region's transit system expansions, including the light rail project.

New and Proposed Sources: Project sponsors are currently examining potential new funding sources for the proposed project, including a sales tax, motor fuel tax, or a property tax. A local referendum on these options is currently planned for May 2001.

Stability and Reliability of Operating Finance Plan

Rating: Low

The *Low* rating reflects the absence of a dedicated funding source for the operation and maintenance requirements of the project. The rating also reflects the absence of a local entity to operate the proposed light rail project.

Agency Operating Condition: At this time, a local entity to operate the proposed light rail project has not been identified. Both 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 $18 million (current year 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 for mid-2001 to determine a dedicated operating source of funding for the proposed project.

Locally Proposed Financing Plan

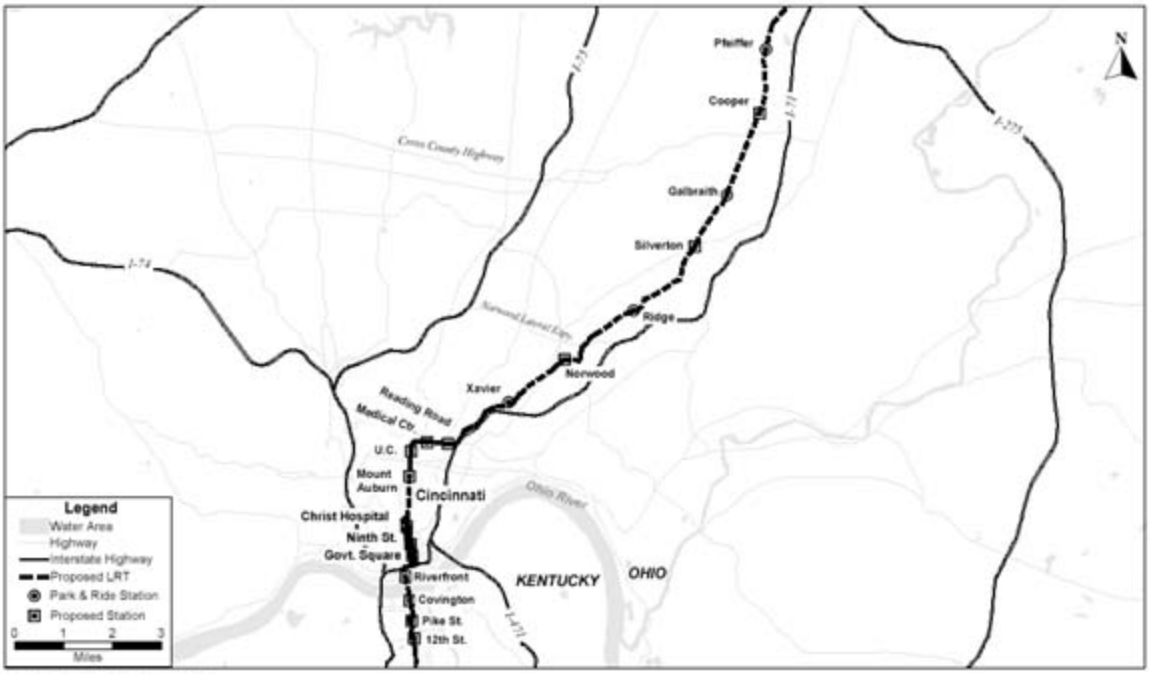
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts	$431.20	$9.75 million appropriated through FY 2000
State:	$215.60	N/A
Local:	$227.90	N/A
Total:	**$874.70**	

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

Cincinnati, OH



Federal Transit Administration, 2000

Cleveland, Ohio/Euclid Corridor Improvement Project

Euclid Corridor Improvement Project

Cleveland, Ohio

(November 1999)

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 Improvement Project (ECIP). The ECIP incorporates a series of transit improvements including an exclusive center median busway along Euclid Avenue from Public Square to University Circle, improvements to East 17th/East 18th 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 on the corridor. The ETBs will have access to the entire length of the proposed corridor. However, conventional buses will not be able to access Euclid Avenue in the CBD. Total capital costs for the ECIP are estimated at $220 million (escalated dollars). GCRTA estimates that 29,500 average weekday boardings will use the ECIP in the forecast year (2025).

The proposed "Transit Zone" will be bounded by Superior Avenue, St. Clair Avenue, West 3rd Street and East 18th Street. The Transit Zone will facilitate the distribution of traffic by conveniently locating bus stops for both eastbound and westbound routes to allow easier transfers between cross-town bus routes. The improvements to E.17th/E.18th 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. East 17th Street will be limited to transit and local auto traffic north of Euclid Avenue. E. 17th Street will be extended from Prospect Avenue one block south for buses only. East 18th Street will carry auto traffic only between the inner belt and the northern edge of the CBD.

Euclid Corridor Improvement Summary Description

Proposed Project	Bus Rapid Transit Lanes (7.34 miles – exclusive, 2.43 miles – mixed traffic) and related capital improvements
Total Capital Cost ($YOE)	$220.00 million
Section 5309 Share ($YOE)	$135.00 million

Annual Operating Cost ($YOE)	$1.30 million
Ridership Forecast (2025)	29,500 average weekday boardings 2,400 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

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 1999.** 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 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 ECIP 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 ECIP. In mid-1999, GCRTA reconfigured the scope of the ECIP to incorporate only the construction of a busway along Euclid Avenue. The rapid rail elements have been eliminated from the ECIP proposal for Section 5309 New Starts funding. The environmental review process is scheduled for completion in Spring 2000.

Section 3030(a)(17) of TEA-21 authorized the "Euclid Corridor Extension" for final design and construction. Through FY 2000, Congress has appropriated $9.49 million in Section 5309 New Starts funds for the Euclid Corridor Improvement 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 attributes and the anticipated travel time savings benefits associated with the project, but acknowledges its 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 ECIP busway in 2025. GCRTA estimates the following annual travel time savings for the ECIP:

Mobility Improvements	New Start vs. *No- Build*	New Start vs. *TSM*
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 nonattainment area for ozone and a moderate nonattainment area for particulate matter (PM_{10}). GCRTA estimates the following emission reductions for the ECIP as compared to the No-Build alternative.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 71 annual tons	N/A
Nitrogen Oxide (NOx)	decrease of 23 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 19 annual tons	N/A
Particulate Matter (PM_{10})	decrease of 1 annual ton	N/A
Carbon Dioxide (CO_2)	decrease of 8,481 annual tons	N/A

GCRTA estimates that the ECIP 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. *No-Build*	New Start vs. *TSM*
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. *No-Build*	New Start vs. *TSM*
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, and the transit-supportive policies within the Cleveland central business district (CBD).

Existing Conditions: The downtown area adjacent to Euclid Avenue includes high-density commercial uses (office and retail), a theater district, a State office complex, the campus of Cleveland State University, and the Gateway Sports complex (20,000- seat arena and 42,000 seat ballpark). Several institutional uses are located in University Circle, including Case Western Reserve University and Cleveland Clinic Foundation. In addition, several cultural uses are also located in the University Circle area, including the Cleveland Art Institute, Art Museum, Cleveland Botanical Gardens and the Natural Science History Museum. Multi-family and single-family housing is located one to two blocks away from Euclid Avenue throughout the corridor.

1995 Cleveland CBD employment was estimated at 121,900 and is projected to decline slightly to 118,600 in 2025 (10.2 and 9.5 percent of metropolitan employment, respectively). CBD employment density is roughly 70 jobs per acre. Total employment in the Euclid Avenue Corridor is estimated at 207,000 (17 percent of regional employment). In 1995, total population within ½ mile of Euclid Avenue was estimated 41,000, with an average density of 7,400 persons per square mile. Population within the Euclid Avenue Corridor is forecast to increase by 10 percent (from 41,400 to 45,400), with density increasing to 8,100 persons per square mile. Evidence of reversal of previous downward trends is supported by recent increases in residential

development in the Cleveland CBD and in the Fairfax and Church Square areas. Total corridor employment is expected to increase by 6 percent over this period.

Future Plans and Policies: A number of organizations and institutions have formed or adopted positions to support reinvestment in fully developed communities and existing infrastructure. These include the First Suburbs Consortium, elected representatives of ten mature inner-ring communities that are advocating a re-examination of public policies and investments; the Federation for Community Planning, an advocacy group for human and social service agencies; the Cleveland Area Board of Realtors; the Catholic Diocese of Cleveland; and Eco City Cleveland, a non-profit educational organization that recently led an outreach project to develop a "bioregional plan."

Other Factors

FTA BRT Demonstration Program: In August 1999, the Cleveland ECIP 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.

Economic Development: The Cleveland area's business community recently put together the *Cleveland Civic Vision and Beyond 2000 Plan.* The plan calls for rezoning of the corridor to convert industrial areas to office uses, and to consolidate commercial and residential areas and eliminate spot-zoning while still allowing mixed-use activities. In addition, an *Economic Development Plan* for the Euclid Avenue Corridor was developed in April 1999, which includes numerous recommendations, including parking mitigation, tax increment financing and redevelopment incentives. The Euclid Avenue Revitalization Plan (May 1998) - a privately commissioned study - focuses on ways to revitalize retail activity along Euclid Avenue in the CBD. A set of *Streetscape Urban Design Guidelines* has also been developed for the ECIP.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 39%

The financial plan for the proposed Euclid Corridor Improvement Project includes $135 million (61 percent) in Section 5309 New Starts funds, $50 million (23 percent) in Section 5307 Formula funds and $35 million (16 percent) in GCRTA/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 ECIP.

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 current financial viability.

Capital Cost Estimates and Contingencies: Adequate cost estimates, escalation rates and contingency factors have been developed for the proposed Euclid Avenue busway project.

Existing and Committed Funding: At this time, 80 percent ($68 million) of non-Section 5309 New Starts funding has been committed to the proposed project via the Ohio DOT's Transportation Review Advisory Commission and GCRTA. GCRTA proposes that the City of Cleveland would provide $17 million of funding towards the project; however, this funding is not yet committed. The City of Cleveland and the GCRTA are currently working on an interagency agreement that will outline the City's financial contribution to the proposed ECIP. This action is scheduled for completion in March 2000.

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

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 ECIP 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 4 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. The regional economy has experienced moderate growth that has generated sufficient sales tax revenue to cover both operations and expansion costs.

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: The entire project's proposed operating costs currently exist. Documentation provided by GCRTA illustrates sufficient financial capacity to cover both operating and capital costs associated with the ECIP. 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 revenue sources are already in existence. No new sources are needed.

Locally Proposed Financing Plan

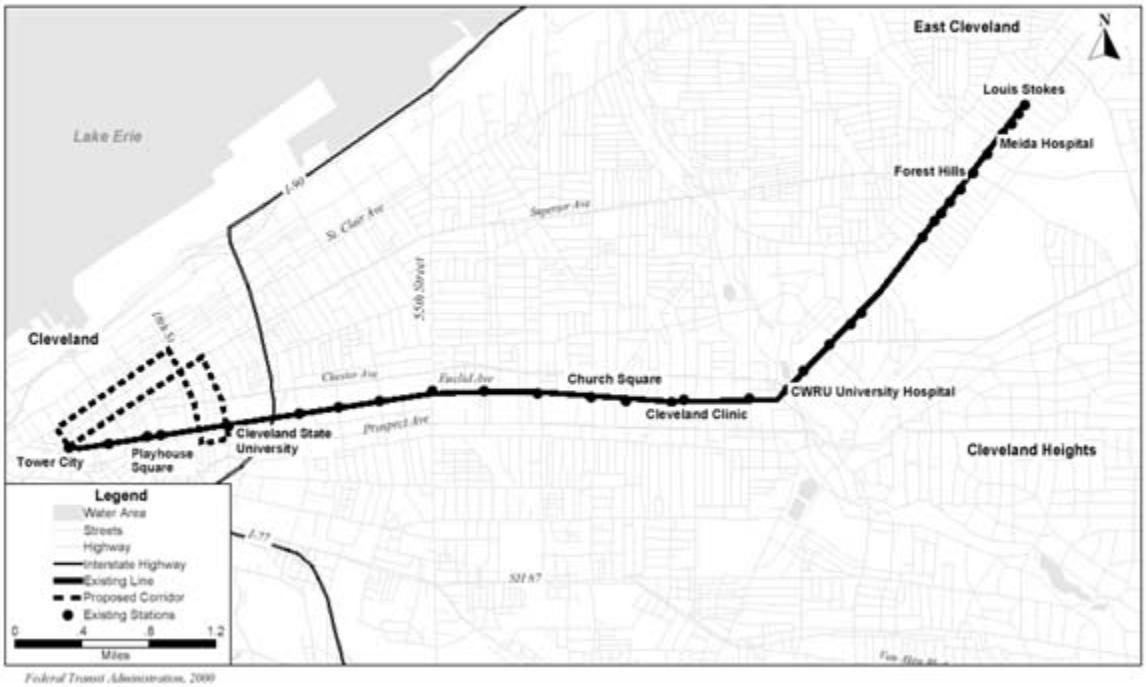
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal:		
Section 5309 New Starts	$135.00	$9.49 million appropriated through FY 2000. $4.72 million rescinded or reprogrammed.
Local:		
Toll Revenue Credits	$50.00	N/A
GCRTA	$18.00	N/A
City of Cleveland	$17.00	N/A
Total:	**$220.00**	

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 Improvement Project

Cleveland, OH



Denver, Colorado/Southeast Corridor LRT

Southeast Corridor LRT

Denver, CO

(November 1999)

Description

The Regional Transportation District (RTD) and Colorado Department of Transportation (CDOT) are proposing the Southeast Corridor project, a 19.0-mile light rail transit (LRT) system extending from the existing LRT station at I-25 and Broadway in Denver along I-25 to Lincoln Avenue and I-25 in Douglas County, with a LRT spur line along I-225 to Parker Road in Arapahoe County. The double track system is proposed to operate on an exclusive, grade-separated right-of-way and connect with the existing 5.3-mile Central Corridor light rail line in downtown Denver at the existing Broadway station. At I-25 and Broadway, the Southeast Corridor would also connect with RTD's Southwest Corridor light rail line that is currently under construction.

The capital cost estimate of the fixed-guideway element is $882.5 million in escalated dollars, including right-of-way acquisition, final design, construction, and acquisition of rolling stock. Annual operating costs in 2020 are estimated at $35.3 million. Ridership is estimated at 38,100 average weekday boardings, 12,900 of which are new riders.

Southeast Corridor Summary Description

Proposed Project	Light rail line 19 miles, 14 stations
Total Capital Cost ($YOE)	$882.50 million
Section 5309 Share ($YOE)	$525.00 million
Annual Operating Cost ($YOE)	$35.30 million
Ridership Forecast (2020)	38,100 average weekday boardings 12,900 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the project's adequate justification criteria and solid capital and operating plan. The overall project rating applies to this Annual New Starts Report **and**

reflects conditions as of November 1999. 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 Colorado Department of Transportation (CDOT), in cooperation with the Denver Regional Council of Governments (DRCOG) and the RTD, completed a Major Investment Study on the corridor in July 1997. The MIS resulted in the selection of a multimodal package of highway and rail improvements. The DRCOG Board has included the LRT locally preferred alternative in the 2020 Long Range Regional Transportation Plan. Preliminary engineering and environmental work were initiated in the spring of 1998. A Draft Environmental Impact Statement was issued in August 1999. A Final Environmental Impact Statement is expected to be issued in December, 1999 and a Record of Decision is expected in early 2000. Opening day is anticipated for 2007.

A combination of Federal Highway Administration (FHWA) and State funds are being utilized to fund Preliminary Engineering (PE). In November 1999 voters approved a local referendum that authorizes RTD to incur debt using low interest rate commercial paper and sales tax revenue bonds for the purposes of constructing the Southeast Corridor LRT. The referendum also extended RTD's current partial exemption from State revenue retention restrictions.

TEA-21 Section 3030(a)(23) authorized the Denver Southeast LRT for final design and construction. Through FY 2000, Congress has appropriated $3.44 million in Section 5309 New Starts 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*. N/A indicates that data are not available for this 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* justification rating reflects the project's generally adequate project justification criteria, although it acknowledges a relatively weak project cost-effectiveness.

Mobility Improvements

Rating: Medium

The 19.0-mile project is expected to serve 38,100 average weekday boardings and 12,900 daily new riders in 2020. RTD estimates the following annual travel time savings for the Southeast line.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	4.00 million hours	3.40 million hours

Based on 1990 data, there are 1,906 low-income households within ½ mile of the 13 proposed (and one existing) stations, representing 15 percent of total households served within ½ mile of the stations.

Environmental Benefits

Rating: Medium

Denver is currently classified a "transitional" non-attainment area for ozone, a "serious" non-attainment area for carbon monoxide, and a "moderate" non-attainment area for PM_{10}. Denver is in attainment for NO_x. RTD estimates the following emissions reductions in pollutant emissions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 276 annual tons	decrease of 231 annual tons
Nitrogen Oxide (NO_x)	decrease of 52 annual tons	decrease of 57 annual tons
Volatile Organic Compounds (VOC)	decrease of 43 annual tons	decrease of 40 annual tons
Particulate Matter (PM_{10})	decrease of 3 annual tons	decrease of 3 annual tons
Carbon Dioxide (CO_2)	decrease of 5,177 annual tons	decrease of 7,905 annual tons

RTD estimates the following savings in regional energy consumption (measured in British Thermal Units–BTU) will occur.

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 2,340 million annual BTU	decrease of 43,288 million annual BTU

Operating Efficiencies

Rating: Medium

RTD estimates the following operating costs per passenger mile.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (1997)	$0.37	$0.39	$0.37

Values reflect 2020 ridership forecast and 1997 dollars.

Cost Effectiveness

Rating: Low-Medium

RTD estimates the following cost effectiveness indices:

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$18.40	$14.80

Values reflect 2020 ridership forecast and 1997 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Medium

The *Medium* land use rating reflects both the existing and relatively dense land uses and strong transit supportive policies within Denver *and* the generally less dense development and weaker policies outside of the City.

Existing Conditions: The corridor generally parallels Interstate 25. High density commercial and office space constitute the central business district. Moving southward towards the proposed University Station, the University of Denver and medium density housing surround the station area. Low density residential and commercial space characterize the southern half of the corridor, with some moderate density office development. Downtown Denver, to which this corridor connects, contains a dense concentration of over 102,000 jobs. Although 79,000 jobs are scattered throughout the remainder of the corridor, outside of the Denver Technological Center there is no significant concentration of employment.

The proposed corridor would connect downtown to the Denver Technological Center, which is part of the Southeast Business District. Parking appears plentiful and is generally developed as large lots outside of the CBD. Zoning in the corridor is moderately supportive of transit, with the more supportive policies existing in Denver and less supportive outside of the City. Zoning is in place at all but one of the Denver station areas to implement the "Transit Station Development Program" that requires sidewalks, landscaping, and transit-friendly site design, mixed-use developments, and trip reduction programs. The City of Greenwood Village has new Town Center zoning and Mixed-Use Commercial zoning. Modest growth management policies exist in the region. The Denver Regional Council of Governments is working to establish an urban development boundary.

Future Plans and Policies: Denver's Comprehensive Plan suggests that regional centers should be developed as transit destinations. It includes policy statements that support the provision of incentives for higher density transit-oriented development. The City's Comprehensive Plan's Action Agenda endorses the improvement of pedestrian-oriented streets. Denver is preparing a

Transit-Oriented Development (TOD) Zoning District to explicitly encourage transit-oriented and mixed-use developments. The Denver Regional Council of Governments is working to establish an urban development boundary. Some jurisdictions, such as the Cities of Aurora and Greenwood Village, state or suggest urban design standards. The Douglas County Master Plan suggests the development of land-planning criteria that promote transit use and protect options

for future transit development. In November 1999, the Arapohoe County Board of County Commissioners adopted a resolution that identifies policies to support light-rail transit. Land use policy within roadway corridors where light-rail transit will be located will be reviewed for incorporation into the Comprehensive Plan update.

Although some existing corridor plans and policies support transit-oriented development, others are weak or are still in the developmental stage. While most cities in the corridor contain some provisions promoting a concentration of development around transit, statements do not specify how such general goals will be implemented or tied to certain development policies. Policies to manage and concentrate growth around transit are still being prepared and not yet fully articulated. Action on an urban growth boundary and a regional growth plan is still pending. A Parking Management Plan for all stations is being prepared, but no specific strategies such as pricing have been determined. No specific targets for reducing parking ratios have yet been articulated for the southern portion of the corridor.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 40%

RTD proposes that $525.0 million (60 percent) in Section 5309 New Start funds and $357.5 million (40 percent) in local funds be applied to the project.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the strong financial condition of RTD and the dedicated bond revenues to support the project's capital cost.

Agency Capital Financing Condition: The RTD is in solid financial condition. The agency relies on dedicated sales tax revenue to support capital and operation needs. Because of the area's growth, the sales tax revenue has been a stable and reliable funding source. The tax rate of 0.6 percent generates nearly $200 million in annual revenue. RTD will begin operation of new LRT lines in 2000 (Southwest Corridor) and 2001 (Central Platte Valley) and is still expected to adequately fund construction of the Southeast Corridor project.

Capital Cost Estimates and Contingencies: Capital cost estimates for the project have increased 84 percent since its major investment study. Project cost escalation is primarily a result of further engineering and the addition of four stations to the proposed system. Despite cost increases, RTD has reduced its New Starts share of project costs from 80 percent to 60 percent. Available working capital exceeds $100 million through most of the project developmental period and reaches $390 million at the conclusion of the twenty-year period. This provision has been included in the cash-flow analysis for unexpected cost overruns or revenue shortfalls.

Existing and Committed Funding: Following the November 1999 referendum, all but $30 million (over 90 percent) of non-New Starts funds are now committed to the Southeast corridor project. The commercial paper bond revenues authorized by the vote are expected to be sufficient to cover the local share of project capital costs. RTD and CDOT will donate right-of-way and prior improvements as in-kind contributions.

New and Proposed Sources: The RTD is proposing that as-yet-undetermined local and developer contributions will account for $30 million in estimated project costs.

Stability and Reliability of Operating Finance Plan

Rating: Medium-High

The *Medium-High* rating reflects the RTD's strong dedicated operating revenue stream.

Agency Operating Condition: RTD's operating financial condition is good. In recent years, the agency has experienced positive operating surpluses, an increased farebox recovery of 23 percent (compared to 17 percent five years ago) a consistent 4 percent annual increase in ridership levels during a six-year period, and increased retained earnings of over $375 million.

Operating Cost Estimates and Contingencies: Annual operating costs are estimated at $35.3 million in escalated dollars. Operating and maintenance costs and inflation assumptions are reasonable for the project's size and scope.

Existing and Committed Funding: RTD proposes funding operations through a combination of the system-generated revenue and regional sales tax revenues. The RTD sales tax mechanism has been in-place and generated revenue for RTD projects for many years. The historical growth rates of the past five years have been at about 7.6 percent while the revenue projections used a more conservative 5.6 percent growth rate.

New and Proposed Sources: All proposed operating revenue sources currently exist. No new sources are needed.

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start	$525.00	$3.44 million appropriated through FY 2000
Local: Sales Tax Revenue-Based Bond Proceeds	$320.00	N/A
ROW donations: Local/Private Contributions	$30.00	N/A
Total:	**$882.50**	

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

Southeast Corridor

Denver, CO

Federal Transit Administration, 2000

Hartford, Connecticut/New Britain – Hartford Busway

New Britain - Hartford Busway

Hartford, Connecticut

(November 1999)

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 $80.0 million in escalated dollars. ConnDOT proposes to begin operations of the New Britain Hartford Busway in 2003.

New Britain-Hartford Busway Summary Description

Proposed Project	Bus Rapid Transit (BRT) 9.6 miles, 12 stations
Total Capital Cost ($YOE)	$80.00 million
Section 5309 Share ($YOE)	$51.60 million
Annual Operating Cost ($YOE)	$6.50 million
Ridership Forecast (2020)	13,300 weekday boardings 8,800 daily new riders
FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

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 1999.** 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 21st Century (TEA-21). To date, $1.49 million in New Starts funding has been appropriated.

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 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.*

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 13,300 average weekday boardings and 8,800 daily new riders by 2020. Hartford 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. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	2.60 million hours	0.70 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. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 269 annual tons	decrease of 183 annual tons
Nitrogen Oxide (NOx)	decrease of 40 annual tons	decrease of 23 annual tons
Volatile Organic Compounds (VOC)	decrease of 42 annual tons	decrease of 29 annual tons
Particulate Matter (PM_{10})	0	0
Carbon Dioxide (CO_2)	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).

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	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.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (YOE)	$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.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$5.50	$4.30

Values reflect 2020 ridership forecast and 1997 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Low-Medium

The *Low-Medium* rating reflects the absence of significant policies to encourage transit supportive land use in the corridor and the limited coordination of land use plans among the six jurisdictions served by the proposed Busway.

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. Land uses in the Farmington portion of the corridor are predominantly medium to high-density residential developments. There are a total of 20,322 households within one-half mile of the twelve stations. The number of housing units in 1995 was 21,197 and is expected to rise to 25,282 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 for the half-mile total station area 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, and New Britain is also actively encouraging redevelopment of its downtown area. However, there is no coordinated approach to encouraging transit supportive development in the six jurisdictions along the proposed Busway. Likewise, there are no strategies for transit station area development, coordinated policies to reduce sprawl, or coordinated parking policies. Station area zoning plans have not been 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: 35%

ConnDOT proposes a $51.6 million Section 5309 New Start share (65 percent) of total project capital costs. The financial plan includes $1.5 million in FHWA National Highway System Funds (2 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 $16.0 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 and adequacy of the project's financial plan at this stage of development.

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 do not include contingencies. It is likely that capital cost estimates will increase as preliminary engineering progresses.

Existing and Committed Funding: Existing non-New Starts funding for the proposed Busway project total $28.4 million. ConnDOT's contribution towards the project is $16.0 million, however, these funds are not formally committed. Additional funding will come from other federal sources; the various sources include 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.

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 $6.5 million. These estimates are reasonable given the project size, scope, and current stage of development.

Existing and Committed Funding: Operating costs are proposed 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.

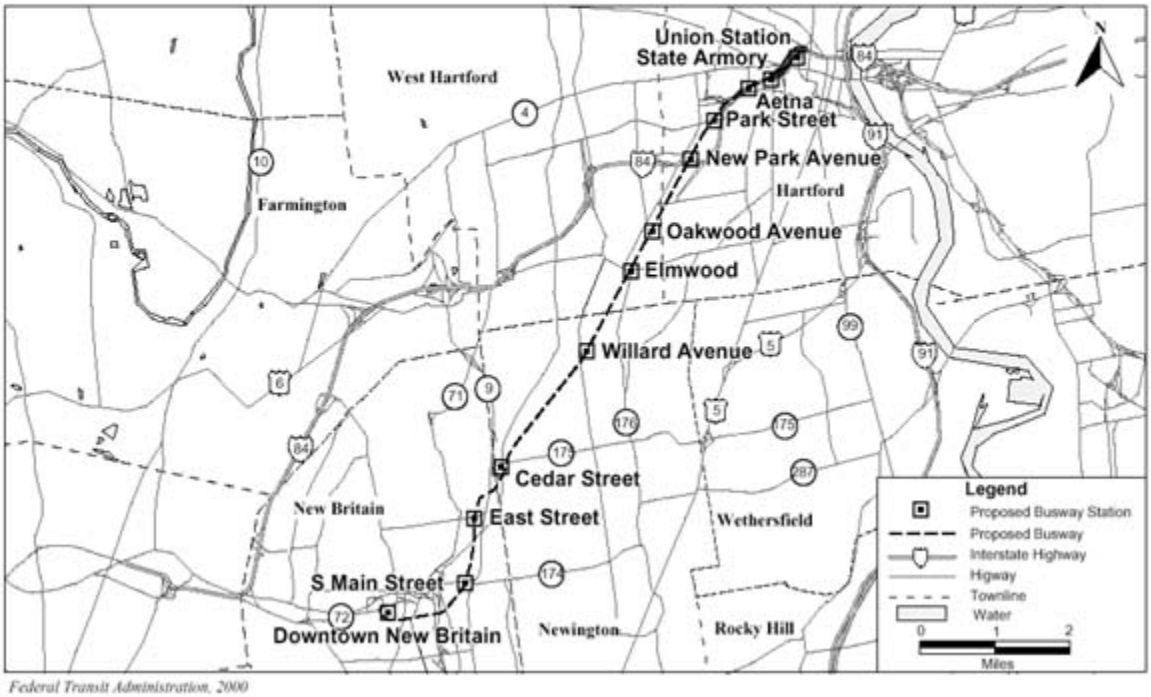
Proposed Source of Funds	Total Funding ($million)	Appropriations to Date

Federal:		
Section 5309 New Starts	$51.60	$1.49 million appropriated through FY 2000
FHWA NHS	$1.50	N/A
FHWA CMAQ	$3.90	N/A
FTA Section 5307	$7.00	N/A
State:		
ConnDOT Special Transportation Funds	$16.00	N/A
Total:	**$80.00**	

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, CT



Federal Transit Administration, 2000

Houston, Texas/Downtown to Astrodome Light Rail

Houston Downtown to Astrodome Light Rail

Houston, Texas

(November 1999)

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 distibution system for the existing 85-mile Regional Bus Plan and HOV system (expanding to 120-miles by 2010) which radiates from, but does not currently penetrate, the core of the inner-city.

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 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

Proposed Project	7.5 miles, 17 station LRT
Total Capital Cost ($YOE)	$300.00 million
Section 5309 Share ($YOE)	$64.90 million
Annual Operating Cost ($YOE)	$23.50 million
Ridership Forecast (2020)	33,100 average daily boardings 3,500 daily new riders

FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

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 *for this stage of project development*. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 the completion of required environmental documentation.

The Advanced Transit Program was authorized in ISTEA. TEA-21 Section 3030(b)(20) authorizes the Advanced Transit Program for alternatives analysis and preliminary engineering. Through FY 2000, 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 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*.

Justification

The *Medium* project justification rating reflects relatively weak cost-effectiveness balanced by average ratings in transit-supportive land use, mobility improvements and other criteria.

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.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	1.20 million hours	N/A

Based on 1990 census data, there are an estimated 1,800 low-income households within a 1/2 mile radius of the proposed 17 LRT stations, roughly 21 percent of total households within ½ mile of proposed stations.

Environmental Benefits

Rating: Medium

The Houston region is a "severe" non-attainment area for ozone. METRO estimates the following annual emissions reductions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 54 annual tons	N/A
Nitrogen Oxide (NOx)	decrease of 24 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 15,208 annual tons	N/A
Particulate Matter (PM_{10})	decrease of 92 annual tons	N/A
Carbon Dioxide (CO_2)	decrease of 7,074 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. *No-Build*	New Start vs. *TSM*
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)	$0.42	N/A	$0.42

Values reflect 2020 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Low-Medium

METRO estimates the following cost effectiveness index comparing the proposed new start to the no-build alternative.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$20.00	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 and implementing 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 which are

pedestrian- and transit-supportive. The City of Houston has established Tax Increment 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 which are pedestrian- and transit-supportive.

The City of Houston, on behalf of the Main Street Coalition, was awarded a U.S.D.O.T Transportation and Community System Preservation grant to coordinate infrastructure investments in the corridor. 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. Formal parking policies in the corridor are limited. However, the Medical Center Master Plan includes significant transit promotion to reduction in parking availability.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 78%

The financial plan for the 7.5 mile LRT project includes $64.9 million (22 percent of total project costs) in Section 5309 New Starts funding, $36.0 million (12 percent) in CMAQ Federal Flexible Funds, and $199.1 million (66 percent) in dedicated local sales tax 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 received 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 43%. METRO has no debt, no outstanding bond liabilities or other long-term debt.

Capital Cost Estimates and Contingencies: Current capital cost estimates, averaging over $37 million per mile for an at-grade LRT system, appear reasonable at this time. However, preliminary engineering is needed to produce more detailed cost estimates.

Existing and Committed Funding: METRO proposes that $199.1 million (in escalated dollars) from the dedicated 1% sales tax and cash reserves will be available as the non-Federal funding share. 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 in available working capital is estimated to decline to $84 million by the proposed opening of the LRT, resulting in potential cash flow pressures for this project and the overall capital program.

The financing plan also includes $36 million in Federal CMAQ funds. The MPO has programmed the initial $10 million of these funds in the FY2000-2002 TIP.

New and Proposed Sources: Only existing sources are proposed for the project.

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* 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. Operating cost estimates appear reasonable given the proposed operating plan and service frequencies. More detailed operating plans and cost estimates will be examined in greater detail in preliminary engineering.

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. More details on the operating budget and revenue sources need to be examined in preliminary engineering. For example, systemwide farebox recovery is projected to increase from 21% currently to 28% in the projected opening year of LRT service. This may be optimistic. Operating plans and projected expenditures on proposed interrelated bus and light rail services will be examined in greater detail.

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
Federal: Section 5309 New Start	$64.90	$5.92 million appropriated through FY 2000
Federal: CMAQ Flexible Funds	$36.00	N/A
Local: Dedicated 1% Sales Tax and Cash Reserves	$199.10	N/A

Total:	**$300.00**

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

Houston Downtown to Astrodome Light Rail

Houston, TX

Federal Transit Administration, 2000

Johnson County, Kansas – Kansas City, Missouri/I-35 Commuter Rail

I-35 Commuter Rail

Johnson County, KS/Kansas City, MO

(November 1999)

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

Proposed Project	Commuter Rail (23 miles, 5 stations)
Total Capital Cost	$30.90 million
Section 5309 Share	$24.80 million
Annual Operating Cost	$4.20 million
Ridership Forecast	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.

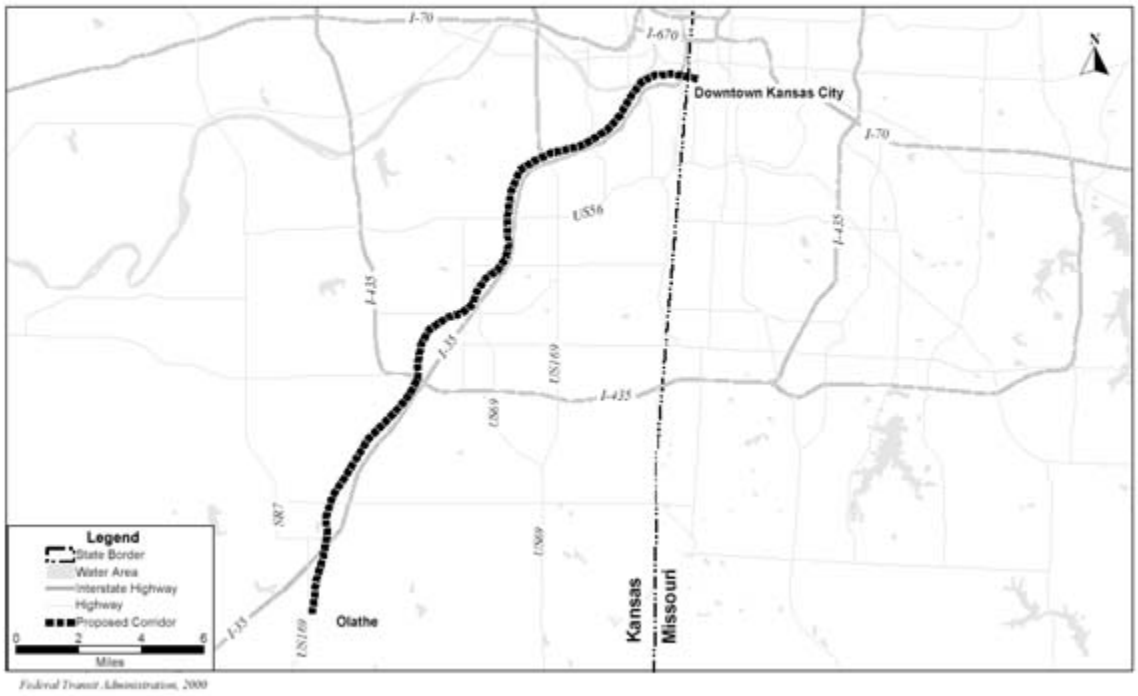
TEA-21 Section 3030(a)(32) authorizes the "Kansas City I-35 Commuter Rail" project for final design and construction. Through FY 2000, Congress has appropriated $1.97 million for the project.

