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ASSESSMENT OF LOCAL FINANCIAL COMMITMENT FOR NEW STARTS PROJECTS: *FY 1999 NEW STARTS REPORT*

*A Supplement to the Fiscal Year 1999 Report
on Funding Levels and Allocations of Funds
for Transit Major Capital Investments
(the FY 1999 New Starts Report)*

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16. Abstract This report is a supplement to the 1998 annual report titled <i>Fiscal Year 1999 Report on Funding Levels and Allocations of Funds for Transit Major Capital Investment</i> . It summarizes and analyzes, for the first time, the application of the revised Section 5309 New Starts local financial commitment criteria, as applied to the 30 proposed transit projects profiled in the <i>FY 1999 New Starts Report</i> . The study objective is to assist local agencies in preparing and reporting their New Starts financial criteria, and promote a better understanding of the financial assessment process. The report reviews the purpose, requirements, and application of the local financial commitment criteria. It begins with an overview of the New Starts criteria and project evaluation process, and discussion of the application and reporting of the local financial commitment criterion and financial assessment methodology. Results of a cross-sectional analysis of the 30 project financial plans are presented, as well as highlights of the financial planning strategies and trends which characterize these financial plans as a group. Conclusions and recommendations regarding the financial assessment process are also discussed along with the lessons learned. The fifth and largest part of the text presents summary financial assessment profiles of the 30 projects, including key findings. These summary assessments reflect the proposed local share of project costs, stability and reliability of the capital financing plan, and the stability and reliability of the operating financing plan for each New Starts project as of November 1997. The report concludes with a glossary of key terms and financial concepts used throughout the study.					
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November 1998

Dear Colleague:

For several years, the Federal Transit Administration (FTA) has carefully examined and considered the local financial commitment of candidate New Starts projects as an input to annual recommendations for allocating Section 5309 New Starts discretionary resources. As part of the "*FY 1999 Report on Funding Levels and Allocations for Transit Major Capital Investments*," FTA evaluated and applied financial ratings to 30 projects in preliminary engineering and final design.

Financial evaluations and ratings are supported by assessments conducted by FTA contractors, in coordination with staff from the FTA Office of Planning. These assessments involve the identification, collection, and analysis and evaluation of a wide range of local financial plans, documents, and other source information. Based upon these assessments, FTA assigns ratings on the stability and reliability of each project's capital and operating financing plan and develops brief financial narratives for inclusion in the "*FY 1999 Report on Funding Levels . . .*"

This report -- *Assessment of Local Financial Commitment for New Starts Projects* -- provides an overview of these FY 1999 financial assessments. The report presents an introduction to the assessment process, a review and synthesis of key findings (including tabulated results) across all projects, and a summary of recommendations for strengthening local agency submissions of the *Local Financial Commitment* New Starts criteria. The ultimate purpose of *Assessment of Local Financial Commitment for New Starts Projects* is two-fold: first, to benefit candidate New Starts project sponsors in preparing and submitting to FTA information which demonstrates local financial commitment for their proposed investments; and secondly, to serve a much broader audience by identifying and describing several key financial planning strategies for implementing major transit capital projects.

It is important to note that the overall findings and the individual project assessments presented here reflect conditions as of November 1997, and that each assessment is based entirely upon documentation provided by the project sponsor. Local decisions affecting project finance and other significant financial actions since November 1997 are not reflected in this report, but will be incorporated into subsequent year assessments.

I am pleased to provide you with this copy of *Assessment of Local Financial Commitment for New Starts Projects*. In coordination with this guidance, FTA has also issued a similar report which summarizes assessments of transit supportive land use undertaken for the "*FY 1999 Report on Funding Levels . . .*" I am confident that these publications will prove to be valuable resources in the planning and development of sound transit capital investments throughout the United States.

Sincerely,

Gordon J. Linton

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Chapter 1. INTRODUCTION

The Federal Transit Administration (FTA) has prepared this report to summarize and analyze the application of the Section 5309 New Starts local financial commitment criteria for thirty (30) transit projects profiled in the *Fiscal Year 1999 Report on Funding Levels and Allocations of Funds for Transit Major Capital Investments* (referred to as the *FY 1999 New Starts Report*). The objective of this report is to assist local agencies in preparing and reporting their New Starts financial criteria, as well as to further their understanding of the relationship between the total level of Federal funding sought for each New Start project, each sponsoring agency's ability to meet local funding commitments, and the required financing to maintain and operate completed New Starts guideway investments while continuing the operation of existing transit systems. Ultimately, this report is intended to promote a better understanding of the financial assessment process and to help agencies seeking Federal discretionary funds to improve the quality of their financial criteria submission.

Please note that this summary analysis report reflects conditions at each agency and for each proposed New Starts Project as of November 1997. Financial assessments are based entirely on information provided to FTA by the local agencies. Assessments and ratings may change in subsequent years as financial conditions change and revised financial documentation is reviewed and analyzed.

Background

As required by 49 U.S.C. Section 5309(m)(3), the Secretary of Transportation submits to Congress each year the Department's *New Starts Report* as a collateral document to the President's annual budget. The report documents the Department's recommendations for allocating funds for transit fixed-guideway projects under the Section 5309 New Starts program. In addition, the report evaluates all projects in Final Design and Preliminary Engineering against a full range of project justification criteria. Section 5309(e) requires that projects be justified against a comprehensive review of mobility improvements, environmental benefits, operating efficiencies, cost effectiveness, transit supportive land use, local financial commitment, and other factors.

For the past several years, FTA has reviewed local information and documentation, completed financial assessments, and reported measures and assigned ratings for selected projects in the Final Design and Preliminary Engineering stage(s) of project development. The Transportation Equity Act for the 21st Century (TEA-21) continues to embrace the consideration of local financial commitment as a significant project justification criteria for evaluating potential transit investments. As required in Section 3009(e)(5), FTA will be issuing a regulation which incorporates additional New Starts rating and evaluation considerations (including finance-related factors) and outlines procedures for FTA assignment of overall project ratings and evaluations.

Organization of this Report

Chapter 2 of this report provides an overview of the *New Starts* criteria and project evaluation process in general, including a summary of the three measures of local financial commitment: 1) proposed local share of project cost; 2) the stability and reliability of the local capital financing plan; and 3) the stability and reliability of the local operating financing plan. Chapter 2 further discusses the application and reporting of the local financial commitment criterion, and the financial assessment methodology.

Chapter 3 presents a cross-sectional analysis of projects rated in *FTA's FY 1999 New Starts Report* and highlights several significant financial planning strategies and trends found among the group.

Conclusions and lessons learned from the application of the local financial commitment criteria in the *FY 1999 New Starts Report* are presented in Chapter 4. Additional guidance to candidate New Starts project sponsors on how to address the criteria is also provided.

Chapter 5 summarizes the financial assessments of each of the thirty (30) projects evaluated and rated in the *FY 1999 New Starts Report*, including a summary of key findings for each project.

Finally, the report concludes with a glossary of key terms and financial concepts used throughout both the project assessments and this analysis.

FTA has also prepared an *Appendix* to this report. The *Appendix* includes the full financial assessments prepared by FTA for each of the thirty (30) projects evaluated and rated in the *FY 1999 New Starts Report*. (Summaries of these full assessments are included in Chapter 5 of this report). Because of its large size, hard copies of the *Appendix* will be available in only limited numbers.

Distribution of this Report

For copies of this report, *Assessment of Local Financial Commitment for Projects in the FY 1999 New Starts Report*, and its *Appendix*, please contact your local FTA Regional Office or David Vozzolo at the Federal Transit Administration, Office of Planning, TPL-22, 400 7th Street, SW, Room 9413, Washington, DC 20590, (202/366-9612) or fax your request (202) 493-2478. Copies of both documents are available on the FTA Internet Homepage at <http://www.fta.dot.gov>.

Chapter 2. OVERVIEW OF LOCAL FINANCIAL COMMITMENT

A. Overview of the New Starts Criteria

In December 1996, the Federal Transit Administration (FTA) issued a *Federal Register Notice* describing the revised justification criteria to be used to evaluate candidate transit projects for discretionary New Starts funding under Section 5309. These criteria, which replaced those in effect since 1984, are currently applied to fulfill the annual ratings' process of proposed New Start transit investments as required by Congress, as well as to meet various statutory approval processes during the incremental stages of project development.

The first application of the revised Section 5309 New Starts criteria was applied to the thirty (30) New Start projects identified in the *FY 1999 New Starts Report*. The revised criteria reflect a comprehensive set of quantitative and qualitative measures, including:

- Mobility Improvements
- Environmental Benefits
- Operating Efficiencies
- Cost Effectiveness
- Transit-Supportive Existing Land Use and Future Patterns
- Other Factors (optional)
- Local Financial Commitment

The main focus of this report is to review the purpose, requirements, and application of the local financial commitment criterion. This report is intended to provide additional guidance to the grantees and industry.

B. Discussion of Financial Assessments and Overall Goals and Objectives

Information which supports the New Starts financial criteria is based largely on the assessment, by FTA staff, of the financial plans and other documentation of each New Starts project seeking Federal funding assistance under the Section 5309 New Starts Capital Program. The primary objective of these assessments is to evaluate the total level of Federal funding sought for each New Start project, as well as the sponsoring agency's ability to meet local funding commitments and to maintain and operate the completed transit system. The information derived from these assessments is an important input to the process of allocating limited New Starts Capital Program discretionary funds among competing New Start projects.

Beginning with the *FY 1999 New Starts Report*, FTA will annually initiate new financial assessments or complete annual updates of previous financial assessments for all projects in Final Design or Preliminary Engineering. See Exhibit II-1 and Exhibit II-2, located at the end of this chapter, for guidance on rating capital and operating financial plans for projects in

Preliminary Engineering and Final Design. The purpose of the financial assessment process is to prepare an independent review of the project financial plan for candidate New Start projects. Specifically, the assessment process is designed to examine each project's financial plan with respect to the following financial parameters:

- The amount and percentage of non-Federal funding for capital projects sought (including special consideration of innovative financing techniques);
- The strength of the local capital financing plan, including the stability and reliability of local funding sources and the ability of localities to fund unanticipated cost overruns from local resources;
- The financial capability of local transit agencies to operate and maintain the transit system once the proposed project is built and operating. This includes the sensitivity of local financial projections to changes in ridership, operating costs, local economic conditions, and other related issues.

These evaluation parameters were used to establish, focus, and set analysis priorities for each financial assessment. Assessments examined the strength and weaknesses of the financing approach and the unique local funding conditions presented in the financing plan of each project.

FTA's evaluation of the local financial commitment to a proposed New Start transit investment focuses on three distinct measures: 1) proposed local share of project costs; 2) stability and reliability of the capital financing plan; and, 3) the stability and reliability of the operating financing plan. These three measures are described below:

1. Proposed Local Share of Project Costs

Local share refers to the percentage of capital costs to be met with non-Federal 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 share (thus leveraging limited Federal discretionary resources), and because it indicates a strong local commitment to the project. The use of flexible funds and innovative financing techniques is noted, where appropriate.

2. Stability and Reliability of Capital Financing Plan

This measure takes on two principal forms. First, the capital financing plan is reviewed to determine the stability and reliability of each proposed source of local match. This includes a review of intergovernmental grants, tax sources, and debt obligations. Each revenue source is reviewed for availability within the proposed project's 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 financing plan is rated "high," "medium," or "low" by FTA.

3. Stability and Reliability of Operating Financing Plan

The third component of the financial rating is an assessment of the ability of the local transit agency to fund operation of the entire transit system, including the New Start, as planned once the new fixed guideway 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/or facilities. The strength of the operating financing plan is rated "high," "medium," or "low" by FTA.

C. Application and Reporting of Local Financial Commitment Criterion

As part of the development of the annual *New Starts Report*, candidate New Start project sponsors provide information and documentation related to local financial commitment measures directly to FTA contractors. Local agencies are encouraged to work closely with FTA contractors to ensure that the most appropriate and up-to-date information is applied in the assessment. FTA staff will then review the information in order to assess each measure and assign ratings.

A general listing of the types of information and documentation requested from local agencies by FTA staff and contractors includes:

General Documentation

Background information and description of the transit agency, including organizational structure and an outline of any other significant capital projects underway (e.g., annual A-128 audits, annual reports, current budget)

Background information and description of the New Start fixed guideway project, including project status, (e.g., project pamphlets, planning and engineering reports used to select and define the project).

Information describing economic conditions in the region (e.g., regional socioeconomic reports, regional planning estimates of socioeconomic growth used in the development of the financial and ridership estimates).

Financial Documentation

Agency operating and capital cash flow analysis for the 20-year period (in year of expenditure dollars) as required by planning guidelines. The cash flow analysis should include expenses and revenues for the proposed project.

A description of the types and amounts (in year of expenditure dollars) for the transit system and proposed project (e.g., local, state, Federal, sales tax, bonds, flexible funding, innovative funding sources).

Operating and maintenance cost estimates (in year-of-expenditure dollars) for the planned transit system, including the proposed project.

Capital cost estimates (in year-of-expenditure dollars) for the proposed project, broken out by major cost categories, including contingencies.

Description of innovative financing techniques (e.g., innovative funding sources or financing techniques to be used to support the project or to be implemented as part of a larger system-wide program).

National Transit Database (Section 5335) submittals, including financial and operating data for the transit agency.

Additional Documentation

Regional Long Range Transportation Plan

Regional Transportation Improvement Program (TIP)

Major Investment Study (MIS)

Environmental Impact Statement (EIS), if applicable

Capital and Operating Financing Plans, other related reports

D. Assessment Methodology

After obtaining the proper documentation from the local agencies, FTA and contractors review the materials to assess the project with respect to the three measures outlined earlier. In completing these analyses, the FTA and contractors also review documentation related to size and scope and local economic and demographic growth (to assess the reasonability of capital costs and revenue and ridership growth assumptions).

Upon completion of an initial draft of all financial assessments, copies of the draft assessments are forwarded to the sponsoring agency for review. This process is intended to address any remaining questions and ensure that the FTA and the contractors have properly interpreted the financial documentation provided by the sponsoring agency. Subsequently, financial ratings are assigned by the FTA for each project. These ratings and selected highlights of the financial analysis are then incorporated into the *Annual New Starts Report* to Congress.

Exhibit II-1
Financial Ratings Guidance
Stability and Reliability of Capital Financing Plan

Final Design	High/Medium	FTA considers the applicant to be in reasonably sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular. The applicant has committed or dedicated sufficient funds to cover the entire non-Federal share of the overall undertaking, including provisions for contingent cost overruns.
	Low	FTA does not consider the applicant to be in reasonably sound financial condition. The applicant has not yet committed or dedicated sufficient funds to cover the entire non-Federal share of the overall undertaking, including provisions for contingent cost overruns. For example, a "low" rating would be given where significant events such as the renewal of expiring authorizing legislation, satisfactory resolution of conditions imposed by funding entities, the passage of new legislation, or a referendum still must occur to put adequate local funding in place.
Preliminary Engineering	High	FTA considers the applicant to be in sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular. The applicant has committed or dedicated sufficient funds to cover all, or nearly all, of the non-Federal share of the overall undertaking, including provisions for contingent cost overruns.
	Medium	FTA considers the applicant to be in reasonably sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular. The applicant has adopted a realistic capital finance plan that adequately covers projected non-Federal capital costs. The plan may be vulnerable to economic downturns and other funding uncertainties, but these vulnerabilities can probably be managed without significant disruptions to capital programs and/or operations.
	Low	FTA does not consider the applicant to be in reasonably sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular. The applicant has not adopted a capital finance plan, or FTA considers the adopted finance plan to be inadequate or infeasible. The plan may be so vulnerable to economic downturns and other funding uncertainties that implementation of the project would put capital programs and operations at significant risk.

Exhibit II-2
Financial Ratings Guidance
Stability and Reliability of Operating Financing Plan

Final Design	High/Medium	<p>Dedicated transit funding sources are in place, or there has been a clear pattern of general appropriations from state or local governments, which regularly provide a balanced budget for the existing system.</p> <p>Existing transit facilities have been adequately maintained and replaced through continuing reinvestment in the system.</p> <p>Financial projections show that the applicant currently has adequate financial capacity to operate and maintain the locally preferred alternative, supporting feeder systems, other programmed projects, and other elements of its transit system, under reasonably conservative assumptions.</p>
	Low	<p>Sources of local transit funding have not kept pace with costs. Financial conditions have led to a pattern of service level cuts to reduce operating costs.</p> <p>The applicant has a history of deferring capital replacement and/or routine maintenance.</p> <p>Financial projections show that the applicant does not currently have the financial capacity to operate the proposed project, supporting feeder system, other programmed projects, and other elements of its transit system under reasonably conservative assumptions.</p>
Preliminary Engineering	High	<p>Ample dedicated funding sources are in place, or there has been a clear pattern of general appropriations from state or local governments, which regularly provide a balanced budget for the existing system.</p> <p>Existing transit facilities have been well maintained and improved through continuing reinvestment in the system.</p> <p>Financial projections show that the applicant currently has ample financial capacity to operate and maintain the locally preferred alternative, supporting feeder systems, other programmed projects, and other elements of its transit system under reasonably conservative assumptions.</p>
	Medium	<p>Dedicated transit funding sources are in place, or there has been a clear pattern of general appropriations from state or local governments, which regularly provide a balanced budget for the existing system.</p> <p>Existing transit facilities have been adequately maintained and replaced through continuing reinvestment in the system. The applicant's funding plan demonstrates an ability to continue with an adequate maintenance and replacement program.</p> <p>The applicant has adopted a realistic financial plan which, once implemented, would provide adequate financial capacity to operate and maintain the locally preferred alternative, supporting feeder systems, other programmed projects, and other elements of its transit system under reasonably conservative assumptions.</p>
	Low	<p>Sources of local transit funding have not kept pace with costs. Financial conditions have led to a pattern of service level cuts to reduce operating costs.</p> <p>The applicant has a history of deferring capital replacement and/or routine maintenance. Or, implementation of the project would create deficiencies in the applicant's ability to provide timely maintenance and capital replacement.</p> <p>The applicant has not yet adopted a finance plan, or has adopted a plan that is unrealistic or inadequate. For example, a "low" rating would be given where a region has demonstrated an unwillingness to adopt new funding sources with the required level of financial capacity, or where the operating plan is dependent upon unreasonable passenger revenue projections. A "low" rating would also be appropriate where financial projections show that, even if the adopted plan is fully implemented, the applicant would still not have the financial capacity to operate the proposed project, other programmed projects, and the total transit system.</p>

Chapter 3. ANALYSIS OF TRENDS IN NEW STARTS FINANCIAL PLANNING

This chapter highlights the results of a cross-sectional analysis of the thirty project financial plans summarized in the FY 1999 New Starts New Starts Report. In total this analysis considers \$18.9 billion in proposed new starts investments covering projects in the preliminary engineering (PE) and final design phases of project development. The goal of this analysis was to identify and assess significant financial planning trends and strategies which characterize these financial plans as a group. Lessons learned from this analysis may be used to support further refinement of FTA's financial submission guidelines and to assist sponsoring agencies in the development of more effective financial plans. This analysis also provides a means of evaluating the success of various Federal funding initiatives such as the use of innovative finance techniques. For purposes of a more equitable analysis all expenditure values have been converted to a common 1997 dollar basis. Lastly a reporting distinction is being made in this report for analytical purposes only between projects in early PE and PE. There is no such official FTA designation as early PE.

Examples of questions to addressed by this analysis include the following:

- What factors lead to a higher financial rating?
- Does a higher local match imply a stronger overall plan?
- How common is the use of innovative financing?
- Do funding shares change as projects proceed from PE to final design?
- Does the proposed Federal share increase or decrease as project size increases?

Analyses Performed

A listing of the specific analysis considered here is provided in **Exhibit III-1**. In addition, two summary tables are presented at the end of this chapter. Table III-1 is a summary of key financial assessment information on each project and Table III-2 is a summary of non-Federal funding sources for each project.

Key Findings

Several significant trends and relationships were identified by the analysis. Following is a brief summary of these findings. A more detailed description of these findings and the underlying analyses is found in this chapter. The analysis covers all thirty projects, as reported in the FY 1999 New Starts Report, with a combined total of \$18.9 billion (\$1997) in capital costs.

EXHIBIT III-1

Chapter III Analyses of New Starts Financial Planning Trends
A. Proposed Expenditures By Project Type By Mode Multimodal vs. Single Mode Projects Extensions vs. New Fixed Guideway Systems
B. Proposed Funding Shares By Project Phase By Plan Rating or Mode Non-Federal Match as a Function of Project Size
C. Project Ratings By Project Phase By (Primary Investment) Mode
D. Commitment of Non-Federal Funds By Project Rating By Project Phase
E. Existing Vs. New Funding Sources By Project Rating By Project Phase By Extension vs. New Investment
F. Use of Innovative Financing Plans Proposing Innovative Funds By Plan Rating
G. Use of "Other" Federal Funds Proposed Amounts by Source Share of Project Costs by Capital Plan Rating

Distribution of Proposed Expenditures — This analysis considered the distribution of project expenditures across all thirty New Starts projects using a variety of project segmentations (e.g., by mode, and by extension vs. new systems investment). Results from this analysis are:

- Light rail transit (LRT) accounts for close to half of all projects both in number of projects proposed and on a per dollar basis (\$9.2 billion in \$1997).
- Highway/HOV investment accounted for less than 1% of total project costs.
- Investment is evenly split between expansion in existing systems and new system investment

Distribution of Proposed Funding Shares — This analysis considered the trends in Federal, state and local funding shares across all thirty New Starts projects. Based on this analysis:

- Both Federal and state funding shares were highest for projects in final design and lowest for projects in early PE. Local shares were lowest in final design and highest in PE. This outcome is not mutually exclusive. First, more recent projects are increasing the proposed local match in response to Federal (and some

state) policies which aim to distribute transit capital funds among a greater number of projects. Second, the proposed local match is decreasing as projects proceed from PE to final design as agencies find they are unable to secure all of the local funding sources proposed in their initial financial plans thus forcing state and Federal sources to make up the difference.

- There is a statistically significant increase in non-Federal match as project size increases.
- There is no clear relationship between Federal share and the strength of the capital plan.

Financial Plan Ratings — This analysis considered relationships between the ratings received by the thirty New Starts projects with other key investment variables such as mode, and project phase. Based on this analysis:

- Projects demonstrating a high level of commitment of state and local funds tend to obtain the highest financial ratings.
- There is no clear relationship between the strength of the capital plan and other key variables including project phase, project mode, or investment in system expansions versus new systems.

Analysis of State and Local Sources — This analysis considered relationships between the commitment of new and existing state and local funding sources with other key investment variables such as mode, and project phase. Based on this analysis:

- Projects in PE obtained the highest levels of commitment from state and local sources.
- Projects in final design had the highest proportion of unspecified funds.
- Despite the high number of new system projects, most state and local funds are derived from existing funding sources versus new funding sources.

Use of Alternative Funding Methods — This analyses examined the use of innovative, flexible and other alternative funding sources in the development of the New Start financial plans. This analysis suggests that alternative funding techniques are not widely used and only account for a small share of project funding requirements. Based on this analysis:

- Only 15% of projects used innovative financing (covering 6% of project costs on average).
- Less than 5% of the proposed innovative funds represent a firm funding commitment.
- Only 20% of projects used flexible CMAQ/STP funds (covering 7% of project costs on average).

Additional Notes on Analysis

The cross-sectional analysis presented here is limited to the thirty New Starts projects identified in the FY 1999 New Starts Report. Observations drawn from this analysis reflect the characteristics of these projects as a group but may not be transferable to a different sample of projects (e.g., New Starts projects from five years ago or five years into the future). Confirmation of the trends identified here requires a *time series* analysis of New Starts financial plans over a consecutive five to ten year period (including analyses of individual projects as they proceed from early in the preliminary engineering project development phase through the final design project phase. The remaining chapter considers the analysis summarized above in more detail.

A. Proposed Expenditures By Project Type

This section examines trends in proposed investment expenditures by project type. Specifically, proposed investment levels are examined using the following segmentations:

- Mode
- Multimodal vs. Single Mode Investments
- Extensions vs. New Systems Investments

Expenditures by Mode

An analysis of proposed expenditure levels by mode is presented below in **Exhibit III-2**. Key findings from this analysis are as follows:

- ***New Starts Dominated by Light Rail Transit (LRT) Investments*** — Proposed investment levels are dominated by light rail projects. Specifically, light rail investments accounts for 19 of the 40 proposed “modal” projects and just under 50% of all proposed expenditures on a per dollar basis.
- ***Average Cost per Project*** — Average project costs and cost per mile invested are lowest for DMU projects and highest for heavy rail projects – with the exception of Long Island Railroad’s (LIRR) East Side Access Project (commuter rail) which had the highest overall project cost. The low DMU costs result primarily from the use of existing freight rail right-of-way.
- ***Highway/HOV Investments*** — HOV constitutes less than 1% of total proposed investment expenditures.

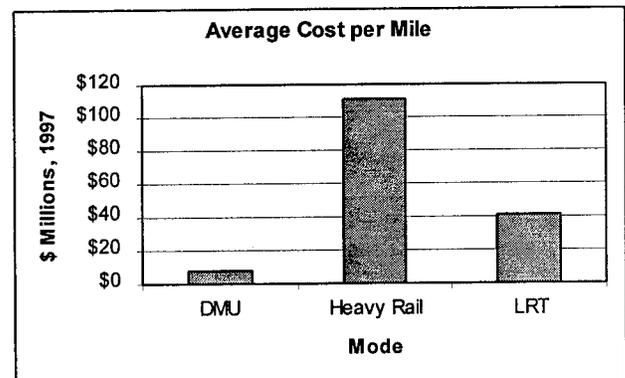
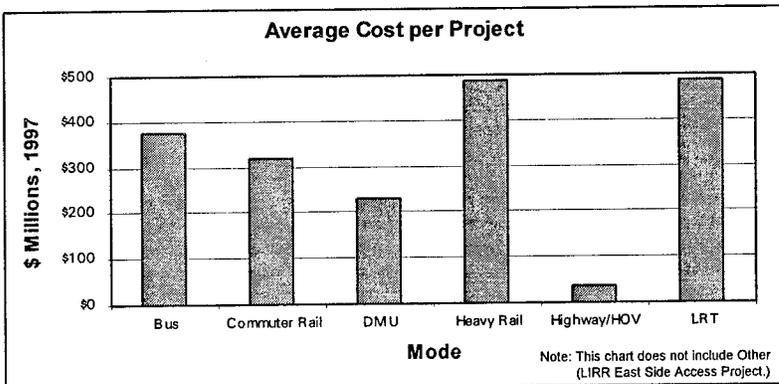
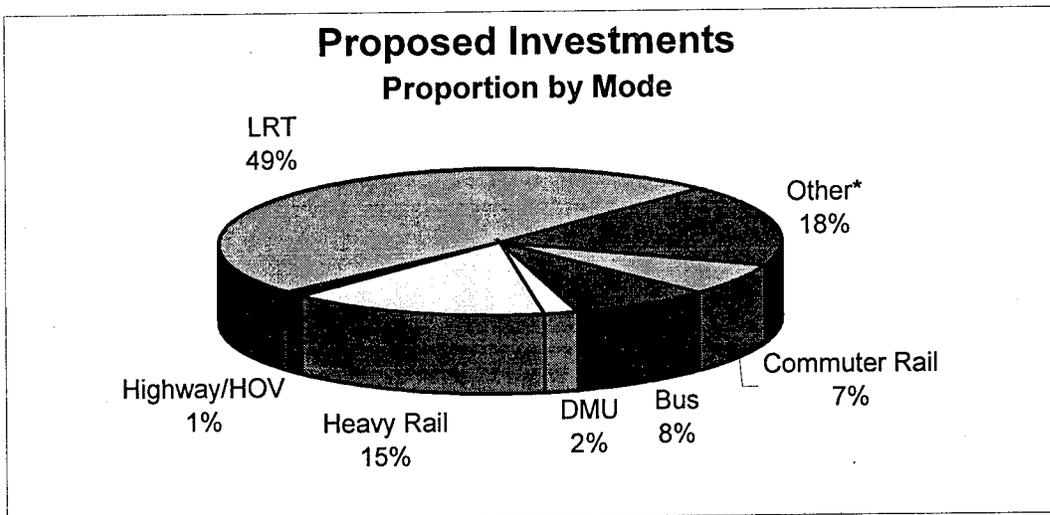
**EXHIBIT III-2
Proposed Expenditures By Mode
(\$Millions of 1997)**

Mode	Cost	Share of Costs	Number of Projects	Share of Projects	Avg. Cost Per Project	Alignment Length (Miles)	Cost Per Mile
Bus	\$1,499	7.9%	4	10.0%	\$374.8	N/A	N/A
Commuter Rail	\$1,269	6.7%	4	10.0%	\$317.3	N/A	N/A
DMU	\$458	2.4%	2	5.0%	\$228.8	58.7	\$7.8
Facility	\$16	0.1%	1	2.5%	\$16.4	N/A	N/A
Heavy Rail	\$2,925	15.5%	6	15.0%	\$487.4	26.3	\$111.2
Highway/HOV	\$104	0.6%	3	7.5%	\$34.8	N/A	N/A
LRT	\$9,248	48.9%	19	47.5%	\$486.7	227.6	\$40.6
Other*	\$3,400	18.0%	1	2.5%	\$3,400	1.2	\$2,833.3
Total	\$18,919	100.0%	40	100.0%	\$473.0	339.4	\$40.4

Note: While financial assessments were conducted for only thirty projects, a total of forty separate model investments were proposed when multimodal projects are segmented into individual modal investments.

* Other refers to the LIRR East Side Access Project

Expenditures on Multimodal vs. Single Mode Projects



Expenditures on Multimodal vs. Single Mode Projects

An analysis of proposed expenditures on multimodal vs. single mode projects is presented below in **Exhibit III-3** while a listing of all proposed multimodal projects is provided in **Exhibit III-4**. Multimodal projects are defined here as those with significant, “stand alone” investment in each of two or more new modes. Under this definition, expansion of existing bus fleets to feed a proposed new rail investment is not considered a multimodal investment. Key findings are as follows:

- **Significant Investments in Multimodal Projects** — Multimodal projects account for more than one-quarter of all projects proposed and close to half of all proposed investments on a dollar basis.
- **Average Cost per Project** — The average multimodal project is over \$1 billion, more than twice the cost of a typical single-mode project.
- **Highway/HOV Investments** — Of the eight multimodal projects proposed, only three include significant highway/HOV investments. Furthermore, for those projects including highway/HOV investment, this modal component typically accounts for less than 10% of total project costs.

EXHIBIT III-3
Expenditures On Multimodal Vs. Single Mode Projects
 (\$Millions of 1997)

Project Type	Proposed Projects	Share	Proposed Investment	Share	Average Project Size
Single Mode	22	73%	\$10,405	55%	\$438
Multimodal	8	27%	\$8,514	45%	\$1,064
Total	30	100%	\$18,919	100%	\$631

EXHIBIT III-4
Listing of Multimodal Projects
 (\$Millions of 1997)

Location	Project	Primary Mode	Secondary Mode	Tertiary Mode	Total Cost
Cleveland	Euclid Corridor	Bus	Heavy Rail		\$332.5
Fort Worth	Railtran Phase 2	Commuter Rail	Facility		\$135.0
Las Vegas	Resort Corridor	LRT	Highway/HOV	Bus	\$393.3
Miami	East-West Corridor	Heavy Rail	Highway/HOV		\$1,733.3
Orange County	Transitway Project	LRT	Bus		\$1,656.0
Orlando	Central LRT System	LRT	Highway/HOV		\$878.8
San Diego	Mid-Coast to Balboa	LRT	Commuter Rail		\$98.4
Seattle	Sound Move	LRT	Bus	Commuter Rail	\$3,286.5
			Total:		\$8,513.8

Extensions vs. Investment in New Systems

An analysis of the proposed expenditures on extensions to existing fixed guideway systems vs. investment in new systems is presented below in **Exhibit III-5**. Given that multimodal projects can include both extensions and new system investments, this analysis segments each multimodal investment into its two or more constituent single-mode investments. A comparison of capital plan ratings for expansion and new system investments is presented in **Exhibit III-6**. Key findings from these analyses are as follows:

- **Even Distribution of Investments** — The proposed New Starts investments are split even between investment in extensions to existing systems and investment in new systems. This is true both in terms of the number of projects proposed and the total dollar amount proposed.
- **Average Cost per Project** — Based on the sample of projects considered, the average cost per project is slightly higher for new systems than for extensions to existing systems. This difference likely reflects the decreased design needs for extensions vs. new system projects.
- **Project Ratings** — Financial plan strength was neither stronger nor weaker for extensions versus new system investments.

EXHIBIT III-5
Expenditures for Expansion vs. New System Investments
 (\$Millions of 1997)

Project Type	Number of Projects*	Proportion	Total Cost	Cost Share	Avg. Cost Per Project
Extension	21	52.5%	\$9,724	51.4%	\$463
New System	19	47.5%	\$9,195	48.6%	\$484
Total	40	100%	\$18,919	100%	\$473

*Note: While financial assessments were conducted for only thirty projects, a total of forty separate model investments were proposed when multimodal projects are segmented into individual modal investments.

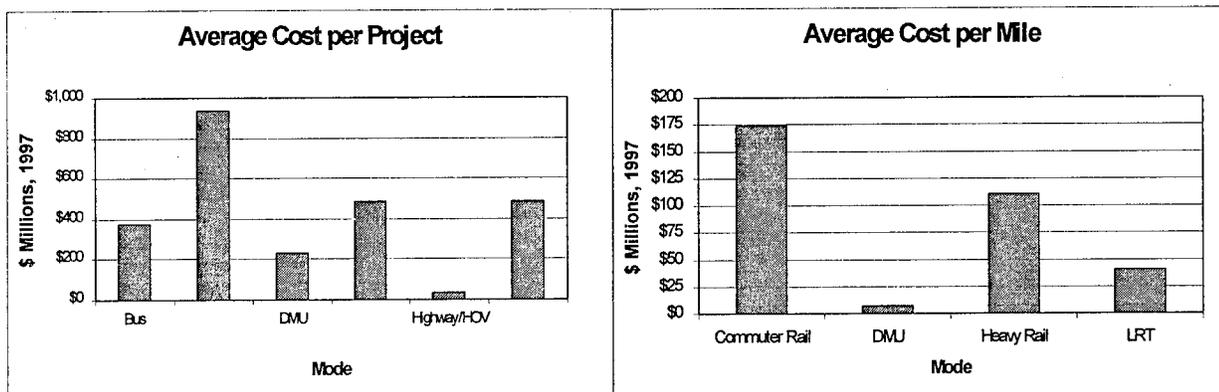


EXHIBIT III-6
Capital Plan Ratings: Expansion vs. New System Investments

Capital Plan Rating	Extension	Green Field
High	2	0
Medium-High	1	3
Medium	4	0
Low-Medium	5	9
Low	4	1
Not Rated	1	0

B. Proposed Funding Shares

This section examines trends in proposed funding shares including Federal, state and local sources. Specifically, proposed funding shares are examined in relation to the following:

- Project Phase
- Capital Plan Rating
- Project Size

Funding Shares by Project Phase

An analysis of the proposed funding shares by project phase is presented below in **Exhibit III-7**. Key findings from this analysis are as follows:

- **Funding Share Trends** — Federal and state funding shares are lower for projects in preliminary engineering and higher for projects in final design. Local funding share decreases as it moves through the project development phase from PE to final design. Two potential explanations for this pattern are:
 - Local agencies may recognize the decline in availability of Federal and state funds for individual projects in recent years. Given this change, agencies with projects currently in early preliminary engineering may be requesting less state and Federal funding assistance than did those projects now in final design. Financial plans for projects in final design rely more heavily on state and Federal funds.
 - Agencies in preliminary engineering may propose local funding sources that are not yet approved for the project. If these sources do not materialize by final design, state and Federal sources may be required to fund the resulting shortfall.

The relevance of these two explanations can be better understood by observing how funding shares change for individual projects overtime using time series analysis versus the cross sectional analysis already performed. Such analysis

should indicate that the local funding match does tend to decrease as projects proceed from PE to final design.

- **Proposed Section 5309 Contribution** — The average proposed Section 5309 contribution is less than 45%. This contribution is highest for projects currently in final design (61% of project costs) and lowest for projects in early preliminary engineering (35% of project costs).
- **Other Federal Funds** —The proposed funding contributions from other Federal sources was also found to be higher for projects which are more advanced in the project development process. In general, projects in PE (particularly early PE) request less Federal funds than projects in final design.

EXHIBIT III-7
Proposed Funding Shares by Project Phase

Phase	Federal 5309	Other Federal	Total Federal	Total State	Total Local	Total Non-Fed	Total (\$M 1997)
Early PE	35%	3%	38%	8%	54%	62%	\$10,185
PE	51%	4%	55%	13%	32%	45%	\$7,512
Final Design	61%	5%	66%	20%	14%	34%	\$1,222
Total	43%	4%	47%	11%	42%	53%	\$18,919

Funding Shares by Capital Plan Rating and Mode

An analysis of the proposed funding shares by the capital finance plan rating is presented below in **Exhibit III-8**. Funding shares by mode is considered in **Exhibit III-9**. There does not appear to be any relationship between the funding shares and the capital plan rating, or the funding shares and the mode. However, a potential exception is that projects with lower capital finance plan ratings appear to have a higher proportion of state funds and a below average local funding share.

EXHIBIT III-8
Proposed Funding Shares by Capital Plan Rating
(\$Millions of 1997)

Capital Plan Rating	Federal Section 5309	Other Federal Sources	Total Federal Funding	Total State Funding	Total Local Funding	Total (\$Millions 1997)
High	61%	3%	64%	0%	36%	\$1,498
Medium-High	20%	6%	26%	<1%	74%	\$3,508
Medium	48%	1%	49%	14%	37%	\$1,421
Low-Medium	52%	8%	60%	23%	17%	\$5,558
Low	56%	<1%	57%	16%	28%	\$3,535
Not Rated	28%	0%	28%	0%	72%	\$3,400
Total	43%	4%	47%	11%	42%	\$18,919

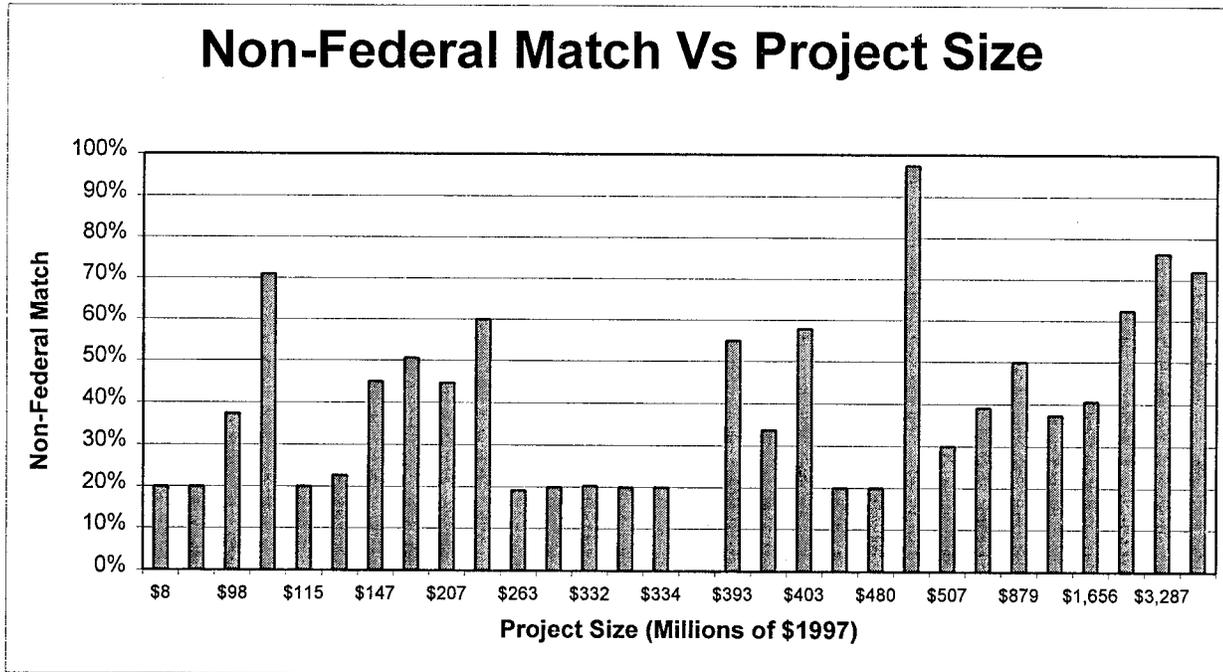
**EXHIBIT III-9
Proposed Funding Shares by Mode**

Mode	Federal Section 5309	Other Federal Sources	Total Federal Funding	Total State Funding	Total Local Funding	Total (\$Millions 1997)
Bus	80%	0%	80%	0%	20%	\$333
Commuter Rail	33%	2%	34%	6%	60%	\$4,108
DMU	47%	0%	47%	19%	34%	\$458
Heavy Rail	52%	0%	52%	11%	38%	\$2,951
LRT	43%	6%	49%	13%	38%	\$11,069
Total	43%	4%	47%	11%	42%	\$18,919

Non-Federal Match as a Function of Total Project Cost

The relationship between non-Federal funding match and total project cost is presented below in **Exhibit III-10**. Note that the increase in the non-Federal match as project size (i.e., total capital cost) increases is statistically significant. This suggests that agencies sponsoring larger projects recognize the limited availability of Federal funds and propose increased local shares in compensation.

EXHIBIT III-10



A regression model (least-squares) using the non-Federal share as a function of total project cost produced the following results (t-statistics in parenthesis):

$$\text{Non - Federal Share} = 0.315 + 0.000126 * \text{Project Cost}$$

(1.59) (2.88)

Where, $R^2 = 0.2287$

These results suggest that while there is a positive and statistically significant relationship between project cost and non-Federal share (i.e., the t-statistic's absolute value is greater than 2), the total project cost is a weak predictor of non-Federal share.

C. Project Ratings

This section examines the relationships between project capital finance plan ratings and the following project characteristics:

- Project Phase
- Primary Investment Mode

Project Ratings and Project Phase

An analysis of the project capital plan ratings by project phase and by average project cost is presented in **Exhibit III-11** and **Exhibit III-12**. Key findings from these analyses are as follows:

EXHIBIT III-11
Capital Plan Rating by Project Phase

Capital Plan Rating	Early PE	PE	Final Design	Total
High	0	1	1	2
Medium-High	4	0	0	4
Medium	2	2	0	4
Low-Medium	3	9	2	14
Low	1	3	1	5
Not Rated	1	0	0	1
Total	11	15	4	30

- **Exhibit III-11 and III-12 indicate that there is no Relation Between Project Phase and Plan Strength** — There is not a clear relationship between the project phase and the strength of the underlying financial plan. (Note that relatively few projects are in final design relative to PE or early PE.)
- **Project Costs Highest for Early PE** — Average project costs are highest for projects in early PE and lowest for projects in final design (reflecting increased number of high cost, multimodal projects particularly in early PE).

EXHIBIT III-12
Average Project Cost by Plan Rating and Project Phase
(\$Millions of 1997)

Capital Plan Rating	Early PE	PE	Final Design	Total
High	\$0.0	\$1,098.9	\$398.7	\$1,497.6
Medium-High	\$877.1	\$0.0	\$0.0	\$877.1
Medium	\$294.9	\$415.4	\$0.0	\$710.2
Low-Medium	\$766.4	\$334.2	\$125.1	\$1,225.8
Low	\$387.1	\$858.1	\$573.1	\$1,818.3
Not Rated	\$3,400.0	\$0.0	\$0.0	\$3,400.0
Average	\$925.9	\$500.8	\$305.5	\$630.6

Project Ratings and Primary Investment Mode

An analysis of the project capital plan ratings by primary investment mode is presented in **Exhibit III-13**. (Primary investment mode is defined as that modal component of a proposed New Starts project which accounts for the largest share of project capital costs.) Light rail (LRT) projects are the only mode type to receive financial plan ratings of medium-high or better. Otherwise, no significant trends were observed.

EXHIBIT III-13
Capital Plan Rating by Primary Investment Mode

Capital Plan Rating	Bus	Comm. Rail	DMU	Heavy Rail	LRT	Total
High	0	0	0	0	2	2
Medium-High	0	0	0	0	4	4
Medium	0	0	0	1	3	4
Low-Medium	1	1	2	1	9	14
Low	0	1	0	3	1	5
Not Rated	0	1	0	0	0	1
Total	1	3	2	5	19	30

D. Commitment of Non-Federal Funds

The commitment of non-Federal funds to a proposed New Starts project represents a key project rating criteria within the financial assessment process. This section provides a summary analysis of this commitment across all thirty projects reported based on the following project characteristics:

- Project Rating
- Project Phase

To complete this analysis, the state, local and private funding sources for all thirty New Starts projects were categorized into the following levels of commitments:

- **Committed** — The state, local or private funding authority has provided a clear commitment of the proposed funding source to the New Starts project (i.e., the funding source has been approved for that project).
- **Not Committed** — The state, local, or private funding authority has not yet provided a clear commitment of the proposed funding source to the New Starts project.
- **Uncertain** — It is unclear from the project financial plan whether or not the state or local funding authority or private source has provided a clear commitment of the proposed funding source.
- **Unspecified** — The proposed non-Federal funding sources are not sufficient to cover the proposed local match. The funding source needed to cover this shortfall remains “unspecified.” Under these conditions, the project’s financial plans generally outline the sponsoring agency’s current strategies to fill these funding gaps.

Commitment by Capital Plan Rating

An analysis of non-Federal funding commitment by the project’s capital plan is presented in **Exhibit III-14** and **Exhibit III-15**. As may be expected, projects with higher levels of committed state, local, and private funds received higher financial plan ratings. Alternatively, projects with high proportions of uncertain and/or unspecified funds tended to receive low project ratings.

EXHIBIT III-14
Non-Federal Commitment by Capital Plan Rating — Dollar Amount

Capital Plan Rating	Committed	Not Committed	Uncertain	Unspecified	Total (\$M 1997)
High	100%	0%	0%	0%	\$545
Medium-High	99%	0%	<1%	<1%	\$2,608
Medium	21%	21%	79%	0%	\$727
Low-Medium	14%	30%	50%	6%	\$2,214
Low	0%	30%	14%	57%	\$1,526
Not Rated	0%	40%	60%	0%	\$2,448
Total	36%	21%	33%	10%	\$10,068

EXHIBIT III-15
Non-Federal Commitment by Capital Plan Rating — by Share

Capital Plan Rating	Committed	Not Committed	Uncertain	Unspecified	Total (\$M 1997)
High	100%	0%	0%	0%	\$545
Medium-High	99%	0%	<1%	<1%	\$2,608
Medium	21%	21%	79%	0%	\$727
Low-Medium	14%	30%	50%	6%	\$2,214
Low	0%	30%	14%	57%	\$1,526
Not Rated	0%	40%	60%	0%	\$2,448
Total	36%	21%	33%	10%	\$10,068

Commitment by Project Phase

An analysis of non-Federal funding commitment by project phase is presented below in **Exhibit III-16** and **Exhibit III-17**. As may be expected, projects in early PE and PE had the largest proportions of funding sources with uncertain funding commitment. However, an unexpected find was the large proportion of unspecified funds for projects in the final design project phase.

