



U.S. Department
of Transportation
**Federal Transit
Administration**

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Report on Funding Levels and Allocations of Funds

Report of the Secretary of Transportation
to the United States Congress
Pursuant to Section 3(j) of the
Federal Transit Act, as amended

April 1994



THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

April 7, 1994

The Honorable Donald W. Reigle, Jr.
Chairman, Committee on Banking,
Housing, and Urban Affairs
United States Senate
Washington, D.C. 20510-6075

Dear Mr. Chairman:

I am pleased to transmit to you a copy of the enclosed "Report on Funding Levels and Allocations of Funds" in response to the requirements of Section 3(j) of the Federal Transit Act. As required by Section 3(j), the report makes recommendations on the allocation of New Fixed Guideway Systems and Extensions funds for FY 1995.

We are providing copies of this report to the Transportation Subcommittees of the Appropriations Committees of both the House and Senate.

Sincerely,

A handwritten signature in cursive script, which appears to read "Federico Peña".

Federico Peña

Enclosure



THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

April 7, 1994

The Honorable Alfonse M. D'Amato
Ranking Minority Member, Committee on Banking,
Housing, and Urban Affairs
United States Senate
Washington, D.C. 20510-6075

Dear Senator D'Amato:

I am pleased to transmit to you a copy of the enclosed "Report on Funding Levels and Allocations of Funds" in response to the requirements of Section 3(j) of the Federal Transit Act. As required by Section 3(j), the report makes recommendations on the allocation of New Fixed Guideway Systems and Extensions funds for FY 1995.

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Federico Peña

Enclosure



THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

April 7, 1994

The Honorable Norman Y. Mineta
Chairman, Committee on Public Works
and Transportation
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

I am pleased to transmit to you a copy of the enclosed "Report on Funding Levels and Allocations of Funds" in response to the requirements of Section 3(j) of the Federal Transit Act. As required by Section 3(j), the report makes recommendations on the allocation of New Fixed Guideway Systems and Extensions funds for FY 1995.

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Enclosure



THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

April 7, 1994

The Honorable Bud Shuster
Ranking Minority Member, Committee on
Public Works and Transportation
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Shuster:

I am pleased to transmit to you a copy of the enclosed "Report on Funding Levels and Allocations of Funds" in response to the requirements of Section 3(j) of the Federal Transit Act. As required by Section 3(j), the report makes recommendations on the allocation of New Fixed Guideway Systems and Extensions funds for FY 1995.

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Pursuant to Section 3(j) of the
Federal Transit Act, as amended

United States Department of Transportation
Federal Transit Administration

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EXECUTIVE SUMMARY

This report provides the U.S. Department of Transportation's recommendations to Congress for allocation of funds to be made available for construction of new fixed guideway systems and extensions (Section 3 New Starts funding) for Fiscal Year 1995. The report is required by section 3(j) of the Federal Transit Act (FT Act).

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) identifies over \$6 billion in funding authorizations or earmarks for specific projects through FY 1997, the life of the authorization. However, it authorizes a total of only \$5 billion in section 3 funding for these projects. This means that during each year of the ISTEA authorization, some prioritization of the authorized projects will be necessary. However, by the end of FY 1997 an additional \$1.454 billion in contingent commitment authority is expected to be available from one-half of the uncommitted cash balance in the Mass Transit Account of the Highway Trust Fund, as provided for in ISTEA.

The President's budget for FY 1995 proposes that \$400.00 million be made available for the Section 3 New Starts program. After setting aside three-quarters of one percent of these funds for Project Management Oversight as specified in ISTEA, \$397.00 million is available for project grants. This report recommends five projects for funding in FY 1995, all of which have existing Full Funding Grant Agreements (FFGA).

The Department historically has recommended that these funds be allocated to New Starts projects in accordance with these principles:

- Projects that have existing or pending FFGAs should be funded before any new commitments are made.
- Statutory authorizations contained in the ISTEA should be honored to the extent that projects are ready for funding. However, funds should not be provided before they are actually needed, and initial planning should not be funded by section 3; instead, section 8 or 9 funds should be used.
- Projects should meet the project justification, finance, and process criteria established by section 3(i) of the FT Act and be consistent with the January 26, 1994 Executive Order, "Principles for Federal Infrastructure Investments."
- FFGAs, which commit future funding to complete a project, should not be made until preliminary engineering is completed.

- Letters of Intent (LOI) (ultimately anticipating FFGAs) authorized by section 3(a)(4) of the FT Act should be issued only to worthy projects which have proceeded far enough along (generally through alternatives analysis, at a minimum) that their justification and level of local financial commitment can be established with some certainty.
- LOIs should be awarded to the best projects, in terms of cost-effectiveness, financial commitment and other justification criteria, in an order which is based on the degree to which each project meets these criteria.
- Funding should be provided to the most worthy projects to allow them to proceed through the process on a reasonable schedule.

Based on the principles above, the following projects with existing FFGAs may be funded within the \$397.00 million in section 3 New Starts funds recommended for FY 1995:

- \$33.77 million to the Dallas/South Oak Cliff project to complete the Federal commitment to this project, in accordance with the FFGA.
- \$4.69 million to cover extraordinary costs for the Metrolink project in St. Louis, in addition to those funds already made available under the FFGA.
- \$111.70 million in FY 1995 (and \$229.20 million in future funds) to the Westside light rail extension project in Portland, including the \$104.00 million specified for FY 1995 in the FFGA for this project, plus \$7.70 million to compensate for the FY 1994 funding shortfall (after the addition of \$10.38 million in discretionary funds to the FY 1994 funding level and accounting for the \$2.99 million allocated to this project in FY 1993 in excess of the FFGA amount for that year).
- \$184.30 million for the Los Angeles/MOS-3 project in FY 1995 (and \$852.60 million in future funds, including \$535.00 million in contingent commitments), including the \$158.80 million specified for FY 1995 in the FFGA for this project, plus \$25.50 million to compensate for the FY 1994 funding shortfall (after the addition of \$34.05 million in discretionary funds to the FY 1994 funding level).
- \$62.54 million in FY 1995 (and \$152.16 million in future funds) for the Queens Local/Express Connection in New York City. An FFGA for this project was announced in mid-February.

The following table summarizes the recommendations for projects to receive funding in FY 1995 (in millions of dollars):

<u>Project</u>	<u>Funding</u>	<u>Purpose</u>
Dallas/South Oak Cliff	\$33.77	Construction
Los Angeles/MOS-3	184.30	Construction
New York/Queens	62.54	Construction
Portland/Westside	111.70	Construction
St. Louis/Metrolink	4.69	Construction/Extraordinary costs
TOTAL	\$397.00	

Section 3(a)(4)(E) of the FT Act limits the total amount of LOIs, FFGAs and contingent commitments which can be issued at any time to the remaining balance of the authorization, or one-half of the uncommitted cash balance in the Mass Transit Account of the Highway Trust Fund, whichever is greater. The potential maximum amount of New Starts funding which was made available by ISTEA is about \$2.80 billion for FY 1995 through 1997. By the end of 1997, an additional \$1.454 billion is expected to be available for New Starts from one-half of the uncommitted balance of the Mass Transit Account. The sum of commitments which are proposed in this report (\$1,095.96 million), plus the \$535.00 million in expected contingent commitments for Los Angeles/MOS-3, is within the total amount permitted to be committed under section 3(a)(4)(E).

Table 1 summarizes the recommendations for FY 1995 funding and overall funding commitments, and compares them to the funding authorizations contained in the ISTEA. For each project in the New Starts process, the first column indicates the amount of funds which were provided to the project prior to ISTEA; with three minor exceptions (Baltimore, Cleveland, and St. Louis/St. Clair), all of these funds have been obligated. The second column indicates the amount of funds provided under ISTEA that have been obligated to each project, and the third column shows the amount of FY 1993 and prior year earmarked funds under ISTEA which have not yet been obligated. The fourth column shows the amount of funds available in FY 1994 as a result of the ISTEA and DOT Appropriations Act. The fifth column summarizes the recommendations for funding in FY 1995, and the sixth column shows the maximum amount of section 3 outyear funding recommended to be committed to these projects. The seventh column in Table 1 sums the first six columns and shows the total amount which would be made available for each project from section 3 over the life of that project, and the final column shows the total section 3 amount authorized in ISTEA for each project over the authorization period.

The Administration is preparing a new major capital investment policy to address more formally the wider range of project justification criteria contained in section 3(i). The project justification criteria will be used to make comparisons among the various projects proposed for Federal investment in a way that will be consistent with the January 26, 1994 Executive Order on "Principles for Federal Infrastructure Investments." The Administration expects to issue a new major capital investment policy during the 1994 Fiscal Year.

A key component of section 3(i) is the requirement that Federal funding decisions be based on the results of alternatives analysis and preliminary engineering. On October 28, 1993, FTA and the Federal Highway Administration jointly issued new planning regulations which significantly alter the planning and project development process for major transit and highway projects. Under these rules, a major transportation investment study must be performed before a major highway or transit project can be adopted as part of a metropolitan area's transportation plan; this study serves as the alternatives analysis for section 3 New Starts projects. The new planning rules will help ensure that local planning decisions reflect the best possible use of available transportation funds, and establish a level playing field for highway and transit investments.

Table 1
FY 1995 Funding for New Start Authorizations
(millions of dollars)

City/Project	Pre-ISTEA	FY 1992 and FY 1993		FY 1994	FY 1995	Maximum	Total	Total
	Earmarks (FY 1991 and Prior Years)	Obligated	Unobligated	Adjusted Earmarks	Recommended Funding			
TOTALS BY PHASE								
Under Construction	\$771.60	\$267.78	\$49.63	\$221.31	\$150.16	\$229.20	\$1,689.69	\$675.00
Final Design	83.90	196.65	44.29	226.00	246.84	469.76	1,267.44	1,901.30
Preliminary Engineering	199.80	156.82	244.23	234.20	0.00	0.00	835.06	1,904.08
Alternatives Analysis	11.50	2.36	12.60	11.14	0.00	0.00	37.59	273.70
System Planning & Other	0.00	17.81	97.10	46.20	0.00	0.00	161.12	669.52
GRAND TOTAL	\$1,066.80	\$641.42	\$447.86	\$738.85	\$397.00	\$698.96	\$3,990.89	\$5,423.60
UNDER CONSTRUCTION								
Dallas - South Oak Cliff	\$19.90	\$62.66	\$0.00	\$43.70	\$33.77	\$0.00	\$160.03	\$160.00
Los Angeles - MOS-2	479.00	69.10	49.63	69.27	0.00	0.00	667.00	0.00
Portland - Westside	1.00	80.80	0.00	93.26	111.70	229.20	515.96	515.00
St. Louis - Metrolink	271.70	55.22	0.00	15.09	4.69	0.00	346.70	0.00
SUBTOTAL	\$771.60	\$267.78	\$49.63	\$221.31	\$150.16	\$229.20	\$1,689.69	\$675.00
FINAL DESIGN								
Atlanta - North	\$81.90	\$29.07	\$11.05	\$0.00	\$0.00	\$0.00	\$122.02	\$329.00
Jacksonville - South	0.00	0.00	15.05	0.00	0.00	0.00	15.05	71.20
Los Angeles - MOS-3	0.00	59.55	0.00	133.50	184.30	317.60	694.95	695.00
New York - Queens	0.00	26.78	0.00	64.51	62.54	152.16	305.99	306.10
SF Area - Airport/Tasman (1)	2.00	81.25	18.20	27.99	0.00	0.00	129.44	500.00
SUBTOTAL	\$83.90	\$196.65	\$44.29	\$226.00	\$246.84	\$469.76	\$1,267.44	\$1,901.30
PRELIMINARY ENGINEERING								
Baltimore - LRT Extensions (2)	\$16.30	\$0.00	\$27.38	\$0.00	0.00	0.00	\$43.68	\$60.00
Boston - Piers	0.00	48.71	0.00	19.93	0.00	0.00	68.64	278.00
Chicago - Central	16.90	1.82	40.28	32.41	0.00	0.00	91.41	260.00
Chicago-Wisconsin Central	0.00	0.00	0.00	7.94	0.00	0.00	7.94	0.00
Dallas - RAILTRAN	0.00	2.48	0.00	0.00	0.00	0.00	2.48	5.68
Houston - Regional Bus	146.10	48.90	0.18	39.70	0.00	0.00	234.88	500.00
Los Angeles - E Central (3)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	{535.00}
Maine - Boston/Portland CR	0.00	0.00	25.31	9.43	0.00	0.00	34.74	30.00
New Jersey - Urban Core	5.00	26.80	146.64	62.03	0.00	0.00	240.47	634.40
Orange Co - Transitway	0.00	0.00	0.00	15.38	0.00	0.00	15.38	0.00
Orlando - OSCAR	0.00	0.00	2.50	2.98	0.00	0.00	5.47	5.00
Pittsburgh - Busways	0.00	24.55	0.00	41.42	0.00	0.00	65.97	0.00
Portland - Hillsboro	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Salt Lake City - South LRT	15.50	3.56	1.95	2.98	0.00	0.00	23.99	131.00
SUBTOTAL	\$199.80	\$156.82	\$244.23	\$234.20	\$0.00	\$0.00	\$835.06	\$1,904.08

Table 1 (continued)
FY 1995 Funding for New Start Authorizations
(millions of dollars)