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: Section 5309 New Starts	$24.80	$1.97 million appropriated through FY 2000
Local:	$6.20	N/A
Total:	**$30.90**	

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



Las Vegas, Nevada/Las Vegas Resort Corridor Fixed Guideway MOS

Las Vegas Resort Corridor Fixed Guideway MOS

Las Vegas, Nevada

(November 1999)

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 regions' central business district, several gaming resorts, 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, all-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 $568 million (escalated dollars) and carry over 63,000 weekday boardings in 2020. The MOS is being evaluated in this profile.

RTC is also studying participation in a public/private partnership to develop a 7 mile system which would extend as far south as Tropicana Avenue. This alternative would offer a seamless connection between a 3.4 mile RTC-built guideway and a 3.6 mile facility constructed by the MGM-Hilton Limited Liability Corporation. Average weekday boardings on this 7 mile "seamless" service option is forecasted at 173,000 in 2020.

Las Vegas Resort Corridor Summary Description

Proposed Project	Automated Fixed Guideway Transit (MOS) 4.7 miles, 11 stations
Total Capital Cost ($YOE)	$568.00 million
Section 5309 Share ($YOE)	$155.00 million
Annual Operating Cost ($YOE)	$13.50 million
Ridership Forecast (2020)	65,000 average weekday boardings 36,000 daily new riders

FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium-High**
FY 2001 Overall Project Rating:	**Recommended**

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 1999.** 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 December 1999, with the selection of an LPA from the DEIS anticipated in early 2000. RTC anticipates a Record of Decision, following completion of a Final EIS for the project, in the Fall of 2000.

TEA-21 Section 3030(a)(35) authorizes the Las Vegas Corridor for final design and construction. Through FY 2000, Congress has appropriated $12.38 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.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	26.70 million hours	2.40 million hours

Based on 1990 census data, there are an estimated 3,393 low-income households within a ½ mile radius of the proposed 11 stations of the MOS.

Environmental Benefits

Rating: Medium

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. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 2613 annual tons	increase of 109 annual tons
Nitrogen Oxide (NOx)	decrease of 90 annual tons	increase of 32 annual tons
Hydrocarbons (HC)	decrease of 99 annual tons	increase of 35 annual tons
Particulate Matter (PM_{10})	increase of 52 annual tons	increase of 147 annual tons
Carbon Dioxide (CO_2)	decrease of 24,440 annual tons	increase of 15,366 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. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 274,682 million annual BTU	increase of 202,387 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
System Operating Cost per Passenger Mile (2020)	$0.35	$0.37	$0.33

Values reflect 2020 ridership forecast and 1997 dollars.

Cost Effectiveness

Rating: High

RTC estimates the following cost effectiveness indices.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$3.70	$0.70

Values reflect 2020 ridership forecast and 1997 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 a 7 mile joint public/private seamless fixed guideway system. This alternative would utilize $443 million of public funds, including $155 million of Section 5309 New Starts funding, on a 3.4 mile guideway investment which closely follows the proposed MOS alignment. Private funds would be used to extend the system 3.6 miles south to the MGM Grand near Tropicana Boulevard. The RTC and the MGM-Hilton Limited Liability Corporation have entered into a memorandum of understanding to pursue the integration of system operations.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 73%

The project's financial plan includes $155 million of Section 5309 New Starts funding (27 percent of total project costs), $108 million of FHWA flexible funding (19 percent), and $305 million in RTC Bonds (54 percent).

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: Capital cost estimates may be low given the proposed investment (elevated automated guideway system). 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 $108 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 $308 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, although private resources would be utilized if the RTC were to pursue the 7 mile public/private 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

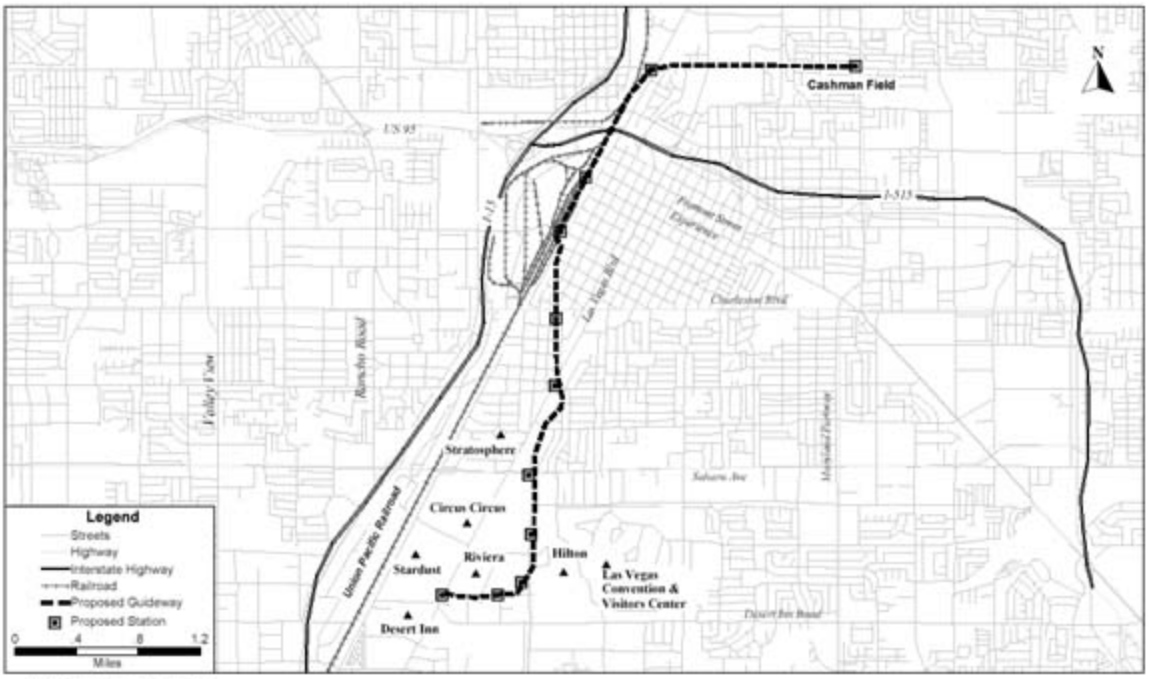
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$155.00	$12.38 million appropriated through FY 2000
CMAQ	$32.50	N/A
STP State	$43.00	N/A
STP Urban	$32.50	N/A
Local:		
RTC Sales Tax Bond	$305.00	N/A
Total:	**$568.00**	

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, NV



Federal Transit Administration, 2000

Maryland/MARC Commuter Rail Improvement Projects

MARC Commuter Rail Improvements Projects

Maryland

(November 1999)

Description

The Maryland Mass Transit Administration is proposing a series of major capital improvements for the Maryland Commuter Rail (MARC) system serving the Baltimore, MD and Washington, DC metropolitan areas. To date, these proposed improvements include: Mid-Day Storage Facility, Penn-Camden Connection, and the Silver Spring Intermodal Transit Center. Total estimated capital costs for the set of proposed improvements equals $85.1 million. Proposed Section 5309 New Starts funds total $40.9 million.

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 relocate the Silver Spring MARC Station to the Silver Spring Metrorail station (Phase I) as well as construct an intermodal transit center at the station (Phase II). 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 transit center phase of the project total $33.3 million.

Section 3030(g)(2) of TEA-21 authorizes this project as part of the Frederick extension, and it will permit service improvements necessary to take full advantage of that extension. No summary rating has been assigned to this project. It was authorized as an addition to the Frederick extension, which was evaluated and issued an FFGA under the criteria and procedures in effect

under ISTEA, and project sponsors have not yet provided sufficient information to rate the Commuter Rail Improvements project. Further, the proposed share of Federal funding from the §5309 new starts program is less than $25.0 million for each of the individual improvements, which would render them exempt from evaluation if MARC proceeds on each of the three project components separately. However, since this is a single project as authorized in TEA-21, it must be evaluated and rated according to §5309(e) in order to be eligible for an FFGA. FTA is working with the Maryland MTA to develop the necessary information to evaluate and move each of these proposed improvements through the planning and project development process.

MARC Commuter Rail Summary Description

Proposed Project	Commuter Rail Improvements
Total Capital Cost ($YOE)	$85.10 million
Section 5309 Share ($YOE)	$40.90 million
Annual Operating Cost ($YOE)	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. Environmental studies, which resulted in a Categorical Exclusion, have been submitted to FTA. A preferred alignment for the MARC Penn-Camden Connection was selected in the 1995 MARC Master Plan Study and the Environmental Assessment resulted in a Finding of No Significant Impact. A request for a Categorical Exclusion on the MARC Silver Spring Intermodal Center has been submitted to FTA and is scheduled for March, 2000.

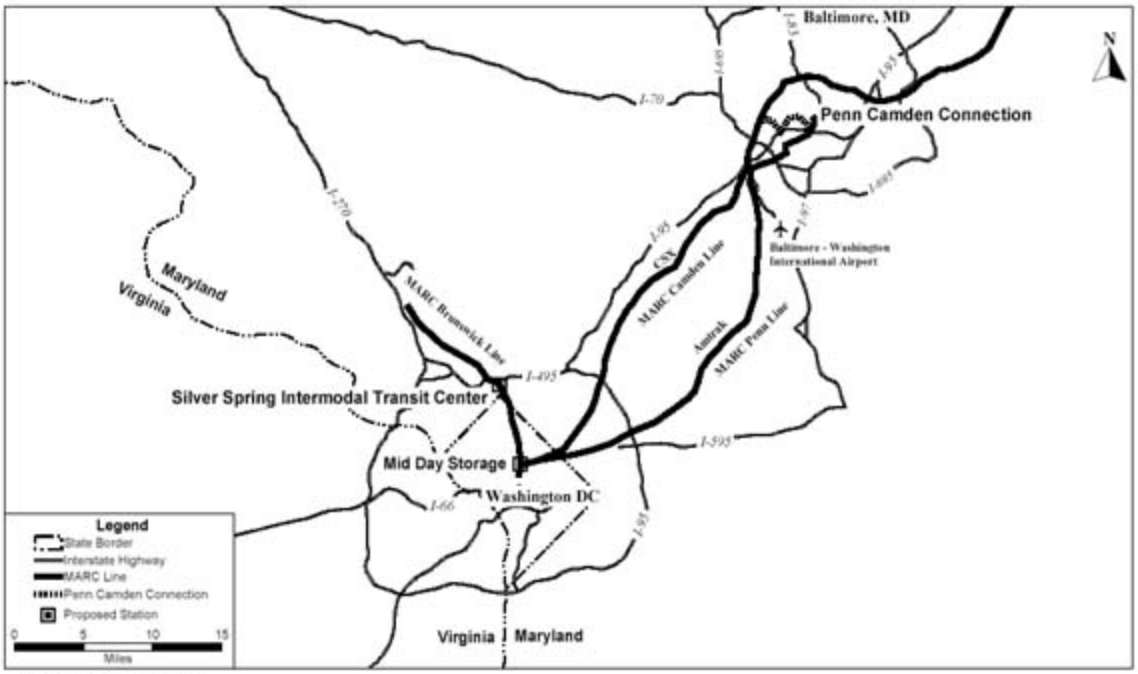
TEA-21 Section 3030(a) authorizes the "MARC Commuter Rail Improvements " for final design and construction. Through FY 2000, Congress has appropriated $4.45 million for these improvement projects.

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: Section 5309 New Starts	$40.90	$4.45 million appropriated through FY 2000
Federal: Other	$13.50	N/A
State:	$30.70	N/A
Total:	**$85.10**	

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 Project

Maryland



Federal Transit Administration, 2000

Memphis, Tennessee/Medical Center Extension

Medical Center Extension

Memphis,Tennessee

(November 1999)

Description

The Memphis Area Transit Authority (MATA), in cooperation with the City of Memphis, is proposing to build a 2.5-mile light rail transit extension to the Main Street Trolley/Riverfront Loop village rail system. The extension would expand the central business district (CBD) rail circulation system to serve the Medical Center area east of the CBD. The proposed project would operate on street 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. At the eastern terminus, near Cleveland Street, a bus transfer point and a small park-and-ride lot would be constructed to accommodate transfers with buses and cars. At the western terminus, existing stations on Main Street near Madison Avenue would be utilized for transfers to/from the Main Street Trolley/Riverfront Loop system. 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 utilized until a proposed regional LRT line is implemented and a fleet of modern LRT vehicles is acquired. The project is proposed as 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 2.5 mile project is estimated at $69.1 million (escalated dollars), with a Section 5309 New Starts share of $55.3 million. MATA estimates 2,100 average weekday boardings in the opening year (2002), increasing to 4,200 by 2020.

Medical Center Extension Summary Description

Proposed Project	LRT Extension 2.5 miles, 6 stations
Total Capital Cost ($YOE)	$69.10 million
Section 5309 Share ($YOE)	$55.30 million
Annual Operating Cost ($2004)	$1.30 million
Ridership Forecast (2020)	4,200 average weekday boardings 1,700 daily new riders
FY 2001 Financial Rating:	**Medium**

FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the project's strong estimated cost effectiveness and the adequacy 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 1999**. 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/Environmental Assessment, resulting in the selection of a trolley service extension as the Locally Preferred Alternative (LPA), was completed in June 1997. FTA approved initiation of preliminary engineering (PE) for the project in April 1998. A Supplemental Environmental Assessment is being prepared to document changes to the preferred alternative and to incorporate updated data developed in preliminary engineering. Completion of PE and the EA is anticipated by January 2000, and a request for FTA approval to advance into final design is expected shortly thereafter. The proposed project is included in the City of Memphis' Capital Improvement Program, the Memphis MPO's Transportation Improvement Program, and the State Transportation Improvement Program.

TEA-21 Section 3030(a)(43) authorizes the Memphis Medical Center Extension for final design and construction. Through FY 2000, Congress has appropriated $10.38 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*. Information was not provided by MATA comparing the New Start to the Transportation System Management (TSM) alternative.

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.

Justification

The *Medium* project justification rating reflects the project's strong anticipated cost-effectiveness and the adequacy of the other justification measures.

Mobility Improvements

Rating: Not Rated

The proposed extension is expected to serve 4,200 average weekday boardings and generate 1,700 daily new riders by 2020. No information on travel time savings was submitted by MATA.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	N/A	N/A

Based on 1990 data, there are an estimated 2,700 low-income households within a ½ mile radius of the six proposed new stations, representing 38 percent of total households within ½ mile of boarding points.

Environmental Benefits

Rating: Medium

Memphis is currently classified as a maintenance area for ozone and carbon monoxide. Memphis projects that in 2020 the proposed project would result in the following emissions reductions for CO, NOx, and VOC.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 13 annual tons	N/A
Nitrogen Oxide (NOx)	decrease of 2 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 1 annual ton	N/A
Particulate Matter (PM_{10})	N/A	N/A
Carbon Dioxide (CO_2)	decrease of 177 annual tons	N/A

MATA estimates the following savings in regional energy consumption (measured in British Thermal Units - BTU) for the forecast year 2020.

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 160,084 million annual BTU	decrease of 119,449 million annual BTU

Operating Efficiencies

Rating: Medium

MATA estimates the following systemwide operating cost per passenger mile for the proposed project in the forecast year.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (1995)	$0.42	N/A	$0.44

Values reflect 2020 ridership forecast and 1995 dollars.

Cost Effectiveness

Rating: High

MATA estimates the following cost-effectiveness index, comparing the proposed project to the No-Build alternative.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$5.20	N/A

Values reflect 2020 ridership forecast and 1995 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Medium

The *Medium* rating reflects the existing transit-supportive conditions along the corridor, improving policies, and proposed new developments. However, the rating also recognizes the relatively slow progress in improving zoning regulations and parking policies in the corridor.

Existing Conditions: Development in the 2.5-mile corridor is generally centered around the two ends of the proposed project. Downtown, at the western end of the corridor, contains a mix of commercial, office, and government land uses, and a new minor league baseball stadium. The eastern end of the corridor contains a high concentration of medical facilities and two colleges/universities. Downtown Employment is expected to increase by 60 percent (to 24,000 employees) by 2020. Employment at the Medical Center, a major employment center in the Region with 13,500 jobs in 1995, is forecast to remain stagnant. The corridor includes a high percentage of transit dependent households, and population in the corridor is expected to increase by 76% in downtown and 22% in Midtown by 2020. Development towards the center of the proposed corridor currently consists of underutilized commercial and industrial uses. Current zoning does not specifically promote transit- and pedestrian-oriented site planning, design, or facilities, and does not promote increased development densities.

Plans and Policies: The City of Memphis and Shelby County have established the Center City Commission (CCC) to coordinate development throughout its Central Business Improvement District, which includes downtown Memphis and the Medical Center Extension. The CCC plans to study and, ultimately, modify zoning regulations to promote transit usage by the end of 2000, and formulate incentives to promote development in the corridor by the end of 2001. Transit-oriented development on the existing Trolley/Riverfront Loop is underway (at the North End Terminal) and proposed (at Central Station). And, there are increased local public and private sector efforts to facilitate transit supportive development along the Medical Center Extension. However, no specific station plans have been developed, and no parking management policies in the corridor have been implemented.

The State of Tennessee has mandated that Shelby County, along with the incorporated cities within the county, must adopt a joint 20-year urban growth plan or risk losing state funding for

highways and community development. Shelby County and its affected jurisdictions are currently working on the growth plan, which must be submitted to the State by December 1999.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 20%

MATA proposes a Federal share of $55.3 million (80 percent of total project costs) in Section 5309 New Start funds, $6.9 million in State funds (10 percent) and $6.9 in local funding (10 percent).

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the commitment of the non-Federal funding for the Medical Center Rail Extension. The State of Tennessee and City of Memphis both exhibit enough revenue capacity to support construction of the project.

Agency Financial Condition: MATA is considered to be in adequate financial condition. Non-Federal funding for the Medical Center Extension is proposed to be split between the City of Memphis and the Tennessee Department of Transportation. The City of Memphis and the State DOT are considered highly stable and reliable funding partners. The City receives AA ratings from Standard and Poor's and Fitch Investor Service, respectively, and an AA rating from Moody's.

Cost Estimates and Contingencies: Cost estimates for the Medical Extension Project have escalated from $35.9 million in 1998 to $69.1 million in 1999. Project cost increases are attributed to unanticipated utility relocation costs, some modifications to the original alignment, and a significant increase in contingency costs. The project's revised cost estimates are reasonable. Contingency provisions include funding committed to the project by the city and State above the amount included in the financial plan.

Existing and Committed Funding: The City of Memphis and Tennessee DOT have each committed up to $7.5 million towards the construction of the proposed project. This commitment represents an amount above the $6.9 million proposed in the financial plan to be contributed from each entity.

New and Proposed Sources: No new sources are proposed for construction of the Medical Center Extension.

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* rating reflects the commitment of the City of Memphis to support MATA's operating needs, but acknowledges the agency's lack of a dedicated funding source.

Agency Financial Condition: MATA has no dedicated operating funding source at the present time. The City of Memphis provides the largest single source of operating revenue for MATA, and has a strong record of supporting the operation of the agency's services.

Cost Estimates and Contingencies: Annual operating costs for the Medical Center Extension are estimated at $1.3 million. Implementation of trolley service to the Medical Center Area is expected to result in a reduction in duplicative bus service in the corridor, and an overall decrease in MATA's systemwide operating expenses.

Existing and Committed Funding: Local operating revenues are currently generated through passenger fares, other system revenues, the City of Memphis, and the Tennessee DOT. The City has historically been a reliable funding partner, and has increased its commitment to MATA operations by 160 percent between the years 1980-1997.

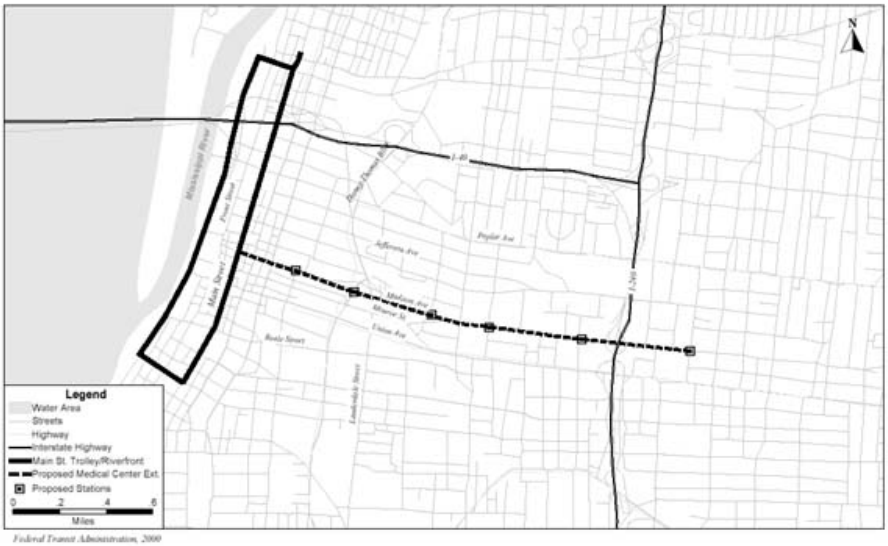
New and Proposed Funding Sources: No new funding sources have been proposed for this project. However, MATA is pursuing the establishment of a dedicated funding source to support ongoing system operation and planned expansion.

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts	$55.30	$10.38 million appropriated through FY 2000
State: Tennessee DOT	$6.90	N/A
Local: City of Memphis	$6.90	N/A
Total:	**$69.10**	

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

Medical Center Rail Extension

Memphis, TN



Miami, Florida/ East-West Corridor

Miami East-West Corridor

Miami, Florida

(November 1999)

Description

The Miami-Dade Transit Agency has proposed to implement a set of multimodal improvements in the Route (SR 836) East-West corridor that would link the suburban area west of the Palmetto Expressway (SR 836) with the Miami International Airport (MIA), downtown Miami, and the Port of Miami seaport. The proposed improvements include an 11.2-mile minimum-operable-segment (MOS) of a heavy rail transit alignment that runs from just east of the Palmetto Expressway (SR 836) to the Port of Miami. An additional 0.7-mile branch is proposed from MIA to the Miami Intermodal Center (MIC). The heavy rail line includes 8.2 miles of aerial guideway and 3.6 miles of bored tunnel with ten stations (six aerial and four underground). The proposed project also includes two buffer-separated HOV lanes, one in each direction, in the median of SR 836 from NW 107th Avenue to the SR 836/SR 112 Interconnector/(MIC). Capital cost estimates for the project (transit and roadway improvements) total $2.023 billion (YOE dollars). The proposed rail line is expected to carry 27,300 average weekday boardings on opening day and 31,400 average weekday boardings by the year 2020.

On July 29, 1999, voters rejected a 1 cent sales tax increase to support proposed MDTA capital and operating needs, including the proposed East-West Corridor project. As a result of the failed referendum, Metro-Dade is currently evaluating considering other projects in place of the East-West Corridor. The scope of the resulting proposed investment may not be consistent with the information submitted for this profile.

Miami East-West Corridor Summary Description

Proposed Project	Heavy-rail line 11.9 miles, 10 stations
Total Capital Cost ($YOE)	$2,023.00 million
Section 5309 Share ($YOE)	$808.00 million
Annual Operating Cost ($YOE)	$39.90 million
Ridership Forecast (2020)	31,400 average weekday boardings 13,300 daily new riders
FY 2001 Financial Rating:	**Low**

FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Not Recommended**

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 1999. 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 reflect new information, changing conditions, and refined financing plans.**

Status

In October 1996, FDOT initiated preliminary engineering (PE) and the final environmental impact statement (FEIS) for the locally preferred alternative (LPA). The FEIS was finalized in August 1998 and a joint FHWA/FTA Record of Decision was issued September 28, 1998. The Federal Transit Administration (FTA), the Federal Aviation Administration, the Federal Railroad Administration, the Maritime Administration, and the Coast Guard are cooperating agencies pursuant to a 1993 Memorandum of Understanding. The Miami-Dade Transit Agency (MDTA) recently assumed responsibility for the project from the Florida Department of Transportation.

On July 29, 1999, voters rejected a 1 cent sales tax increase to support proposed MDTA capital and operating needs, including the proposed East-West Corridor project. As a result, Metro-Dade is currently re-evaluating other alternatives to improve transportation mobility in the East-West Corridor.

TEA-21 Section 3030 (a) (44) authorizes the Miami East-West project for final design and construction. Through FY 2000, Congress has appropriated $10.92 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.* MDTA indicates that a TSM alternative was not advanced in the project development process; therefore, criteria comparing the New Start to the TSM alternative are not available (NA).

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.* However, note that the scope of the project may change following the local re-evaluation of potential alternatives.

Justification

The *Medium* project justification rating reflects the strong transit supportive land use, but relatively low cost-effectiveness, of the proposed project.

Mobility Improvements

Rating: Medium

The 11.9 mile system is expected to serve 31,400 average weekday boardings and 13,300 daily new riders by 2015. MDTA estimates the following annual travel time savings for the forecast year 2020.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	10.10 million hours	N/A

Based on 1990 census data, there are an estimated 849 low-income households within a ½ mile radius of the proposed 7 stations, about 36 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 the year 2020, the rail component of the LPA would result in emissions reductions for Carbon Monoxide (CO) and HC (Hydrocarbons), and increases for Nitrogen Oxides (NOx) and Particulate Matter (PM10). The following emissions reductions are forecast for the proposed project.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 18,231 annual tons	N/A
Nitrogen Oxide (NOx)	increase of 141 annual tons	N/A
Hydrocarbons (HC)	decrease of 1,067 annual tons	N/A
Particulate Matter (PM_{10})	increase of 63 annual tons	N/A
Carbon Dioxide (CO_2)	decrease of 256,056 annual tons	N/A

MDTA estimates that in the year 2015, the proposed project will result in a decrease in regional energy consumption (measured in British Thermal Units) as shown below.

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 3,257,228 million annual BTU	N/A

Operating Efficiencies

Rating: Medium

MDTA estimates a slight increase in the system-wide operating cost per passenger mile in the year 2020 for the rail component compared to the No-Build alternative.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	$0.35	N/A	$0.36

Values reflect 2020 ridership forecast and 1995 dollars.

Cost Effectiveness

Rating: Low-Medium

MDTA estimates the following cost-effectiveness index for the rail component compared to the No-Build Alternative.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$18.90	N/A

Values reflect 2015 ridership forecast and 1995 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Medium-High

The *Medium-High* rating for transit-supportive land use is largely due to the moderate densities and high-trip generators along the project corridor and local policies to promote infill development and increased densities at transit station locations.

Existing Conditions: Several major trip generators are located along the corridor, including the Miami Central Business District, the American Airlines Arena under construction in downtown Miami, the Orange Bowl, and the planned Miami Intermodal Center. The project will provide intermodal connections with the Miami International Airport and the Tri-County Commuter Rail service at the Miami Intermodal Center, with the existing Metrorail and Metromover service in downtown Miami, and with the cruise ship terminals at the Port of Miami. The Miami International Airport and surrounding area has the largest concentration of employment in the Miami-Dade County area. The population in the corridor is anticipated to increase from 76,800 in 1995 to 81,600 in 2015, an increase of 6 percent. Employment in the corridor is expected to increase from 231,600 in 1995 to 250,000 in 2015, and increase of 8 percent.

Future Plans and Policies: The general density of the land uses along the corridor are expected to increase through infill development as promoted by initiatives from the State of Florida and several regional planning councils, the City of Miami, and recommendations from an Urban Infill Strategy Task Force. Miami-Dade County recently updated the Comprehensive Development Master Plan (CDMP) to require a minimum density of housing units and employment around rail transit stations. Additionally, Miami-Dade has embarked on a Station Area Aesthetics, Design and Development (SAAD&D) initiative to create a separate community-oriented planning processes to develop plans and design guidelines for each station area. The SAAD&D process

began in late 1998 for corridor stations following final alignment and station site choices. MDTA has completed preliminary market development surveys for each station and has determined general development potential. Some progress toward development around several stations is evident and plans for several stations appear advanced. Plans for development at station areas along the proposed East-West corridor include proposals for mixed-use development at the NW 57th Avenue and MIC station areas and a new post office and day care center adjacent to the proposed Blue Lagoon Station area.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 60%

MDTA's financial plan assumes $808 million from Section 5309 New Start funds (40 percent) and local funding sources totaling $1.215 billion (60 percent). Local funding sources identified in the financial plan include $789 million (39 percent) in funds from the regional Long-Range Transportation Plan (LRTP), $108 million (5 percent) from toll road revenue bonds, $100 million (5 percent) from Port of Miami revenue bonds, $30 million (1 percent) from development rights, $11 million (0.5 percent) from cross-border leasing, and $177 million (9 percent) from the Local Option Gas Tax.

Stability and Reliability of Capital Financing Plan

Rating: Low

The *Low* rating reflects the large share of uncommitted and/or unidentified local funding proposed for the project.

Agency Capital Financial Condition: The overall financial condition of the MDTA is adequate. On July 29, 1999, a proposed 1 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 1 % tax has significant financial implications for availability of MDTA capital funding.

Capital Cost Estimates and Contingencies: The capital cost estimates appear reasonable for a project of the size and scope proposed by MDTA.

Existing and Committed Funding: Little of the non-New Starts Share of the project funding is committed. MDTA's financial plan indicates that $1,025 million of non-Federal funding sources may be committed through legislation, resolution or other formal, binding agreement; however, exact sources have not been identified or confirmed. $796.6 million in current state and non-discretionary federal funding programs historically available to Miami-Dade County are being examined, as well are local fuel taxes and some federal sources. MDTA proposes to bond some funds included in the long range regional transportation plan as a source of funding for the project.

$229 million in Miami-Dade Expressway Authority (MDI) toll revenues are committed by legislation but the tolls are not yet operational.

New and Proposed Sources: MDTA proposes approximately $30 million in funds from the sale or lease of rail station development rights; however, the agency has yet to obtain a firm funding commitment of funding for this transaction. An estimated $100 million is proposed from the Port

of Miami (towards capital costs associated with a premium Airport-Seaport rail service), although the Port has yet to commit to this funding level. MDTA continues to indicate a potential cost savings from cross-border leasing as a source of funds. The Miami-Dade County Board has not approved implementation of a local option gas tax (proposed to contribute $177.1 million) which would support construction of the project.

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: Annual operating costs are estimated at $39.9 million. Project operating costs and inflation assumptions appear reasonable for a project of this size and scope.

Existing and Committed Funding: No specific existing funding sources are identified within MDTA's financial plan to cover project operating costs.

New and Proposed Sources: The source of operating funds for the East-West Corridor is proposed to come from operating surpluses generated from fares collected for a premium round-trip service for tourists traveling between the Miami International Airport and the Port of Miami. The actual revenues that will be generated by this premium service have yet to be determined, and no commitments are in place. The financial operating plan assumes that 54 percent of cruise ship embarkations will select this service over the taxi and charter bus options, generating a farebox recovery ratio of 214 percent for this service. Surpluses from this premium service are anticipated to fully cover operating deficits on the East-West line.

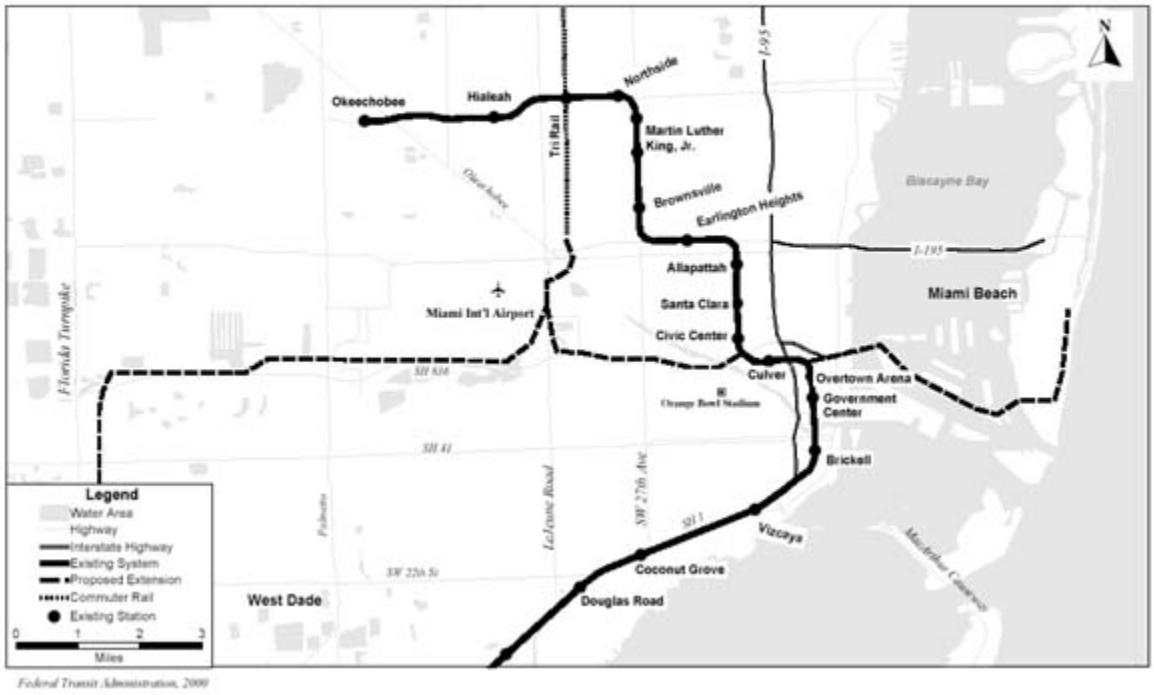
Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$808.00	$10.92 million appropriated through FY 2000
State and Local:		
Long-Range Transportation Plan (LRTP)	$789.00	N/A
Toll Revenue Bonds	$108.00	N/A
Port of Miami	$100.00	N/A

Cross Border Leasing	$11.00	N/A
Local Option Gas Tax	$177.10	N/A
Joint Development	$30.00	N/A
Total:	**$2,023.00**	

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

East - West Corridor

Miami, FL



Miami, Florida/North 27th Avenue

Miami North 27th Avenue

Miami, Florida

(November 1999)

Description

The Miami-Dade Transit Agency (MDTA) has proposed to construct a heavy rail 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. Park-n-ride lots would be provided to intercept commuters in the corridor. The proposed heavy rail line 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 $615.2 million (escalated); based on the assumed Federal/local share, the Section 5309 share is $430.6 million (escalated).

On July 29, 1999, voters rejected a 1 cent sales tax increase to support proposed MDTA capital and operating needs, including the proposed North 27th Avenue rail project. As a result of the failed referendum, Metro-Dade is currently evaluating lower cost busway options for the North Corridor. The scope of the resulting proposed investment may not be consistent with the information submitted for this profile.

Miami North 27th Avenue Summary Description

Proposed Project	Heavy rail line 9.5 miles, 7 stations
Total Capital Cost ($YOE)	$615.20 million
Section 5309 Share ($YOE)	$430.60 million
Annual Operating Cost ($YOE)	$15.10 million
Year Ridership Forecast (2015)	14,500 average weekday boardings
FY 2001 Financial Rating:	**Low**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Not Recommended**

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 1999**. 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 Cost Feasible Year 2015 Long Range Transportation Plan. An Option 1 Alternative Analysis and the Draft Environmental Impact Statement (DEIS), including consideration of two busway alternatives and one heavy rail alternative, has 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 LPA. The Preliminary Engineering/Final Environmental Impact Statement (FEIS) phase is underway and is currently scheduled for completion in late 2000.

On July 29, 1999, voters rejected a 1 cent sales tax increase to support proposed MDTA capital and operating needs, including the proposed North 27th Avenue rail project. As a result, Metro-Dade is currently re-evaluating other alternatives to improve transportation mobility in the North 27th Avenue Corridor.

TEA-21 Section 3030 (a) (44) authorizes the Miami North 27th Avenue project for final design and construction. Through FY2000, 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 Metrorail Extension. 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.* However, note that the scope of the project may change following the local re-evaluation of potential alternatives currently underway.