EXHIBIT III-16
Non-Federal Commitment by Project Phase — Dollar Amounts
(\$Millions of 1997)

Capital Plan Rating	Committed	Not Committed	Uncertain	Unspecified	Total \$
Early PE	\$2,929	\$1,136	\$2,203	\$2.0	\$6,269
PE	\$493	\$957	\$1,160	\$777	\$3,386
Final Design	\$185	\$0	\$3	\$224	\$412
Total	\$3,608	\$2,093	\$3,365	\$1,002	\$10,068

EXHIBIT III-17
Non-Federal Commitment by Project Phase — Shares

Capital Plan Rating	Committed	Not Committed	Uncertain	Unspecified	Total (\$M 1997)
Early PE	47%	18%	35%	0%	\$6,269
PE	15%	28%	34%	23%	\$3,386
Final Design	45%	0%	>1%	54%	\$412
Total	36%	21%	33%	10%	\$10,068

E. Existing Vs. New Funding Sources

This section examines the use of existing versus new funding sources in the development of project financial plans. The use of existing and new funding sources is examined based on the following project characteristics:

- Project Rating
- Project Phase
- Extension vs. New System Investment

To complete this analysis, state, local and private funding sources were grouped into categories using the following definitions:

- **Existing** — Includes sales taxes, and other dedicated state and local revenue streams available for capital and other transit uses for at least one year. Identification of “existing” funds in the financial plan does not imply that the funding authority has approved use of these funds for project development. Existing sources generally pose less risk to financial plan viability given the known revenue potential based on historical experience.
- **New Source** — Sales taxes and other dedicated state and local revenues not available prior to the current project. The source may or may not yet be enacted or have enabling legislation.
- **Debt** — Funds obtained from the sale of revenue bonds, general obligation (GO) bonds, short-term paper or other debt instrument.
- **Unspecified** — The proposed non-Federal funding sources are not sufficient to cover the proposed local match. Therefore the funding source to cover this shortfall remains “unspecified.” Under these conditions, project financial plans generally outline the sponsoring agency’s current strategies to fill these funding gaps.

The distribution of non-Federal funds within these four groups is provided in **Exhibit III-18**. Note that approximately 70% of all state and local funds are expected to be derived from existing sources and the issuance of debt with only 30% from new and unspecified sources.

EXHIBIT III-18
Commitment of Non-Federal Funds by Project Phase — Shares
 (\$Millions of 1997)

Source Type	Amount	Share
Existing	\$3,894	39%
New	\$2,045	20%
Debt	\$3,127	31%
Unspecified	\$1,002	10%
Total	\$10,068	100%

Existing and New Funding Sources by Capital Plan Rating

An analysis of the use of new and existing funding sources by capital plan rating is presented in **Exhibit III-19** and **Exhibit III-20**. Key findings from this analysis are as follows:

- **High Ratings and the Use of Debt and Existing Funding Sources** — Projects which received medium-high ratings or better obtained a significant proportion of the local match from debt. Similarly, agencies with projects ranked above a medium rating appeared to have higher credit ratings and greater availability to secure future funding.
- **Low Ratings and New Sources** — Projects with a low and low-medium capital plan ratings placed a higher dependence on new revenue sources and often did not specify sufficient funds to cover the full local match.

EXHIBIT III-19
Use of Existing and New Funding Sources by Plan Rating — Dollar Amount
(\$Millions of 1997)

Capital Plan Rating	Existing	New	Debt	Unspecified Sources	Total
High	\$135	\$9	\$402	\$0	\$545
Medium-High	\$1,468	\$3	\$1,135	\$2	\$2,608
Medium	\$640	\$9	\$78	\$0	\$727
Low-Medium	\$1,508	\$521	\$50	\$135	\$2,214
Low	\$143	\$517	\$0	\$866	\$1,526
Not Rated	\$0	\$986	\$1,462	\$0	\$2,448
Total	\$3,894	\$2,045	\$3,127	\$1,002	\$10,068

EXHIBIT III-20
Use of Existing and New Funding Sources by Plan Rating — Shares
(\$Millions of 1997)

Capital Plan Rating	Existing	New	Debt	Unspecified Sources	Total (\$M 1997)
High	25%	2%	74%	0%	\$545
Medium-High	56%	0%	44%	0%	\$2,608
Medium	88%	1%	11%	0%	\$727
Low-Medium	68%	24%	2%	6%	\$2,214
Low	0%	34%	0%	57%	\$1,526
Not Rated	0%	40%	60%	0%	\$2,448
Total	39%	22%	31%	10%	\$10,068

Existing and New Funding Sources by Project Phase

An analysis of the use of new and existing funding sources by project phase is presented in **Exhibit III-21** and **Exhibit III-22**. As the project phase advances, then the use of debt declines while unspecified funds increase. Newer proposed projects (in early PE and PE) have access to more secure funding sources than those projects currently in final design, allowing for greater reliance on debt.

EXHIBIT III-21
Use of Existing and New Funding Sources by Project Phase — Dollar Amount
 (\$Millions of 1997)

Capital Plan Rating	Existing	New	Debt	Unspecified Sources	Total
Early PE	\$2,503	\$1,039	\$2,725	\$2	\$6,269
PE	\$1,220	\$989	\$401	\$777	\$3,386
Final Design	\$171	\$17	\$0	\$224	\$412
Total	\$3,894	\$2,045	\$3,127	\$1,002	\$10,068

EXHIBIT III-22
Use of Existing and New Funding Sources by Project Phase — Shares
 (\$Millions of 1997)

Capital Plan Rating	Existing	New	Debt	Unspecified Sources	Total
Early PE	40%	36%	44%	0%	\$6,269
PE	36%	29%	12%	23%	\$3,386
Final Design	42%	4%	0%	54%	\$412
Total	39%	20%	31%	10%	\$10,068

Existing and New Funding Sources by Project Phase

An analysis of the relationship between the use of new and existing funding sources and new system investments versus extensions to existing transit systems is presented below in **Exhibit III-23** and **Exhibit III-24**. Contrary to *a priori* expectations, the financial plans for new systems tend to propose a higher proportion of existing sources (and lower proportion of new sources) than projects adding extensions to existing fixed-guideway systems.

EXHIBIT III-23
Use of Existing and New Funding Sources by Project Phase — Dollar Amount
 (\$Millions of 1997)

Type	Debt	Existing	New	Unspecified	Total \$
Extension	\$1,943	\$1,041	\$1,154	\$293	\$4,431
New System	\$1,182	\$2,853	\$892	\$709	\$5,637
Total	\$3,127	\$3,894	\$2,046	\$1,002	\$10,068

EXHIBIT III-24
Use of Existing and New Funding Sources by Project Phase — Dollar Amount
(\$Millions of 1997)

Type	Debt	Existing	New	Unspecified	Total \$
Extension	44%	24%	26%	7%	\$4,431
New System	21%	51%	16%	13%	\$5,637
Total	31%	39%	20%	10%	\$10,068

F. Use of Innovative Financing

The FTA's Innovative Financing Initiative (*Federal Register Notice*, May 1995) promotes the use of innovative financing sources in project financial plans and recognizes their use through the project rating process. The objective of this initiative is to decrease the local agency's reliance on traditional funding sources (e.g., Section 5309 funds) by promoting the use of non-traditional funding techniques — particularly those that increase private sector involvement. This approach encourages spreading limited Federal, state and local funds across a greater number of projects.

Based on the analysis which follows, few agencies are making effective use of this funding options. Furthermore, when they are used, these innovative sources cover only a small fraction of total project costs.

The use of innovative financing techniques by New Starts projects currently in PE or final design is outlined in **Exhibit III-25** and **Exhibit III-26**. Key findings from this analysis are as follows:

- ***Low Use of Innovative Financing*** — Of the 30 financial plans reviewed, one third (10) considered the use of innovative financing. One-half of these (5) proposed specific funding amounts (the other five plans did not include dollar estimates). Total proposed innovative financing for these five projects was \$60 million (\$1997), covering approximately 6% of the combined capital costs for these projects. Only \$10-million of these funds was backed by a firm funding commitment.
- ***Poor Financial Performance*** — In general, projects proposing innovative financing methods received low ratings. Agencies that are unable to secure the full local match from traditional non-Federal sources are looking to innovative funding sources to bridge the funding shortfall.

EXHIBIT III-25
Use of Innovative Financing in Financial Plans
(\$Millions of 1997)

Innovative Source Proposed	Specific Funding Amount Proposed	Number of Projects	Innovative Funds Proposed	Share of Project Costs
Yes	Yes	5	\$301	6%
Yes	No	5	\$0	0%
No	No	20	\$0	0%

EXHIBIT III-26
Use of Innovative Financing by Capital Plan Rating
(\$Millions of 1997)

Capital Plan Rating	Funding Levels
High	\$10.00
Medium-High	\$0.00
Medium	\$8.50
Low-Medium	\$140.80
Low	\$141.20

G. Use of “Other” Federal Funds

FTA promotes the use of other flexible Federal funds, a practice recognized in the financial plan rating process. The use of other Federal funds in current financial plans is considered in **Exhibit III-27** and **Exhibit III-28**. Key findings from these analyses are as follows:

- **High Use of CMAQ/STP** — Flexible CMAQ/STP funds account for more than 60% of all “other” Federal funds (i.e., Federal sources excluding Section 5309 funds).
- **No Relation to Financial Performance** — There is no relationship between the use of flexible or other non-5309 Federal sources and the strength of the financial plan.
- **Low Use of Flexible Funds** — On average, “other” Federal funds covered about 4% of total project costs.

EXHIBIT III-27
Use of “Other” Federal Funding Sources
(\$Millions of 1997)

Source	Amount	Share
STP/CMAQ	\$386	61%
Section 5307	\$27	4%
Urban Core Program	\$30	5%
Unspecified	\$190	30%
Total	\$631	100%

EXHIBIT III-28

Use of "Other" Federal Funding Sources as a Share of Total Project Cost

Capital Plan Rating	STP/ CMAQ	Section 5307	Section 5309 Fixed Guideway	Urban Core Program	Unspecified Federal	Total
High	3.1%	0.0%	0.0%	0.0%	0.0%	3.1%
Medium-High	0.0%	0.0%	0.0%	0.0%	5.4%	5.4%
Medium	1.1%	0.0%	0.0%	0.0%	0.0%	1.1%
Low-Medium	5.8%	0.0%	1.8%	0.5%	0.0%	8.2%
Low	0.0%	0.7%	0.0%	0.0%	0.0%	0.7%
Not Rated	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Average	2.0%	0.1%	0.5%	0.2%	1.0%	3.9%

**TABLE III-1
Summary of Key Financial Assessment Information**

City: Project	Primary Mode	Extension Or New System	Project Phase	Project Cost Millions (\$1997)	Section 5309 Millions (\$1997)	Section 5309 Share	Capital Financing Plan Rating	Operating Financing Plan Rating
Austin, TX: Northwest/North Central Corridor	LRT	New System	PE	\$182.3	\$90.0	49%	Medium-High	Medium-High
Boston, MA: Piers Transitway Phase 2	Heavy Rail	Extension	PE	\$267.0	\$213.6	80%	Low-Medium	Low-Medium
Cleveland, OH: Euclid Corridor Improvement Project	Bus	New System	PE	\$332.5	\$266.0	80%	Low-Medium	Low-Medium
Dallas, TX: North Central Corridor	LRT	Extension	Final Design	\$398.7	\$263.9	66%	High	High
Denver, CO: Southeast Corridor Project	LRT	Extension	PE	\$479.7	\$383.8	80%	Medium	Low-Medium
Fort Lauderdale, FL: Tri-County Commuter Rail Project	Commuter Rail	Extension	Final Design	\$573.1	\$324.7	57%	Low	Low
Fort Worth, TX: Railtran Project Phase 2	Commuter Rail	New System	Final Design	\$135.0	\$63.8	47%	Low-Medium	Low-Medium
Kansas City, MO: Southtown Corridor Transit Study	LRT	New System	PE	\$262.7	\$210.2	80%	Low-Medium	Low-Medium
Largo, MD: Largo Metrorail Extension	Heavy Rail	Extension	PE	\$334.3	\$267.5	80%	Low	Low-Medium
Las Vegas, NV: Resort Corridor - Initial Operating Segment (IOS)	LRT	New System	PE	\$393.3	\$177.0	45%	Medium	Medium
Little Rock, AK: Junction Bridge Rail Project	LRT	New System	PE	\$7.7	\$6.1	80%	Medium-High	Medium-High
Memphis, TN: Medical Center Rail Extension	LRT	Extension	PE	\$31.9	\$25.5	80%	Medium-High	Medium
Miami, FL: East-West Multimodal Corridor Study	Heavy Rail	New System	PE	\$1,733.3	\$650.7	38%	Low	Low
Miami, FL: North Corridor Project	Heavy Rail	Extension	PE	\$506.7	\$354.6	70%	Low	Low
New Orleans, LA: Canal Streetcar Light Rail Transit	LRT	Extension	Final Design	\$115.3	\$92.2	80%	Low-Medium	Low-Medium
New York, NY: Long Island Rail Road East Side Access	Commuter Rail	Extension	PE	\$3,400.0	\$952.0	28%	Not Rated	Medium-High
Norfolk, VA: Virginia Beach Light Rail Project	LRT	New System	PE	\$403.3	\$141.2	35%	Low-Medium	Low-Medium
Northern New Jersey: Newark-Elizabeth Rail Link (FOS)	LRT	Extension	PE	\$147.3	\$44.2	30%	Low-Medium	Low-Medium
Orange County, CA: Orange County Transitway Project	LRT	New System	PE	\$1,656.0	\$828.0	50%	Low-Medium	Low-Medium
Orlando, FL: Central Light Rail Transit System (CLRTS)	LRT	New System	PE	\$878.8	\$439.4	50%	Low-Medium	Low-Medium
Pittsburgh, PA: Stage II Light Rail Transit Reconstruction Project	LRT	Extension	PE	\$410.7	\$135.5	33%	Low-Medium	Low-Medium
Portland, OR: South/North Corridor Light Rail Transit	LRT	Extension	PE	\$1,098.9	\$642.4	58%	High	High
Raleigh, NC: Phase I Regional Rail Project	DMU	New System	PE	\$250.0	\$100.0	40%	Low-Medium	Low-Medium
Salt Lake City, UT: East-West Corridor Light Rail Transit Project	LRT	Extension	PE	\$387.1	\$387.1	100%	Low	Low
San Diego, CA: Mid-Coast LRT to Balboa	LRT	Extension	PE	\$98.4	\$61.6	63%	Low-Medium	Medium
San Diego, CA: Mission Valley East Light Rail Transit (LRT)	LRT	Extension	PE	\$332.0	\$261.4	79%	Medium	Medium
San Diego, CA: Oceanside - Escondido Rail Project	DMU	New System	PE	\$207.5	\$114.6	55%	Medium	Low-Medium
San Francisco, CA: Third Street Light Rail Project	LRT	Extension	PE	\$498.8	\$0.0	0%	Medium	Medium-High
San Juan PR: Tren Urbano Minillas Extension	Heavy Rail	Extension	PE	\$110.0	\$32.0	29%	Medium	Medium
Seattle, WA: Sound Move	LRT	New System	PE	\$3,286.5	\$589.2	18%	Medium-High	Medium-High

TABLE III-2
Summary of Non-Federal Funding Sources
(\$Millions of 1997)

City: Project	Project Cost	Non-Federal Funding	Non-Federal Funding Share	Capital Financing Plan Rating	Non-Federal Funding Commitment (% of Non-Federal Funds)			Non-Federal Funding Sources (% of Non-Federal Funds)			
					Committed	Not Committed	Uncertain	Not Specified	Existing	New	Not Specified
Austin, TX: Northwest/North Central Corridor	\$182.3	\$92.3	51%	Med-High	100%	0%	0%	0%	100%	0%	0%
Boston, MA: Piers Transitway Phase 2	\$267.0	\$53.4	20%	Low-Med	0%	0%	100%	0%	0%	100%	0%
Cleveland, OH: Euclid Corridor Improvement Project	\$332.5	\$66.5	20%	Low-Med	0%	0%	0%	100%	0%	0%	100%
Dallas, TX: North Central Corridor	\$398.7	\$134.8	34%	High	100%	0%	0%	0%	100%	0%	0%
Denver, CO: Southeast Corridor Project	\$479.7	\$95.9	20%	Medium	100%	0%	0%	0%	100%	0%	0%
Fort Lauderdale, FL: Tri-County Commuter Rail Project	\$573.1	\$248.4	43%	Low	0%	0%	0%	100%	0%	0%	100%
Fort Worth, TX: Railtran Project Phase 2	\$135.0	\$71.2	53%	Low-Med	100%	0%	0%	0%	0%	55%	45%
Kansas City, MO: Southtown Corridor Transit Study	\$262.7	\$52.5	20%	Low-Med	0%	100%	0%	0%	0%	100%	0%
Largo, MD: Largo Metrorail Extension	\$334.3	\$66.9	20%	Low	0%	0%	0%	100%	0%	0%	0%
Las Vegas, NV: Resort Corridor - Initial Operating Segment	\$393.3	\$216.3	55%	Medium	0%	0%	0%	100%	0%	0%	0%
Little Rock, AK: Junction Bridge Rail Project	\$7.7	\$1.5	20%	Med-High	0%	0%	0%	0%	100%	0%	100%
Memphis, TN: Medical Center Rail Extension	\$31.9	\$6.4	20%	Med-High	0%	0%	100%	0%	0%	0%	0%
Miami, FL: East-West Multimodal Corridor Study	\$1,733.3	\$1,082.6	62%	Low	0%	28%	13%	59%	0%	41%	59%
Miami, FL: North Corridor Project	\$506.7	\$152.1	30%	Low	0%	100%	0%	0%	50%	50%	0%
New Orleans, LA: Canal Streetcar Light Rail Transit	\$115.3	\$23.1	20%	Low-Med	86%	0%	14%	0%	86%	14%	0%
New York, NY: Long Island Rail Road East Side Access	\$3,400.0	\$2,448.0	72%	Not Rated	0%	40%	60%	0%	0%	100%	0%
Norfolk, VA: Norfolk - Virginia Beach Light Rail Project	\$403.3	\$262.1	65%	Low-Med	0%	100%	0%	0%	50%	50%	0%
Northern New Jersey: Newark-Elizabeth Rail Link (FOS)	\$147.3	\$103.1	70%	Low-Med	0%	100%	0%	0%	100%	0%	0%
Orange County, CA: Orange County Transitway Project	\$1,656.0	\$828.0	50%	Low-Med	35%	0%	65%	0%	100%	0%	0%
Orlando, FL: Central Light Rail Transit System (CLRTS)	\$878.8	\$439.4	50%	Low-Med	0%	31%	69%	0%	50%	50%	0%
Pittsburgh, PA: Stage II Light Rail Transit Reconstruction	\$410.7	\$275.2	67%	Low-Med	0%	0%	17%	84%	0%	17%	84%
Portland, OR: South/North Corridor Light Rail Transit	\$1,098.9	\$456.5	42%	High	100%	0%	0%	0%	0%	100%	0%
Raleigh, NC: Phase I Regional Rail Project	\$250.0	\$150.0	60%	Low-Med	0%	100%	0%	0%	67%	33%	0%
Salt Lake City, UT: East-West Corridor Light Rail Transit	\$387.1	\$0.0	0%	Low	NA	NA	NA	NA	NA	NA	NA
San Diego, CA: Mid-Coast LRT to Balboa	\$98.4	\$36.8	37%	Low-Med	19%	0%	81%	0%	100%	0%	0%
San Diego, CA: Mission Valley East Light Rail Transit	\$332.0	\$70.6	21%	Medium	86%	0%	14%	0%	100%	0%	0%
San Diego, CA: Oceanview - Escondido Rail Project	\$207.5	\$92.9	45%	Medium	19%	20%	60%	0%	100%	0%	0%
San Francisco, CA: Third Street Light Rail Project	\$498.8	\$498.8	100%	Medium	0%	0%	100%	0%	98%	2%	0%
San Juan PR: Tren Urbano Minillas Extension	\$110.0	\$78.0	71%	Medium	0%	0%	100%	0%	0%	100%	0%
Seattle, WA: Sound Move	\$3,286.5	\$2,697.3	82%	Med-High	100%	0%	0%	0%	100%	0%	0%

Chapter 4. LESSONS LEARNED AND RECOMMENDATIONS FOR AGENCY SUBMISSIONS

This chapter presents a number of conclusions regarding the financial assessment process and related recommendations helpful to agencies preparing submissions in support of FTA's New Starts financial criteria. These conclusions and corresponding recommendations are derived from the lessons learned by FTA staff and financial assessment contractors who have been involved in the financial assessment process since its inception. Input has also been provided from agencies with financial review experience. Incorporating these lessons learned and recommendations into the development of project financial documentation will help ensure clear analysis by the reviewer, ensure proper recognition of each plan's financial strengths and increase the potential for an improved financial rating.

A. Lessons Learned

Since initiation of the financial assessment process in 1984, FTA staff and contractors have gained a number of valuable insights regarding assessment procedures. This section documents several of those lessons. The product of these observations is a set of recommendations to local agencies submitting documentation for review with emphasis on the preparation of more effective financial documentation.

Documentation — Sponsoring agencies are asked to submit financial and related documents at the start of each assessment period (which usually begin in the fall). These documents provide FTA staff and contractors with the data required to complete their evaluation of the local financial commitment for the New Starts project. Given the wide range of materials requested, agency submissions typically include a large number of documents.

In practice, it is a time-consuming process for local agency staff to compile the requested documentation before it is reviewed by agency management and subsequently forwarded to FTA staff and contractors for their review. The length of time required to complete this process often constrains the time available to FTA staff and contractors to complete their analysis, seek and incorporate agency comments and submit the final assessment for publication in the New Starts Report. For this reason, agencies are encouraged to submit their documentation as quickly as possible and to ensure their submissions closely follow the guidelines for reporting local financial commitment as contained in the September 1997 Technical Guidance on the Section 5309 New Starts Criteria (as well as subsequent guidance updates).

Incomplete Submissions — Despite the number of physical documents provided, documentation frequently remains incomplete from the viewpoint of providing the key

financial data required to complete each assessment. At the very least, submission of incomplete documentation further increases the time required to complete an assessment (e.g., requiring further requests for data clarification). More importantly, an incomplete submission can lead to a reduced project rating (i.e., if the plan appears underdeveloped), even if certain underlying financial plan characteristics are strong. The key document most commonly missing from an agency submission is the twenty-year cash flow analysis. More than any other document, the project cash-flow provides reviewers with an effective understanding of the sponsoring agency's ability to finance the project's capital and operating needs within the context of the agency's ongoing operations.

Agency Awareness — Agency staff are sometimes unaware of the need to undergo a financial assessment. Under these circumstances, the agency often does not have the required documentation in a fully prepared format when first informed that an assessment is required, thereby leading to submission of materials which are out-of-date, preliminary, incomplete, and/or delayed.

B. Recommendations for Agency Submissions

Presentation of a project financial plan that is well-defined, complete, and understandable, helps ensure recognition of effective financial planning through the rating process. At the same time, submissions which are incomplete, difficult to understand or lack consistency raise potential concerns for FTA. These concerns can lead to lower than expected project financial ratings, even for projects with positive characteristics underlying their financial plans. Given these considerations and the importance of the financial plan ratings to the Federal funding process, it is important that agency financial submissions be as complete, well considered and clearly presented as possible. The following sections provide background and submission recommendations to help sponsoring agencies meet these goals. These recommendations are in accordance with FTA guidelines for project financial documentation.

The following provides guidance on the content and presentation of several key financial data, including:

- **Project Description** – mode, alignment length, grade, number of stations, and vehicles
- **Economic and Demographic Data** – economic, population, and employment growth
- **Funding Sources** – dollar amount, history, funding agreement, projection assumptions, and use of debt
- **20-Year Cash Flow** – 20-year projection of agency-wide sources and uses of capital and operating funds (including descriptions of line items and underlying assumptions)
- **Capital Cost Estimates** – breakdown by category (track, stations, systems, vehicles), including contingencies.

In addition to basic project, demographic, and economic data, information in support of each of the three finance measures --- 1) proposed local share of project cost; 2) stability and reliability of capital financing plan; and 3) stability and reliability of operating financing plan --- must be included in each project sponsor's submission.

Project Description

Submissions should include a basic description of the proposed project including the mode type, number of miles of alignment (segmented by grade type), alignment location, number of stations, vehicles and facilities. If more than one mode is proposed, the above should be segmented by mode and clearly isolate the New Start project requirements from other capital projects. These descriptions are used to help assess the reasonability of capital cost estimates and to gain a better understanding of project size and scope.

In addition, the basic project description should include estimates of the project's overall capital costs (in total and segmented by major asset investment categories, including structures, vehicles, stations, etc.), operating costs estimates, and provision for contingencies. Note that reviewers may highlight estimates or contingency provisions which are considered low when compared to recent projects of similar size and scope.

Local Demographic and Economic Projections

Forecasts of local economic and demographic growth are necessary to gauge the reasonability of revenue yield estimates included in the twenty-year project cash-flow analysis. These forecasts also provide a check on the reasonability of growth rate assumptions for ridership, local tax revenues, regional inflation and other key variables. Forecasts from institutions with an independent perspective — such as universities, state agencies and private forecasting firms — represent preferred sources for these background estimates.

Criteria Measure — Proposed Local Share of Project Costs

This is a measure of the dollar amount and percentage of total project costs to be funded by non-Federal sources (i.e., state, local and private funds). Non-Federal sources cover both the local match required by Federal law (a minimum of 20%) plus any additional local capital funds, or overmatch, committed to the project. Overmatch is specifically considered in the FTA's rating process as it reduces the Federal commitment required to complete each project and permits limited Federal funds to be distributed across a wider range of projects. The presence and degree of overmatch offers clear evidence of the degree of local financial commitment to the project. The proposed level of overmatch has increased significantly in recent years with the average non-Federal share increasing from 34% for projects currently in final design to 62% for projects in PE.

In addition to overmatch, evaluation of this measure also considers the proposed use of both innovative and flexible funding sources, the reasonableness of capital cost estimates,

and the inclusion of contingency costs. To facilitate this evaluation, it is recommended that project sponsors clearly identify all local, state, Federal and private funding sources, including the name, originating level of government, total dollar amount anticipated, amount currently expended, and percentage contribution to project capital costs. The total dollar amount across funding sources should sum to the project's total capital cost. Failure to associate a specific funding amount with a specified source calls into question the availability of that source. Local agencies should identify innovative and/or flexible funds, including their type, source and innovative characteristics.

Local agencies should also identify costs, and the amount expended by funding source, of planning activities (major investment study/alternative analysis, preliminary engineering, etc.) which have supported and continue to support the proposed New Starts investment.

Criteria Measure — Stability and Reliability of Capital Financing Plan

This measure evaluates the local agency's ability to cover the non-Federal match from proposed local, state and private funding sources. Included here is an assessment of the level of commitment secured from source providers and the risk of funding shortfalls (e.g., due to lower than expected economic growth forecasts).

The methods employed and objectives of this analysis are similar to that pursued by a financial institution assessing the financial position of a prospective loan recipient: what is the strength of commitment, what is the ability to pay, and what are the sources of risk? To answer these questions, the sponsoring agency's submission should provide reviewers with sufficient background data and documentation to provide independent confirmation of the availability, stability, and reliability of all non-Federal funding sources. Documentation must also support the strength of the agency's current financial position and demonstrate steps taken to limit risk to the capital plan.

Recommendations to ensure a complete submission include the following:

- **Financial Condition** — Documentation of the financial condition of the local agency (e.g., via annual reports, etc.). Evidence of strong financial condition provides an indication of decreased financial risk. Documentation of such evidence includes the extent of the cash accounts, bond or cash asset test ratios, the historical reaction to unexpected financial conditions, the extent of the ongoing capital rehabilitation and replacement program, and the condition of the agency's existing asset base. In addition, evidence of the timely match, obligation, and draw-down of FTA formula resources over the past several years should be provided.
- **Stability and Reliability of Non-Federal Funding Sources** — Provide documentation confirming the stability, reliability, and availability of all non-Federal funding sources. This portion of the analysis receives the significant weight in the rating. Complete submissions should consider the following:

- Existing vs. New Sources — For each funding source identified, clearly indicate whether the source is an existing source (e.g., an active local tax source for which revenues are currently collected) or a new source requiring legislative approval. For existing sources, outline the conditions of the funding agreement (e.g., funding formula, percent share of total revenues, etc.) and provide 5 to 10 years of historical revenue data (including the amount available for transit uses). For new sources, indicate when legislative approval is expected and the date the source becomes effective. For both new and existing sources, document if the source is dedicated (in total or in part) to transit uses. For all sources, document any sunset clauses and potential provisions to cover project funding beyond the sunset date.

- Funding Commitment — Indicate whether the government agency or private entity furnishing the source has committed (i.e., approved) the funds to the project or if the funding commitment is still under negotiation. Provide documentation of funding agreements confirming commitment or indicate the current plans to obtain such commitment. It is helpful if this documentation is from a source other than the grantee, such as a letter of commitment from the agency providing the funds.

- Debt — If the financial plan includes debt, identify the type of debt (e.g., revenue bonds, general obligation bonds), projected dates of issue and amounts, term to maturity, interest rate and agency bond rating. The debt payment schedule and related funding sources should be clearly identified in the project's twenty-year cash-flow analysis.

- Revenue Source Growth Rate Assumptions — For 20-year cash-flow projections, use conservative rates of growth which do not exceed historical experience for that source (demonstrate by supplying historical revenue data for a five to ten year period). If the assumed growth rate is in excess of recent experience, provide justification in the form of independent economic forecasts or other analysis. In addition to considering the reasonableness of growth rate assumptions, reviewers may also evaluate the sensitivity of the financial plan to changes in those assumptions (e.g., lower revenue growth and higher inflation). For example, plans which go into deficit with slight changes in the underlying assumptions may be considered risky. Higher ratings are awarded to projects which are robust in the face of modest changes to the underlying assumptions.

- **Capital Costs** — Reviewers evaluate estimates of project capital costs to ensure they are reasonable. Estimates considered too low may represent a source of risk to the project financial plan (e.g., costs may escalate significantly). Conversely,

estimates which are high may limit the availability of Federal funds to other projects. To facilitate reviewer analysis, capital cost submissions should describe the cost estimation process and should segment costs by major cost category (e.g., guideway, facilities, systems, vehicles). Cost estimates should also highlight all soft-costs including design and construction management as well as set-asides for contingencies. If the project includes more than one mode, further segment the cost estimates on a mode-by-mode basis and isolate the New Start program project for closer examination. Reasonableness of capital cost estimates is recognized within the rating process.

- **Contingencies** — Provisions for contingencies for cost overruns and other uncertainties should be separately identified in the project financial plan. Provision for adequate contingencies is recognized within the rating process.
- **Other Capital Projects** — Identify all major capital projects currently underway or under consideration *at both the transit agency and regional level*. Documentation should include project names and descriptions, total cost, development period, and proposed Federal funding contributions. Projects included in the long range plan and transportation improvement program for the metropolitan area should be identified. These projects should also be clearly identified in the twenty-year cash-flow analysis and statement of sources and uses of capital and operating funds.

Criteria Measure — Stability and Reliability of Operating Financing Plan

This measure assesses the local agency's ability to fund continuing operation of the entire transit system, including the New Start project, during project construction and initial revenue operations. The operating plan assessment evaluates the impact of the New Start investment on the sponsoring agency's complete finances including both operating and capital balances. The primary data source for this analysis is the twenty-year cash flow projection of agency sources and uses of capital and operating funds during project construction and initial operations.

Agencies sometimes make the mistake of submitting financial materials which only cover start-up and operations of the proposed New Starts project. While this data is required, the complete analysis requires a more holistic approach by analyzing the project's impact on the agency's entire financial picture, including continuing operations of the existing system plus construction and operations of any additional capital investments either under construction or under consideration. Recommendations to facilitate evaluation of this measure include the following:

- **20-Year Cash Flow** — Provide a detailed 20-year cash-flow analysis identifying the sources and uses of all agency capital and operating funds. The 20-year period should cover design, construction and initial operations of the proposed New Starts project. The analysis should also include the ongoing costs for operation,

rehabilitation and replacement of the existing transit system as well as all proposed capital investments in addition to the New Starts project.

The capital and operating segments of the cash-flow analysis should be consolidated indicating all debt servicing payments, annual operating and capital deficits, and cumulative balance impacts. Also, the submission should include text describing each funding source (including fare revenues), operating expenses, and capital expenses including growth rate, ridership, and other assumptions. Note that cash-flow analyses which only outline the incremental impact of the New Starts project do not provide the level of detail required to fully assess agency wide impacts of the proposed investment and may lead to a lower than expected operating plan rating.

- **Operating & Maintenance Cost Estimation Reports** — Include a copy of the O&M costing report for the New Starts Project. Project O&M costs are evaluated for reasonability just as capital costs are within the capital plan. O&M costs which appear too low may pose a risk to the viability of the project operating plan.
- **Review of Recent Operating Experience** — Reviewers conduct an analysis of the local agency's recent operating experience to compare long term trends in operating costs, average fare, ridership, and other key variables with the projected trends implicit in the 20-year cash flow analysis. Local agencies should justify major differences in the historical and projected rates of growth in costs, revenues, and ridership.

Recommendations and FTA Technical Guidance to Grantees

The recommendations outlined here highlight key components of the project financial plan which are often undeveloped or omitted in recent financial plans submissions. They also reflect the experience and understanding of those FTA staff and contractors tasked to conduct these assessments since their inception. The recommendations are intended to help agencies develop stronger and more complete financial submissions which ensure proper recognition of a strong financial plan within the FTA's project rating process.

While submitting agencies are highly encouraged to adopt these recommendations, it is crucial that submission development follows the Federal Transit Administration's *Technical Guidance Report on Section 5309 New Starts Criteria* (September 1997), as well as subsequent guidance updates. Specifically, agencies are directed toward Figure 4.21 on page 4-66 of that document which provides a detailed listing of the documentation required.

Chapter 5. PROJECT PRESENTATIONS

Following is a summary financial assessment of the thirty (30) projects evaluated and rated in the FY 1999 New Starts Report, including a summary of key findings for each project. Each summary contains the substance of the local financial commitment criteria information which the transit agency submitted on the projects, as well as FTA's assessment of that information.

These summary assessments reflect the proposed local share of projects costs, the stability and reliability of the capital financing plan, and the stability and reliability of the operating financing plan for each proposed New Starts project as of November 1997. Project financial rating may change in future years as local financial conditions change and as FTA reviews and analyzes the revised financial documentation.

The complete financial assessments for each FY 1999 New Starts Report proposed project are included in a separate Appendix which, due to size, is available only in limited numbers. The Introduction of this report provides directions on obtaining the Appendix in hard copy and on the FTA Internet Homepage.

Project Phase: FINAL DESIGN

PROJECT

Project: North Central Corridor
Project Location: Dallas, Texas
Lead Agency: Dallas Area Rapid Transit (DART)
Review Date: November 1997
FTA Capital Financing Rating: High
FTA Operating Financing Rating: High

PROJECT SUMMARY

Project Phase: Final Design
Mode: Light Rail
Length: 12.3 miles
Number of Stations: 8 (2 additional stations in future)
Total Estimated Capital Cost: \$503.1 million (YOE \$)
2015 Ridership Forecast: 34,000 daily on LRT Extensions; 17,000 new riders

CAPITAL FINANCING PLAN SUMMARY

Specific costs by category were not provided for the North Central Corridor, although the overall cost per route mile for the project appears reasonable. The financial plan relies on 66.2 percent of project costs to come from Federal Section 5309 New Start funds – an increase in expected Federal commitment from prior financial plans. The use of debt financing to leverage resources is a positive approach and supports FTA’s innovative financing initiative. DART’s local sales tax – a dedicated source of funds for transit – appears very stable as a source for supporting the North Central Corridor project.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

Ongoing operating cost estimates over the twenty-year cashflow period are somewhat lower than experienced in recent years, but appear reasonable given past experience. DART has developed an ambitious capital program, with total capital expenditures estimates at \$4.6 billion over the twenty-year period. This level of effort appears achievable given strong performance by DART’s dedicated sales tax, which is estimated to provide 77.5 percent of all revenue over the period. The projected average annual growth rate of 5.8 percent for this tax appears reasonable, but is higher than the 5.0 percent historical average annual growth rate. DART’s net available cash balance (i.e., after reserve requirements are met) could be impacted if the annual tax revenue growth is closer to 5.5 percent. DART’s significant cash reserves – expected to grow to \$2 billion at the end of the twenty-year period – would likely cover any shortfalls.

PROJECT PLAN OVERVIEW

DESCRIPTION: The North Central Corridor project is part of an ambitious transit capital development program initially approved by the DART Board of Directors in June 1989. This program was recently updated through the FY 1997 Transit System Financial Plan, which would require \$2.9 billion over the next ten year period and over \$4.6 billion in capital funds over the next twenty years. The Transit

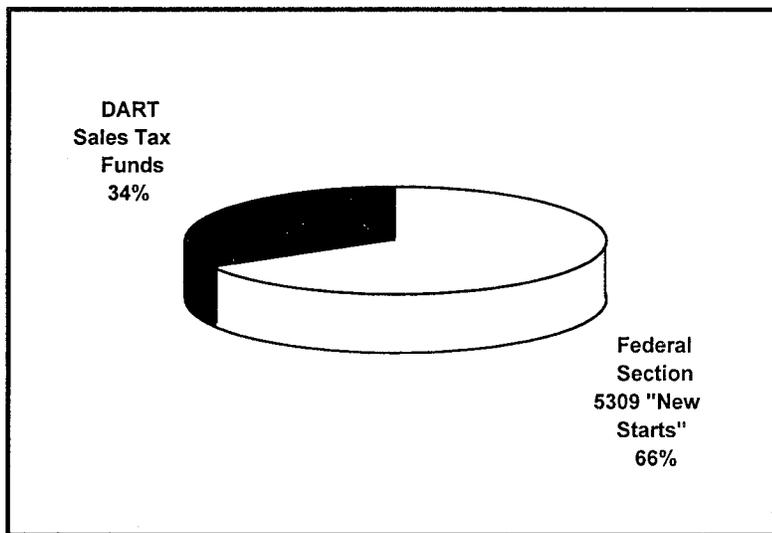
Dallas, TX: North Central Corridor

System Plan calls for several expansions to the light rail system and commuter rail system (57 miles in total). The plan also includes additional high-occupancy vehicle (HOV) facilities. The light rail starter system opened in three phases from June 1996 to July 1997. The North Central Corridor project calls for DART's LRT Starter System to be extended north of Park Lane to Plano. The proposed extension is 12.3 miles long with 8 stations, with two additional stations deferred for future development.

Proposed Sources of Capital Funds – North Central Corridor

	Total Project	
	YOE \$ M	Percent
Federal		
Federal Section 5309 "New Starts"	\$ 333.0	66.2%
Local		
DART Sales Tax Funds	\$ 170.1	33.8%
Total	\$ 503.1	100.0%

Source: FY 1997 Financial Plan



KEY FINDINGS

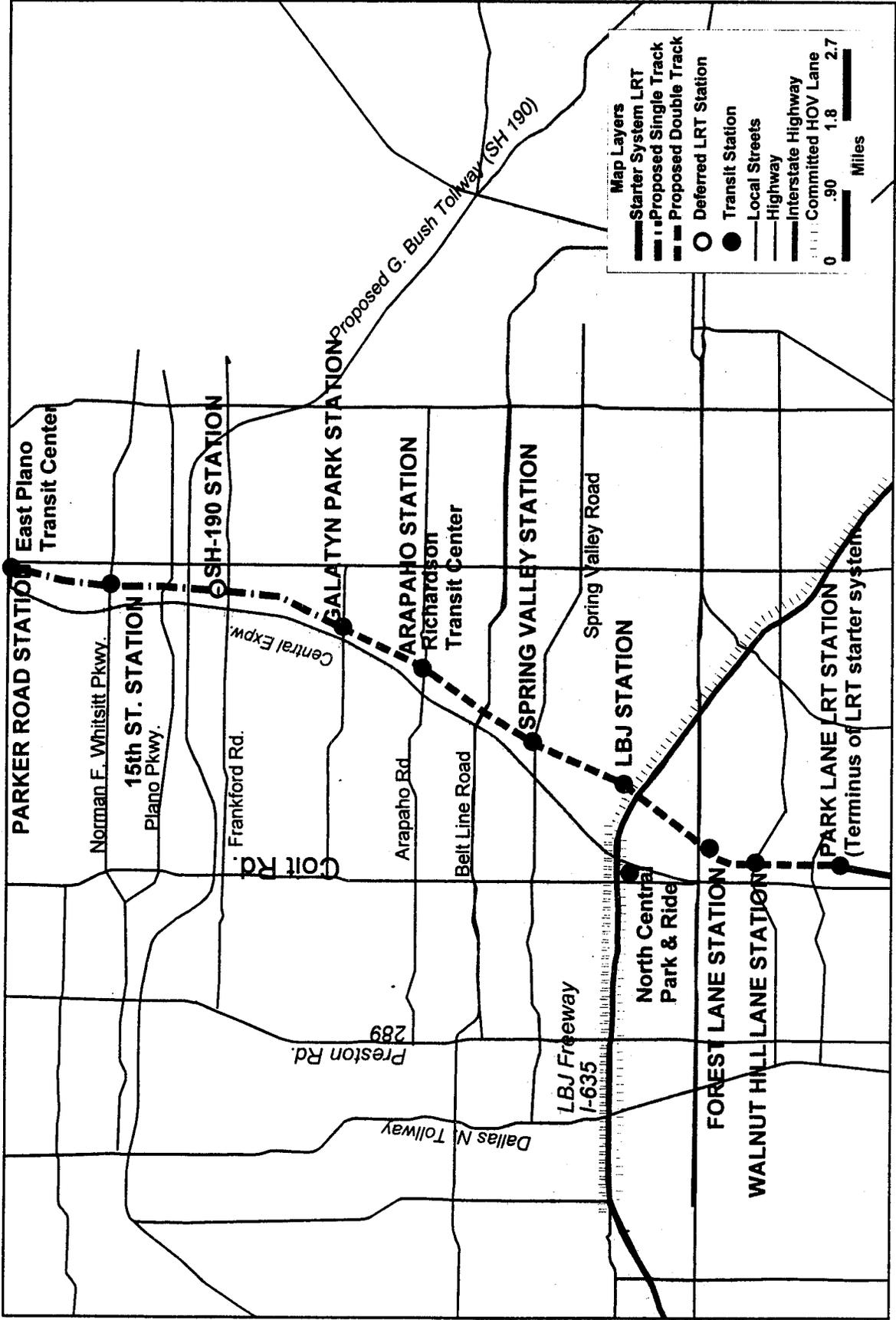
The \$503.1 million North Central Corridor project is only one component (11.0 percent) of the \$4.6 billion transit improvement program being undertaken by DART. In addition to the North Central Corridor Project, this capital investment program includes four additional light rail extensions, bus and paratransit equipment replacement and expansion, a high occupancy vehicle lane (HOV), and commuter rail line development. DART does not present detailed financing plans for the North Central Corridor project, however, it has prepared a comprehensive financial plan for overall capital projects and operations. This financial plan serves as the basis for conducting the financial assessment.

The viability of DART's financial plan depends primarily on revenue from sales tax receipts, projected to provide over 77.5 percent of capital and operating revenue sources. Given the significance of this funding source, the financial plan is sensitive to changes in the rate of growth of sales tax revenue.

However, DART's reserve requirements and other funding contingencies presented in its financial plan demonstrate the plan's ability to cover capital project overruns or shortfalls in projected funding sources. Overall, DART presents a sound financial plan for supporting its capital expansion program and ongoing and additional operations. Related financing issues include the following:

- The North Central Corridor Extension relies upon Federal Section 5309 funds to provide \$333.0 million, representing 66.2 percent of project costs. This is an increase in previous estimates of Federal funding sources covering 50 percent of costs. This increased reliance in Federal funding may prove optimistic and should be considered in the context of financial assessment criteria of the “amount and percentage of non-Federal funding for capital projects sought.”
- The ongoing agency financial plan reduces total short-term debt financing requirements to \$210 million for light rail transit extensions. The maximum debt holdings are within the short term debt capacity based on current debt covenants. With DART's decrease in total debt issuance and overall financial stability, the debt financing component appears sound. The debt financing strategy also supports goals of FTA's innovative finance initiative.
- DART estimates that sales tax receipts, the agency's largest single source of operating and capital funds, will provide \$11.7 billion in operating and capital funds, over 77.5 percent of all of all revenue sources. DART projects this source of funds to grow at an average annual rate of 5.8 percent compared with a 5.0 percent average annual rate experienced between 1987 and 1995. The projected growth rate appears reasonable given the positive economic forecast projected for the Dallas region. A sensitivity analysis demonstrates that should tax revenue growth average closer to 5.5 percent, DART would likely experience negative net available cash balances (i.e., after reserve requirements have been met) early in the next century.
- Ongoing agency operating expenses are projected to increase from \$215.2 million in 1998 to \$511.3 million in 2017. This average annual increase of 4.7 percent is just slightly lower than the 4.8 percent annual growth in operating expenses experienced between 1987 and 1995. Overall, the operating cost projects appear reasonable given past experience and results of sensitivity analyses.

North Central LRT Dallas, TX



Fort Lauderdale, FL: Tri-County Commuter Rail

PROJECT

Project: Tri-County Commuter Rail Project
Project Location: Fort Lauderdale, Florida
Lead Agency: Tri-County Commuter Rail Authority (TCRA)
Review Date: November 1997
FTA Capital Financing Plan Rating: Low
FTA Ongoing Agency Financial Plan Rating: Low-Medium

PROJECT SUMMARY

Project Phase: Final Design
Mode: Commuter Rail
Length: 71 miles
Total Estimated Capital Cost: \$573.1 million (\$1997)

CAPITAL FINANCING PLAN SUMMARY

Total project cost for the Tri-County Commuter Rail Project is \$573.1 million in 1997 dollars. The capital financing plan for the project estimates a total Federal share covering 60.9% of project capital costs; including a total New Starts Capital Program (Section 5309) contribution of \$270.7 million and a further \$24.3 million from Section 5309 Bus Allocation funds. The remaining \$224.1 million (39.1%) in local match is expected to come from state sources although the specific funding sources (e.g., sales tax revenues, state capital assistance programs, etc.) are not identified in the current financial plan.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The financial plan submitted by the Tri-County Commuter Rail Authority (TCRA) provides two sources of operating and maintenance cost data including a 5-year projection of operating needs for the South Florida Corridor and a fifteen year budget projection for TCRA. There are a number of discrepancies between these sources making it difficult to assess the strength of the underlying operating plan. Also, the financial plan does not provide text describing the sources of funds including their histories, availability or capacity and reliability.