City/Project	Pre-ISTEA	FY 1992 and FY 1993		FY 1994	FY 1995	Maximum	Total	Total
	Earmarks	ISTEA Earmarks						
	(FY 1991 and	Obligated	Unobligated	Earmarks	Funding	Funds	Funding	Earmarks
	Prior Years)							
ALTERNATIVES ANALYSIS/CORRIDOR STUDY								
Austin - North Central	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Cleveland - Dual Hub (4)	7.00	0.00	3.45	0.79	0.00	0.00	11.24	5.00
Columbus - North	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dallas - North Central	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Denver - Southwest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hartford-Griffin Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kansas City - South LRT	0.00	0.37	1.13	0.00	0.00	0.00	1.50	5.90
Los Angeles - W Central	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami-North 27th Ave.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami-Airport/Seaport	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Milwaukee - East/West	0.00	0.00	0.00	3.00	0.00	0.00	3.00	200.00
Minneapolis-Central	0.00	0.00	0.00	2.78	0.00	0.00	2.78	0.00
New Orleans - Canal Street	0.00	0.00	0.00	3.57	0.00	0.00	3.57	4.80
Norfolk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland - North-South	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento - South	0.00	0.99	0.00	0.99	0.00	0.00	1.99	26.00
St. Louis-St. Charles	0.00	0.45	0.00	0.00	0.00	0.00	0.45	0.00
St. Louis - St. Clair (5)	4.10	0.00	4.44	0.00	0.00	0.00	8.54	0.00
St. Louis - Cross-County	0.00	0.45	0.00	0.00	0.00	0.00	0.45	0.00
San Diego - Mid Coast	0.40	0.10	3.59	0.00	0.00	0.00	4.09	27.00
San Diego-Mission Valley	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
San Juan-Tren Urbano Ph. 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington - Largo/Bowie	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00
SUBTOTAL	\$11.50	\$2.36	\$12.60	\$11.14	\$0.00	\$0.00	\$37.59	\$273.70

Table 1 (continued)
FY 1995 Funding for New Start Authorizations
(millions of dollars)

City/Project	Pre-ISTEA	FY 1992 and FY 1993		FY 1994	FY 1995	Maximum	Total	Total
	Earmarks	FY 1992 and FY 1993	Unobligated					
	(FY 1991 and	ISTEA Earmarks		Earmarks	Funding	Funds	Funding	Earmarks
	Prior Years)	Obligated	Obligated					
SYSTEM PLANNING AND OTHER								
Altoona - Pedestrian	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3.20
Los Angeles-LOSSAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles - Transit Parkway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00
Los Angeles-San Diego CR	0.00	0.00	10.00	0.00	0.00	0.00	10.00	20.00
Maryland - MARC Exts	0.00	9.93	0.00	23.32	0.00	0.00	33.25	160.00
New Jersey - Hawthorne	0.00	0.00	38.67	6.65	0.00	0.00	45.32	46.87
New York - Midtown Ferry	0.00	0.00	1.00	0.00	0.00	0.00	1.00	12.00
San Jose - Gilroy CR	0.00	0.00	8.00	0.00	0.00	0.00	8.00	21.00
Seattle - CR	0.00	1.88	18.43	0.00	0.00	0.00	20.31	25.00
Seattle - Rail	0.00	0.00	0.00	0.00	0.00	0.00	0.00	300.00
Vallejo - Ferry	0.00	0.00	8.00	0.00	0.00	0.00	8.00	17.00
Atlanta - Buckhead PM	0.00	0.20	0.00	0.00	0.00	0.00	0.20	0.20
Atlanta - CR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
Boston - NS-SS Link	0.00	0.25	0.00	0.00	0.00	0.00	0.25	0.25
Charlotte - Priority	0.00	0.12	0.00	0.00	0.00	0.00	0.12	0.50
Cincinnati - Commuter	0.00	0.00	0.00	1.34	0.00	0.00	1.34	0.00
Cleveland - CR	0.00	0.80	0.00	0.00	0.00	0.00	0.80	1.60
Cleveland - Highland Hls	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20
Detroit - LRT	0.00	0.00	10.00	0.00	0.00	0.00	10.00	20.00
Long Beach - MetroLink	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00
Memphis - Regional Rail	0.00	0.00	0.00	0.50	0.00	0.00	0.50	0.00
New Jersey - Lkwd-Frhld CR	0.00	0.00	1.80	2.98	0.00	0.00	4.78	7.80
New Jersey - South Regional	0.00	0.00	0.00	0.50	0.00	0.00	0.50	0.00
Ohio - Northeast CR (Akron)	0.00	0.00	0.00	0.99	0.00	0.00	0.99	0.00
Philadelphia - Cross Cty	0.00	0.00	1.20	0.00	0.00	0.00	1.20	2.40
Philadelphia - N East CR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Pittsburgh - LR Rehab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00
Tri-County Commuter Rail	0.00	4.64	0.00	9.93	0.00	0.00	14.56	0.00
Washington - Dulles	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
SUBTOTAL	\$0.00	\$17.81	\$97.10	\$46.20	\$0.00	\$0.00	\$161.12	\$669.52

NOTE: The column showing "FY 1994 Adjusted Earmarks" includes the Secretary's discretionary funds, which have been divided between Portland-Westside and Los Angeles-MOS-3.

- (1) "Total ISTEA Earmarks" does not include the \$68.50 million in pre-ISTEA funds (FY 1990 and 1991) also earmarked in ISTEA.
- (2) "Pre-ISTEA Earmarks" include \$14.30 million in unobligated funds.
- (3) The \$535.00 million "Total ISTEA Earmark" represents advance construction authority.
- (4) "Pre-ISTEA Earmarks" include \$5.50 million in unobligated funds.
- (5) "Pre-ISTEA Earmarks" include \$3.60 million in unobligated funds.

I. INTRODUCTION

This is the annual report called for by section 3(j) of the Federal Transit Act (FT Act) which requires a "Report on Funding Levels and Allocations of Funds." The Fixed Guideway Modernization category is now apportioned by formula, while the Bus and New Starts categories remain discretionary. Section 3(j) requires that the report contain:

- (1) A PROPOSAL OF THE TOTAL AMOUNT OF FUNDS WHICH SHOULD BE MADE AVAILABLE IN ACCORDANCE WITH SUBSECTION (K)(1)(D) OF THIS SECTION TO FINANCE FOR THE FISCAL YEAR BEGINNING ON OCTOBER 1 OF SUCH YEAR GRANTS AND LOANS FOR EACH OF THE FOLLOWING:
 - (A) THE REPLACEMENT, REHABILITATION, AND PURCHASE OF BUSES AND RELATED EQUIPMENT AND THE CONSTRUCTION OF BUS RELATED FACILITIES,
 - (B) RAIL MODERNIZATION, AND
 - (C) CONSTRUCTION OF NEW FIXED GUIDEWAY SYSTEMS AND EXTENSIONS TO FIXED GUIDEWAY SYSTEMS; AND

- (2) A PROPOSAL OF THE ALLOCATION OF THE FUNDS TO BE MADE AVAILABLE TO FINANCE GRANTS AND LOANS FOR THE CONSTRUCTION OF NEW FIXED GUIDEWAY SYSTEMS AND EXTENSIONS TO FIXED GUIDEWAY SYSTEMS AMONG APPLICANTS FOR SUCH ASSISTANCE.

The purpose of this report is to describe the Department's recommendations for allocating the funds for New Starts. New fixed guideway systems and extensions (e.g., a light rail line, a subway line or a busway/high occupancy vehicle (HOV) facility) are referred to in this document as "New Starts" and are considered to be major capital investments.

This report is a collateral document to the proposed FY 1995 budget submitted by the President. It is meant to be a constructive element in the administration of the Federal transit assistance program, enriching the information exchange between the Executive and Legislative Branches at the beginning of the appropriations cycle for the next fiscal year.

II. FY 1995 BUDGET PROPOSAL

While the FT Act authorizes funding for FTA programs, the annual appropriations process actually sets the amount of funds which can be obligated in any fiscal year. The President's budget for FY 1995 proposes \$400.00 million for section 3 New Starts.

III. NEW STARTS ALLOCATIONS AND RECOMMENDATIONS

As noted, the funding level proposed for FY 1995 for New Starts is \$400.00 million. Once the three-quarters of one percent for FTA oversight activities is subtracted from this amount, as authorized by section 23 of the FT Act, \$397.00 million remains for projects. This report recommends the allocation of these funds among the various New Starts projects that have been proposed. The recommendations are based on the following principles:

- Existing or pending FFGA commitments should be honored before any additional commitments are made.
- Statutory authorizations contained in ISTEA should be honored to the extent that projects are ready for funding. However, funds should not be made available by FTA before obligations are required to permit project development to proceed nor should initial planning be funded with section 3 funds. Instead, section 8 or 9 funds should be used.
- Any project recommended for new funding commitments should meet the project justification, finance, and process criteria established by section 3(i) of the FT Act and be consistent with the January 26, 1994 Executive Order, "Principles for Federal Infrastructure Investments."
- Firm funding commitments, embodied in FFGAs, should not be made until preliminary engineering is completed since costs, benefits, and impacts are not accurately known until this level of engineering has been completed.
- LOIs (ultimately anticipating FFGAs), authorized by section 3(a)(4) of the FT Act, should be issued only to worthy projects which have progressed enough (generally through alternatives analysis, at a minimum) that their justification and level of local financial commitment can be established with some certainty.
- LOIs should be awarded to the best projects, in terms of cost-effectiveness, financial commitment and other justification criteria, in an order which is based on the degree to which each project meets these criteria.
- Funding should be provided to the most worthy projects to allow them to proceed through the process on a reasonable schedule.

Proposed projects become candidates for New Starts funding by virtue of having successfully completed the appropriate steps in the project development process. To assure that projects proposed for New Starts funding meet the requirements of the FT Act, the Department requires project sponsors to undertake a defined project development process.

The steps in the process begin with system planning, during which future needs and strategies for addressing those needs are identified. Where the need for a major transportation investment is identified as part of a region's planning process, a corridor or subarea study (alternatives analysis) is undertaken to evaluate the merits of alternative technologies and alignments. These studies and subsequent preliminary engineering develop information on the justification for the projects and the financial plans which demonstrate the sponsor's ability to meet the local matching share and to build and operate the projects. Finally, projects undergo final design, during which detailed engineering takes place. Under ISTEA, each project advances from one step to the next under an "assured timetable." More detail is provided on the New Starts project development process in Appendix A.

As projects proceed through the stages of the development process, they are evaluated against the full range of project justification criteria contained in section 3(i) of the FT Act to determine whether consideration of a Federal funding commitment is warranted. Section 3(i) requires that projects be justified based on a comprehensive review of mobility improvements, environmental benefits, cost-effectiveness, operating efficiencies, and other factors such as land use and economic development. In addition, stable and dependable local funding must be sufficient to assure that the project will be completed in a timely manner, that the project will be operated as planned, and that local financial resources are available to operate the proposed system. Consistent with the January 26, 1994 Executive Order, "Principles for Federal Infrastructure Investment," this analysis includes both quantifiable measures of benefits and costs as well as qualitative measures reflecting values that are not readily quantified.

The same project justification criteria are applied to projects at all stages of development. As a project progresses through these stages and becomes increasingly refined, the standards tighten. The resulting comparisons among the projects, based on the evaluation of these criteria for each, are used to determine the best candidates for consideration of Federal funding. Candidate projects are then ranked based on their current stage of development, their readiness to proceed and their capacity to obligate Federal funds in the coming fiscal year. Projects that are (or are expected to be) under construction or in final design by the upcoming fiscal year and are capable of obligating Federal funds are considered to be candidates for FFGAs. LOIs are recommended when a project is ready to proceed and is justified based on the section 3(i) criteria, but outstanding issues remain. In such cases, FTA may acknowledge its commitment to a worthy project but require that outstanding issues be resolved before an FFGA is negotiated. (In certain cases, a project may require only minimal funding to complete the Federal commitment. When such funds can reasonably be provided in a single fiscal year, an FFGA is generally not considered to be necessary. A single grant would be issued instead.)

Table 2 provides a summary of the projects now in the New Starts "pipeline" and a summary evaluation of the projects in terms of project justification. This table lists potential projects which are in final design, in preliminary engineering, and in corridor/subarea planning (alternatives analysis) as of the date of this Report. It also shows those projects which have been authorized funding in ISTEA but which have not yet entered the process. It does not list those projects

(Los Angeles/MOS-2, Los Angeles/MOS-3, Miami/DPM Extensions, St. Louis/Airport LRT, and Portland/Westside LRT) for which FFGAs have already been negotiated. Because funding to complete these projects has already been committed, any further evaluation would be meaningless. Appendix B provides a more detailed profile for each project, including the basis for the evaluation of the project.

For each project, the total capital cost is shown in the first column, followed by four columns which rate projects in terms of project justification. These columns correspond to the wider range of project justification factors (including cost-effectiveness) stipulated in section 3(i). The second column lists the cost-effectiveness of each project in terms of the expected cost to attract each new rider; a "new rider" is defined as a new transit user, rather than a rider who simply shifted from another transit mode. Mobility improvements are rated in the third column on the basis of hours of travel time per day projected to be saved when the project is constructed. The fourth column lists the Environmental Protection Agency (EPA) classifications for each city for ozone and carbon monoxide; this represents the best information currently available regarding the potential environmental benefits of each project, which are required to be evaluated by ISTEA. The project profiles in Appendix B present data (where available) on each project's impact on emissions. Operating efficiencies are rated in the fifth column, based on the potential of each project to reduce systemwide operating cost per passenger.