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

The 9.5 mile extension is expected to serve 14,500 average weekday boardings and 11,200 daily new riders by 2015. MDTA estimates the following annual travel time savings for the Metrorail Extension alternative compared to the No-Build and TSM alternatives.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	0.80 million hours	0.80 million hours

Based on 1990 census data, there are an estimated 1,383 low-income households within a ½ mile radius of the proposed seven stations for the Metrorail extension, roughly 27 percent of total households within ½ mile of the proposed stations.

Environmental Benefits

Rating: High

The southeast Florida area is an attainment area for carbon monoxide and a maintenance area for ozone. MDTA estimates that in 2015, the Metrorail Extension will result in the following impact on emissions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 474 annual tons	decrease of 568 annual tons
Nitrogen Oxide (NOx)	decrease of 36 annual tons	decrease of 42 annual tons
Hydrocarbons (HC)	decrease of 42 annual tons	decrease of 51 annual tons
Particulate Matter (PM_{10})	decrease of 61 annual tons	decrease of 74 annual tons
Carbon Dioxide (CO_2)	decrease of 10,846 annual tons	decrease of 17,629 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. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 126,659 million annual BTU	decrease of 213,760 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)	$0.45	$0.45	$0.43

Values reflect 2015 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Low-Medium

MDTA estimates the following cost-effectiveness indices for the Metrorail Extension alternative compared to the No-Build and the TSM alternatives.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$15.50	$21.50

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 which 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 uses 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 248,456 to 269,876 between 1995 and 2015 and the employment in the corridor is expected to grow from 94,690 to 115,151, 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: An Urban Infill Strategy Task Force has been established to encourage infill development and increased densities by the State of Florida and several regional planning councils. 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. 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 199th Street Station.

Local Financial Commitment

Proposed Non-Section 5309 of Total Project Costs: 30%

MDTA's financial plan assumes $430.6 million from Section 5309 New Start funds (70 percent), $92.3 million (15 percent) in State funds, and $92.3 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 unidentified local funding proposed for the project.

Agency Capital Financial Condition: The overall financial condition of the MDTA is adequate. On July 29, 1999, a proposed 1 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 1% tax has significant financial implications for availability of MDTA Capital funding.

Capital Cost Estimates and Contingencies: The capital cost estimates appear reasonable for a project of this size and scope.

Existing and Committed Funding: MDTA has not secured any firm local funding commitments for the proposed North 27th Avenue rail 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 $70 million (15 percent). However, the LOGT has been rolled back from the five cents per gallon assumed in the project's financial plan to three cents per gallon, and may only provide $15 million (pay-as-you-go) to $30 million (via revenue bonds) towards the project.

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 projects an annual operating cost of $15.1 million (YOE) in the year 2015 for the North 27th Avenue project. Cost estimates appear reasonable, although no contingency provisions have been identified.

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.

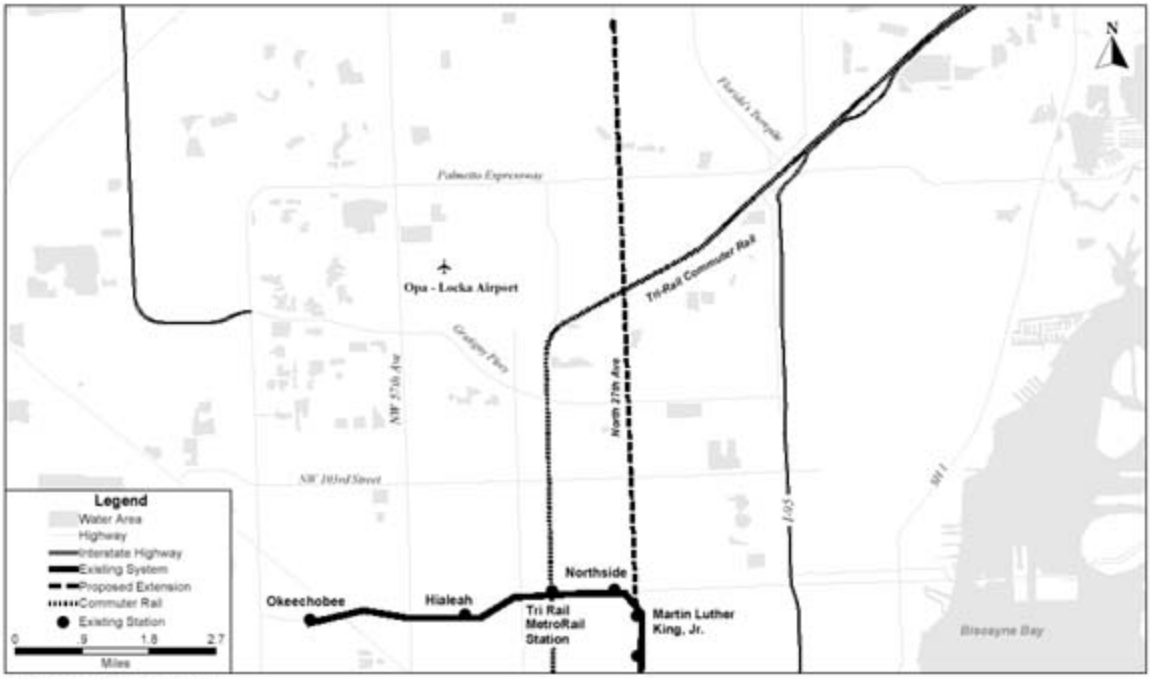
Locally Proposed Financing Plan

(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: Section 5309 New Starts	$430.60	$11.93 million appropriated through FY 2000
State: Public Transit Block Grant Program	$92.30	N/A
Local: Local Option Gax Tax (Right-of-Way Easements, General County Revenues/General Obligation Bonds)	$92.30	N/A
Total:	**$615.10**	

North 27th Avenue Corridor

Miami, FL



Federal Transit Administration, 2000

Miami, Florida/South Miami-Dade Busway Extension

South Miami-Dade Busway Extension

Miami, Florida

(November 1999)

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 $87.8 million (escalated dollars), and has an estimated 8,800 average weekday boardings on the extension.

South Miami-Dade Busway Summary Description

Proposed Project	Busway 11.5 miles, 12 stations
Total Capital Cost ($YOE)	$87.80 million
Section 5309 Share ($YOE)	$61.30 million
Annual Operating Cost ($YOE)	$4.90 million
Year Ridership Forecast (2015)	8,800 average weekday boardings 3,000 daily new riders
FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the project's cost-effectiveness and the adequacy 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 1999**. 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 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. A five mile portion of the South Miami-Dade Busway is undergoing Final Design and the remaining 6.5 miles is undergoing Preliminary Engineering. It is anticipated that Final Design for the first 5 miles will be completed by June 2000. For the remaining 6.5 miles, Final Design is anticipated to be completed by April of 2001. 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.

Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria* for the 11.5 mile Busway Extension. 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 anticipated mobility improvements and adequate cost effectiveness, off-set by relatively poor transit supportive land use in the corridor.

Mobility Improvements

Rating: High

The 11.5 mile South Miami-Dade Busway Extension is expected to serve 8,800 average weekday boardings and 3,000 daily new riders by 2015. Miami-Dade estimates the following annual travel time savings.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	3.20 million hours	2.90 million hours

Based on 1990 census data, there are an estimated 760 low-income households within a ½ mile radius of the proposed twelve stations for the South Miami-Dade Busway extension, roughly 23 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 Busway Extension will result in the following impact on emissions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 21 annual tons	decrease of 18 annual tons
Nitrogen Oxide (NOx)	decrease of 370 annual tons	decrease of 370 annual tons
Hydrocarbons (HC)	decrease of 17 annual tons	decrease of 19 annual tons
Particulate Matter (PM_{10})	increase of 2 annual tons	N/A
Carbon Dioxide (CO_2)	increase of 4,578 annual tons	increase of 5,582 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. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 60,754 million annual BTU	decrease of 72,817 million annual BTU

Operating Efficiencies

Rating: High

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)	$0.53	$0.52	$0.49

Values reflect 2015 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Medium

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. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$11.70	$14.20

Values reflect 2015 ridership forecast and 1997 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Low-Medium

The *Low-Medium* land use rating reflects the generally low densities and poor pedestrian access along the corridor, but acknowledges the positive efforts of Miami-Dade County and local jurisdictions to promote transit-supportive development within the corridor.

Existing Land Use: The northern portion of the corridor includes predominantly low density single family homes, public housing, and trailer parks. There is a large regional shopping mall at the Dadeland South Metrorail Station, where the existing Busway connects with the Metrorail system. Further south, the commercial uses immediately abutting U.S. 1 include strip commercial shopping centers, agricultural services, and automobile dealerships. Current population density is 1.8 persons per acre and employment density is 0.6 employees per acre. Further south along the corridor, most of the land is used for agricultural purposes. There are few pedestrian amenities in the corridor and limited connectivity between existing development.

Plans and Policies: The Miami-Dade County Comprehensive Development Master Plan (CDMP) has policies that call for minimum standards of development and housing at transit stations. The cities of Homestead and Florida City both have transit supportive corridor policies to support mixed land use development, higher density land use, and transit oriented land use design in station areas. However, no proposed station area design specific to this project have been developed by Miami-Dade County or the cities of Homestead or Florida City. Growth within the corridor is constrained by an Urban Growth Boundary (UDB), established within the Miami-Dade County Development Master Plan, which limits the extension of urban services and facilities to a twelve-mile wide area of land stretching from the Atlantic coast of Florida inward to the Everglades. The proposed South Miami-Dade Busway extension is roughly in the middle of the UDB area. Largely because of the UDB, the land along the proposed South Miami-Dade Busway extension is one of the last undeveloped areas in South Florida and thus, there is tremendous growth pressure. The population in the corridor is expected to grow from 124,470 to 317,300 in 2015, an increase of 155 percent. Employment in the corridor is expected to increase from 38,700 to 46,900 in 2015, an increase of 21 percent. Plans and policies need to be developed to accommodate the proposed growth and concentrate it around the proposed Busway Extension.

Other Factors

FTA BRT Demonstration Program: In August 1999, the South Miami-Dade Busway Extension 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 of Total Project Costs: 30%

MDTA's financial plan assumes $61.3 million from Section 5309 New Start funds (70 percent of the total project cost), $5.7 million (6 percent) in CMAQ flexible funds, and $20.8 million (24 percent) in State funds (for right-of-way purchased in 1988).

Stability and Reliability of Capital Financing Plan

Rating: Medium

The *Medium* rating acknowledges the commitment of Non-Section 5309 funding to the project. However, the capital cost contingency is low for a project at this stage of preliminary engineering and very limited non-Section 5309 New Starts funding appears to be available to address potential cost increases.

Agency Capital Financial Condition: The Miami Dade Transit Agency is in adequate financial condition. While the failed July 1999 sales tax referendum limits MDTA's capital expansion plans, the agency's proposed participation in the Busway project (previously purchased right-of-way) is secure.

Capital Cost Estimates and Contingencies: The capital cost estimates for the South Miami-Dade Busway Extension are based upon two different sets of plans for the project: 1) a five mile segment has had preliminary engineering completed to 60 percent, and 2) a 6.5 mile segment of the project has had preliminary engineering completed to 10 percent. Thus, capital costs estimated are preliminary and as such, should have a high contingency cost. However, the capital costs include low contingency costs for a project in the preliminary engineering stage of project development. Because the proposed Non-Section 5309 Share of the project costs are not from an existing revenue source, there are limited resources available for financing any unanticipated cost increases.

Existing and Committed Funding: The proposed Non-Section 5309 New Starts share of project costs is $26.5 million, or 30 percent of the total capital costs. The local match proposed for this project is $20.8 million, which is the value of 11.5 miles of a 20 mile right-of-way purchased for $40 million in 1988 by the Florida Department of Transportation for the busway. Another $5.7 million in CMAQ funds are programmed for the project. Thus, the Non-Section 5309 Share of the project costs are existing and committed.

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

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* rating reflects the low operating cost of the proposed busway and the financial condition of the MDTA to operate buses on the proposed facility.

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: Annual operating costs are estimated at $4.6 million. Project operating costs and inflation assumptions appear reasonable for a project of this size and scope.

Existing and Committed Funding: MDTA anticipates a farebox recovery ratio of 45 percent ($2.2 million annually) on Phase II of the South Miami-Dade Busway, which is similar to the farebox recovery for Phase I. The remaining $1.7 million in operating funds are anticipated from local revenue sources and $0.9 million is from unidentified revenue sources.

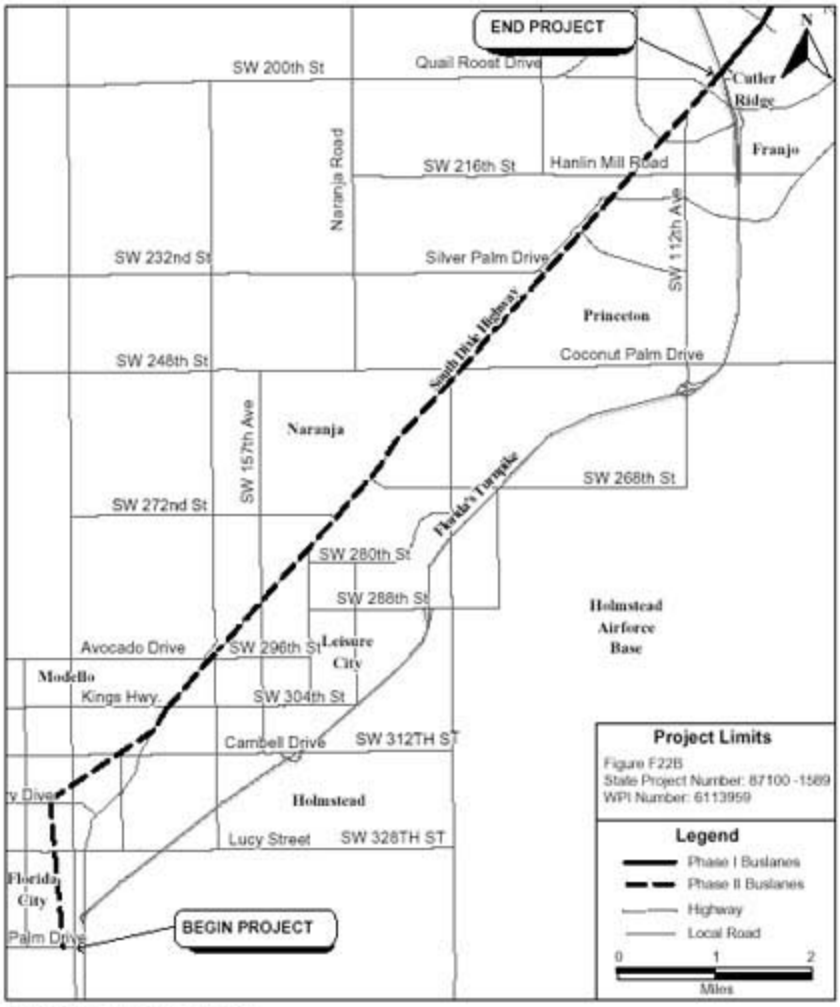
New and Proposed Sources: No new or proposed sources of operating funds have been identified.

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: Section 5309 New Starts	$61.30	$0 million appropriated through FY 2000
Federal: CMAQ Flexible Funds	$5.70	
State: Florida East-Coast Railroad Right-of-Way Purchase	$20.80	
Total:	**$87.80**	

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, FL



Federal Transit Administration, 2000

Minneapolis, Minnesota/Hiawatha Avenue LRT

Hiawatha Avenue LRT

Minneapolis-St. Paul, Minnesota

(November 1999)

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 11.5-mile Light Rail Transit (LRT) line along the Hiawatha Avenue 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 reconstruction of TH-55 as a four lane at-grade arterial between Franklin Avenue and 59th 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 5th Street. The LRT is planned to exit the CBD near the Hubert Humphrey Metrodome, following the former Soo Line Railroad to Franklin Avenue, then parallel Hiawatha Avenue. The project will include a 0.8-mile tunnel to be constructed under the MSP airport runways and taxiways with the construction of one station. The line is then planned to emerge from the tunnel on the West Side of the airport and continue south with four proposed stations in Bloomington, including a station in the vicinity of the Mall of America. The estimated capital cost for the 11.5-mile Hiawatha Avenue LRT, including 15 proposed stations, totals $548.6 million (escalated dollars). The project is expected to serve 24,600 average weekday boardings by the year 2020; 18,300 average weekday boardings are projected in the opening year.

Hiawatha Avenue Summary Description

Proposed Project	Light Rail Transit Line 11.5 miles, 15 stations
Total Capital Cost ($YOE)	$548.60 million
Section 5309 Share ($YOE)	$247.30 million
Annual Operating Cost ($YOE)	$15.00 million
Ridership Forecast (2020)	24,600 average daily boardings 9,300 daily new riders
FY 2001 Financial Rating:	**Medium-High**

FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the strong transit-supportive land use policies in place along the corridor and throughout the metropolitan area, 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 1999.** 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 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. 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 on the segment extending from I-494 to the MOA was also completed that same month. Revised information includes 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 Avenue LRT is included in the region's financially constrained Transportation Improvement Program and the Long-Range Transportation Plan. The project is expected to be ready to advance into final design in early 2000.

Section 3030(a)(91) of TEA-21 authorizes the "Twin Cities – Transitway Corridors" for final design and construction. Through FY 2000, Congress has appropriated $69.32 million in Section 5309 New Starts funds for the "Twin Cities Transitways" project, which includes the Hiawatha Avenue Corridor light 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 strong transit-supportive characteristics of the Hiawatha Avenue Corridor and the positive environmental benefits anticipated to result from the implementation of the project.

Mobility Improvements

Rating: Low-Medium

Metro Transit estimates that, in the year 2020, average weekday boardings will reach 24,600, including 9,300 daily new riders. Metro Transit estimates the following annual travel time savings for the Hiawatha Avenue LRT line:

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	decrease of 1.00 million hours	increase of 0.40 million hours

Based on 1990 census data, there are an estimated 3,358 low-income households within a ½ mile radius of the 15 proposed stations. This represents 20 percent of the total number of households within a ½ mile radius of the proposed stations.

Environmental Benefits

Rating: High

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 (PM10). Metro Transit estimates that in the year 2020, implementation of the Hiawatha Avenue LRT would result in the following emissions reductions:

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 395 annual tons	decrease of 253 annual tons
Nitrogen Oxide (NOx)	decrease of 68 annual tons	decrease of 45 annual tons
Hydrocarbons (HC)	decrease of 41 annual tons	decrease of 27 annual tons
Particulate Matter (PM_{10})	decrease of 2 annual tons	decrease of 2 annual tons
Carbon Dioxide (CO_2)	decrease of 9,378 annual tons	decrease of 10,404 annual tons

Metro Transit estimates that the proposed project 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 (millions)	decrease of 106,273 million annual BTU	decrease of 117,578 million annual BTU

Operating Efficiencies

Rating: Medium

Metro Transit estimates the following systemwide operating costs per passenger mile, reporting an increase in the new start compared to the no-build alternative.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	$0.35	$0.35	$0.36

Values reflect 2020 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Low-Medium

Metro Transit estimates the following cost effectiveness indices:

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$19.00	$19.20

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 the region's recent progress in adopting plans, policies and incentives to promote transit supportive development in the Hiawatha Avenue Corridor and throughout the Twin Cities region. The rating also acknowledges the region's current growth management policies as well as the participation and endorsement of local government and civic organizations in the development and planning processes associated with the proposed light rail project.

Existing Conditions: Downtown Minneapolis serves as the dominant job center for the metropolitan region and the upper Midwest with approximately 140,000 employees and 20,000 residents. Approximately 106,000 employees work within three blocks of the proposed Hiawatha Avenue LRT route. In addition, several major trip generators are also included along the proposed route, including the Mall of America (largest retail complex in the nation), the Minneapolis-St. Paul International Airport, numerous educational and medical facilities and the Metrodome (sports arena). The City is currently reviewing 16 major development projects for the downtown area that total 8.3 million square feet.

The Twin Cities region has been experiencing steady population and economic growth (ranking ninth in the nation in population growth from 1990 to 1996), and the Minneapolis CBD is growing at a rate significantly higher than the region as a whole. Total population and employment in 1995 was estimated at 70,000 and 198,000, respectively, within a ½ mile radius of proposed light rail stations. Based on 2020 forecasts, both total population and employment within a ½ mile radius of proposed LRT stations is projected to grow approximately 25% (87,800) and 37% (271,891), respectively.

Future Plans and Policies: The Metropolitan Council, which has responsibility for regional planning and the operation of several major public services, has established a strong policy foundation for growth management. The Met Council's Metro 2040 Strategy in the Regional Blueprint establishes a growth boundary promoting higher density development overall and emphasizing reinvestment in the urban core. As part of the implementation of the regional growth strategy, the Met Council will tie investments in transportation and sewer facilities to local efforts to implement the regional plan and will determine consistency of local governments' required comprehensive plans, zoning ordinances, and capital improvement programs with the Regional Blueprint. The Council's new Smart Growth initiative has produced a *Transit Oriented Development Guidebook* to assist communities in implementing TOD around tarnsit facilities.

Development of additional surface parking lots is banned downtown. Minneapolis interim zoning ordinances offer "bonuses" or reductions in required parking to businesses located within 200 feet of a transit stop. Large developers in downtown Minneapolis are allowed reductions in parking supply requirements. Other provisions currently under consideration include additional bonuses for locating near an LRT station, and maximum parking limits appropriate to size and use.

The Metropolitan Council has taken recent action to target regional development resources to the proposed corridor. These actions include the dedication of $5 million to land assembly in the corridor for the creation of transit-friendly development around stations, and the award of state-funded "Livable Communities Demonstration Account" funding to three separate Hiawatha LRT neighborhood-based development initiatives. Another mixed-use development project located near the Downtown East (Metrodome) station was awarded Livable Communities funding in a previous funding cycle. In addition, the City of Minneapolis has targeted $4 million in redevelopment funding for transit-oriented redevelopment initiatives around the city's proposed LRT stations.

Local Financial Commitment

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

The financial strategy for the proposed Hiawatha Avenue light rail project assumes $274.3 million (50 percent) of Section 5309 New Start funds, $117.3 million (21 percent) in State funds, $87.0 million (16 percent) in local funds, and $70 million (13 percent) from the Metropolitan Airports Commission.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the strong financial condition of Metro Transit and the high percentage (75 percent or $204.3 million) of funding committed at the State and local level to the proposed project.

Agency Capital Financial Condition: The Metropolitan Council is in strong financial condition with an existing fund balance (1998) of $145 million. Metro Transit operates as a division of the Metropolitan Council of Governments, itself a component unit of the State of Minnesota. The Metropolitan Council has taxing capacity and acts as an administrator of both Federal and State funds.

Capital Cost Estimates and Contingencies: Total capital cost estimates increased approximately 22 percent over the last year to reflect 1) costs in escalated dollars, 2) the redesign of several project elements, and 3) more detailed engineering studies. These costs are considered reasonable given the project's size and scope.

Existing and Committed Funding: Approximately 75 percent ($204.3 million) of non-New Starts funding is existing and committed to the Hiawatha Avenue LRT. These sources represent contributions from the State of Minnesota ($117.3 million) and the Hennepin County Regional Railroad Authority ($87 million). Over the last two years, the Minnesota Legislature has set aside $117.3 million for the proposed LRT. The remaining 25 percent ($70 million) of local funding has been proposed by the Metropolitan Airports Commission (which is also a division of the Metropolitan Council) in the form of general airport revenues. However, the use of these funds must be approved by the Federal Aviation Administration.

New and Proposed Sources: Only existing sources are proposed for the construction of the Hiawatha Avenue light rail project.

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* rating reflects the Metropolitan Council's healthy operating condition. Revenues to operate the proposed Hiawatha Avenue LRT appear strong.

Operating Cost Estimates and Contingencies: Operating cost estimates appear reasonable. Project sponsors estimate annual operating and maintenance cost at $15 million for the Hiawatha Avenue light rail project. This will require an additional annual operating subsidy of $11.43 million (escalated dollars) representing an increase of 10 percent in operating assistance requirements.

Existing and Committed Funding: All of the Hiawatha Avenue light rail project's operating funds currently exist and are considered committed. Funds to support operating costs will be derived from the following: real growth in existing property tax levies, real growth in state general appropriations/miscellaneous sources; periodic fare increases; and a three year temporary application of regional CMAQ funding.

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

Locally Proposed Financing Plan

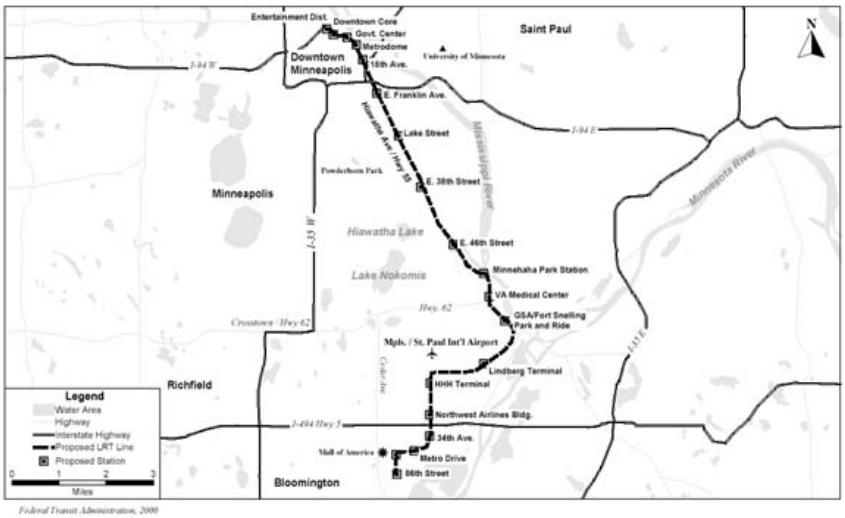
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal:		
Section 5309 New Starts	$274.30	$69.32 million appropriated to the Hiawatha Avenue LRT through FY 2000
State:		
Minnesota Legislature	$117.30	
Local:		
Hennepin County Regional Railroad Authority	$87.00	
Metropolitan Airports Commission	$70.00	
Total:	**$548.60**	

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

Hiawatha Avenue Corridor

Minneapolis - St. Paul, MN



Nashville, Tennessee/East Corridor Commuter Rail

East Corridor Commuter Rail

Nashville, Tennessee

(November 1999)

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 1400 average weekday boardings on the proposed project in 2006, including 700 daily new riders. The project is estimated to cost $30.0 million in escalated dollars, with a proposed Section 5309 New Starts share of $20.9 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 Summary Description

Proposed Project	Commuter Rail 31.1 miles, 5 stations
Total Capital Cost ($YOE)	$30.00 million
Section 5309 Share ($YOE)	$20.90 million
Annual Operating Cost ($YOE)	$2.00 million
Ridership Forecast (2006)	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. FTA approved the project to advance into preliminary engineering (during which time an environmental assessment will be undertaken) on November 30, 1999.

TEA-21 Section 3030(a)(50) authorizes the "Nashville Commuter Rail" project for final design and construction. Through FY 2000, Congress has appropriated $1.97 million for the project.

Locally Proposed Financing Plan

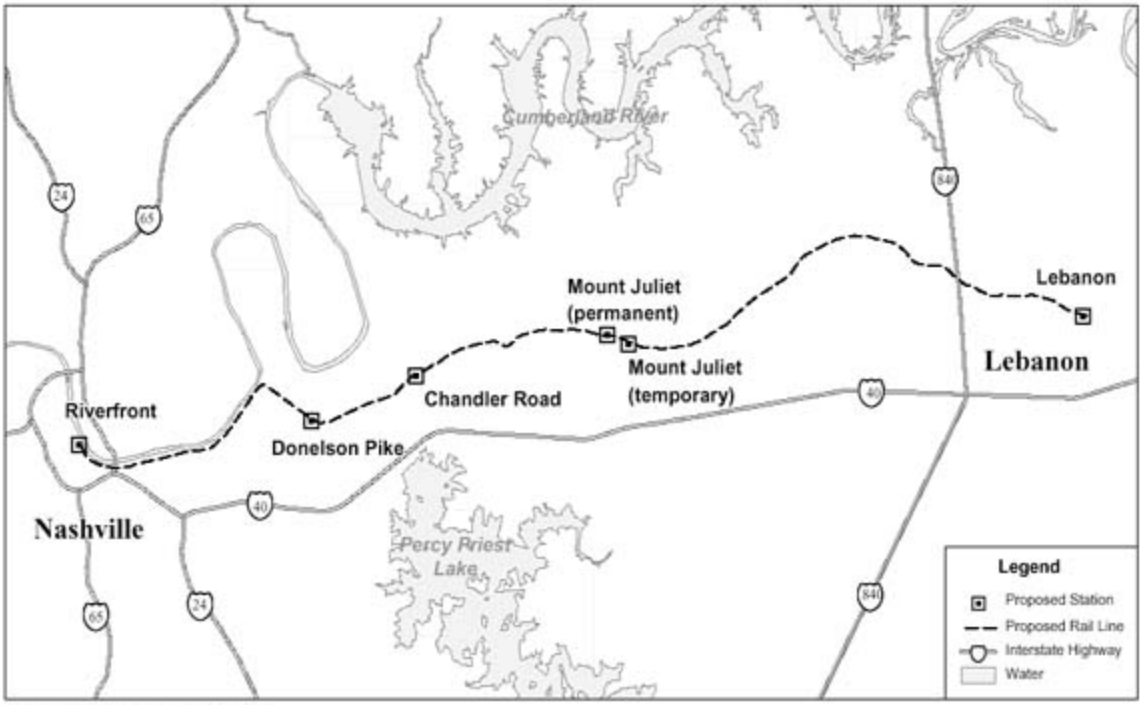
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$20.90	$1.97 million appropriated through FY 2000
FHWA Intermodal	$3.00	
Local:		
Tennessee DOT	$2.60	
Regional Funding	$2.60	
Local Government Funding	$0.80	
Total:	**$30.00**	

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, TN



Federal Transit Administration, 2000

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 1999)

Description

The Metropolitan Transportation Authority (MTA) is the lead agency for the proposed Long Island Rail Road (LIRR) East Side Access project. The project would provide increased capacity for the commuter rail lines of the Long Island Rail Road and direct access between suburban Long Island and Queens and a new passenger terminal in Grand Central Terminal in east Midtown Manhattan, in addition to the current connection to Penn Station in Manhattan.

The East Side Access (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 63rd 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 63rd Street Tunnel under Park Avenue and into a new LIRR terminal in the lower level of Grand Central Terminal (GCT). ESA will provide the LIRR will additional tunnel capacity across the East River. Increased capacity and headways would be introduced at most LIRR stations. For example, an additional 24 peak hour trains would operate through the existing 63rd Street Tunnel to GCT. Ten new tracks and five platforms will 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 approximately $4.35 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

Proposed Project	Commuter Rail Extension 4 miles, 2 stations
Total Capital Cost ($YOE)	$4,350.00 million

Section 5309 Share ($YOE)	$2,175.00 million
Annual Operating Cost ($YOE)	$157.80 million
Ridership Forecast (2020)	351,000 average weekday boardings
FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based primarily on the strongly 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 capital funds 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 1999**. 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. The DEIS is scheduled for completion in February 2000. MTA anticipates completing the Final EIS in June 2000, followed by a Record of Decision in August 2000.

TEA-21 Section 3030(a)(54) authorizes the Long Island Railroad East Side Access for final design and construction. Through FY 2000, Congress has appropriated $45.71 million in Section 5309 New Start 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.

The project is rated 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*.

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 use the proposed 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. *No-Build*	New Start vs. *TSM*
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 the Terminal.

Environmental Benefits

Rating: Medium

The U.S. Environmental Protection Agency designates the New York City area as "severe" nonattainment for ozone and "moderate" nonattainment for carbon monoxide. New York County is designated as "moderate" nonattainment 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.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 720 annual tons	decrease of 524 annual tons
Nitrogen Oxide (NO_x)	decrease of 107 annual tons	decrease of 73 annual tons
Volatile Organic Compounds (VOC)	increase of 267 annual tons	decrease of 188 annual tons
Particulate Matter (PM_{10})	decrease of 66 annual tons	decrease of 11 annual tons
Carbon Dioxide (CO_2)	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):

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	increase of 1,305,826 million annual BTU	increase of 1,531,344 million annual BTU

Operating Efficiencies

Rating: Not Rated

NY MTA did not provide information on operating efficiencies.

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

Cost Effectiveness

Rating: Low

NY MTA provided the following information on cost effectiveness:

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$34.50	$32.20

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 CBD is approximately 261.1 employees

per acre. The proposed station at Sunnyside 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. 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. The Long Island City CBD area is also zoned for high density (15.0 FAR), to encourage high-intensity commercial and residential development.

While some 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 local station areas. 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. By 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 that will allow four to five large office towers to be constructed in the area. Additional changes in development anticpated 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 includes $2,175 million (50 percent) in Section 5309 New Starts funds and $2,175 million (50 percent) in State and local funds.

Stability and Reliability of Capital Financing Plan

Rating: Medium

The *Medium* rating reflects the sound financial condition of MTA and the agency's positive dedicated revenue sources. The rating also acknowledges that, at this time, approximately 39 percent ($845 million) of the total proposed non-Section 5309 New Starts share of project costs is reasonably committed.

Agency Capital Financing Condition: NY MTA is in strong financial condition. The MTA Board recently approved the agency's FY2000-FY2004 capital plan, 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 plan. Historically, these projections are consistent with the agency's reliance on Federal funding sources in prior years. It is important to note, however, that the FY00-FY04 capital plan has not yet been approved by the NY legislature.

Capital Cost Estimates and Contingencies: Capital cost estimates increased approximately one percent ($61 million) over the last year as a result of cost escalation due to refined engineering studies. Contingencies on unit costs were added to reflect the early stage of design. 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. These costs are considered reasonable given the scope and size of the project.

Existing and Committed Funding: At this time, 39 percent ($845 million) of the total non-Section 5309 New Starts share has been reasonably committed to the project, including $750 million via NY MTA's proposed FY00-FY04 capital plan. It is important to note that this plan has been approved by the MTA Board but not yet approved by the NY legislature. MTA will need to continue to allocate sufficient funds – in future capital plans – to cover the entire construction phase of the LIRR ESA project

New and Proposed Sources: No new sources are proposed for the LIRR ESA project.

Stability and Reliability of Operating Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects NY MTA's (the largest transit authority in the country) healthy operating condition. Revenues to operate the proposed LIRR ESA project are considered strong.

Agency Operating Condition: The operating condition of the NY MTA is considered strong. The 1998 MTA Annual Report indicated that fares and operating revenues covered approximately 50 percent of the agency's operations. Bridge and tunnel tolls covered an additional 15 percent. The remaining 35 percent were covered through normal Federal, State and local allocations.

Operating Cost Estimates and Contingencies: Annual operating costs for the proposed project are estimated at $157.8 million (escalated dollars). This estimate is considered reasonable. Theestimated cost to operate the entire MTA transit, bridge and tunnel system in the year 2012 is $14.37 billion (escalated dollars). Thus, the proposed LIRR ESA project represents only one percent of the agency's overall operations. The FY00-FY04 system-wide capital plan identifies a $4.4 billion capital (expressed as debt service) and operating funding gap that is anticipated to be addressed via non-service related cost reductions, financing initiatives, and new government assistance and other resources. Based on past performance and planned resources, it is anticipated that funds will be secured to fill the projected gap.

Existing and Committed Funding: All of the proposed operating funds are existing and are considered stable and committed. The 20-year cash flow analysis provided by MTA forecasts that sufficient funds are available to build and operate the proposed ESA project. The MTA currently

has a farebox recovery ratio of 60 percent before debt service and 50 percent after debt service. In addition, the agency has supported an average of 55 percent of its operations for the years 1983-1996 through passenger revenues and bridge and tunnel surpluses – the latter being a State mandate. The MTA also receives dedicated tax funding for operations from the Metropolitan Mass Transportation Operating Assistance Account which includes a ¼ percent sales and use tax, a legislatively allocated portion of the business privilege tax imposed on NY petroleum businesses and a portion of the taxes levied on certain transportation and transmission companies.