PROJECT PLAN OVERVIEW

DESCRIPTION: The Tri-County Commuter Rail Project includes a range of measures intended to upgrade the existing 71-mile South Florida Rail Corridor. These improvements include the following elements:

- Laying second mainline track (double tracking)
- Signal system rehabilitation
- Station improvements
- Parking expansions
- Expansion of rolling stock

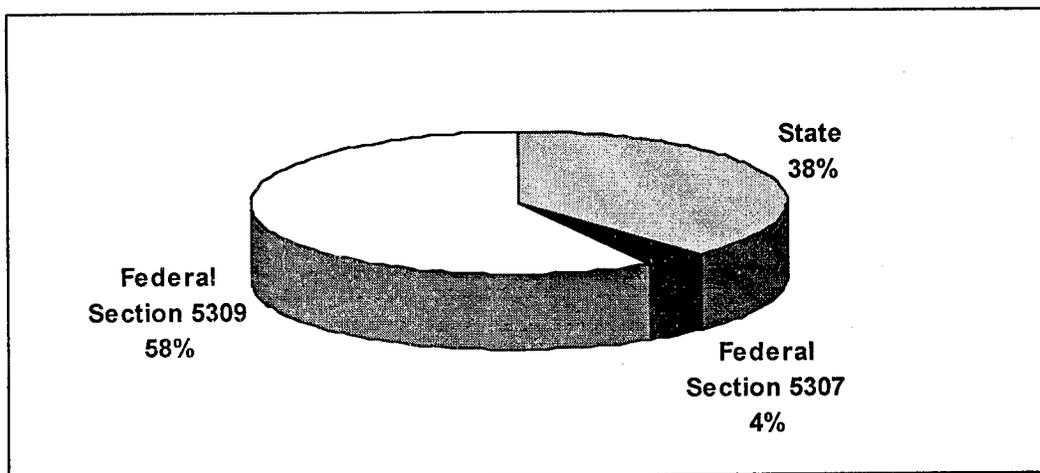
Fort Lauderdale, FL: Tri-County Commuter Rail

The current financial plan does not state the exact number of track miles (i.e., undergoing double tracking or signal rehabilitation), stations, parking lots, or vehicles covered by the estimated \$573.1 million in project costs.

Proposed Sources of Capital Funds — TCRA

Source	Total Project	
	1997 \$ M	Percent
Federal		
Section 5309 New Starts Committed	\$ 270.7	47.2 %
Section 5309 Bus	54.0	9.4 %
Section 5307 Formula	24.3	4.2 %
State and Local		
“State”	\$ 224.1	39.1 %
Total	\$ 573.1	100.0 %

Source: TCRA



KEY FINDINGS

The financial materials provided by TCRA do not identify a specific source of state funding to meet the local match. Furthermore, the materials do not mention the use of local funds, the need for bonding, or the potential use of innovative financing techniques. Other potential concerns with the financial plan include the following:

- The materials provided do not specify whether the analysis is in year of expenditure or current year dollars.
- The financial plan does not describe the sources and uses of capital and operating funds, the stability and reliability of each source, or the availability and capacity of each source. Furthermore, the capital cash flow provided does not appear to cover the full project development period.

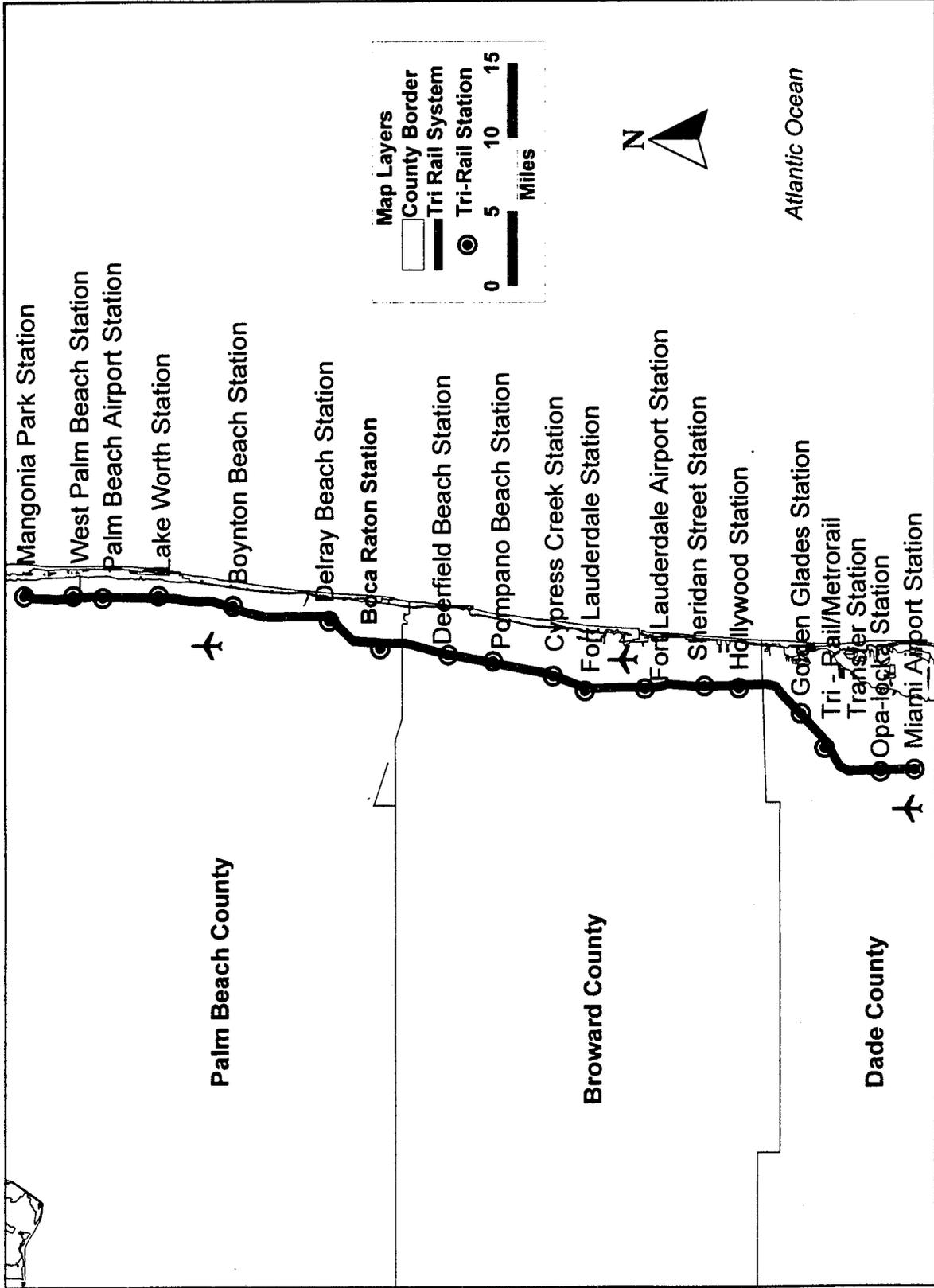
Fort Lauderdale, FL: Tri-County Commuter Rail

- The materials provided do not clearly state the increase in annual operating costs anticipated from the opening of the expanded rail facilities.
- The text does not describe the specific sources of state and local operating funds proposed for the expanded facilities including their names, histories, availability, capacity or reliability.

In refining its financial plan, TCRA should provide greater detail regarding the sources of capital and operating funds, the stream of payments expected from these sources, the commitment of the state to provide these funds, and sufficient fund histories to assess the stability and reliability of these sources.

Tri-County Commuter Rail

Fort Lauderdale, FL



PROJECT

Project:	RAILTRAN Project — Phase 2
Project Location:	Fort Worth, Texas
Lead Agency:	Fort Worth Transportation Authority (FWTA)
Review Date:	November 1997
FTA Capital Financing Rating:	Low-Medium
FTA Operating Financing Rating:	Low-Medium
Significant Features:	Joint project between FWTA (Phase 2) and DART (Phase 1); \$39.4 million or 1/3 proposed funding using CMAQ funds; Privatization of system operations

PROJECT SUMMARY

Project Phase:	Final Design
Mode:	Commuter Rail
Length:	25 miles
Number of Stations:	6 stations
Total Estimated Capital Cost:	\$135 million

CAPITAL FINANCING PLAN SUMMARY

Total capital costs for Phase 2 of the RAILTRAN project are \$135 million in 1997 dollars. This amount includes \$118.6 million for the commuter rail system and \$16.4 million for the Intermodal Transportation Center (ITC). Under the current financial plan \$104.3 million or 77.3 percent of these funds are expected to come from Federal sources including \$63.8 million from the New Starts Capital Program (Section 5309) funds and \$39.4 million from Congestion Mitigation Air Quality (CMAQ) funds.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

Operating and maintenance expenses are projected to increase from an initial \$9.02 million annually in FY 2000 to \$15.3 million in 2017 (primarily due to inflation). These costs appear reasonable given the characteristics of the system. Under the current operating plan, DART will cover 100% of the commuter rail operator's operating deficit for fiscal years 1998 and 1999. Thereafter, DART will pay 59.6% of the annual operating deficit with FWTA paying the balance. These shares are based on the predicted ridership splits between Dallas and Fort Worth Based system users.

PROJECT PLAN OVERVIEW

DESCRIPTION: The RAILTRAN corridor extends 35 miles between the cities of Dallas and Fort Worth, Texas. Heading westward, the corridor extends from the Dallas Central Business District (CBD) through Dallas' Medical Market Center, South Irving, Hurst, and Richmond Hills and terminates in the Fort Worth CBD. DART began planning Phase 1 of the commuter rail project over the ten mile segment between Union Station in downtown Dallas to the South Irving Transit Station in the late 1980's. This line, the Trinity Express, is currently in revenue service. Acting under an Interlocal agreement, DART

Fort Worth, TX: RAILTRAN Project – Phase 2

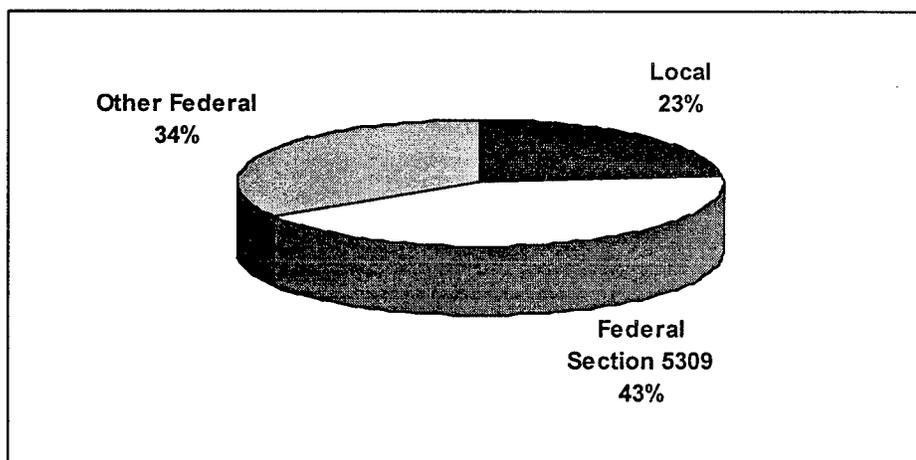
and FWTA initiated Phase 2 of the project which will complete system development over the additional 25 miles from the South Irving Transit Station into downtown Fort Worth. The Phase 2 expansion is the focus of this financial assessment profile. Total capital costs for Phase 2 are \$135.0 million (\$1997).

The completed system will feature air-conditioned passenger cars with bi-directional service to avoid the need for switching at either terminus. The completed system is also expected to include ten stations, six of which are included in the Phase 2 development. In addition to the Commuter Rail portion of the project, FWTA is also pursuing development of the related Fort Worth Intermodal Transportation Center (ITC) at a cost of \$16.4 million. Total project cost for Phase 2 is estimated to be \$135 million including \$118.6 million for the commuter rail system and \$16.4 million for the ITC.

Proposed Sources of Capital Funds — FWTA

Source	Total Project	
	1997 \$ M	Percent
Federal		
Section 5309 – Committed	\$53.1	39.3 %
Section 5309 – Uncommitted	\$10.7	7.9 %
Section 5307 Formula	\$ 0.1	0.1 %
STEP	\$ 1.0	1.0 %
CMAQ	\$39.4	29.2 %
State and Local		
Fort Worth Transit Authority (FWTA)	\$15.3	11.3 %
Dallas Area Rapid Transit (DART)	\$ 1.4	1.0 %
RAILTRAN	\$ 7.4	5.5 %
Tarrant County and Cities	<u>\$ 6.5</u>	<u>4.8 %</u>
Total	\$ 135.0	100.0 %

Source: FWTA - Includes ITC



KEY FINDINGS

Given its larger share of project responsibilities and smaller financial base, the financial viability of Phase 2 of the RAILTRAN Project depends primarily on the strength of FWTA’s financial plan. Hence

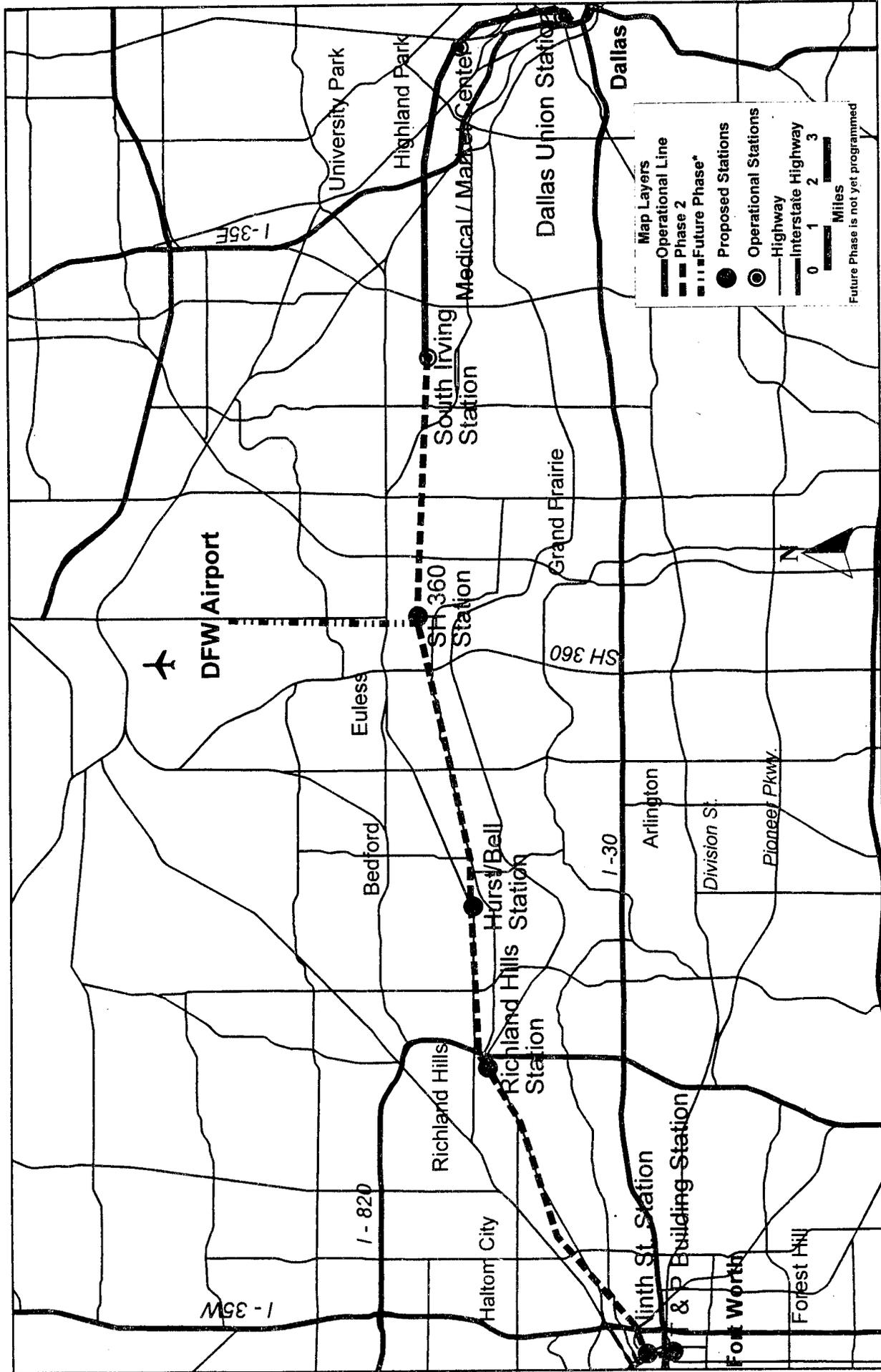
Fort Worth, TX: RAILTRAN Project – Phase 2

this financial assessment profiles focuses on FWTA, with less emphasis on the other project participants. Potential problems with the project's financial plan include the following:

- Approximately \$10.7 million or 9% of project costs remain uncommitted. The current financial plan assumes that these funds will be obtained from FTA sources (most likely Section 5309). These uncommitted project funds represent the most significant risk to RAILTRAN's financial plan. The currently committed Section 5309 funds account for \$53.1 million or 33.7% of project capital costs.
- FWTA's \$12.1 million local match is to be derived from the agency's 0.5% local sales tax. This source is currently the primary source of funds used to cover FWTA's annual operating deficit and also functions as a primary source of capital funds. While the financial plan's cash flow projections for this source are reasonable given the historic flow of funds from this source, these funds remain insufficient to fully fund both operating and capital uses over the early years of the project. Rather, to meet these needs, FWTA must draw down its cash balances by \$8.8 million (from a high of \$37.7 million in 1998 to \$28.9 million at the close of 2001). Even with this drawdown, FWTA retains significant cash-balances with which to cover unexpected cost overruns.

RAILTRAN Phase 2

Dallas - Fort Worth, TX



New Orleans, LA: Canal Streetcar Light Rail Transit

PROJECT

Project:	Canal Streetcar Light Rail Transit
Project Location:	New Orleans, Louisiana
Lead Agency:	New Orleans Regional Transit Authority (RTA)
Review Date:	November 1997
FTA Capital Financing Rating:	Low-Medium
FTA Operating Financing Rating:	Low-Medium
Significant Features:	Innovative financing in the form of right-of-way donations, material donations, and sponsorships of shelters is projected to cover about three percent of project costs.

PROJECT SUMMARY

Project Phase:	Final Design
Mode:	Streetcar
Length:	4.7 miles
Total Estimated Capital Cost:	\$136.4 million

CAPITAL FINANCING PLAN SUMMARY

Capital cost estimates for the Canal Streetcar Light Rail Transit (LRT) project appear reasonable. The New Orleans Regional Transit Authority's (RTA) reliance on Federal funds to cover 80 percent of project costs may prove optimistic given potential reductions in Federal capital support for transit. The RTA has confirmed State support to cover the majority of the 20 percent local match through General Obligation bonds. The remaining local match – consisting of right-of-way donations by the City of New Orleans, materials donations, and sponsorships – is not confirmed. The RTA intends to offset any deficiencies in the local match through the sale of bonds, although further information and confirmation of this contingency plan was not presented.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The ability to fund ongoing operations of the system is somewhat questionable given recent negative operating balances experienced by the RTA. The RTA indicates it has initiated “an aggressive cost reduction program,” but has not demonstrated results of this strategy. Operating and maintenance costs are projected to increase at a lower rate than experienced in past years. While recent ridership declines may present challenges to fare revenue projections, retail sales tax sources (48 percent of operating funds) appear stable. The ongoing capital financing plan does not define specific capital project needs or confirm stability and availability of state or local fund sources. It also relies heavily on Federal support to cover 80 percent of ongoing capital project expenses.

PROJECT PLAN OVERVIEW

The Canal Streetcar LRT project is a proposed 4.7-mile streetcar system in downtown New Orleans. The RTA is sponsoring the project, which represents an extension to the existing streetcar system operated by the RTA. The alignment begins at the foot of Canal Street, near the existing Riverfront streetcar line. It

New Orleans, LA: Canal Streetcar Light Rail Transit

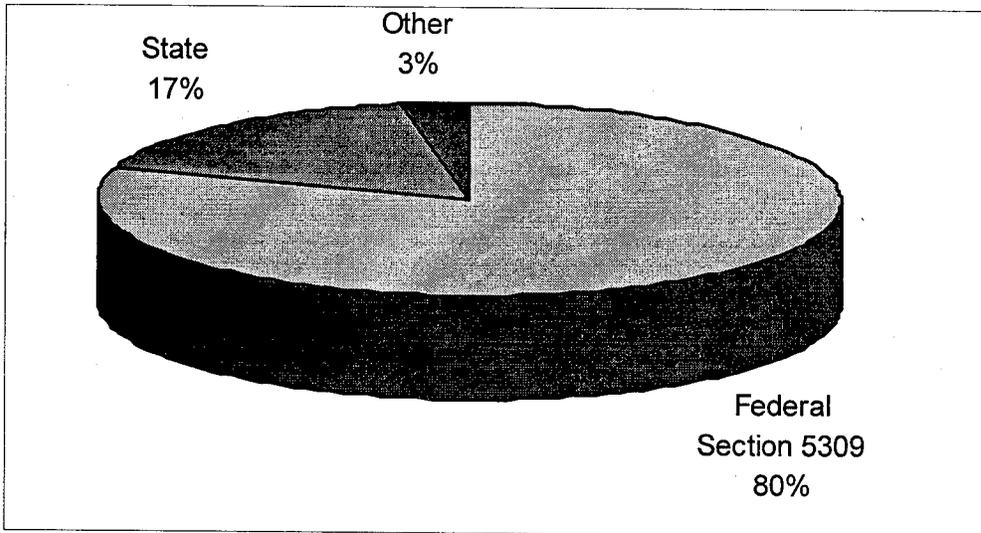
would run in the center of Canal Street and pass along the Central Business District (CBD) and the French Quarter, where it would utilize an existing dedicated busway for the right-of-way.

The project has two spurs at Carrollton Avenue, with one continuing on Canal Street to Barnadotte/Anthony Streets and terminating at the cemeteries. The second spur follows Carrollton Avenue to City Park. The project also includes construction of a rail maintenance facility for storage, inspection and service of the Canal Street and Riverfront streetcar fleets. The project also includes the purchase of vehicles to support the new service.

Proposed Sources of Capital Funds – Canal Street LRT IOS

	2000 \$ Millions	Percent
Federal		
Federal Section 5309 "New Starts"	\$ 109.1	80.0%
State		
State Capital Outlay Budget	\$ 23.5	17.2%
Other		
ROW Donations	\$ 2.2	1.6%
Material Donations	\$ 0.4	0.3%
Sponsorships	\$ 1.2	0.9%
Total	\$ 136.4	100.0%

Source: FEIS (July 1997)



Source: FEIS (July 1997)

KEY FINDINGS

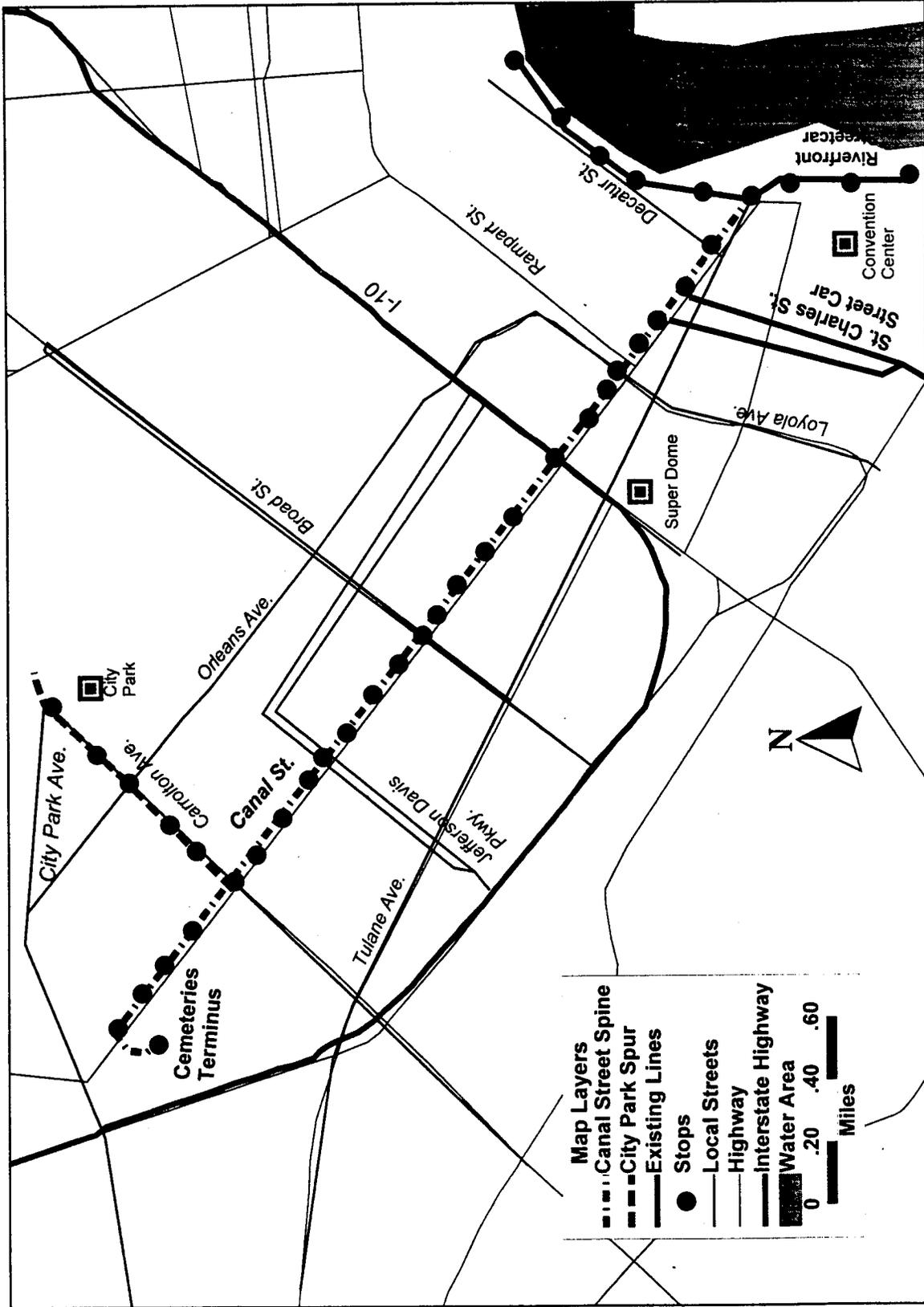
The RTA’s reliance on Federal funds to cover 80 percent of Canal Streetcar LRT project costs may prove optimistic given potential reductions in Federal capital support for transit. The RTA has confirmed State support to cover the majority of the local match, with the remainder derived from right-of-way contributions and donations. The ability to fund ongoing operations of the system is somewhat questionable given recent negative operating balances experienced by the RTA. The ongoing capital

New Orleans, LA: Canal Streetcar Light Rail Transit

financing plan relies heavily on Federal support and does not confirm stability and availability of state or local fund sources. Additional detail regarding these and other project financing issues is presented below:

- The RTA intends to rely solely on Federal Section 5309 New Start funds to cover 80 percent of project costs, about \$109.1 million. Financial assessments strongly consider the “amount and percentage of non-Federal funding for capital projects sought.” Considering this context and given potential reductions in Federal capital support for transit, this exclusive reliance on Federal funds to cover 80 percent of capital project costs may prove optimistic and present future funding challenges.
- Overall, support for the 20 percent local match for the project appears stable. The State of Louisiana’s contribution to the project through general obligation bonds was confirmed. Right-of-way donations, materials, and sponsorship funds were not confirmed. The RTA plans to “offset any deficiency in donations or sponsorships through the sale of bonds,” although further confirmation of this contingency plan was not presented.
- The twenty-year operating cashflow presents a negative operating balance in the first year of the plan, but recovers to a positive balance after 1998. This is a point of concern given the decrease in the operating balance demonstrated in recent years. The RTA indicates it has initiated “an aggressive cost reduction program,” but has not demonstrated results of this strategy.
- Agency operating and maintenance costs (including bus and LRT) are projected to rise from \$82.9 million in 1996 to \$145.5 million in 2016. This represents an average annual increase of 2.7 percent over the period, which is somewhat lower than the 4.6 percent increase in operating expenses experienced by RTA from 1991 through 1995. If total expenses increase at an average annual rate of 3.0 percent over the period, the RTA would experience an operating deficit in 2004 that would continue through 2016.
- The twenty-year capital plan does not confirm stability and availability of state or local fund sources. It also does not define specific capital project needs over the period. The projected costs of the Canal Streetcar line included in the cashflow are somewhat less than those in the project capital plan. The ongoing capital plan also places heavy reliance on Federal funds to cover 80 percent of all capital needs.

Canal Streetcar Spine New Orleans, LA



Project Phase: PRELIMINARY ENGINEERING

PROJECT

Project: Northwest/North Central Corridor
Project Location: Austin, Texas
Lead Agency: Capital Metropolitan Transportation Authority (CMTA)
Review Date: November 1997
FTA Capital Financing Rating: Medium-High
FTA Operating Financing Rating: Medium-High
Significant Feature: Capital Metro will allocate ¼ cent of the sales tax revenue for years 1999 through 2002 to provide Capital funding for the Red Line.

PROJECT SUMMARY

Project Phase: Preliminary Engineering
Mode: Light Rail
Length: 30 Miles
Total Estimated Capital Cost: \$182.3 Million
2020 Ridership Forecast: 27,000 daily

CAPITAL FINANCING PLAN SUMMARY

Capital Metropolitan Transportation Authority (Capital Metro) has projected 50% local funding for this project. Capital Metro will provide this amount of local funding from sales tax revenues, fully-funded reserves and short-term borrowing. Capital Metro currently receives one-cent of a local sales tax. Capital Metro will keep current operating costs contained to the ¾-cent level while using the additional ¼ cent to provide capital funding for the Northwest/North Central Corridor.

OPERATING FINANCING PLAN SUMMARY

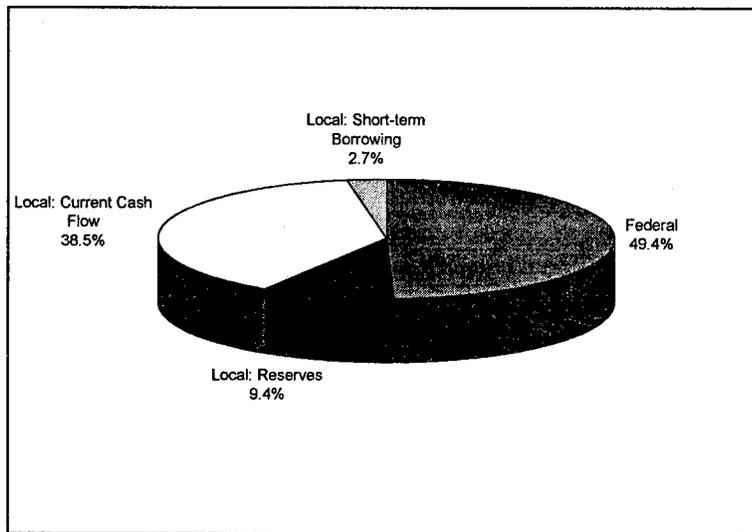
Capital Metro will be able to fund Red Line operations if the agency continues to receive 1-cent of the sales tax. Thanks to the 1-cent sales tax revenue, Capital Metro had operating surpluses in 1995 and 1996. The agency also projects operating surpluses when the Red Line begins operations in year 2002. However, if the 1-cent sales tax revenue were to be reduced to the previous ¾-cent level, the projected surplus would be eliminated with the Red Line in service.

PROJECT PLAN OVERVIEW

Capital Metro is proposing to build a 30-mile rail transit line from downtown Austin north to the city of Leander. This line through the Northwest/North Central Corridor will be called the "Red Line" and will use the Giddings-Llano Railroad right-of-way, which has been purchased with Federal funds for mass transit. Construction is scheduled to begin in the year 2000 and operations are scheduled to begin in year 2002.

Proposed Source of Capital Funds

Source	Total Project	
	YOE \$ M	Percent
Federal	\$ 90.0	49.4%
Local		
Reserves	\$ 17.1	9.4%
Current Cash Flow	\$ 70.2	38.5%
Short-Term Borrowing	\$ 5.0	2.7%
Total	\$182.3	100%



KEY FINDINGS

- The information provided by Capital Metro shows that the Red Line is a transportation facility that is needed for the growing Austin metropolitan area and that the project can be constructed without imposing a heavy local financial burden. Thanks to the benefits of the sales tax, the Red Line will be built and operated with only minimal debt service.
- Capital Metro is heavily reliant on the 1-cent sales tax to fund its capital and operating needs. With the sales tax receipts, Capital Metro was able to have positive operating balances in 1995 and 1996. For funding of the Red Line, Capital Metro will use the sales tax receipts for both capital and operational needs.
- The impressive growth in the Austin metropolitan area means that the sales tax receipts will continue to grow for Capital Metro. Additionally, this growth will increase the need for the Red Line as the roads around Austin become more congested. As long as Capital Metro continues to receive the 1-cent sales tax, the Red Line is a financially viable project. However, if the percentage of the sales tax received is lowered, Capital Metro

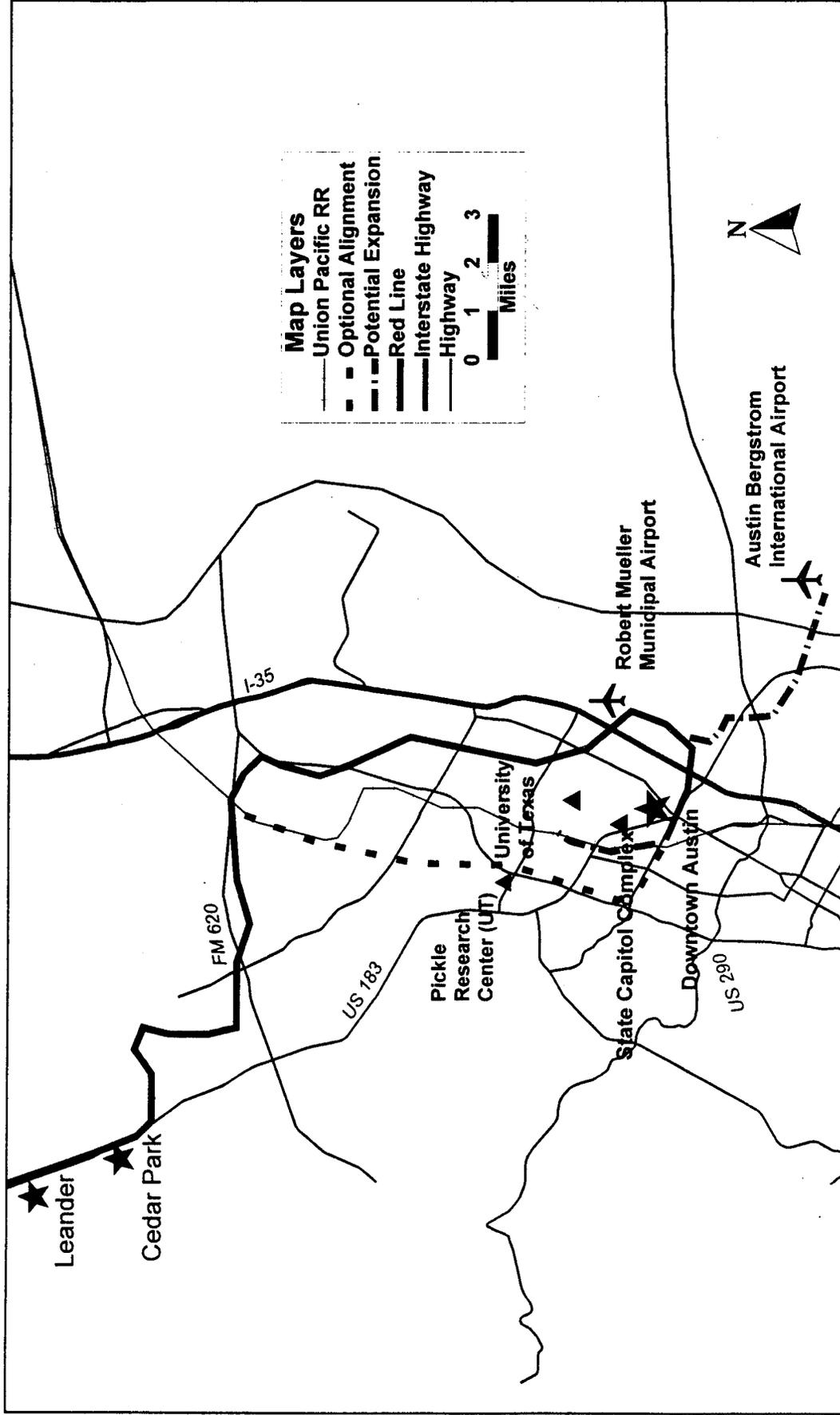
Austin, TX: Northwest/North Central Corridor

will have to determine how to compensate for a significant decrease in funding capability.

- Recent developments at Capital Metro and the new financial data provided by the Authority show many differences with the information available when the Red Line proposal was reviewed in November 1997. The new Capital Metro Board is unsure whether it wants to proceed with the project. While the Authority is still receiving the 1-cent sales tax revenue, the Board has not decided whether to use ¼ cent of this revenue for the Red Line. Additionally, this new Board will want to put any expenditures on capital rail projects to a vote; a referendum was not expected in November 1997. The new 20-Year Cash Flow Summary shows that borrowing for the project will be needed by year 2002; the old 20-Year Cash Flow Summary had the Red Line project funded without debt service.
- The Capital Metro board is to decide shortly (mid-May) on a policy regarding the additional 1/4-cent sales tax revenue. This decision should determine whether the Authority wants to go ahead with the Red Line project.

Northwest - North Central Corridor

Austin, TX



PROJECT

Project:	South Boston Piers Transitway, Phase 2
Project Location:	Boston, Massachusetts
Lead Agency:	Massachusetts Bay Transportation Authority (MBTA)
Review Date:	November 1997
FTA Capital Financial Rating:	Low-Medium
FTA Operating Financial Rating:	Low-Medium

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Rail
Length:	1.5 miles
Number of Stations:	2 stations
Total Estimated Capital Cost:	\$258 million (\$1996)

CAPITAL FINANCING PLAN SUMMARY

The estimated capital cost for the South Boston Piers Transitway – Phase 2 is \$258 million in 1996 dollars. To fund this investment, MBTA anticipates a Federal New Starts Capital Program (Section 5309) fund contribution of \$206.4 million or 80% of project capital costs. The remaining \$51.5 million (20%) is to come from a mix of state and local sources including MBTA bond issues and the State Contract and Assistance Program. MBTA issues bonds to cover the local share of most capital projects. MBTA states it has “sufficient financial capacity to service this debt through fare, state, local, and other revenue sources”. Under state law, the state will cover up to 90 percent of MBTA debt service charges incurred for capital expenditures as needed. MBTA proposes use of this mechanism to fund capital expenditure shortfalls. Note, however, that the plan does not fully specify the level of funding anticipated from specific local sources (e.g., fares) or how much state assistance is expected to be required or the state’s willingness to pay.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The materials submitted did not include a cash-flow analysis of ongoing capital and operating costs for MBTA. However, based on the 1993 FEIS financial plan, the annual operations and maintenance costs for the Phase 2 South Boston Piers tunnel extension are expected to be only marginally higher than the existing costs.

Of greater concern is the \$9.66 billion in capital needs over the period 1997-2020 including \$1.98 billion for new projects (including the South Boston Piers Project) and \$7.68 billion for capital reinvestment. Other significant capital projects under consideration but not included in the above include a further \$1 billion to \$4 billion in new capital investments.

Boston, MA: South Boston Piers Transitway, Phase 2

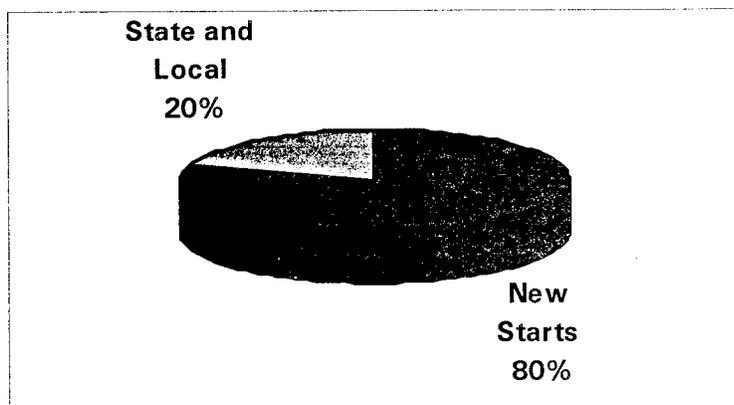
PROJECT PLAN OVERVIEW

The full build South Boston Piers Transitway Project consists of a 1.5 mile underground transit tunnel between Boylston Station and the World Trade Center, five underground rail transit stations, and numerous bus stations and connecting bus services. Given the presence of financial constraints, the project was split into two parts with the initial phase (Phase 1) already under construction and due for completion in 2002. Phase 1 construction covers the segment between South Station and the World Trade Center and includes three of the five underground stations. The second phase (Phase 2 – the focus of this financial assessment profile) extends the tunnel from South Station to Boylston Station and includes the final two underground transit stations. It is not expected that the state will proceed with construction until at least the year 2002 when Phase 1 opens. Phase 2 is scheduled to open in 2008. Total capital costs for Phase 2 are estimated at \$258.0 million in 1996 dollars.

Proposed Sources of Capital Funds — MBTA (\$1996)

Sources	Total Project	
	1996 \$ M	Percent
Federal Section 5309 New Starts	\$ 206.4	80.0 %
State and Local	\$ 51.6	20.0 %
Total	\$ 258.0	100.0 %

Source: Final Environmental Impact Statement: South Boston Piers Transit Project (12/93)



KEY FINDINGS

The financial analysis for the South Boston Piers Project is derived almost entirely from the 1993 FEIS for the South Boston Piers / Fort Point Channel Project. Phase 2 of the South Piers component represents the second and last South Boston Piers phase. The South Piers project was split into two phases due to local funding constraints. MBTA proposes to finance the South Boston Piers Phase 2 project using debt financing but does not provide an analysis outlining the specific local funding sources intended to meet Phase 2 debt service obligations. Other financing issues include the following:

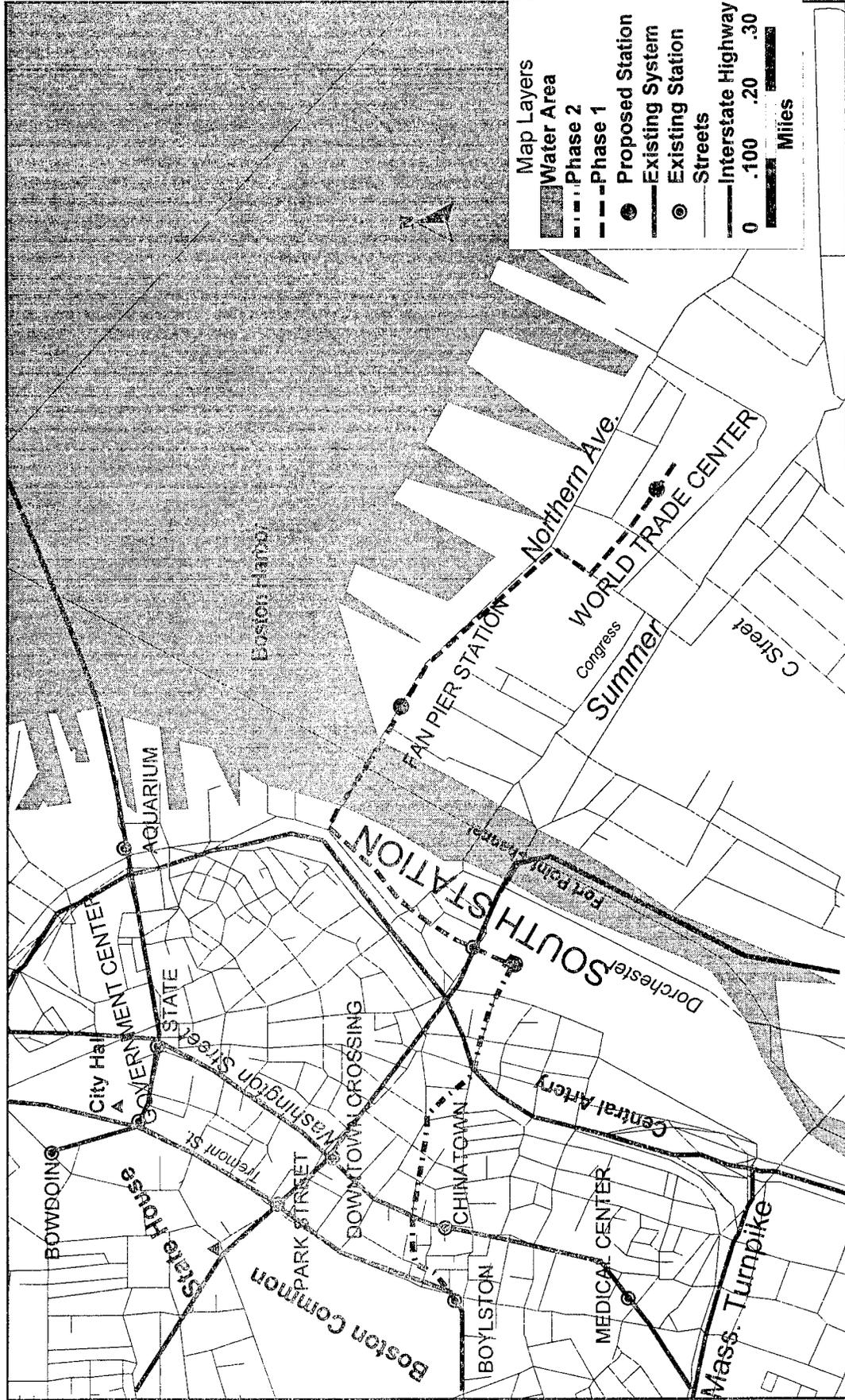
Boston, MA: South Boston Piers Transitway, Phase 2

- Under Massachusetts law, the state covers up to 90% of the debt service charges incurred by MBTA for capital expenditures. MBTA proposes utilization of this mechanism to meet excess Phase 2 debt service costs not covered by local sources but does not indicate the state's willingness or ability to meet these funding expectations.
- The local MPO projects total capital needs over the period 1997-2020 to be \$9.66 billion including \$1.98 billion for new projects (including the South Boston Piers Project) and \$7.68 billion in capital reinvestment needs. This represents a significant level of overall capital needs over the coming twenty-year period.