The remaining three columns in the table show an assessment of each project's local financial commitment in terms of proposed Federal share of project cost, the acceptability of the project's capital financial commitment, and the stability and reliability of operating funding. Appendix B describes the criteria for rating local financial commitments for capital and operating costs.

Candidate projects for FFGAs or LOIs are chosen according to the relative merits of each as measured by the criteria shown in Table 2. Projects are considered to be candidates for FFGAs when their ratings in these categories justify a Federal commitment and they have reached a sufficient state of readiness to obligate funds. When outstanding issues are known to exist that affect the rating of an otherwise meritorious project against one or more of these criteria, that project will be considered for an LOI instead.

Table 2
Summary of FY 1995 New Starts Ratings

Phase and City (Project)	Project Justification					Local Financial Commitment (e)		
	Capital Cost (a) (million \$)	Cost-Effectiveness (Cost/New Trip)	Mobility Improvements (b)	EPA Classification (c)	Operating Efficiencies (d)	Section 3 Share of Project Cost	Capital Financing Commitment	Stability & Reliability of Operating Assistance
<u>Final Design</u>								
Atlanta-MARTA North Line Extension	\$497	\$5	NA	Serious/Attain.	Medium	80%	Medium	Medium
Jacksonville-South ASE Extension	\$134	NA	NA	Trans./Attain.	NA	80%	Low	Medium
New York-Queens Local Connection	\$645	(f)	High	Severe/Mod.	Low	50%	Low-Medium	Medium
San Jose-Tasman LRT	\$480	\$33	Medium	Mod./Mod.	Low	50%	Low	Low
<u>Preliminary Engineering</u>								
Baltimore-LRT Extensions	\$106	\$8	Medium	Serious/Mod.	Medium	80%	Medium	Medium
Boston-So. Boston Piers Transitway	\$741	\$10	Medium	Serious/Mod.	Medium	80%	Low-Medium	Medium
Chicago-Central Circulator	\$775	\$8	Medium	Severe/Attain.	NA	33%	Medium	Medium
Chicago-Wisconsin Central	\$81	NA	Medium	Severe/Attain.	NA	13%	Medium	High
Dallas/Fort Worth-Railtran Phase 2	\$101	\$8	Medium	Mod./Attain.	Medium	57%	Low-Medium	Low
Houston-Regional Bus Plan	\$1,250	\$3	Medium	Severe/Attain.	Medium	50%	Medium	Medium
Los Angeles-East Central	\$1,640	NA	High	Extreme/Serious	NA	50%	Low	Low
New Jersey-Newark/Elizabeth	\$845 (92\$)	\$11	High	Severe/Mod.	NA	100%	Low-Medium	Medium
New Jersey-Secaucus	\$374	NA	NA	Severe/Mod.	Medium	100%	Medium	Medium
New Jersey-Hudson River Waterfront	\$775 (90\$)	\$5	High	Severe/Mod.	NA	95%	Low-Medium	Medium
Orange County-Transitway	\$615	NA	Medium	Extreme/Serious	Medium	52%	Medium-High	Medium
Orlando-OSCAR	\$50	\$6	Medium	Attain./Attain.	Low	80%	High	High
Pittsburgh-Airport Busway Phase 1	\$293	\$5	Medium	Mod./NC	Medium	24%	High	Medium
Pittsburgh-East Busway Extension	\$43	\$4	Medium	Mod./NC	Medium	0%	High	Medium
Portland-Hillsboro LRT (g)	\$198	\$16-\$75(g)	Medium	Marg./Mod.	Low/NA(g)	65%/33%(g)	High	Medium
Salt Lake City-South LRT	\$275 (92\$)	\$4	Medium	Mod./NC	High	25%	Low	Low
San Francisco-BART to Airport	\$960	\$23	Medium	Mod./Mod.	Low	75%	Medium	Medium
<u>Alternatives Analysis</u>								
Austin-North Central	\$304	NA	NA	Attain./Attain.	NA	50%	High	High
Cleveland-Dual Hub	\$489-\$536	NA	NA	Mod./Mod.	NA	50%	Medium	Medium
Columbus-North	\$436 (92\$)	NA	NA	Marg./Attain.	NA	70%	Low	Medium
Dallas-North Central	\$306 (93\$)	\$11	NA	Mod./Attain.	NA	80%	Medium	High
Denver-Southwest	\$75-\$130 (92\$)	NA	NA	Trans./Mod.	NA	80%	Low	Medium
Hartford-Griffin Line	\$100-\$160 (92\$)	NA	NA	Severe/Mod.	NA	NA	Low-Medium	Medium
Kansas City-Southtown	\$200-\$260 (93\$)	NA	NA	Attain./Attain.	NA	80%	Low-Medium	Low-Medium
Los Angeles-West Central	\$2,800	NA	NA	Extreme/Serious	NA	50%	Low	Low
Miami-Airport/Seaport	\$1,400 (92\$)	NA	NA	Mod./Attain.	NA	29%	Medium	Medium
Miami-North 27th Avenue	\$574	\$22	NA	Attain./Mod.	NA	70%	Medium	Medium
Milwaukee-East/West	\$425-\$1082 (92\$)	\$5-\$43	Medium	Severe/Attain.	NA	NA	Low-Medium	Low-Medium
Minneapolis-Central	\$83-\$581	\$29-\$34	Medium	Attain./Mod.	Low	NA	Medium	Medium
New Orleans-Canal Street	\$90 (90\$)	\$7-\$9	NA	Trans./Attain.	NA	80%	High	Medium
Norfolk	\$125 (91\$)	NA	NA	Marg./Attain.	NA	30%-50%	Low	Medium
Portland-South/North	\$1000-\$1700 (94\$)	NA	NA	Marg./Mod.	NA	NA	Low-Med	Medium
Sacramento-South	\$380-\$560 (92\$)	\$9-\$14	Medium	Serious/Mod.	NA	80%	Medium	Medium
St. Louis-St. Charles	\$218-\$270(89\$)	NA	NA	Mod./NC	NA	80%	Low-Medium	Low
St. Louis-St. Clair	\$330-\$340(92\$)	NA	NA	Mod./NC	NA	80%	Medium	Medium
St. Louis-Cross County	\$270-\$310(89\$)	NA	NA	Mod./NC	NA	80%	Low	Low
San Diego-Mid Coast	\$61-\$350 (92\$)	\$3-\$14	Medium	Serious/Mod.	Medium	80%	High	Medium
San Diego-Mission Valley East	\$250-\$300 (93\$)	\$16	NA	Serious/Mod.	NA	80%	High	Medium
San Juan-Tren Urbano Phase 1	\$900	\$4	High	Attain./Attain.	NA	33%	Medium	High
Washington-Largo/Bowie	\$230-\$400 (91\$)	\$16-\$83	NA	Serious/Mod.	NA	NA	Low	Low-Med.

Table 2 (continued)
Summary of FY 1995 New Start Ratings

Phase and City (Project)	Project Justification					Local Financial Commitment (e)		
	Capital Cost (a) (million \$)	Cost-Effectiveness (Cost/New Trip)	Mobility Improvements (b)	EPA Classification (c)	Operating Efficiencies (d)	Section 3 Share of Project Cost	Capital Financing Commitment	Stability & Reliability of Operating Assistance
System Planning								
Altoona-Pedestrian Crossing	NA	NA	NA	Marg./NC	NA	NA	NA	NA
Atlanta-Buckhead People Mover	NA	NA	NA	Serious/Attain.	NA	NA	NA	NA
Atlanta-Commuter Rail	NA	NA	NA	Serious/Attain.	NA	NA	NA	NA
Boston-North/South Sta. Rail Link	\$2000-\$4000	NA	NA	Serious/Mod.	NA	NA	Low	NA
Charlotte-Priority Corridor	\$600 (93\$)	NA	NA	Mod./NC	NA	50%-80%	NA	NA
Cincinnati-Commuter Rail	\$585	NA	NA	Mod./Attain.	NA	NA	NA	NA
Cleveland-Commuter Rail	NA	NA	NA	Mod./Mod.	NA	NA	NA	NA
Cleveland-Highland Hills	NA	NA	NA	Mod./Mod.	NA	NA	NA	NA
Detroit-Woodward	NA	NA	NA	Mod./NC	NA	80%	NA	NA
Honolulu-Rapid Transit	\$2,300	\$6	High	Attain./Attain.	High	50%	Low	Low
Los Angeles-LOSSAN	\$32	NA	NA	Extreme/Serious	NA	63%	NA	NA
Los Angeles-Multimodal Parkway	\$66	NA	NA	Extreme/Serious	NA	23%	Low	Low
Maryland-MARC Extensions	NA	NA	NA	Serious/Mod.	NA	NA	NA	NA
No. New Jersey-Lakewood/Freehold	NA	NA	NA	Severe/Mod.	NA	NA	NA	NA
No. New Jersey-Hawthorne/Warwick	NA	NA	NA	Severe/Mod.	NA	NA	NA	NA
New York-Midtown Ferry	NA	NA	NA	Severe/Mod.	NA	NA	NA	NA
Philadelphia-Cross County	\$100	NA	NA	Severe/Mod.	NA	NA	NA	NA
Philadelphia-Northeast	NA	NA	NA	Severe/Mod.	NA	NA	NA	NA
Pittsburgh-LRT Rehabilitation	\$320	NA	NA	Mod./NC	Medium	80%	NA	NA
Seattle-Core Rapid Transit	\$1900 (93\$)	\$17	High	Marginal/Mod.	Medium	33%	Medium	Medium
Seattle-Tacoma Commuter Rail	\$250 (93\$)	NA	NA	Marginal/Mod.	NA	10%	Medium	Medium
So. New Jersey-Burlgtn/Gloucesterc	\$1100-\$1500 (91\$)	NA	NA	Severe/Mod.	NA	NA	NA	NA
Vallejo-North Bay Ferry	NA	NA	NA	Mod./Mod.	NA	NA	High	High
Washington-Dulles	\$1,000	NA	NA	Serious/Mod.	NA	NA	NA	NA

NA = Not Available

- (a) Unless otherwise noted, costs are shown in escalated (year of construction) dollars and are based on most recent cost estimates. For projects in Alternatives Analysis and the early stages of Preliminary Engineering, the estimate is likely to change as more detailed engineering is performed. For projects in System Planning, cost estimates may change significantly.
- (b) A "high" rating has been assigned to projects that would save 10,000 or more hours of travel time per day, compared with the TSM alternative. "Medium" was given to projects that would save zero to 10,000 hours. "Low" indicates projects that would increase travel time.
- (c) EPA classifications for ozone and carbon monoxide are shown to illustrate the severity of the region's air quality problem. In order of severity, the ozone classifications are: extreme, severe, serious, moderate, marginal, sub-marginal, transitional, and attainment. Carbon monoxide classifications are: serious, moderate, not classified, and attainment. The Project Profiles in Appendix B present data (where available) on each project's impact on emissions.
- (d) A "high" rating has been given to projects that would reduce the systemwide operating cost per passenger by 5 percent or more, compared with the TSM alternative. "Medium" was given to projects that would reduce operating cost per passenger by zero to 5 percent. "Low" indicates projects that would increase operating costs per passenger.
- (e) The local share and financial ratings shown in this table are based on the financial plans developed by the local project sponsors and financial reviews performed by FTA's financial consultant, Booz Allen. The criteria used to rate the local financial plans are described in Appendix B.
- (f) The project is considered to be cost-effective on the basis of a user benefit index of \$4.50 per hour of benefit.
- (g) The Hillsboro project and the Westside to 185th project together constitute a Program of Interrelated Projects as defined in Section 3(a)(8) of the Federal Transit Act. For such programs, the Secretary is required to consider an assessment of all program elements to the extent that such consideration expedites project implementation. The cost-effectiveness index for the Portland Westside program is \$25 per new trip. For the Hillsboro extension alone it is \$75 per new trip. The Section 3 share for the Portland Westside program is 65%; for the Hillsboro extension alone it is 33%. The operating efficiency of the Hillsboro extension alone is not known, but the overall Westside program would lead to a slight increase in the operating cost per passenger.

New Major Capital Investment Policy. The Administration is preparing a new major capital investment policy to more formally address the wider range of project justification criteria contained in section 3(i). The policy will reflect the use of the project justification criteria established in ISTEA to make comparisons among the various projects competing for Federal investment. The precise measures and process used will be consistent with the January 26, 1994 Executive Order on "Principles for Federal Infrastructure Investments." The Administration expects to issue the new major capital investment policy during the 1994 Fiscal Year.

Section 3(i) was added to the Federal Transit Act by the Surface Transportation and Uniform Relocation Assistance Act of 1987 (STURAA). Under STURAA, the Secretary was required to determine that a New Starts project was based on the results of alternatives analysis and preliminary engineering, was cost-effective, and was supported by an acceptable degree of local financial commitment.

ISTEA made a number of significant changes to section 3(i). It modified the determinations under section 3(i)(1) to include additional project justification criteria, in addition to cost effectiveness, reflecting transit's broader goals and objectives. Section 3(i) now requires that New Starts be justified based on a comprehensive review that considers mobility improvements, environmental benefits, cost-effectiveness, operating efficiencies, and other factors such as land use and economic development. In addition, stable and dependable local funding must be sufficient to assure that the project will be completed in a timely manner, that the project will be operated as planned, and that local financial resources are available to operate the overall proposed transit system.