New and Proposed Sources: All proposed operating revenue sources are existing.

Locally Proposed Financing Plan

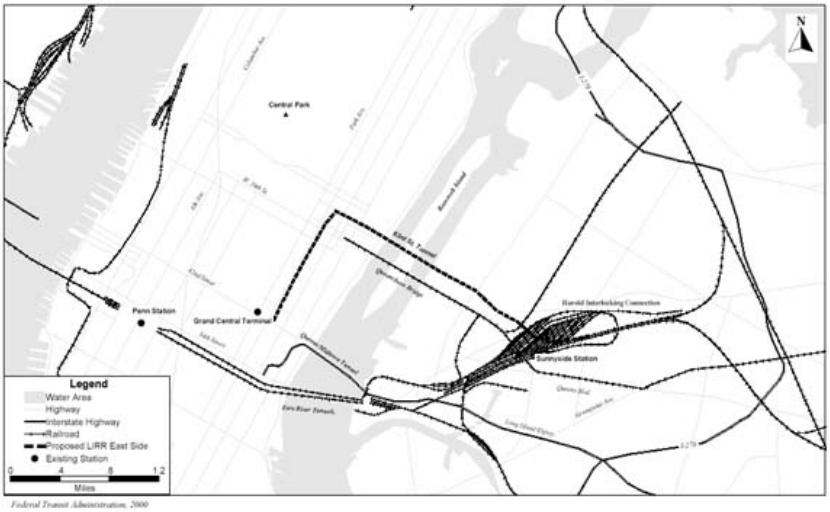
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: Section 5309 New Starts	$2,175.00	$45.71 million appropriated through FY 2000
State and Local:	$2,175.00	
Total:	**$4,350.00**	

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

LIRR East Side Access

New York, NY



Norfolk, Virginia/Norfolk-Virginia Beach Corridor

Norfolk-Virginia Beach Corridor LRT

Norfolk, Virginia

(November 1999)

Description

Hampton Roads Transit (HRT) has planned a 13 station, 18.3-mile double track light rail transit (LRT) line from Downtown Virginia Beach (at the Pavilion) to Downtown Norfolk. (Hampton Roads Transit is the agency formed from the merger of Tidewater Regional Transit and Peninsula Transit, effective October 1, 1999; reference to HRT project planning and development connotes actions taken by either of the predecessor agencies.) The proposed LRT alignment generally follows an active Norfolk Southern Railroad right-of-way. This east-west corridor is intended to serve the growing market of commuters into Norfolk and Virginia Beach from outside those communities. Virginia Beach Boulevard and Route 44/I-264 are at or over capacity at many locations. In addition to capacity concerns, there are other important issues within the corridor, such as potential economic development opportunities and increased mobility for the residents of the Hampton Roads region. HRT estimates that the Norfolk - Virginia Beach Corridor LRT will cost $524.6 million (escalated dollars) to construct, with ridership estimated at 33,200 average weekday boardings and 11,600 daily new riders in the year 2018.

The project is the first phase of a planned 30-mile light rail system in the Hampton Roads region that includes a line to the Norfolk Naval Base and to the cities of Chesapeake and Portsmouth.

Norfolk Beach Corridor Summary Description

Proposed Project	Light rail line 18.3 miles, 13 stations
Total Capital Cost ($YOE)	$524.50 million
Section 5309 Share ($YOE)	$288.50 million
Annual Operating Cost ($2018)	$21.70 million
Ridership Forecast (2018)	33,200 average weekday boardings 11,600 daily new riders
FY 2001 Financial Rating:	**Low**
FY 2001 Project Justification Rating:	**Low-Medium**
FY 2001 Overall Project Rating:	**Not Recommended**

The overall project rating of *Not Recommended* is based on the project's generally weak project justification criteria and the uncertainty regarding proposed funding to build and operate the project *at this time*. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999**. 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

HRT completed a Major Investment Study (MIS) to evaluate transportation improvements in the 30-mile corridor extending from Virginia Beach to Downtown Norfolk and the Norfolk Naval Base. HRT selected the Light Rail Transit Alternative for the 18.3-mile segment from Virginia Beach to Downtown Norfolk as the locally preferred alternative (LPA), which was endorsed by the Hampton Roads District Planning Commission, the MPO, on January 15, 1997. Development of the lines connecting to the Norfolk Naval Base and Chesapeake/ Portsmouth has also been adopted by the MPO and will be considered in later phases.

Approval from the Federal Transit Administration to enter preliminary engineering (PE) was granted in April 1997. In November 1999, Virginia Beach voters rejected a referendum of support for the proposed project. HRT is continuing development of the project and anticipates that the Environmental Impact Statement will be completed in late fall 1999; issuance of the Record of Decision (ROD) is anticipated by March 2000. HRT is expected to submit to FTA a request to enter final design in spring 2000. The first phase of the regional LRT system is expected to begin operations in late 2004/early 2005.

TEA-21 Section 3030(a)(58) authorizes the Norfolk-Virginia Beach Corridor for final design and construction. Through FY 2000, Congress has appropriated $10.91 million in Section 5309 New Starts funds to this project.

Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Criteria have been submitted for the 18.3-mile segment from Virginia Beach to Norfolk. N/A indicates that data are not available for this specific measure.

FTA has evaluated this project as being in preliminary engineering. The project will be reevaluated prior to FTA approval to enter final design, and for next year's *Annual Report on New Starts*.

Justification

The *Low-Medium* project justification rating reflects the project's relatively weak justification criteria.

Mobility Improvements

Rating: Low

HRT estimates that the Norfolk – Virginia Beach Corridor LRT project will serve 33,200 average weekday boardings and attract 11,600 daily new riders by 2018, and would result in the following annual travel time savings.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	0.40 million hours	0.30 million hours

Based on 1990 U.S. census data, there are an estimated 1,447 low-income households within a ½ mile radius of the proposed 13 stations, representing 13 percent of all households within the corridor.

Environmental Benefits

Rating: Medium

Hampton Roads is classified as a maintenance area for both VOC and NO_x, and is in attainment for ozone and carbon monoxide.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 916,807 annual tons	decrease of annual tons
Nitrogen Oxide (NO_x)	decrease of 51,446 annual tons	decrease of 46,921 annual tons
Hydrocarbons (HC)	decrease of 224,113 annual tons	decrease of 195,931 annual tons
Particulate Matter (PM_{10})	N/A	N/A
Carbon Dioxide (CO_2)	decrease of 5,705 annual tons	decrease of 9,724 annual tons

HRT estimates the proposed project 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 (millions)	decrease of 64,640 million annual BTU	decrease of 115,716 million annual BTU

Operating Efficiencies

Rating: High

HRT estimates the following system-wide costs per passenger mile.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2018)	$0.73	$0.79	$0.63

Values reflect 2018 ridership forecast and 1998 dollars.

Cost Effectiveness

Rating: Low-Medium

HRT estimates the following cost effectiveness indices.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$16.40	$15.10

Values reflect 2018 ridership forecast and 1998 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Low-Medium

The *Low-Medium* land use rating reflects the relatively low density development and marginal transit supportive corridor policies in the corridor.

Existing Conditions: Total employment and population in station areas are relatively small given the length of the corridor. Most stations have neighborhoods of both multi-family and single-family housing within a ½ mile radius. Neighborhood access in some areas is blocked by an adjacent freeway and/or circuitous streets. Residential areas in the rail corridor are typically relatively low density, i.e., less than 9 units per acre. The Norfolk CBD is small but relatively dense and pedestrian accessible. Streetscape initiatives have recently been undertaken in conjunction with redevelopment projects in transit station areas. Most of the moderate to high density population areas in Norfolk are concentrated a few miles away from the light rail line. Virginia Beach has an established development boundary beyond which public services are not provided. Parking costs at CBD city lots range up to $1 per hour or $8 per day, with monthly rates from $43 to $85. Approximately 2.1 parking spaces per 1000 sq. ft. exist within proposed CBD station areas. Norfolk CBD high trip generators include the MacArthur Center, the Harbor Park minor league baseball stadium and Norfolk State University.

Outside the Norfolk CBD, residential areas are generally single-family, with some multi-family developments, and are suburban in character. The design of most areas outside the Norfolk CBD is primarily auto-oriented. Office developments are generally low-rise and commercial, and retail areas are strip or plaza style. Despite some diminished neighborhood access due to street network design, some office, retail and residential developments are readily accessible from proposed station sites. Parking outside the CBD is approximately 3.3 parking spaces per 1000 sq. ft. Major trip generators include the Oceana Naval Air Station, Pavilion Convention Center and the Virginia Beach Oceanfront Resort Area.

Future Plans and Policies: The City of Norfolk has undertaken some significant activities that are strongly supportive of transit-oriented development and urban redevelopment. Norfolk has recently revised zoning in station areas and other areas of downtown to facilitate higher-intensity commercial, residential, and/or mixed-use development. Within the corridor, employment growth is expected to keep pace with regional trends although residential growth will not; the greatest growth in the region is forecast to occur in Virginia Beach. Unlike Norfolk, however, the City of Virginia Beach, which has jurisdiction over 9 of the 13 stations, has not developed tools to facilitate transit-supportive development or indicated an interest in doing so. Aside from the planned Pembroke/CBD station area, no specific transit-supportive zoning policies are indicated in Virginia Beach. HRT is leading a planning effort to develop transit station area plans and design guidelines. The only parking policy identified is a plan to centralize parking and rely on transit shuttle circulation in the Virginia Beach Oceanfront area.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 45%

The HRT project financial plan proposes to use $288.5 million (55 percent of total project costs) in Section 5309 New Start funds, $125.3 million (24 percent) in State funds, $81.3 million (15 percent) in local funds, and $29.4 million (6 percent) of Federal flexible and CMAQ funds.
Stability and Reliability of Capital Financing Plan

Rating: Low

The *Low* capital finance plan rating reflects the uncertainty of proposed funding to construct the proposed project.

Agency Capital Financial Condition: Total project capital needs are forecast to increase at an annual average rate of 10 percent between FY 1998 and FY 2017, reaching $171.9 million in one year during the height of construction. A proposed local gas tax is expected to provide for 23 percent of all ongoing system-wide capital needs beginning in FY 2001, in addition to providing 34 percent of the project's non-New Starts capital costs. Without experience in projects of this magnitude, HRT may be challenged to maintain such a high level of expenditure.

Capital Cost Estimates and Contingencies: The project's $525 million cost estimate is reasonable given its size and design, and assuming normal inflation and escalation. Delaying the project has been identified as a strategy to cover potential funding shortfalls, as well as additional debt financing, increased fares, and non-farebox revenues, e.g., joint development and concessions.

Existing and Committed Funding: No funding has been committed for the project. Approval of the Virginia General Assembly is required for use of any non-New Starts funding, i.e., state, local and Federal flexible and CMAQ funds. However, State financial support for the Norfolk-Virginia Beach Corridor LRT has not yet been pursued; HRT will work to attain a resolution of financial support, without indicating specific funding sources, during the January 2000 General Assembly. The Virginia Transportation Trust Fund is viewed as a reliable funding source if its use is designated for this project. Non-New Starts funds are Federal flexible and CMAQ monies requiring State approval and regional allocation.

New and Proposed Funding: The proposed local taxing authority (5 percent on retail gas prices), yet to be adopted, is subject to referendum and State Legislature approval; the financial implications of the recent failed Virginia Beach referendum in support of light rail is undetermined. This dedicated funding source would account for 15 percent of total project costs, representing 35 percent of non-New Starts funding. Up to $107 million (45 percent of non-new Starts funds) in State funding would be financed through debt service on a bond, which would support both the bulk of the State's share and $60.5 million in local share of the project. The State and HRT would enter into a service contract for annual payments of $8.3 million by the State to support this bond; HRT intends to seek the annual appropriation to continue project development during the next General Assembly.

Stability and Reliability of Operating Finance Plan

Rating: Low

The *Low* operating finance plan rating reflects substantial reliance on a proposed local gas tax, not yet adopted, and the lack of an average operating surplus (for TRT) to fund the project.

Agency Operating Financial Condition: The former TRT has experienced zero operating balances, on average, in recent years while achieving a 35 percent farebox recovery ratio. TRT system-wide operating costs are expected to increase from $24.3 million to $90.1 million over the 20-year period FY 1998 to FY 2017. The 7.1 percent annual growth rate is reasonable given the planned operation of the LRT and ongoing bus expansion. Although TRT ridership has been increasing, LRT operating costs are estimated to comprise 20 percent of overall operating costs in outyears. Projected bus operations fare revenues are to provide approximately 24 percent of ongoing revenues; however, the expected growth rate is higher than historical growth. Over 24 percent of ongoing operating needs are to be funded through the proposed local gas tax.

Operating Cost Estimates and Contingencies: Annual operations and maintenance costs are estimated at $12 million for the project, potentially low for its size. Contingencies include increased fares and non-farebox funding.

Existing and Committed Funding: Only fare revenues are identified as an existing operations funding source.

New and Proposed Funding: The proposed local gas tax would provide over 24 percent of all ongoing operating funds over the course of the twenty year cash flow.

Locally Proposed Financing Plan

(Reported in $YOE)

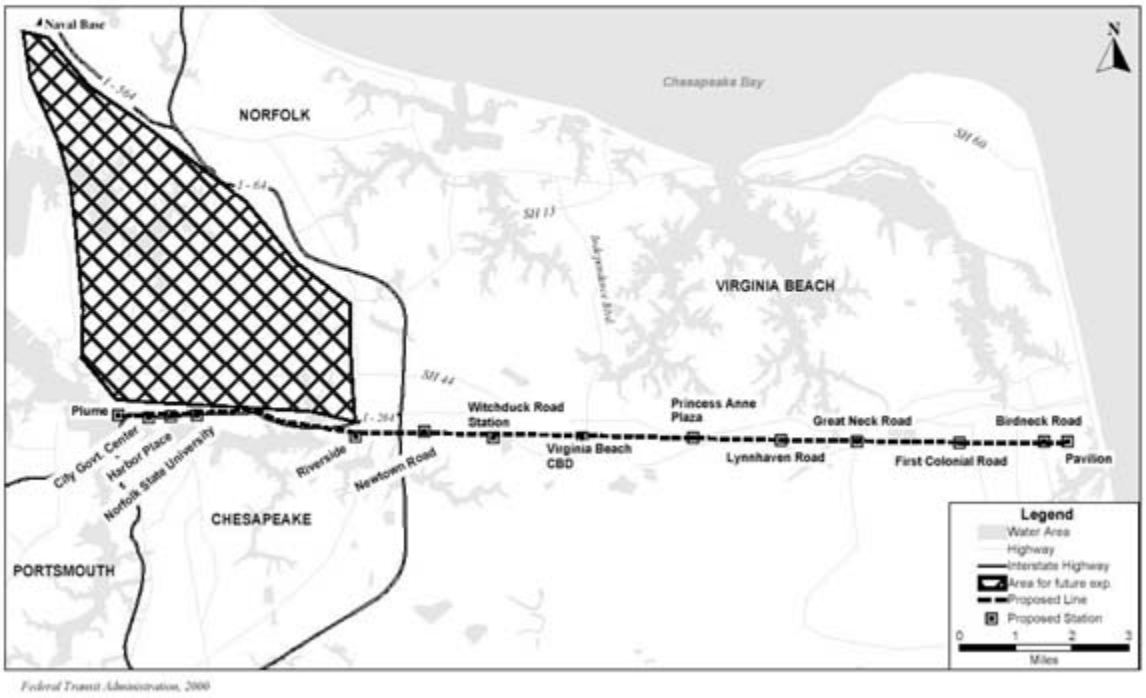
Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal:		
Section 5309 New Starts	$288.50	$10.91 million appropriated through FY 2000

CMAQ/STP	$29.40	
State:		
Bonds	$107.00	
General Appropriations	$18.30	
Local:		
Regional Gas Tax	$81.30	
Total:	**$524.50**	

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

Norfolk - Virginia Beach Corridor LRT

Norfolk, VA



Orange County, California/Centerline Rail Corridor

The Centerline Orange County Rail Corridor

Orange County, California

(November 1999)

Description

The Orange County Transportation Authority (OCTA) is developing a 26.6-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.

OCTA is currently studying several alignment alternatives for a light rail transit system in the corridor, including minimum operable segment (MOS) options. This profile reflects an assumption of a 31-station 26.6 mile LRT system which is 97 percent at-grade and 3 percent elevated. Project costs are estimated at $2.015 billion (escalated dollars) with ridership estimated at 71,800 average weekday boardings.

Centerline Orange County Rail Summary Description

Proposed Project	Rail Fixed Guideway (LRT) 26.6 miles, 31 stations
Total Capital Cost ($YOE)	$2.015 billion
Section 5309 New Starts Share ($YOE)	$1.009 billion
Annual Operating Cost ($YOE)	$46.5 million
Ridership Forecast (2020)	71,800 average weekday boardings 35,800 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The overall project rating of *Recommended* is based on the project's adequate 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 1999.** 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% 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 Summer of 2000 with the selection of a Locally Preferred Alternative (LPA), at which point OCTA will focus its remaining PE effort on the LPA.

The Centerline rail corridor project is included in the metropolitan planning organization's financially constrained and conforming Regional Transportation Plan and Transportation Improvement Program. TEA-21 Section 3030(a)(59) authorizes the Fullerton-Irvine Corridor for final design and construction. Through FY 2000, Congress has appropriated $8.44 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 71,800 average weekday boardings and 35,800 daily new riders by 2020. OCTA estimates the following travel time savings for the New Start compared with the No-Build and TSM alternatives.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	13.3 million hours	6.3 million hours

Based on the 1990 US Census, OCTA estimates that there are 17,506 low-income households within ½ mile of the 31 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, a "serious"

nonattainment area for PM-10, and a nonattainment area for NOx.

OCTA estimates the following changes in annual regional emissions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	increase of 23 annual tons	decrease of 179 annual tons
Nitrogen Oxide (NO_x)	increase of 123 annual tons	decrease of 70 annual tons
Volatile Organic Compounds (VOC)	increase of 25 annual tons	decrease of 25 annual tons
Particulate Matter (PM_{10})	0	0
Carbon Dioxide (CO_2)	decrease of 26,745 annual tons	decrease of 4,267 annual tons

OCTA estimates the following changes in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	increase of 37,744 million annual BTU	decrease of 85,779 million annual BTU

Operating Efficiencies

Rating: High

OCTA estimates a decrease in the systemwide operating cost per passenger mile compared to the No-Build and TSM.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	$0.40	$0.42	$0.36

Values reflect 2020 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Medium

OCTA estimates the following cost effectiveness indices:

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$6.80	$11.90

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 26.6-mile corridor serves several single and multi-family residential neighborhoods, several office parks, regional malls, strip retail development, several industrial areas, and Disneyland, Anaheim Stadium, and other entertainment attractions. Additionally, the John Wayne Airport and the El Torro Base Redevelopment Site will also be served by the proposed investment. Land use densities are generally moderate in the north of the corridor but are generally lower in the southern portion of the corridor. The population of the corridor is expected to grow by 13%, from 715,900 to 808,500 between 1997 and 2020 and employment in the corridor is expected to grow from 581,270 to 936,300 --- a 61 percent increase. The corridor contains 25 percent of the population and 45 percent of employment within Orange County. The land use patterns in the corridor are auto-oriented, with a significant supply of parking in most employment centers, shopping areas, and attractions. In general, the corridor is not pedestrian-friendly; however, most of the seven communities traversed by the corridor have adopted policies and plans which support redevelopment and pedestrian access around station areas.

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. The communities along the corridor have enacted relatively dense residential zoning (15 to 30 units per acre and higher), and there are a number of redevelopment 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 $1,009.1 million (50 percent) in Section 5309 New Start funds and an additional Federal contribution of $405.4 million (20 percent) in Federal flexible funds. The plan includes $421.9 million (21 percent) in State funding and $179.4 million (9 percent) in local funds.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The Centerline Rail Corridor has received a *Medium-High* capital plan rating because 100 percent of proposed local funding for the project is committed from existing sources.

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.

Capital Cost Estimates and Contingencies: OCTA is in the process of selecting the locally preferred alternative and is considering a minimum operating segment (MOS). Capital cost estimates and contingencies will likely be refined after selection of the preferred alternative.

Existing and Committed Funding: The OCTA Board of Directors has committed $180 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 Funding Sources: All of the proposed Non-Section 5309 share of projects 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 $46.5 million. These estimates appear reasonable given the proposed size of the system. These costs will be refined after the locally preferred alternative is selected.

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 ($250 million) and CMAQ ($49 million) funds. This resource is estimated to yield sufficient funds to operate the completed 26.6-mile system through FY 2030. OCTA has similar funding in place for both its bus and commuter rail operations

New and Proposed Funding Sources: All of the funding proposed for operations and maintenance is from existing funding sources.

Locally Proposed Financing Plan

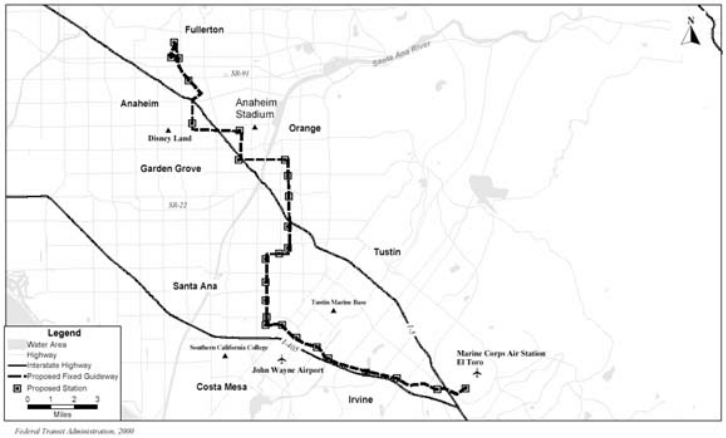
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal:		
Section 5309 New Starts	$1,009.1	$8.44 million appropriated through FY 2000.
STP/CMAQ	$405.4	
State:		
STIP	$421.9	
Local:		
Measure M	$179.4	
Total:	**$2,015.8**	

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, CA



Phoenix, Arizona/Central Phoenix/East Valley Corridor

Central Phoenix / East Valley Corridor

Phoenix, Arizona

(November 1999)

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 an 18.5 mile minimum operating segment (MOS) which includes a 17.0-mile mainline from downtown Phoenix, through Tempe to Mesa, and a 1.5-mile spur serving the emerging Rio Salado development along Town Lake in Tempe. The rail line would run primarily on existing rail right-of-way. The proposed LRT MOS is estimated to cost approximately $883.9 million (escalated), of which the RPTA intends to seek $441.9 million in New Starts funding.

East Valley Corridor Summary Description

Proposed Project	Light Rail Transit 18.5-mile MOS, 22 stations
Total Capital Cost ($YOE)	$883.9 million
Section 5309 Share ($YOE)	$441.9 million
Annual Operating Cost ($YOE)	$31.1 million
FY 2001 Financial Rating:	**Low-Medium**
FY 2001 Project Justification Rating:	**Not Rated**
FY 2001 Overall Project Rating:	**Not Recommended**

The *Not Recommended* rating is based on the lack of local funding *at this time* for implementing and operating the proposed project. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999**. 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 RPTA permission to enter the Preliminary Engineering/Environmental Impact Statement (PE/EIS) phase on 13 miles of the corridor. FTA has subsequently approved preliminary engineering on 18.5 miles of the proposed system. It is anticipated that PE/EIS will be completed in December 2000 and a Record Of Decision issued by FTA in January 2001.

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 2000, Congress has appropriated $13.86 million for the project.

Evaluation

The RPTA did not submit information consistent with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Pending an update of the MAG regional travel demand model to produce more accurate forecasts, FTA has not rated the project's justification criteria. 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 RPTA did not submit project justification criteria in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Therefore, FTA has not rated the project's justification criteria. The region is currently undertaking an update to its regional travel demand model to account for the proposed expansion of the regional bus network, accommodate changes in the project scope, and produce higher quality transit ridership forecasts.

Mobility Improvements

Rating: Not Rated

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	N/A	N/A

Based on the 1990 census data, there are approximately 4,040 low-income households within a ½ mile radius of the proposed LRT stations, roughly 16 percent of total households within ½ mile of proposed stations.

Environmental Benefits

Rating: Not Rated

The Phoenix Metropolitan region is a serious non-attainment area for ozone, carbon monoxide, and particulates (PM10).

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	N/A	N/A
Nitrogen Oxide (NOx)	N/A	N/A
Hydrocarbons (HC)	N/A	N/A
Particulate Matter (PM_{10})	N/A	N/A
Carbon Dioxide (CO_2)	N/A	N/A

Information on BTU reductions is not available.

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	N/A	N/A

Operating Efficiencies

Rating: Not Rated

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

Cost Effectiveness

Rating: Not Rated

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	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.

The State of Arizona has led efforts to examine strategies to manage growth and preserve open space. A proposal from the Governor's "Growing Smarter" Committee was due at the end of 1999.

Local Financial Commitment

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

The financial plan for the 18.5-mile Central Phoenix/East Valley LRT MOS includes $883.9 (YOE) $441.9 million (50 percent) in Section 5309 New Start funds, and $441.9 million (50 percent) in state and local funds from the Cities of Phoenix, Tempe, and Mesa.

Stability and Reliability of Capital Financing Plan

Rating: Low-Medium

The *Low-Medium* rating reflects the lack of committed local funding to the project. A referendum is scheduled for Phoenix in March 2000 which, if passed, would commit sufficient funding to improve the project's capital plan rating.

Agency Capital Financial Condition: The RPTA is in good financial condition. 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 a significant increase in in-street operations, a refinement 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. State LTAF/PTF funds are proposed to meet any potential funding shortfalls, but it is not clear if such funding would be above what is needed for ongoing bus capital and operating needs.

Existing and Committed Funding: Local match for capital expenses are proposed to come from the corridor cities of Tempe, Mesa, and Phoenix, but no firm local funding commitments yet exist. While Tempe has a dedicated ½ cent sales tax which may be tapped for transit, use of these revenues for light rail must be first put to an advisory vote of the electorate. Mesa has a dedicated funding source for transportation, but the amount of funding allocated from this source may not meet the necessary $26 million commitment.

New and Proposed Sources: The City of Phoenix has set a referendum for Spring 2000 which, if passed, would establish a 0.4 cent sales tax dedicated to bus and rail transit in the City. Passage of the referendum would generate adequate revenues to meet Phoenix's proposed capital commitment of $260 million.

Stability and Reliability of Operating Finance Plan

Rating: Low

The *Low* rating reflects the lack of financial resources to operate the proposed LRT, and the numerous local actions necessary before such operating revenues can be secured.

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 rate 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).

Operating Cost Estimates and Contingencies: Annual operating costs for the proposed project are estimated at $31.1 million when the system is scheduled to open in 2006. Cost estimates and escalation factors are reasonable, although there are no specific provisions for cost overruns or revenue shortfalls.

Existing and Committed Funding: No existing operating revenues are yet committed to the proposed Central Phoenix/East Valley LRT project. The Tempe City Council will require an advisory vote by the electorate to make sales tax revenues approved for bus service available for light rail. Mesa also has a dedicated revenue source which contributes operating revenue to the existing bus system.

New and Proposed Sources: The City of Phoenix must secure a revenue source equal to the proposed 0.4 cent sales tax increase for not less than twenty years to fund operation and maintenance of the proposed project and the region's long range bus program. LRT operating revenues are further based on the assumption that an additional referendum extending a ½ cent Maricpoa County sales tax for highways, and committing 50 percent of these revenues to transit, will pass prior to 2006.

Locally Proposed Financing Plan

(Reported in $YOE)

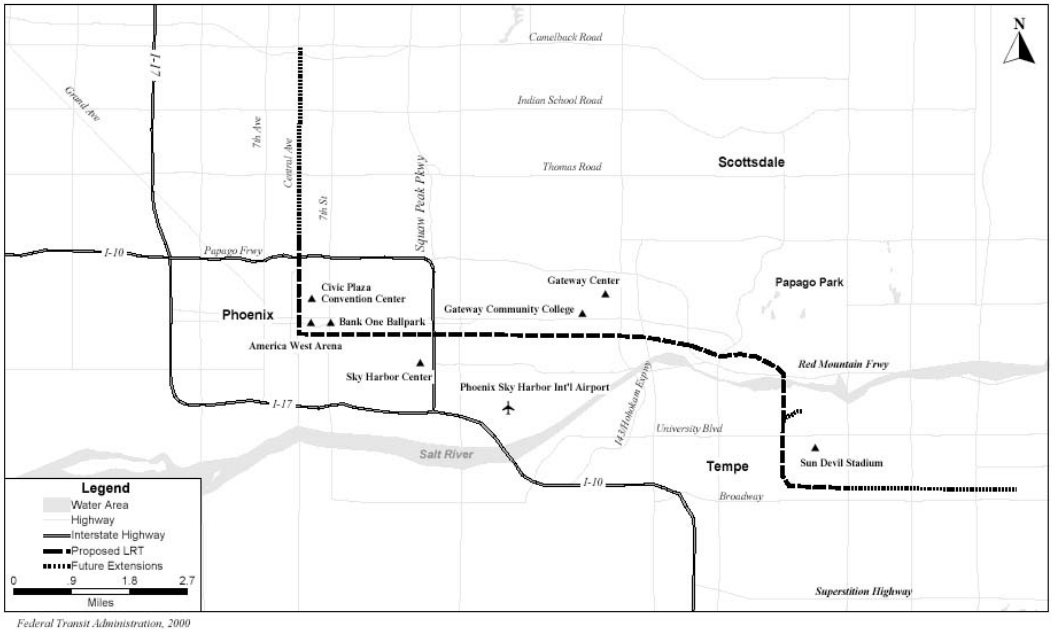
Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal:		

Section 5309 New Starts	$441.9	$13.86 million appropriated through FY 2000
Local:		
City of Phoenix	$260.0	
City of Mesa	$156.0	
City of Tempe	$26.0	
Total:	**$883.9**	

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, AZ



Federal Transit Administration, 2000

Portland, Oregon/Interstate MAX LRT Extension

Interstate MAX LRT Extension

Portland, Oregon

(November 1999)

Description

The Tri-County Metropolitan Transportation District of Oregon (Tri-Met) is proposing a 5.6-mile extension of its Light Rail Transit (LRT) system known locally as the Metropolitan Area Express. The proposed Interstate Metropolitan Area Express (MAX) line will extend existing LRT service northward from the Rose Quarter Arena 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 boaridngs (8,400 new riders) by 2020.

Interstate MAX Summary Description

Proposed Project	Light Rail Line; 5.6 miles, 10 stations
Total Capital Cost ($YOE)	$350.0 million
Section 5309 Share ($YOE)	$257.5 million
Annual Operating Cost ($2005)	$7.2 million
Ridership Forecast (2020)	18,100 average weekly boardings 8,400 daily new riders
FY 2001 Financial Rating:	**High**
FY 2001 Project Justification Rating:	**High**
FY 2001 Overall Project Rating:	**Highly Recommended**

The *Highly Recommended* rating is based on the project's strong estimated cost effectiveness, transit supportive land use, and demonstrated local financial commitment to build and operate the project. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 Federal Transit Administration (FTA) approved the initiation of preliminary engineering on the 12-mile South-North LRT project in April 1996. In February 1998, the Draft Environmental Impact Statement 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 Draft Environmental Impact Statement 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 dollars to the project. The Final Environmental Impact Statement on the Interstate MAX project was completed in October 1999 and a Record of Decision is anticipated in December 1999. The project is anticipated to be ready to advance into final design in early 2000.

TEA-21 Section 3030(a)(66) authorizes the Portland South-North Corridor LRT (Interstate MAX) project for final design and construction. Through FY 2000, Congress has appropriated $8.96 million in Section 5309 New Start 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 data are unavailable for this specific measure.

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

Justification

The *High* project justification rating reflects strong transit supportive land use, mobility improvements, and cost effectiveness, and the adequacy of all other justification criteria.

Mobility Improvements

Rating: High

The 5.6-mile extension is expected to serve 18,100 average weekday boardings and 8,400 daily new riders by 2020. Metro, the Metropolitan Planning Organization for the Portland area, estimates the following travel time savings for the LRT project, compared to the No-Build and TSM alternatives.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings	decrease of 17.4 million hours	decrease of 0.8 million hours

Based on 1990 US Census data, there are an estimated 3,226 low-income households within a ½ mile radius of the proposed 10 stations, representing 25 percent of all households within the corridor.

Environmental Benefits

Rating: High

The Portland, OR / Vancouver, WA metropolitan region is currently in attainment for both ozone and carbon monoxide. The Interstate MAX and related land use densities are a major component of the region's air quality maintenance plan.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 1,402 annual tons	decrease of 144 annual tons
Nitrogen Oxide (NOx)	decrease of 251 annual tons	decrease of 251 annual tons
Volatile Organic Compounds (VOC)	decrease of 176 annual tons	decrease of 19 annual tons
Particulate Matter (PM_{10})	N/A	N/A
Carbon Dioxide (CO_2)	decrease of 33,873 annual tons	decrease of 3,553 annual tons

Metro estimates that the North Corridor-Interstate MAX would result in the following changes in regional energy consumption (measured in British Thermal Units -- BTU). Note that a decrease is reported in the comparison between the New Start and No-Build, and an increase reported between the New Start and TSM.

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 433,413 million annual BTU	increase of 13,808 million annual BTU

Operating Efficiencies

Rating: Medium

Metro estimates the following systemwide operating cost per passenger mile.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	$0.42	$0.38	$0.38

Values reflect 2020 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Medium-High

Metro estimates the following cost effectiveness indices.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$3.10	$9.70

Values reflect 2020 ridership forecast and 1999 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: High

The *High* land use rating reflects the number of major trip generators and the strong transit supportive policies, both in the corridor and throughout the region.

Existing Conditions: The alignment parallels Interstate 5 in northern Portland. The corridor includes three distinct segments. Travelling from south to north, the three areas are Albina, Upper Interstate, and the Expo Center. Albina contains the Rose Garden Arena, a major medical facility, industrial land, and parkspace. Upper Interstate has single and multi-family residential with commercial development directly adjacent to the corridor. The Expo Center area consists of a regional exposition and convention facility, a commercial raceway, parkspace, and some commercial uses. The extension will link north Portland to the Downtown by connecting to the existing East/West Line. Moderate block sizes and required street level store fronts contribute to a pedestrian friendly Downtown. Population within the corridor is expected to increase 51 percent. From 1994 to 2020, employment is expected to rise 48 percent. The population density is expected to rise from 0.94 persons per acre in 1994 to 1.41 in 2020 and employment density is expected to rise from 1.01 to 1.49 persons per acre. Major trip generators in the corridor include the Portland Central Business District, Portland State University, the Civic Stadium, the Rose Quarter (professional sports arena), the Memorial Coliseum, the Oregon Convention Center, the Edgar Kaiser Medical Facilities, and the Expo Center.

Current zoning in the corridor supports high residential and commercial densities. Zoning regulations encourage street use by pedestrians, bicyclists, and transit users by establishing street spacing, building orientation, and street geometrics standards.

Future Plans and Policies: The Region 2040 Growth Concept and the Regional Framework Plan (the Growth Concept's implementing document) establish the pattern and densities for development within the region. The Regional Framework Plan guides the organization of land into clusters of residential development and employment centers. Other focuses of development efforts include "Station Communities," "Transit Corridors," and "Main Streets." Portland conducts station area planning to analyze station area characteristics and create appropriate development plans. For all areas around the station sites, the City is developing Urban Renewal Districts. The Albina Community Plan calls for a required increase in densities in the area upon commitment of the North Corridor LRT.

The Urban Growth Management Functional Plan and Portland's Central City Transportation Management Plan limits the amount of parking throughout the region. The Central City Transportation Management Plan outlines various ways in which parking will be limited along the alignment in order to encourage increased transit usage.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 27%

The Tri-Met financial plan proposes $257.5 million (73 percent) in Section 5309 New Start funds and $92.5 million (27 percent) in State, local, and Federal flexible funds for the project. Tri-Met notes that it is not requesting any Section 5309 New Starts funding for two simultaneous projects currently under development: the Airport Max Light Rail project and the Portland Streetcar. Local and private sources will cover $246.5 million of these project costs.