In refining its financial plan for Phase 2 of the South Boston Piers Project, MBTA should better specify the proposed sources of funds, the amount expected from each source, and the time periods over which funds are expected.

South Boston Piers Transitway, Phase II

Boston, MA



Cleveland, OH: Euclid Corridor Improvement Project

PROJECT

Project:	Euclid Corridor Improvement Project
Project Location:	Cleveland, Ohio
Lead Agency:	Greater Cleveland Regional Transit Authority (GCRTA)
Review Date:	November 1997
FTA Capital Financial Rating:	Low-Medium
FTA Operating Financial Rating:	Low-Medium

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Heavy Rail/Bus
Length:	5.6 miles
Number of Stations:	6 stations
Total Estimated Capital Cost:	\$332.5 million

CAPITAL FINANCING PLAN SUMMARY

The scheduled completion date of the capital financing plan is June 1998. Development of this plan will include looking at financing available from a number of sources, including state, local, Federal, transit agency, and the private sector. The plan will identify all sources expected to contribute capital funds. It is not possible to identify specific local match sources at this time.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The operating financing plan is scheduled for completion in June 1998. Development of this plan will include consideration of the financing available from a number of sources, including state, local, Federal, transit agency, and private sources. The plan will identify all sources expected to contribute operating funds. The transit agency currently covers the majority of operating deficits from a dedicated (one percent) sales tax. The agency's 1997 budget includes estimates of four-percent annual growth in sales tax revenues, which is slightly above inflation. Passenger fare revenues are expected to grow by two percent a year, which is higher than the growth over previous years.

PROJECT PLAN OVERVIEW

The Greater Cleveland Regional Transit Authority (GCRTA), in partnership with the City of Cleveland, is proposing to design and construct a 5.6 mile corridor incorporating exclusive bus lanes and related capital improvements from Public Square in downtown Cleveland east to University Circle. The proposed project is called the Euclid Corridor Improvement Project (ECIP). In addition, six stations along the existing Red Line (heavy rail) will be either relocated or reconstructed in order to spur economic development and improve access between the stations, surrounding neighborhoods, and employment centers.

The project has four major components: Euclid Avenue, East 17th and 18th Street Transit/Auto Pairs, the St. Clair/Superior Transit Zone, and Red Line Station reconstruction and relocations. The major project consists of improvements to the Euclid Avenue right-of-way to allow for improved bus service.

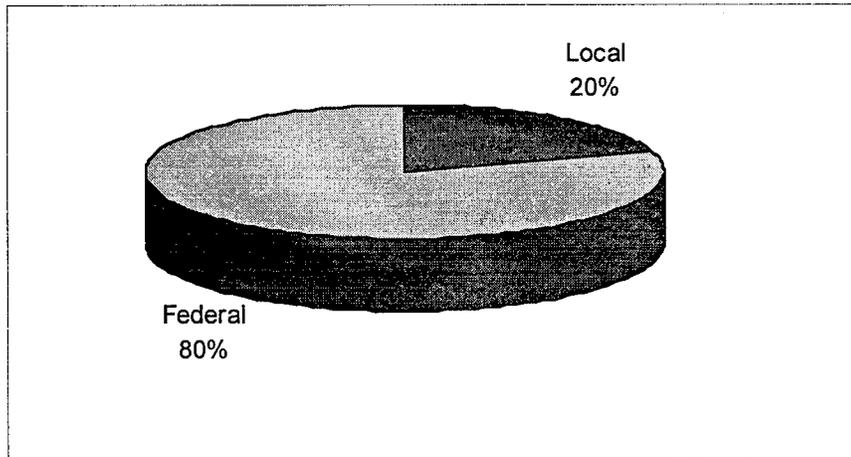
Cleveland, OH: Euclid Corridor Improvement Project

Improvements will include reconstruction of the roadway, signal improvements, upgraded lighting, crosswalks and bus stops, and improved signage.

The project also includes the East 17th/18th one way pairs, which will construct one way streets on the entire right-of-way of East 17th and 18th streets between the Inner Belt and Lakeside Avenue to facilitate the North-South movement of buses and other vehicles through Downtown Cleveland. The St. Clair/Superior Transit Zone will include improvements to provide expanded and highly visible bus service in the Central Business District. Work will include improved facilities for transfer between crosstown bus routes, improved pedestrian access to transit facilities, and roadway improvements to allow for better bus service. The final component is the selected relocation or reconstruction of Red Line (heavy rail) stations. Three stations will be relocated and three reconstructed in order to allow for improved accessibility between the stations and neighborhoods and to meet the requirements of the Americans with Disabilities Act.

Proposed Sources of Capital Funds - GCRTA ECIP

Source	Total Project	
	\$ M	Percent
Federal Section 5309 New Starts	\$ 266.5	80%
Local Transit Agency	\$ 66.5	20%
Total	\$ 332.5	100%



KEY FINDINGS

In the absence of a financial plan specific to the ECIP, the percentage of local versus Federal share of project funding is uncertain. For planning purposes, the GCRTA is assuming that maximum Federal funding, 80% of the project cost, will be received. The GCRTA is financially sound and has a bond rating of A. The capacity to add debt may be a problem given that the agency issued \$70 million in General Obligation Capital Improvement Bonds in 1996.

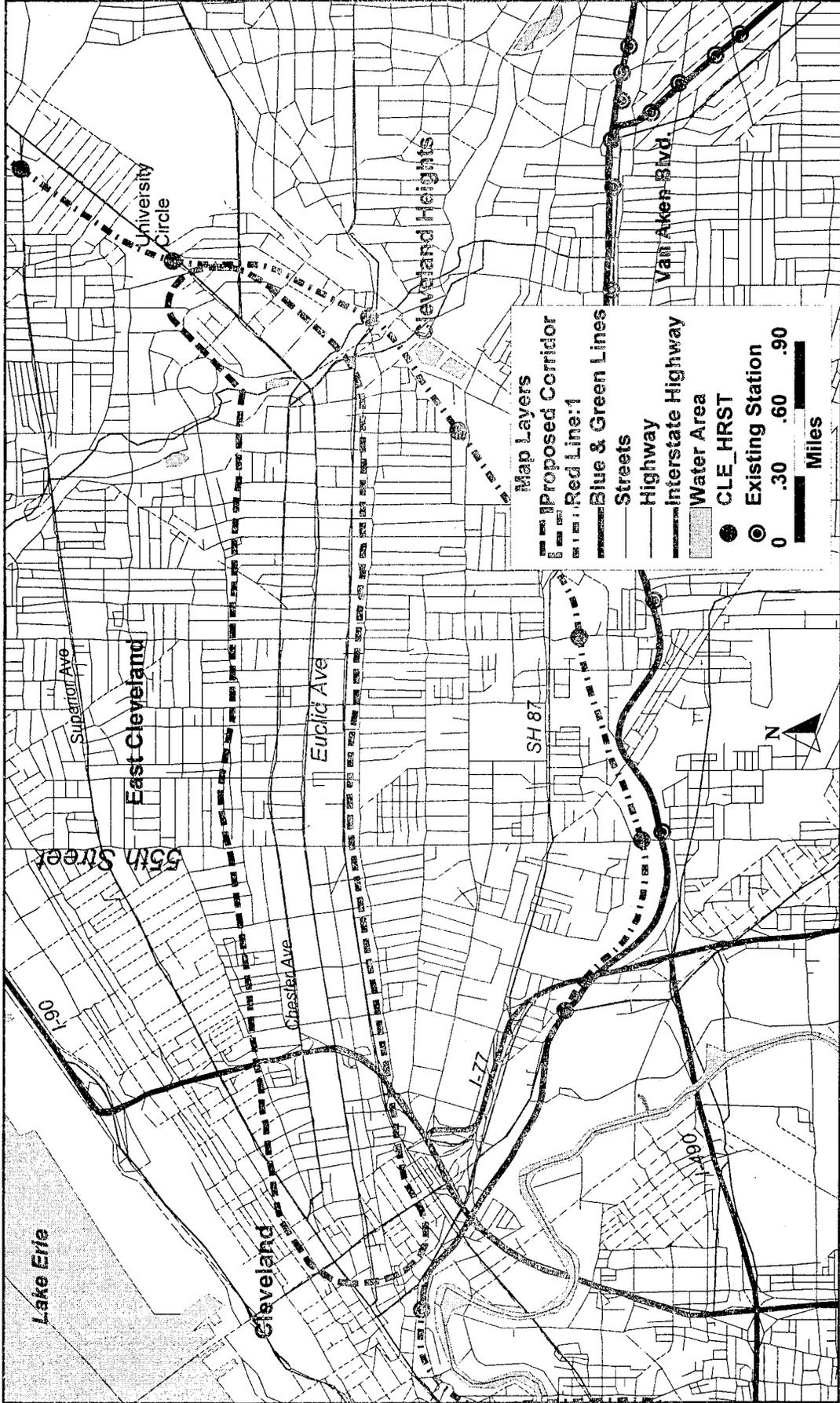
Cleveland, OH: Euclid Corridor Improvement Project

An additional concern is the overall drop in bus ridership, which accounts for the majority of passenger trips, since 1990. There was a small increase from 1995 to 1996, but this did not come close to bringing ridership up to levels of 10 years ago. Increases in ridership have occurred in heavy and light rail, but these increases are modest. Only heavy rail had an increase in passenger trips between 1990 in 1996.

While these conditions do suggest areas of concern, potential questions should be considered within the broader context of GCRTA's financial strengths and its demonstrated managerial capabilities, including its recent successful completion of a major expansion project using state and local funds, for which it has been able to cover operation costs. The sales tax revenue should continue to be sufficient as long as the region's economy remains strong. The diversity of the economy is an important factor contributing to long-term stability.

Euclid Corridor

Cleveland, OH



PROJECT

Project:	Southeast Corridor Project
Project Location:	Denver, Colorado
Review Date:	November 1997
FTA Capital Financing Rating:	Medium
FTA Operating Financing Rating:	Low-Medium
Significant Features:	Joint development opportunities have been identified along the corridor and may be pursued.

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Light Rail
Length:	19.7 miles
Number of Stations:	10
Total Estimated Capital Cost:	\$479.7 million

CAPITAL FINANCING PLAN SUMMARY

The estimated capital cost for this project is \$479.7 million. The Colorado Department of Transportation (CDOT) will use a share of state taxes on motor vehicles and accessories (SB 97-01 funds) to cover the 20% local match required to receive Section 5309 New Start funds. The state has made these funds available because tax receipts providing revenue for SB 97-01 funding are in surplus.

OPERATING FINANCING PLAN SUMMARY

The Regional Transit District (RTD) is expected to operate this project when complete. The expected annual cost of operating this project in 2020, based on preliminary estimates, is \$22.3 million (in 1997 dollars). RTD's major source of operating funds is a dedicated sales tax, which currently provides more than 70% of operating revenues. A ballot measure to increase this tax was defeated in November 1997.

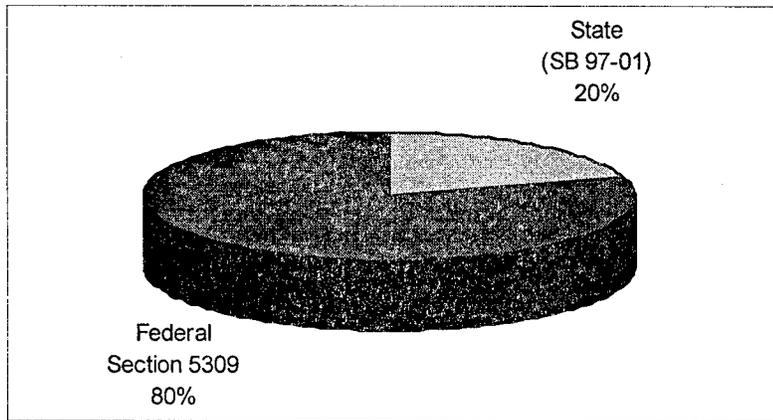
PROJECT PLAN OVERVIEW

The State of Colorado proposes to build 19.7 miles of double-tracked light rail transit along what is called the Southeast Corridor in the Denver metropolitan area. The project would connect to the existing light rail system operated by the RTD and would be made up of 15.2 miles along Interstate 25, from Broadway to Lincoln, and 4.5 miles along Interstate 225 to Parker Rd. The system would run along the south and west sides of I-25 and in the median of I-225. This project involves building ten stations at major intersections and at park-n-ride locations. The regional transportation planning process completed a Major Investment Study (MIS) of this corridor in July 1997. The light rail system being proposed was the preferred local alternative resulting from this analysis, to be operated by the RTD.

This project was included in a larger set of projects called the "Guide the Ride" light rail initiative that was placed on the ballot in November 1997 and lost. The Guide the Ride initiative proposed building 125 miles of light rail throughout the Denver metropolitan area over the next 17 years. The project was to be funded by a four-tenths of one-percent increase in the sales tax.

Proposed Source of Capital Funds-- CDOT Southeast Corridor Project

Source	Total Project	
	Funding (\$ M)	Percent
Federal Section 5309 New Starts	\$ 383.8	80%
State SB 97-01	\$ 95.9	20%
Total	\$ 479.7	100%



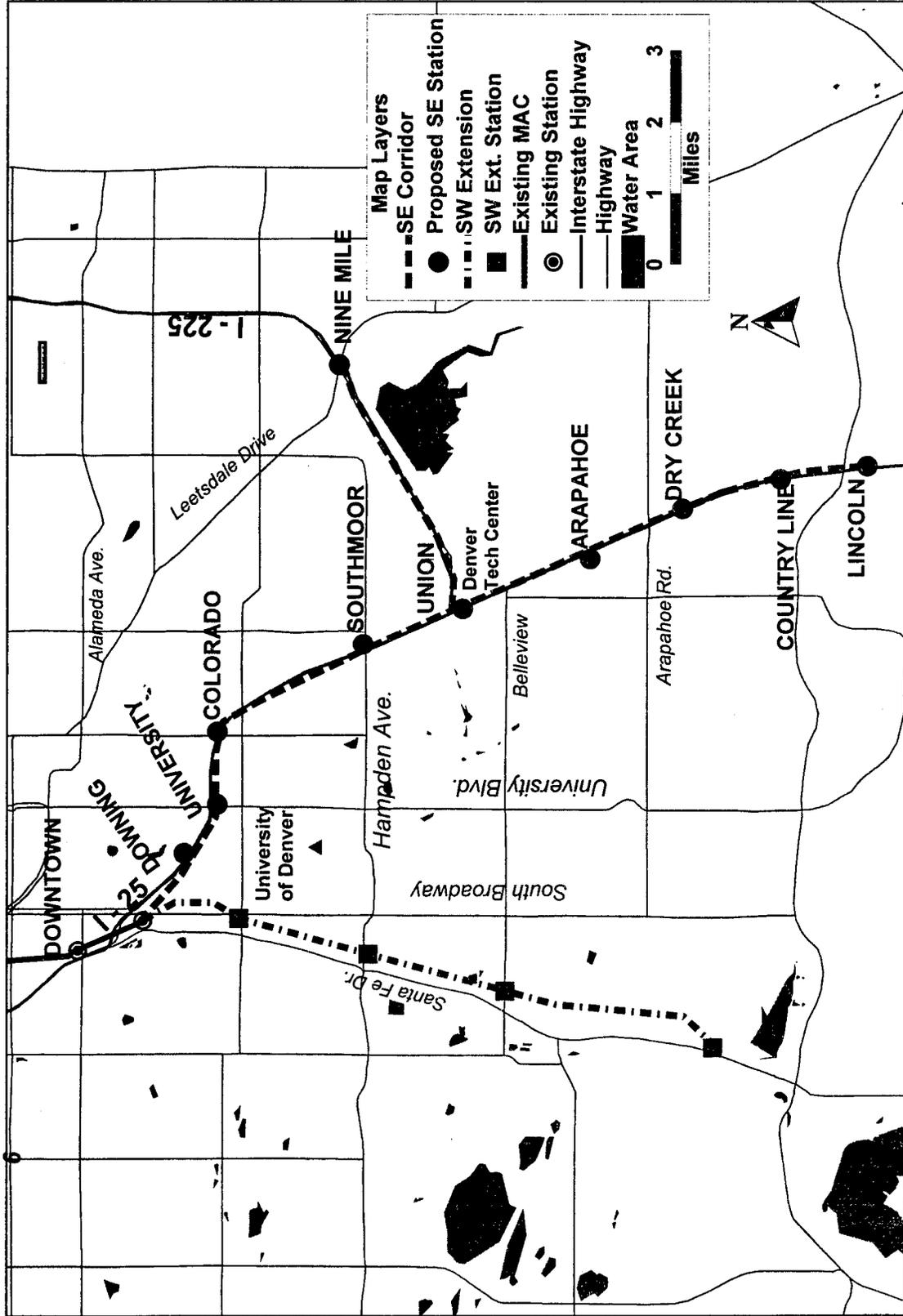
KEY FINDINGS

The proposed project will serve a part of the region that is experiencing growth in both the number of households and employment centers. The Southeast Corridor connects the regions two largest employment centers: Denver’s Central Business District and the South I-225 business area. The project is designed to address regional environmental and traffic congestion issues resulting from population and employment growth in the region.

The Southeast Corridor Project is a phase of a plan for a larger rail network serving the Denver Metropolitan Area. Extension to the regional system was placed in jeopardy in November 1997 when voters rejected a ballot measure. The state, through CDOT, agreed to develop this corridor of the system using funds recently made available by the State Legislature. This combination of factors suggests that there is substantial political support for this project. While the voter rejection of the ballot measure suggests a lack of popular support for the entire plan, the commitments made by the political establishment reflect substantial public support for this segment.

The RTD, which would have developed this project had the ballot measure passed, is the likely operator of the project once completed. CDOT and RTD will determine how and when that will take place. Options range from CDOT contracting with RTD to operate the system to RTD taking full control of the development once completed.

Southeast LRT Denver, CO



PROJECT

Project: Southtown Corridor Project
Project Location: Kansas City, Missouri
Lead Agency: Kansas City Area Transportation Authority (KCATA)
Review Date: November 1997
FTA Capital Financing Rating: Low-Medium
FTA Operating Financing Rating: Low-Medium
Significant Features: Under an 80% Federal share, KCATA can fund the project on a pay-as-you-go-basis (assuming state approval of the State Assistance Program). This financial assessment profile focuses on the 80% Federal funding option as the more likely scenario.

PROJECT SUMMARY

Project Phase: Preliminary Engineering
Mode: Light Rail
Length: 5.6 miles
Number of Stations: 17 stations; 2 park-n-ride facilities
Total Estimated Capital Cost: \$490 million (year-of-expenditure \$)

CAPITAL FINANCING PLAN SUMMARY

Total capital cost for the Light Rail Starter Project is estimated to be \$490 million (\$1997) year-of-expenditure dollars. The Kansas City Area Transportation Authority (KCATA) currently proposes to fund 80% of these costs using New Start Capital Program (Federal 5309) funds. The financial plan acknowledges that a new source of local funds is required to cover the local match for project construction, operations, and maintenance costs. The most likely possibility is an increase in the statewide general sales tax. As recommended by a Governor-appointed Total Transportation Commission that reviewed statewide transportation needs.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

A new funding source, including either the State Assistance Programs or the proposed sales tax increase will also required to fund continued operations of a combined KCATA bus and light rail system.

PROJECT PLAN OVERVIEW

In total, the Southtown Combination alternative consists of 15.2 miles of light rail alignment, 34 transit stations and 12 Park-&-Ride facilities serving the full Southtown Corridor. Given the presence of capital funding constraints, KCATA has decided to complete this Locally Preferred Alignment (LPA) in phases beginning with the "Light Rail Starter Project – River to Plaza" option. This option begins at the River Market area north of downtown and runs southward to its southern terminus at 51st Street covering 5.6 miles of the original LPA alignment. The Starter Project includes 17 transit stations and two Park-&-Ride facilities. This financial assessment focuses on the financial and related operational requirements for the Starter Project.

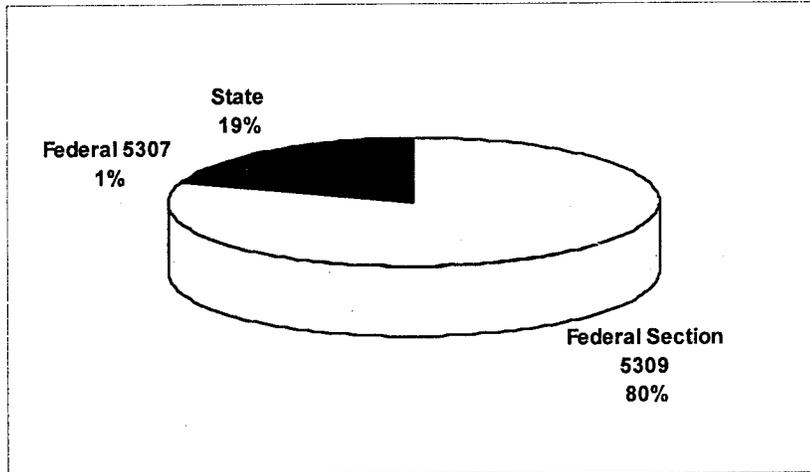
Kansas City, MO: Southtown Corridor Project

In addition to the rail components, the Starter Project also includes development of a service and storage area for rail vehicles and a “vintage trolley” operation. The service and storage area includes several rail related operations investments including administrative offices, maintenance facilities, storage facilities, and an operations control center. The proposed vintage trolley operation consists of a circulator system in the downtown area running on project’s LRT track and using vintage rail trolley vehicles.

Proposed Sources of Capital Funds — KCATA (\$1997)

Source	<u>Total Project</u>	
	1997 \$ M	Percent
Federal (Assuming 80% Federal funding)		
Section 5309 New Starts	\$ 210.2	80.0 %
Section 5307 Formula	2.1	0.8 %
State and Local		
State Assistance Program	\$ 50.4	19.2 %
Missouri Transportation Sales Tax	<u>0.0</u>	<u>0.0 %</u>
Total	\$ 262.7	100.0 %

Source: KCATA



KEY FINDINGS

The viability of KCATA’s financial plan depends primarily on the agency’s ability to secure new funds from the potential but as yet non-existent State Assistance Program. This source, currently under consideration by the Missouri legislature, would provide at least \$8.4 million annually in funds intended for transit. This proposed source is by far the largest single source of non-Federal capital funds identified in the incremental cash flow analysis, providing 100% of the local match. This source is also slated to fund the operating deficit for the Light Rail Starter Project. Even with the approval of this source, KCATA may still require some additional revenues to finance light rail development and operations.

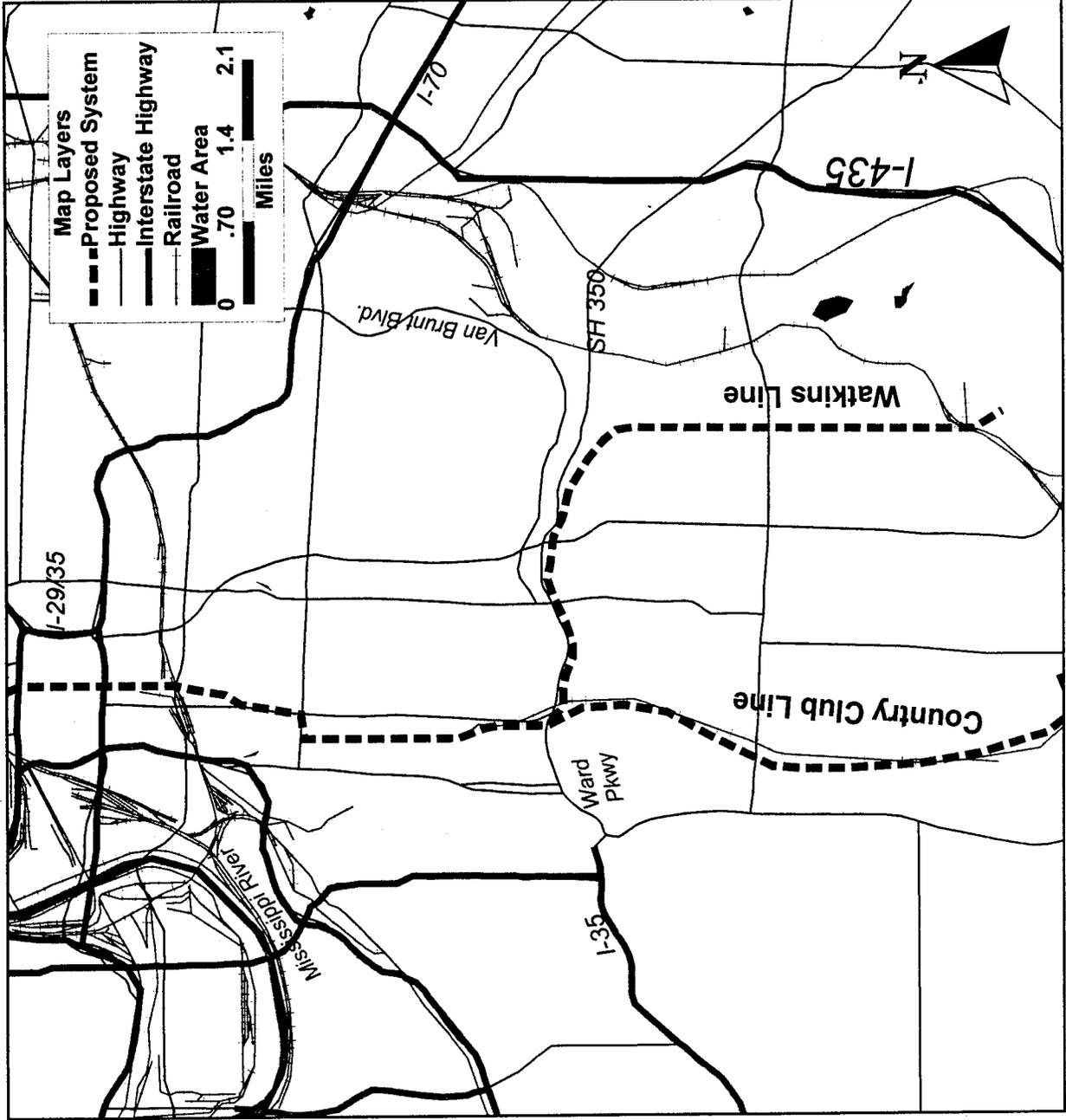
Kansas City, MO: Southtown Corridor Project

Other project financial issues include the following:

- KCATA currently depends extensively on its one-half cent share of the local sales tax as a source of operations funding. Declines in revenues from this one-half cent tax have imposed financial constraints on KCATA's operating budget in recent years, forcing the agency to curtail existing bus service levels and reduce agency staffing.
- KCATA assumes that the FTA Section 5309 project share will be 80% (\$212.3 million) in year-of-expenditure dollars (taking into account high and low estimates for project capital costs).
- KCATA project cash flow projections, which assume implementation of the State Assistance Program, predict relatively high rates of increase in project cash balances.
- The project's cash flow analysis is presented on an incremental basis, only including those new costs and revenues directly associated with the new rail project. Given this incremental basis, the analysis does not consider KCATA's ability to adequately fund and maintain its existing bus operations in future years. This is an important omission given that KCATA has been forced to reduce operations staffing and increase bus headways in recent years due to funding shortfalls. Additional funding shortfalls and/or cost overruns related to light rail development would lead to further reductions in the quality of local bus services.
- To meet KCATA's funding needs, funds from a State Assistance Program would need to meet the following criteria:
 - Sufficiently long-term and reliable to permit bonding of the stream of funds
 - Implemented as early as possible to spread out the project implementation schedule (to permit project construction to begin and limit the need for bond financing)
 - Allow KCATA to apply funds to both operating and capital uses.

In refining its financial plan for the Southtown Corridor Project, KCATA should lock in the sources of local funds anticipated for this project, and outline the proposed annual drawdown of these funds as well as the details regarding the need to bond funds from these sources.

Southtown LRT Kansas City, MO



PROJECT

Project:	Resort Corridor – Initial Operating Segment (IOS)
Project Location:	Las Vegas, Nevada
Lead Agency:	Regional Transportation Commission (RTC)
Review Date:	November 1997
FTA Capital Financing Rating:	Medium
FTA Operating Financing Rating:	Medium

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Rail
Length:	5.2 miles
Number of Stations:	10 stations
Total Estimated Capital Cost:	\$380 million (\$1996)

CAPITAL FINANCING PLAN SUMMARY

Total project costs for the Resort Corridor Project are \$380 million in 1996 dollars. The Resort Corridor financial plan anticipates obtaining \$171 million (45%) of these funds from New Starts Discretionary Funds (Section 5309) and the remaining \$209 million (55%) from unspecified state and local sources. The viability of this financial plan depends on the agency's ability to secure these state and local funds. Within this context, the final Major Investment Study (MIS) report states that the 55 percent non-Federal share "would come from a combination of state, local, and private sources that will be defined in the next phase of project definition".

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The project financial plan estimates operating and maintenance (O&M) costs for the 18.4 mile, full build system at approximately \$115 million (\$1996) annually in 2003. The plan does provide O&M cost estimates for the 5.2 mile Initial Operating System (IOS) to be \$10.5 million (\$1996). Current O&M costs for CAT operations are \$25 million annually.

PROJECT PLAN OVERVIEW

The Resort Corridor covers roughly 36 square miles and encompasses about 10 percent of Urbanized Las Vegas including much of the city's tourist related activities. The complete Resort Corridor Transportation Master Plan includes four separate transportation elements:

- Transportation System Management (TSM) and Transportation Demand Management (TDM) Element: This element includes seven grade-separated pedestrian crosswalks; ITS highway improvements, and TDM measures including vanpools, carpools, and transit incentive programs
- Bus Element: This element includes 500 expansion buses; increased bus service; new express bus routes, and investments in park-&-ride lots to be deployed no later than 2010

Las Vegas, NV: Resort Corridor – IOS

- Street and Highway Element: This element includes several highway construction or improvement projects
- Fixed Guideway Element: This element includes 18.4 miles of mostly elevated guideway transit; 25 transit stations; 2 major terminals; and a connection to McCarran International Airport.

Estimated cost to complete the full Resort Corridor Transportation Master Plan is \$2.2 billion (\$1996). This level of investment represents a significant increase in asset ownership, management and service levels for a transit agency currently operating a 215 bus system (or about \$25-\$30 million in assets).

On May 15, 1997 the RTC unanimously adopted a proposal to proceed with the Resort Corridor Transportation Master Plan using a phased development approach. Phase 1 of the plan includes the following four components:

- The Initial Operating System (IOS): A portion of the fixed guideway core system extending 5.2 miles from the North Terminal near Cashman Field to the Las Vegas Convention Center and on to Las Vegas Boulevard South. The IOS includes ten rail stations and is estimated to be completed by FY 2003.
- The Bus Element: 500-bus expansion to be implemented in stages and operational by 2010.
- The TSM/TDM Element: (as described above).
- The Street and Highway Element: (as described above).

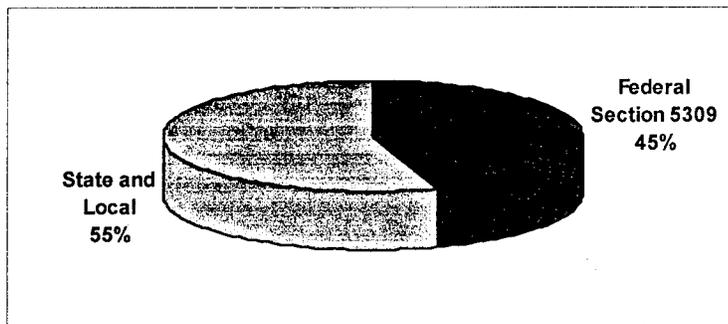
This financial assessment focuses on the Phase 1 Initial Operating Segment (IOS) of the Fixed Guideway Element.

Proposed Sources of Capital Funds — RTC (\$1996)

Source	Total Project	
	1996 \$ M	Percent
Federal		
Section 5309 New Starts	\$ 171.0	45.0 %
State and Local		
State Assistance Program	<u>\$ 209.0</u>	<u>55.0 %</u>
Total	\$ 380.0	100.0 %

Source: RTC

Las Vegas, NV: Resort Corridor – IOS



KEY FINDINGS

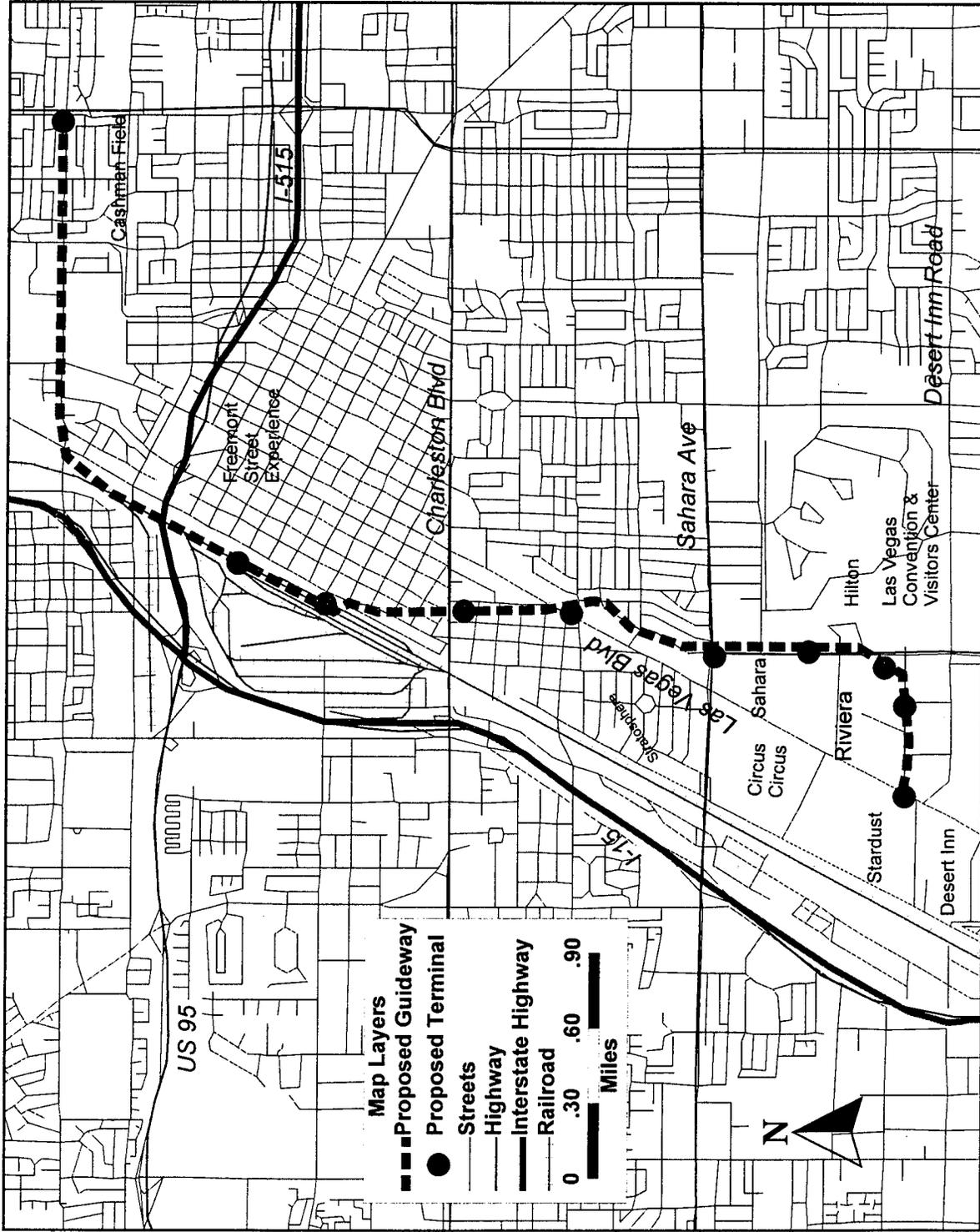
The viability of RTC's financial plan depends primarily on the agency's ability to secure the proposed \$209 million in state and local funds. At present these funding sources remain entirely undefined. This lack of definition in project funding represents the primary source of financial risk to a project already within the preliminary engineering phase.

Other project financial issues include the following:

- The project financial plan for the Resort Corridor estimates the operating and maintenance costs for the 18.4 mile, full build system as approximately \$115 million (\$1996) annually in 2003. The plan does provide O&M cost estimates for the 5.2 mile Initial Operating System (IOS) to be \$10.5 million.
- The financial plan also lacks a detailed operating and capital cash flow analysis demonstrating the sources and uses of operating and capital funds and their underlying assumptions. In the absence of this data, it is difficult to properly assess the viability of this plan.
- The estimated cost to complete the full Resort Corridor Transportation Master Plan is \$2.2 billion (\$1996) while the cost to complete the IOS is estimated to be \$380 million. These levels of investment represent a significant increase in asset ownership and management for a transit agency currently operating a 140 bus system (or about \$25-\$30 million in assets).

In refining its financial plan for the Resort Corridor Project, RTC should identify and secure reliable sources of state and local capital and operating funds and outline the proposed sources and uses of these funds in a detailed, twenty-year cash flow projection.

Resort Corridor Las Vegas, NV



Prince George's County, MD: Largo Metrorail Extension

PROJECT

Project:	Largo Corridor Metrorail Extension
Project Location:	Prince George's County, Maryland
Lead Agency:	Maryland Mass Transit Administration
Review Date:	November 1997
FTA Capital Financial Rating:	Low
FTA Operating Financial Rating:	Low-Medium
Significant Feature:	The DEIS suggests several joint development and value capture strategies; transit district overlay zones, right-of-way contributions, developer proffers, developer payment in lieu of parking, benefit assessments, and air rights leases.

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Light Rail
Length:	3.1 miles
Number of Stations:	2 stations
Total Estimated Capital Cost:	\$397.1 million

CAPITAL FINANCING PLAN SUMMARY

Total costs for the Largo Corridor Metrorail Extension have been revised upward to \$397.1 million, escalated to the midpoint of construction (\$ 2002). Given the MTA's current assumptions of an 80 percent Federal share and 20 percent state/local match for the project, the cost estimate implies a Federal contribution of \$316.1 million in year-of-expenditure dollars. The DEIS for the Largo Metrorail Extension identifies three possible sources of local capital funds, including; MDOT funding, Prince George's County funding, and private sector funding.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The current financial plan for the year 2020 estimates the incremental annual operating and maintenance costs from operation of the Largo Extension at roughly \$11.0 million annually (\$ 1996) while incremental fare revenues are estimated at \$7.8 million, which results in a farebox recovery ratio of 71%. The remaining shortfall of \$3.2 million must be subsidized through a mix of state and local sources that are not identified in the financial plan. At present, the financial plan assumes that the project net O&M costs will be allocated among jurisdictions using the same formula as currently used for the existing Metrorail operations.

PROJECT PROJECT PLAN OVERVIEW

The 3.1 mile Largo Extension will run from Metrorail's Addison Road Station to the Largo Town Center near the existing US Airways Arena in Prince George's County Maryland. The investment includes two stations, one at Summerfield Boulevard and the other at Largo Town Center, 2,700 parking spaces, and tailtracks. Total cost for the Largo Extension has been revised upward to \$397.1 million, escalated to the midpoint of construction (2002 \$). Given the MTA's current assumptions of an 80 percent Federal share

Prince George's County, MD: Largo Metrorail Extension

and 20 percent state/local match for the project, the cost estimate imply a Federal contribution of \$316.1 million in year-of-expenditure dollars.

KEY FINDINGS

- Total cost for the Largo Extension has been revised upward to \$397.1 million, escalated to the midpoint of construction (\$2002). Given the MTA's current assumptions of an 80 percent Federal share and 20 percent state/local match for the project, the cost estimate implies a Federal contribution of \$316.1 million in year-of-expenditure dollars.
- The DEIS for the Largo Metrorail Extension identifies three possible sources of local capital funds including MDOT funding, Prince George's County funding, and private sector funding. Of these three funding sources, MDOT funding would appear to offer the greatest potential with annual Transportation Trust Fund revenues of approximately \$1.3 billion. The MDOT draft FY 1998 - FY 2003 Consolidated Transportation Program includes \$5.587 million in state funds for FY 1999 to begin final design of the Largo Metrorail Extension.
- The current financial plan for the year 2020 estimates the incremental annual operating and maintenance costs from operation of the Largo Extension at roughly \$11.0 million annually (\$1996) while incremental fare revenues are estimated at \$7.8 million. The remaining shortfall of \$3.2 million must be subsidized through a mix of state and local sources which are not identified in the financial plan. At present, the financial plan assumes that the project net O&M costs will be allocated among jurisdictions using the same formula as currently used for the existing Metrorail operations.

PROJECT

Project: Junction Bridge Rail Project, Phase 1
Project Location: Little Rock, Arkansas
Lead Agency: Central Arkansas Transit Authority (CATA)
Review Date: November 1997
FTA Capital Financing Rating: Medium-High
FTA Operating Financing Rating: Medium-High

PROJECT SUMMARY

Project Phase: Preliminary Engineering
Mode: Streetcar
Length: 1.9 miles
Total Estimated Capital Cost: \$7.7 million (\$1997)

CAPITAL FINANCING PLAN SUMMARY

Phase 1 of the Junction Bridge Rail Project calls for the development of 1.9 miles of streetcar service on 1 mile of existing freight track and on 0.9 miles of new track to be laid in existing public street right of way. Phase 1 has an estimated capital cost of \$7.7 million (\$ 1997), and assumes an 80 percent Federal share and 20 percent local match to finance the construction of the project. Three participating jurisdictions comprise the local funding source, and all three governments have provided letters to the CATA board of directors expressing their commitment to provide their share of the capital funds necessary to construct Phase 1 of the Junction Bridge Rail Project.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

Annual operation and maintenance costs for Phase 1 of the Junction Bridge Rail Project are estimated to total \$307,000 and \$69,000 (\$ 1997) for peak period regular service and special event service, respectively. This estimate constitutes a 6 percent increase from CATA's 1997 total operating expenses. Each of the three participating jurisdictions have expressed their written commitment to provide CATA with the appropriate share to fund the increase in local operating expenses entailed by the Junction Bridge Rail Project. Since 1990, local government subsidies have increased by 130 percent and accounted for 65 percent of CATA's operating budget in 1997. This increase in local financial support for CATA and its services demonstrates a strong local commitment, on the part of the local governments, in supporting CATA and the provision of transit services.

PROJECT PLAN OVERVIEW

The proposed Junction Bridge Rail Project is a two phase project. Phase I is to be implemented in the near future and already has financial commitments from reliable local funding sources. The first phase calls for the development of 1.9 miles of streetcar service on 1 mile of existing freight track and on 0.9 miles of new track to be laid in existing public street right-of-way. Phase I has an estimated capital cost of \$7.7 million (\$ 1997), and assumes an 80 percent Federal share and 20 percent local match to finance the construction of the project. While capital cost estimates are documented in the feasibility report for Phase II, only Phase I is being considered for immediate implementation and Federal funding assistance.

Little Rock, AK: Junction Bridge Rail Project

Phase II is proposed to be added to the system in the future as resources allow. Therefore, this financial capability assessment focuses only on Phase I of the Junction Bridge Rail Project.

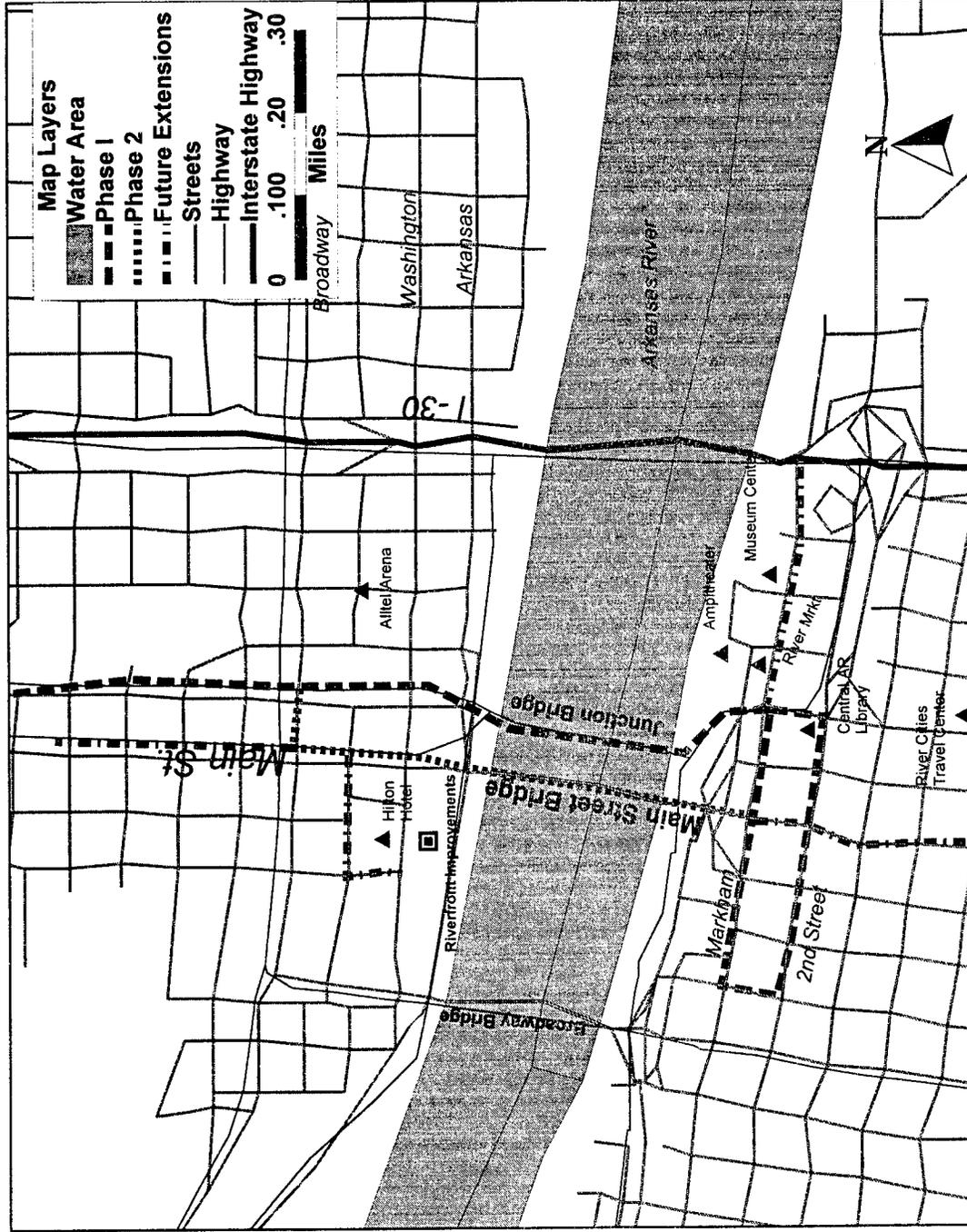
KEY FINDINGS

- Phase 1 of the Junction Bridge Rail Project has an estimated capital cost of \$7.6 million (1997\$), and assumes an 80 percent Federal share and a 20 percent local match. According to the feasibility study, the cost estimates are based on a limited level of detail and could vary from actual costs up to 30 percent or more. A 30 percent increase over the current project cost would place it at \$9.96 million. The small scope of the project limits the potential for costs to greatly exceed the initial capital cost estimate.
- The proposed local funding sources are the City of Little Rock, the City of North Little Rock, and Pulaski County. Together they are scheduled to contribute \$1.53 million (20%) in capital funds. The three jurisdictions have provided letters to the CATA board of directors expressing their commitment to provide their share of capital funds necessary to construct Phase 1 of the Junction Bridge Rail Project.
- The City of Little Rock is financially capable of meeting their expected capital contribution level. While the City of North Little Rock had a negative operating income of \$8.5 million in 1996, the City did maintain a positive General Fund balance of \$2.8 million. Due to the small scope of the project, the City is considered capable of contributing its expected share of capital costs. No information was provided by Pulaski County. Generally, due to the low estimated project costs and the written commitment by each participating jurisdiction, the local funding source is considered stable.
- The Junction Bridge Rail Project has already received an appropriation from Congress in the amount of \$2 million. An additional \$4.1 million will be sought for Phase 1 in FY 1998 and FY 1999.