In the forthcoming policy, FTA will show how the section 3(i) criteria are used to identify the best candidates for investment of discretionary New Starts funds. Projects that have completed the required planning and preliminary engineering steps will be considered for funding as part of a comprehensive evaluation process which will reflect the January 26, 1994 Executive Order "Principles for Infrastructure Investment." FTA's pre-ISTEA evaluation approach placed heavy emphasis on cost-effectiveness, with effectiveness measured in narrowly-defined transportation terms. Consistent with the Executive Order, the new evaluation approach will still be directed to maximizing the return on Federal investment. However, consistent with ISTEA, the measure of effectiveness will utilize an economic efficiency framework that will explicitly account for all benefits of transit, including mobility improvements for the transportation disadvantaged, air quality enhancement, and the relief of traffic congestion, which are benefits enumerated in section 3(i).

A key component of section 3(i) is the requirement that Federal funding decisions be based on the results of alternatives analysis and preliminary engineering. On October 28, 1993, FTA and the Federal Highway Administration (FHWA) jointly issued new planning regulations which significantly alter the planning and project development process for major transit and highway projects. Under these rules, a major transportation investment study must be performed before a major highway or transit project can be adopted as part of a metropolitan area's transportation

plan. Each major investment study will evaluate a full set of alternatives and, for section 3 New Starts projects, will serve as the required alternatives analysis. The new planning rules help to establish a level playing field for the consideration of highway and transit alternatives. This should ensure that local and State officials are able to direct available resources, including flexible funds, to the projects that will best address current and future needs. The new procedures also begin to respond to ISTEA's directive that FTA and FHWA conform their environmental review procedures for major projects.

Projects Recommended for Funding in FY 1995

Five projects -- Dallas/South Oak Cliff, Los Angeles/MOS-2 and MOS-3, New York/Queens, and Portland/Westside -- have existing FFGAs which commit FTA to provide specified levels of Federal funding. An FFGA is also in place for the Metrolink project in St. Louis. While the Federal commitment to this project has been fulfilled, additional funds have been requested to cover extraordinary costs which FTA considers to be justified. The Los Angeles/MOS-3 segment of the Metro Rail Red Line Project is now in final design, as is the Queens Connection; the rest of these projects are all under construction. The FY 1994 appropriation for section 3 New Starts provided sufficient funding to complete the Federal commitment to the MOS-2 segment of the Los Angeles Metro Rail Red Line; additional funding is therefore not required in FY 1995.

The FFGA for the Los Angeles/MOS-3 project provides \$158.80 million per year over the remaining life of the current authorization, with additional funds to be drawn from contingent commitment authority. The FY 1994 budget provided a total of \$168.73 million for both MOS-2 and MOS-3, of which \$99.46 million was available for MOS-3 after an allocation of \$69.27 million to complete MOS-2. To this was added \$34.05 million in discretionary funds, for a total FY 1994 funding level of \$133.50 million. The agreement for the Westside to 185th project in Portland calls for \$104.00 million in each of fiscal years 1994 and 1995; the FY 1994 budget provided \$82.87 million, to which was added \$10.38 million in discretionary funds for a total of \$93.26 million provided to this project in FY 1994. The FFGA for New York/Queens provides for \$62.54 million in FY 1995, and \$152.16 million in future funds. A total of \$33.77 million is required to complete the FFGA for the Dallas/South Oak Cliff project.

It is recommended that the Dallas, Los Angeles/MOS-3, New York/Queens and Portland projects be funded in FY 1995 according to their respective FFGAs, with sufficient additional funds allocated to Portland and MOS-3 to offset the shortfall in the FY 1994 budget earmarks (in the case of Portland, subtracting the \$2.99 million provided in FY 1993 in excess of the FFGA amount). Additionally, \$4.69 million is recommended for the St. Louis/Metrolink to cover extraordinary costs. The allocations to these five projects would commit the entire \$397.00 million proposed to be available for New Starts in FY 1995.

The following table summarizes the FY 1995 recommendations for projects under existing FFGAs and the maximum amount of outyear funds committed (in millions of dollars):

	Commitment Instrument	FY 1995 Funding	Maximum Outyear Funds
Dallas/South Oak Cliff	FFGA	\$ 33.77	\$ 0.00
Los Angeles/MOS-2	FFGA	0.00 ¹	0.00 ¹
Los Angeles/MOS-3	FFGA	184.30	317.60 ²
New York/Queens Connection	FFGA	62.54	152.16
Portland/Westside LRT	FFGA	111.70	229.20
St. Louis/Metrolink	FFGA	4.69	0.00
TOTAL		<u>\$397.00</u>	<u>\$698.96</u>

¹Sufficient funds already made available

²Plus contingent commitment of \$535.00 million

Status of Projects Not Recommended for Funding in FY 1995

There are approximately 70 projects in the transit New Starts development process that, for a variety of reasons, are not recommended for section 3 funding in FY 1995. Such reasons may include concerns regarding a project's local financing, justification, or ability to obligate funds; insufficient information about a project; a belief that increased section 9 funding or existing section 3 earmarks are sufficient to make needed progress; or, given limited budget resources, a judgment that a project is of a lower priority than other possible Federal investments. Projects in final design or preliminary engineering that are not recommended for funding in FY 1995 are discussed below in alphabetical order.

A. Projects in Final Design

This category of projects consists of those which have completed preliminary engineering and are now in the final design process, but which do not have existing or pending FFGAs.

1. Atlanta/North Line Extension

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is designing an 8.8-mile, five-station extension to its heavy rail rapid transit system. The initial 5.7-mile North Line segment will be built by MARTA without FTA assistance. MARTA plans to seek FTA funding for a 3.1-mile, three-station extension of the North Line, from Medical Center to North Springs. Final design of the Atlanta/North Line Extension project is underway.

Section 3035(tt) of ISTEA requires the Department to negotiate and sign a multiyear grant agreement for the North Line Extension project. The cost of this extension is estimated at \$497 million; MARTA is proposing a Federal share of 80 percent, or \$398 million. FTA has

made a \$92 million grant for final design and construction of the first segment from Medical Center to Dunwoody, and unobligated funds from FY 1993 are expected to complete the funding for this segment. Additional funding will be required for the segment between Dunwoody and North Springs.

Revenue from a one percent sales tax supports MARTA's operations and its construction program; a maximum of 50 percent of this revenue may be used for capital expenditures. Operating expenses will increase as new segments now under construction open for service, which may decrease the amount of capital funding available. The financial plan for this project assumes a 5 to 7 percent increase in sales tax revenue, which has been relatively stable or declining in recent years, and MARTA is approaching its legal debt capacity. MARTA's construction schedule has been delayed as a result. MARTA did not seek additional funding for this project in FY 1994, and has indicated that it does not intend to seek funds in FY 1995.

2. Jacksonville/South ASE Extension

The Jacksonville Transportation Authority (JTA) is planning a 2.5-mile Automated Skyway Express (ASE) system serving downtown Jacksonville. The initial 0.7-mile starter line opened for revenue service in June 1989. In September 1991, at Congressional direction, FTA and JTA entered into an FFGA for a 0.6-mile extension of the starter line to the north. The \$29.00 million Federal share for this project has already been appropriated, and construction is well underway. Initial bids for the systems portion of the project (rolling stock, train control, and communications) have exceeded the budget. JTA is negotiating with FTA to complete a shorter segment of the 1.2-mile extension to the south, using funds already appropriated.

Based on the most current ridership projection (performed in 1988), JTA estimates that the complete 2.5-mile system will carry 38,000 passengers daily in 2005, depending on development and parking assumptions. The 0.7-mile starter line averages approximately 1,600 riders per day, less than the original forecast of 10,000 used to justify the project. Most of these riders are park-and-ride patrons who pay a single fee to park in a JTA facility and ride the system.

Section 3035(vv) of ISTEA authorizes a total of \$71.2 million for completion of the ASE system, including the 1.2 mile South Extension, over the six-year authorization period. Of this amount, \$15.05 million has been provided through earmarks in FY 1993 and prior years. It has become evident that the ISTEA authorization and currently committed local funds are insufficient to complete the full system. FTA is negotiating an FFGA with JTA to complete an operable segment of the South ASE Extension, using the \$15.05 million in existing earmarks and a substantial increase in local funding. This would allow for combined procurements for the north and south segments, deferring a portion of the South segment. At this time, FTA does not anticipate that additional Federal funding for this project will be forthcoming.

3. San Francisco Area/Airport & Tasman

Section 3(a)(8)(C)(ii) of the FT Act defines the BART extensions to Colma and the San Francisco Airport, and the Tasman Corridor project in San Jose, as elements of a Program of Interrelated Projects to be considered together for the purposes of Federal requirements. In addition, section 3032(c) of ISTEA directs the Secretary to approve the construction of these projects, and section 3032(e) authorizes \$568.50 million in section 3 New Starts funds. Through FY 1994, \$254.00 million of these funds has been appropriated for metropolitan San Francisco with the provision that the Metropolitan Transportation Commission (MTC) allocate these funds among the three projects. The affected agencies are working with MTC to determine this allocation. Because the total section 3 cost of these projects exceeds the ISTEA earmark, the Bay Area hopes to obtain a contingent commitment that would allow all three projects to proceed simultaneously. The Federal commitment to the Colma project has been fulfilled.

The Airport project will extend the BART rapid-rail system from Colma to an external intermodal station near San Francisco International Airport, significantly improving access to a critical intermodal facility of national stature. The estimated section 3 cost to complete this project is \$568.50 million. Still in preliminary engineering, this project is the more cost-effective of the remaining two. However, because issues involving the alignment, financing, and environmental concerns are still being resolved, a future funding commitment for the BART Airport extension would be premature at this time. The Tasman project in San Jose is a light-rail system that would connect with both the Guadalupe LRT in northern Santa Clara County and the Caltrain commuter rail system. This project is in the final design stage of development.

These projects make up the Federally-assisted portion of a much larger regional program of transit expansion, including significant BART extensions in the East Bay area (to Pittsburg and Pleasanton) and relocation of the Caltrain terminal in downtown San Francisco. The regional plan calls for 100 percent non-Federal funding of the East Bay extensions and no use of section 3 discretionary funds for the Caltrain terminal relocation. Thus, the section 3 share for the region's entire program of fixed guideway extensions is only 27 percent. This is a significant indication of local financial support for transit in a very transit dependent region and is a major reason for the Department's support of both the BART Airport and Tasman projects.

The Santa Clara County Transit District (SCCTD) is seeking section 3 New Starts funds for approximately 50 percent of the capital cost of the Tasman project. The county has an existing 1/2-cent sales tax for transit and receives revenue from an additional 1/4-cent sales tax through the State. In November 1992, voters in Santa Clara County approved a doubling of the existing 1/2-cent sales tax, dedicated largely to transit to pay for the Tasman project and other increases in service. The California Appeals Court has invalidated this tax; an appeal is pending.

The Federal share of the Tasman project is estimated to be \$240.00 million; of this, \$60.80 million has already been made available in prior Fiscal Years. Accounting for the \$18.20 million in unobligated funds currently available for this project leaves a balance of \$161.00 million required

for completion (\$27.99 million was earmarked in FY 1994 for both the Tasman and Airport projects; the MTC has not yet allocated these funds to either). In view of the fact that the court struck down the half-cent sales tax that Santa Clara County intended to use for the local share of this project, several financial concerns must be resolved before an FFGA can be executed. These include development of a multiyear financial plan prioritizing capital projects in the Bay Area and the identification of specific amounts and sources of funds, including local funds necessary to complete the Tasman project. In the interim, the Department has notified Congress of its intent to issue an LOI for this project upon expiration of the notification period required by section 3(a)(4) of the FT Act. This LOI is the last New Starts commitment to be issued prior to the implementation of Executive Order 12893, "Principles for Federal Infrastructure Investments."

B. Projects in Preliminary Engineering

The next category of projects consists of those now in the preliminary engineering phase but which are likely to be through this phase by the end of FY 1994. As mentioned earlier, this is the stage in project development where funding commitments may first be considered, as better information regarding costs and benefits is available. The 14 projects in preliminary engineering are discussed below.

1. Baltimore/LRT Extensions

Using State and local funds, the Maryland Mass Transit Administration (MTA) has constructed a 22-mile light rail line along existing railroad right-of-way from Timonium in the north, through the Baltimore Central Business District to Glen Burnie in the south. MTA has proposed three federally funded extensions of this line: a 5-mile extension northward from Timonium to Hunt Valley; a 2-mile branch off the mainline to Baltimore-Washington International Airport (BWI); and a 0.25-mile spur to Penn Station in downtown Baltimore to connect with Amtrak and MARC commuter rail service. The entire LRT system has an estimated cost of \$470.70 million, including the total cost of the extensions estimated at \$106.30 million. MTA is seeking a Federal share from section 3 of 80 percent, or \$85.04 million, for these extensions. This project has completed the preliminary engineering stage of development.

Section 3035(n) of ISTEA directs FTA to enter into an FFGA with MTA to provide not less than \$60.00 million in New Starts funds for these three extensions. Through FY 1994, \$43.68 million in New Starts funds has been earmarked for the Baltimore extensions.

Although the results of the alternatives analysis and preliminary engineering provide limited justification for this project, the local financial commitment is strong. The proposed Federal share of the three extensions is only 18 percent of the cost of the entire LRT system. Thus, the project is exempt from the requirements of section 3(i). Accordingly, this project is a candidate for a FFGA. This project requires \$41.36 million for completion.