Stability and Reliability of Capital Financing Plan

Rating: High

The *High* rating reflects the solid financial condition of Tri-Met, the local lead transit agency, and the other local partners – Metro and the City of Portland. Unlike the previous South-North corridor proposal, this project does not require a referendum to approve a funding source.

Agency Capital Financial Condition: Tri-Met is in good financial condition. Short-term bonds will be issued under the agency's existing bond indenture. The bond trust indenture has a rating of AA+ by Standard & Poor's and Aa3 by Moody's.

Capital Cost Estimates and Contingencies: Capital cost estimates have decreased by 70 percent from last year because the scope of the project has been reduced from the 12-mile South/North proposal to the current 5.6 mile Interstate MAX. Present cost estimates are reasonable for the scope of the project and inflation assumptions are in-line with regional trends. The agency has a logical contingency plan to modify the construction schedule to minimize additional interim borrowing if federal funding authorizations are insufficient.

Existing and Committed Funding: All non-New Starts funding for the project is committed and programmed. Non-federal financing alternatives appear strong and well-considered. Financing strategies such as an interim local borrowing program (i.e., letters of credit, commercial paper, vendor financing, and a line of credit) and "flexing" Surface Transportation Program (STP) funds to the project are in place. Tri-Met and the City of Portland recently signed a detailed intergovernmental agreement that defines financing responsibilities, payment of project funds, administration of the project account, and other terms and conditions. The City will use tax increment financing, its General Fund, or its Transportation Fund to support its $30 million contribution.

New and Proposed Sources: Tri-Met's contribution of short-term bonds is a new funding source, but will be issued under the agency's existing bond indenture and constitute 20 percent of non-Federal funding. This service is committed and programmed.

Stability and Reliability of Operating Finance Plan

Rating: High

The *High* rating reflects the stability of operating funds, sufficient projected revenue growth, and adequate cash reserves.

Agency Operating Condition: Tri-Met's operating condition is very strong. The agency's expense growth rate remains in balance with revenue growth rates, and Tri-Met has substantial working capital reserves on hand to cover any variations in a given year.

Operating Cost Estimates and Contingencies: Annual operating costs for Interstate MAX are estimated at $7.2 million in 2005 dollars. Operating cost estimates appear reasonable Tri-Met maintains from 2 to 3 months working capital across the life of the cash flow – a substantial reserve for covering unanticipated cash flow or cost issues.

Existing and Committed Funding: Over 68 percent of all Tri-Met's ongoing operating revenues are projected to come from its dedicated regional employer/municipal payroll tax revenue, which is assumed to increase at an average annual rate of 7.4 percent. This projected growth is conservative compared to the historical increase of 9.6 percent. The projected farebox recovery ratio is 29 percent.

New and Proposed Sources: All proposed operating revenues currently exist.

Locally Proposed Financing Plan

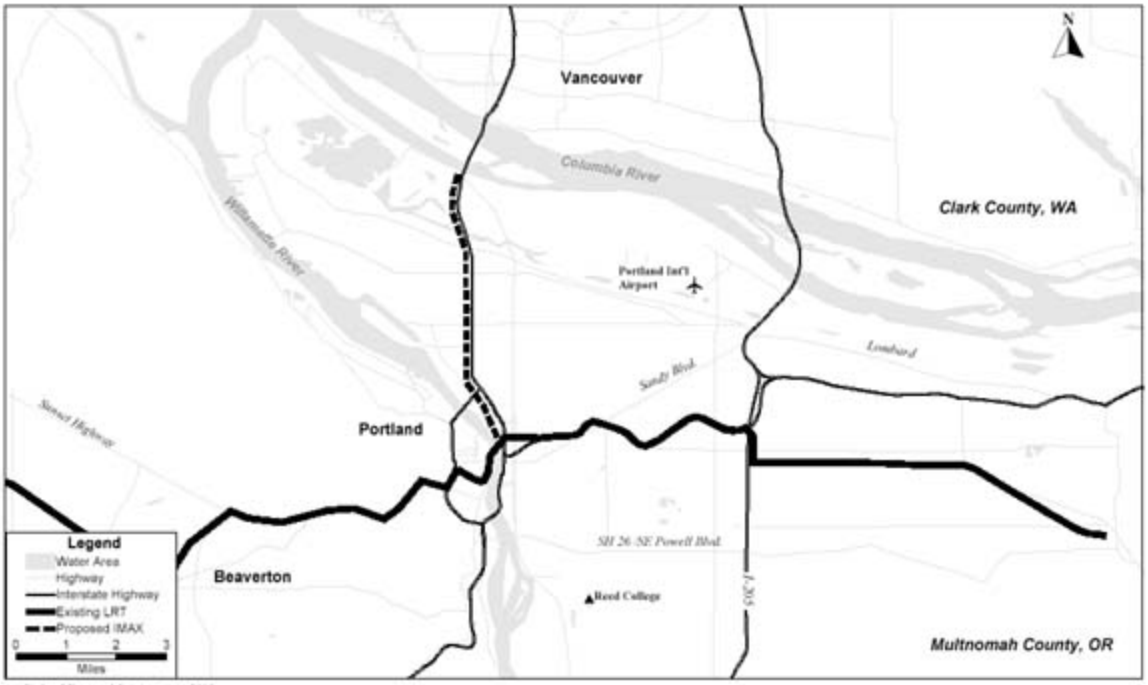
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$257.5	$8.96 million appropriated through FY 2000
STP Funds	$24.0	
Local:		
City of Portland	$30.0	
Tri-Met Revenue Bonds	$38.5	
Total:	**$350.0**	

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

North Corridor - Interstate MAX

Portland, OR



Federal Transit Administration, 2000

Raleigh, North Carolina/Regional Transit Plan Phase I Regional Rail

Regional Transit Plan
Phase I Regional Rail - Durham to North Raleigh

Raleigh, North Carolina

(November 1999)

Description

The Phase I Regional Rail project is the first proposed 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 anticipated Phase I stations.

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 (submitted in 1998 for the *FY2000 Report on New Starts*) for Phase I is $284.0 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 ROW proposed to be used by TTA for the project is shared among a number or operating railroads. The North Carolina DOT (NCDOT) Rail Division has suggested that TTA study potential track realignments to accommodate inter-city and high-speed rail improvements in the proposed rail corridor. TTA's realignment studies have significantly impacted the project's development schedule, and are expected to result in significant cost increases and some changes in scope. These analyses are likely to result in a proposed investment which may not be consistent with the information reported in this profile.

Regional Transit Plan Summary Description

Proposed Project	Commuter Rail (Diesel Multiple Units) 34.7 miles, 16 stations (Phase I)
Total Capital Cost ($YOE)	$284.0 million
Section 5309 Share ($YOE)	$111.0 million

Annual Operating Cost ($1997)	$9.4 million
Ridership Forecast (2020)	17,600 average weekday boardings
FY 2001 Financial Rating:	**Low-Medium**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Not Recommended**

The overall project rating of *Not Recommended* is based on the lack of an updated financial plan which demonstrates the capacity of local financial resources to meet project capital and operating needs. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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 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 wadopted 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 TIPs and North Carolina STIP. 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 (NCRR), CSX Railroad, NCDOT Rail, and the Federal Railroad Administration. The anticipated completion of Preliminary Engineering is February 2000, with a Record of Decision on the Final EIS expected in December 2000.

TEA-21 Section 3030 (a) (68) authorizes the project for final design and construction. Through FY 2000, Congress has appropriated $31.74 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. FTA notes that the project cost effectiveness evaluated and reported in this profile may not reflect an accurate estimation of project costs and ridership.

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 project's current estimated cost effectiveness and the positive efforts of TTA and local jurisdictions to promote transit-supportive development within the corridor

Mobility Improvements

Rating: Not Rated

TTA estimates that Phase 1 of the Regional Rail project will serve 17,600 average weekday boardings by 2020. TTA did not submit information on travel time savings in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	N/A	N/A

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: Medium

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.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	N/A	decrease of 1,168 annual tons
Nitrogen Oxide (NOx)	N/A	increase of 95 annual tons
Volatile Organic Compounds (VOC)	N/A	decrease of 69 annual tons
Hydrocarbons (HC)	N/A	N/A
Particulate Matter (PM_{10})	N/A	N/A
Carbon Dioxide (CO_2)	N/A	N/A

TTA did not provide information on annual energy savings.

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	N/A	N/A

Operating Efficiencies

Rating: High

TTA projects a decrease in a systemwide operating cost per passenger mile in the year 2020 for the Phase I Regional Rail Plan compared to the TSM.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (1996)	N/A	$0.58	$0.44

Values reflect 2020 ridership forecast and 1996 dollars.

Cost Effectiveness

Rating: Medium

TTA estimates the following cost-effectiveness index for the Regional Rail alternative compared to the TSM alternative. FTA notes that the cost effectiveness of the project is likely to change once project cost and ridership estimates are updated.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	N/A	$11.62

Values reflect 2020 ridership forecast and 1996 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: 61%

The current finance plan for the Regional Rail Project proposes a Section 5309 New Starts share of $111.0 million (39 percent), $31.0 million of FTA Section 5307 formula funds (11 percent), $14.0 million in CMAQ funding (5 percent), $57.0 million (20 percent) in State funds, and $71.0 million (25 percent of project costs) in local contributions.

Stability and Reliability of Capital Financing Plan

Rating: Low-Medium

The *Low-Medium* rating reflects the uncertainty of project 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. However, the value of the agency's planned investments over the next 5-7 years (at least $340 million) exceeds the replacement value of TTA's existing asset base. The agency currently operates a 90-bus system.

Cost Estimates and Contingencies: With the exception of adjustment for inflation, project capital cost estimates for the proposed Regional Rail project have not changed since 1996. Current cost estimates assume the use of existing CSX tracks requiring minimal upgrades for DMU service. Project cost estimates are likely to be revised at the conclusion of ongoing alignment studies.

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, TTA's assumption of an annual revenue growth rate of 7.5 % (5 percent excluding inflation) appears optimistic over the length of the project's cash flow. The State of North Carolina is proposed to provide $57 million in capital costs. To date, only $4.5 million of State funding is 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: Low-Medium

The *Low-Medium* rating acknowledges the project's dedicated operating revenue stream but reflects uncertainties regarding the capacity of proposed 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 225 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. The capacity of rental vehicle tax revenues to meet proposed capital and operating needs is questionable if a 7.5 percent annual growth rate is not maintained.

Fare revenues are projected to increase thereafter at a rate of 3.2 percent annually--a rate, which may prove optimistic given recent declines in TTA's bus ridership. Annual revenues from this service are projected to be roughly double that of *services over the same forecast period and roughly fives times higher than TTA's current bus fare revenues*.

New and Proposed Sources: No new operating revenues are proposed for the project.

Locally Proposed Financing Plan

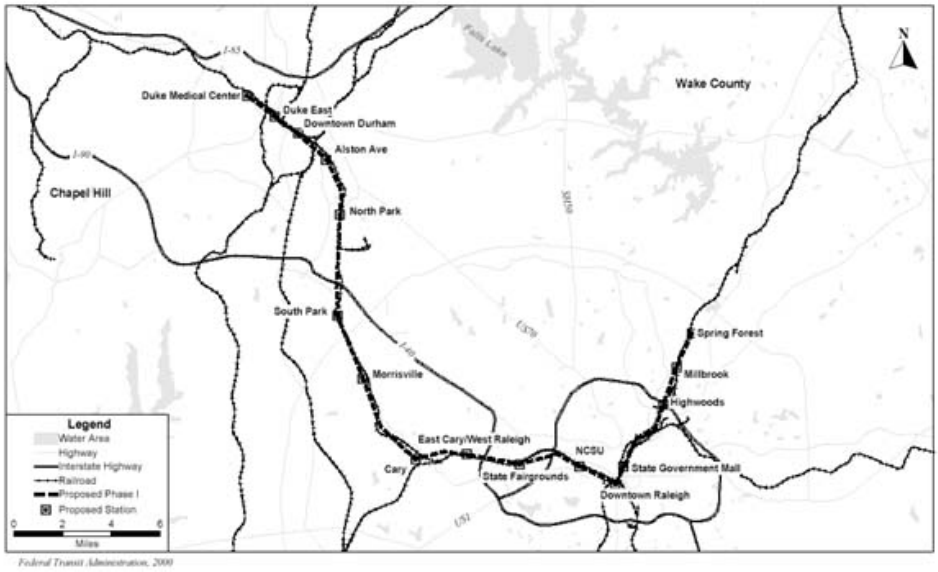
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Starts	$111.0	$31.74 million appropriated through FY 2000
Federal: Section 5307 Urbanized Area Formula Funds	$31.0	
Federal: CMAQ Funds	$14.0	
State:	$57.0	
Local:	$71.0	
Total:	**$284.0**	

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

Raleigh, NC



Salt Lake City, Utah/CBD to University LRT

CBD to University LRT

Salt Lake City, Utah

(November 1999)

Description

The Utah Transit Authority (UTA) has proposed the implementation and operation of light rail transit (LRT) extending 2.5 miles from the North/South line, in downtown Salt Lake City, to Rice/Eccles Stadium on the University of Utah campus. The proposed University LRT line includes four stations. The University line is scaled back from the previously proposed 10.9-mile West/East line that extended from the airport to the University. Light rail vehicles 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 the 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.

The capital cost estimate of the 2.5-mile University LRT line totals $105.8 million (escalated dollars), with annual operating costs projected at $2.6 million ($2002 dollars).

CBD To University Summary Description

Proposed Project	Light Rail Line; 2.5 miles, 4 stations
Total Capital Cost ($YOE)	$105.8 million
Section 5309 Share ($YOE)	$84.6 million
Annual Operating Cost ($2002)	$2.6 million
Ridership Forecast (2020)	7,600 average weekday boardings 3,100 daily new riders
FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the project's strong cost effectiveness but relatively weak mobility improvements, and the adequacy 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 1999**. 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 Wasatch Front Regional Council (WFRC) completed a Major Investment Study and Draft Environmental Impact Statement in July 1997 on the 10.9 West-East Corridor. FTA approved entry into preliminary engineering on the West-East LRT project in January 1998. The Final Environmental Impact Statement was published in January 1999 and the Record of Decision is

anticipated by the end of 1999. UTA is completing an Environmental Reassessment Report to document two changes to the West/East Light Rail Project: first, the change from side running to center running for a two block section; and second, the initial construction of 2.5 miles of the project.

TEA-21 Section 3030(a)(72) authorizes the Salt Lake City – Light Rail (Airport to the University of Utah) for final design and construction. Through FY 2000, Congress has appropriated $4.96 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* for the 2.5 mile University corridor.

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, adequate transit supportive land use, but relatively weak mobility improvements.

Mobility Improvements

Rating: Low-Medium

The 2.5-mile project is expected to serve 7,600 average weekday boardings and 3,100 daily new riders by 2020. UTA estimates the following annual travel time savings.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings	decrease of 0.2 million hours	increase of 0.2 million hours

Based on 1990 data, the UTA estimates that 3,105 low-income households are located within ½ mile of the four proposed stations of the University LRT line. This figure represents 25 percent of all households located within ½ mile of proposed stations.

Environmental Benefits

Rating: Medium

Salt Lake City is designated as a nonattainment area for carbon monoxide and PM10, and Salt Lake and Davis Counties are designated as maintenance areas for ozone. The UTA estimates the following annual emissions reductions between the University LRT line and the TSM and No-Build alternatives.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 27 annual tons	decrease of 20 annual tons
Nitrogen Oxide (NOx)	decrease of 19 annual tons	decrease of 19 annual tons
Volatile Organic Compounds (VOC)	decrease of 154 annual tons	decrease of 96 annual tons
Particulate Matter (PM_{10})	decrease of 19 annual tons	decrease of 12 annual tons
Carbon Dioxide (CO_2)	decrease of 8,283 annual tons	decrease of 6,373 annual tons

The UTA estimates the following savings in regional energy consumption (measured in British Thermal Units – BTU) for the University LRT.

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 52,997 million annual BTU	decrease of 27,793 million annual BTU

Operating Efficiencies

Rating: Medium

UTA estimates the following systemwide operating costs per passenger mile following implementation of the University LRT:

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	$0.30	$0.30	$0.30

Values reflect 2020 ridership forecast and 1997 dollars.

Cost Effectiveness

Rating: Medium-High

UTA estimates the following cost effective indices:

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$6.00	$9.30

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 high concentration of activities at both ends of the corridor. While the CBD is expected to grow, growth outside of the corridor is forecast to increase at a much higher rate.

Existing Conditions: The 2.5 mile corridor runs on 400 South and 500 South in eastern Salt Lake City. The CBD and the University of Utah, which are major activity generators, anchor the LRT corridor on the west and east, respectively. The two middle stations would serve an active urban-scale commercial corridor surrounded by predominately medium-density residential and mixed-use development. The total population in the LRT corridor is approximately 32,900 and total employment is 86,500 including 13,000 employees of the University of Utah. The University has 25,000 students. CBD employment density is a relatively low 37.5 employees per acre. Although intensification of urban-scale development is expected to occur, projected increases in corridor population are low and projected employment growth, while higher, is roughly half the rate forecast for the metropolitan area overall. The existing North/South LRT line, connecting to the proposed University Line, would link the corridor to higher-intensity activity centers, such as the Delta Center and the Salt Palace Convention Center. Parking is not significantly restricted outside of the CBD and the University area; however, the University has adopted parking management policies which limit parking supply and promote the use of alternative modes. Salt Lake City has reduced parking requirements for new development.

Future Plans and Policies: The Salt Lake City Master Plan recommends a concentration of high-density, mixed use growth in the 400 South/East Downtown corridor and other transit corridors. The Central Community Plan, covering the transit corridor between the CBD and the University, has been updated to permit mixed uses. The city uses zoning as the principal tool to implement transit-supportive land use policies. The performance of land use policies has improved as demonstrated by recent construction in the corridor. Design charettes are being conducted to ensure transit oriented development practices are being applied along the proposed and existing LRT lines.

Growth management initiatives are at an early stage. Although the city's master plan recommends the concentration of commercial development in the downtown area, no regional growth management policies exist in this high growth region. Natural growth boundaries will ultimately limit metropolitan area sprawl, but will not necessarily produce concentrations of development at a pedestrian-friendly, urban scale. The Envision Utah coalition is working on the development of strategies for the period from 2020 to 2050 addressing growth-related impacts in the six-county Wasatch Front area.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 20%

UTA's financial plan for the University Corridor proposes to use $84.6 million (80 percent) in Section 5309 New Starts funds and $21.5 million (20 percent) in local resources to fund the capital costs of the project.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the solid financial condition of UTA and stability of its funding source.

Agency Capital Financial Condition: The 0.25 percent sales tax that the UTA assesses on retail sales within the service area serves as the primary local funding source for the agency's transit projects, including capital and operating costs. For the 1998 Comprehensive Annual Financial Report, UTA reported $28 million in cash and cash equivalents, which is the primary source for the University LRT project. In 1998, UTA had a net revenue gain (including depreciation costs) of $10 million and a total of $11 million in retained earnings.

Capital Cost Estimates and Contingencies: A contingency reserve of $9.5 million is included in the total capital cost. No specific escalation factors for the University Line capital cost estimates have been identified.

Existing and Committed Funding: The 0.25 percent sales tax is a stable revenue mechanism that is indexed to inflation, and grows with the economy. UTA has proposed that cash reserves be used to fund a majority of the project's local match from local sales tax funds saved from the North/South Line. The agency reports savings from the North/South Line in the amount of $43 million (current budget less current obligations).

New and Proposed Sources: UTA is proposing a Cross Border Lease program to fund $2.0 million of the total project cost.

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* rating reflects the stability of UTA's operating revenues but notes concerns about the provision of future bus service.

Agency Operating Condition: UTA maintained a strong financial operating position in 1998. In 1998, UTA received $56.5 million in sales tax revenue; a significant portion of which funded operating costs. The 0.25 percent sales tax is indexed to inflation, making it a stable funding source.

Operating Cost Estimates and Contingencies: Annual operating costs for the 2.5-mile LRT are estimated at $2.6 million in YOE dollars. No documentation on operating cost assumptions, escalation rates, and contingencies was provided by UTA.

Existing and Committed Funding: The existing UTA-levied sales tax revenues cover most of the agency's current operating costs. Farebox revenues are estimated to cover 25 to 30 percent

of the operating costs of the University LRT. The Governor has stated in a letter to FTA that a previous State commitment of $5 million in annual operating guarantees passed by the Legislature for the proposed Airport to University line is equally applicable to the University Corridor.

New and Proposed Sources: Uncertainty exists about when an additional local revenue assessment i.e., higher sales tax rate, will be needed. According to the UTA cash flow analysis, UTA appears to be able to operate the proposed University line, but has to assume no bus service growth in the area through 2012. The cash flow analysis assumes that bus passenger fares will increase at a healthy rate. However, the need to construct or implement new projects and maintain and operate existing and new systems may require an earlier tax increase.

Locally Proposed Financing Plan

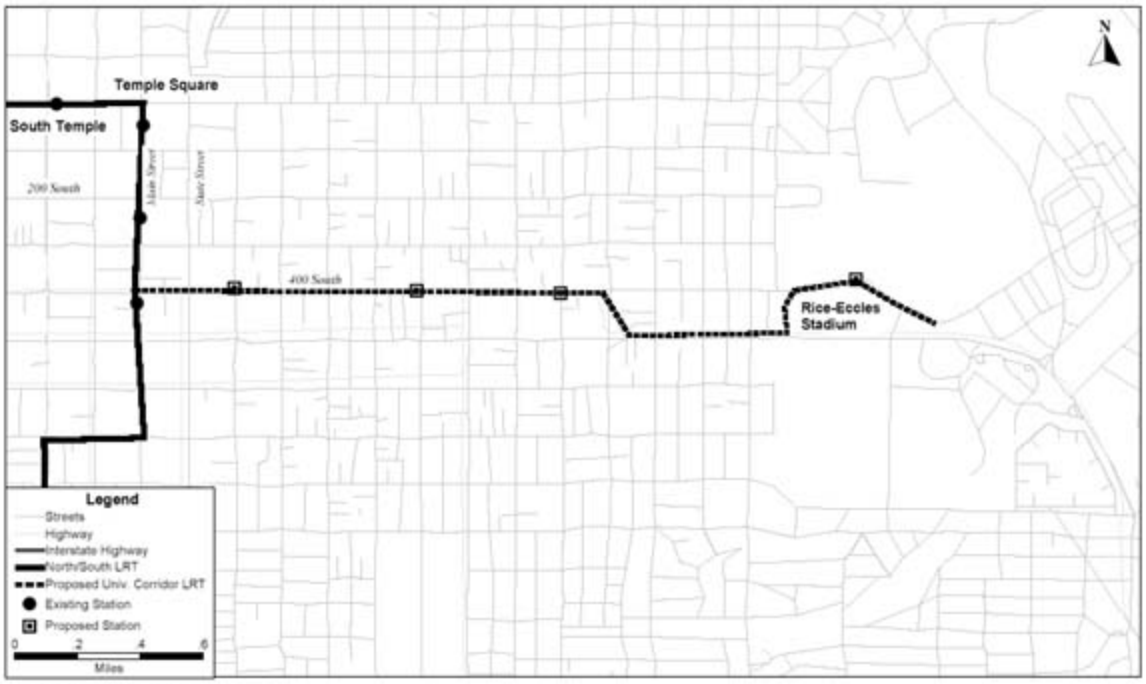
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$84.6	$4.96 million appropriated to the West-East LRT through FY 2000
State/Local:		
UTA Cash Reserves	$19.2	
Cross Border Lease	$2.0	
Total:	**$105.8**	

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

University Corridor LRT

Salt Lake City, UT



Federal Transit Administration, 2000

San Diego, California/Mid Coast Corridor

Mid Coast Corridor

San Diego, California

(November 1999)

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, and the construction of a new Coaster station at Nobel Drive in University City. The estimated project cost of Phase 1 is $123.0 million (escalated), with a Section 5309 New Starts share of $48.3 million.

Mid Coast Corridor Summary Description

Proposed Project	3.4 mile, 3 station LRT extension and new commuter rail station
Total Capital Cost ($YOE)	$123.0 million
Section 5309 Share ($YOE)	$48.3 million
Annual Operating Cost ($YOE)	$2.1 million
Ridership Forecast (2015)	22,600 average weekday boardings 10,300 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium-High**
FY 2001 Overall Project Rating:	**Highly Recommended**

The overall project rating of *Highly Recommended* is based on the project's strong cost-effectiveness, adequate 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 1999.** 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 and Nobel Coaster station. A Record of Decision on the project is anticipated in Spring 2000.

TEA-21 Section 3030(a)(75) authorizes the Mid Coast LRT Corridor for final design and construction. Through FY 2000, 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 and the Nobel Coaster commuter rail station project. 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-High* 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 and the Coaster station rail improvements will serve 22,600 average weekday boardings and attract 10,300 daily new riders by 2015, and would result in the following annual travel time savings.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	0.8 million	N/A

Based on 1998 data, there are an estimated 405 low-income households within a 1/2 mile radius of the proposed 3 LRT and 1 Commuter Rail stations, or roughly 8 percent of total households within ½ 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. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 179 annual tons	N/A
Nitrogen Oxide (NOx)	decrease of 23 annual tons	N/A
Volatile Organic Compounds (VOC)	decrease of 15 annual tons	N/A
Particulate Matter (PM_{10})	decrease of 2 annual tons	N/A
Carbon Dioxide (CO_2)	decrease of 13,425 annual tons	N/A

MTDB estimates that in 2015, the LRT extension and the Coaster station rail improvements 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 (millions)	decrease of 175,016 million annual BTU	N/A

Operating Efficiencies

Rating: Medium

MTDB 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 (2015)	$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.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$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: 61%

The financial plan for the 3.4 mile initial phase of Mid Coast LRT and the Nobel Coaster Station includes $48.3 million (39 percent of total project costs) in Section 5309 New Starts funding, $74.4 million (61 percent) in dedicated TransNet local sales tax revenues, and $288,000 in state gas tax revenues.

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 increased by 18 percent over the last year. These changes are the result of cost escalation due to project development delays and the redesign of some project elements. 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. SANDAG has undertaken some analysis which suggests that TransNet may yield sufficient funding to meet the needs of both the Mission Valley East East Extension and Phase I of the Mid Coast project, although 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 $2.1 million in 2015 (YOE dollars). 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: All of the project's proposed sources of operating funding are existing and committed. State Transit Development Act and Transit Assistance revenues cover approximately 30 percent and 4 percent, respectively, of MTDB's operating costs. TransNet is proposed to contribute 8 percent of system operating costs through 2008, at which point the source is terminated. Despite significant increases in ridership and in the MTDB's farebox recovery ratio in recent years, the agency's estimated 2015 farebox recovery rate of 58 percent appears optimistic. Additional funding for operations come from various local sources and are considered stable and committed.

New and Proposed Sources: All proposed operating revenue sources currently exist.

Locally Proposed Financing Plan

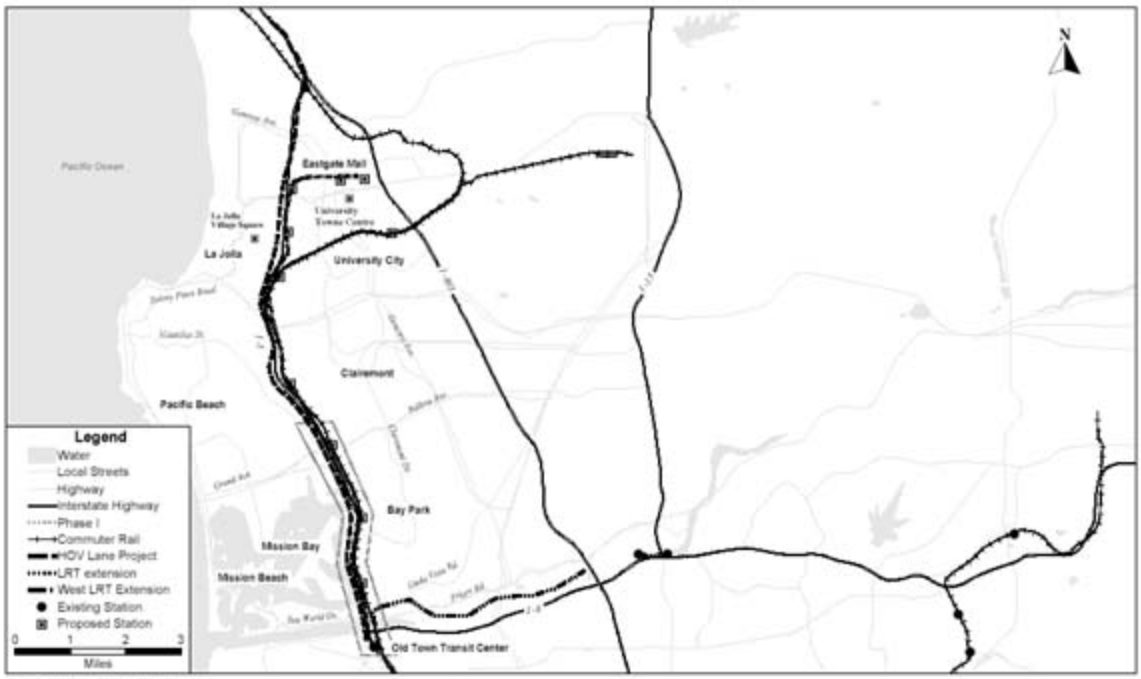
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal:		
Section 5309 New Starts	$48.3	$11.33 million appropriated through FY 2000
State:		
Gas Revenue Tax	$0.3	
Local:		
TransNet Tax	$74.4	
Total:	**$123.0**	

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, CA



Federal Transit Administration, 2000

San Diego County, California/Oceanside -Escondido Rail Project

Oceanside-Escondido Rail Project

North San Diego County, California

(November 1999)

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 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. Passenger rail would have exclusive use during pre-defined operational schedules. Average daily weekday boardings in 2015 are estimated at 15,100, with 8,600 daily new riders.

Oceanside-Escondido Summary Description

Proposed Project	Diesel Multiple Units 23.7 miles, 15 stations
Total Capital Cost ($YOE)	$253.5 million
Section 5309 Share ($YOE)	$152.1 million
Annual Operating Cost ($YOE)	$8.3 million
Ridership Forecast (2020)	15,100 daily boardings 8,600 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium-High**
FY 2001 Overall Project Rating:	**Highly Recommended**

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 New Starts Report **and reflects conditions as of November 1999.** 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

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. It is expected that NCTD will be ready to proceed into final design on the project by the first quarter of 2000.

Section 3030 (a)(77) authorizes the Oceanside-Escondido Corridor for final design and construction. Through FY 2000 Congress has appropriated $7.93 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 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-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. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings	decrease of 1.4 million hours	decrease of 0.7 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.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 96 annual tons	decrease of 43 annual tons
Nitrogen Oxide (NOx)	increase of 1 annual ton	decrease of 12 annual tons
Volatile Organic Compounds (VOC)	decrease of 5 annual tons	decrease of 4 annual tons
Particulate Matter (PM_{10})	0	0
Carbon Dioxide (CO_2)	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).

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	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.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (1997)	$0.10	$0.10	$0.10

Values reflect 2015 ridership forecast and 1998 dollars.

Cost Effectiveness

Rating: High

NCTD estimates the following cost effectiveness indices.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$4.40	$6.40

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% to 20%. Population and employment around proposed station areas are forecasted to increase by 49% (to 65,500) and 66% (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 downtowns 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 TOD planning.

Local Financial Commitment

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 40%

The project's financial plan in year of expenditure dollars proposes $152.1 million (60 percent of total project costs) in Section 5309 New Starts funds, $34.4 million (14 percent) in State funds, and $67.0 million (26 percent) in local funds.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* rating reflects the demonstrated commitment of 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 have increased from $216.6 million to $253.5 million. The revised cost estimate includes increases in contingencies, annual inflation factors, and environmental mitigation and ROW acquisition estimates. The revised cost estimates and contingencies are reasonable for a project at this stage of development, although costs would further increase if the NCTD double-tracks the entire project, as is currently being studied.

Existing and Committed Funding: All of NCTD's proposed local funding for the project is committed. State funding for the project includes Proposition 108 passenger rail bond revenues and State Transportation Improvement Program funding. San Diego County's ½ cent TransNet revenue is a stable and reliable funding source through 2008. NCTD will borrow against future TransNet revenues to absorb the local share of the project's revised capital cost estimate. However, current TransNet revenue projections do not demonstrate the capacity to cover any other potential significant cost increases.

New and Proposed Sources: No new sources are proposed.

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 the 20-year cash flow time horizon. Failure to achieve this rate of growth may jeopardize the agency's operating balance after the TransNet source sunsets in 2008.

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

Locally Proposed Financing Plan

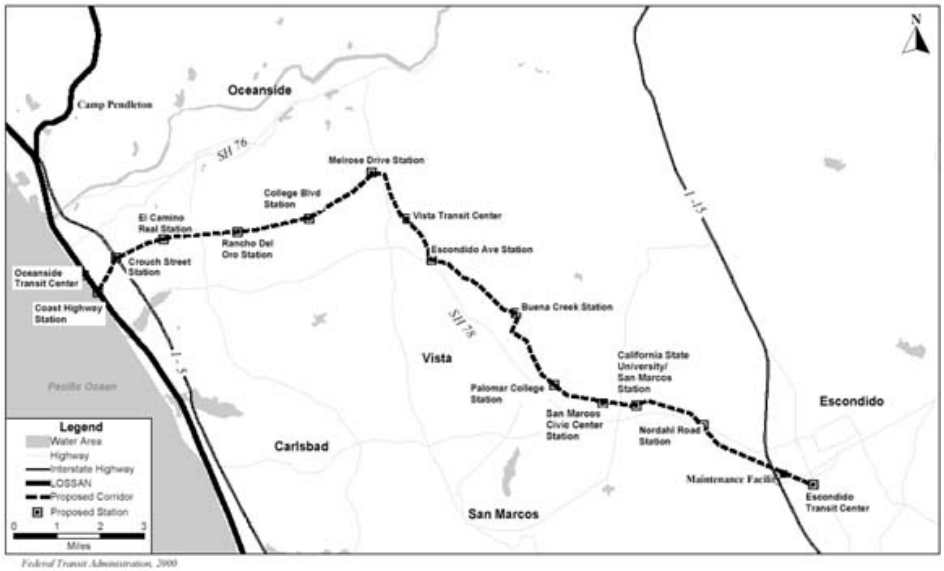
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal:		
Section 5309 New Starts	$152.1	$7.93 million appropriated through FY 2000
State:		
State 108	$17.6	
State STIP	$16.8	
Local:		
Transnet	$67.0	
Total:	**$253.5**	

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 Project

North San Diego County, CA



Federal Transit Administration, 2000

San Francisco, California/Third Street Light Rail Project Phase 1

Third Street Light Rail Project Phase 1

San Francisco, California

(November 1999)

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. The proposed project would operate on the surface from the Caltrain Bayshore Station at the San Francisco County line to the south, connect to the existing LRT system in downtown San Francisco via Third Street, and extend into a subway terminating in Chinatown. The project would provide regional connections to BART and CalTrain at multimodal stations. Third Street Light Rail operations would include exclusive (subway) as well as semi-exclusive (street median) rights-of-way, using MUNI's existing high floor light rail vehicles.

Capital costs for the complete Third Street Light Rail Project total $1.38 billion (escalated dollars), to be constructed in two phases. Phase 1, which is evaluated in this profile, is a 5.4 mile minimum operable segment (MOS), which 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 $500.1 million (escalated dollars). Phase 2, the New Central Subway, would extend the line underground to a terminal in Chinatown, and is estimated to cost $876.1 million (escalated dollars) to construct.

Third Street Light Rail Summary Description

Proposed Project	Light Rail Line (MOS); 5.4 miles, 19 stations
Total Capital Cost ($YOE)	$500.1 million
Section 5309 Share ($YOE)	$0.0 million
Annual Operating Cost ($2003)	$5.0 million
Ridership Forecast (2015)	80,100 average weekday boardings 2,000 daily new riders

FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

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 New Starts Report **and reflects conditions as of November 1999.** 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. MUNI anticipates being ready to advance into final design in early 2000.