Annual operation and maintenance costs for The Junction Bridge Rail Project were estimated to total \$380,000. These new O & M costs are expected to be partially offset by passenger revenues and special event contracts. Additionally, the three participating jurisdictions have expressed their written commitment to provide CATA with their appropriate share to meet these increased operating costs.

River Rail Project

Little Rock, AR



Federal Transit Administration, 1998

Memphis, TN: Medical Center Rail Extension

PROJECT

Project:	Medical Center Rail Extension
Project Location:	Memphis, Tennessee
Lead Agency:	Tennessee Department of Transportation/City of Memphis
Review Date:	November 1997
FTA Capital Financing Rating:	Medium-High
FTA Operating Financing Rating:	Medium
Significant Feature:	Numerous financing alternatives are discussed in the Memphis Regional Transit Plan. To achieve timely project implementation, non-Federal funding relies on traditional sources (i.e. state and local appropriation).

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Rail Trolley
Length:	2.5 miles
Number of Stations:	10 stops
Total Estimated Capital Cost:	\$30.4 million

CAPITAL FINANCING PLAN SUMMARY

The total capital cost for the Medical Center Rail Extension is estimated at \$30.38 million. The proposed capital financial plan assumes that 80 percent of the capital costs will be funded through FTA 5309 New Start monies, 10 percent through the Tennessee DOT, and 10 percent through the City of Memphis. Contributions from major medical institutions have reportedly been sought, but have not been secured as of October 1997. Currently the Memphis Area Transit Authority (MATA) has no dedicated funding source and all funding is dependent on the annual appropriations process. The two proposed non-Federal funding sources, the Tennessee DOT and the City of Memphis, are both financially sound and highly reliable.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The Medical Center Rail Extension is purported to entail no net increase to MATA's operating expenses due to the anticipated savings from turned back bus routes. Since 1990, MATA's operating revenues have increased at an average rate of 2.9 percent annually, and were reported to total \$26.2 million in FY 1997. MATA's operating expenses have generally kept pace with revenues during this time. Between 1980 and 1997, the Federal operating subsidy has decreased by 65 percent, while the City of Memphis has increased its subsidy by 160 percent. This increase in local financial support for MATA and its services demonstrates a strong local commitment, on the part of the City of Memphis, in supporting MATA and the provision of transit services.

PROJECT PLAN OVERVIEW

The Medical Center Rail Extension project would extend downtown rail trolley service from downtown Memphis to the Medical Center. The Medical Center area is considered a major employment and

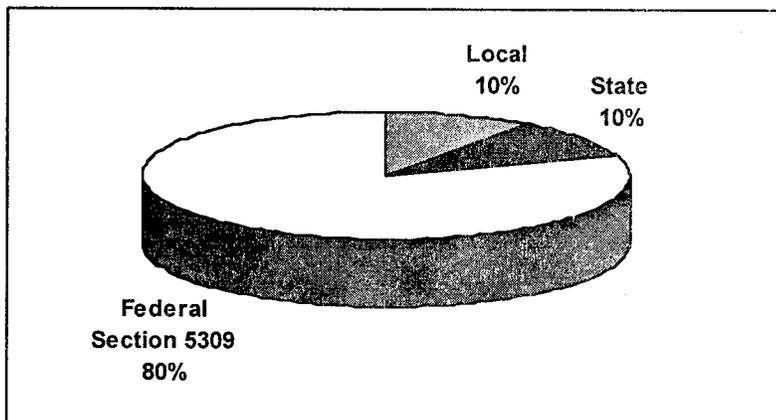
Memphis, TN: Medical Center Rail Extension

activity center and is the source of 14,000 jobs in its core area. The rail extension is expected to stimulate downtown development, foster new development in the area between the downtown area and the Medical Center, as well as provide an alternate form of travel within the corridor and thus relieve current and anticipated traffic congestion. The locally preferred strategy is a light rail extension operating on-street in mixed traffic on Madison Avenue, Jefferson Avenue, Dunlap Street and Claybrook Street. The length of the extension would be approximately 2.5 miles with ten stops located along the route. The total capital cost of the project is estimated to be \$30.38 million and is scheduled to be completed with less than \$25 million in FTA section 5309 funding (the estimated Federal contribution is \$24.3 million).

Proposed Sources of Capital Funds

Proposed Sources of Capital Funds	Total Project	
	1995 \$ M	Percent
Federal		
Federal Section 5309 "New Starts"	\$24.4	80%
State		
Tennessee DOT	\$3.0	10%
Local		
City of Memphis	\$3.0	10%
Total	\$30.4	100%

Source: City of Memphis Capital Improvement Program, 1998-2005



Source: City of Memphis Capital Improvement Program, 1998-2005

KEY FINDINGS

- The total capital cost for the Medical Center Rail Extension is estimated at \$29,797,000. The proposed capital financial plan assumes that 80 percent of project costs will be funded through FTA New Starts monies, 10 percent through the State of Tennessee DOT, and 10 percent through the City of Memphis.
- According to the City of Memphis CIP plan, the City is scheduled to issue \$2,979,000 in General Obligation bonds over the course of FY 1999 and FY 2000 in order to fund their local contribution (10%). The City of Memphis is financially sound and capable or

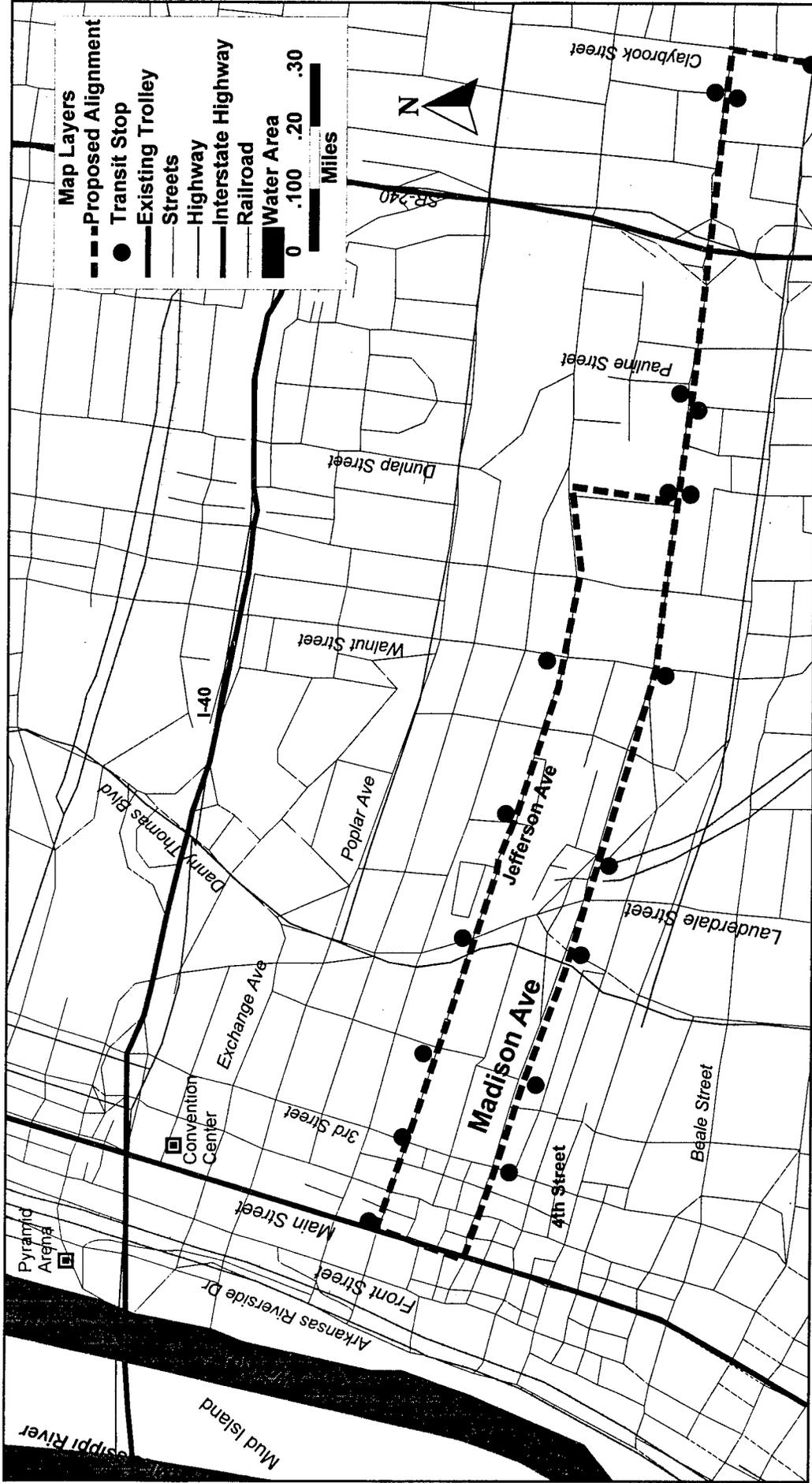
Memphis, TN: Medical Center Rail Extension

incurring this additional debt and enjoys the second highest bond rating from the three major rating services.

- The financial plan proposes that the State of Tennessee DOT contribute \$2,979,000 (10%) of the project's total capital costs. State DOT funding for transit projects comes out of the State Highway Fund which generated \$485 million in revenue from dedicated state sources in 1997 (total revenue was \$930 million with Federal contribution). At the time of this report the State DOT had informally acknowledged their commitment and ability to contribute the specified amount to the project.
- The Medical Center Rail Extension is expected to add approximately \$1.1 million (\$1995) to total trolley operating costs. However, according to the MIS, savings in bus miles resulting from turned-back routes will offset the cost of operating rail service in the corridor. Therefore, the rail extension is purported to entail no net increase to MATA's operating expenses.
- Between 1980 and 1997, the City of Memphis has increased its operating subsidy to MATA by 160 percent, contributing \$11.3 million in 1997. In the event that there is an increase in net operating costs due to the rail extension, the modest initial operating cost estimate coupled with the City's historical financial commitment to transit limits the risk that the Medical Center Rail extension represents to MATA's overall operations.

Medical Center Rail Extension

Memphis, TN



Miami, FL: East-West Multimodal Corridor Project

PROJECT

Project:	East-West Multimodal Corridor Project
Project Location:	Miami, Florida
Lead Agency:	Florida Department Of Transportation (FDOT)
Review Date:	November 1997
FTA Capital Financing Plan Rating:	Low
FTA Ongoing Agency Financial Plan Rating:	Low
Significant Feature:	The project's O&M cash flow is unusual in that farebox revenues are expected to cover over 98% of project operating expenses.

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Heavy Rail
Length:	11.9 miles
Number of Stations:	10 stations
Total Estimated Capital Cost:	\$2.2 billion (\$Year-of-Expenditure)

CAPITAL FINANCING PLAN SUMMARY

Total capital expenditures over the period 1997 through 2030 are estimated at \$2.2 billion in year-of-expenditure dollars of which \$130 million (6%) is assigned to highway improvements/HOV lane development while the remaining \$2.1 billion (94%) is assigned to new transit rail investments. Of this amount, FTA Section 5309 funds are expected to provide \$808 million or 40% of transit investment capital costs (38% of total project costs) for the East-West Corridor Project. The remaining \$1.2 billion (60%) are expected to originate from State, local and non-discretionary Federal sources. This includes \$789 million (39%) in funds already assigned within the regional Long Range Transportation Plan (LRTP), \$108 million (5%) from toll road revenue bonds, \$100 million (5%) from Port of Miami revenue bonds, \$30 million (2%) from development rights, \$11.2 million (1%) from cross-border leasing, and \$177 million (9%) from the Local Option Gas Tax.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The project operating plan is unusual in that projected farebox revenues cover over 98% of project operating expenses. This high farebox recovery ratio is made possible by the \$20 premium fare paid by patrons of the Airport-Seaport service (producing a farebox recovery rate for that service of over 200%) providing sufficient surplus revenues to cover the full operating deficit for the traditional East-West Corridor transit service.

PROJECT PLAN OVERVIEW

The Locally Preferred Alternative (LPA) selected for the East-West Corridor is a multimodal investment package including both rail and highway investment components. The rail component consists of 11.9 miles of heavy rail alignment including 8.2 miles of elevated structure connecting the western terminus with downtown Miami and another 3.6 miles of subway alignment connecting downtown with the Port of

Miami, FL: East-West Multimodal Corridor Project

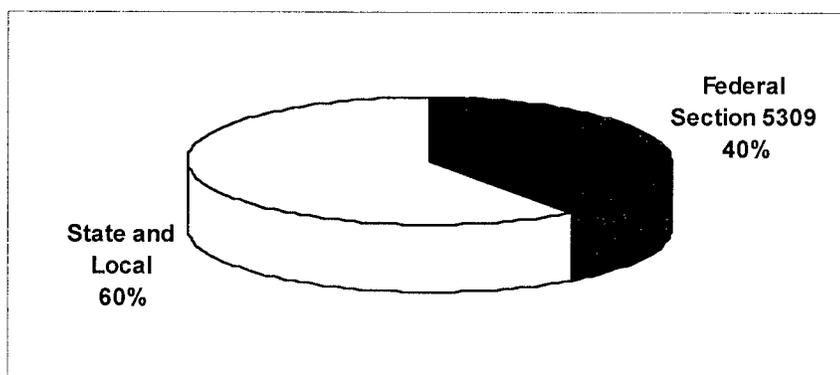
Miami. The rail investment also includes ten passenger stations (six elevated and four underground), a new storage and maintenance yard, and pedestrian and bicycle facilities along the line and at stations.

The highway component consists of upgrades to SR 836 including the addition of auxiliary lanes, reconfiguration or redevelopment of four interchanges, reconfiguration of an existing SR 836 Toll plaza, and the addition of two buffer separated HOV lanes in the median of SR 836 from NW 107th Avenue to the SR 836/SR 112 Interconnector.

Proposed Sources of Capital Funds — FDOT

Source	Total Project	
	YOE \$ M	Percent
Federal		
Section 5309 New Starts	\$ 808.0	40%
Other	<u>Unspecified amount from LRTP</u>	
State and Local		
Funds Identified in LRTP (includes some Federal funds)	\$ 788.7	39%
DCEA Toll Revenues	107.9	5.3%
Port of Miami	100.0	4.9%
Joint Development	30.0	1.5%
Cross-Border Leasing	11.2	0.6%
Local Option Gas Tax	<u>\$ 177.1</u>	<u>8.2%</u>
Total	\$ 2,022.9	100.0 %

Source: FDOT



KEY FINDINGS

Of the \$1.2 billion in funds expected from non-Federal sources, approximately \$426 million (or 21% of capital costs) remain uncommitted, have yet to obtain firm political support, or remain unrealized. This includes funds from toll revenues, joint development, anticipated cross-boarder lease savings, the Port of Miami, and the Local Option Gas Tax. The viability of FDOT's financial plan depends primarily on the agency's ability to secure funds from these sources. Other financing issues include the following:

Miami, FL: East-West Multimodal Corridor Project

- Engineering and administration costs are estimated to account for less than 10% of total project capital costs. Historically, these costs have typically accounted for more than 20% for similar US heavy rail projects.
- While the DCEA board has adopted a resolution supporting the East-West Corridor project, including a commitment to participate in project financing, the resolution does not commit DCEA to the 300% increase in toll charges outlined in the project's financial plan. Revenues from this source are expected to cover \$108 million (5.3%) of transit capital costs and \$122 million (93.9%) of highway capital costs.
- The current financial plan anticipates covering \$100 million (4.9%) of transit capital costs with funding obtained from the Port of Miami (towards capital costs associated with a premium Airport-Seaport rail service). The Port has yet to commit to this funding level. Such commitment will likely require a formal interagency agreement and input from the cruise ship industry and those charter bus operators currently operating between the Airport and the Port of Miami.
- FDOT estimates approximately \$30 million in funds (1.5% of transit capital costs) from the sale or lease of rail station development rights. While FDOT has initiated preliminary discussions with local property owners and developers, the agency has yet to obtain a firm funding commitment for this source.

The farebox recovery ratio for the East-West Corridor service (excluding the premium Airport-Seaport service) is close to 40% which is higher than the 30% rate currently experienced by MDTA. Also, the \$20 round-trip fare assumed for the premium Airport-Seaport service may be high relative to existing modes. (FDOT defends the \$20 fare assumption noting that the \$20 round-trip fare in 2009 is less than the existing \$7 one-way bus fare when adjusted for inflation.) The high farebox recovery ratio and \$20 Airport-Seaport fare are crucial to the financial plan's operating component which assumes the premium Airport-Seaport service provides sufficient surplus to cover expected operating deficits on the regular East-West Corridor service.

Miami, FL: North Corridor Project

PROJECT

Project:	North Corridor Project
Project Location:	Miami, Florida
Lead Agency:	Miami-Dade Transit Agency (MDTA)
Review Date:	November 1997
FTA Capital Financing Plan Rating:	Low
FTA Ongoing Agency Financial Plan Rating:	Low
Significant Features:	MDTA proposes a 70% Federal funding share. MDTA has not secured a firm commitment for State and local funds.

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Heavy Rail (assumed by this assessment)
Length:	9.2 miles
Total Estimated Capital Cost:	\$473 million

CAPITAL FINANCING PLAN SUMMARY

At this time, Miami-Dade Transit Agency has not selected a preferred mode or alignment for the North Corridor Project, leading to a wide range of project cost estimates. This financial assessment assumes adoption of an elevated heavy rail technology located in the roadway median — leading to a total project cost estimate of \$473 million. Under this assumption, the projected Federal New Starts Discretionary (Section 5309) fund share for this project is \$331.0 million or 70% of total capital costs. The remaining funds split evenly with \$71.0 million (15%) anticipated from both state and local sources. Note here that the capital financing plan for the North Corridor Project is not well specified as the documents do not fully specify the sources of anticipated state and local funding contributions, the annual flow of funds expected from Federal sources, or the specific Federal and state sources. Rather, the plan identifies several potential Federal, State, and local sources but does not indicate that funds from any of these sources have been dedicated to the North Corridor Project.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

Incremental operating costs for the North Corridor Project relative to the no build alternative are estimated at \$16.2 million annually, including \$15.3 million in rail costs and \$0.9 million in incremental bus costs. Although no specific sources of operating funds have yet been identified for the North Corridor Project, it is assumed that these funds will be obtained from state and local sources. Sources under consideration by MDTA include a potential “ninth” cent gasoline tax (not in legislation), a Transit Zone Parking Surcharge, a Transportation Utility Fee, and a Transit Impact Fee.

PROJECT PLAN OVERVIEW

The North Corridor is 9.5 miles in length running along 27th Avenue from NW 62nd Street north to the Miami-Dade/Broward County Line. Investment within the corridor is intended to improve regional

Miami, FL: North Corridor Project

mobility and transit access between the existing Metrorail system and the Miami-Dade-Broward County Line. On November 21, 1995, the Miami Transportation Planning Council confirmed the selection of a Locally Preferred Alternative (LPA) with Metrorail and busway modal options to be considered during the DEIS phase. Despite this selection and subsequent analysis, the precise definition of the North Corridor Project remains uncertain. In particular, MDTA has not selected from among the following project options:

- **Modal Option:** MDTA is still considering two modal options for the North Corridor Project. These include a continuation of the local Metrorail (i.e., heavy rail) system or construction of a peak-period only busway.

Metrorail: The Metrorail option would extend the existing Metrorail system using an elevated structure for the full 9.5 mile alignment. While the exact station locations for this option have not been established, MDTA has identified tentative sites reflecting the location of prominent activity centers. Park & Ride facilities are anticipated at some station stops. This North Corridor Metrorail “branch” would be fully integrated into the existing Metrorail system.

Busway: The busway option provides for an exclusive right-of-way for peak-period, peak-direction Metrobuses. Broward County buses would also be permitted to operate “closed door” service along the busway to connect riders with Metrorail services. Busway design calls for the development of ten busway stops, two equipped with Park & Ride facilities.

- **Alignment Option:** MDTA is considering two alignment options for the Busway modal option.

Metrorail:

The alignment option for the rail mode is principally along the east and west side of North 27th Avenue with limited portions located along the median.

Busway Median Alignment: For this option, Metrorail elevated structure or a one-lane reversible busway would be located within the median of NW 27th Avenue. Stations would be located over the middle of the street. This option preserves four through lanes on most portions of NW 27th Avenue.

Busway West Side Alignment: For this option, a 50-foot wide right-of-way would be purchased and busway lanes developed alongside of NW 27th Avenue. This alignment option would feature two-way busway lanes within the 50-foot right-of-way. Heavy rail is not currently included in the side alignment option.

The estimated cost to complete the three investment options is as follows:

- One-lane reversible busway in roadway median — \$58 million
- Two-way busway on west side of roadway — \$248.9 million
- Elevated Metrorail extension along roadway — \$ 472.9 million.

In addition to the North Corridor Project, MDTA is also pursuing development of the rail component of the East-West Corridor Project and has numerous other projects under consideration. This extensive

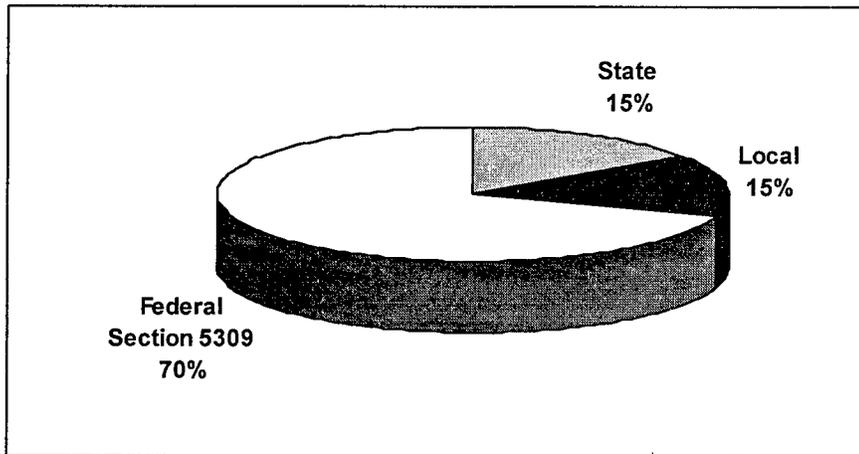
Miami, FL: North Corridor Project

MDTA Metrorail expansion program combined with the lack of specificity for the North Corridor Project raises questions about the financial capacity of MDTA and the region to complete each of the projects under consideration.

Proposed Sources of Capital Funds — MDTA

Source	Total Project	
	1995 \$ M	Percent
Federal Section 5309 New Starts	\$ 331.0	70.0 %
State Block Grant Program	\$ 71.0	15.0 %
Local LOGT, others	\$ 71.0	15.0 %
Total	\$ 473.0	100.0 %

Source: MDTA



KEY FINDINGS

The viability of MDTA’s financial plan depends primarily on its ability to secure dedicated state and local funds to finance both capital and operating needs. Specific financing issues include the following:

- Locally dedicated gas tax funds (LOGT) can at most provide \$30 million of the \$71 million local funding share (assuming the stream of funds from this source is used to support a bond issue). LOGT remains the only local source fully committed to the project. Use of this bonding option would likely require special legislation to earmark the stream of gas tax revenues and make it credit worthy.
- The financial plan identifies two additional potential sources of local funds to meet the local match including right-of-way easements and the possible issuance of General Obligation bonds by Miami-Dade County. However, while the plan identifies each of

Miami, FL: North Corridor Project

these as a potential funding source, neither source has been approved and no funds from these sources have been specifically dedicated to completion of the North Corridor Project.

- Within the existing financial plan, the \$71 million (15%) state share is slated to originate from the Public Transit Block Grant Program. MDTA currently receives its full allocation from this source and intends to seek legislative action to raise the existing spending cap to fund the North Corridor project. This increase has not been approved.
- The estimated operating deficit for the North Corridor Project is estimated at \$5.4 million annually. While no specific source of operating funds for this deficit has been identified for this deficit, MDTA suggests that Miami-Dade County has “historically provided sufficient operating funds as required to operate new transit investments”.
- MDTA has not selected the mode (heavy rail or busway) or alignment (roadway median or roadside alignment) for this project. Given these uncertainties, the project’s cost definition and hence financial plan remain subject to the addition of considerable detail and subsequent change.
- In addition to the North Corridor Project, MDTA is also pursuing development of other major rail development over this same time period, including the \$2 billion, East-West Corridor Project. MDTA’s interest in pursuing both the East-West and North Corridor Projects raises concerns regarding the region’s capacity to fund both projects (the East-West Corridor Project is being pursued jointly with FDOT). MDTA’s documentation recognizes this concern and suggests that their financial plans have been coordinated to insure that local capital funds are adequate to fund the capital costs of both projects. The financial plan does not provide the detail required to confirm this statement.

In refining its financial plan, MDTA should specify the full range of capital projects being pursued by the agency, document each plan in the operating budget, define the level and types of Federal, State, and local capital and operating funds anticipated for each project, and outline the proposed annual drawdown of these funds (on a per project basis).

New York, NY: Long Island Rail Road East Side Access

PROJECT

Project:	Long Island Rail Road East Side Access
Project Location:	New York, New York
Review Date:	November 1997
FTA Capital Financing Rating:	Not Rated
FTA Operating Financing Rating:	Medium-High

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Commuter Rail
Total Estimated Capital Cost:	\$3.4 billion

CAPITAL FINANCING PLAN SUMMARY

The Metropolitan Transportation Authority (MTA) had not produced a capital financing plan for this project at the time information was gathered for the FY 1999 New Starts Report. The MTA has indicated that it is reasonable to expect that funding will come from similar types of sources used for previous capital programs. A review of the MTA's 1995-1999 Capital Program Plan shows that the MTA is funding 72% of the plan without Federal assistance.

OPERATING FINANCING PLAN SUMMARY

The MTA also was not ready to provide an operating financing plan for the project, but has stated that operations will be covered by the same sources as existing operations (fare revenues, subsidies, and tolls). The MTA currently recovers 53% of its operating expenses from fares and receives an additional 15% from bridges and tunnel tolls. The Long Island Rail Road also has a strong farebox recovery ratio, 50% in 1996 and 54.3% in 1997.

PROJECT PLAN OVERVIEW

The Long Island Rail Road East Side Access project will connect the commuter rail lines of the Long Island Rail Road (LIRR) between Queens and a new passenger terminal within the Grand Central Terminal (GCT) in east Midtown Manhattan. Access to the east side of Manhattan will be provided 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. A second 5,000-foot tunnel will carry LIRR trains from the 63rd Street Tunnel under Park Avenue and into the GCT. A LIRR terminal will be constructed in the western portion of the lower level of the GCT.

Construction costs for the East Side Access project are estimated to be \$3.4 billion with the following break-out by category:

Right-of-Way	\$400 million
Construction	\$2.2 billion
Rolling Stock	\$780 million

New York, NY: Long Island Rail Road East Side Access

Construction is scheduled to begin in the year 2000 and to be completed by the year 2010.

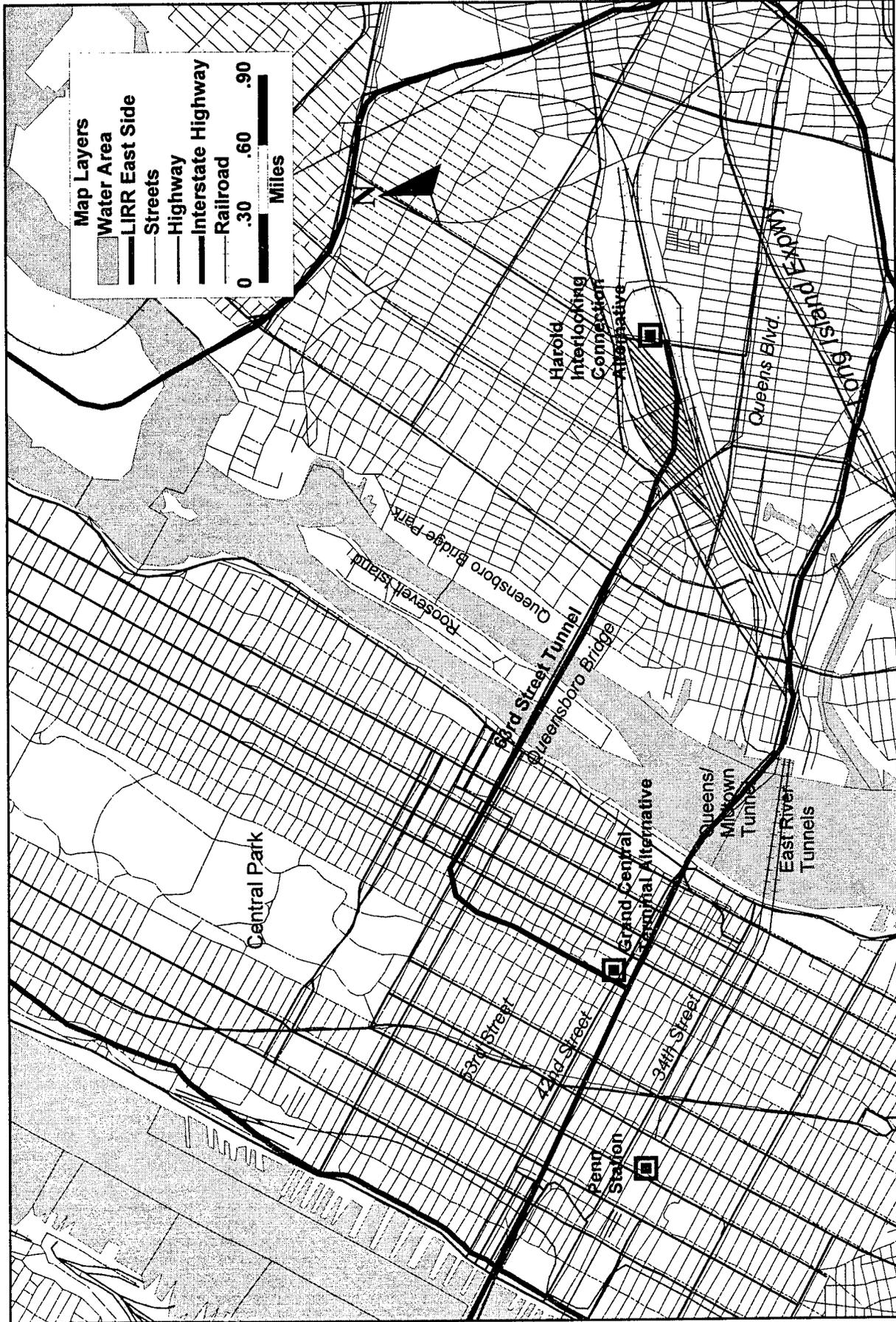
KEY FINDINGS

Due to the early stage of this project, the MTA was unable to provide documentation detailing the proposed source of funds or a 20-year cash flow summary. Therefore, a thorough financial assessment, particularly the capital financing plan, is not feasible at this time. However, by analyzing the MTA and LIRR current situation, a judgement can be made on the agency's current financial position and its present ability to self-fund a significant portion of projects like East Side Access.

The MTA's current financial condition is strong. The agency is funding 72% of its current Capital Plan without Federal assistance. The MTA has been given authorization for bonding a significant portion of the Plan and will be able to use pay-as-you-go capital as another means for covering capital costs. The MTA, in its current condition, shows the ability to meet Federal requirements for self-funding major capital programs.

The MTA and LIRR are also currently able to meet a significant percentage of their operations. Both the MTA and LIRR have farebox recovery ratios of at least 50% and the MTA also uses bridges and tunnel receipts to fund operations. Additionally, the LIRR's farebox recovery ratio has increased in the past few years. A review of current operations at the MTA and LIRR has shown that the agencies are presently in a strong operating financial condition.

LIRR East Side Access New York, NY



Norfolk, VA: Virginia Beach Light Rail Project

PROJECT

Project:	Norfolk – Virginia Beach Light Rail Project
Project Location:	Norfolk, Virginia
Lead Agency:	Tidewater Transportation District Commission (TTDC)
Review Date:	November 1997
FTA Capital Financial Rating:	Low-Medium
FTA Operating Financial Rating:	Low-Medium

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Light Rail
Length:	18.3 miles
Number of Stations:	13 stations
Total Estimated Capital Cost:	\$376.5 million (\$1996)

CAPITAL FINANCING PLAN SUMMARY

Total project costs for the Norfolk-Virginia Beach Light Rail Project are estimated to be \$376.5 million (\$1996) or \$450 million in year of expenditure dollars. The Tidewater Transportation District Commission (TTDC) proposes that \$131.8 million (35.0%) be funded from Federal Section 5309 New Starts Discretionary funds, \$16.6 million (4.4%) from flexible STP funds, and \$9.9 million from flexible CMAQ funds. The remaining \$218.2 million (58%) are to be split equally between state and local sources. At present no dedicated regional funding source currently exists to cover the \$109.1 million (29.0%) local funding share. To meet this share, TTDC is currently seeking state approval to create a local tax revenue source as is permitted under Virginia State legislation.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

Annual Operating and Maintenance (O&M) costs are estimated to be \$10 - 11 million for the completed light rail system and \$27.5 million for TTDC's non-rail modes for a total of \$39.0 million. This represents an annual increase of \$18.0 million or 85% over TTDC's current operating expenditures. As with project capital costs, no funding source exists to cover this increase. Here the agency proposes using either the motor fuels tax or the retail sales tax described above (or a combination of the two) to cover annual operations. These sources have not been created or implemented by state and local officials and, hence, represent a significant source of risk to the financial plan for the Light Rail project.

PROJECT PLAN OVERVIEW

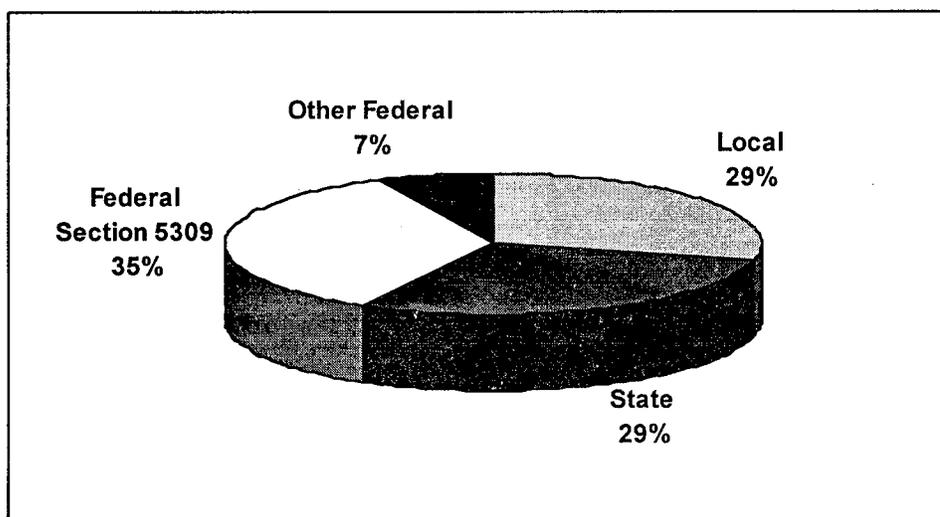
The Norfolk-Virginia Beach Light Rail Project is an 18.3 mile light rail alignment running from the oceanfront in Virginia Beach to downtown Norfolk generally following the Norfolk Southern Railroad right-of-way. The alignment will utilize a combination of single and double tracking using tie and ballast construction in most areas but switching to embedded track in downtown Norfolk. Power will be fed to light rail vehicles through overhead catenary. The completed project would include 13 stations, nine equipped for both bus and park-&-ride access, ten equipped with bus access and three designed as major transit centers. System design also includes a LRT vehicle storage and maintenance facility.

Norfolk, VA: Virginia Beach Light Rail Project

Proposed Sources of Capital Funds

Sources	Total Project	
	1995 \$ M	Percent
Federal		
Section 5309 New Starts	\$ 131.8	35.0 %
STP	\$ 16.6	4.4 %
CMAQ	\$ 9.9	2.6 %
State & Local		
State	\$ 109.1	29.0 %
Local	\$ 109.1	29.0 %
Total	\$ 376.5	100.0 %

Source: TTDC



KEY FINDINGS

The viability of TTDC’s financial plan depends primarily on the agency’s ability to secure the proposed \$218.2 million (58% of capital costs) in state and local funds. At present, TTDC has not obtained commitment for the state sources while the local sources have yet to be legislated or implemented by the state and regional localities. Other project financial issues identified include the following:

- The financial plan proposes Federal flexible funding contributions of \$16.6 million (4.4%) in STP funds and \$9.9 million (2.6%) in CMAQ funds. For both sources it is assumed that up to one-third of the current regional allocations would be devoted to construction of the light rail system over a four-year period. While the project is eligible for these funds, state-funding priorities would first have to be realigned to favor the light rail project over other, existing projects. Uncertainty regarding TTDC’s ability to obtain this realignment of project funding priorities places \$26.5 million or 7.0 percent of project capital costs at risk.

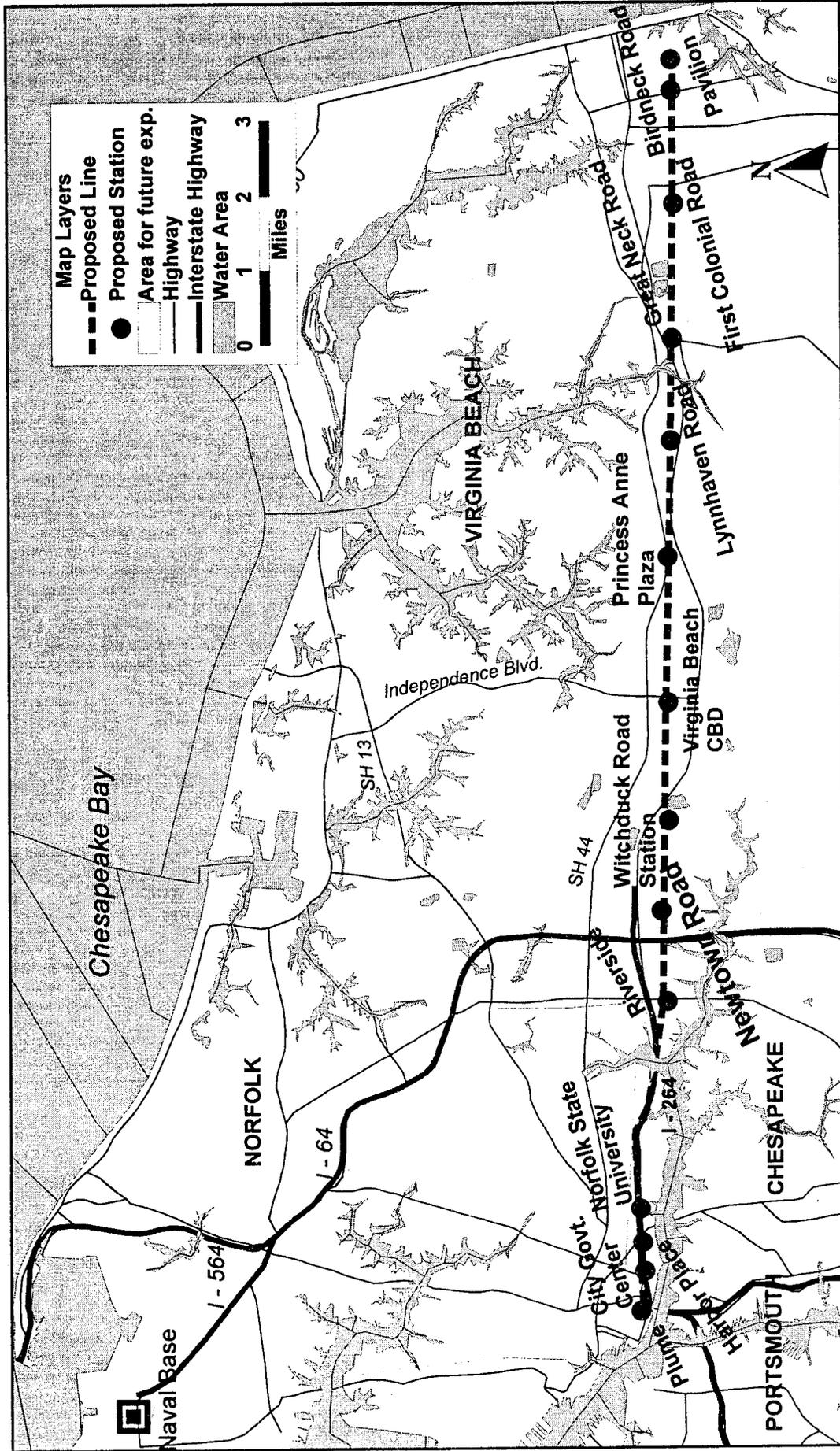
Norfolk, VA: Virginia Beach Light Rail Project

- At present, no specific source of state funds has been committed to meet the proposed \$109.1 million (29%) state funding share. The current financial plan states its assumption that state funds will be forthcoming following a decision to proceed with the locally preferred alternative. However, the plan also recognizes that any state decision to fund the Light Rail project would require a reorientation of spending priorities among modes. This lack of commitment of state funds represents a significant risk to the project's financial plan.
- No dedicated regional funding source currently exists to cover the \$109.1 million (29%) local funding share. To meet this share, TTDC is currently seeking state approval to create a local tax revenue source as is permitted under Virginia State legislation. The financial plan creation of either a motor fuels tax or a retail sales tax, both of which must be approved by the state and regional localities. The selected option determines whether the project is paid for on a pay-as-you-go basis or requires some bonding of the proposed revenue stream. The absence of any firm commitment by either the state or local government to create and implement a tax based revenue source represents a major source of risk both to the project financial plan and project schedule.
- The financial plan also identifies a range of potential innovative financing techniques including cross-border leasing, COPs, contracting out of maintenance and operations, and other techniques. However, none of these options has been included directly in the current financial plan.
- TTDC currently has not determined a funding source to cover project operating costs.

In refining its financial plan for the Norfolk-Virginia Beach Light Rail Project, TTDC needs to identify and secure reliable sources of state and local capital and operating funds and outline the proposed sources and uses of these funds in a detailed, twenty year cash flow projection.

Norfolk - Virginia Beach Corridor

Norfolk, VA



Northern New Jersey: Newark-Elizabeth Rail Link

PROJECT

Project:	Newark-Elizabeth Rail Link (First Operating Segment)
Project Location:	Northern New Jersey
Lead Agency:	New Jersey Transit Corporation (NJ TRANSIT)
Review Date:	November 1997 (Updated April 1998)
FTA Capital Financing Rating:	Low-Medium
FTA Operating Financing Rating:	Low-Medium

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Light Rail
Length:	1 mile
Total Estimated Capital Cost:	\$141 million (\$1995)
Ridership Forecast:	6,500 new riders; 13,000 riders total

CAPITAL FINANCING PLAN SUMMARY

The grantee, New Jersey Transit Corporation (NJ TRANSIT), has not provided FTA with a financing plan identifying specific funding sources for the project, citing exemption of the Newark-Elizabeth Rail Line (NERL) and other elements of the New Jersey Urban Core project from the requirements of Section 5309 New Starts criteria. Considering the agency's entire 5-year capital program (FY1997-2001), 47 percent of capital financing is expected to be provided from State Transportation Trust Funds. Absent a commitment to this level of state funding for the project, however, a conservative assumption is that the state/local share will be the 20 percent minimum required. While costs of projects currently included in the 5-year capital program exceed anticipated revenues by \$120.4 million, NJ TRANSIT cites overprogramming in the budget as a standard financial planning practice and has sufficient latitude in prioritizing and scheduling projects to bring costs into balance with funding. The full cost of the Initial Operating Segment (IOS) of the project would account for 4 percent of the agency's capital budget through 2001. The modest impact on the capital budget suggests that the agency can assemble the financial resources necessary to fund the project, even if projected deficits mandate cutbacks in total planned agency expenditures.

OPERATING FINANCE PLAN SUMMARY

While NJ TRANSIT has had operating surpluses in recent years, a \$79.1 million deficit currently is projected through the year 2000, reflecting an expected reduction in both Federal and state operating assistance. A number of possible options are available to bring costs and revenues into balance, including increases in fares, which have remained constant over the past 7 years. NJ Transit recovers approximately 50 percent of its operating costs through passenger fares, which is a source of financial strength and stability. Operating financial conditions are currently sound overall, although measures will be needed to address projected future shortfalls.

PROJECT PLAN OVERVIEW

Northern New Jersey: Newark-Elizabeth Rail Link

The proposed NERL is an 8.8-mile, 15-station light rail transit line linking Newark and Elizabeth, including a station serving Newark International Airport. The IOS, which is .97 miles long, would function as an extension of the existing 4.3-mile Newark City Subway light rail line, connecting the Broad Street station in Newark to Newark Penn Station, with 2 intermediate stations. NERL is a component of the New Jersey Urban Core Project under Section 3031 of the Intermodal Surface Transportation Efficiency Act. Estimated capital costs are \$694 million (1995 dollars) for the entire project and \$141.0 million for the IOS.

Projected daily ridership for the full-build project is 24,900, representing an 11,500-passenger net gain in transit ridership. Considering the IOS alone, NJ Transit forecasts ridership of 13,000 daily passengers, 6,500 of whom would be new transit riders. The project is intended to address several key goals: improve mobility and intermodal connectivity by providing better linkages among light rail stations, AMTRAK, and Newark International Airport; improve air quality in a severe ozone and moderate carbon monoxide non-attainment area; support economic development; and reduce parking supply to encourage more productive land uses. The IOS will specifically address the current lack of a connection between Newark's two commuter rail stations, Penn and Broad Street.