2. Boston/Piers

The Massachusetts Bay Transportation Authority (MBTA) is proposing an underground transitway between the existing transit system and the South Boston Piers area, located on the fringe of downtown. The Piers area, which is connected to the Boston Central Business District (CBD) by three local bridges, is slated for future development. Electric trolley buses would operate in the transitway and on limited surface routes in the eastern end of the Piers area.

The initial segment of the transitway involves a 1-mile bus tunnel with three stations to be located at South Station, Fan Pier, and the World Trade Center. The MBTA estimates the cost of this segment at \$438.40 million, and has requested a Federal share of 80 percent of the initial construction expenditure. Section 3035(j) of ISTEA directs FTA to enter into an FFGA in the amount of \$278 million for this segment. A total of \$68.64 million has been appropriated by Congress for this project, including \$10.00 million in FY 1993 and prior year earmarks made available from the Honolulu/Rapid Transit project in FY 1994. This project is in the preliminary engineering stage of development.

This project was initially intended to serve expected new development in the South Boston Piers/Fort Point Channel area, adjacent to the CBD. While the downtown Boston office market was quite strong during the 1980s, the current real estate market is such that the timing and intensity of the development projected for the Piers area is uncertain. However, Phase I of the transitway contains certain elements integrally related to construction of the Central Artery/Third Harbor Tunnel road project, now underway. Joint construction of these common elements will ultimately reduce the overall cost of the transitway, as well as its associated environmental and construction impacts. The MBTA and Central Artery/Third Harbor Tunnel project have advertised a contract for a segment of the Central Artery which would include both the new underground roadway and an adjacent section of transitway tunnel. Recognizing the opportunity for cost savings as well as project integration, the Department considers the common elements of this project to be a candidate for an LOI. It is estimated that the construction of those elements of the South Boston Piers transitway project common to the Central Artery/Third Harbor Tunnel project will require \$40.00 million in addition to those funds already earmarked for this project.

3. Chicago/Central Area Circulator

The Chicago Central Area Circulator would be a multilegged transit system within the Chicago Central Business District (CBD), connecting the commuter rail stations and other locations within the CBD with the Loop and two subway lines. The project would serve the more recently developed areas of the CBD, particularly to the northeast along Michigan Avenue, which are not well-served by the current rapid transit system. Through FY 1994, \$89.76 million in section 3 funds has been appropriated for this project, of which \$72.69 million remains unobligated.

The locally preferred alternative is a trolley system operating primarily in reserved lanes on city streets. The potential for traffic and pedestrian conflicts inherent in this type of system,

particularly at intersections, presents operating difficulties that could compromise its safety, speed, and cost-effectiveness. To address these issues, project sponsors have convened a peer review panel which has met several times and made specific recommendations for design and operation. If these recommendations are followed, the operating and safety concerns should be mitigated.

This project has an especially strong local financial commitment to its capital costs. The Federal share of the project cost would be only one-third, with the remainder coming from the State and the private sector in the form of a special tax on commercial property in the service area. The State has commissioned an independent review of the project prior to finalizing its commitment. The project is located in a severe nonattainment area for ozone.

Section 3035(e) of ISTEA provides authorizations of \$260 million to carry out construction of the locally preferred alternative. Preliminary engineering for this project is expected to be completed in early calendar year 1994. Provided the operational difficulties mentioned above are addressed to the Department's satisfaction, this project is a candidate for an LOI.

4. Chicago/Wisconsin Central Commuter Rail

This project would initiate commuter rail service from the Wisconsin border (at Antioch, Illinois) to downtown Chicago, along existing Wisconsin Central Railroad right-of-way. The scope of the project includes costs for land acquisition, track and signal upgrades, station platform facilities, and other operations-related improvements associated with commuter service requirements.

The FY 1994 budget provided \$7.94 million for this project; the grantee has requested an additional \$2.00 million from section 3 for completion. FTA expects the remaining costs for this project will be covered by the large increase in section 9 formula funds proposed for FY 1995. Because the section 3 cost for this project is less than \$25.00 million and accounts for less than one-third of the total cost, it is exempt from the project justification criteria contained in section 3(i) of the FT Act.

5. Dallas/RAILTRAN

The RAILTRAN project would initiate commuter rail service in two phases between Dallas and Fort Worth, Texas. Phase 1, a 10-mile segment between Dallas and South Irving, is being financed without section 3 funding; service is scheduled to commence in 1995. Phase 2 continues the line from South Irving to Fort Worth along 25 miles of existing right-of-way; plans call for service to be initiated in 1997. The capital cost of the project is \$66.30 million for Phase 1 and \$101.11 million for Phase 2. Included in Phase 2 is the Fort Worth Intermodal Transportation Center, now underway, which is funded with \$13.40 million in Highway Demonstration Program funds.

Section 3035(x) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with the cities of Dallas and Fort Worth in the amount of \$5.68 million for preliminary engineering and construction of improvements to the RAILTRAN system. FTA has obligated \$2.48 million of the earmarked funds for preliminary engineering, which is scheduled to be completed in September 1994. Based on the strength of the local commitment to Phase 1 and the readiness of this project to proceed with right-of-way and rolling stock acquisition activities as early as FY 1995, the Department considers this project a candidate for an LOI for Phase 2.

6. Houston/Regional Bus Plan

The locally preferred alternative for this project consists of major improvements to the existing bus system. Known as the Regional Bus Plan, it will provide direct service to all major activity centers and one-transfer service to many other destinations. The cost of these improvements is estimated at \$1.25 billion, and includes major transit service expansion in most of the region, new and extended HOV facilities and ramps, several transit centers, and supporting facilities. This project is in various engineering and design stages of development.

Section 3035(uu) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement for \$500 million, provided that a locally-preferred alternative for the Priority Corridor project had been selected by March 1, 1992. This condition has been met. Houston received New Start earmarks in FY 1989-1993 totaling \$195.18 million; of this amount, all but \$0.18 million has now been obligated. An additional \$39.71 million was earmarked in FY 1994, including \$1.00 million in FY 1993 and prior year funds made available from the Honolulu/Rapid Transit project. The project would serve a moderate nonattainment area for both carbon monoxide and ground-level ozone, and has an adequate commitment to both capital and operating assistance.

The Section 3(j) Report for FY 1994 New Starts funding recommended that an LOI be issued as a precursor to negotiation of an FFGA for this project. FTA has instead opted to proceed directly with negotiations for an FFGA, which are now underway. Remaining issues concerning the precise scope of the project will be resolved as part of the negotiation process.

7. Los Angeles/East Central

The East Central Corridor extension of the Metro Rail Red Line is the third segment of the MOS-3 project in Los Angeles (the two other segments are North Hollywood and Mid City, discussed earlier). The corridor extends approximately 6.5 miles from the eastern terminus of the Red Line at Union Station, to Atlantic and Whittier Boulevards in East Los Angeles. A number of separate alignments are being considered. The EPA classifies metropolitan Los Angeles as an "extreme" nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. This project is part of a larger commitment to meeting air quality goals through the Regional Mobility Plan, which includes an extensive network of rail lines, electric bus lines, and HOV facilities, and an aggressive travel demand management program.

The cost of the East Central extension is estimated at \$1.64 billion. The Los Angeles County Metropolitan Transportation Authority (LACMTA) is proposing a Federal share of approximately 50 percent, similar to MOS-1 and -2. In addition, LACMTA is funding several major transit investments with no Federal assistance. This project is still in the early stages of preliminary engineering, and substantial funding is being provided for the other segments of MOS-3. The FFGA for MOS-3 includes a contingent commitment to cover the first phase of the Eastside extension.

8. Maine/Portland-Boston Commuter Rail

This Maine Department of Transportation (MeDOT) project would initiate commuter rail service over existing track between Boston, Massachusetts and Portland, Maine. Currently, no passenger rail service is provided on much of this 114-mile route. Plans are being developed jointly by State and local officials along this corridor. The project would involve track and signal improvements at a total cost of \$50 million, assuming Amtrak will provide rolling stock at no cost to the project. The FY 1994 budget provided sufficient funding to complete this project; consideration of additional funding is therefore unnecessary.

9. New Jersey/Urban Core

Section 3(a)(8)(C)(i) of the FT Act provides that the New Jersey Urban Core Project be considered as a Program of Interrelated Projects for the purposes of Federal requirements. Section 3031(d) of ISTEA defines this program to include the Secaucus Transfer Station, the Kearny connection, the Waterfront connection, the Northeast Corridor signal system improvements, the Hudson River Waterfront transportation system, the Newark-Elizabeth Transit Link, a Newark Penn Station-Broad Street Station rail connection, and the New York Penn Station Concourse.

ISTEA requires FTA to enter into an FFGA for those elements of the Urban Core project that can be fully funded from FY 1992 through FY 1997. Section 3031(c) of ISTEA specifically exempts these projects from the New Starts requirements of ISTEA and FTA's major transit investment policy (except that an alternatives analysis was required for the Hudson River Waterfront Transportation System). Of these elements, the **Secaucus Transfer** project is expected to be ready to obligate funding in FY 1995. This project consists of a new transfer station at the intersection of the Northeast Corridor and NJ Transit Main lines, track expansions, and track, bridge, and signal upgrades. It would connect three high-ridership commuter rail lines and improve access to midtown Manhattan on two of these lines, and vastly improve transit connections within New Jersey. This project has completed the preliminary engineering stage of development.

The total amount of section 3 funds authorized for the Urban Core project is \$634.40 million; through FY 1994, \$240.47 million in New Starts funds have been appropriated. The **Secaucus Transfer element of the Urban Core project** requires \$165.30 million to complete. Based on

the improved transit connections and improved access to a major employment center, and the readiness to proceed with this project, the Department considers the Secaucus Transfer to be a candidate for an FFGA.

10. Orange County/Transitway

The Orange County Transportation Agency (OCTA) is proposing a transitway project which has a total estimated cost of about \$615 million. Although the components of the program are still being developed, it includes short sections of barrier-separated transitways in the medians of I-405 and SR-55, exclusive HOV connections between the transitways on both freeways, and HOV ramps between the transitways and adjacent activity centers. OCTA is proposing a 52 percent section 3 share for this project. Viewed as part of the 20-year, approximately \$2.2 billion local/State effort to construct HOV lanes and transitways on Orange County freeways, the section 3 share is less than 15 percent. Federal funding for this project would amount to \$318 million. OCTA is nearing completion of preliminary engineering for the transitway ramps.

OCTA has proposed that an Intermodal Center (IC) be included as part of this project. The IC did not emerge from the project planning process and the environmental review process has not yet begun. There has been no FTA involvement in this proposal. Additionally, the inclusion of the IC delays the schedule of the project and postpones the acquisition of transitway buses and construction of park-and-ride facilities to a later phase, diverting resources necessary to achieve the full benefits of the transitway investment. For these reasons, the Department currently views the IC as separate from the transitway ramps and related bus acquisition activities. Until the issues surrounding the IC are resolved, it is premature to consider this project for a future Federal funding commitment.

11. Orlando/OSCAR

The Orlando Streetcar (OSCAR) project proposed by the City of Orlando consists of an electrified trolley system separated from traffic. The 2.7-mile system would circulate passengers in the downtown area and connect to regional transit centers and parking facilities on the fringe of the downtown core. The proposed system would operate within an exclusive right-of-way and is projected to increase transit speeds in the CBD by 2-3 miles per hour. Based on a comparison of selected origin-destination pairs, travel times would be reduced by 0-3 minutes over a bus-only alternative (buses would operate in mixed traffic).

The capital cost to complete the proposed system is estimated at \$50.00 million. Section 3035(l) of ISTEA directs FTA to enter into a multiyear grant agreement with the City of Orlando in the amount of \$5 million for alternatives analysis and preliminary engineering. Through FY 1994, Congress has appropriated \$5.48 million, primarily for final design and engineering. This project was approved to enter preliminary engineering in October, 1993.

Ridership on OSCAR is estimated at 8,200 passengers daily by 2010; free shuttle buses currently serve the same market, carrying approximately 1,700 passengers per day. Most of the new riders would be taking relatively short trips within the downtown area or between downtown and the fringe parking facilities. The ridership projections assume a 150 percent increase in CBD employment during the period of 1985 to 2010.

This project has a strong local financial commitment to both capital costs and operating assistance. However, because this project is still in the early stages of preliminary engineering, it would be premature to make a judgment concerning the worthiness of a future funding commitment based on the current projections for ridership and mobility improvements. As the project is further developed, better information will likely become available.

12. Pittsburgh/Busway Extensions

Port Authority Transit (PAT) is studying two extensions to the existing Martin Luther King, Jr. Busway. One would extend the existing 6.8-mile busway 2.3 miles further to the east together with park-and-ride lots. The total cost of this extension is estimated to be \$43 million, with a Federal share of less than \$25 million, all from sources other than section 3. The second extension would be to the west in the 20-mile corridor between downtown Pittsburgh and the Greater Pittsburgh International Airport; a 7-mile busway is being considered for the area in which congestion is worst. The project includes the 1.1-mile Wabash Tunnel and Bridge High-Occupancy Vehicle (HOV) facility. Both extensions are now in the preliminary engineering stage of development.