Phase I of the Third Street Light Rail project is included in the region's long-range plan. The complete 7.1 mile project would leverage approximately $560 million in federal funds with over $800 million in state and local resources. The SFCTA is currently pursuing the inclusion of the full Third Street Light Rail Project in the regional transportation plan.

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, New Start criteria are reported for the comparison of the New Start (Phase 1) to the TSM alternative, and not for the comparison to the No Build alternative. N/A indicates that data are not available for a specific measure.

The project is rated as being in preliminary engineering. The project will be re-evaluated when it is ready to advance into final design.

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-High

The Phase 1 3rd Street LRT would serve 80,100 average weekday boardings and carry 2,000 daily new riders. MUNI estimates that Phase 1 would result in the following annual travel time savings.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	N/A	1.3 million

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. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	N/A	decrease of 8 annual tons
Nitrogen Oxide (NOx)	N/A	decrease of 19 annual tons
Volatile Organic Compounds (VOC)	N/A	decrease of 1 annual ton
Particulate Matter (PM_{10})	N/A	0
Carbon Dioxide (CO_2)	N/A	decrease of 3,503 annual tons

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

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	N/A	increase of 16,661 million annual BTU

Operating Efficiencies

Rating: Medium

MUNI estimates that systemwide operating costs per passenger mile remain constant when comparing Phase 1 to the TSM alternative.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2015)	N/A	$0.55	$0.55

Values reflect 2015 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Low

MUNI estimates the following cost effectiveness index.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	N/A	$38.90

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 3rd 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 is currently under construction 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 3rd 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

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; $90.1 million (18 %) in State funding; $351.8 million (70 %) in local Proposition B revenues; and $8 million (2 %) in private contributions. MUNI is proposing the use of $512.3 million in New Starts funding for implementing Phase II of the project.

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 Phase 1 project at this stage of development.

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 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 3rd 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: Little recent information on the agency's overall operating financial condition was provided by MUNI. In the past, FTA has found MUNI's condition to be adequate, and the City has been increasing its financial support for the agency. MUNI has significant experience operating an urban rail system.

Operating Cost Estimates and Contingencies: Implementation of Phase 1 of the 3rd 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 3rd 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**
Federal:		
Section 5309 New Starts	$0.0	No Section 5309 New Starts funds have been appropriated through FY 2000
Section 5309 Rail Mod	$46.1	
FHWA STP	$5.0	
State:		
STIP	$60.1	
State Rail Bond Program	$30.0	

Local:		
Proposition B Sales Tax	$351.8	
Developer Contribution	$8.0	
Total:	**$500.1**	

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 LRT Project - Phase 1

San Francisco, CA

Federal Transit Administration, 2000

San Juan, Puerto Rico/Minillas Extension

Minillas Extension

San Juan, Puerto Rico

(November 1999)

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 Carazon 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 $478.3 million (escalated dollars). The extension forecast to carry 14,400 average weekday boardings in 2010.

Minillas Extension Summary Description

Proposed Project	Heavy Rail Line; 1 mile, 2 stations
Total Capital Cost ($YOE)	$478.3 million
Section 5309 Share ($YOE)	$382.6 million
Annual Operating Cost ($YOE)	$5.7 million
Ridership Forecast (2010)	14,400 average weekday boardings 9,100 daily new riders
FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium-High**
FY 2001 Overall Project Rating:	**Recommended**

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 1999**. 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 DEIS for the extension of Tren Urbano Phase I to Minillas. In August 1997, a Notice of Intent to prepare a DSEIS was published in the Federal Register. The Draft Supplemental Environmental Impact Statement (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 of 1999. A final Record of Decision is expected in late 1999.

TEA-21 Section 3030(a)(82) authorized the San Juan Tren Urbano Extension to Minillas for final design and construction. Through FY 2000, 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 Plase 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. *No-Build*	New Start vs. *TSM*
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). PHRTA estimates the following annual emissions reductions for the Tren Urbano I and Minillas Extension. For the New Start vs the TSM alternative there is an estimated increase in Carbon Dioxide.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 13,802 annual tons	decrease of 1,436 annual tons
Nitrogen Oxide (NOx)	decrease of 699 annual tons	decrease of 699 annual tons
Hydrocarbons (HC)	decrease of 1,515 annual tons	decrease of 167 annual tons
Particulate Matter (PM_{10})	decrease of 11 annual tons	decrease of 1 annual ton
Carbon Dioxide (CO_2)	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).

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 488,977 million annual BTU	increase of 87,589 million annual BTU

Operating Efficiencies

Rating: Medium

PHRTA estimates an increase in systemwide operating cost per passenger mile for the three alternatives.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2010)	$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 (New Start including the Tren Urbano Phase I and Minillas Extension vs the Tren Urbano Phase I and Minillas Extension vs. the No-Build).

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$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 compact development 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 municipal 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, which is among the highest density of the projects under consideration in the New Starts pipeline

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. The plan also discourages urban sprawl by limiting development where public facilities do not already exist. Population in the corridor is anticipated to increase from 100,000 in 1990 to 106,900 in 2010, a 6 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.

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 $95.7 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

The *Medium* rating reflects that the Non-Section 5309 share of funds are committed to the project. However, because the capital cost estimates are based upon 30 percent engineering and the alignment is underground, there needs to be a high level of contingencies to account for potential cost increases.

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.

Existing and Committed Funding: The proposed Non-Section 5309 New Starts share of project costs is $95.7 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-High

The *Medium-High* 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.

Agency Operating Condition: The PHRTA receives revenues from toll roads and dedicated fuels taxes, and is considered to be in sound financial condition. The Tren Urbano System, when constructed, is anticipated to carry heavy daily passenger loads and may provide an operating revenue surplus.

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
Federal: Section 5309 New Start	$382.6	$0.0 million appropriated through FY 2000 for the Minillas Extension
Local: PHRTA Funding	$95.7	
Total:	**$478.3**	

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, 2000

Seattle, Washington/Central Link LRT (MOS)

Central Link LRT (MOS)

Seattle, Washington

(November 1999)

Description

Sound Transit (Central Puget Sound Regional Transit Authority) is planning a 23.5-mile Central *Link* light rail transit (LRT) project 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 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. Capital costs for the entire project are $3.1 billion (escalated dollars), with annual operating costs estimated at $62.5 million (escalated dollars).

Sound Transit proposes to implement the system in several minimum operable segments (MOS). The MOS being proposed for Federal funding under TEA-21 will extend 7.2 miles from NE 45th Street station southward to the South Lander Street station. This alignment includes 4.5 miles of wholly 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 the MOS in 2020. The estimated cost of this segment is $1,500 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 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 Transit Summary Description

Proposed Project	Light Rail Line (MOS) 7.2 miles, 10 stations
Total Capital Cost ($YOE)	$1.5 billion
Section 5309 Share ($YOE)	$0.5 billion
Annual Operating Cost ($1997)	$62.5 million
Ridership Forecast (2020)	87,200 average weekday boardings

	39,800 daily new riders
FY 2001 Financial Rating:	**Medium-High**
FY 2001 Project Justification Rating:	**High**
FY 2001 Overall Project Rating:	**Highly Recommended**

The *Highly Recommended* rating is based on the project's strong estimated cost effectiveness, transit supportive land use plans and policies, and local financial commitment. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999** . 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 $3.914 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 was distributed for public review in November 1999. The Sound Transit board formally adopted the 7.2 mile-MOS for Federal participation on November 18, 1999. Sound Transit expects to begin LRT operations in 2006.

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 2000, Congress has appropriated $41.44 million for the *Link* light rail project.

Evaluation

The following criteria have been estimated in conformance with FTA's *Technical Guidance on Section 5309 New Starts Criteria*. Information was provided by Sound Transit comparing the New Start to the TSM alternative for the MOS and for the full LRT system. This evaluation pertains only to the 7.2-mile MOS. FTA has concurred with Sound Transit's methodology that evaluates the *Link* TSM and No-Build scenarios as equivalent with each other. N/A indicates that data are not available for a specific measure.

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

Justification

The *High* project justification rating reflects strong cost effectiveness and transit supportive land use and the adequacy of the other justification criteria.

Mobility Improvements

Rating: Medium

The 7.2-mile MOS is expected to serve 87,200 average weekday boardings, including 39,800 daily new riders. Sound Transit estimates the following travel time savings for the New Start compared with the TSM alternative.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	N/A	12.8 million

Based on 1990 data, Sound Transit estimates that 7,879 low-income households are located within a ½ mile radius of the 10 proposed stations (representing 11 percent of total households located within a ½ mile radius of stations).

Environmental Benefits

Rating: High

The Central Puget Sound Area is classified as a maintenance area for carbon monoxide and ozone. Spot areas in the region are designated as non-attainment for PM10. Sound Transit estimates the following reductions in emissions for the *Link* light rail.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	N/A	decrease of 301 annual tons
Nitrogen Oxide (NOx)	N/A	decrease of 2,303 annual tons
Volatile Organic Compounds (VOC)	N/A	decrease of 171 annual ton
Particulate Matter (PM_{10})	N/A	5
Carbon Dioxide (CO_2)	N/A	decrease of 32,758 annual tons

Sound Transit estimates the following changes in regional energy consumption (measured in British Thermal Units - BTU).

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	N/A	increase of 407,589 million annual BTU

Operating Efficiencies

Rating: Medium

Sound Transit estimates a reduction in the systemwide operating costs per passenger mile in 2020 for the *Link* light rail MOS compared to the TSM alternative.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	N/A	$0.47	$0.45

Values reflect 2020 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Low

Sound Transit estimates the following cost-effectiveness indiex.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	N/A	$3.30

Values reflect 2020 ridership forecast and 1999 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: High

The *High* land use rating reflects the dense and transit supportive land uses along the proposed MOS corridor and the strong land use policies in place throughout the region.

Existing Conditions: The proposed Federally-funded MOS begins in the University District , parallels Interstate 5, runs through the Seattle central business district (CBD) and terminates in the Duwamish industrial area. Station areas (one-half mile radius) in the central LRT corridor contained an estimated population of 95,800. Employment within a one-quarter mile radius was 231,800. Average population density within a one-half mile station radius is 7,000 people per square mile. It also runs through some dense residential areas, and serves several large trip generators with a large portion of existing transit trips. Major trip generators include: the University of Washington (UW); UW Medical Center and Hospital; UW football stadium and basketball arena; the Capital Hill/First Hill neighborhood (density = 16,000 persons per square mile); Seattle Central Community College; Seattle University; four hospitals; Denny Regrade Area (high density residential); and sports stadiums and exhibition centers at the proposed Royal Brougham Station.

The CBD and several neighborhoods served by the project are characterized by mixed land uses in a pedestrian-friendly environment. Single occupancy vehicles constitute less than 50 percent of the mode split in the University District, Capital Hill/First Hill neighborhood, and Downtown Seattle. High parking costs in the CBD, averaging over $20 per day, limit the desirability of parking. In March 1999, the Seattle City Council adopted a Station Area Interim Overlay District

Ordinance restricting the development of new primary parking facilities and other restrictions on the location and access to parking in an area ¼ mile around proposed station areas.

Future Plans and Policies: The State of Washington adopted the Growth Management Act of 1990 which attempts to contain sprawl and focus development in urban areas. The Puget Sound Regional Council has adopted Vision 2020, the long-range Plan for the region which promotes development of urban centers, and each locality has adopted a comprehensive plan that builds on this regional plan and emphasizes consistency. Land use planning is well-coordinated with transportation planning. Seattle's Comprehensive Plan identifies a network of Urban Centers, Hub Urban Centers, and Residential Villages within which new growth will be concentrated. Seattle monitors its progress on implementing the plan and prepares a report every two years. The City has completed several planning documents that include policies to support transit-oriented development (TOD) and has adopted a resolution that establishes goals and strategies to promote TOD. These include: *Background Report for Light Rail Station Area Planning in Seattle: Existing Conditions and Future Prospects for Transit-Oriented Development; Background Report for Light Rail Station Area Planning in Seattle: Station Area Profiles*; neighborhood plans for all neighborhoods along the line; and Ordinance #119394 – Station Area Interim Overlay District.

Zoning to support transit-related development is already in place. The LRT corridor was planned specifically to link urban centers identified in Vision 2020, (a regional land use plan/growth strategy) where high densities are accommodated with existing zoning. Several Seattle city departments, in cooperation with the Washington Department of Transportation and King County, are collaborating on a comprehensive parking study as part of the Seattle Light Rail Station Area Planning process and implementation of the Transportation Strategic Plan.

The City has adopted an interim zoning overlay to prohibit new auto-oriented uses in and around station areas. This measure expires in March 2000. Upon completion of the station area planning process, City staff will recommend that the Council adopt station specific objectives. Furthermore, the City is partnering with a bank and Fannie Mae to establish a Location Efficient Mortgage program that allows homebuyers purchasing homes in close proximity to transit to qualify for higher mortgages than they would otherwise be eligible for.

Local Financial Commitment

Proposed Non-Section 5309 Share of Total Project Costs: 67%

Sound Transit proposes $500.0 million (33 percent) in Section 5309 funds, and $1.0 billion (67 percent) in local funds for the project. Local sources will consist of a sales and use tax, motor vehicle excise tax, and local issue bonds.

Stability and Reliability of Capital Financing Plan

Rating: High

The *High* rating reflects the solid financial condition of Sound Transit and the agency's dedicated local revenue sources.

Agency Capital Financial Condition: The financial condition of Sound Transit is strong. In 1996, voters approved a $3.9 billion Sound Move regional transit plan to be supported by two dedicated local tax sources. The taxes continue in perpetuity with no sunset provisions and are

dedicated solely to Sound Transit projects. Sound Transit intends to bond against these revenues to implement the *Sound Move* program and has received an A1 rating from Moody's Investor Service.

Capital Cost Estimates and Contingencies: Cost estimates have increased from last year, for both the MOS and the entire project, because of increased right-of-way costs and mitigation components. Adequate provisions exist to cover unanticipated cost overruns. The agency applies adequate cost contingencies to all capital items. Furthermore, it maintains two capital reserve funds which are a bond reserve fund equal to one year's debt servicing and an operating reserve fund equal to two months of operating expenditures. The agency's ultimate contingency is its untapped debt capacity. Sound Transit could issue additional bonds without violating its debt policy or legislated constraints on capacity.

Existing and Committed Funding: All non-New Starts funding exists and is committed. Sound Transit has access to two strong local tax sources for its exclusive use – a Sales and Use Tax and a Motor Vehicle Excise Tax (MVET) - which will contribute $475 million to the project. These sources are separate from sources that fund other transit services in the Seattle area. Growth in tax revenues from these sources has outpaced inflation. The 0.4 percent Sales and Use Tax and the 0.3 percent MVET have existed since the inception of Sound Move in 1996. These sources help Sound Transit contribute a strong local match and to issue and service long-term debt ($524 million in bonds) as part of the local match.

New and Proposed Sources: All proposed capital revenue sources currently exist. No new sources are needed.

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* rating reflects Sound Transit's stable and reliable operating revenues, but acknowledges some concern with the operating condition of other transit providers in the region.

Agency Operating Condition: In recent years Sound Transit has experienced a zero operating balance (operating costs equal operating revenues), a 20 to 25 percent farebox recovery ratio, and consistent ridership levels. According to the financial plan, operation of the MOS, as well as the full project, will not detract from other Sound Transit project initiatives (e.g., commuter rail, express bus).

Operating Cost Estimates and Contingencies: Operating costs are estimated at $62.5 million and appear reasonable. If economic growth slows or financial difficulties occur, sales tax revenues may be used to secure additional debt funding.

Existing and Committed Funding: The financial plan uses the same tax revenue sources to fund operations as are used to fund capital expenditures. These dedicated local sources are anticipated to provide 86 percent of all operating revenues when service is open in 2007. Sound Transit assumes a farebox recovery ratio of 55 percent for the overall *Link* project. Analysis by the agency actually projects a recovery ratio of 66 percent, but the more conservative estimate is used for the financial plan.

Initiative 695 (I-695), which voters adopted in November 1999 adds a degree of uncertainty about the operation of services provided by other providers in the Central Puget Sound region.

I-695 replaces the state motor vehicle excise tax (SMVET) with a flat tax and requires voter approval for any increase in taxes, fees, or charges. This legislation becomes effective January 2000.

Although the Initiative did not repeal Sound Transit's ability to impose a MVET, a separate source with a similar name that was approved in 1996 by voters, it could result in a 30 percent decrease in funding for regional operations unless new revenue sources are found. The entire *Sound Move* project relies on strong partnerships with local transit agencies, which may be affected by the loss of the SMVET. While local transit agencies are developing strategies to address projected revenue reductions, changes in service levels for these operators could indirectly impact the proposed service plans and projected ridership levels for Sound Transit services.

New and Proposed Sources: All proposed operating revenue sources for the *Link* LRT currently exist. No new sources are needed.

Locally Proposed Financing Plan

(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: Section 5309 New Start	$500.0	$41.44 million appropriated through FY 2000 for entire system
Local: Sales and Use Tax and MVET	$475.0	
Local: Bonds	$524.0	
Total:	**$1,500.0**	

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

Seattle Link LRT (MOS)

Seattle, WA

Federal Transit Administration, 2000

Seattle, Washington/Everett-to-Seattle Commuter Rail

Everett-to-Seattle Commuter Rail

Seattle, Washington

(November 1999)

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 1.25 million riders annually.

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

Proposed Project	Commuter Rail; 35 miles, 7 stations
Total Capital Cost ($YOE)	$104.0
Section 5309 Share ($YOE)	$24.9 million
Annual Operating Cost ($YOE)	N/A
Ridership Forecast	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 will be published in December 1999. Sound Transit will be seeking FTA authorization to enter Final Design for this project in January 2000.

TEA-21 Section 3030(a)(85) authorizes the "Sound Move Corridor" for final design and construction. To date, Congress has appropriated $54.57 million to the 82-mile *Sounder* commuter rail system.

Locally Proposed Financing Plan

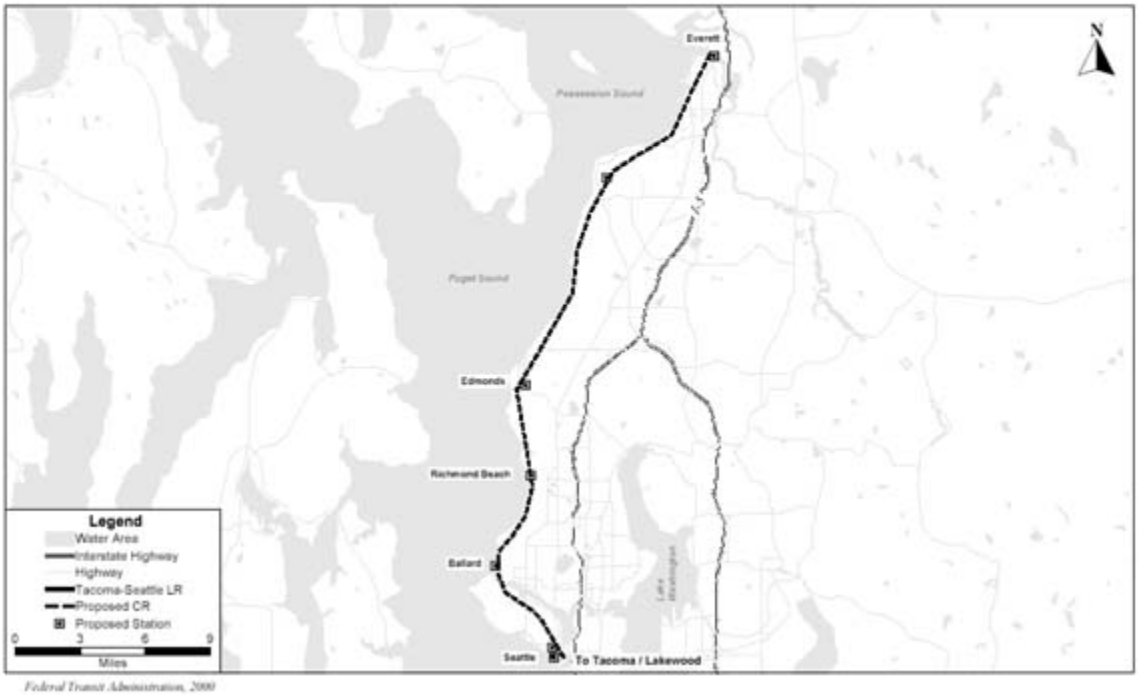
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start	$24.9	$54.57 million appropriated for the 82-mile *Sounder* through FY 2000
Local:	$79.1	
Total:	**$104.0**	

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

Seattle, WA



Federal Transit Administration, 2000

Tacoma, Washington/Lakewood-to-Tacoma Commuter Rail

Lakewood-to-Tacoma Commuter Rail

Tacoma, Washington

(November 1999)

Description

The Central Puget Sound Regional Transit Authority (Sound Transit) is proposing to implement peak-hour commuter rail service to on 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

Proposed Project	Commuter Rail; 8 miles, 3 stations
Total Capital Cost ($YOE)	$86.0 million
Section 5309 Share	$24.9 million
Annual Operating Cost	N/A
Ridership Forecast	2,800 average weekday boardings

Status

Lakewood-to-Tacoma commuter rail service is scheduled to begin operations in 2001. Preparation of the Draft Environmental Impact Statement (DEIS) is underway, with the scoping period completed in July 1999. Sound Transit will be seeking Final Design authorization for this project in early 2000.

TEA-21 Section 3030(a)(85) authorizes the "Sound Move Corridor" for final design and construction. To date, Congress has appropriated $54.57 million to the 82-mile *Sounder* commuter rail system.

Locally Proposed Financing Plan

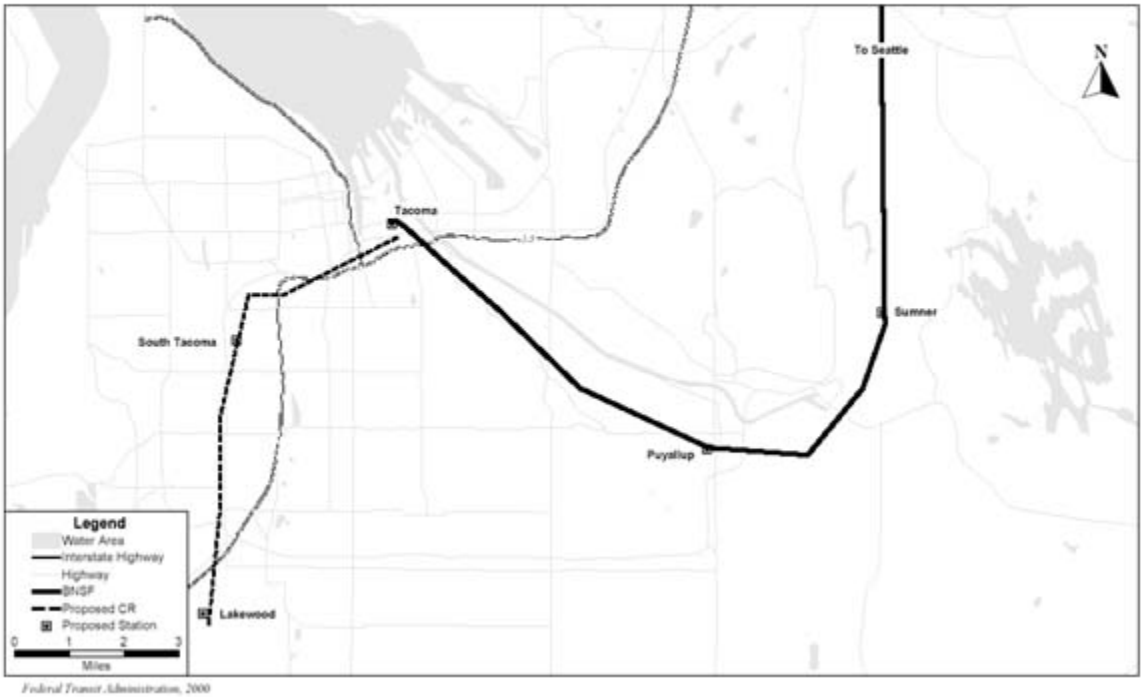
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start	$24.9	$54.57 million appropriated to the 82-mile *Sounder* commuter rail system through FY 2000
Local:	$61.1	
Total:	**$86.0**	

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, WA



Tampa, Florida/Tampa Bay Regional Rail System

Tampa Bay Regional Rail System

Tampa, Florida

(November 1999)

Description

The Hillsborough Area Regional Transit Authority (HART), in cooperation with the Hillsborough and Polk Counties metropolitan planning organizations (MPO) and the cities of Lakeland and Tampa, are proposing to implement the Tampa Bay Regional Rail System. A first step to the proposed rail system is a 30 mile, 30 station "Early Action Plan" minimum operable segment (MOS). The MOS would utilize Diesel Multiple Unit (DMU) rail technology in two corridors: a 19-mile Northeast/Southwest Corridor and a 11-mile West Corridor. Capital cost estimates for the proposed 30 -mile investment total $953.8 million (escalated), with a proposed Section 5309 share is $476.9 million. Annual operating costs are estimated at $19.8 million (escalated). HART estimates 37,000 average weekday boardings in 2020 on the proposed 30-mile segment.

The Early Action Plan MOS is a portion of a proposed $4 billion locally preferred strategy for implementing a regionwide package of multimodal transportation investments, including a 39-station, 71-mile Regional Rail System. The proposed Regional Rail System would provide service throughout Hillsborough County and a portion of Polk County, including the cities of Tampa, Lakeland, and Plant City. Current capital cost estimates for the complete 71-mile system total $1.09 billion, while annual operating and maintenance costs are estimated at $40.0 million (both in 1997 dollars). HART is planning for completion of the full 71-mile Regional Rail System by 2015.

Tampa Bay Regional Rail Summary Description

Proposed Project	Diesel Multiple Unit (DMU) Rail; 30.0 miles, 30 stations
Total Capital Cost ($YOE)	$953.8 million
Section 5309 Share ($YOE)	$476.9 million
Annual Operating Cost ($YOE)	$19.8 million
Ridership Forecast (2020)	37,000 average weekday boardings 27,300 daily new riders
FY 2001 Financial Rating:	**Low-Medium**

FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Not Recommended**

The overall project rating of *Not Recommended* is based on the project's lack of committed non-Federal funding. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999.** 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) to address alternatives for enhancing mobility throughout Tampa, Hillsborough County, Lakeland, and Polk County was completed in April 1998, with the selection by local stakeholders of the multimodal Locally Preferred Strategy, including the 71-mile Regional Rail System. The MIS also identified 28.5 miles of rail investment in the Northeast/Southwest and West Corridors to be included in the regional Early Action Plan. The Year 2020 Long-Range Transportation Plan, which incorporates both the Early Action Plan and Locally Preferred Strategy, was formally adopted by the Hillsborough Metropolitan Planning Organization Board in November 1998. FTA approved initiation of the Preliminary Engineering/Environmental Impact Statement phase for the two corridors in the Early Action Plan in January 1999. While in Preliminary Engineering, the Early Action Plan MOS has increased in length from 28.5 miles to 30 miles; the following criteria reflect the change. The Preliminary Engineering/Environmental Impact Study phase of project development is anticipated to be completed by the end of 2000. A public referendum to establish a local funding mechanism to cover the local share of capital and operating costs for the project has been scheduled for November 2000.

TEA-21 Section 3030(a)(89) authorized the Tampa Regional Rail System for final design and construction. Through FY 2000, Congress has appropriated $5.94 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*. The criteria evaluated are for the 30 mile Early Action Plan MOS. The Early Action Plan includes a significant expansion of bus service (a projected doubling of the existing fleet) included in the Transportation Systems Management (TSM) alternative.

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 environmental benefits, off-setting relatively poor estimated mobility improvements and existing transit supportive land use.

Mobility Improvements

Rating: Low-Medium

The 30-mile MOS is expected to serve 37,000 average weekday boardings and 27,300 daily riders by 2020. HART estimates the following annual travel time savings for the Early Action Plan compared with the No-Build and Transportation System Management (TSM) alternatives.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings	decrease of 2.2 million hours	increase of 1.8 million hours

Based on the 1990 census data, there are estimated 6,053 low-income households within ½ mile radius of the proposed 30 stations, or 22 percent of the total households within ½ mile of proposed stations.

Environmental Benefits

Rating: High

The Tampa area is currently classified as an attainment area for ozone and carbon monoxide. HART estimates the following reductions in annual regional emissions for the Early Action Plan.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 368 annual tons	decrease of 251 annual tons
Nitrogen Oxide (NOx)	decrease of 55 annual tons	decrease of 39 annual tons
Volatile Organic Compounds (VOC)	decrease of 44 annual tons	decrease of 30 annual tons
Particulate Matter (PM_{10})	N/A	N/A
Carbon Dioxide (CO_2)	decrease of 17,825 annual tons	decrease of 12,574 annual tons

HART estimates the following changes in regional energy consumption (measured in British Thermal Units-BTU) for the Early Action Plan.

Annual Energy Savings	New Start vs. *No-Build*	New Start vs. *TSM*
BTU (millions)	decrease of 233,738 million annual BTU	decrease of 164,625 million annual BTU

Operating Efficiencies

Rating: High

HART estimates a decrease in systemwide operating costs per passenger mile for the Early Action Plan compared to the No-Build and the TSM alternatives.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (1999)	$0.50	$0.54	$0.44

Values reflect 2020 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Medium-High

HART estimates the following cost effectiveness indices for the Early Action Plan in the year 2020.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$8.50	$8.40

Values reflect 2015 ridership forecast and 1997 dollars.

Transit-Supportive Existing Land Use and Future Patterns

Rating: Low-Medium

The *Low-Medium* land use rating reflects existing low to moderate densities along the corridor. Some credit is given to continued local efforts to plan for some transit-supportive future land use patterns.

Existing Conditions: The proposed Early Action Plan MOS corridor would provide DMU service from predominantly low-density suburban residential areas to the Tampa Central Business District. The dominant land use in the CBD is office development, although there are also a number of entertainment attractions downtown, including the Florida Aquarium, Garrison Seaport Center, the Ice Palace, the Tampa Convention Center, and Harbour Island. The Early Action MOS is proposed to connect the CBD with a few major activity centers in the region, including the University of South Florida, the Tampa International Airport, and the Port of Tampa. Development along the Northeast Corridor is generally medium density in residential areas with some commercial and industrial nodes. The Southeast and West Corridors are a mix of moderately dense residential and commercial development. Parking is generally in ample supply throughout the proposed corridors. The MIS for the project confirmed that existing land use codes did not generally support a transit-and pedestrian-oriented environment.

Plans and Policies: HART continues to work towards facilitating the implementation of transit-oriented supportive land use polices and urban design strategies. The Tampa Bay Comprehensive Plan includes general transit-supportive corridor policies but there is little

consideration of land use policies pertaining specifically to the proposed rail corridors. The Tampa Bay Comprehensive Plan further reflects growth management policies for the metropolitan area; however Hillsborough County and the City of Tampa land use codes do not include highly transit-supportive growth management policies. Long-range development and land use plans of the City of Tampa include policies that support intensification of development in the CBD, where several stations would be located. The Comprehensive Plan does incorporate the creation of overlay zones. Parking management policies identified in the Comprehensive Plan and Strategic Regional Policy Plan do not directly relate to the proposed rail corridors.

Local Financial Commitment

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

HART estimates a total cost for the 30-mile rail component of the Early Action Plan of $953.8 million (YOE), and proposes to fund it with $476.9 million (50 percent) in Section 5309 New Starts funding and $476.9 million (50 percent) in state and local funds.

Stability and Reliability of Capital Financing Plan

Rating: Low-Medium

The *Low-Medium* rating reflects limited documentation detailing the financial commitment for HARTline's Early Action Plan. The local funding proposed for this project is contingent upon a dedicated sales tax referendum proposed for November 2000

Agency Financial Condition: HARTline's New Starts financial submission is based on historical and projected cash flow analysis. Past information suggests the agency's current financial condition is adequate.

Cost Estimates and Contingencies: Cost estimates for the Early Action plan have increased from $726.3 million to $953.8 million (YOE dollars) since last year. The project's current cost estimate reflects the average of high- and low-cost build alternatives studied in the corridors, and are assumed to change as the project progresses through preliminary engineering.

Existing and Committed Funding: No non-Federal funding is yet committed to the proposed project. FDOT will not commit its proposed contribution ($357.7 million) until HART secures local funding for the project.

New and Proposed Sources: Proposed local funding for the Early Action Plan would come from a ½ cent countywide dedicated sales tax. A referendum on the sales tax increase is scheduled for November 2000.

Stability and Reliability of Operating Finance Plan

Rating: Low-Medium

The *Low-Medium* rating reflects HARTline's lack of a funding source to operate the proposed project.

Agency Financial Condition: According to HARTline's 1998 Annual Financial Report, the agency's operating revenues total $24.3 million and compared favorably with expenditures of $23.4 million. While HARTline is maintaining a positive operating balance and is in sound

condition, the agency's ability to implement rail and expand its bus service is contingent upon securing a new dedicated funding source.

Operating Cost Estimates and Contingencies: Annual operating costs are estimated at $19.8 million in YOE dollars. HARTline has not developed a financing plan that specifies contingencies.

Existing and Committed Funding: HARTline has estimated that 30 percent of project operating costs will be recouped at the farebox. HARTline's other existing operating revenues include FDOT State Block Grant funds and operating support from the City of Tampa through local gas and property assessment revenue.

New and Proposed Sources: Sixty-two percent of the projected operating revenue for the Regional Rail project is expected to be derived from a new dedicated ½ cent sales tax, to be voted upon in a November 2000 referendum.

Locally Proposed Financing Plan

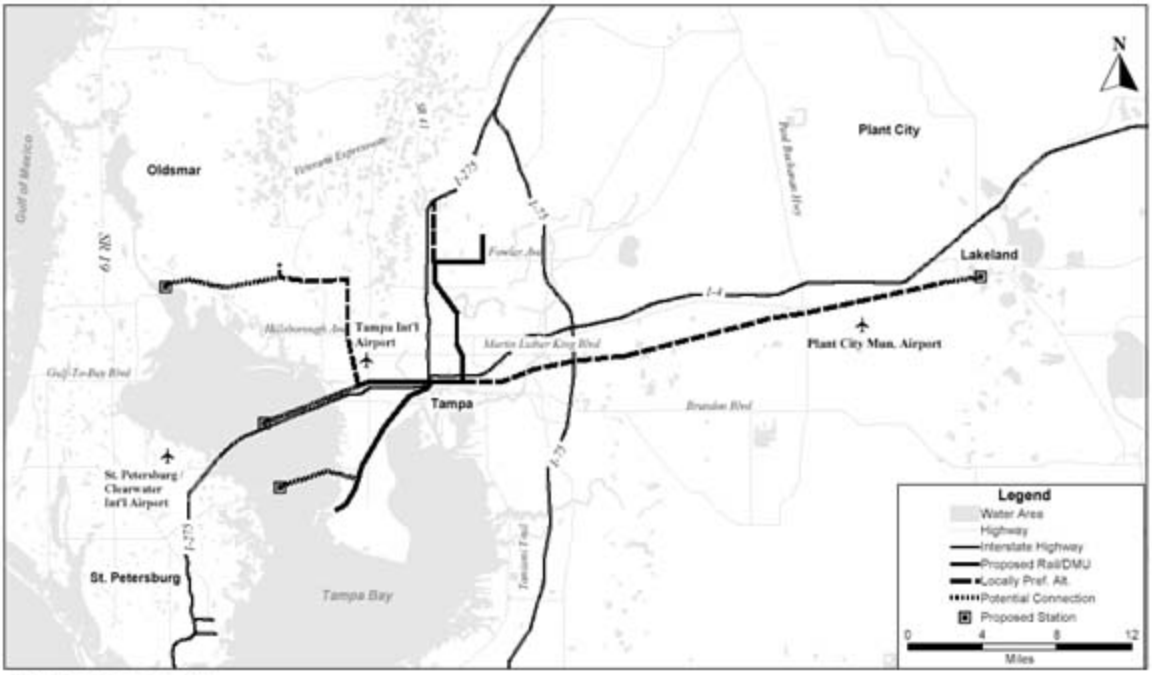
(Reported in $YOE)

Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal: Section 5309 New Start	$476.9	$5.94 million appropriated through FY 2000
State:	$357.7	
Local:	$119.2	
Total:	**$953.8**	

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

Tampa Bay Regional Rail System

Tampa, FL



Federal Transit Administration, 2000

Washington, D.C. Metropolitan Area/Dulles Corridor Rapid Transit

Dulles Corridor Rapid Transit

Washington, DC

(November 1999)

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 extension of Metrorail service in Northern Virginia in the Dulles Corridor. 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 phased rapid transit system would provide enhanced service extending from the Metrorail Orange Line at Falls Church through Tysons Corner to Dulles International Airport and into eastern Loudoun County, primarily along the medians of the Dulles Airport Access Road and the Dulles Greenway. The fully built rail project is scheduled for operation in 2010 at an estimated cost of $2.2 billion (escalated). Interim phases to implementation of rail to Dulles International Airport/Loudoun County are enhanced express bus service, a fully extended bus rapid transit (BRT) system, and rail service between Falls Church and Tysons Corner.