KEY FINDINGS

In the absence of a financial plan specific to the NERL project, the percentage of local versus Federal share of project funding is uncertain, although a conservative assumption is that the state will meet the minimum 20 percent requirement. Additional concerns regarding the financial materials submitted by NJ TRANSIT are the shortfalls in funding incorporated in the current capital program and operating plan for the agency overall, without information on how budgets will be brought into balance. The 5-year capital program includes costs of \$120.4 million in excess of projected funding. While NJ TRANSIT will eliminate this shortfall through postponement of some planned expenditures or generation of additional funds, no specific explanation is provided on how this will be accomplished or the priority accorded the NERL IOS for available capital resources. Similarly, NJ TRANSIT has the ability to eliminate the projected \$79.1 million operating deficit currently projected through the year 2000 through some combination of increasing revenues or cutting costs, but the means of balancing the budget are not specified.

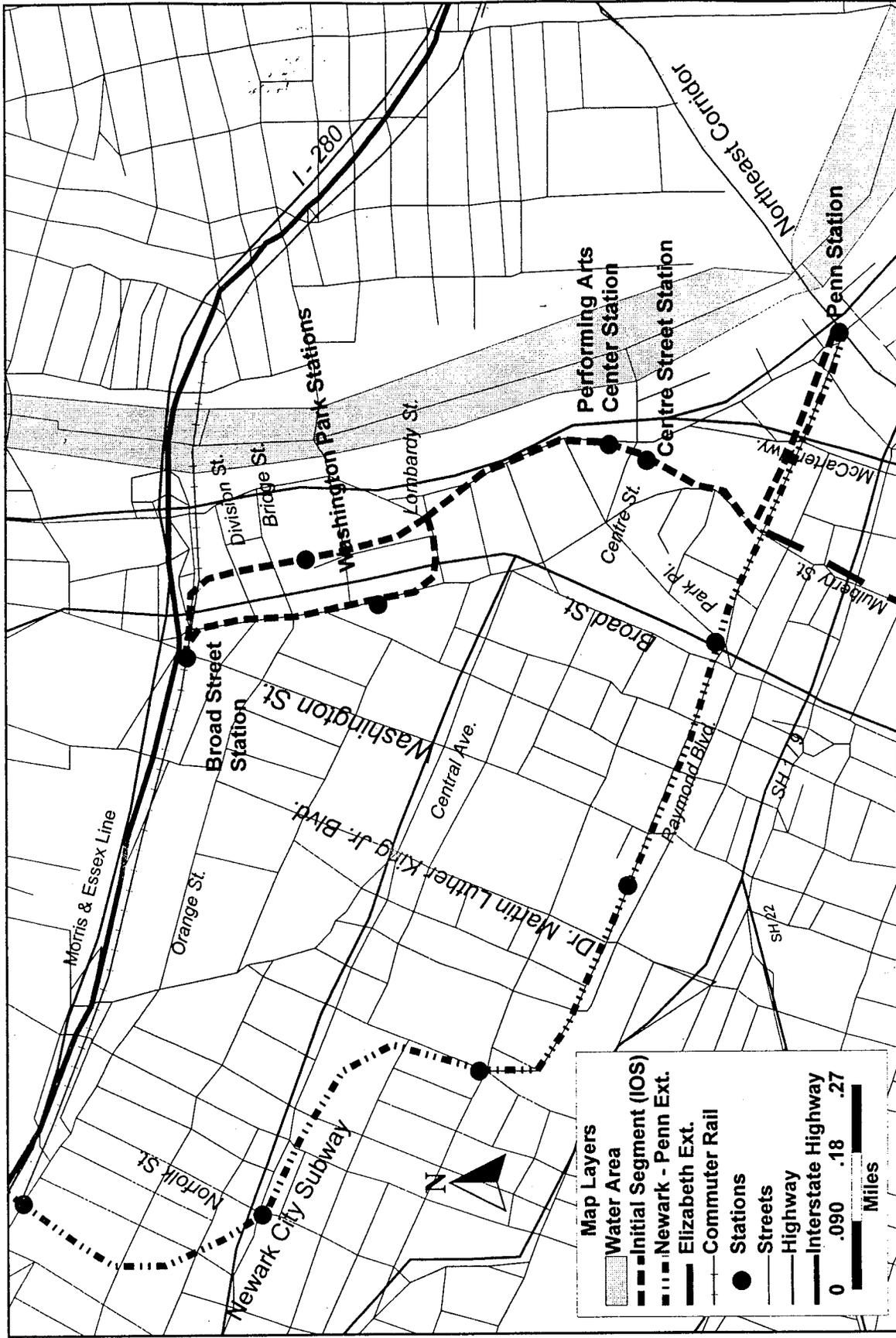
These uncertainties are of limited significance, however, in relation to the overall financial condition of NJ TRANSIT and its ability to fund and operate the NERL IOS. NJ TRANSIT has a strong financial track record. Key factors include:

- secure source of capital funding from the Transportation Trust Fund for nearly 50 percent of the total capital program
- steady growth in ridership and a fare recovery ratio of approximately 50 percent
- operating surpluses in four of the five most recent years.

Another factor is the relatively modest cost of the NERL IOS at \$141 million. The full cost of the project would account for only 4 percent of the current 5-year capital plan. Overall, while NJ TRANSIT has a strong financial foundation for undertaking the project, the means of addressing important impending budget issues is uncertain due to the lack of detail provided in current financial plans.

Newark - Elizabeth Rail Link

Northern New Jersey



Orange County, CA: Orange County Transitway Project

PROJECT

Project:	Orange County Transitway Project
Project Location:	Orange County, California
Lead Agency:	Orange County Transit Authority (OCTA)
Review Date:	November 1997
FTA Capital Financing Rating:	Low-Medium
FTA Operating Financing Rating:	Low-Medium

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Rail
Length:	28 miles
Number of Stations:	26 stations
Total Estimated Capital Cost:	\$1.6 billion

CAPITAL FINANCING PLAN SUMMARY

Total project costs for the Transitway Project are estimated to be \$1.9 billion (\$1996) including \$1.6 billion for the fixed guideway component and \$340 million for the bus related improvements. OCTA plans to fund the fixed guideway component using \$800 million (50%) in Federal New Starts Capital Program (Section 5309) funds, \$150 million (9%) in flexible CMAQ funds, \$300 million (19%) in flexible state funds, \$125 million (8%) in California Proposition 116 funds, and \$225 million (14%) in local Measure M funds.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

Projected annual operating costs for the Transitway are \$22.4 million (\$1996). As with the project's capital costs, the operating cost estimates will undergo significant change as OCTA narrows in on a preferred fixed guideway technology and related service levels. OCTA is establishing a \$200 million operating endowment to fund urban rail operations. As with the local capital match, operating deficits will be funded solely by Measure M sales tax revenues through at least 2011.

PROJECT PLAN OVERVIEW

The Major Investment Study (MIS) for the Transitway Corridor was completed in June, 1997 leading to selection of a Locally Preferred Strategy (LPS) composed of a 28 mile rail system and a 49 percent increase in bus service within the Corridor. In October 1997, OCTA issued a Request for Proposals seeking qualified consultant teams to perform the first phase of preliminary engineering.

The fixed guideway component of the Orange County Transitway Project consists of 28 miles of facility connecting the Fullerton Transportation Center to the Irvine Transportation Center. Three rail technologies remain under consideration including light rail transit (LRT), automated guideway transit (AGT), and monorail. Similarly, OCTA has yet to select a preferred guideway vertical alignment

Orange County, CA: Orange County Transitway Project

including at-grade and elevated. The completed system will include 26 stations. The MIS estimated total costs for the fixed guideway component at \$1.6 billion (\$1996).

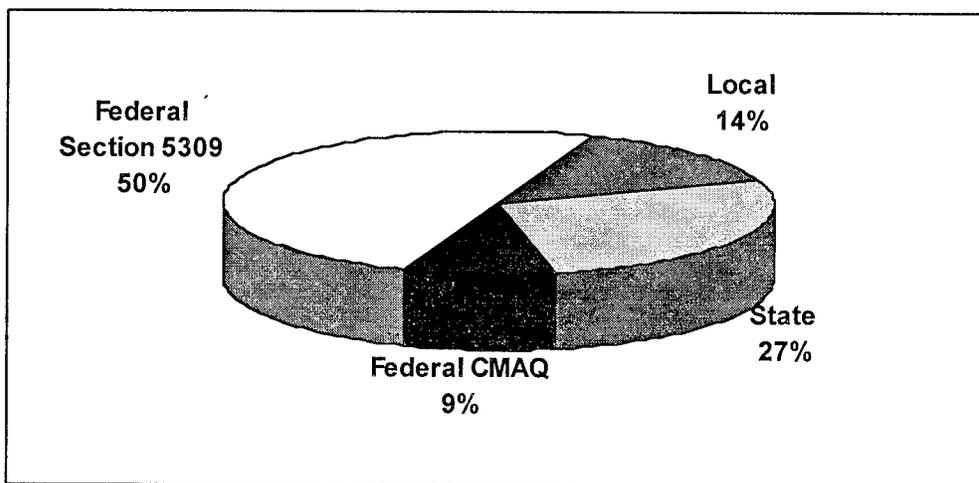
Given that OCTA has yet to select a specific fixed guideway technology, vertical alignment, and, in some instances, alignment location, total project costs for the Transitway Project are likely to change significantly over the course of the project. This expected variation in project costs represents a significant source of risk to the project’s financial plan. Preliminary engineering will produce refined cost estimates.

In addition to the proposed fixed guideway investment, the Locally Preferred Strategy (LPS) includes the following investments:

- LPS Bus Improvements: Increased bus service to meet increased travel demand, provide feeder service to the fixed guideway investment, bus prioritization investments.
- Transit Capacity Improvements: Roadway widening, and other roadway improvements.

Proposed Sources of Capital Funds—OCTA

Sources	Total Project	
	1996 \$ M	Percent
Federal		
Section 5309	\$ 800	50.0 %
CMAQ	\$ 150	9.4 %
State		
Flexible State Funds	\$ 300	18.8 %
Proposition 116	\$ 125	7.8 %
Local		
Measure M	\$ 225	14.0 %
Total	\$1,600	100.0 %



KEY FINDINGS

Orange County, CA: Orange County Transitway Project

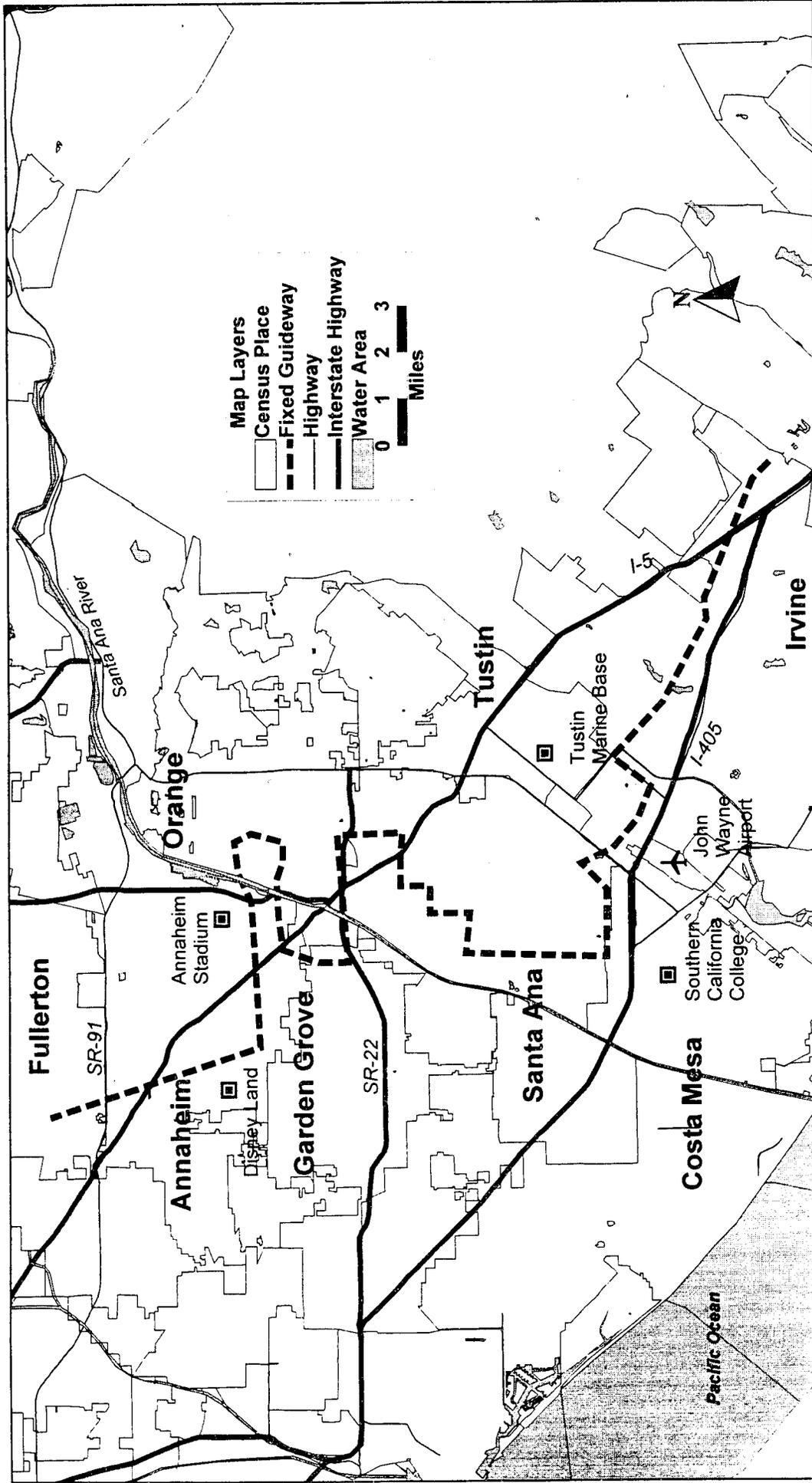
The viability of OCTA's financial plan depends primarily on the agency's ability to select a preferred fixed guideway technology and vertical alignment. Without having made these selections, project capital costs and operating costs are subject to wide variation as are the expected funding commitments from local, state and Federal funding sources. Other potential concerns include the following:

- While the financial plan favors a 50% Federal Section 5309 funding share, OCTA's financial plan also considers the possibility of an 80% Federal share. With a 50% Federal share, OCTA anticipates the need for approximately \$75 million in bond issues to cover project construction as well as an extended construction schedule allowing the project to be built in phases (with MOS-A completed in 2011 and MOS-B completed in 2015). With an 80% Federal share, the project can be completed on a pay-as-you-go basis with project construction completed in 2011.
- The current financial plan includes \$425 million (26.6%) from state funding sources, including \$300 million (18.8%) from STIP funds and \$125 million (7.8%) in Proposition 116 funds. The financial plan does not indicate the state's willingness to dedicate funds from either of these sources to the Transitway project.
- In addition to operations and capital uses for the Transitway's fixed guideway component, the local Measure M sales tax has a range of other transit-related capital and operating uses. However, the financial plan does not fully specify the exact nature of these uses, the amounts expected for each use or the sales tax's ability to fund each use. Future financial plans should fully specify the full range of uses of the Measure M sales tax and demonstrate its capacity to meet these needs.

The financial plan for the Transitway's fixed guideway component does not include a detailed cash-flow statement outlining the sources and uses of project capital and operating funds. Future financial plans should include such a detailed cash-flow statement, which demonstrates OCTA's ability to fund its full range of capital projects.

Orange County Transitway (Irvine - Fullerton Corridor)

Orange County, CA



Orlando, FL: Central Florida Light Rail Transit System

PROJECT

Project: Central Florida Light Rail Transit System (CFLRTS)
Project Location: Orlando, Florida
Lead Agency: Central Florida Regional Transportation Authority (LYNX)
Review Date: November 1997
FTA Capital Financing Plan Rating: Low-Medium
FTA Ongoing Agency Financial Plan Rating: Low-Medium

PROJECT SUMMARY

Project Phase: Preliminary Engineering
Mode: Light Rail
Length: 26.8 miles
Number of Stations: 27 stations
Total Estimated Capital Cost: \$878.8 million (\$1997)

CAPITAL FINANCING PLAN SUMMARY

Capital cost estimates for the CFLRTS project are reasonable. The financial plan relies on 50 percent of all revenues to come from non-Federal sources (state, local, private and quasi-public contributions). This is a positive approach in consideration of the financial assessment criteria of "amount and percentage of non-Federal funding sought." Reliance on debt financing and private and quasi-public revenue sources are strategies consistent with FTA's innovative financing initiative. However, the reliability of the non-Federal sources is uncertain as their commitment was not confirmed by independent documents.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The Central Florida Regional Transportation Authority's (LYNX) cost estimates for ongoing operations and maintenance are somewhat conservative based on historical trends. Financing of LYNX's ongoing operating and capital needs over the twenty year cash-flow period relies heavily on the proposed Charter County Sales Tax (40 percent of capital revenue and 40 percent of operating revenue come from dedicated sources). If this tax is not approved, LYNX would experience a funding shortfall. LYNX identifies contingency plans, but does not specifically address consequences if the Charter County Sales Tax is not passed.

PROJECT PLAN OVERVIEW

The CFLRTS is one component of an I-4 Priority Corridor Study being conducted jointly by the Florida Department of Transportation (FDOT) and LYNX. In September 1995, the Orlando Metropolitan Planning Organization (MPO) and the Volusia MPO adopted the preferred investment strategy recommended in the I-4 Multi-Modal Master Plan/Major Investment Study (MIS). This plan consists of six general purpose lanes, two HOV lanes, and light rail transit (LRT) referred to as the "6+2 with LRT." LYNX indicates that the approved plans are included in the adopted Long Range Transportation Plans of both MPOs. This financial assessment focuses on the LRT components of the overall study.

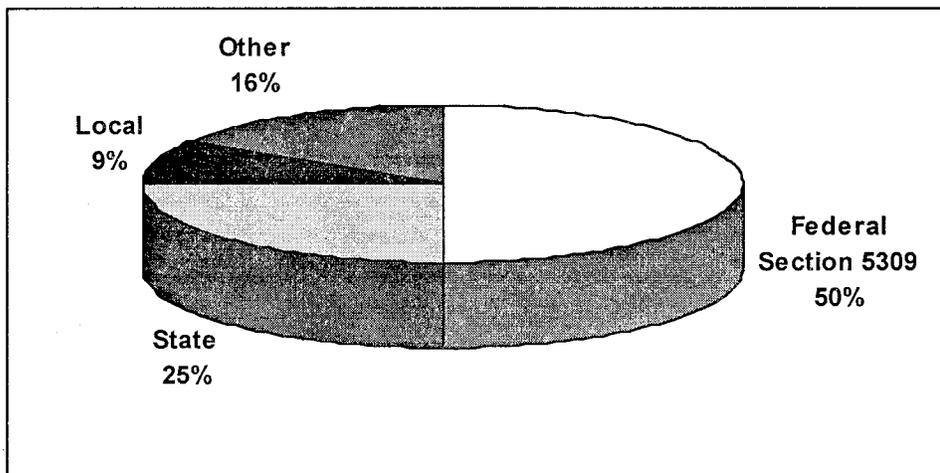
Orlando, FL: Central Florida Light Rail Transit System

The CFLRTS is 26.8 miles in length and includes 27 stations. The corridor extends from the Central Florida Parkway in the vicinity of Sea World on the south to the vicinity of State Road (SR) 434 near Longwood on the north. The corridor is bounded by I-4 on the west and the CSX railroad on the east. The DEIS also outlines an initial Minimum Operable Segment (MOS) that is 14.7 miles in length and includes 17 stations. New Start Capital Program funds are being applied for the full-length corridor alignment of the CFLRTS project.

Proposed Sources of Capital Funds – CFLRTS MOS

Source	Total Project	
	1997 \$ M	Percent
Federal		
Federal Section 5309 "New Starts"	\$ 439.4	50.0%
State		
FDOT Intermodal	\$ 219.7	25.0%
Local		
Local Governments	\$ 82.7	9.4%
Other		
Orange County Conv.	\$ 53.0	6.0%
Intl. Drive MTU	\$ 42.0	4.8%
Intl. Drive Prop. Owners	\$ 42.0	4.8%
Total	\$ 878.8	100.0%

Source: DEIS (11/97)



Source: DEIS (11/97)

KEY FINDINGS

LYNX's reliance on non-Federal sources to cover 50 percent of total CFLRTS capital costs (\$439 million) is a positive feature of the financial plan. However, there are several concerns regarding planned strategies to cover the local match, especially in regard to the stability and reliability of local match sources. Independent confirmation of state and local sources was not provided. Financing ongoing agency operations hinges primarily on adoption of a Charter County Sales Tax. This source has

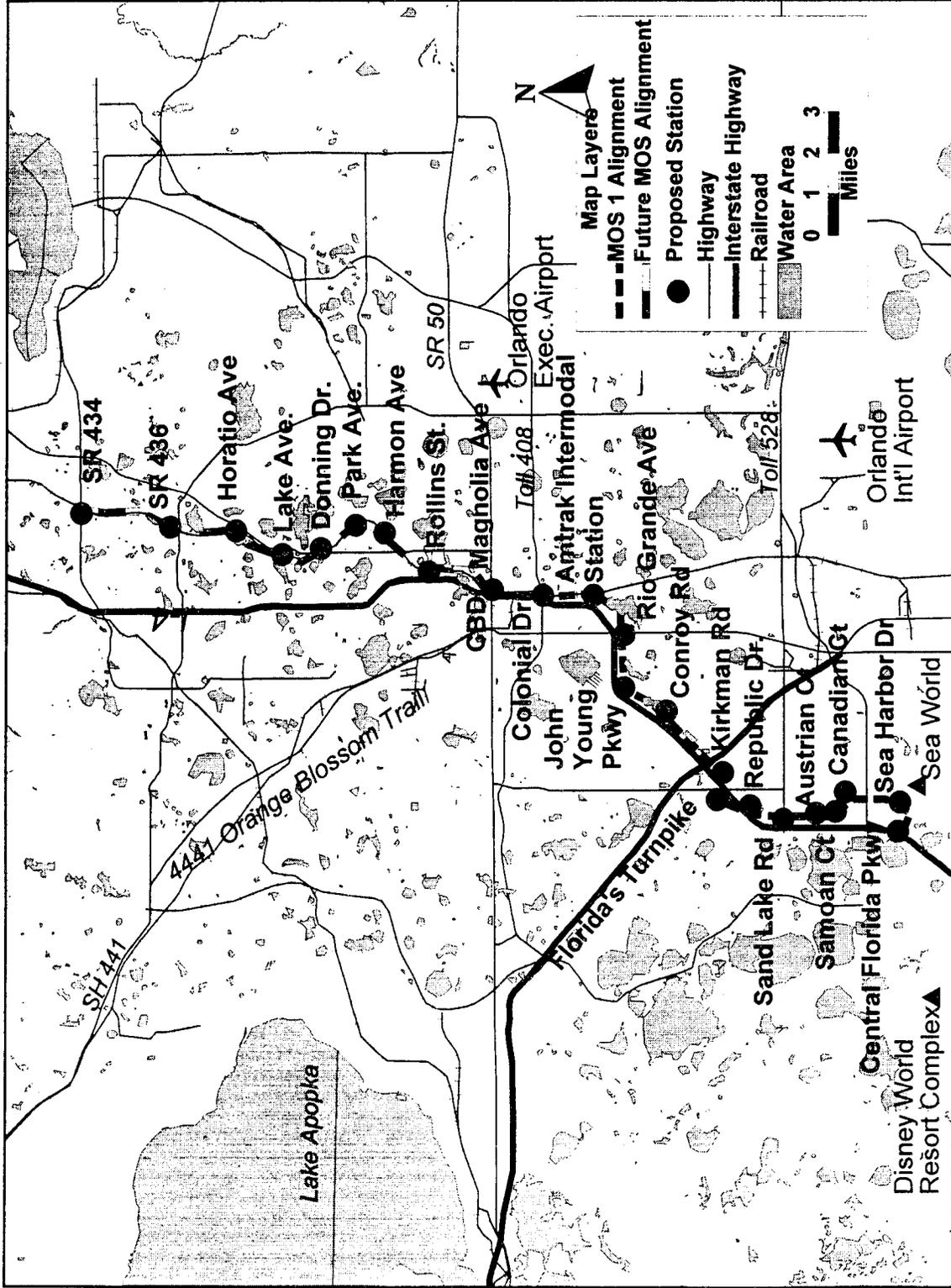
Orlando, FL: Central Florida Light Rail Transit System

yet to be approved by voters and hence represents a significant source of risk to project funding. Additional detail regarding these and other project financing issues is presented below:

- The financial plan relies on 50 percent of all revenues to come from non-Federal sources (state, local, private and quasi-public contributions). This is a positive approach in consideration of the financial assessment criteria of “amount and percentage of non-Federal funding sought.” However, the planned drawdown of Federal funds is concentrated in a shortened period. LYNX notes debt financing may be required to fill funding gaps, but documentation provided did not outline a project-specific debt financing strategy.
- LYNX notes FDOT committed to fund 25 percent of project costs (up to a minimum of \$400 million), but independent confirmation of this source by FDOT was not provided. Last year’s assessment indicated FDOT was only able to fund \$115.5 million for the project from 1997 through 2006, a shortfall of \$85.1 million from the amount required in the current plan.
- LYNX’s debt financing strategy of using revenue bonds and COPs to cover project and ongoing agency operating funding gaps appears reasonable. This approach is consistent with FTA’s innovative financing initiative. However, LYNX did not develop a project-specific capital finance plan that identifies direct application of this debt financing strategy to the proposed LRT project and related revenues. In addition, debt from revenue bonds are paid from private and quasi-public sources and the Charter County Sale Tax – a source yet to be approved.
- Total LYNX operating and maintenance costs for bus and light rail are projected to rise from \$46.9 million in 1997 to \$228.9 million in 2020. This average annual increase of 7.2 percent is significantly lower than the 22.6 percent historical average annual increase from 1991 through 1995 – a period of substantial service growth. If expenses increase at an average annual rate of 10 percent, LYNX would experience a negative operating cash flow beginning from 1999 through 2002 and a sustained negative overall cash flow beginning in 2009.
- LYNX expects to receive 40 percent of all ongoing capital revenue and 40 percent of all ongoing operating revenue from dedicated sources, which are derived primarily from the proposed Charter County Sales Tax to be implemented in 2004. If this tax is not approved, LYNX would lose a significant level of ongoing funding. LYNX identifies several contingencies, but does not specifically address consequences should the proposed sales tax not pass.
- The reliance on private and quasi public sources to cover 16 percent of project costs is a form of financing consistent with FTA’s innovative finance initiative. While these sources are innovative, their commitment was not confirmed by any independent sources submitted for the financial assessment.

Central Florida Light Rail System

Orlando, FL



Pittsburgh, PA: Stage II Light Rail Transit Reconstruction

PROJECT

Project:	Stage II Light Rail Transit Reconstruction Project
Project Location:	Pittsburgh, Pennsylvania
Lead Agency:	Port Authority of Allegheny County (PAT)
Review Date:	November 1997
FTA Capital Financial Rating:	Low-Medium
FTA Operating Financial Rating:	Low-Medium

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Light Rail
Length:	12 miles
Total Estimated Capital Cost:	\$410 million (\$1997)

CAPITAL FINANCING PLAN SUMMARY

The capital financing plan developed by the grantee, the Port Authority of Allegheny County (PAT), including capital cost and cash flow estimates for the Stage II Light Rail Reconstruction project, appears to be sound and conservative. While the proposed 20 percent local share of project capital costs is the minimum required, Federal Section 5309 Fixed Guideway formula funds, slightly over half of which have already been banked by the grantee for this project, are proposed as the source of nearly 25 percent of total funding. Possible causes for concern regarding the proposed financing of the project are:

- (1) PAT plans to obtain 22.3 percent of the project funding from ISTEAs flexible funds. These funds can be obtained only with the approval of the Metropolitan Planning Organization, which has expressed reservations about allocating this level of funding to the project over a 4 year period versus a 6 – 10 year expenditure period; and
- (2) The County's ability to provide all of the planned 3.3 percent match may be compromised by recent reductions in property tax rates and revenues.¹ Traditionally, 16.7 percent State and 3.3 percent County matching funds have been contributed to Federally-funded transit capital programs at PAT. While the Commonwealth of Pennsylvania's financial condition is strong and improving, the financial status of Allegheny County has been less solid. The Commonwealth of Pennsylvania is a potential source for making up any potential shortfall in either ISTEAs flexible funding or the County match.

OPERATING FINANCING PLAN SUMMARY

PAT projects farebox recovery of about 22 percent, consistent with historical trends and conservative estimates of revenue growth. State assistance covering 32 percent of operating expenses is a fixed percentage of total state operating assistance for transit that must be directly appropriated from the State

¹ Recent events suggest that the crisis caused by the property tax rollback may have been short-lived and that the County has made adjustments to eliminate any revenue shortfalls that could negatively affect PAT.

Pittsburgh, PA: Stage II Light Rail Transit Reconstruction

budget annually. Local operating assistance from Allegheny County covers 10 percent of operating costs. Allegheny County must match every three dollars in state operating assistance with one of its own. The remainder of PAT's operating expenses is covered by a combination of dedicated State and Federal funding sources. The County is planning on cutting the planned PAT operating subsidy for next year by \$1 million, which will cause a State reduction in operating assistance of \$3 million.² Primarily as a result of these cutbacks, PAT is projecting a deficit of \$73 million (with the project implemented) in its 16-year budget, based on very conservative assumptions. The project, however, is estimated to have a minimal impact on system operating costs (1.2 percent increase) as a result of some positive factors from project implementation. Thus, any weaknesses in the operating finance plan are due almost entirely to recent problems with Allegheny County funding for the entire PAT system, rather than to any problems with the Stage II operating finance plan.

PROJECT PLAN OVERVIEW

During the 1980s, 13 miles of the 25-mile rail system from Pittsburgh extending to the south were reconstructed to light rail standards under the Stage I Light Rail Transit (LRT) Project. The Stage II LRT reconstruction would complete this effort for the Overbrook, Library, and Drake trolley lines, which compose the remaining 12 miles.

The Stage II project would reconstruct these three lines to modern LRT standards, double track the single-track segments, reopen the closed Overbrook Line, replace antiquated trolleys with new light rail vehicles, and add approximately 2,500 park and ride spaces and 27 new light rail vehicles to a now interconnected 25 mile LRT system.

The estimated capital cost of the project is \$492.8 million (escalated dollars), or \$410.7 million in 1997 dollars. In 2005, the estimated daily ridership for Stage II is expected to be about 9,000 new riders, with about 50,000 riders for the entire light rail system.

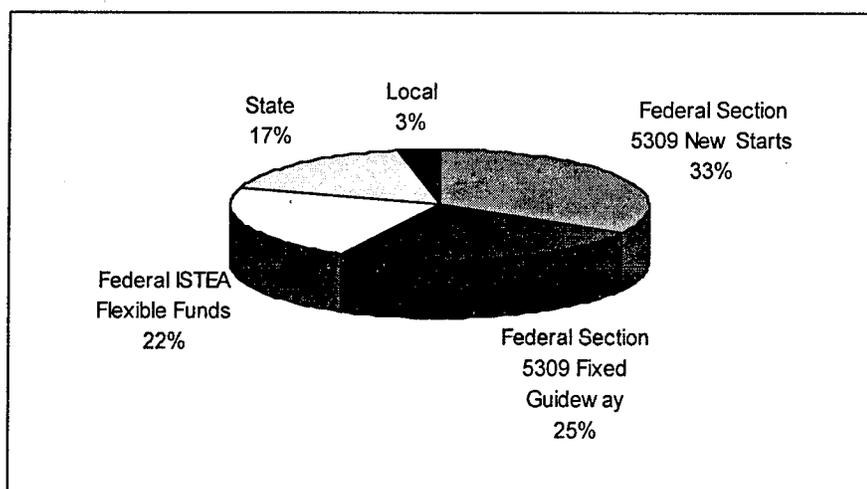
Proposed Sources of Capital Funds - Stage II LRT Reconstruction

Source	Total Project	
	YOE \$ M	Percent
Federal		
Section 5309 New Starts	\$ 162.6M	33.0%
Section 5309 Fixed Guideway	\$ 121.7M	24.7%
ISTEA Flexible Funds	\$ 110.0M	22.3%
State	\$ 82.1M	16.7%
Local		
Allegheny County	\$ 16.4M	3.3%
Total	\$ 492.8M	100.0%

² As discussed in footnote 1, the crisis caused by the property tax rollback may have been short-lived and that the County has made adjustments likely to obviate the need for a \$1 million reduction in PAT's operating subsidy next year.

Pittsburgh, PA: Stage II Light Rail Transit Reconstruction

Proposed Sources of Capital Funds - Stage II LRT Reconstruction



KEY FINDINGS

PAT has a record of responsible financial management and has developed a sound financial plan for the operation of the Stage II Light Rail Reconstruction project. The project will produce efficiencies in the operation of the light rail system that will enable service improvements at minimal incremental system operating costs. Capital cost estimates and assumptions for the Stage II Light Rail Reconstruction project appear to be based on careful and realistic analysis. The estimated capital cost for the project of \$41 million per mile is close to the median when compared with other light rail projects. The cash flow plan for receiving and expending funds appears to be sound and conservative.

There are, however, several aspects of the capital financing plan that may bear further scrutiny. The proposed 20 percent local share of project funding just meets the minimum threshold, although the use of Federal Section 5309 Fixed Guideway formula funds banked by the Authority over several years reflects a careful and strategic stewardship of Federal funds. With \$64 million of these funds already appropriated, plus the \$16 million 20 percent State and County match also appropriated, 16 percent of the project funding already is in place. A possible cautionary note, however, is that the planned use of an additional 57.7 million of these funds for the project, plus the 20 percent State and County match, could divert funds needed for repairs to other PAT fixed guideway facilities. Additional possible causes for concern regarding the financing of the project are uncertainty regarding the MPO's concurrence with the proposed use of ISTEA flexible funds and possible repercussions of recent reductions in county property taxes that serve as a significant component of PAT's revenue base.

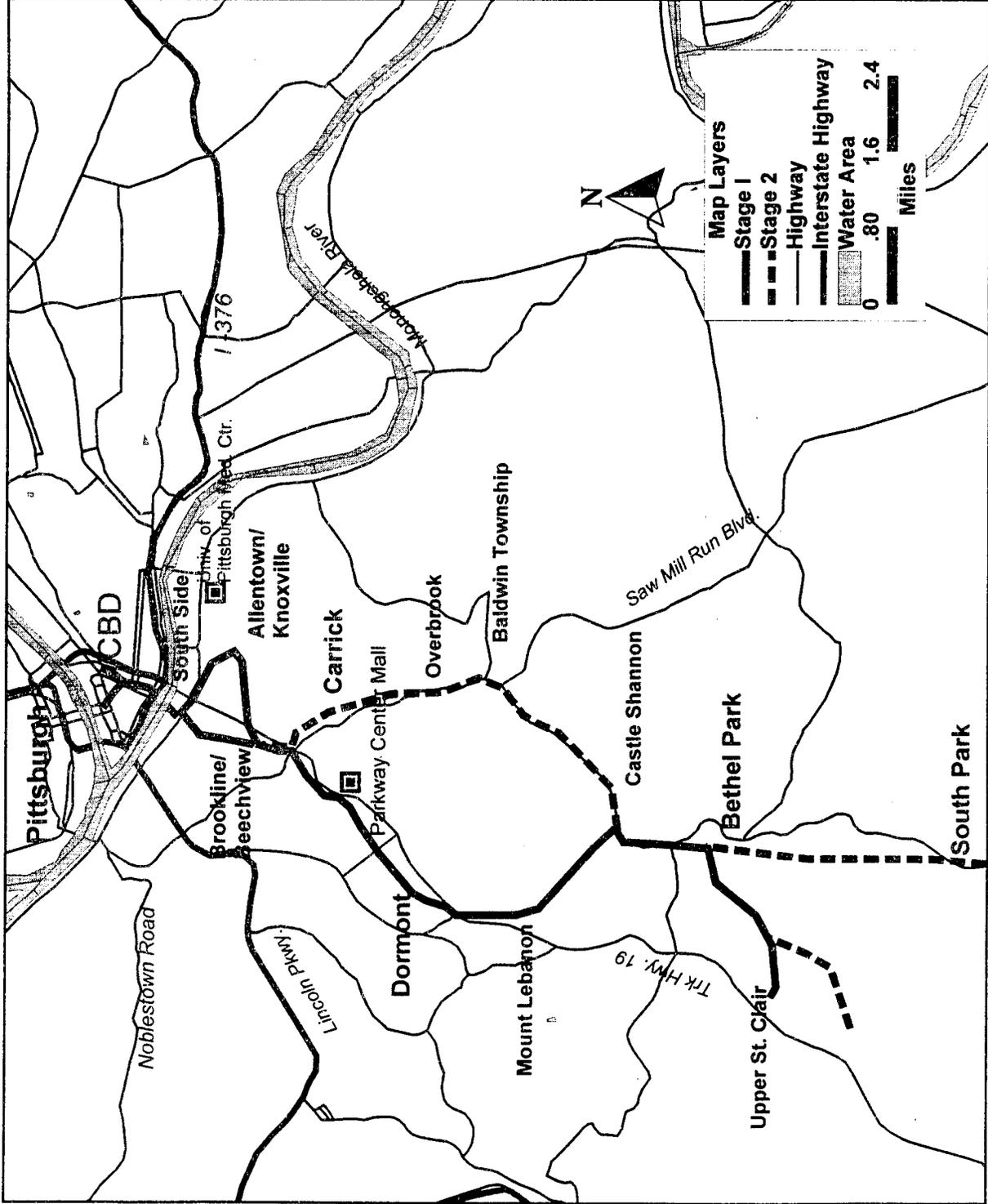
Cutbacks in county funding would also have repercussions on PAT's operations. Local operating assistance from Allegheny County covers 10 percent of operating costs and serves as a 1-to-3 match for state operating assistance. Reductions in county operating assistance anticipated in November 1997, along with very conservative assumptions, are a major factor responsible for projected operating deficits of \$73 million in the 16-year budget covering the period ending in FY 2012. This budget, however, incorporates very conservative assumptions regarding revenue growth.

While the system as a whole may face the prospect of increasing deficits, the Stage II Light Rail project is estimated to have a minimal impact on operating balances. The small magnitude of impacts is due in part to the small scale of service being added to the PAT system and efficiencies that will result from the

Pittsburgh, PA: Stage II Light Rail Transit Reconstruction

replacement of an antiquated trolley line with a state-of-the-art LRT line over part of the project and the integration of the 12 new miles of LRT into the existing 13 miles. Thus, any weaknesses in the operating finance plan are due almost entirely to possible problems in Allegheny County funding for the entire PAT system rather than to any problems with the Stage II operating finance plan itself.

Stage II LRT Pittsburgh, PA



Portland, OR: South/North Corridor

PROJECT

Project:	South/North Corridor Light Rail Transit
Project Location:	Portland, Oregon
Lead Agency:	Tri-County Metropolitan Transportation District of Oregon (Tri-Met)
Review Date:	November 1997
FTA Capital Financing Rating:	High
FTA Ongoing Agency Financial Plan Rating:	Medium-High
Significant Feature:	An interim borrowing plan leverages the availability of local resources to advance the project in a timely manner. The use of STP funds presents another form of innovative financing.

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Light Rail
Length:	20 miles
Total Estimated Capital Cost:	\$1.3 billion (Year-of-Expenditure \$)

CAPITAL FINANCING PLAN SUMMARY

Capital cost estimates for the South/North Corridor project are reasonable. The financial plan relies on 41.5 percent of all revenues for total project costs (51.4 percent of IOS-1 costs) to come from non-Federal sources. This is a positive approach in consideration of the financial assessment criteria of "amount and percentage of non-Federal funding sought." The use of Federal Surface Transportation Program (STP) flexible funds and the local interim borrowing plan support goals of FTA's innovative finance initiative. The General Obligation (G.O.) bond financing strategy – the primary source of the local match – appears sound and able to support annual requirements of the project capital financing plan.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

Future operating cost estimates over the twenty-year cashflow period are somewhat lower than experienced in recent years. While higher growth rates could result in negative operating balances, this will likely present a minimal risk as Tri-Met would have enough working capital reserves to cover shortfalls. Future growth for employee payroll tax proceeds – a primary source of operating revenue (66.0 percent) – is strong and logical given historic trends and the region's economic outlook. Projected farebox recovery ratios for the South/North Corridor are higher than existing MAX service. Passenger revenue projections could be impacted if the farebox recovery ratio is not as high as expected.

PROJECT PLAN OVERVIEW

The South/North Light Rail Transit (LRT) project is a proposed 20 mile light rail transit system starting in Clackamas Regional Center south of Portland and ending near the Veteran Medical Center and Clark College in the north. The project is an expansion of the current Metropolitan Area Express (MAX) LRT

Portland, OR: South/North Corridor

system. The proposed alignment passes through the Central Business District, where it would connect to the existing MAX East/West line.

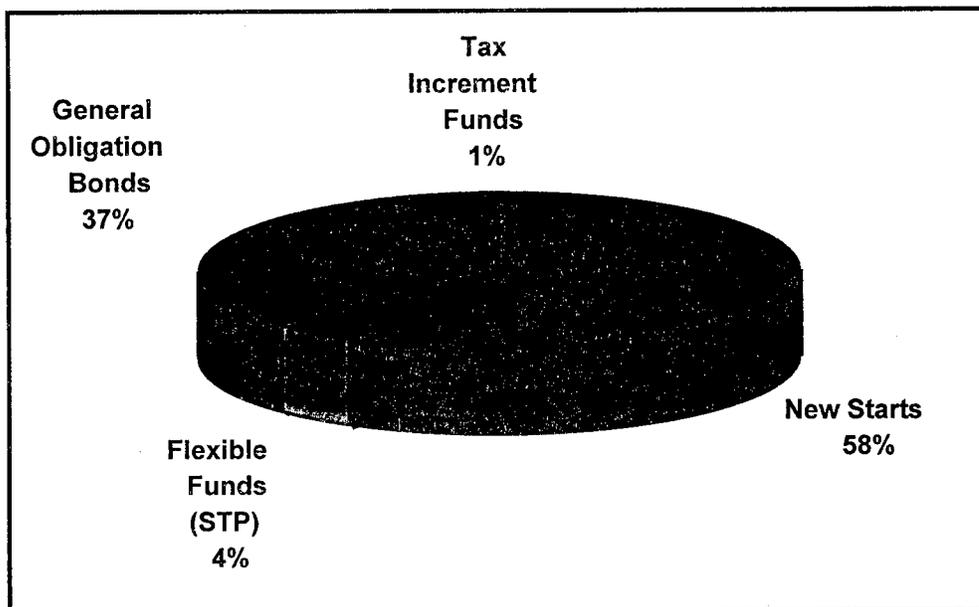
Phase I of the project, the focus of this assessment, will run between the Clackamas Regional Center and Lombard Street in North Portland. Phase I is proposed to be built in two Interim Operable Segments (IOS). IOS-1 would be 10.5 miles in length and would include the purchase of 36 light rail vehicles. IOS-2 would extend the project 3.4 miles and would include the purchase of 10 light rail vehicles.

Proposed Sources of Capital Funds – South/North Corridor

	Total Project		IOS-1	
	YOE \$ M	Percent	YOE \$ M	Percent
Federal				
Federal Section 5309 "New Starts"	\$ 760.0	58.5%	\$ 487.2	48.6%
Flexible Funds (STP)	\$ 55.0	4.2%	\$ 30.0	3.0%
Local				
General Obligation Bonds	\$ 475.0	36.5%	\$ 475.0	47.4%
Tax Increment Funds	\$ 10.0	0.8%	\$ 10.0	1.0%
Total	\$ 1,300.0	100.0%	\$ 1,002.2	100.0%

Source: South/North LRT Project Capital Financial Plan Summary (1/97)

**Proposed Sources of Capital Funds – South/North Corridor
(Total Project)**



Source: South/North LRT Project Capital Financial Plan Summary (1/97)

KEY FINDINGS

The South/North project capital financial plan's reliance on New Start Capital Program funds to cover \$487.2 million (48.6 percent) of IOS-1 project costs and \$760.0 million (58.5 percent) of total

Portland, OR: South/North Corridor

South/North project costs appears reasonable, given increased demands on and limited availability of Federal resources. The South/North LRT financial plan provides several innovative financing strategies, including development of an interim borrowing plan to cover gaps in the availability of Federal funds. The use of Federal STP funds (\$30 million for IOS-1 and \$55.0 million for the total project) presents another form of innovative financing.