The cost of the eastern extension is estimated at \$43 million; local officials are committed to raising 50 percent of this estimated cost from non-Federal sources. PAT is proposing to use Title 1 funds authorized under Section 1108 of ISTEA for the Federal share, which would enable the eastern extension to be built without section 3 funds. The total capital cost of the Airport extension is estimated to be \$293 million. A total of \$152.27 million has been provided to this project from a combination of Federal funds, including \$65.97 million from section 3 from FY 1992 through FY 1994. Sections 1069(e) and 1108(b) of the highway title of ISTEA authorize \$39.50 million in highway program funds for the projects that have not yet been appropriated. PAT has requested that these highway funds be provided instead from section 3. The Department recommends that these funds be appropriated from the highway program as specified by ISTEA. This would leave a balance of \$31.23 million to be provided from section 3 for the Airport extension.

Preliminary estimates indicate that these projects are extremely well-justified. Mobility in the two corridors is expected to improve by a projected reduction in travel times into the downtown area of as much as 17 minutes for the East Busway extension, and 26 minutes for the Airport Corridor busway extension. State funding for the local share of the capital cost of these projects is already in place. PAT has a good history of obtaining needed funds to operate new services and operate and maintain its existing system, and the State legislature recently approved a series of small taxes

dedicated to transit for asset maintenance and routine capital replacement needs. This project is therefore a candidate for an FFGA.

13. Portland/Hillsboro

Tri-Met is performing preliminary engineering for a light rail extension in the Hillsboro Corridor, which extends from the terminus of the Westside LRT project at 185th Avenue to downtown Hillsboro to the west, a distance of about six miles. This project is part of the Program of Interrelated Projects that includes the Westside LRT, now under construction. Tri-Met is seeking section 3 New Starts funds for 33 percent of the cost of this extension, which exempts it from the New Starts criteria under ISTEA. In addition, the FFGA for the Westside project indicates that it may be amended to include the Hillsboro extension once environmental and other Federal requirements are met and Congress makes funds available for the project. This project has not yet reached a sufficient level of readiness for consideration of future funding commitments at this time.

14. Salt Lake City/South LRT

The Utah Transit Authority (UTA) is proposing a 15- to 17-mile at-grade light rail transit (LRT) line from downtown Salt Lake City to the southern suburbs. The line would follow a lightly-used Union Pacific Railroad alignment. The cost of this project is estimated at \$275.00 million.

Section 3035(f) of ISTEA directs FTA to enter into a multiyear grant agreement with UTA, which includes \$131.0 million for construction of the initial segment of the locally-preferred alternative. Congress has appropriated \$23.99 million for advanced right-of-way acquisition, engineering, and design work associated with an at-grade LRT project.

UTA is considering significant changes to the project in reaction to the November 1992 defeat of the sales tax referendum which was necessary to fund the local share of the project as originally defined. A first phase implementation plan would have fewer stations and sections of single track, but the alignment would be the same. Although funding constraints on the local share have led to the planned phasing of the project, UTA assumes the full project will eventually be built. UTA is attempting to finance this project as a mitigation measure for the I-15 reconstruction project. If successful, the Utah Department of Transportation will need a substantial gasoline tax increase to provide the local share. Such an increase is unlikely to be taken up by the State legislature before the January 1995 session, with passage no earlier than March 1995. Because of these concerns, and because a decision on the future of this project has not been made at this time, a commitment to future funding is premature.

C. Projects in Alternatives Analysis

There are currently 23 corridors in the alternatives analysis phase of the project development process. During this phase, a range of alternatives is evaluated, the locally preferred alternative is selected, and a draft environmental impact statement is completed. These projects are not expected to reach a state of readiness sufficient to contemplate future funding agreements at this time. The 23 corridors undergoing alternatives analysis are listed in Appendix B.

D. Projects in System Planning and Other Initial Phases

FTA traditionally has not recommended projects that are not yet in alternatives analysis for Section 3 New Starts funding. Projects in these preliminary stages of development typically have not reached a level of readiness sufficient to obligate funds. Twenty-four projects currently in system planning are listed in Appendix B.

Honolulu/Rapid Transit. The Honolulu Rapid Transit project has been returned to system planning due to the defeat of an excise tax in September 1992 that would have provided 70 percent of the capital costs. Other local funding options were explored, but these also failed to win approval by the City Council. Local authorities are reexamining decisions concerning alignments, termini, and the feasibility of a downtown tunnel. The preliminary engineering effort has been halted by the city.

Because of these issues, Congress removed the \$76.5 million earmark contained in the 1993 Transportation Appropriations Act; \$45 million was provided for the Secretary's discretion, and the remaining funds reallocated among six other projects in FY 1994. The Governor of Hawaii has proposed a one-half percent increase in the state excise tax to finance a rail transit project in Oahu, provided the Federal government funds 50 percent of the project. This proposal comes at a time when the State is in a recession, and faces anti-tax sentiment in the State legislature.

Suspended Light Rail Transit. Also considered to be in the system planning stage is the Suspended Light Rail Transit (SLRT) pilot project contained in section 3030 of ISTEA. The purpose of this project is to assess the state of new technology for SLRT, and to demonstrate the feasibility, costs, and benefits of using such a system for transporting passengers. The project is to proceed in three phases. Phase 1, which requires the selection of three finalists from among proposals submitted by public entities in a national competition, was completed in October 1993; a total of \$1.00 million in section 3 grants was awarded to the three finalists in FY 1993 (\$0.33 million to each). Phase 2 calls for the selection of a single proposal from among the three finalists to proceed with environmental impact analyses and preliminary engineering. Phase 3 includes construction, pre-revenue service, and commencement of revenue service of the SLRT system.

ISTEA authorized \$4.00 million in section 3 funds for SLRT Phase 2 in FY 1993; however, no funds were appropriated by Congress in either FY 1993 or FY 1994 and specific direction was provided that indicated intent that the project not progress at this time. Due to the pressing number of other critical transit needs facing the country, FTA does not intend to seek funding for Phase 2 and Phase 3 of this project.

Maryland/MARC Extensions. The Mass Transit Administration (MTA) of Maryland has proposed extensions of the Maryland Commuter Rail (MARC) system that would provide service to Washington, D.C. from Waldorf and Frederick, Maryland. The environmental assessment for the Frederick extension is still in the early stages, and the Environmental Impact Statement for Waldorf has not yet been initiated. The \$23.32 million in FY 1994 funds appropriated by Congress is sufficient allow project development to proceed on a reasonable schedule; no additional funds are likely to be needed in FY 1995.

E. Summary of Funding Allocations By Project Phase

The following table shows how much is recommended to be allocated in FY 1995 to projects in each phase of the project development process:

Existing FFGAs	\$397.00 million
Final Design (w/o FFGAs)	0.00 million
Preliminary Engineering	0.00 million
Alternatives Analysis	0.00 million
System Planning	0.00 million
TOTAL	<u>\$ 397.00 million</u>

F. Summary of FY 1995 Funding Allocations

The following chart indicates the FY 1995 and potential outyear implications of the funding allocations recommended above (in millions of dollars):

	FY 1995 Funds	Phase (1)	Maximum Outyear Funds FY 1996-97	Total Funding FY 1995-97
<u>Existing Full Funding Grant Agreements</u>				
Dallas/South Oak Cliff	\$33.77	UC	\$0.00	\$33.77
Los Angeles/MOS-3	184.30	FD	317.60	501.90
New York/Queens	62.54	FD	152.16	214.70
Portland/Westside LRT	111.70	UC	229.20	340.90
St. Louis/Metrolink	4.69	UC	0.00	4.69
TOTAL	<u>\$397.00</u>		<u>\$698.96</u>	<u>\$1,095.96</u>

G. Summary of Candidates for Future Funding Commitments

The following chart summarizes additional projects under consideration for future funding commitments (in millions of dollars):

		Maximum Phase (1) Outyear Funds
<u>Other Projects Nearing Completion</u>		
Chicago/Wisconsin Central CR	PE	\$2.00
<u>Candidates for Full Funding Grant Agreements</u>		
Baltimore/LRT Extensions	PE	\$41.34
Houston/Regional Bus	PE	390.10
New Jersey/Urban Core	PE	165.30
Pittsburgh/Busways	PE	<u>31.23</u>
Subtotal		<u>\$627.97</u>
<u>Candidates for Letters of Intent</u>		
Boston/Piers	PE	\$40.00
Chicago/Central Area Circulator	PE	158.50
Dallas/RAILTRAN	PE	55.50
San Francisco/Airport & Tasman (2)	FD	<u>161.00</u>
Subtotal		<u>\$415.00</u>
TOTALS		<u>\$1,044.97</u>

(1) Phases of project development are abbreviated as follows:

- UC = Under Construction
- FD = Final Design
- PE = Preliminary Engineering
- AA = Alternatives Analysis
- SP = System Planning

(2) Reflects cost to complete Tasman project (FY 1994 earmark not yet allocated).

Section 3(a)(4)(E) limits the total amount of LOIs, FFGAs and contingent commitments which can be issued at any time to the remaining balance of the authorization, or one-half of the uncommitted cash balance in the Mass Transit Account of the Highway Trust Fund, whichever is greater. The potential maximum amount of New Starts funding which was made available by ISTEA is about \$2.80 billion for FY 1995 through 1997. By the end of 1997, an additional \$1.454 billion is expected to be available for New Starts from one-half of the uncommitted cash balance of the Mass Transit Account. The sum of commitments which are proposed in this report (\$1,095.96 million), plus the \$535.00 million in contingent commitments for Los Angeles/MOS-3, is within the total amount permitted to be committed under section 3(a)(4)(E). The following table illustrates the remaining commitment capacity under ISTEA (in millions of dollars):

	<u>FY 1995 Funds</u>	<u>Maximum Outyear Funds FY 1996-97</u>	<u>Total Funding FY 1995-97</u>	<u>Available ISTEA Funding</u>
ISTEA Funding Availability (FY 1995-1997)				\$2,800.00
Less:				
<u>Existing Full Funding Grant Agreements</u>				
Dallas/South Oak Cliff	\$ 33.77	\$ 00.00	\$ 33.77	
Los Angeles/MOS-3	184.30	317.60	501.90	
New York/Queens	62.54	152.16	214.70	
Portland/Westside LRT	111.70	229.20	340.90	
St. Louis/Metrolink	<u>4.69</u>	<u>0.00</u>	<u>4.69</u>	
Subtotal	\$397.00	\$698.96	\$1,095.96	<u>-\$1,095.96</u>
REMAINING ISTEA COMMITMENT CAPACITY (FY 1995-1997)				\$1,704.04
Anticipated Additional Contingent Commitment				
Authority for New Starts from 50% Uncommitted				
Cash Balance of Mass Transit Account (FY 1997)				+\$1,453.90
Less:				
<u>Contingent Commitments (FY 1998-2000)</u>				
L.A./MOS-3			\$535.00	-535.00
TOTAL REMAINING COMMITMENT CAPACITY (FY 1995-2000)				<u>\$2,622.94</u>

IV. CONCLUSION

The \$397.00 million available for FY 1995 is sufficient to honor all five of the New Starts projects that have existing FFGAs. Two of these projects, Los Angeles/MOS-3 and Portland/Westside, have been allocated additional funds to compensate for FFGA funding shortfalls in prior years. The funding for Dallas/South Oak Cliff will complete the Federal commitment to this project. The allowance for the Metrolink project in St. Louis is intended to cover unanticipated costs associated with its construction. Specifically, we intend to:

- Provide \$33.77 million to the Dallas/South Oak Cliff project, in accordance with the FFGA, to complete the Federal commitment to this project.
- Provide \$4.69 million to cover extraordinary costs for the Metrolink project in St. Louis, in addition to those funds already made available under the FFGA.
- Provide \$111.70 million in FY 1995 (and \$229.20 million in future funds) to the Westside light rail extension project in Portland, including the \$104.00 million specified for FY 1995 in the FFGA for this project, plus \$7.70 million to compensate for the FY 1994 funding shortfall (after the addition of \$10.38 million in discretionary funds to the FY 1994 funding level and accounting for the \$2.99 million allocated to this project in FY 1993 in excess of the FFGA amount for that year).
- Provide \$184.30 million for the Los Angeles/MOS-3 project in FY 1995 (and \$852.60 million in future funds, including \$535.00 million in contingent commitments), including the \$158.80 million specified for FY 1995 in the FFGA for this project, plus \$25.50 million to compensate for the FY 1994 funding shortfall (after the addition of \$34.05 million in discretionary funds to the FY 1994 funding level).
- Provide \$62.54 million in FY 1995 (and \$152.16 million in future funds) for construction of the Queens Local/Express Connection in New York City, in accordance with the FFGA for this project.

APPENDIX A.