The minimum operating segment (MOS) for the Dulles Corridor Rapid Transit project is the bus rapid transit (BRT) system currently under review as a New Starts project. The proposed BRT system will be developed as an interim step to rail, using the reserved lanes of the Dulles Airport Access Road (DAAR) as a fixed guideway for advanced technology buses. 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 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 $280 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 Rapid Transit Summary Description

Proposed Project	Bus Rapid Transit; 23 miles, 3 new stations convertible to rail
Total Capital Cost ($YOE)	$279.8 million

Section 5309 Share ($YOE)	$217.8 million
Annual Operating Cost ($YOE)	$48.4 million
Ridership Forecast (2020)	23,000 average weekday boardings 13,600 daily new riders
FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium**
FY 2001 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the adequacy of the BRT system's justification criteria and capital finance plan at this early stage of Preliminary Engineering. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999**. 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. VDRPT and WMATA submitted a request to initiate preliminary engineering for the BRT MOS and to initiate the NEPA process for the full Dulles Corridor Rapid Transit project to FTA in November 1999.

TEA-21 Section 3030(a)(93) authorizes the "Washington, DC – Dulles Corridor Extension" for final design and construction. Through FY 2000, Congress has appropriated $41.40 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. *No-Build*	New Start vs. *TSM*
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. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 2,362 annual tons	decrease of 2,387 annual tons
Nitrogen Oxide (NOx)	decrease of 184 annual tons	decrease of 207 annual tons
Volatile Organic Compounds (VOC)	decrease of 220 annual tons	decrease of 225 annual tons
Particulate Matter (PM_{10})	decrease of 321 annual tons	decrease of 328 annual tons
Carbon Dioxide (CO_2)	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. *No-Build*	New Start vs. *TSM*
BTU (millions)	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
System Operating Cost per Passenger Mile (2020)	$0.31	$0.31	$0.29

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. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$11.90	$19.60

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 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.

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. 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: 22%

The VDRPT financial plan proposes to use $217.8 million (78 percent of total project costs) in Section 5309 New Starts funds, $2 million (1 percent) of FHWA Surface Transportation Program (STP) funds, and $4 million (1 percent) of Intelligent Transportation System/Bus Rapid Transit Demonstration Funds. Proposed State and local funding is as follows: $8 million (3 percent) from the Commonwealth Transportation Trust Fund; $6 million (2 percent) from Northern Virginia Transportation District Bonds; $9 million (3 percent) from Excess Toll Revenues; $21 million (8 percent) from new local/regional taxes; and $1 million from local jurisdiction general funds. Private funding includes $6 million (2 percent) from equipment sales-leasebacks and $5 million (2 percent) from a public-private proposal.

Stability and Reliability of Capital Financing Plan

Rating: Medium

The *Medium* capital finance plan rating reflects the financial conditions of the Virginia Capital Transportation Trust Fund (VCTTF) and WMATA, and the reasonableness of the capital financing plan at this stage of preliminary engineering for the BRT project. This rating reflects evaluation of only the BRT system.

Agency Capital Financial Condition: The VCTTF and WMATA are in sound financial condition. The Commonwealth of Virginia will finance the capital development of the project through the VCTTF and locally through Fairfax and Loudoun Counties. The State 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 this early stage of preliminary engineering. As the project advances through the planning and project development processes, it is anticipated that the capital cost estimates will be refined.

Existing and Committed Funding: Commonwealth Capital Transportation Trust Funds and a portion of the excess toll revenues have been allocated by the Virginia General Assembly. Funding from the Northern Virginia Transportation District Fund has been authorized by the Virginia General Assembly, subject to local referenda. It is anticipated that as the project advances through the planning and project development processes, additional funds will be committed towards the project from State funding sources as indicated in the project financial plan.

New and Proposed Sources: Several new funding sources are proposed for the project including proposed local/regional income/sales/gas taxes, revenue from sale-leaseback arrangements for buses, and revenue from public-private proposals.

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. At this early stage of preliminary engineering, a detailed account of the operation and maintenance costs for the project has not been provided.

Existing and Committed Funding: Limited funds have been committed towards operating the proposed BRT. However, in July of 1999, the Fairfax Connector Bus service started operating new express bus service, reverse commute service, collector-feeder service, and regional bus route service in the corridor. In 2001, Fairfax County will add 18 new bus routes to the Dulles Corridor. Thus, the transit operators are committed towards increasing bus service to meet anticipated demand.

New and Proposed Sources: Several new funding sources are proposed for operating BRT service in the corridor, including sales-leasebacks and innovative procurement.

Locally Proposed Financing Plan

(Reported in $YOE)

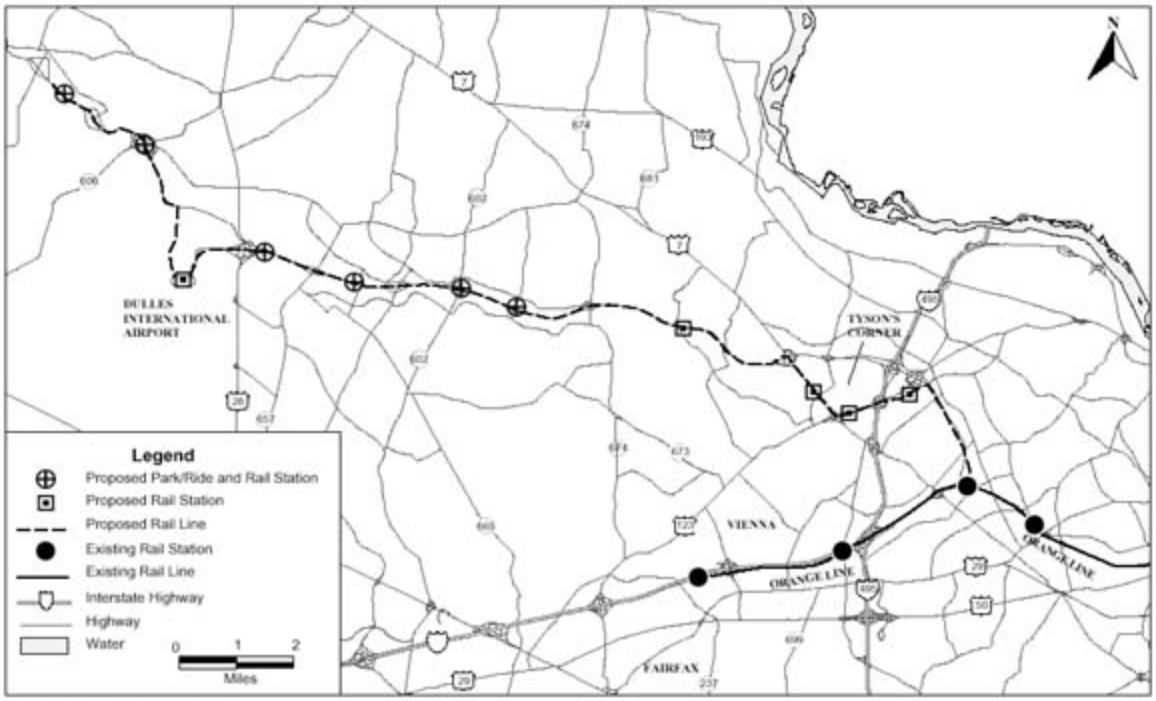
Proposed Source of Funds	Total Funding ($million)	Appropriations to Date
Federal:		
Section 5309 New Starts	$217.8	$41.40 million appropriated through FY

		2000
ITS/BRT Demo Funds	$4.0	
STP	$2.0	
State:		
Commonwealth Capital Transportation Trust Fund	$8.0	
Northern Virginia Transportation District Bonds	$6.0	
Excess Toll Revenue	$9.0	
Local:		
New Local/Regional Taxes	$21.0	
Local Jurisdiction General Funds	$1.0	
Private:		
Equipment Sale-Leaseback	$6.0	
Public-Private Proposals	$5.0	
Total:	**$279.8**	

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

Dulles Corridor Rapid Transit

Washington D.C.



Federal Transit Administration, 2000

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

Largo Extension

Washington, DC / Maryland

(November 1999)

Description

The Maryland Mass Transit Administration (MTA) and the Washington Metropolitan Area Transit Authority (WMATA) are joint lead local agencies planning a proposed 3.1 mile heavy rail extension of the 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, containing at-, above- and below-grade segments, has been modified to be underground or covered between Central Avenue and the Capital Beltway to address concerns raised during public review of the DEIS. Two new stations will be provided at Summerfield and at the Largo Town Center Station. The stations will provide 500 and 2,200 park-and-ride spaces, respectively, plus a hundred or more kiss-and-ride spaces and 11 bus bays each. A number of WMATA and Prince George's County bus routes will connect to the two new stations; shuttle bus service is proposed between both stations and the FedEx Field (formerly known as the Redskins Stadium). The project will also directly serve the USAir Arena, a former major sports complex planned for entertainment and retail uses. MTA will manage the project through preliminary engineering, with WMATA undertaking final design and construction. The project is anticipated to open for service by September 2004, at a cost of $433.9 million (in escalated dollars). Average weekday boardings are estimated to be 28,500 in 2020 with 16,400 daily new riders.

Largo Extension Summary Description

Proposed Project	Heavy Rail Extension; 3.1 miles, 2 stations
Total Capital Cost ($YOE)	$433.9 million
Section 5309 Share ($YOE)	$260.3 million
Annual Operating Cost ($YOE)	$11.5 million
Ridership Forecast (2020)	28,500 average weekday boardings 16,400 daily new riders

FY 2001 Financial Rating:	**Medium**
FY 2001 Project Justification Rating:	**Medium**
FY 2000 Overall Project Rating:	**Recommended**

The *Recommended* rating is based on the adequacy of the project's justification criteria and capital and operating finance plans. The overall project rating applies to this Annual New Starts Report **and reflects conditions as of November 1999**. 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 proposed Largo Extension was approved by the WMATA Board as an addition to the 103-mile Metrorail Adopted Regional System in February 1997, applying WMATA Compact funding arrangements, contingent upon requisite FTA approvals. The project is included in the National Capital Region's Constrained Long Range Plan.

Preliminary engineering was initiated in February 1996. The Draft Environmental Impact Statement (DEIS) was completed and approved by FTA in October 1996. The Draft Final Environmental Impact Statement (FEIS) was completed in September 1999; a Record of Decision (ROD) is expected by early 2000. WMATA will assume managing responsibility for the project upon submission of a request to FTA for final design approval, following the ROD.

TEA-21 Section 3030(a)(93) authorizes the "Washington, DC – Largo Extension" for final design and construction. Through FY 2000, Congress has appropriated $5.65 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 3.1 mile extension. 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 adequacy of the project's cost effectiveness and other benefits.

Mobility Improvements

Rating: Medium

MTA and WMATA estimate that the Largo Metrorail Extension will serve 28,500 average weekday boardings and attract 16,400 daily new riders by 2020, and would result in the following annual travel time savings.

Mobility Improvements	New Start vs. *No-Build*	New Start vs. *TSM*
Annual Travel Time Savings (Hours)	1.7 million	1.1 million

Based on 1990 Census data, there are an estimated 46 low-income households within a ½ mile radius of the proposed 2 new stations, approximately 5 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. MTA estimates that in 2020, the Largo Metrorail Extension would result in the following annual emissions reductions.

Criteria Pollutant	New Start vs. *No-Build*	New Start vs. *TSM*
Carbon Monoxide (CO)	decrease of 94 annual tons	decrease of 74 annual tons
Nitrogen Oxide (NOx)	decrease of 722 annual tons	decrease of 563 annual tons
Volatile Organic Compounds (VOC)	decrease of 39 annual tons	decrease of 37 annual tons
Particulate Matter (PM_{10})	0	decrease of 1 annual ton
Carbon Dioxide (CO_2)	decrease of 2,740 annual tons	decrease of 10,370 annual tons

MTA estimates that in 2020, the Largo Metrorail Extension 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 (millions)	decrease of 19,499 million annual BTU	decrease of 6,418 million annual BTU

Operating Efficiencies

Rating: Medium

MTA estimates the following systemwide operating cost per passenger mile in the year 2020 for the Largo Metrorail Extension, No-Build, and TSM alternatives.

Operating Efficiencies	No-Build	TSM	New Start
System Operating Cost per Passenger Mile (2020)	$0.38	$0.38	$0.38

Values reflect 2020 ridership forecast and 1999 dollars.

Cost Effectiveness

Rating: Medium

MTA estimates the following cost effectiveness indices for the new starts to no-build and TSM comparisons.

Cost Effectiveness	New Start vs. *No-Build*	New Start vs. *TSM*
Incremental Cost per Incremental Passenger	$9.30	$11.60

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 the extension's connection to the Washington metropolitan area CBD and local efforts to foster transit-oriented development around proposed station areas.

Existing Conditions: The proposed Largo Metrorail Extension serves the suburban towns of Landover and Largo-Lottsford, Maryland, and traverses medium-density single-family suburban residential development interspersed with multi-family housing, office parks, civic uses, a major professional sports facility, a major entertainment facility, recreational parks, and undeveloped land. Much of the land directly adjacent to the two station areas is not yet developed or is in the process of being developed according to established plans, which call for mixed uses, higher intensities, and pedestrian design in station areas. Redevelopment of the Capital Centre is also underway. Some pedestrian improvements are being undertaken with State funding.

Future Plans and Policies: High population growth is forecast for the Washington, DC metropolitan area (44 percent between 1995 and 2020) and for the study area. The Maryland Smart Growth Initiative contains a set of policies and tools to manage and direct growth. The Prince George's County General Plan encourages concentration of land use around station areas, and area plans are consistent with this policy. The county has recently completed a study that recommends actions to strengthen growth management activities. Local plans call for mixed-use, transit-oriented development to occur at moderate densities, albeit higher than in the surrounding area. Largo Town Center, in particular, is being developed in accordance with plans as a mixed-use activity center oriented around the proposed Metrorail Station. County-wide processes are in place to allow for consideration of increased densities in the future, although these have not yet been activated. Prince George's County has committed to doing small area plans for both station areas in FY 2001. Existing zoning permits moderate-density mixed-use commercial and residential development in station areas. Density bonuses and reductions in

parking requirements are available for provision of pedestrian facilities and/or structured parking in station areas. WMATA and MTA are conducting joint activities to pursue transit-supportive station area development. WMATA continues to actively pursue joint development opportunities under a formalized program that has been utilized in many other Metrorail station areas. The state and county have a number of economic development programs that could be used to provide incentives for development in the corridor and in station areas. Local developers have incorporated the transit facility in their planning and design. However, office development proposals are contingent on construction of the project. The adopted 1999 Maryland Transportation Plan contains policies that support transit-oriented development, joint development and mixed use. In this plan, MDOT has stated goals of (1) providing transit and pedestrian facilities…; (2) fostering pedestrian-friendly design in station areas; (3) working closely with local officials to address the pattern and density of land use; and (4) supporting development in established communities and compact mixed-use areas. County and transit agency policies allow for the development of Transit District Overlay Zones for use in increasing densities.

Local Financial Commitment

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 40%

The MTA financial plan proposes to use $260.3 million (60 percent of total project costs) in Section 5309 New Starts funds, $3.2 million (1 percent) of CMAQ funds, and $170.4 million (39 percent) of State funds.

Stability and Reliability of Capital Financing Plan

Rating: Medium-High

The *Medium-High* capital finance plan rating reflects the strong financial condition of the Maryland Department of Transportation, parent agency of the Mass Transit Administration, and the State's demonstrated financial commitment to the project.

Agency Capital Financial Condition: All capital transportation investments in the State of Maryland are locally financed entirely through the Maryland Transportation Trust Fund (MTTF) administered by the Maryland Department of Transportation (MDOT). As of June 30, 1999, MDOT had outstanding bond debt totaling $749 million; its overall debt limit equals $1.2 billion. The debt is rated Aa2 by Moody's Investor Services, AA by Standard and Poor's Corporation, and AA by Fitch IBCA, Inc., which are among the highest ratings awarded to transportation agencies.

Capital Cost Estimates and Contingencies: Capital costs have increased in PE by $36.8 million, or 9 percent, over the FY 2000 estimate due to public input calling for the alignment of a segment of the extension to be underground as opposed to at-grade. WMATA has developed financial scenarios for a prolonged outlay of Federal funding (both new starts and non-new starts) for the project, including borrowing costs, cost overruns and potential proposed funding unavailability.

Existing and Committed Funding: The financial plan reflects an increase in the State's share of project financing from 20 percent in FY 2000 to the current 40 percent. The local share has been committed in the State's Consolidated Transportation Program. The one percent in CMAQ funds has been programmed in both the Maryland and National Capital Region TIPs.

New and Proposed Sources: No new funding sources are proposed for the project.

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* operating finance plan rating reflects the reliability of Maryland support of WMATA operating subsidies, and the uncertainty of the actual required contribution to be determined by negotiation of the WMATA Compact for funding Metrorail operations.

Agency Operating Financial Condition: All activities of MDOT/MTA are supported by the MTTF, including debt service, maintenance, operations and administration. Revenues allocated to the MTTF exceed $2 billion annually. MDOT has existing bonding capacity and is able to balance anticipated expenditures with projected revenues, despite the fact that the MTTF does not depend on inflation-sensitive revenue sources. WMATA will operate the new Largo Metrorail Extension, with application of the WMATA Compact funding arrangements to the project. Individual Compact contributions are subject to negotiation; however, the participating jurisdictions are considered capable and reliable of providing the required funding.

Operating Cost Estimates and Contingencies: Average annual operating costs are expected to increase and are estimated in forecast-year dollars at $11.54 million for the Largo Metrorail Extension. A detailed account of O&M costs for the project has not been provided. Therefore, the reasonableness of the estimate cannot be determined.

Existing and Committed Funding: The MTTF will provide the State operating subsidy for the Largo Metrorail Extension. Farebox revenues are proposed to meet $7.9 million (68 percent) of increased operating costs, with 8 counties/cities under the WMATA Compact contributing the remaining $3.65 million (32 percent). The required increase in operating subsidy from the WMATA Compact jurisdictions constitutes a one percent increase over the current subsidy. The State of Maryland has continued to commit to providing the WMATA operating subsidy through the MTTF.

New and Proposed Sources: No new funding sources are proposed for the project.

Locally Proposed Financing Plan

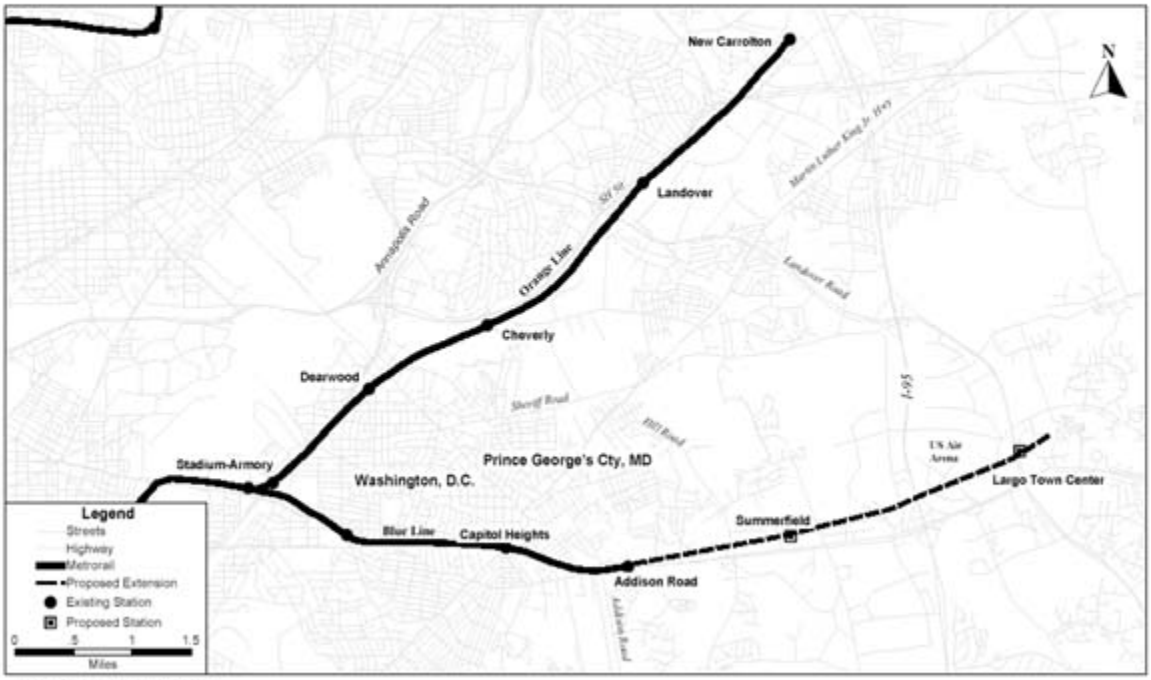
(Reported in $YOE)

Proposed Source of Funds	**Total Funding ($million)**	**Appropriations to Date**
Federal: Section 5309 New Start	$260.3	$5.65 million appropriated through FY 2000
Federal: CMAQ	$3.2	
State: MDOT/TFF	$170.4	
Total:	**$433.9**	

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

Largo Metrorail Extension

Washington, DC



Federal Transit Administration, 2000

Authorizations for Final Design and Construction

Greater Albuquerque Mass Transit Project

Albuquerque, New Mexico

The City of Albuquerque's Transit Department, in coordination with the City of New Mexico's Highway and Transportation Department, and the Middle Rio Grande Council of Governments, have undertaken a High Capacity Transportation System (HCTS) Study. The Albuquerque Metropolitan Planning Area is forecasted to have a 48% 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 is anticipated for completion in June 2000. Phase II will identify a set of corridors for detailed analysis. A Locally Preferred Alternative will be selected and a Draft Environmental Impact Statement (DEIS) will be prepared. The DEIS is anticipated to be completed in December 2001. 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. The high capacity-strategic corridors plan will be incorporated into the region's Metropolitan Transportation Plan. Through FY 2000, Congress has appropriated

$11.82 million in Section 5309 New Starts funds for this effort.

High Capacity Corridor [Light Rail]

Albuquerque, New Mexico

See project description for the Greater Albuquerque Mass Transit Project above. Project sponsors have informed the Federal Transit Administration that the two are identical.

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.

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 initial service from Atlanta-Griffin-Macon is 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 under 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 additional 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

The Federal Transit Administration 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 2000, 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 documentation 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. The first phase of the project was funded by the MD DOT.

Metropolitan Rail Corridor

Baltimore, Maryland

The Maryland Department of Transportation (MD DOT) is currently considering 17 transportation improvement options for the Baltimore and Washington Metropolitan regions. 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 (Baltimore - Central Downtown Major Investment 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 2000, Congress has appropriated $0.5 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 alternatives 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 Bogata. The Vince Lombardi park-and-ride lot is the present terminus point for the Hudson-Bergen LRT (HBLRT). The first Minimum Operable Segment of the HBLRT is currently under construction. 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. Through FY 2000, Congress has appropriated $3.97 million in Section 5309 New Starts funds for the MIS/DEIS.

Transit Corridor

Birmingham, Alabama

The Birmingham Metropolitan Planning Organization, in cooperation with local governments, the local transit authority, the Chamber of Commerce, and the Birmingham Regional Planning Commission, is conducting a feasibility study as part of its Strategic Regional Multimodal Mobility Plan. This effort constitutes Phase I of the Birmingham Transit Corridor and will result in the identification of feasible regional transit strategies proposed within selected corridors to determine which may be the most effective for addressing congestion management needs. Regional transit strategies under consideration include High Occupancy Vehicle (HOV) lanes with express bus service; feeder and circulator bus service; improvements to fixed route transit service; and light rail transit. Federal Highway Administration Metropolitan Planning funds and local funds support Phase I. Phase I is scheduled for completion in January 2000. Phase II will consists of an

Alternatives Analysis Study for selected primary corridors. Phase II will evaluate the alternative alignments and strategies identified in each primary corridor in the system plan and choose a Locally Preferred Alternative. This phase will also initiate the environmental review process (National Environmental Policy Act of 1969, as amended) – and include concept-level engineering and an environmental scan. Phase II is anticipated to take approximately 18 months and will be completed in June 2001. Through FY 2000, Congress has appropriated $3.93 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 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. The Federal Transit Administration has approved the Environmental Assessment 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. The estimated cost to design and implement the AITC is approximately $40 million.

Boston-Providence Commuter Rail

Boston, Massachusetts

This project involves the construction of a commuter rail layover facility in Pawtucket, Rhode Island. The project is a joint Rhode Island Department of Transportation (RIDOT/Massachusetts Bay Transportation Authority (MBTA) venture for the design and construction of 6-9 track commuter rail yard for the purpose of overnight layover/storage and future light maintenance of commuter rail equipment. This project is to serve both the existing Providence-Boston service and Rhode Island's future Providence-Westerly service. The twelve-acre parcel is situated adjacent to and 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 (TIP).

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 for the corridor by focusing on operational impacts to the MBTA system, ridership analysis, capital and operating costs, community impacts, environmental impacts and cost/benefit analyses. This project is not in the Boston area Long Range Transportation Plan. Through

FY 2000, Congress has appropriated $1.97 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 2000, Congress has appropriated $0.496 million in Section 5309 New Starts funds for this effort.

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 2000, Congress has appropriated $2.7 million in Section 5309 New Starts funds for this effort.

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 2000, Congress has appropriated $6.96 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 light rail or monobeam transit system from the Airport to the Convention Center. The full-scale proposed 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 2000, Congress has appropriated $6.13 million in Section 5309 New Starts for this effort.

North-South Corridor Transitway

Charlotte-Mecklenburg, North Carolina

The North-South Corridor extends approximately 36 miles from Davidson in North Mecklenburg County through downtown Charlotte to Pineville in South Mecklenburg County. This corridor was identified in the Centers and Corridors Plan adopted by the Charlotte Council and Mecklenburg County Board of Commissioners in 1994 and reaffirmed through inclusion in the adopted 2020 Long Range Transportation Plan and the 2025 Transit/Land Use Plan. The formal scoping meeting for the Phase I environmental analysis was held January 1999. Alternatives Analysis is currently underway for the 11.5-mile southern portion of the corridor from downtown Charlotte to Pineville. Adoption of a Locally Preferred Alternative followed by a request to the Federal Transit

Administration to enter preliminary engineering is anticipated in early 2000. York County, South Carolina is also doing preliminary investigation of alignments and land use patterns to evaluate possible future extensions to South Carolina. The City of Charlotte, Mecklenburg County and the six other municipalities in the County have developed a county-wide Transit/Land Use Plan for 2025. Transit options and possible land use actions for five corridors, including the North-South Corridor, were analyzed. The 2025 Plan built upon earlier studies and land use plans for the Charlotte-Mecklenburg area. The Plan was also the basis for obtaining November 1998 approval of a county-wide referendum for a ½ cent sales tax dedicated to public transportation. The tax went into effect in April 1999 and is anticipated to yield approximately

$46-$48 million during the first year. The City of Charlotte, Mecklenburg County, and six towns formed the Metropolitan Transit Commission (MTC) to oversee the county-

wide transit system. The adopted MTC Capital and Operating Budget for the current fiscal year exceeds $91 million. Through FY 2000, Congress has appropriated

$7.89 million in Section 5309 New Starts for this effort.

35th 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 35th 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 recommendation of a set of alternatives is expected shortly.

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 Locally Preferred Investment Strategy (LPIS) was recommended to the GCRTA Board of Trustees by its Planning and Development Committee in November 1999. NOACA is expected to make an LPIS selection in January 2000. Through FY 2000, Congress has appropriated $2.9 million in Section 5309 New Starts funds for this effort.

Cleveland-Akron-Canton Commuter Rail

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 Interstate 271

and Interstate 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 primary scoping stage. The proposed project is included in the Akron Metropolitan Area Transportation Study's Long Range Needs Plan. In addition, several miles of rail right-of-way have been purchased for passenger rail use. Through FY 2000, Congress has appropriated

$14.4 million in Section 5309 New Starts funds for this effort.

Cleveland - 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 2000, Congress has appropriated $0.8 million in Section 5309 New Starts funds for this effort.

Interstate 90 Corridor to Ashtabula County

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 a proposed corridor between Cleveland and Ashtabula County. The proposed corridor is one of seven found to be feasible for commuter rail under Phase I of the Northeast Ohio Commuter Rail Feasibility Study (NEOrail) being conducted by NOACA. Currently, no commuter rail service operates in the corridor. Prior to a decision to implement commuter rail service, NOACA will conduct Phase II of the NEOrail study. Phase II will complete the feasibility analysis, including implementing planning for all seven corridors, as input to the regional decision-making process necessary to select, program and fund a proposed projec

North – South (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 2000, Congress has appropriated $0.99 million in Section 5309 New Starts funds for this effort.

Lorain-Cleveland Commuter Rail

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 a proposed corridor between Cleveland and Lorain County in northeast Ohio. The proposed corridor is one of seven found to be feasible for commuter rail under Phase I of the Northeast Ohio Commuter Rail Feasibility Study (NEOrail) being conducted by NOACA. Currently, no commuter rail service operates in the corridor. Prior to a decision to implement commuter rail service, NOACA will conduct Phase II of the NEOrail study. Phase II will complete the feasibility analysis, including implementing planning for all seven corridors, as input to the regional decision-making process necessary to select, program and fund a proposed project.

Northeast Ohio Commuter Rail 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 has been completed by NOACA. Seven corridors have been 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.

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 southcentral 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 2000. The Inter-Island Ferry Authority is

the grant recipient. Through FY 2000, Congress has appropriated $6.3 million in Section 5309 New Starts funds for this effort.

Dallas (Northwest Corridor)

Dallas, Texas

The Dallas Area Rapid Transit (DART) Agency is conducting a Major Investment Study (MIS) to examine transportation options in a proposed corridor extending approximately 19 miles north from the Dallas Central Business District. The proposed corridor also includes a new arena development in downtown Dallas, the Medical-Market Center, Love Field Airport, the cities of Irving, Farmers Branch and Carrollton, as well as developing areas northwest – such as the Dallas-Ft. Worth International Airport and Los Colinas. Two freight rail lines and two major freeways are located within the corridor and are incorporated as alignment alternatives. The purposes of the study are to examine the feasibility of enhancing mobility, providing additional capacity, reducing congestion, enhancing transit, and maintaining the environment. Alternatives under consideration include: No-build, Transportation System Management (TSM) including Congestion Management System applications, light rail, commuter rail, High Occupancy Vehicle (HOV) lanes and feeder bus transit improvements. An extensive public involvement process is currently underway. The study is also being closely coordinated with three other MISs being conducted by the Texas Department of Transportation. Following detailed evaluation of the individual modes, multi-modal strategies will be evaluated and a draft Locally Preferred Investment Strategy selected by late 1999 or early 2000.

Dallas (Southeast Corridor)

Dallas, Texas

The Dallas Area Rapid Transit (DART) Agency is conducting a Major Investment Study (MIS) to examine transportation options in a proposed corridor extending approximately 10 miles within the southeastern quadrant of DART's service area. The proposed corridor begins east of the Dallas Central Business District (CBD) and includes Baylor Hospital, the Deep Ellum Planned Development District, the Buckner Boulevard commercial/retail

area and Fair Park. The Dallas CBD and the Medical-Market Center are outside the proposed corridor. However, they anchor one end of the southeast-northwest travel pattern of the corridor. The purposes of the MIS are to examine the feasibility of increasing mobility in the corridor, adding capacity along heavily traveled routes, reducing congestion and strengthening economic development. Alternatives under consideration include No-build, Transportation System Management (TSM) and eight alternative light rail alignments. High Occupancy Vehicle (HOV) lanes, busways and commuter rail have been screened out at this stage of the MIS. Having completed a detailed evaluation of alternatives, including an extensive public participation process, a recommendation is pending on a 10.2-mile, double track light rail alignment with nine passenger stations. The DART Board will review the recommendation before identifying a locally preferred investment strategy that may also include elements of the TSM alternative. The Southeast Corridor is identified as a committed element in the region's Long Range Transportation Plan. The MIS is scheduled for completion at the end of 1999.

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 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 40th Avenue and 40th 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.

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-Greely-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 (HOV) lanes and highway

improvements. Phase 2 of the study is currently underway. Through FY 2000, Congress has appropriated $0.5 million in Section 5309 New Starts funds for this effort.

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. Environmental analysis 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 have proposed to fund the $40 million segment with a combination of Federal, State, local and private funds.

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 Cuidad, 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 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 - on the east side of downtown, and the Island's most important tourist destination, "Moody Gardens" on the west part of the Island. The proposed extension has been adopted as part of the Houston-Galveston area Council's Transportation Improvement Program (TIP) and the Long Range Transportation Plan. The study is scheduled for completion in 2000. Through FY 2000, Congress has appropriated $3.47 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 an Alternatives Analysis (AA) 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 private sector has also been an active participant in this effort. The results of the CAT Regional Transit Alternatives Analysis Study and the Long Range Transportation Plan will be used to develop alternatives. The AA study is scheduled for completion in late 1999 or early 2000. Through FY 2000, 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 2000, Congress has appropriated $0.99 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, is expected to be undertaken at a later date. This project is in the Hartford area Long Range Transportation Plan. Through FY 2000, Congress has appropriated $1.48 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, Minnesota 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.

Advanced Transit Program (West Loop Corridor)

Houston, Texas

The Advanced Transit Program (ATP) is a $304.8 million program proposed to be funded 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 2000. The West Loop MIS is locally funded. Through FY 2000, Congress has appropriated $5.92 million in Section 5309 New Starts funds for the ATP. Section 5309 New Starts funds appropriated through FY 1999 has been applied to the MIS/EA for the Downtown to Astrodome LRT. Funding will be requested for preliminary engineering for the LRT, Hobby and Gulfgate Transit Center projects and the Clean Fuel Program through a future grant application.

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 10th Street in Indianapolis to Tipton, Indiana. Through FY 2000, Congress has appropriated $2.23 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. Phase II is scheduled to be completed in March 1999. 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 begin in April 1999 and will 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 the year 2000.

Southtown Corridor

Kansas City, Missouri

In 1995, the Kansas City Area Transportation Authority (KCATA) completed an Alternatives Analysis Study that examined a proposed corridor extending from the riverfront and downtown Kansas City south to the Country Club (Plaza) and to 85th Street and Holmes Road within the Kansas City metropolitan area. The Locally Preferred Alternative (LPA) resulting from the study recommended that a 15.2-mile light rail transit (LRT) line be constructed within the corridor. Later in 1995, the LPA was included in the Mid-America Regional Council's – local Metropolitan Planning Organization – Long Range Transportation Plan. The project also included an eastern LRT line extending from the Plaza to Watkins Drive and south to 75th Street. KCATA proposed to build the project in phases, with an initial 5.6-mile "starter" segment extending from the River Market to 51st Street at the southern edge of the Plaza. Total capital costs for the starter segment are estimated at $220 million ($1997). The starter segment is projected to average 10,800 daily boardings, including 4,800 new riders in the year 2010. In October 1995, FTA approved the initiation of preliminary engineering (PE) for the Southtown Corridor project. However, the PE phase has progressed slowly as local officials are currently reassessing the need for light rail and reconsidering the alignment options for the downtown area. A referendum on a proposed half-cent sales tax to provide a capital funding source for a regional LRT system was rejected by Kansas City voters in November 1999. The referendum was not sponsored by KCATA or the city. Through FY 2000, Congress has appropriated $4.02 million in Section 5309 New Starts funds for the project.