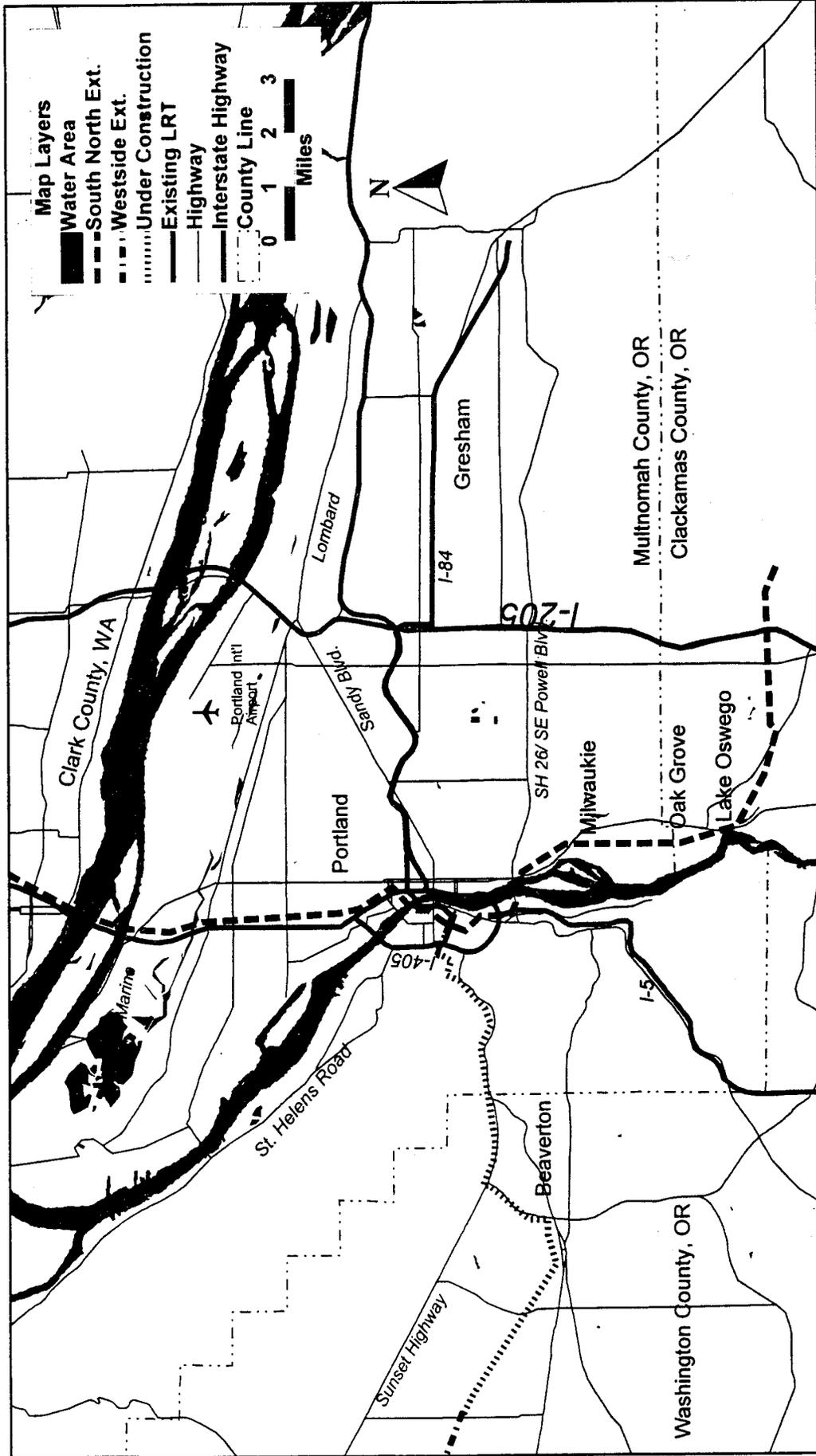
These strategies and other areas regarding the capital financial plan and ongoing agency operating and capital plan are discussed in further detail below:

- Documentation was submitted with the financial assessment materials to verify approval of the G.O. bond support, which is to provide \$475 million for the South/North Corridor project, approximately 36.5 percent of total project costs and 47.4 percent of IOS-1 segment costs. Tri-Met could issue the entire \$475 million in South/North G.O. bonds at one time, but is taking a more conservative approach and issues the bonds in two sales. This initial debt financing strategy appears sound and able to support annual requirements in the financial plan.
- The reliance on interim borrowing of \$131.6 million for the entire South/North project (\$118.6 for IOS-1) to fund gaps in Federal funds and accelerate the project development schedule represents a strategy consistent with FTA's innovative financing initiative. Based on Tri-Met's successful experience with the Westside/Hillsboro project, this similar approach for the South/North project appears reasonable.
- Tri-Met's projected operating cost estimates are somewhat lower than experienced in recent years. The average annual increase in operating and maintenance costs of 6.4 percent is slightly less than the 7.9 percent average annual increase experienced by Tri-Met from the FY 1986 through FY 1997 period, the period over which initial MAX LRT service was initiated. If operating and maintenance costs grow at higher rates than projected, Tri-Met could experience negative operating balances (i.e., general fund results) in certain years. This would likely present minimal risk to ongoing operations since Tri-Met would have enough reserves in its working capital fund to cover this shortfall.
- Tri-Met derives the majority of its ongoing operating revenues from the employer payroll tax, which is expected to provide \$4.2 billion over the cashflow period, approximately 66.0 percent of all Tri-Met operating revenues. This source is expected to grow at an average annual rate of 7.2 percent over the period, which is lower than historical trends. This reflects a conservative approach and appears logical given historical trends for this source and the economic outlook for the region.
- Tri-Met expects South/North operations to recover 50 percent of costs, a recovery ratio that is somewhat higher than the overall existing MAX recovery ratio of 45 percent. This is also higher than recent overall agency farebox recovery ratio trends, which declined from 28.0 percent in 1991 to 22.8 percent in 1995. Revenue projections for the project could be impacted if the farebox recovery ratio for the South/North line is not as high as expected, especially as the system continues to expand.
- It appears that Tri-Met has adequate operating revenues to draw upon to cover the transfer to cover ongoing capital needs. This source combined with revenue bond

Portland, OR: South/North Corridor

proceeds (not related to or impacted by the South/North project) and the ongoing capital fund balance appear sufficient to fund total capital expenditures over the period.

South - North Corridor Portland, OR



PROJECT

Project: Phase I Regional Rail Project
Project Location: Raleigh, North Carolina
Lead Agency: Triangle Transit Authority (TTA)
Review Date: November 1997
FTA Capital Financing Plan Rating: Low-Medium
FTA Ongoing Agency Financial Plan Rating: Low-Medium

PROJECT SUMMARY

Project Phase: Preliminary Engineering
Mode: Rail
Length: 35 miles
Total Estimated Capital Cost: \$250 million (\$1997)
Ridership Forecast: 14,000 riders; 53,000 systemwide

CAPITAL FINANCING PLAN SUMMARY

Total capital costs for Phase I are \$250 million in 1997 dollars. TTA anticipates funding this investment with \$100 million (40%) in Federal New Starts Capital Program (Section 5309) funds, \$50 million (20%) in North Carolina State Department of Transportation funds, \$50 million (20%) from a proposed regional tax on auto rentals, and \$50 million (20%) financed by Rail Car bonds.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

Annual operations and maintenance costs for the completed Regional Rail Project are projected at \$9.4 million (\$1997) when full revenue service begins in 2004. These estimates are reasonable given the proposed network size, ridership forecast, and planned service levels. A planned 5 percent annual increase in real rail system operating and maintenance (O&M) costs over the early years of the project implies a similar increase in service levels. Such service increases may be unwarranted given TTA's recent declines in bus ridership and service levels.

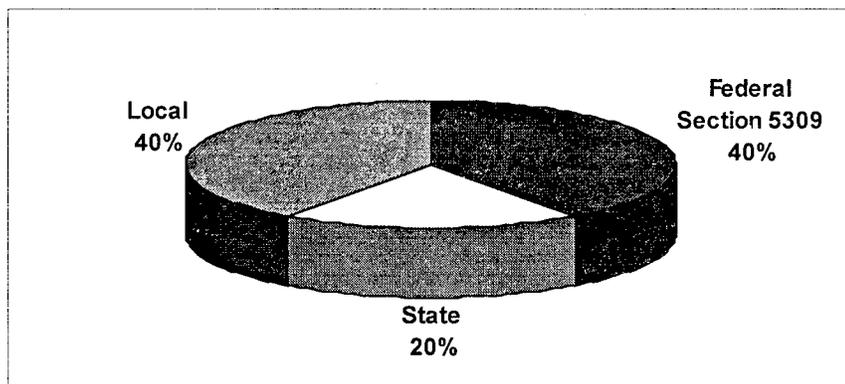
PROJECT PLAN OVERVIEW

Phase I of the Regional Rail Project is a 35-mile system from Durham to downtown Raleigh and to North Raleigh. The completed system would operate 13 diesel multiple unit (DMU) vehicles on existing North Carolina Railroad and CSX Railroad rights-of-way, serving sixteen stations linking Duke University, Durham, Research Triangle Park, Morrisville, Cary, NCSU, downtown Raleigh, and North Raleigh. Proposed service headways are 15-minutes in the peak-period and 30-minutes in the off-peak. TTA projects that the completed Phase I Regional Rail System will carry 14,000 riders per day by FY 2020, with a total systemwide transit ridership of 53,000.

Raleigh, NC: Phase I Regional Rail Project

Proposed Sources of Capital Funds – TTA

Sources	Total Project	
	1997 \$ M	Percent
Federal		
Section 5309 New Starts	\$ 100	40.0 %
State		
NCDOT	\$ 50	20.0 %
Local		
TTA	\$ 50	20.0 %
Rail Car Bonds	\$ 50	20.0 %
Total	\$ 250	100.0 %



KEY FINDINGS

The viability of TTA’s financial plan depends primarily on the agency’s ability to obtain firm funding commitments for the \$150 million in state and local capital funding (60% of project costs). At present many of these capital revenue sources have yet to be approved and, in some cases, have yet to be implemented by state or local governments. Other potential problems with the current plan include the following:

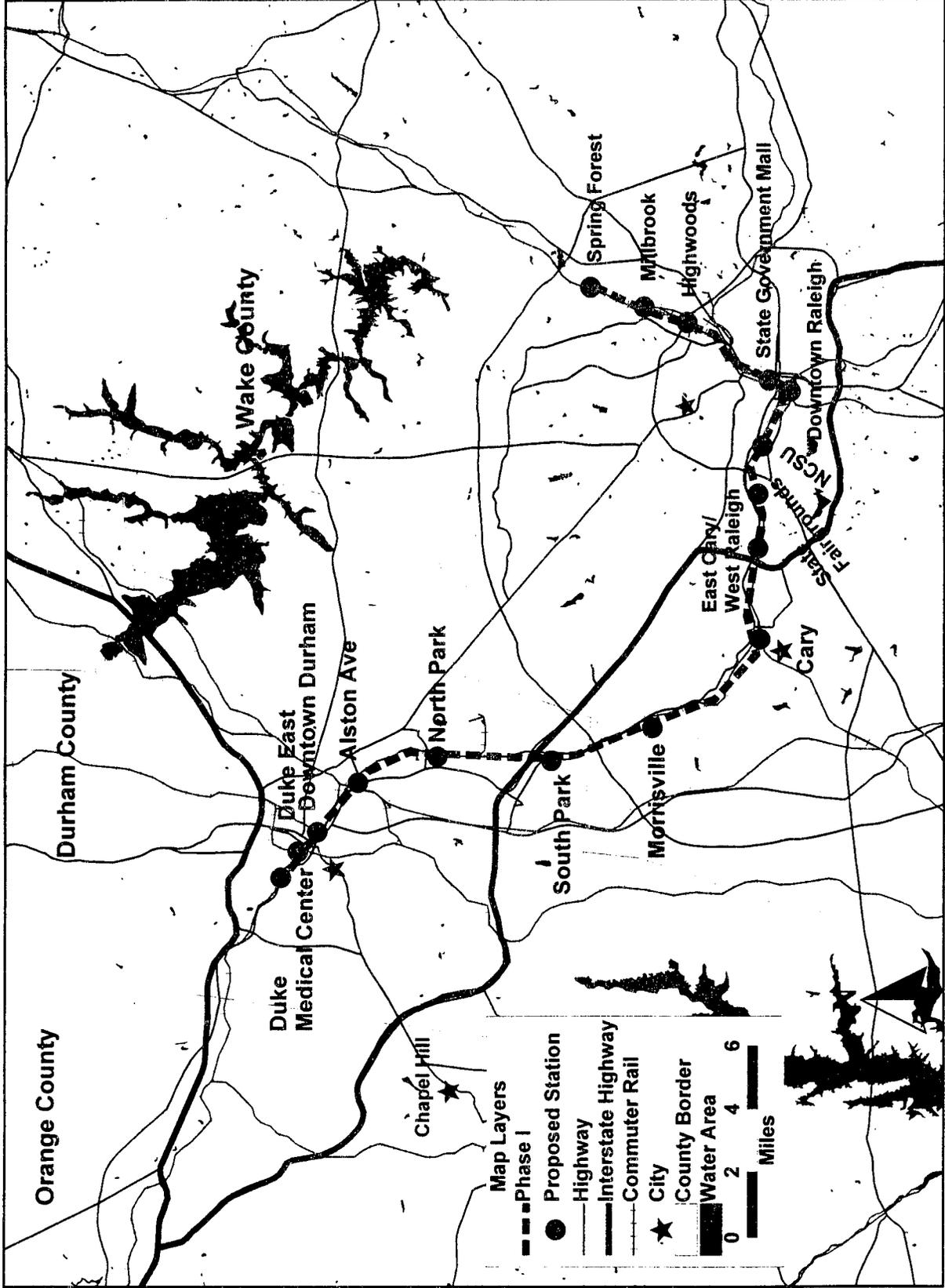
- The current financial plan identifies “flexible Federal funds” as a potential source if the state funding sources prove insufficient to cover the current 20% state-funding share.
- The current financial plan anticipates \$50 million (20%) from state funding sources. While the plan identifies a number of potential funding sources for the state’s proposed \$50 million (20%) funding share, none of these funds has been committed to the project and some of these sources have only been proposed and have yet to be created. This lack of a firm funding commitment for the \$50 million, 20% state share represents a significant source of risk to the project’s financial plan.
- \$50 million of the \$100 million in local funding is to originate from a proposed rental vehicle tax. Revenues from this source are projected to increase at a real annual rate of

Raleigh, NC: Phase I Regional Rail Project

increase (i.e., net of inflation) of 7.5 percent. This rate of increase implies a 7.5% annual rate of increase in motor vehicle rentals in North Carolina, a value that appears fairly optimistic. Given that funds from this source are also intended to cover the completed system's annual operating deficit, a shortfall in revenues from this source represents a significant risk to the project's financing plan.

- Included in the \$100 million local funding share is a \$50 million bond issue in 2002 to cover the cost of vehicle procurement. TTA has separated the costs of this vehicle procurement from the project's other capital costs (decreasing total project costs to \$200 million and increasing the Federal share from 40% to 50%).
- Despite producing healthy surpluses over the early years of the project, the overall Phase I financial plan projects a number of annual deficits beginning in FY 2000. These deficits tend to increase over time leading to a peak cumulative deficit of \$6.6 million (\$1997) in FY 2004. While this deficit is small relative to the size of the project (and could be covered by project contingencies), it does represent some risk to the project's financial plan.
- TTA's projections of fare revenues from bus and rail service assume a 5% annual rate of growth. This rate of increase appears optimistic given recent declines in TTA ridership. Also, the plan predicts annual fare revenues from the initial Phase I Rail service to be more than five times that currently collected from TTA's bus services. This implies a very high level of initial rail ridership.

Regional Transit Plan Raleigh, NC



Salt Lake City, UT: West-East Corridor Light Rail Transit

PROJECT

Project:	West-East Corridor Light Rail Transit Project
Project Location:	Salt Lake City, Utah
Lead Agency	Utah Transit Authority
Review Date:	November 1997
FTA Capital Financing Rating:	Low
FTA Operating Financing Rating:	Low
Significant Feature:	Numerous financing alternatives are discussed in the DEIS. The DEIS lists 18 potential non-Federal funding sources ranging from the Airport to the Church of Jesus Christ of Latter-Day Saints. None of these sources have expressed a commitment to financially support the project.

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Light Rail
Length:	10.9 miles
Total Estimated Capital Cost:	\$374 million (1996 \$)

CAPITAL FINANCING PLAN SUMMARY

The total capital cost for the West-East Corridor Light Rail Transit Project is estimated at \$374,000,000 (\$1996). For the project to move forward 100% Federal funding would be required. The non-Federal match is proposed to be met by the local overmatch of airport and highway improvements. UTA forecasted sales tax revenues are already committed through the year 2003 to fund operating subsidy plus the local share of capital requirements for the North-South LRT.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The net O&M costs generated by the West-East Corridor LRT net of fare revenues and cost savings from bus service replaced by LRT operations is estimated at \$3.9 million (1996\$). UTA has not identified stable and reliable supplemental funding sources to meet this subsidy requirement on a recurring basis.

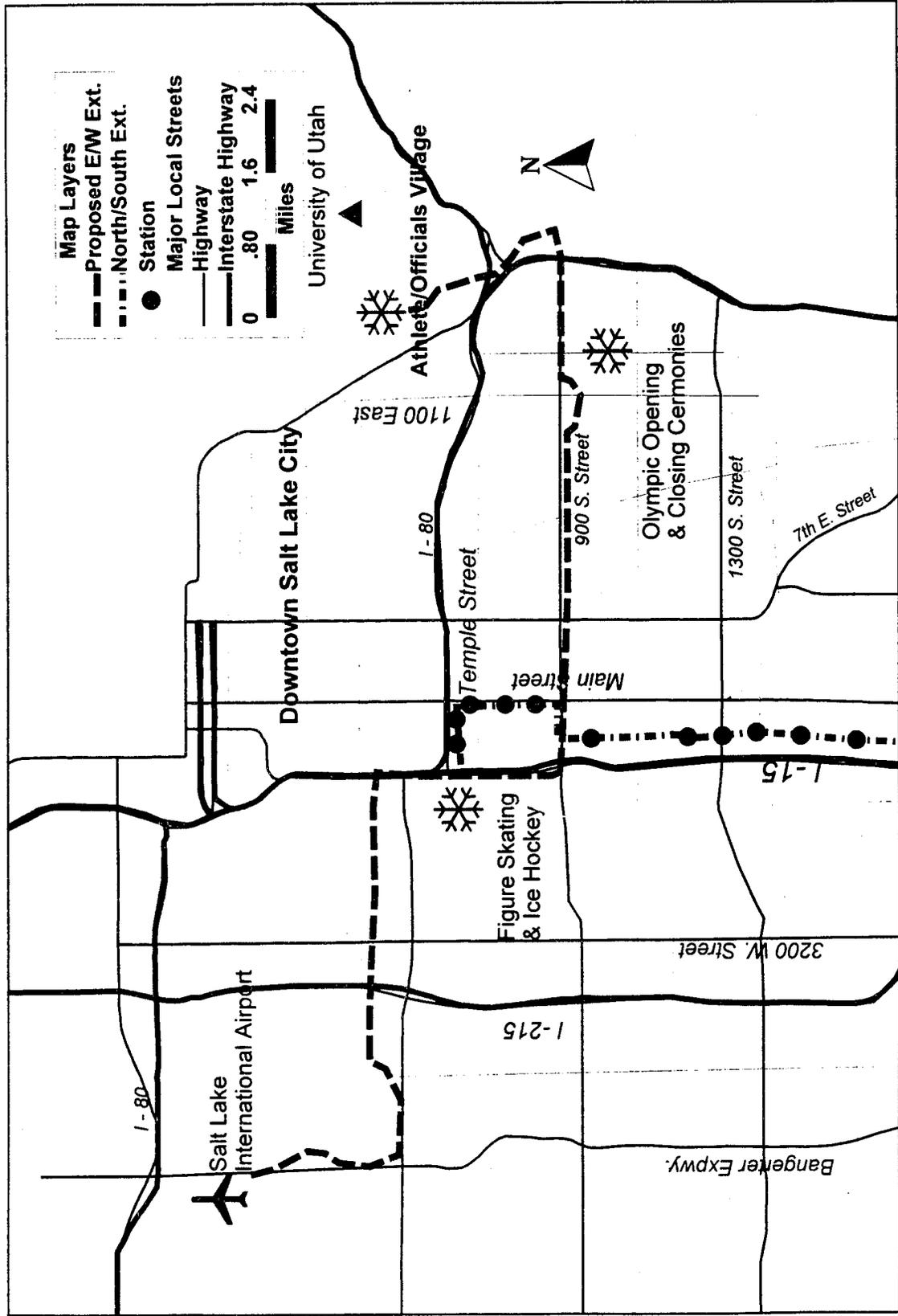
PROJECT PLAN OVERVIEW

The Wasatch Front Regional Council has identified a light rail transit (LRT) system as the preferred alternative to serve the University-Downtown-Airport Transportation Corridor of Salt Lake City, Utah. The 10.9 mile West-East Corridor will be constructed from the University of Utah Health Sciences Center, through the Central Business District (CBD) to Salt Lake City International Airport. It will interface with the existing north-south LRT line at 400 South and Main Street, and at South Temple and 400 West.

KEY FINDINGS

- The capital cost of the East-West Corridor Light Rail Transit Project is estimated at \$374 million. Numerous financing alternatives are discussed in the DEIS, and 18 potential non-Federal funding sources are cited, ranging from the Airport to the Church of Later Day Saints. However, none of these sources have expressed a commitment to financially support the project. This lack of a committed local funding source calls into question the feasibility of the project's financial plan.
- UTA's primary funding source for the local share of capital transit projects is the locally dedicated 0.25% sales tax. However, UTA's forecasted sales tax revenues have already been committed through the year 2003 to fund operating subsidy plus the local share of capital requirements for the North-South LRT. In lieu of a specified non-Federal funding source, a proposal raised in the DEIS suggests 100 percent Federal funding, with a delayed local match which would be forthcoming sometime after year 2003. Essentially, for the project to move forward at this time 100 percent Federal funding would be required.
- The net O&M costs generated by the East-West Corridor LRT net of fare revenues and cost savings from bus service replaced by LRT operations is estimated at \$3.9 million (\$1996). UTA has not identified stable and reliable supplemental funding sources to meet this subsidy requirement on a recurring basis.

Airport to University (East - West) Light Rail Line Salt Lake City, UT



San Diego, CA: Mid-Coast LRT Corridor

PROJECT

Project:	Mid-Coast LRT Corridor
Project Location:	San Diego, California
Lead Agency:	Metropolitan Transit Development Board (MTDB)
Review Date:	November 1997
FTA Capital Financing Rating:	Low-Medium
FTA Operating Financing Rating:	Medium
Significant Features:	Mid-Coast LRT to Balboa project to start development only after completion of the Mission Valley East LRT project. Primary local funding source, TransNet Sales Tax, will be discontinued due to a sunset clause in FY 2008.

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Light Rail
Length:	3.4 miles
Number of Stations:	2 stations (improvements only)
Total Estimated Capital Cost:	\$126.6 (Year-of-Expenditure \$)

CAPITAL FINANCING PLAN SUMMARY

Capital cost estimates for the Mid-Coast LRT to Balboa project appear reasonable when compared against recently built LRT systems and peer New Start projects. Federal contributions to this project from the New Starts Capital Program are estimated at 63 percent of total required capital revenues. The Federal contribution is somewhat higher than previous Federal participation levels on MTDB projects, however, when combined with the entire MTDB LRT Program, Federal participation is closer to 32%. The revision of the implementation schedule to a completion date of FY 2011 and the reduction in technical and financial scope of the original Mid-Coast Corridor project to achieve the Mid-Coast LRT to Balboa project has significantly increased the reasonableness of the capital financing plan. MTDB currently has a stable and important local funding source (TransNet Sales Tax), however, one quarter of the tax is scheduled to sunset in FY 2008.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

MTDB's cost estimates for ongoing operations and maintenance have decreased with the adjustment in implementation schedule and scope of the Mid-Coast Corridor project. Operating sources and uses of funds balance out from FY 1996 to FY 2015 while capital sources and uses of funds result in reserves of up to \$252.7 million in FY 2007 with a small but steady decline thereafter. MTDB assumes the continued use of Urbanized Area Formula Funds for the entire twenty-year period without any reflection of recent trends that strongly suggest this source will be eliminated in the near future.

PROJECT PLAN OVERVIEW

The Mid-Coast LRT to Balboa is a major new capital project under the responsibility of the Metropolitan Transit Development Board (MTDB). This project consists of a 3.4 mile Light Rail Transit (LRT) system running from Old Town North to Balboa Avenue along the Interstate-5 San Diego Northern Railway Corridor. The project also includes improvements to two existing Coaster commuter rail stations. The estimated cost in year of expenditure dollars for the complete project is approximately \$126.6 million (\$98.4 million in 1997 dollars). Federal funding sources are expected to provide approximately 63 percent of total project capital costs. The Mid-Coast Corridor project was originally composed of two major segments:

- The Balboa LRT extension, a 3.4 mile light rail segment from Old Town North to Balboa Avenue including improvements to existing Coaster Commuter Rail stations, and
- The University City segment, a 7.3 mile LRT extension from Balboa Avenue to North University City.

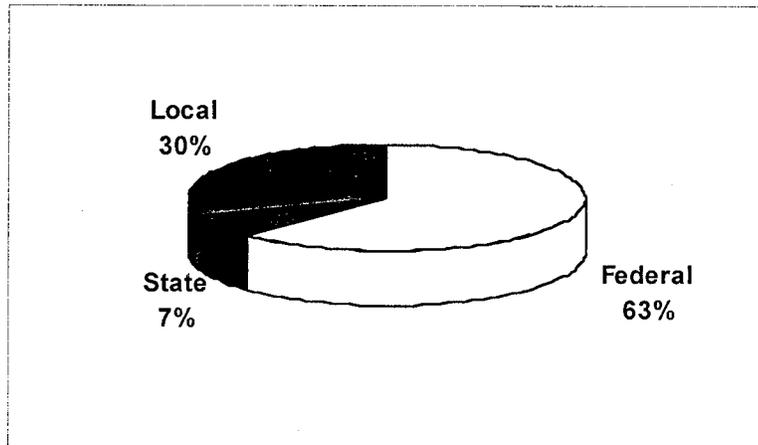
However, funding constraints identified over the last two years have resulted in the segment to Balboa Avenue as the only phase being considered by MTDB. This segment is the main focus of this financial assessment and will commence engineering, design and construction only after the Mission Valley East LRT project is complete (See separate Financial Assessment for Mission Valley East LRT).

Proposed Sources of Capital Funds: Mid-Coast LRT to Balboa

Source	Total Project	
	1997 \$ M	Percent
Federal		
Federal Section 5309 "New Starts"	\$ 61.6	62.6%
State		
TCI & TSM	\$ 7.0	7.2%
Local		
TransNet Sales Tax & Misc.	\$ 29.7	30.2%
Total	\$ 98.4	100.0%

Source: Financial Analysis Results Report (12-96) and MTDB (11-97)

Proposed Sources of Capital Funds: Mid-Coast LRT to Balboa



Source: Financial Analysis Results Report (12-96) and MTDB (11-97)

KEY FINDINGS

The MTDB recently revised their prioritization of major capital projects and the scope of the Mid-Coast Corridor project (10.7 miles to 3.4 miles) as stated above due to financial and technical constraints. As a result, the Mission Valley East LRT project has top priority among MTDB's major capital projects. As documented by MTDB, the Mid-Coast LRT to Balboa project will begin after the completion and start-up of the Mission Valley East LRT system which is scheduled in FY 2004.

This financial assessment is based on several sources of planning and financial documentation provided by MTDB for the original Mid-Coast Corridor project and the Mission Valley East LRT project. The original financial plan for the Mid-Coast Corridor project has not been updated to reflect the changes in technical scope described above. However, planning and financial documentation from the Mission Valley East LRT project provided adequate data to complete this financial assessment until the Mid-Coast documentation can be updated. Based on the available information, it appears that the cost estimates and the financial approach to funding this project are reasonable given the new implementation schedule and past track record of MTDB. The following issues were identified as a result of this financial assessment:

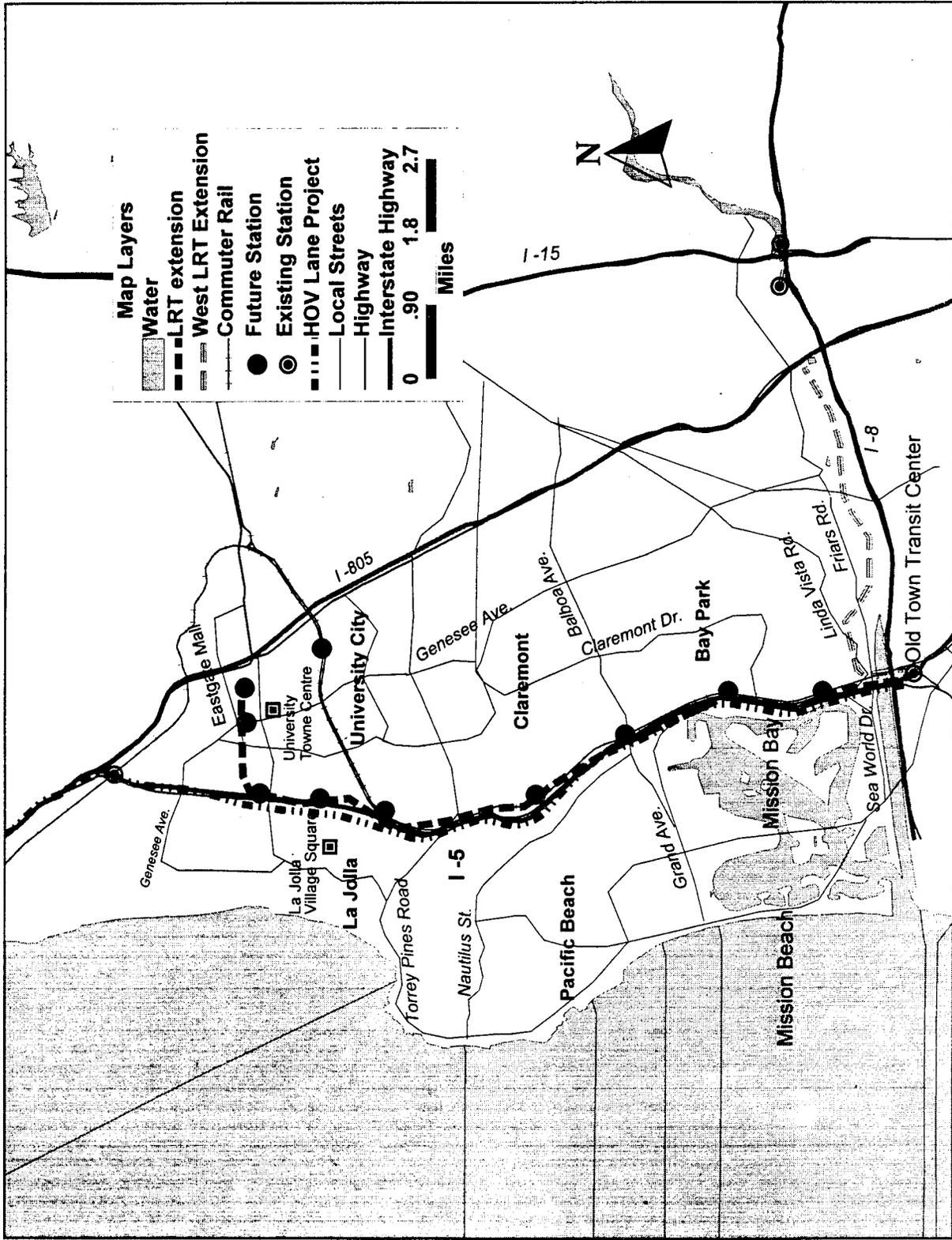
- The Financial Analysis Results Report (January 1994) for the Mid-Coast Corridor project has not been updated to reflect the revised implementation schedule and technical scope for the preferred segment to Balboa Avenue. The Financial Analysis Results Report (December 1996) for the Mission Valley East LRT project is the only source of financial data that reflects these changes, however, detailed information is limited since Mid-Coast LRT to Balboa is not the primary focus of this document.
- The level of Federal New Start funds at 63 percent of total capital revenues required to build the Mid-Coast LRT to Balboa project is considered in the middle of the range based on recent trends nationwide. MTDB and FTA have an agreement that Federal funds will contribute up to one-third of the capital resources required to build the entire level of MTDB rail expansion projects. MTDB estimates that when the entire rail system is combined, Federal participation is approximately 32 percent.

San Diego, CA: Mid-Coast LRT Corridor

- The ongoing financial plan estimates that approximately \$163.7 million in TDA funds will be available as capital revenue to support capital program costs. Although TDA funds have traditionally been used to support operating expenses, they can be made available for capital expenses. The cash flow analysis estimates that excess TDA funds will be available to support capital purchases from \$2.8 million in 1995 to \$16.9 million in FY 2007. These projections may be optimistic, considering that these funds have rarely been available for capital purchases in the past after paying off operating expenses. The reasoning for these excess balances in TDA funds is unclear in the most recent financial plan for the Mission Valley East LRT project. In addition, due to the regions recession in the early 1990's, TDA funding levels have declined and will only reach 1991 levels again in FY 2000.
- The Financial Analysis Results Report (December 1996) and a review of the cash flow analysis indicate that annual capital balances begin to decline after the discontinuation of a quarter of the TransNet Sales Tax in FY 2008. A review of the financial plan indicates that although a capital reserve of \$252.7 million exists in FY 2007 to offset this decline, an unknown portion of these reserve revenues may not be authorized to fund future deficits. Further analysis of this issue may be necessary to determine the exact amount available to cover future deficits and their effect, if any, on the financial commitments to major capital projects.
- Urbanized Area Formula Funds are estimated to continue at a consistent level from FY 1996 to FY 2015 to support bus and transit operating expenses for existing and new investments. Current trends in Federal operating subsidies indicate that this source of funding will be discontinued in the near future. Projections in the cash flow analysis at approximately \$2.4 million annually appear to be unrealistic based on current trends and data from peer transit agencies which indicate revenue from this source steadily declining over recent years to a zero dollar level.

Miscellaneous revenues are identified in the cash flow analysis to offset a portion of both operating and capital expenses. Operating revenues total \$161.7 million and capital revenues total \$111.8 million from FY 1996 to FY 2015. These revenues are only generally identified as advertising, interest income and other government sources in the financial documentation. Specific amounts by category and long-term commitment confirmation by other government sources are not identified in the financial plan.

Mid Coast Corridor San Diego, CA



PROJECT

Project: Mission Valley East Light Rail Transit (LRT)
Project Location: San Diego, California
Lead Agency: Metropolitan Transit Development Board
Review Date: November 1997
FTA Capital Financing Rating: Medium
FTA Operating Financing Rating: Medium

PROJECT SUMMARY

Project Phase: Preliminary Engineering
Mode: Light Rail
Length: 5.9 miles
Total Estimated Capital Cost: \$332 million (\$1997)

CAPITAL FINANCING PLAN SUMMARY

The capital cost for the Mission Valley East LRT project is estimated at \$332.0 million in 1997 dollars (\$373.9 in year-of-expenditure dollars). Federal contributions to this project from the New Starts Capital Program are estimated at approximately \$261.4 million or 79 percent of total required capital revenues. The Federal contribution is somewhat higher than previous Federal participation levels on MTDB projects, however, when combined with the entire MTDB LRT program, Federal participation is estimated to be approximately 32 percent overall. MTDB completed the initial starter line and seven extensions with minimal Federal funds. This is their first major Federal contribution request. State funding for this project is estimated at \$58.3 million (1997 dollars) or 18 percent of total capital revenues and is derived from the Transportation Capital Improvement (TCI) and Transportation System Management (TSM) programs. MTDB currently has a stable and important local funding source (TransNet Sales Tax), however, one quarter of the tax is scheduled to sunset in FY 2008. Local funds are estimated to contribute \$9.1 million or 3 percent of total capital revenues.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

MTDB's cost estimates for ongoing operations and maintenance have decreased with the adjustment in the implementation schedule and scope of the related Mid-Coast Corridor project. Operating sources and uses of funds balance out from FY 1996 to FY 2015 while capital sources and uses of funds result in reserves of up to \$252.7 million in FY 2007 with a small but steady decline thereafter. MTDB assumes the continued use of Urbanized Area Formula Funds for the entire twenty-year period without any reflection of recent trends that strongly suggest this source will be eliminated in the near future. A portion of TDA funds that have historically been exhausted to meet operating expenses are used as capital revenue throughout the twenty-year cash flow period.

PROJECT PLAN OVERVIEW

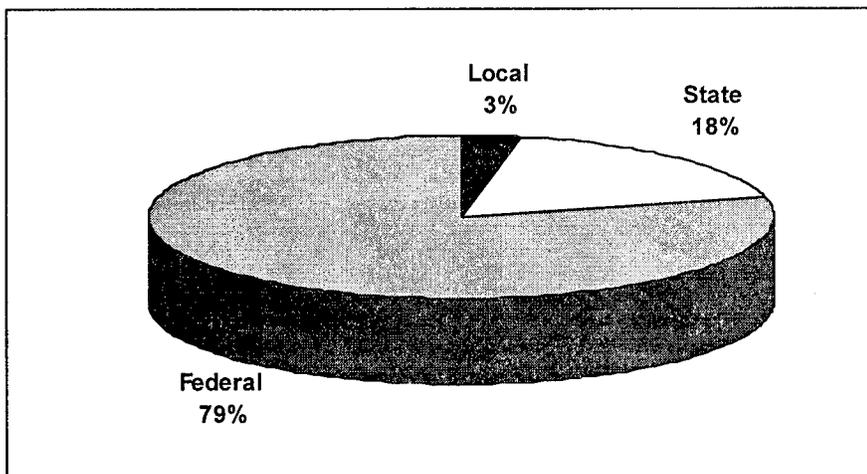
San Diego, CA: Mission Valley East LRT

The Mission Valley East LRT is a major new capital project under the responsibility of the Metropolitan Transit Development Board (MTDB). This project consists of a 5.9-mile LRT system running between Interstate 15 (I-15) and Baltimore Drive in La Mesa. The alignment would travel parallel to Interstate 8 (I-8) connecting with the Mission Valley West LRT system near I-15 at the Mission San Diego Station. The combined LRT system when complete would provide 12 miles of service from the existing Grossmont Center station (connection to Orange Line) in the east to the Old Town Transit Center station, the westernmost station on the Mission Valley West LRT system. The estimated cost for the complete project is approximately \$332.0 million in 1997 dollars. Federal funding from the New Starts Capital Program is expected to contribute approximately 79 percent to the total capital costs of the project.

Proposed Sources of Capital Funds: Mission Valley East LRT

Source	Total Project	
	1997 \$ M	Percent
Federal		
Federal Section 5309 "New Starts"	\$ 261.4	78.7%
CMAQ	\$ 3.2	1.0%
State		
TCI & TSM	\$ 58.3	17.6%
Local		
TransNet Sales Tax & Misc.	\$ 9.1	2.7%
Total	\$ 332.0	100.0%

Source: Financial Analysis Results Report (12-96) and MTDB (11-97)



Source: Financial Analysis Report (12-96) and MTDB (11-97)

KEY FINDINGS

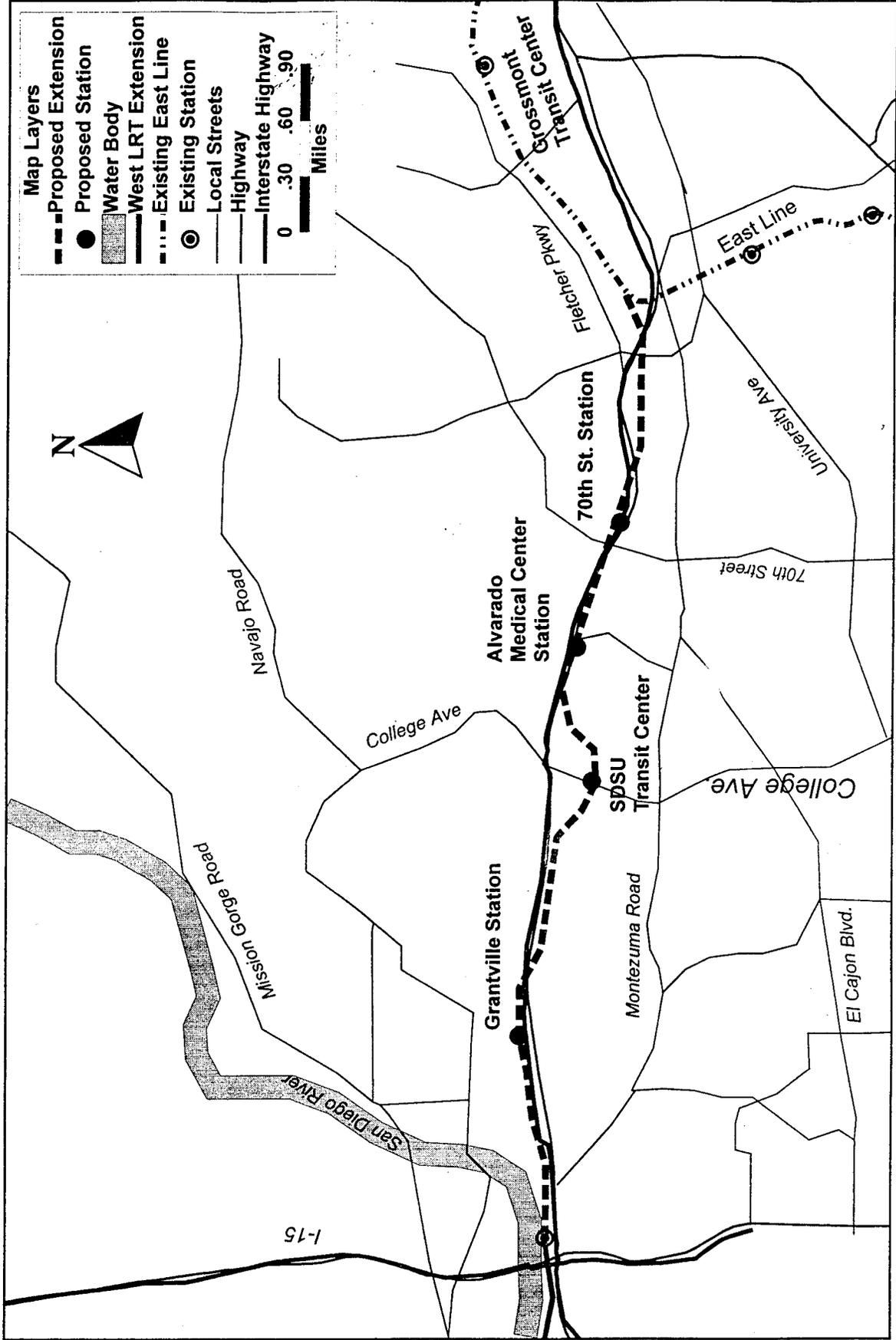
MTDB's financial plan for the Mission Valley East LRT project relies heavily on the use of New Start Capital Program funds at 79 percent of total capital revenues. The maximum level available from FTA is 80 percent, however, recent participation levels indicate a declining trend in this amount due to an ever

increasing nationwide demand and limited New Start funds. The following issues were identified as a result of this financial assessment:

- The level of Federal New Start funds at 79 percent of total capital revenues required to build the Mission Valley East LRT is considered high based on recent trends nationwide. MTDB and FTA have an agreement that Federal funds will contribute up to one-third of the capital resources required to build the entire MTDB rail expansion projects. Even with this level of Federal participation at 80 percent for the Mission Valley East LRT project, MTDB estimates that when the entire rail system is combined, Federal participation will be approximately 32 percent. This participation level is in accordance with the prior MTDB/FTA agreement, however, the possibility exists that this level of Federal funding at 80 percent may not be available at this time for the Mission Valley East LRT project.
- The Financial Analysis Results Report (December 1996) and a review of its cash flow analysis indicate that annual capital balances begin to decline after the discontinuation of a quarter of the TransNet Sales Tax in FY 2008. A review of the financial plan indicates that although a capital reserve of \$252.7 million exists in FY 2007 to offset this decline, an unknown portion of these reserve revenues may not be authorized to fund future deficits. Further analysis of this issue may be necessary to determine the exact amount available to cover future deficits and their effect, if any, on the financial commitments to major capital projects.
- The ongoing financial plan estimates that approximately \$163.7 million in TDA funds will be available as capital revenue to support capital program costs. Although TDA funds have traditionally been used to support operating expenses, they can be made available for capital expenses. The cash flow analysis estimates that excess TDA funds will be available to support capital purchases from \$2.8 million in 1995 to \$16.9 million in FY 2007. These projections may be optimistic, considering that these funds have rarely been available for capital purchases in the past after paying off operating expenses. The reason for relying on these excess balances in TDA funds is unclear in the most recent financial plan for the Mission Valley East LRT project. In addition, due to the regions recession in the early 1990's, TDA funding levels have declined and will only reach 1991 levels again in FY 2000.
- Urbanized Area Formula Funds are estimated to continue at a consistent level from FY 1996 to FY 2015 to support bus and transit operating expenses for existing and new investments. Current trends in Federal operating subsidies indicate that this source of funding will be discontinued in the near future. Projections in the cash flow analysis at approximately \$2.4 million annually appear to be unrealistic based on current trends and data from peer transit agencies which indicate revenue from this source steadily declining over recent years to a zero dollar level.
- Miscellaneous revenues are identified in the cash flow analysis to offset a portion of both operating and capital expenses. Operating revenues total \$161.7 million and capital revenues total \$111.8 million from FY 1996 to FY 2015. These revenues are only generally identified as advertising, interest income and other government sources in the financial documentation. Specific amounts by category and long-term commitment confirmation by other government sources are not identified in the financial plan.

Mission Valley East LRT Corridor

San Diego, CA



San Diego, CA: Oceanside – Escondido Rail Project

PROJECT

Project: Oceanside – Escondido Rail Project
Project Location: San Diego, California
Lead Agency: North County Transit District (NCTD)
Review Date: November 1997
FTA Capital Financing Rating: Medium
FTA Operating Financing Rating: Low-Medium

PROJECT SUMMARY

Project Phase: Preliminary Engineering
Mode: Rail
Length: 23.7 miles
Number of Stations: 17 stations
Total Estimated Capital Cost: \$193.7 million (\$1995)

CAPITAL FINANCING PLAN SUMMARY

Total project costs for the Oceanside–Escondido Rail Project are \$193.7 million in 1995 dollars. NCTD anticipates funding this investment using \$107.0 million (55.2%) in Federal New Starts Capital Program (Section 5309) funds, \$34.4 million (17.8%) in state funding and \$52.3 million (27.0%) in local, Transnet sales taxes.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

NCTD obtains operating funds both from the Transnet source and the Transit Development Act (TDA), a dedicated ¼ percent local sales tax created in 1971 for the purpose of funding transit operations. The current financial plan does not demonstrate that either of these sources has sufficient capacity to fund the new projects planned by NCTD.

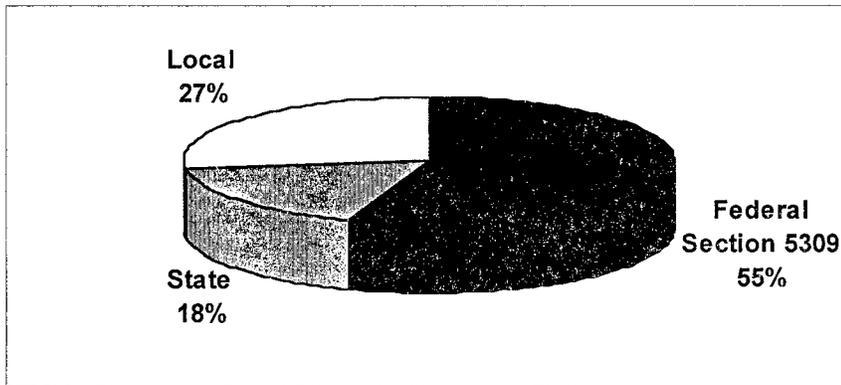
PROJECT PLAN OVERVIEW

The Oceanside–Escondido Rail Project will convert 22 miles of existing freight rail alignment into a light rail (DMU) system. The existing right-of-way is located within the Highway 78 corridor that runs between the Cities of Oceanside and Escondido. The project also includes development of 1.7 miles of new alignment to serve California State University at San Marcos, and 15 passenger stations. Other project components include a new maintenance facility and ten DMU vehicles, each with a capacity of 75 persons.

Construction is scheduled to begin in late 1998 and revenue operations to begin in late 2000. The completed system is forecast to serve 11,400 daily riders in FY 2001 up to 15,100 in FY 2015.