REQUIREMENTS OF SECTION 3(i) OF THE FT ACT

As amended by ISTEA, section 3(i) of the Federal Transit Act provides that:

- "(i) NEW STARTS CRITERIA.--
- "(1) DETERMINATIONS.-- A GRANT OR LOAN FOR CONSTRUCTION OF A NEW FIXED GUIDEWAY SYSTEM OR EXTENSION OF ANY FIXED GUIDEWAY SYSTEM MAY NOT BE MADE UNDER THIS SECTION UNLESS THE SECRETARY DETERMINES THAT THE PROPOSED PROJECT--
 - (A) IS BASED ON THE RESULTS OF AN ALTERNATIVES ANALYSIS AND PRELIMINARY ENGINEERING;
 - (B) IS JUSTIFIED BASED ON A COMPREHENSIVE REVIEW OF ITS MOBILITY IMPROVEMENTS, ENVIRONMENTAL BENEFITS, COST EFFECTIVENESS, AND OPERATING EFFICIENCIES; AND
 - (C) IS SUPPORTED BY AN ACCEPTABLE DEGREE OF LOCAL FINANCIAL COMMITMENT, INCLUDING EVIDENCE OF STABLE AND DEPENDABLE FUNDING SOURCES TO CONSTRUCT, MAINTAIN, AND OPERATE THE SYSTEM OR EXTENSION.
- "(2) CONSIDERATIONS.-- IN MAKING DETERMINATIONS UNDER THIS SUBSECTION, THE SECRETARY--
 - (A) SHALL CONSIDER THE DIRECT AND INDIRECT COSTS OF RELEVANT ALTERNATIVES;
 - (B) SHALL ACCOUNT FOR COSTS RELATED TO SUCH FACTORS AS CONGESTION RELIEF, IMPROVED MOBILITY, AIR POLLUTION, NOISE POLLUTION, CONGESTION, ENERGY CONSUMPTION, AND ALL ASSOCIATED ANCILLARY AND MITIGATION COSTS NECESSARY TO IMPLEMENT EACH ALTERNATIVE ANALYZED; AND
 - (C) SHALL IDENTIFY AND CONSIDER TRANSIT SUPPORTIVE EXISTING LAND USE POLICIES AND FUTURE PATTERNS, AND CONSIDER OTHER FACTORS INCLUDING THE DEGREE TO WHICH THE PROJECT INCREASES THE MOBILITY OF THE TRANSIT DEPENDENT POPULATION OR PROMOTES ECONOMIC DEVELOPMENT, AND OTHER FACTORS THAT THE SECRETARY DEEMS APPROPRIATE TO CARRY OUT THE PURPOSES OF THIS ACT.

"(3) GUIDELINES.--

- (A) IN GENERAL.-- THE SECRETARY SHALL ISSUE GUIDELINES THAT SET FORTH THE MEANS BY WHICH THE SECRETARY SHALL EVALUATE RESULTS OF ALTERNATIVES ANALYSIS, PROJECT JUSTIFICATION, AND DEGREE OF LOCAL FINANCIAL COMMITMENT FOR THE PURPOSES OF PARAGRAPH (1).
- (B) PROJECT JUSTIFICATION.-- PROJECT JUSTIFICATION CRITERIA SHALL BE ADJUSTED TO REFLECT DIFFERENCES IN LOCAL LAND COSTS, CONSTRUCTION COSTS, AND OPERATING COSTS.
- (C) FINANCIAL COMMITMENT.-- THE DEGREE OF LOCAL FINANCIAL COMMITMENT SHALL BE CONSIDERED ACCEPTABLE ONLY IF--
 - (I) THE PROPOSED PROJECT PLAN PROVIDES FOR THE AVAILABILITY OF CONTINGENCY FUNDS THAT THE SECRETARY DETERMINES TO BE REASONABLE TO COVER UNANTICIPATED COST OVERRUNS;
 - (II) EACH PROPOSED LOCAL SOURCE OF CAPITAL AND OPERATING FUNDING IS STABLE, RELIABLE, AND AVAILABLE WITHIN THE PROPOSED PROJECT TIMETABLE; AND
 - (III) LOCAL RESOURCES ARE AVAILABLE TO OPERATE THE OVERALL PROPOSED TRANSIT SYSTEM (INCLUDING ESSENTIAL FEEDER BUS AND OTHER SERVICES NECESSARY TO ACHIEVE THE PROJECTED RIDERSHIP LEVELS) WITHOUT REQUIRING A REDUCTION IN EXISTING TRANSIT SERVICES IN ORDER TO OPERATE THE PROPOSED PROJECT.
- (D) STABILITY ASSESSMENT.-- IN ASSESSING THE STABILITY, RELIABILITY, AND AVAILABILITY OF PROPOSED SOURCES OF LOCAL FUNDING, THE SECRETARY SHALL CONSIDER--
 - (I) EXISTING GRANT COMMITMENTS;
 - (II) THE DEGREE TO WHICH FUNDING SOURCES ARE DEDICATED TO THE PURPOSES PROPOSED; AND
 - (III) ANY DEBT OBLIGATIONS WHICH EXIST OR ARE PROPOSED BY THE RECIPIENT FOR THE PROPOSED PROJECT OR OTHER TRANSIT PURPOSES.

- "(4) PROJECT ADVANCEMENT.-- NO PROJECT SHALL BE ADVANCED FROM ALTERNATIVES ANALYSIS TO PRELIMINARY ENGINEERING UNLESS THE SECRETARY FINDS THAT THE PROPOSED PROJECT MEETS THE REQUIREMENTS OF THIS SECTION AND THERE IS A REASONABLE CHANCE THAT THE PROJECT WILL CONTINUE TO MEET THESE REQUIREMENTS AT THE CONCLUSION OF PRELIMINARY ENGINEERING.

"(5) EXCEPTIONS.--

(A) **IN GENERAL.** -- A NEW FIXED GUIDEWAY SYSTEM OR EXTENSION SHALL NOT BE SUBJECT TO THE REQUIREMENTS OF THIS SUBSECTION AND THE SIMULTANEOUS EVALUATION OF SUCH PROJECTS IN MORE THAN ONE CORRIDOR IN A METROPOLITAN AREA SHALL NOT BE LIMITED IF

- (I) THE PROJECT IS LOCATED WITHIN AN EXTREME OR SEVERE NONATTAINMENT AREA AND IS A TRANSPORTATION CONTROL MEASURE, AS DEFINED BY THE CLEAN AIR ACT, THAT IS REQUIRED TO CARRY OUT AN APPROVED STATE IMPLEMENTATION PLAN, OR
- (II) ASSISTANCE PROVIDED UNDER THIS SECTION ACCOUNTS FOR LESS THAN \$25,000,000 OR LESS THAN 1/3 OF THE TOTAL COST OF THE PROJECT OR AN APPROPRIATE PROGRAM OF PROJECTS AS DETERMINED BY THE SECRETARY.

(B) **EXPEDITED PROCEDURES.** -- IN THE CASE OF A PROJECT THAT IS

- (I) LOCATED WITHIN A NONATTAINMENT AREA THAT IS NOT AN EXTREME OR SEVERE NONATTAINMENT AREA,
- (II) A TRANSPORTATION CONTROL MEASURE, AS DEFINED IN THE CLEAN AIR ACT, AND
- (III) REQUIRED TO CARRY OUT AN APPROVED STATE IMPLEMENTATION PLAN,

THE SIMULTANEOUS EVALUATION OF PROJECTS IN MORE THAN ONE CORRIDOR IN A METROPOLITAN AREA SHALL NOT BE LIMITED AND THE SECRETARY SHALL MAKE DETERMINATIONS UNDER THIS SUBSECTION WITH EXPEDITED PROCEDURES THAT WILL PROMOTE TIMELY IMPLEMENTATION OF THE STATE IMPLEMENTATION PLAN.

(C) **EXCLUSION FOR CERTAIN PROJECTS.** -- THAT PORTION OF A PROJECT (INCLUDING ANY COMMUTER RAIL SERVICE PROJECT ON AN EXISTING RIGHT-OF-WAY) FINANCED ENTIRELY WITH HIGHWAY FUNDS MADE AVAILABLE UNDER THE FEDERAL-AID HIGHWAY ACT OF 1991 SHALL NOT BE SUBJECT TO THE REQUIREMENTS OF THIS SUBSECTION.

"(6) **PROJECT IMPLEMENTATION.** -- A PROJECT FUNDED PURSUANT TO THIS SUBSECTION SHALL BE IMPLEMENTED BY MEANS OF A FULL FUNDING GRANT AGREEMENT."

Section 3(a)(6) of the FT Act sets up an assured timetable for the completion of the steps in the project development process. Specifically, it requires the following:

- The draft environmental impact statement be approved for circulation 45 days after it is submitted to the Secretary.
- The project shall be permitted to advance into preliminary engineering 30 days after selection of the locally preferred alternative, so long as the project meets the requirements of section 3(i).
- The project shall be permitted to begin final design 120 days after completion of the final environmental impact statement.
- A FFGA shall be entered into within 120 days of the start of final design.

In summary, ISTEA made a number of significant changes to section 3(i). It modified the determinations under section 3(i)(1) to broaden the project justification criteria from cost-effectiveness to reflect a broader range of goals and objectives. It added the five following new subsections which provide more details on the application of these criteria. The first new subsection (section 3(i)(2)) provides details on the considerations which must be accounted for in evaluating project justification. The second (section 3(i)(3)) requires guidelines to be published and includes details on how the local financial commitment is to be evaluated. Section 3(i)(4) requires projects to meet the criteria at the end of alternatives analysis and be likely to continue to meet the criteria at the end of preliminary engineering before a project can advance to that phase. Section 3(i)(5) exempts projects which are in approved State Implementation Plans in extreme or severe nonattainment areas, or which are relatively small, have a low Federal share, or which are funded with FHWA funds. Finally, section 3(i)(6) requires FFGAs for New Starts projects.

In a forthcoming policy statement, FTA will show how the section 3(i) criteria will be used to identify the best candidates for investment of discretionary New Starts funds. Projects that have completed the required planning and preliminary engineering steps will be considered for funding as part of a comprehensive evaluation process which will reflect the January 31, 1994 Executive Order "Principles for Infrastructure Investment." FTA's pre-ISTEA evaluation approach placed heavy emphasis on cost-effectiveness, with effectiveness measured in narrowly-defined transportation terms. Consistent with the Executive Order, the new evaluation approach will still be directed to maximizing the return on Federal investment. However, consistent with ISTEA, the measure of effectiveness will utilize an economic efficiency framework that will explicitly account for all benefits of transit, including mobility improvements for the transportation disadvantaged, air quality enhancement, and the relief of traffic congestion, which are benefits enumerated in section 3(i).

A key component of section 3(i) is the requirement that Federal funding decisions be based on the results of alternatives analysis and preliminary engineering. On October 28, 1993, FTA and the

Federal Highway Administration (FHWA) issued new planning regulations which significantly alter the planning and project development process for major transit and highway projects. Under these rules, a major transportation investment study must be performed before a major highway or transit project can be adopted as part of a metropolitan area's transportation plan. Each major investment study will evaluate a full set of alternatives and, for section 3 New Starts projects, will serve as the required alternatives analysis. The new planning rules help to establish a level playing field for the consideration of highway and transit alternatives. This should help ensure that local and State officials direct available resources, including flexible funds, to the projects that will best address current and future needs. The new procedures also begin to respond to ISTEA's directive that FTA and FHWA conform their environmental review procedures for major projects.

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APPENDIX B.

NEW STARTS PROJECT PROFILES

as of

October 1993

Office of Grants Management

Federal Transit Administration

U.S. Department of Transportation

NEW START PROJECT PROFILES
(October 1993)

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PREFACE

These new start project profiles provide background information supporting the Department of Transportation's new start funding recommendations for FY 1995. The Department's funding recommendations are being provided to the Congress pursuant to Section 3(j) of the Federal Transit Act, as amended. The funding recommendations are based in part on the decision criteria defined in Section 3(i)(1) of the Federal Transit Act.

Under Section 3(i)(1), discretionary capital grants and loans for the construction of a new fixed guideway system or the extension of an existing system may be made only if the Secretary determines that the project:

- (A) Is based on the results of alternatives analysis and preliminary engineering;
- (B) Is justified based on a comprehensive review of its mobility improvements, environmental benefits, cost effectiveness, and operating efficiencies; and
- (C) Is supported by an acceptable degree of local financial commitment, including evidence of stable and dependable funding sources to construct, maintain, and operate the system or extension.^{1/}

The Section 3(i)(1) criteria provide a rational basis for selecting, from among the eligible projects, those which are the most worthy of scarce Federal funds. To this end, the new start project profiles describe the fixed guideway projects that are most advanced, and evaluate them in terms of the Section 3(i)(1) criteria.

Profiles have been prepared for each project or study undergoing final design, preliminary engineering, and alternatives analysis. In addition, profiles have been prepared for projects that are under construction if additional funds are needed in FY 1995 to fulfill full funding contract commitments. A number of system planning studies, particularly those where congressional interest has been demonstrated, are also covered.

^{1/} The new start criteria do not apply where (a) the project was in preliminary engineering or final design on January 1, 1987; (b) the project is located within an extreme or severe nonattainment area, is a transportation control measure as defined in the Clean Air Act, and is required to carry out an approved State Implementation Plan; (c) Section 3 new start funding accounts for less than \$25 million; or (d) Section 3 new start funding accounts for less than one third of the total cost of the project or an appropriate program of projects. While such projects need not satisfy Section 3(i)(1) to be eligible for funding, they must compete for funds with other eligible projects.

Each profile contains five sections:

- (1) Description. The description section briefly describes a project's physical characteristics and provides the latest estimates of cost and ridership.
- (2) Status. This section identifies where the project is in the major investment planning and project development process. It indicates, for example, whether alternatives analysis and preliminary engineering have been completed. If not, it indicates when current studies are expected to be completed. This section also cites relevant statutory requirements.
- (3) Justification. This section presents an evaluation of the project's merit based on the criteria cited in Section 3(i)(1)(B) of the Federal Transit Act, as amended. The evaluation process is further described below.
- (4) Local Financial Commitment. This section notes the size of the local match and/or overmatch, and provides FTA's rating on the soundness of the capital finance plan and the stability and reliability of local operating revenues. The financial ratings process is further described below.
- (5) Other Factors. Other rating factors which may be useful in identifying the most meritorious projects are described in this section. The section highlights projects where local officials have demonstrated community support for transit by means of commitments to supportive land use and transportation policies.