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 2000, Congress has appropriated $1.49 million in Section 5309 New Starts funds for this effort.

East Side Extension – Minimum Operable Segment 4

Los Angeles, California

In 1994, the Los Angeles County Metropolitan Transportation Authority (LACMTA) completed a Final Environmental Impact Statement/Environmental Impact Report for a 6.8-mile eastern extension of the Metro Red Line subway from Union Station in downtown Los Angeles to

Whittier/Atlantic in East Los Angeles. The first 3.7-mile segment, from Union Station to 1st/Lorena, was included in a Full Funding Grant Agreement (FFGA) for Los Angeles Metro Rail Segment 2/Eastside. The second 3.1-mile segment, from 1st/Lorena to Whittier/Atlantic, was identified in TEA-21 as a second phase of the Metro Rail Eastside Extension (Segment 4/Eastside). The project had three stations and was estimated to cost $1,216 million. As a result of the suspension of many rail projects by the LACMTA Board of Directors in January 1998, the Segment 4/Eastside project was included in the LACMTA-sponsored Regional Transit Alternatives Analysis Study (RTAA) which reviewed possible lower cost solutions for previously adopted rail corridors. In November 1998, after reviewing the RTAA, the LACMTA Board of Directors reprogrammed local resources previously allocated to the Eastside and Mid-City extensions to the implementation of the RTAA recommendations, including the LACMTA Accelerated Bus Procurement Plan. Currently, the LACMTA is undertaking a Revaluation/Major Investment Study for the Eastside, Mid-City/Westside and San Fernando Valley Transit Corridors. In addition to the previously adopted Locally Preferred Alternative, lower cost alternatives are being considered, including "shortened subway," aerial heavy rail, light rail and bus rapid transit. Through FY 2000, Congress has appropriated $11.82 million in Section 5309 New Starts funds to study fixed guideway alternatives.

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 2000, Congress has appropriated

$0.98 million in Section 5309 New Starts funds for this effort.

Metrolink (Union Station-Fullerton)

Los Angeles, California

The Southern California Regional Rail Authority (SCRRA) is proposing 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 5,400 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 Union Station-Fullerton segment is owned by the Burlington Northern Santa Fe Railroad (BNSF).

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 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.

San Fernando Valley (East-West) Transit Corridor

Los Angeles, California

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is studying alternatives in a proposed 14-mile corridor extending from the currently planned terminus of the Metro Red Line (North Hollywood) to Warner Center in the West San Fernando Valley. The proposed route would follow an abandoned railroad right-of-way and is being evaluated for possible heavy rail extension, light rail, and bus rapid transit. An Administrative Draft Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) was completed in March 1997. The MIS is now being re-evaluated and updated in order to be coordinated with the FTA Bus Rapid Transit Demonstration Program. A decision on the Locally Preferred Alternative is expected in January 2000.

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. The project was approved by the LACMTA's Planning and Programming Committee in July 1999 as well as the full LACMTA board later that same month. 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. Final design of the project is scheduled to begin in January 2000 and take approximately 15-18 months to complete. Construction is scheduled to begin in late FY 2001 and conclude in FY 2003.

Jefferson County Corridor (South Central Corridor)

Louisville, Kentucky

The Transit Authority of River City (TARC) recently completed the "Transportation Tomorrow (T-squared)" Major Investment Study (MIS) for a proposed corridor operating in an exclusive right-of-way extending south from downtown Louisville to an area just beyond the "Outer Loop," a distance of approximately 13 miles. The Locally Preferred Alternative (LPA) recommended a fixed guideway rapid transit system, with an enhanced bus element. Enhanced bus service will include augmented cross-county service, which will connect riders from 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 costs estimate for the enhanced bus element is approximately $25 million. The fixed guideway portion of the LPA has not been determined. However, project sponsors have indicated the possibility of either an electrified Light Rail Transit (LRT) or Bus Rapid Transit (BRT) alternative. Buses would travel along an exclusive right-of-way in the Preston, Kentucky and Interstate 65 Corridor. Proposed station sites for the LPA are being considered at: Downtown, Medical Center, Smoketown, Shelby Park, University of Louisville (Student Center),

University of Louisville (Papa John’s Stadium), Kentucky Fair and Exposition Center (Southern Heights), Louisville International Airport, United Parcel Service, Ford Motor, Inc, and at a proposed park-n-ride lot/maintenance facility to be located between the "Outer Loop" and Gene Synder Freeway. Preliminary capital cost estimates range between $300 - $450 million, dependent upon the determination of the mode and alignment for the fixed guideway portion of the LPA. The proposed project is pending inclusion in the Metropolitan Planning Organization’s Long Range Transportation Plan.

High Speed Ferry Service

Maine

The Maine Department of Transportation (MEDOT) has conducted a Marine Highway Waterfront Assessment to study infrastructure needs to support highspeed ferry service connecting Maine’s coastal communities. This effort supports the MEDOT’s Strategic Passenger Transportation Plan and is in MEDOT’s Twenty and Six-Year Plans and will be included in the State Transportation Plan (STIP), if funded. The Marine Highway Waterfront Assessment identified locations in Portland, Bath, Boothbay Harbor, Rockland and Bar Harbor for ferry infrastructure development. The Marine Highway will link Portland to Bar Harbor, a distance of approximately 72 nautical miles and will provide an alternative for travelers on the congested Interstate 95/Route 1 corridor. The MEDOT estimates ridership for the marine network to be 87,000 a year (May to October). The proposed project is estimated to cost a total of $12.5 million, of which MEDOT is anticipating $10 million in Federal funds.

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 costs for the North Corridor are 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 costs for the South Corridor are 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 147th Avenue to the Dadeland area, is centered along Southwest 88th 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 anticipating conducting 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. Transitway 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 by 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 (TIP) 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.

Kenosha-Racine-Milwaukee Rail Extension [Metra]

Kenosha, Racine, Milwaukee, Wisconsin

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) – local Metropolitan Planning Organization - plans to conduct a Major Investment Study (MIS) 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 2000, Congress has appropriated $1.47 million in Section 5309 New Starts funds for this effort.

East-West Corridor

Milwaukee, Wisconsin

The Wisconsin Department of Transportation (WisDOT) has conducted a Major Investment Study (MIS) to examine transportation alternatives in a proposed 9-mile corridor extending from Glendale and the University of Wisconsin-Milwaukee, southwest through the central business

district and the northside of Milwaukee, to the western suburbs of the city of Waukesha. The study considered a range of alternatives, including Transportation Systems Management (TSM), exclusive High Occupancy Vehicle lanes (HOV) for buses and/or carpools, Interstate highway modernization, and light rail transit (LRT). Several combination alternatives using different technologies in different parts of the corridor were also considered. In 1991, WisDOT conducted an alternatives analysis study. In 1994, this study was converted to a MIS, which included both highway and transit elements. WisDOT selected a locally preferred alternative (LPA) which included improved bus transit with park-n-ride lots, LRT for Milwaukee County, the reconstruction of Interstate 94 with HOV lanes and the reconstruction of the Marquette Interchange in downtown Milwaukee. Total capital costs were estimated at $1.8 billion, with the LRT component estimated at $500 million. The Southeastern Wisconsin Regional Planning Commission (local Metropolitan Planning Organization) included the East-West Corridor in its Long Range Plan. The Milwaukee County and Waukesha County Boards passed resolutions supporting the LPA. However, the resolution passed by the Waukesha County Board stated that the LRT component would not be built in Waukesha County nor funded by Waukesha County residents. In addition, $241 million in Interstate Cost Estimate funds, which had previously been made available for transit, have since been reprogrammed to highway projects by a provision in TEA-21. Local and State officials continue to examine implementation strategies, funding options and financial constraint issues.

Twin Cities – Transitway Corridor (Northstar Corridor) - Minneapolis-Anoka-St. Cloud

Downtown Minneapolis, Anoka, St. Cloud, Minnesota

The Northstar Corridor Development Authority, a joint powers board of 27 local units of government, is conducting a Major Investment Study/Draft Environmental Impact Statement to examine transportation options for a proposed 80-mile corridor linking the Minneapolis and the St. Cloud metropolitan areas. One of the options under consideration includes the potential for a commuter rail line. The proposed corridor extends along the east and north shore of the Mississippi River and includes Trunk Highway 10/47 and the Burlington-Northern Santa Fe Mainline railroad. The Northstar Corridor will also link the proposed Hiawatha Avenue light rail transit corridor in downtown Minneapolis providing connections to Minneapolis-St. Paul International Airport and the Mall of America in Bloomington, the largest retail complex in the nation. In addition, an extensive land use planning effort, as part of the study area, is currently underway for the Northstar Corridor. It is anticipated that the land use planning effort will result in the adoption of updated comprehensive land use plans and ordinances that encourage transit-related development within the proposed corridor. The majority of the cities along the corridor are participating in this land use planning effort. The MIS is scheduled for completion in January 2000. Through FY 2000, Congress has appropriated $1.33 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 2000, Congress has appropriated $0.98 million in Section 5309 New Starts funds for this effort.

Twin Cities – Transitway Corridors (Riverview Corridor)

Minneapolis-St. Paul, 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 April 2000. Through FY 2000, Congress has appropriated $2.13 million in Section 5309 New Starts funds for this effort.

Monmouth/Ocean/Middlesex (MOM) Study

Monmouth/Ocean/Middlesex, New Jersey

The New Jersey Transit Corporation (NJ Transit) is conducting a Major Investment Study (MIS) to consider transportation improvement options between Lakewood and Newark, New Jersey. Several alignment possibilities have been examined and the options have been narrowed to diesel powered commuter rail and/or highway alignments and an enhanced bus system. NJ Transit's Board of Directors subsequently endorsed the advancement of an enhanced bus system and preservation of the railroad right-of-way. However, in response to suggestions from two of the affected counties, analysis continues on potential rail options that would connect with Amtrak's Northeast Corridor in Middlesex County. Information on the local financial commitment, mobility improvements, cost effectiveness, environmental benefits and operating efficiencies is being developed as part of the MIS. Through FY 2000, 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 extend to Gilroy for peak commute times 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 an identification of 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 2000, Congress has appropriated $8.2 million in Section 5309 New Starts funds for this effort.

Nashua-Lowell Commuter Rail Extension

Nashua, New Hampshire-Lowell, Massachusetts

The Nashua Regional Planning Commission (NRPC) and the City of Nashua have completed a Major Investment Study for the corridor between Nashua, New Hampshire and Lowell, Massachusetts. The NRPC plans to proceed with an environmental analysis, along with preliminary engineering-level work, on the commuter rail option in FY 2000. The project is presently not included in the Transportation Improvement Program/State Transportation Improvement Program, but is included in the Nashua RPC's Long Range Transportation Plan. Through FY 2000, Congress has appropriated $0.98 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-mile corridor area. 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 LIRR commuter rail station. The primary site of the Hub will be located in the center of Nassau County, Long Island, New York, on Mitchell Field (a former Air Force base), which has become an extensive mixed-use development. It already has major activity centers, including retail, office, recreation, college, museums and a sports arena. Nassau County will seek assistance from the New York Metropolitan Transportation Council (local Metropolitan Planning Organization), the Long Island Rail Road and Long Island Bus, along with the local business and development community. Through FY 2000, Congress has appropriated $0.5 million in Section 5309 New Starts funds for this effort. A grant award for the AA study was awarded in December 1999.

Desire Streetcar

New Orleans, Louisiana

Since May 1998, the Regional Transit Authority (RTA) has been conducting a Major Investment Study to evaluate transportation improvements in the Desire Corridor, defined as the area bounded by Canal Street, N. Rampart Street/St. Claude Avenue, the Industrial Canal, and the Mississippi River. The proposed corridor is approximately one-half mile wide and three miles long and contains densely developed residential areas, including the French Quarter, Fauburg Marigny and Bywater. These neighborhoods are on the National Register of Historic Places. The proposed corridor also contains major trip generators including the F. Edward Hebert Defense Complex (home to the Navy Support Activity Center and the U.S. Marine Core Reserve), the New Orleans Center for the Creative Arts and numerous other schools. It is adjacent to the St. Claude Medical Center and Louis Armstrong Park, which includes the Municipal Auditorium and the Mahalia Jackson Theater for the Performing Arts. Armstrong Park will soon be the site for the proposed National Jazz Historical Park. In December 1998, 27 alternatives were screened to eight for detailed evaluation. Alternatives included No-build, Enhanced Bus/Transportation System Management, busway on North Rampart/St. Claude Avenue and five streetcar alternatives. The MIS recommended an alternative consisting of a streetcar line on N. Rampart Street/St. Claude Avenue (between Canal Street and Poland Avenue) and a package of enhanced bus improvements. The RTA Board of Commissioners adopted the recommendation as the Locally Preferred Alternative (LPA) of the Desire Corridor in August 1999. In September 1999, the LPA was presented to the Regional Planning Commission (local metropolitan planning organization). The RPC approved the LPA pending the development of a financial plan and completion of the required air quality conformity analysis. Pending completion of these items, the LPA will be fully included (through design and construction) in the region's financially constrained Long Range Transportation Plan (LRTP). At this time, the Desire Corridor is only included in the LRTP as a placeholder. The LPA is also included in the Transportation Improvement Program and Statewide TIP through the preliminary engineering/environmental review phase. Total capital costs are estimated at $101 million ($1999). Through FY 2000, Congress has appropriated $3.97 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.

Eighth 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 33rd Street (Midtown Manhattan) which connects Penn Station with the New York City Transit 8th Avenue/34th 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 8th 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

New York, New York

The proposed project involves the construction of an extension to an existing New York City fixed guideway system to LaGuardia Airport, located in the Borough of Queens. Currently, a project sponsor has not been identified. However, the Astoria-East Elmhurst Extension is a representative of a set of alternatives being considered by the LaGuardia Airport Subway Access/Alternatives Analysis/Draft Environmental Impact Statement (LASA-AA/DEIS). The New York Metropolitan Transportation Authority is the lead local agency for the LASA-AA/DEIS. FTA is the lead federal agency for this effort. The Federal Aviation Administration, Federal Highway

Administration and the Federal Railroad Administration are acting as cooperating agencies, as defined by the National Environmental Policy Act. The purpose of the LASA-AA/DEIS is to examine options to provide fast and convenient service from Manhattan to LaGuardia Airport with no transfers. Alternatives under consideration include extensions to the MTA/New York City Transit and Long Island Railroad systems. The study is being financed with local sources. The AA/DEIS is currently scheduled for production in Spring 2001, with a Preferred Alternative selected in Fall 2001. The MTA has included $645 million in its FY2000-FY2004 Capital Program to complete preliminary engineering and final design for a rail project, construction of key off-airport segments and a contribution towards the on-airport segment. No specific funding source for the balance of the project has been identified.

Broadway-Lafeyette-Bleecker Street

New York, New York

See project description for the Brooklyn-Manhattan Access project below. Project sponsors have informed FTA that the two are identical.

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 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. 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 Capital Program. The Broadway-Bleecker Street passenger transfer is programmed for construction at $25 million 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 60th 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

The New York Metropolitan Transportation Authority (MTA) is conducting a Major Investment Study (MIS) to evaluate new transit services to Lower Manhattan from three commuter rail terminals: Grand Central Terminal in Midtown Manhattan, Penn Station on the West Side of Manhattan, and Flatbush Terminal in Brooklyn. The rebound of businesses in Lower Manhattan from the economic recession in the early 1990s has lagged behind the rest of the island and office vacancy rates remain high. Contributing factors include: the age of the buildings, most of which are more than 50 years old and lack power and ductwork for modern office systems; the lack of direct access to commuter rail services requiring workers to travel on congested rapid transit lines at least fifteen minutes from the commuter rail terminals to reach their offices. The preliminary alternatives under consideration include [ten] Transportation System Management options; a rail shuttle service; two new subway options; and two commuter rail extension options.

Manhattan East Side Alternatives

New York, New York

See description for the New York Second Avenue Subway project. Project sponsors have informed the Federal Transit Administration that the two are identical.

Midtown West Ferry Terminal

New York, New York

The New York City Department of Transportation (NYC DOT), 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 New York Waterways (a private ferry operator owned by Authur Imperatore). The proposed terminal is located geographically on the West Side of Manhattan and serves ferries crossing the Hudson River from New Jersey. 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 Waterways 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 2000, 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.

Queens West Light Rail Link

New York/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 (NYCT) bus service, possibly with improved bus stop signage, shelters and maps. A local Environmental Impact Statement (EIS) was developed and included 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.

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 (Staten Island Rapid Transit Operating Authority - SIROTA), 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 of 1990 (ADA), a new pedestrian walk, and intermodal improvements to the bus complex. 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 $80 million. Funding for the proposed project will come from a combination of sources including, the City of New York, NYCDOT, and the State. It is important to note that although NYC DOT would be the grantee for the funds, a lead agency has not been selected for the project. Through FY 2000, Congress has appropriated $2 million in Section 5309 New Starts funds for the project.

Second Avenue Subway

New York, New York

The Metropolitan Transportation Authority (MTA) and New York City Transit (NYCT) are completing a Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) for the Manhattan East Side Transit Alternatives (MESA) Study. The study is examining options to improve the mobility in the north-south corridor of Manhattan's East Side from South Ferry to approximately 125th Street with potential connections in the Bronx. The East Side of Manhattan has only one rapid transit line (Lexington Avenue). In 1995, the line experienced significant overcrowding during peak periods, carrying approximately 288,000 inbound daily passenger trips across East 60th Street. Also, there is limited additional street capacity to expand bus service. The study has been refined and includes two build alternatives, Transportation System Management (TSM) and No-build alternatives. The first build alternative (Second Avenue Subway) would provide express subway service on the existing Broadway line north from one of three termini (lower level of City Hall Station, Whitehall Street Station, or the 95th Street Station in Brooklyn) to 63rd Street. From there, the alignment would join a new subway line extending northward beneath Second Avenue to approximately 115th Street. From there it would transition via a curved tunnel alignment to a location adjacent to the East Side of the 125th Street Station on the Lexington Avenue line. This alternative would include approximately 15 stations, of which five would be new stations. The estimated cost of the first build alternative is $3.6 billion. The second

build alternative (Subway with Light Rail on Lower East Side) would contain all of the elements of the first build alternative, but would add light rail transit (LRT) to serve the Lower East Side and Lower Manhattan. The proposed two-way LRT would begin near the intersection of Water and Broad Streets, proceed along Water and Pearl Street to Frankford Street, where it would descend into a new tunnel to the Chambers Street/Brooklyn Bridge Station. From there it would continue in an existing tunnel to Ludlow Street where it would surface and travel along East Broadway to Grand, Kazan to Columbia and extend across 14th Street between Avenue D and Union Square. The LRT would serve 11 new stations between Water Street and Union Square on 14th Street. The total estimated capital cost for the LRT element of the second build alternative is $1 billion. It should be noted that this cost estimate is preliminary and will require further refinement as project development progresses. The New York Metropolitan Council (NYMTC) (local Metropolitan Planning Organization) has included the development of the MESA MIS/DEIS in its Long Range Transportation Plan. In September 1999, a public hearing was held on the DEIS. Also in September 1999, the MTA Board programmed $700 million for the MESA project in the MTA's FY2000-FY2004 Capital Program to complete the Final EIS, preliminary engineering and final design, with funding for initial construction. No specific funding source for the $3.6 billion balance of the project has been identified. The MESA MIS/EIS is scheduled for completion in 2000.

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 New Jersey Transit (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 draft 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. Accordingly, project sponsors have indicated a need to proceed with more detailed analysis of this alternative as well as possible variants in order to reconsider the proposed Manhattan alignment between Penn Station and Grand Central Terminal, with an investigation of potential freight opportunities. There is also a need to identify capacity expansion strategies at Penn Station New York in the near term. Further analysis will be performed under Phase 3 of the study. The MIS is scheduled for completion in July 2001. Through FY 2000, Congress has appropriated $4.90 million in Section 5309 New Starts funds for this effort.

Whitehall Intermodal Terminal-Staten Island Ferry

New York, New York

The New York City Department of Transportation (NYCDOT) is undertaking the reconstruction of the Staten Island-Whitehall Street Ferry Intermodal 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 system and several bus routes. The Staten Island to New York Ferry System moves over 60,000 riders daily. A Finding of No Significant Impact (FONSI) was approved in September 1999. Also in September 1999, FTA awarded a grant for the initiation of project construction. Originally, the project was estimated to cost approximately $81 million. However, cost estimates are currently anticipated to increase to approximately $100 million. Through FY 2000, Congress has appropriated $12.95 million in Section 5309 New Starts funds for this effort.

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 (4) 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, it 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.

Lackawanna Cut-off Corridor

Northern New Jersey and 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 reinstituting rail service on the Lackawanna Cut-off Corridor between Scranton, Pennsylvania and Hoboken, New Jersey. 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 Boontoon Line and Morristown Line in Roxbury, NJ. 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.

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. The proposed LRT is currently planned to be constructed in three Minimum Operable Segments (MOS). MOS-1: a one-mile connection between Broad Street Station and Newark Penn Station; 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 Supplement to the 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 Midtowns 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

The New Jersey Transit Corporation (NJ Transit) has 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 the NJ Transit 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, new stations, parking facilities and equipment acquisition and rehabilitation of the Paterson, New Jersey Station on the NJ Transit Main Line. In addition, as part of the project, conceptual design, capital cost estimates, as well as preliminary design and engineering of the Paterson Station upgrade have been completed. In August 1996, a final Environmental Assessment Study was completed for the NYS&W rail line. Subsequently, in September 1996, FTA issued a Finding of No Significant Impact. The Department of Interior has reviewed the Section 4(f) Evaluation for the proposed project's improvements as they relate to the Americans with Disabilities Act of 1990 and subsequently concurred with NJ Transit in September 1999, that there was no prudent and feasible alternative to the proposed project. Once a pending Section 106 Memorandum of

Agreement with the New Jersey State Historical Preservation Office and the FTA is fully executed, the proposed Paterson Station upgrade component will be ready to proceed into final design and construction. Through FY 2000, Congress has appropriated $29.73 million in Section 5309 New Starts funds for this effort.

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 proposed project is located at Morris Avenue on NJ Transit's Raritan Valley Line. The project consists of a bridge for the railroad tracks at Morris Avenue, realignment of existing railroad tracks and all signal and communications; installation of gauntlet tracks; construction of a rail station structure of approximately 3,000 feet; construction of a center island high-level platform; installation of vertical accessibility elements; construction of a pedestrian passageway under the tracks; construction of a commuter parking lot for 484 vehicles; installation of closed circuit security television and the installation of signage, among other commuter amenities. The proposed project is currently in the preliminary design and engineering phase. An Environmental Assessment is under review.

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 six 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 July 2000. Through FY 2000, Congress has appropriated $2.48 million in Section 5309 New Starts funds for this effort.

West Lake Commuter Rail Link (South Shore Commuter Rail)

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 in Chicago. The MIS will primarily build upon an extensive alternate mode study done prior to ISTEA. Through FY 2000, Congress has appropriated $0.49 million in Section 5309 New Starts funds for the MIS.

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 21st 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 was included in Alameda County's Expenditure Plan for Measure B, a county-wide ballot initiative that would have provided $66 million in sales tax revenue for the project, which is budgeted at $130 million. Measure B was defeated in June 1998 by a narrow margin and is to return for a vote in the year 2000.

Broad Street Line Extension

Philadelphia, Pennsylvania

The Federal Transit Administration 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. A draft of the MIS/DEIS is currently undergoing revision to address right-of-way issues in the vicinity of King of Prussia, which will increase costs over those estimated below. The Locally Preferred Alternative (LPA) has been identified as electrically powered light rail, to be built in two phases. The first phase would include light rail 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 light rail system 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 2000, Congress has appropriated $3.17 million in Section 5309 New Starts funds for this effort.

Lower Merion Township

Philadelphia, Pennsylvania

The Federal Transit Administration has not received any information on this effort.

Schuykill 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 Schuykill Valley Corridor. The proposed corridor extends approximately 62 miles and includes the City of Philadelphia, smaller cities of Reading, 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, Art Museum, Philadelphia Zoo, King of Prussia Malls, Valley Forge National Park and Reading outlets. The proposed corridor also encompasses three transit authorities: SEPTA, BARTA and Pottstown Urban Transit (PUT) and two metropolitan planning regions: Delaware Valley and Berks County. The corridor is located along an existing rail freight or commuter rail right-of-way and parallels major congested expressways: the Schuykill Expressway (Interstate 76), US 422 Expressway and US Route 202. Alternatives currently under consideration include light rail and commuter rail. Total capital costs for the alternatives are currently estimated between $700 million and $1.3 billion. Project sponsors anticipate submitting a preliminary DEIS to the Federal Transit Administration for review sometime in the first quarter of calendar year 2000. Through FY 2000, Congress has provided $6.89 million in Section 5309 New Starts funds for the proposed Schuykill 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.

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. This segment is dependent on the outcome of a local ballot initiative that is expected in November 1999. 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 2000. Through FY 2000, Congress has appropriated $2.97 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. The study area for the proposed project is also part of the North Shore-Central Business District Major Investment Study – see project description below.

North Shore-Central Business District

Pittsburgh, Pennsylvania

The Port Authority of Allegheny County (PAT), in cooperation with the City of Pittsburgh and the Southwestern Pennsylvania Regional Planning Commission – local Metropolitan Planning Organization - initiated a North Shore/Central Business District Transportation Corridor Major Investment Study focusing on assessing alternatives for better connections to the immediate North Shore area of the Allegheny River across from, and north of, the Pittsburgh CBD. Development underway along the Allegheny River Corridor includes new facilities for the football and baseball teams and expansion of the convention center. Improved connections are anticipated to support further development and redevelopment of complementary facilities and activities in both the North Shore and CBD, including fringe-parking facilities. Some of the stakeholders in the corridor include the Port Authority of Allegheny County, the Pittsburgh Pirates, Pittsburgh Steelers, Allegheny Conference on Community Development, Pennsylvania Department of Transportation, the Carnegie Science Center, Pittsburgh Parking Authority and the Pittsburgh Cultural Trust. A preliminary Draft Environmental Impact Statement for the proposed corridor is currently under review. Through FY 2000, Congress has appropriated $10.80 million in Section 5309 New Starts funds for this effort.

Providence-Pawtucket Corridor Study

Providence-Pawtucket, Rhode Island

The Rhode Island Department of Transportation and the Rhode Island Public Transit Authority are in the process of defining the project. Definitive information on a proposed project is not available at this time.

Riverside County 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 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 costs for Phase I are 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, BNSF, 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 2000, 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 65th-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

The Federal Transit Administration 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 2000, Congress has appropriated $2.45 million in Section 5309 New Starts funds for this effort.

Draper Light Rail Extension

Salt Lake City, Utah

The Utah Transit Authority (UTA) is conducting a feasibility study to examine the option of extending the North/South light rail transit (LRT) line (currently under construction), approximately seven miles to the suburban communities of Draper and Sandy, Utah. The proposed project would be constructed on an extension of the existing railroad right-of-way owned by UTA and being developed for the North/South LRT. The proposed Draper extension will have six stations complete with park-and-ride lots and bus transfer facilities. The total capital costs for the Draper Extension are estimated at $156.30 million.

Salt Lake City-Ogden-Provo Commuter Rail

Salt Lake City, Utah

The Wasatch Front Regional Council (WFRC) and the Moutainlands Association of Governments (MAG) the two metropolitan planning organizations that oversee transportation planning for more than 85% of the State of Utah's population, along with the Utah Transit Authority and the Utah Department of Transportation, are conducting an Alternatives Analysis (AA) study to evaluate transportation improvements in a proposed 120-mile corridor encompassing the Salt Lake City-Ogden-Provo urbanized areas. The study will evaluate highway, bus, and rail alternatives in the proposed corridor. WFRC and MAG completed a Long Range Transit Analysis in 1996, identifying commuter rail as an effective means of serving the transportation demands in the proposed corridor between Brigham City and Payson. Project sponsors are considering the option of implementing an interim commuter rail segment from Provo to Salt Lake City to mitigate the impacts to traffic flow of the reconstruction of Interstate 15 and for the Olympic Games. Six to seven stations are anticipated for construction. Initial discussions with Union Pacific Railroad have begun concerning the acquisition of track for commuter rail and/or actual purchase of right-of-way to implement commuter rail, light rail or other transportation improvements. The September 1998 update of the region's Long Range Transportation Plan included commuter rail service in the proposed corridor. A more detailed feasibility study of commuter rail options and costs has substantiated the recommendation of the regional transportation plan. The AA study is scheduled for completion in 1999. Total capital costs are estimated at $292 million. Through FY 2000, Congress has appropriated $3.9 million in Section 5309 New Starts funds for this effort.

West Jordan Light Rail Extension

Salt Lake City, Utah

The Utah Transit Authority (UTA) is conducting a feasibility study to examine the option of extending the North/South light Rail transit (LRT) line (currently under construction) approximately seven miles through the City of Midvale to the City of West Jordan. It would be constructed at-grade and will have five stations with bus transfer facilities and park-and-ride lots. 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 fasted 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.

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% 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 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 2000, Congress has appropriated $2.94 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 2000, 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, the recently passed voter referendum (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 2000, 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 (ISTEA). 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 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 Environmental Impact Statement (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" nonattainment 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 (HOV) 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 2000, Congress has appropriated $2.95 million in Section 5309 New Starts funds for this effort.

Altamont Commuter Rail

Stockton, California

The San Joaquin Regional Rail Commission (SJRRC), the Alameda Congestion Management Agency (ACCMA), and the Santa Clara Valley Transportation Authority (VTA) 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 (JPA) comprised of members from each of the three agencies was also created to operate the proposed Altamont Commuter Express (ACE). The SJRRC 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 2000, Congress has appropriated $0.98 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 intracounty mobility, and secondarily improve east-west intercounty 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. Identification of the preferred alternative and completion of the study is anticipated for early 2000. Through FY 2000, 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, completed in December 1997, recommended Light Rail Transit (LRT) as the locally preferred alternative. 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 currently developing a plan to implement the recommendations of the MIS.

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 2000, 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 under 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 2000, 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, VA - 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 2000, Congress has appropriated $9.10 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 needed for commuter rail service and intercity passenger rail service along the corridor.

Other Project Authorization

Albuquerque Alvarado Intermodal Center

Albuquerque, New Mexico

The City of Albuquerque, in coordination with the Advisory Council on Historic Preservation, and the State Historic Preservation Officer of New Mexico, is constructing an intermodal transfer facility to serve the city's downtown core. The project will include a bus transfer site, and will also include retail and office space, bus circulation elements, taxi service, a downtown bus circulator a passenger plaza for transit patrons, and a surface parking lot. The project will also serve to revitalize the area and create a positive atmosphere and a safe and clean environment for visitors and citizens. The facility is envisioned as a transportation hub for the metropolitan area and will also serve as a site for the current Amtrak rail service, intercity transport services and future modes of urban and regional rail services. The primary design concept behind the project is to make the facility work as a transportation center and to further design the facility to include transit-oriented development, which will incorporate other transit-related amenities so that the facility becomes a major activity center within the Central Business District. The construction of the Alvarado intermodal facility is a key component in the City's plan to achieve and maintain National Ambient Air Quality Standards. The project is scheduled for completion in the year 2000.

Intermodal Corridor

Bridgeport, Connecticut

The proposed project 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 project in two phases: Phase I - $14 million parking garage; and Phase II - $20 million bus facility. Through FY 2000, Congress has appropriated $5.6 million in Bus funds for Phase I of this project.

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 2000, Congress has appropriated $0.49 million in Section 5309 New Starts funds for this effort.

Waterfront Access

New London, Connecticut

At this time, a waterfront access mass transit project in the City of New London has not been defined. Through FY 2000, Congress has appropriated $0.49 million in Section 5309 New Starts funds for this effort.

Philadelphia-Pittsburgh Highspeed Rail

Philadelphia-Pittsburgh, Pennsylvania

The Federal Transit Administration has not received any information on this effort.

Integrated Intermodal Transportation

Rhode Island

At this time, a New Start intermodal mass transit project in Rhode Island has not been defined. The Rhode Island Department of Transportation and the Rhode Island Public Transit Authority are in the process of defining the project and justifying its New Start eligibility.

Fixed Guideway Connector (Stamford Urban Transitway)

Stamford, Connecticut

The Stamford Corridor Project involves the construction of urban transitway to improve access to the Stamford Transportation Center, which is currently being rehabilitated to accommodate high speed rail service and to provide additional commuter parking. A Brownfields area is adjacent to the Center. The Stamford Urban Transitway Project will include exclusive lanes for buses and other high occupancy vehicles. The Connecticut Department of Transportation, the Southwestern Regional Planning Agency, the Metropolitan Planning Organization, and the City of Stamford have coordinated the development of the proposed project. Through FY 2000, Congress has appropriated $1.97 million in Section 5309 New Starts funds for this effort.

Other Project Authorizations for FY 2000

Girdwood Commuter Rail Project

Anchorage/Girdwood, Alaska

The Alaska Railroad currently operates passenger services along its main line south of Anchorage. The line is being rehabilitated to permit safer, faster and more efficient operation. The

operation of commuter rail service on the existing Alaska Railroad right-of-way from north of Anchorage south as far as Girdwood, a residential and recreational community, is currently under study. Extension of trackage from the Alaska Railroad main line into Girdwood has also been proposed. Through FY 2000, Congress has appropriated $9.81 million in New Starts funds for this effort. This effort was not authorized in TEA-21.

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 2000, Congress has appropriated $0.49 million in New Starts funds for this effort. The Calais Branch Rail Line Regional Transit Program 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 2000, Congress has appropriated $1.97 million in Section 5309 New Starts funds for this effort. This effort was not authorized in TEA-21.

Homer 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 2000, Congress has appropriated $20 million in New Starts funds for the development of new ferry service for the Alaska and Hawaii areas. This effort was not authorized in TEA-21.

Knoxville-Memphis 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 2000, Congress has appropriated $0.49 million in New Starts funds for this effort. This effort was not authorized in TEA-21.

Washington County – Wilsonville-Beaverton Commuter Rail Study

Portland, Oregon

Portland Metro, the Metropolitan Planning Organization (MPO) for the Portland area, is currently developing an Environmental Analysis for a proposed 17.8-mile commuter rail line between Wilsonville and Beaverton. The southern terminus of the proposed project is located in Wilsonville and extends north to Beaverton tying into the Metropolitan Area Express (MAX) light rail transit line. The proposed project would utilize an existing and active branch rail line, and would include the construction of five to six stations, including park-and-ride facilities. The proposed project also includes multiple capital improvements, including the construction of a maintenance/storage facility and double tracking portions of the alignment. The northern portion of the rail corridor is owned by the Union Pacific Railroad. The Oregon Department of Transportation owns the southern portion of the corridor. As part of the Environmental Analysis, the MPO is also developing an alternatives analysis (AA) evaluating the commuter rail alternative against a No-build, Transportation System Management and potentially other alternatives. The Oregon DOT and Washington County have performed two feasibility studies that served as a basis for the definition of the commuter rail alternative in the current AA study. A locally preferred strategy is anticipated in March 2000. Total capital costs for the commuter rail alternative are currently estimated at $75 million. Through FY 2000, Congress has appropriated $0.49 million in New Starts funds for this effort.

Wilmington Transit Connector

Wilmington, Delaware

The Delaware Department of Transportation and the City of Wilmington have conducted a Major Investment 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. Through FY 2000, Congress has appropriated $0.98 million in New Starts funds for this effort. This effort was not authorized in TEA-21.

Valdez Dock Improvements

Valdez, Alaska

The Alaska Marine Highway System has developed a transportation plan for Southcentral 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 2000, Congress has appropriated $20 million in New Starts funds for the development of new ferry service for the Alaska and Hawaii areas. This effort was not authorized in TEA-21.