Proposed Sources of Capital Funds - NCTD

Sources	Total Project	
	1995 \$ M	Percent
Federal		
Section 5309 New Starts	\$ 107.0	55.2 %
State		
State Transportation Improvement Program	\$ 16.9	8.8 %
Proposition 108	\$ 17.5	9.0 %
Local		
Transnet	\$ 52.3	27.0 %
Total	\$ 193.7	100.0 %



KEY FINDINGS

NCTD is currently seeking a total Federal contribution of \$107 million (\$1995). This contribution represents a total Federal share of 55.2%. The project’s financial materials state that, if this level of Federal funding is secured for the project, then “with some additional debt financing, the needed matching funds could be obtained”, however, “if some of these revenue assumptions do not come to pass, the impact will be severe”. Other potential financing issues include the following:

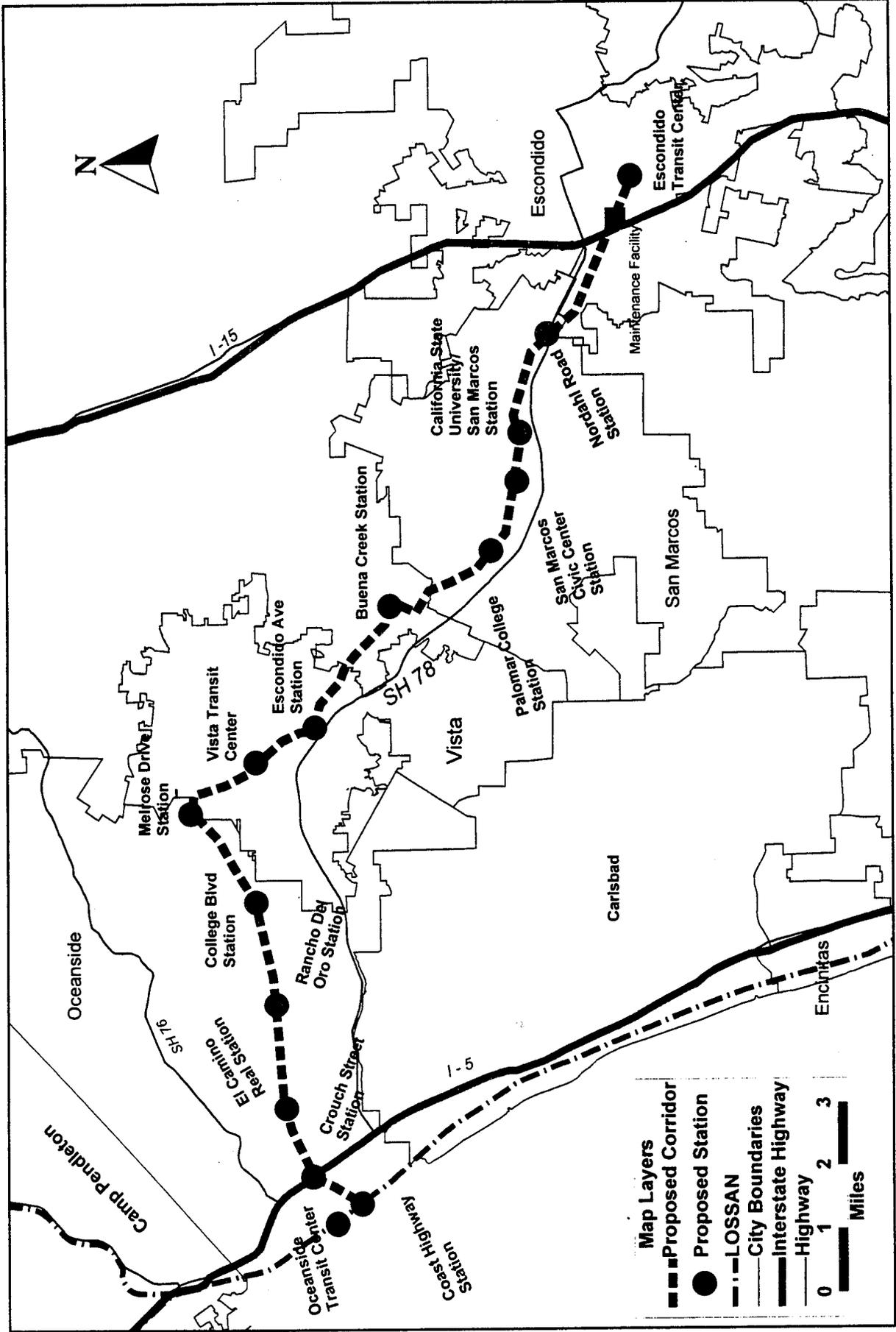
- According to the 1996 TransNet Plan of Finance, constraints on funds from the local TransNet sales tax will require both MTDB and NCTD to obtain over \$534 million debt financing to complete their capital projects (including Oceanside–Escondido) on their existing schedules. The current financial plan does not specify the amount of bonding required for the Oceanside-Escondido project.
- The materials submitted by NCTD do not verify whether the \$17.5 million in Proposition 108 funds have been specifically set-aside for this project.

San Diego, CA: Oceanside – Escondido Rail Project

- After reaching a peak in 1991, NCTD ridership declined through 1993 and now appears to be regaining its former levels. Despite the decline in ridership, the operator service levels have continued to grow. Ridership decreased by 5% in FY ;1992 due to the economic downturn in California and the large deployment of troops from Marine Corps Base Camp Pendleton for Operation Desert Storm.
- The project financial plan does not include a full twenty-year cash-flow analysis or a detailed description of all sources and uses of capital and operating funds proposed for the rail project.

Oceanside - Escondido Corridor

San Diego, CA



PROJECT

Project: Third Street Light Rail Project
Project Location: San Francisco, California
Lead Agency: San Francisco Municipal Railway (MUNI)
Review Date: November 1997
FTA Capital Financing Rating: Medium
FTA Operating Financing Rating: Medium-High

PROJECT SUMMARY

Project Phase: Preliminary Engineering
Mode: Light Rail
Total Estimated Capital Cost: \$465.6 million (\$Year-of-Expenditure)

CAPITAL FINANCING PLAN SUMMARY

Phase I (IOS) of the Third Street Light Rail Project requires no Federal FTA Section 5309 New Starts funding. Federal STP/CMAQ funds are flexed at the state level and represent a modest amount of California's apportionment under ISTEA, and an extremely small portion of capital funding. Local funding is projected to meet almost 90 percent of the Phase I project capital costs. However, the Financial Analysis Results Report states, "It is likely that a Letter-of-No-Prejudice will be sought from the Federal Transit Administration that will qualify the local Proposition B revenues that will be primarily used to fund the IOS Project as local match for subsequent Federal funding for the New Central Subway."

ONGOING AGENCY FINANCIAL PLAN SUMMARY

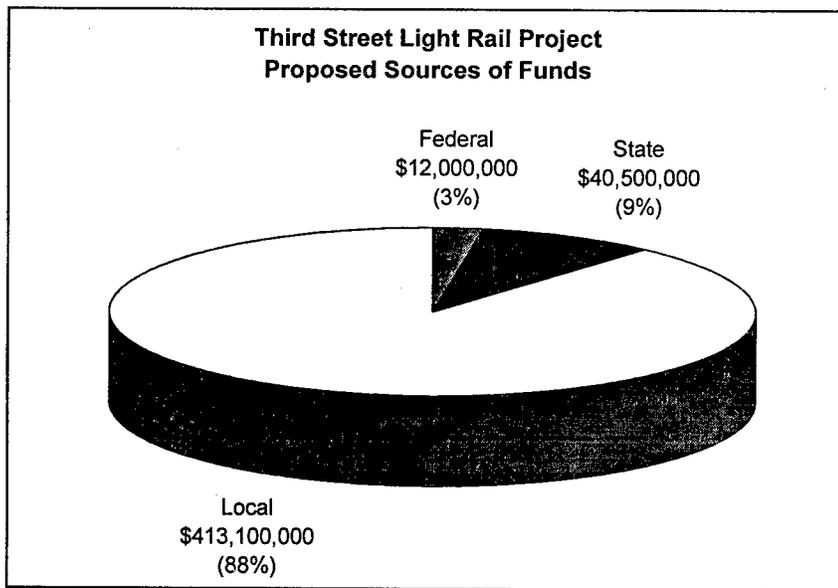
The operation of the Third Street Light Rail project requires additional operating funds which are derived from increased fare revenue, increased general fund appropriations and increased transfers of parking revenues; compared to the financial projections of operations under the no-build. Essentially, any shortfall is assumed to be met by some type of financial assistance from the City. Because a significant amount of MUNI's operating support is discretionary funding from the City, MUNI's operating expenses are typically constrained through the use of hiring freezes, salary savings (whereby budgeted positions remain unfilled) and other personnel cuts. As a consequence, MUNI's operating costs are often determined, year-to-year, by available revenues from the City. Costs incurred to operate and maintain the system are in reality constrained by the total amount of available revenues.

PROJECT PLAN OVERVIEW

The Third Street Light Rail Project would be completed in two phases. The initial phase, the Initial Operating Segment (IOS) which is addressed in this financial assessment, would extend light rail service on the J-line from the Market Street Subway to the CalTrain Bayshore Station via the MUNI Metro Extension and Third/Fourth Street; and the full-build phase (New Central Subway), which would subsequently implement an independent light rail line from the CalTrain Bayshore Station to Chinatown via Third/Fourth, Geary, and Stockton Streets.

Third Street Light Rail Project – Proposed Sources of Funds

Source	Total Project	
	YOE \$ M	Percent
Federal		
Federal STP/CMAQ	\$12.0	3%
State		
State Regional Improvement Program	\$40.5	9%
Local		
Proposition B Sales Tax Revenues	\$404.6	86%
Tax Increment Financing	<u>\$ 8.5</u>	<u>2%</u>
Total	\$465.6	100%



KEY FINDINGS

- The total capital cost of the Third Street Light Rail Project is estimated at \$404 million (\$1997). The proposed financial plan includes no Federal FTA New Starts funding. The financial plan does propose \$12 million (2.6%) in Federal STP/CMAQ funding contributions, \$40.5 million (8.7%) from the state regional improvement program, \$404.6 million (86.9%) from Proposition B Sales Tax Revenues (Prop B), and \$8.5 million (1.8%) through Tax Increment Financing.
- There is the concern that MUNI is assuming a larger portion of Prop B revenues for its capital program than it has been scheduled to receive. According to the financial assessment dated September 1997, Prop B tax revenues are estimated at \$902 million over the 20 year period ending in 2010. Moreover, the assessment states that 60% of

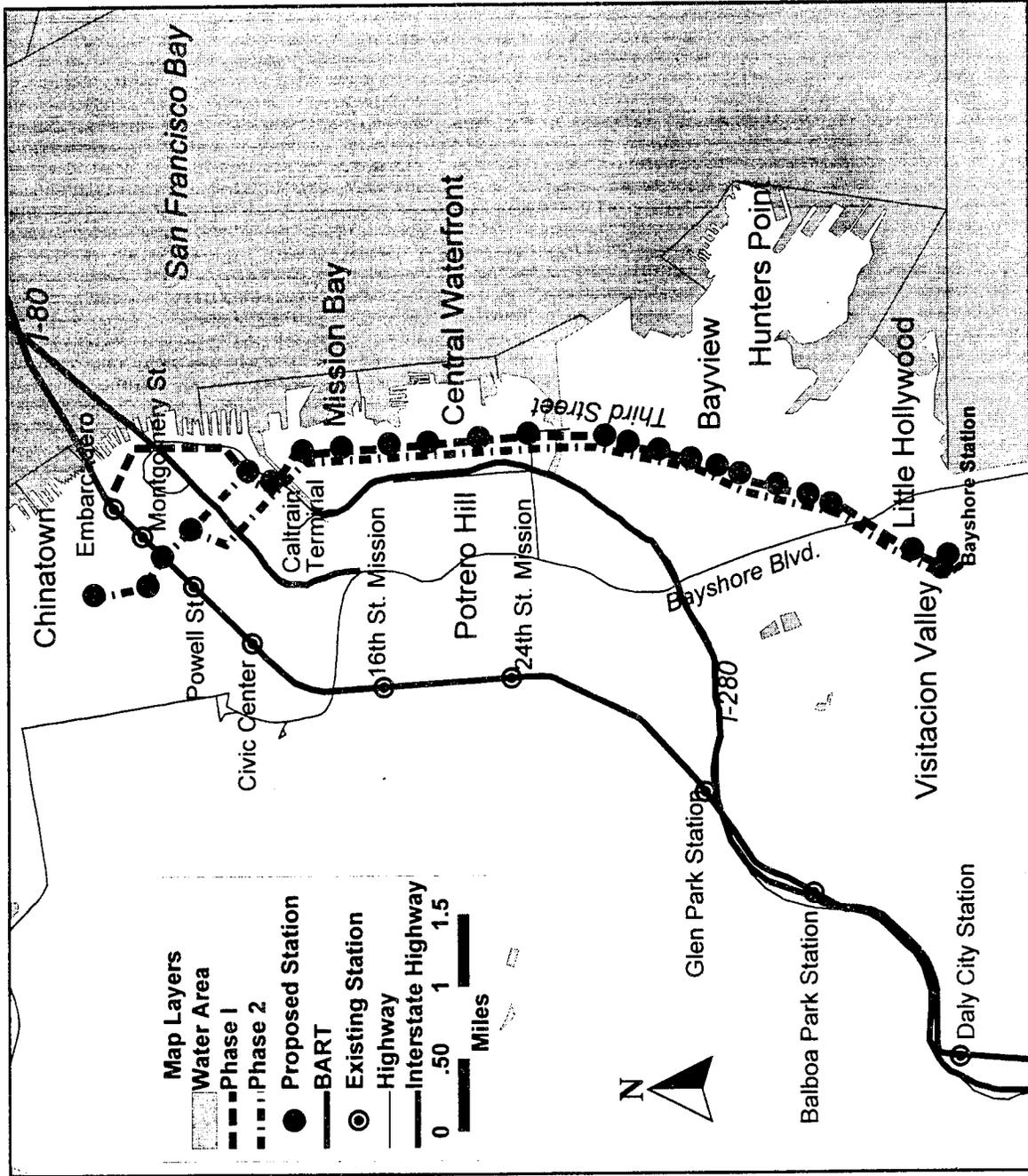
San Francisco, CA: Third Street LRT

these revenues are dedicated to MUNI projects which would provide a total of \$541.2 million over 20 years. MUNI shows capital expenditures from Prop B funds of \$561.3 million and operating expenditures of \$90.1 million from Prop B funds, which would oversubscribe the MUNI allocation by \$110.2 million. Another local analysis not considered in this review and rating forecasts a level of Prop B funding that would not oversubscribe the MUNI allocation.

- The \$40.5 million in State Regional Improvement funds have been earmarked for the Third Street Light Rail Project and are therefore considered a secure source of funds.
- The analysis estimates that the Third Street Light Rail Project will increase MUNI's operating and maintenance costs by \$10.3 million for FY 2004. The proposed funding sources to cover this O&M cost increase in FY 2004 are: \$3.2 million in increased General fund appropriations, \$3.4 million in increased transfers of parking revenues, and \$2.9 million in increased Federal operating subsidies. Additional sources will have to be sought to account for the remaining \$800,000 in increased O&M costs for FY 2004.

Third Street LRT

San Francisco, CA



PROJECT

Project:	Tren Urbano Minillas Extension
Project Location:	San Juan, Puerto Rico
Lead Agency:	Puerto Rico Highway and Transportation Authority
Review Date:	November 1997
FTA Capital Financial Rating:	Medium
FTA Operating Financial Rating:	Medium-High
Significant Feature:	The PRHTA derives revenues from a number of sources. The PRHTA intends to issue revenue bonds and other obligations in amounts sufficient to not only meet its existing capital construction program needs, but also fund the capital cost of the Minillas Extension.

PROJECT SUMMARY

Project Phase:	Preliminary Engineering
Mode:	Rail
Length:	1 mile
Number of Stations:	2 stations
Total Estimated Capital Cost:	\$110 million

CAPITAL FINANCING PLAN SUMMARY

The funding plan for the Minillas Extension is interrelated with the funding for Tren Urbano Phase I and the highway program for the Commonwealth. The Puerto Rico Highway and Transportation Authority (PRHTA) has requested an additional \$110 million grant for the Tren Urbano Phase I system. PRHTA is seeking additional FTA capital program funds for the financing of the proposed extension of the Phase I system to Minillas. For the purposes of this analysis, PRHTA has included Federal funds in the amount of \$32 million for the preliminary engineering and design of the Minillas Extension. The Financial Evaluation Report provided by PRHTA does not include any funds above the \$32 million in the cashflows analyses for the Tren Urbano Phase I and Minillas Extension projects. Nevertheless, the wording clearly indicates that the FTA support of \$32 million applies to the preliminary engineering and design of the Minillas Extension. The PRHTA derives revenues from a number of sources. The PRHTA intends to issue revenue bonds and other obligations in amounts sufficient to not only meet its existing capital construction program needs, but also fund the capital cost of the Minillas Extension.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

The operation of the Minillas Extension is projected to incur operating deficits of slightly over \$2 million per year. Essentially, any shortfall is assumed to be met by some type of financial assistance from the PRHTA. PRHTA revenues from gasoline taxes, gas oil and diesel oil taxes, tolls, motor vehicle registration fees, investment income, and beginning in FY 1998, crude petroleum taxes not used to support debt for the capital program would be available for operations and maintenance.

PROJECT PLAN OVERVIEW

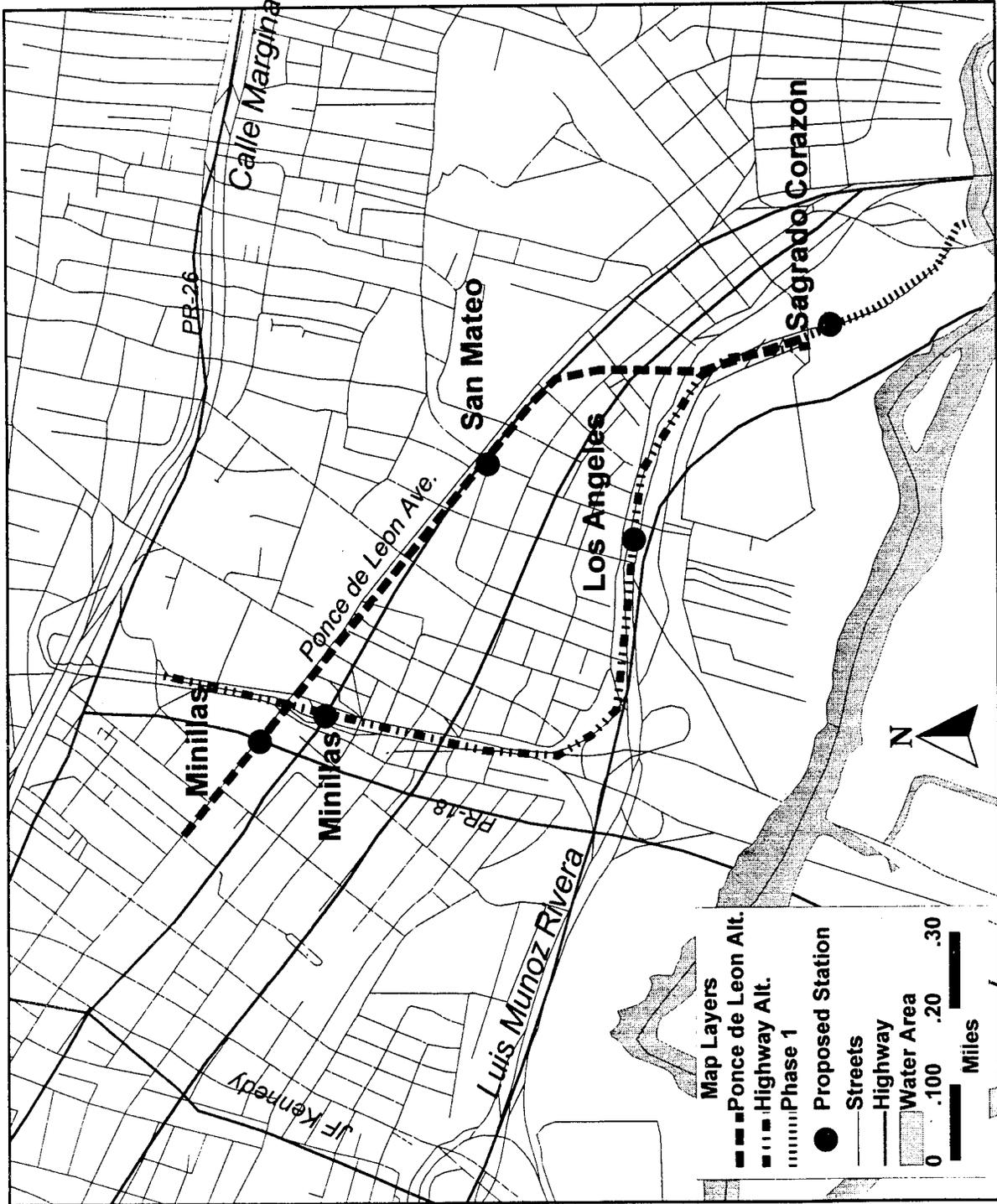
The Puerto Rico Department of Transportation and Public Works (PRDTPW) through its Highway and Transportation Authority (PRHTA) is proposing an extension of its heavy rail rapid transit system, known as Tren Urbano Phase I. The extension of Tren Urbano - Phase I from its current terminus at Sagrado Corazon to the Minillas area of Santurce is approximately one mile in length and contains two stations.

KEY FINDINGS

- The funding plan for the Minillas Extension is interrelated with the funding for Tren Urbano Phase I and the highway program for the Commonwealth. The Puerto Rico Highway and Transportation Authority (PRHTA) has requested an additional \$110 million grant for the Tren Urbano Phase I system. PRHTA has included Federal funds in the amount of \$32 million specifically for the preliminary planning and design of the Minillas Extension.
- The PRHTA derives substantial revenues from user fees and various dedicated taxes and intends to issue revenue bonds and other obligations in amounts sufficient to not only meet its existing capital construction program needs, but also to fund the capital cost of the Minillas Extension. Accounting for its current obligations, the PRHTA has bonding capacity of approximately \$3.9 billion (assuming a target coverage ratio of 1.5 and inclusive of reserve funds and financing costs). This bonding capacity will be drawn upon for both Tren Urbano and the Minillas Extension.
- The operation of the Minillas Extension is projected to incur operating deficits of slightly over \$2 million per year. Essentially, any shortfall is assumed to be met by some type of financial assistance from the PRHTA. PRHTA revenues from user fees and taxes that are not used to support debt for the capital program would be available for operations and maintenance.

Minillas Extension

San Juan, Puerto Rico



PROJECT

Project: Sound Move
Project Location: Seattle, Washington
Lead Agency: Central Puget Sound Regional Transit Authority (RTA)
Review Date: November 1997
FTA Capital Financing Plan Rating: Medium-High
FTA Ongoing Agency Financial Plan Rating: Medium-High
Significant Features: To ensure an equitable distribution of project benefits and costs across each of the RTA's five regional subareas, the RTA Board has established a policy called "subarea equity".

PROJECT SUMMARY

Project Phase: Preliminary Engineering
Mode: Light Rail/Commuter Rail/ Bus/HOV
Length: 25 miles of Light Rail/81 miles of Commuter Rail
Number of Stations: 26 Light Rail stations
Total Estimated Capital Cost: \$3.1 billion

CAPITAL FINANCING PLAN SUMMARY

Total project costs for the Sound Move Project are approximately \$3.1 billion in 1995 dollars. The Regional Transit Authority (RTA) financial plan assumes funding this investment using \$727 million in Federal funds for a 23.7% Federal share (all figures are in \$ 1995). Included in this share are \$550 million (17.9%) from the New Starts Capital Program (Section 5309) and \$177 million (5.8%) from other FTA and FHWA sources. RTA has yet to identify these "other" Federal sources. The remaining \$2,341 million (73.6%) in funds would be derived entirely from local sources including \$1,001 million (32.6%) from the State Sales and Use tax, \$288 million (9.4%) from the Motor Vehicles Excise Tax (MVET) and \$1,052 million (34.3%) from debt secured by these two tax sources. The proven stability and reliability of these local funds combined with the high local match produces a strong project financial plan for this project.

ONGOING AGENCY FINANCIAL PLAN SUMMARY

Total annual operating costs for the completed system will be \$101.4 million (\$1995) once full service levels have been implemented in FY 2007. This includes \$38 million for light rail, \$21.67 million for commuter rail and \$41.7 million for expanded bus services. O&M costs for light rail appear high relative to that experienced by existing operators while the commuter rail O&M costs are slightly lower. Project operations are funded primarily by the same two tax sources as are used for capital development — the dedicated, voter-approved, and local-option Sales and Use tax and the Motor Vehicles Excise Tax (MVET). RTA is not currently considering any significant capital investments beyond the Sound Move Project.

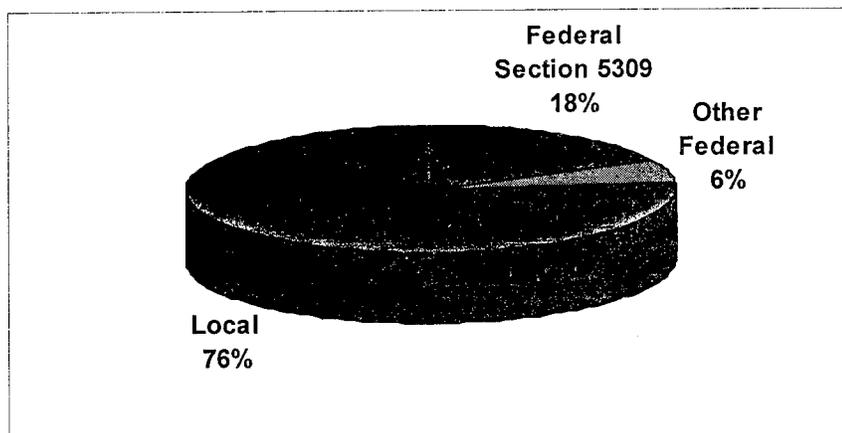
PROJECT PLAN OVERVIEW

The Sound Move Project is designed as a comprehensive, integrated regional system of high capacity transit services. The project includes the following three modal components:

- Light Rail: A 23-mile Central LRT Project running north to south from Northgate through downtown Seattle, Southeast Seattle and the cities of Tukwila and SeaTac. RTA also proposes an additional 2-mile LRT line from downtown Tacoma to the AMTRAK/Sounder rail station and the Tacoma Dome. The combined investment includes 26 stations (\$1,696 million in 1995 dollars)
- Commuter Rail: An 81-mile commuter rail system using existing railroad tracks between Everett, Seattle, Tacoma and Lakewood (\$539 million in 1995 dollars)
- Bus/HOV: Twenty new regional express bus routes to be combined with fourteen new direct access ramps and several new park-and-ride lots and transit centers, and integrated with 100 miles of existing HOV lanes (\$833 million in 1995 dollars).

Proposed Sources of Capital Funds – RTA

Sources	Total Project	
	1995 \$ M	Percent
Federal		
Section 5309 New Starts	\$ 550	17.9 %
Other FTA / FHWA	\$ 177	5.8 %
Local		
Sales and Use Tax	\$ 1,001	32.6 %
Motor Vehicle Excise Tax	\$ 288	9.4 %
Bonds	\$ 1,052	34.3 %
Total	\$ 3,068	100.0 %



Seattle, WA: Sound Move Project

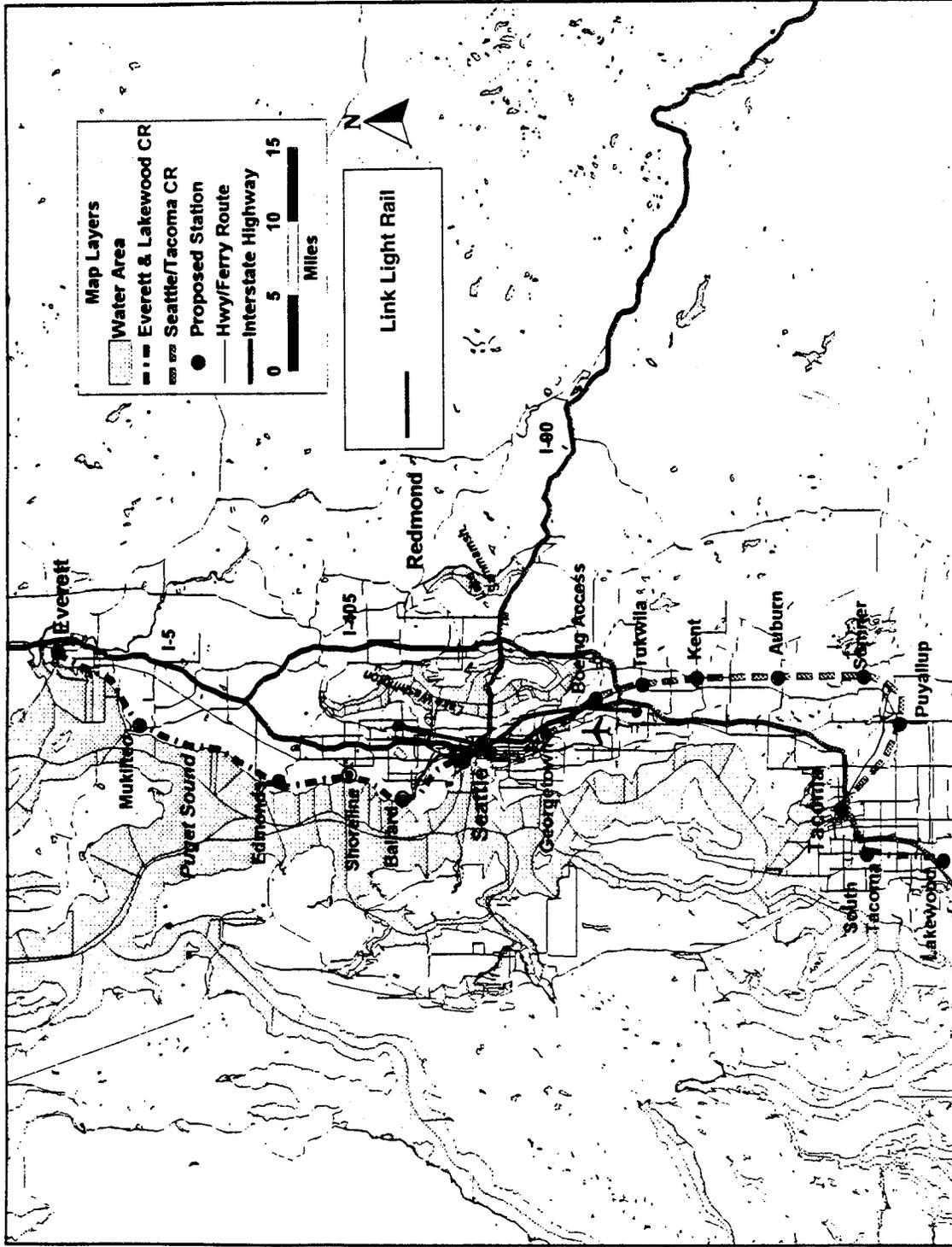
KEY FINDINGS

The proven stability and reliability of the proposed local funds combined with a high local match of 73.6% has yielded a strong financial plan for this project. The only significant concern here is the project's large scale relative to Seattle's existing transit operations. Other highlights and potential concerns for the Sound Move Project's financial plan includes the following:

- RTA is seeking \$550 million (17.9%) from Federal Section 5309 funds and \$177 million (5.8%) from other FTA and FHWA sources. RTA has yet to adopt a specific breakdown for the \$177 million in "other" Federal but is currently developing a strategy for this group.
- The materials provided by RTA do not provide detailed documentation on ridership forecasts or fare structure. The absence of this data makes evaluation of financial plan's fare revenue projections difficult.

Sound Move Regional Transit System

Central Puget Sound, WA



GLOSSARY OF TERMS

ADA - Americans with Disabilities Act of 1990

Ad Valorem Tax - A tax based on the value of taxable property, usually the assessed valuation.

Allocation - An administrative distribution of funds among the States, done for funds that do not have statutory distribution formulas.

Amortization - (1) Gradual reduction, redemption or liquidation of the balance of an account according to a specified schedule of times and amounts. (2) Provision for the retirement of a debt by means of a debt service fund.

Apportionment - A term that refers to a statutorily prescribed division or assignment of funds. An apportionment is based on prescribed formulas in the law and consists of dividing authorized obligation authority for a specific program among the States.

Appropriations Act - Act of a legislative body that makes funds available for expenditure with specific limitations as to amount, purpose, and duration. In most cases, it permits money previously authorized to be obligated and payments made, but for the highway program operating under contract authority, appropriations specify amounts of funds that Congress will make available to liquidate prior obligations.

Assessed Valuation - The valuation of real property for tax purposes.

Authority - A public or quasi-public agency created to form a restricted group of related activities, usually financed from service fee charges, fees, or tolls. An authority may be completely independent or partially dependent on other governments.

Authorization Act - Basic substantive legislation or that which empowers an agency to implement a particular program and also establishes an upper limit on the amount of funds that can be appropriated for that program.

Bond - A written promise to pay a specified sum of money, called the face value (par value) at a specified date or dates in the future, together with periodic interest at a specified rate. The difference between a note and a bond is that bonds usually mature after a longer period of time.

Bond Resolution - The action of the governing body of a state or local government, or agency thereof, authorizing a bond issue. The act may be in the form of an amendment to a state constitution; and act or resolution of the state legislature; a local law or ordinance; or a resolution of the governing body of the issuer.

Budget Authority - Empowerment by Congress that allows Federal agencies to incur obligations to spend or lend money. This empowerment is generally in the form of

appropriations. However, for the major highway categories, it is in the form of "contract authority." Budget authority permits agencies to obligate all or part of the funds that were previously "authorized." Without budget authority, Federal agencies cannot commit the Government to make expenditures or loans.

CAAA - Clean Air Act Amendments of 1990.

Capital Costs - Nonrecurring or infrequently occurring costs of long term assets, such as land, guideways, stations, buildings, and vehicles.

Capital Projects Fund - A fund created to account for financial resources to be used for the acquisition of major capital facilities.

Capital Program - A plan for capital expenditure to be incurred each year over a fixed period of years to meet capital needs in the long term.

Capital Budget - A plan of proposed capital outlays and means of financing them. See Capital Program.

Capital Lease - Has a term that spans at least 75 percent of the useful life of the leased property.

Capital Spending - Reflects the spending on long-lived productive facilities and equipment (used as an economic indicator).

Certificate of Participation (COPS) - A type of lease in which the lessor (or designated Trustee) issues shares (in the form of COPS) which entitle the holder to a portion of the lessor's interest in the lease.

Congestion Mitigation and Air Quality Program (CMAQ) - A funding program contained in Title I of ISTEA which provides funds for projects and activities which reduce congestion and improve air quality. To be eligible for CMAQ, projects and activities must contribute to the National Ambient Air Quality Standards and must be included in a Transportation Improvement Program.

Constant Dollars - The value of the dollar for the year selected as a base, adjusted by using the change in the GNP deflator index or other specified indicator between the current (base) year and the desired year.

Construction Fund - The fund from which project costs are financed. A portion of the Bond proceeds is deposited into this fund which then earns interest during the construction period.

Consumer Price Index - Measures retail price changes and is an often closely monitored economic indicator.

Contingent Liabilities - Items which may become liabilities as a result of conditions undetermined at a given date, such as guarantees, pending lawsuits, judgments under appeal, unsettled disputed claims, unfilled purchase orders, and completed contracts.

Contract Authority - A form of budget authority that permits obligations to be made in advance of appropriations. The Federal-Aid Highway Program operates mostly under contract authority.

Debt Service - The sum of required principal and interest payments for a given period.

Debt Limit - The maximum amount of gross net or debt which is legally permitted.

Debt Service Reserve Fund - A fund created from the proceeds of a bond issue and/or the excess of applicable revenues to provide a ready reserve to meet current debt service payments, should monies not be available from current reserves. Usually established as the average amount of annual debt service.

Dedicated Funding Source - A funding source that, by law, is available for use only to support a specific purpose and cannot be diverted to other uses. One example is the Highway Trust Fund.

Default - Failure to pay principal or interest promptly when due.

Deficit - The amount by which expenditures exceed revenues.

Discount Rate - The rate a financial institution must pay when it borrows from the Federal Reserve Bank (this rate is determined by the Federal Reserve System).

Discretionary Funds - Any funds whose distribution is not automatic. Decisions on the distribution of discretionary funds are usually made by an agency or person on the basis of that agency's or person's choice or judgment and in accordance with criteria set out in law or regulations.

Downgrade - Occurs when a Ratings Agency lowers the rating of an Issuer (e.g., Aaa to Aa)

Feasibility Study - A study conducted by an independent consultant to determine the financial feasibility of a project. The study may consist of a forecast, a projection, or a compilation.

Federal-Aid Highways - Those highways eligible for assistance under Title 23 U.S.C., except those functionally classified as local or rural minor collectors.

FHWA - Federal Highway Administration, an agency within the U.S. Department of Transportation, with jurisdiction over highways.

Finance Lease - A lease in which the lessee does not have use of the project over its entire useful life, but is responsible for the costs of upkeep, taxes, and insurance. The characteristics of this type of lease are such that the lessor realizes a satisfactory return on its investment.

Financial Planning - The development of financial information for decision-making including: information describing cost and revenue cash flow streams; knowledge and risks and uncertainties associated with financing proposed transportation projects and programs; information to determine the best way to raise capital for projects.

Fiscal Year (FY) - The Federal yearly accounting period beginning October 1 and ending September 30 of the subsequent calendar year. Fiscal years are denoted by the calendar year in which they end, e.g., FY 1994 begins October 1, 1993 and ends September 30, 1994.

General Obligation (GO) - A municipal security which has payments secured by a pledge of the full faith credit of the Issuer. The Issuer covenants to meet payment requirements through every legal means at its disposal. It is considered to be the strongest form of an uninsured security pledge.

Indenture - Compensation to be paid for the use of money, usually expressed as an annual percentage rate.

Issue - The public entity borrowing money through the issuance of securities.

Issuer - The governmental unit in whose name the securities are issued.

Junk Bonds - High-risk, high-return bonds which are below investment grade.

Letter of Credit - The obligation of a bank to meet specified payment requirements of an issuer in the event the issuer cannot meet such requirements.

Life Cycle Cost Analysis - A procedure for evaluating the economic worth of one or more projects or investments by discounting future costs over the life of the project or investment.

Limitation on Obligations - Any action or inaction by an officer or employee of the United States that limits the amount of Federal assistance that may be obligated during a specific time period. A limitation on obligation does not affect the scheduled apportionment or allocation of funds, it just controls the rate at which these funds may be used.

Long Range Plan (LRP) - a 20-year forecast plan now required at both the metropolitan and state levels, which must consider a wide range of social, environmental, energy, and economic factors in determining overall regional goals and how transportation can best meet these goals.

Maintenance Area - Any geographic region of the United States designated nonattainment pursuant to the Clean Air Act Amendments of 1990, and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under Section 175A of the Clean Air Act as amended.

Major Metropolitan Transportation Investment - A high-type highway or transit improvement of substantial cost that is expected to have a significant effect on capacity, traffic flow, level of service, or mode share at the transportation corridor or subarea scale.

Market Value - The current price of a security in its trading market.

Metropolitan Statistical Area (MSA or CMSA) - The Census classification for areas having a population over 50,000. The MSA may contain several urbanized areas, both containing one or more central cities. When commuting patterns of two MSAs have caused them to merge, the result is a Consolidated Metropolitan Statistical Area (CMSA).

Metropolitan Planning Organization (MPO) - The forum for cooperative transportation decision making for the metropolitan planning area.

Metropolitan Transportation Plan - The official intermodal transportation plan that is developed and adopted through the metropolitan transportation planning process for the metropolitan planning area.

Municipal Corporation - A body politic and corporate established pursuant to state authorization for the purpose of providing governmental services and regulations for its inhabitants. It has defined boundaries and is usually organized with the consent of its residents. It usually has a seal and may sue or be sued.

Municipal Bond - A tax-exempt security issued on behalf of a state or any subdivision thereunder.

Net Proceeds - Total bond proceeds less the portion of the proceeds invested in the reserve fund.

Net Interest Cost - The average interest cost rate on a bond issue calculated on the basis of simple interest.

New Money Issue - A bond issue used to finance a new capital project.

Nominal Yield - The face interest rate of a bond.

Nonattainment Area - Any geographic region of the United States that the Environmental Protection Agency (EPA) has designated as a nonattainment area for a transportation-related pollutant for which a National Ambient Air Quality Standard (NAAQS) exists.

Note - A security with a (normal) maturity less than that of a bond. All the notes in an Issue typically have the same maturity.

Obligation Authority - Another term for limitation on obligations.

Obligations - Commitments made by Federal agencies to pay out money as distinct from the actual payments, which are "outlays." Generally, obligations are incurred as the enactment of budget authority. However, since budget authority in highway programs is in the form of contract authority, obligations in these cases are permitted to be incurred immediately after apportionment or allocation. The obligations are for the Federal share of the estimated full cost

of each project at the time it is approved regardless of when the actual payments are made or the expected time of project completion.

Operating Lease - A type of lease which covers only a portion of the useful life of the lease property. This lease, usually covering less than 75% of the property's useful life, is characterized in this fashion for accounting and financial reporting purposes.

Pay-As-You-Go - A term used to describe the financial policy of a government which finances all of its capital outlays from current revenues rather than by borrowing.

Proceeds - The money received by the Issuer from the original delivery of an issue. The total proceeds include any variation of the price from par (discounts or premiums) and accrued interest.

Project Costs - All outlays expected to be associated with the financing of a project which are legally able to be included in the principal amount of the bond issue. These outlays may include the costs of acquisition, construction costs, equipment use and acquisition costs, capitalized interest expenses, reserve funding requirements, printing costs, legal fees, and the like.

Rescission - A legislative action to cancel the obligation of unused budget authority previously provided by Congress before the time when the authority would have otherwise lapsed. Rescission may be proposed by the executive branch but requires legislative action to become effective.

Reserve Fund - A fund established under the Indenture to meet expense or debt service payment shortfalls.

Revenue Bonds - Bonds whose principal and interest are payable exclusively from earnings.

Sale and Leaseback - A transaction in which an Issuer will purchase property and immediately lease the property back to the entity from which it was purchased for operation. The lease payments of the seller serve as the revenue required to pay debt service on the issue which allowed the Issuer to purchase property.

Section 3 (5309)- The section of the Federal Transit Act, as amended, that provides assistance to States and local public bodies and agencies thereof in financing New Starts, rail modernization, and bus and bus-related projects.

Section 9 (5307) - The section of the Federal Transit Act, as amended, that governs the distribution of the public transit and capital and operating block grant appropriations, made by Congress each year, among transit operators across the nation.

Service Lease - A true lease (the term of the lease is usually less than 80% of the useful life of the leased property and the lessee does not acquire possession of the property).

Short-term Debt - Debt with a maturity of one year or less after the date of issuance. Short-term debt usually includes bond anticipation notes, tax anticipation notes, revenue anticipation notes, and other forms of interim financing.

Special Assessment - A compulsory levy made against certain properties to defray part or all of the cost of a specific improvement or service deemed to primarily benefit those properties.

Special Assessment Bonds - Bonds payable from the proceeds of special assessments. If, in addition to the assessments, the full faith and credit of the government are pledged, the bonds are known as general obligation special assessment bonds.

Special District - An independent unit of local government organized to perform a restricted number of related governmental functions. Special districts usually have the power to incur debt and levy taxes; however, certain types of special districts are entirely dependent on enterprise earnings and cannot levy taxes.

State Implementation Plan (SIP) - The portion (or portions) of an applicable implementation plan approved or promulgated, or the most recent revision thereof, under sections 110, 301(d) and 175A of the Clean Air Act. The SIP is a plan for how the state will achieve the National Ambient Air Quality Standards.

Statewide Transportation Plan - The official statewide plan, intermodal transportation plan that is developed through the statewide transportation planning process.

Statewide Transportation Improvement Program (STIP) - A staged, multiyear, statewide, intermodal program or transportation projects which is consistent with the Statewide transportation plan and planning processes and metropolitan plans, TIPs and processes.

Surface Transportation Program - A funding program contained in Title I of ISTEA which provides flexibility of funds for highway and transit modes and for a category of funding known as transportation enhancements.

Tax Anticipation Notes (TANS) Notes - (sometimes called warrants) issued in anticipation of collection of taxes, usually retirable only from the proceeds of the tax levy whose collection they anticipate.

Tax Increment Bond - A bond secured by the excess of specified tax receipts after taking into account the historical receipts of the specified tax.

Tax Reform Act of 1986 - Legislation which produced profound changes in the municipal practice of issuing tax-exempt debt securities.

Tax-Exempt Lease (Municipal Lease) - A lease agreement in which the lessee is a state or local government and which exhibits interest payments which are exempt from the gross income portion of federal tax income.

Term Bonds - Bonds which have a single maturity.

Total Bonded Debt - A municipality's total general obligation debt outstanding.

Total Direct Debt - A municipality's combined sum of total bonded debt and any unfunded debt.

Transportation Improvement Program (TIP) - A staged, multiyear, intermodal program of transportation projects which is consistent with the metropolitan transportation plan.

Transportation Control Measure (TCM) - Actions that may be taken by state or local units of government related to the transportation systems' contribution to the achievement of National Ambient Air Quality Standards.

Transportation Management Area (TMA) - An urbanized area with a population over 200,000 (as determined by the latest decennial census) or other area when TMA designation is requested by the Governor and the MPO (or affected local officials), and officially designated by the Administrators of the FHWA and FTA. The TMA designation applies to the entire metropolitan planning area(s).

Trust Funds - Accounts established by law to hold receipts that are collected by the Federal Government and earmarked for specific purposes and programs. These receipts are not available for the general purposes of the Federal Government. The Highway Trust Fund is comprised of receipts from certain highway user taxes (e.g., excise taxes on motor fuel, rubber, and heavy vehicles) and reserved for use for highway construction, mass transportation, and related purposes.

Treasury Bond - An interest-bearing security issued by the U.S. Treasury with a typical maturity of more than ten years.

Treasury Note - An interest-bearing security issued by the U.S. Treasury with a maturity of between one and ten years.

Trustee - The bank or trust company which serves both as the custodian of funds and the official representative of an issue's securities holders.

Underwrite - To assume the liability of delivering to the issuer the expected proceeds of an issue by agreeing to buy the issue in its entirety.

Unified Planning Work Program (UPWP) - A document produced every year by an MPO to describe all transportation-related planning activities that will be carried out during the next year.

Urbanized Area (UZA) - A Census classification for areas having a population of 5,000 or more which meets certain population density requirements.

Yield to Maturity - The average annual percentage of return on a security assuming the interest is reinvested at the same yield and that the security is held to maturity.