How the Ratings were Developed.

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

Project Justification

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) greatly broadened the Section 3(i)(1) new start criteria. Projects are to be evaluated based on a comprehensive review that takes into account mobility improvements, cost effectiveness, environmental benefits, and operating efficiencies. This year's ratings address the full range of ISTEA criteria.

The project profiles address each project's impact on mobility to the extent that such information has been provided by the prospective grantees. Mobility improvements are addressed in terms of such quantifiable measures as travel time savings, increases in transit ridership, and reductions in highway congestion. Typically this information is drawn from the results of locally performed studies, such as alternatives analysis and preliminary engineering. The discussion attempts to

briefly summarize the most significant transportation benefits expected to result from a proposed project, with an emphasis on travel time savings.

Cost effectiveness is defined as the extent to which a project returns benefits relative to its costs. The cost effectiveness of a proposed major investment is measured in terms of its added benefits and added costs when compared to a transportation system management (TSM) alternative. The TSM alternative includes such low cost actions as traffic engineering, transit operational changes, and modest capital improvements.

For the purpose of the FY 1995 ratings, cost effectiveness was measured using the cost-per-new-trip index which was introduced in FTA's 1984 Major Capital Investment Policy. To compute the new trip index, benefits are measured in terms of new riders, travel time savings for existing riders, and operating cost savings. Additional ridership is a measure of how well a transit facility improves transit service, and is also a useful proxy for many of transit's potential secondary benefits, such as the structuring of urban development patterns and reductions in congestion, pollutant emissions, and energy consumption. The travel time savings measure reflects improved travel conditions for existing transit users, and is a good indicator of improved mobility for the transit dependent. Changes in operating and maintenance costs are included to reflect the potential for improvements in efficiency introduced by new transit facilities. The index takes the form of cost-per-added-rider; the lower the index, the more cost-effective the project.

Recognizing the linkages between ISTEA and the Clean Air Act, the FTA's assessment of environmental benefits focuses on a project's contribution toward attaining and maintaining the National Ambient Air Quality Standards. For each project, the profiles identify the severity of the region's air quality problem in terms of the designations and classifications assigned by the Environmental Protection Agency. For ozone, the nonattainment classifications (ranging from most to least severe) are:

- o Extreme
- o Severe-17 (17 years to attain and design value is based on 1986-88data)
- o Severe-15 (15 years to attain)
- o Serious
- o Moderate
- o Marginal
- o Sub-Marginal

Carbon monoxide nonattainment classifications (from most to least severe) are:

- o Serious
- o Moderate > 12.7 ppm
- o Moderate <= 12.7 ppm

To identify the project's contribution to improving air quality, the profiles indicate how much the project is expected to reduce emissions or vehicle miles of travel. This data comes directly from the relevant project studies, where available. Other environmental benefits and impacts are also identified where they are thought to be highly significant.

A project's contribution to the operating efficiency of the transit system can be measured in terms of systemwide operating costs per passenger. The project profiles present such data (where available) for the proposed project and two baseline alternatives, the TSM and No Build alternatives. A project's contribution to operating efficiency can be determined by looking at how much the operating cost per passenger varies among these alternatives. To summarize the evaluation, FTA has given a "high" rating to those projects which would reduce the systemwide operating cost per passenger by 5 percent or more compared with the TSM baseline. Where the reduction is 0 to 5 percent, a "medium" rating is assigned. A "low" rating is given where the operating cost per passenger is higher with the preferred alternative than with the TSM baseline. It should be noted that the cost effectiveness index provides another indicator of operating efficiencies. In the cost effectiveness index computation, savings in operating costs are incorporated as an offset to capital costs. Thus, projects that would lead to greater operating efficiencies would have lower cost effectiveness indices, all else being equal, and the index would approach zero as the operating savings approach the annualized capital cost.

Local Financial Commitment

FTA's evaluation of the local financial commitment to a proposed project focuses on three principal elements: the proposed local share of project costs, the strength of the proposed capital financing plan, and the stability and reliability of sources of operating deficit funding. The assessment of operating deficit funding takes into account the cost of the supporting bus service assumed in determining cost effectiveness.

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 commitment, thus leveraging limited Federal funds, and because it is evidence of a strong local commitment to the project. However, the local overmatch does not become final until preliminary engineering is completed.

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

The third component of the financial rating is an assessment of the ability of the local transit agency to run the system as planned once the guideway project is built. The existence of stable and reliable revenues to cover operating costs reduces the risk that, after a large Federal capital investment, local resources will not be available to maintain and operate the transit system (including essential feeder bus and other ancillary services necessary to achieve projected ridership levels). This rating focuses on the operating revenue base and its ability to expand to meet the incremental operating costs associated with a new fixed guideway investment and any other new services and facilities. The profiles also state the average age of the applicant's bus fleet. This information illustrates the extent to which the applicant has been reinvesting in its existing system. Again, projects are rated high, medium, or low (see Table B-2).

PROJECTS UNDER CONSTRUCTION

South Oak Cliff Corridor

Dallas, Texas
(October 1993)

Description

The South Oak Cliff light rail line is part of a 20-mile, \$835 million light rail starter system which is being constructed by Dallas Area Rapid Transit (DART). Other elements of the system include a branch to West Oak Cliff and a North Central line, both of which are under construction. The 9.6-mile, 13 station South Oak Cliff line extends from downtown Dallas to Ledbetter Drive in the South Oak Cliff area of Dallas. It is estimated to cost \$280 million, of which DART is requesting \$160 million from Section 3. This line is expected to carry 15,000 riders daily in 2005. DART is building the other two lines without Federal funding assistance.

Status

All of the environmental, alternatives analysis, and preliminary engineering requirements have been completed, a Full Funding Grant Agreement has been signed, and construction has been underway since February 1992.

Section 3035(i) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with DART for \$160 million for constructing this project. Congress has appropriated a total of \$126.6 million and FTA has granted a total of \$82.6 for the project.

Justification

Mobility Improvements. The South Oak Cliff line will provide improved transit service to one of the most transit-dependent areas of Dallas. This new service would result in a weighted door-to-door time savings of about 10 minutes because the LRT would offer more frequent service, better access to many destinations, and some in-vehicle travel time savings.

Cost Effectiveness. The project has a cost effectiveness index of about \$10 per new trip, reflecting the relatively low capital cost of the proposed at-grade rail line and modest benefits (2005 ridership, 1989 dollars).

Environmental Benefits. Dallas is a "moderate" nonattainment area for ozone and an attainment area for carbon monoxide. The project, because of its low attraction of new transit ridership in comparison to total regional auto trips, is expected to have minimal impact on regional air quality.

South Oak Cliff Corridor -- Dallas, Texas

Operating Efficiencies. The systemwide operating cost per transit rider is forecast to be about \$2.85 for the DART system with the South Oak Cliff Line, \$2.85 for the TSM alternative, and \$2.73 for No-Build in year 2005.

Local Financial Commitment

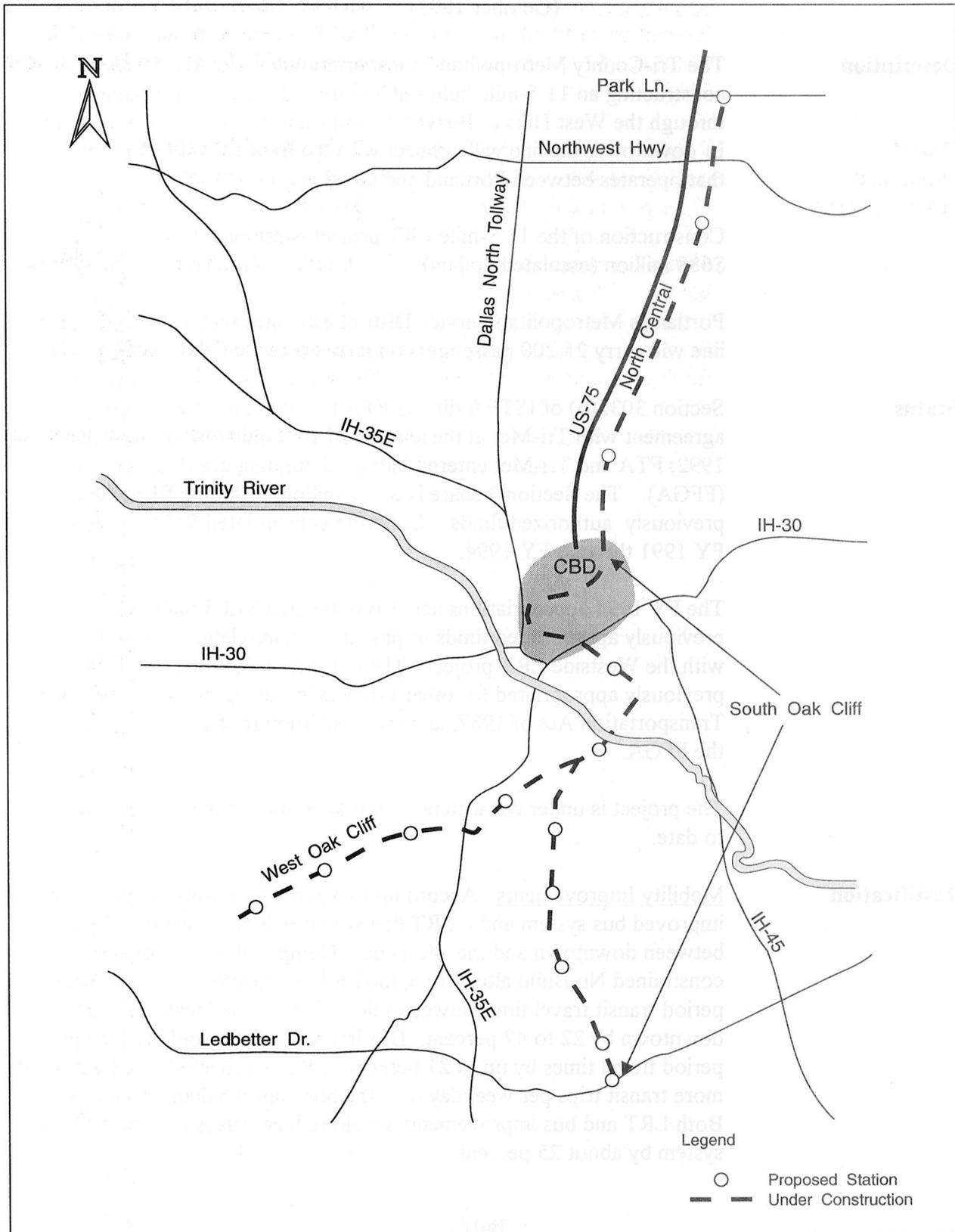
DART is seeking FTA funding for 20 percent of the cost of the 20-mile starter system. This funding would represent 57 percent of the cost of the South Oak Cliff line.

With a 1 percent sales tax, DART is in very good financial condition to build the 20-mile system.

The 1 percent sales tax and other sources provide DART with ample funds to maintain and operate the bus and 20-mile rail systems.

In 1992 DART's bus fleet averaged 7.8 years old which is comparable to the national average.

Dallas: South Oak Cliff Corridor



Westside Light Rail to 185th

Portland, Oregon

(October 1993)

Description

The Tri-County Metropolitan Transportation District (Tri-Met) is constructing an 11.5-mile light rail line from downtown Portland through the West Hills to Beaverton and suburban Washington County. In downtown, the line will connect with the Banfield LRT line ("MAX") that operates between Portland and Gresham.

Construction of the 11.5-mile LRT project is estimated to cost \$688 million (escalated dollars).

Portland's Metropolitan Service District estimates that a Westside LRT line will carry 25,200 passengers on an average weekday in 2005.

Status

Section 3035(b) of ISTEA directs FTA to enter a multiyear grant agreement with Tri-Met in the amount of \$515 million. In September 1992, FTA and Tri-Met entered into a full funding grant agreement (FFGA). The Section 3 share is \$516 million, including \$1 million of previously authorized funds. Congress appropriated \$165.3 million in FY 1991 through FY 1994.

The FY 1994 appropriations act also redirected \$13.5 million of previously appropriated funds to pay for system related costs associated with the Westside LRT project. The redirected Section 3 funds were previously appropriated for other projects in the region under the Surface Transportation Act of 1987, and are in addition to the \$516 million in the FFGA.

The project is under construction with \$200 million in contracts signed to date.

Justification

Mobility Improvements. According to Metro's ridership analyses, both an improved bus system and a LRT line would reduce transit travel time between downtown and the Westside. Compared with a fiscally constrained No Build alternative, the LRT is expected to reduce peak period transit travel time between selected Westside locations and downtown by 22 to 47 percent. Bus improvements would reduce peak period travel times by up to 21 percent. LRT is expected to attract 4600 more transit trips per weekday than the bus improvement alternative. Both LRT and bus improvements would reduce delays on the highway system by about 25 percent.

Westside LRT to 185th -- Portland, Oregon

Cost Effectiveness. The cost effectiveness index for the locally preferred LRT alternative is \$12 per new rider (2005 ridership, 1990 dollars).

Environmental Benefits. The Portland-Vancouver region is a "moderate" nonattainment area for carbon monoxide and a "marginal" nonattainment area for ozone. According to Tri-Met's air quality analysis, the LRT project will reduce regional emissions by 1 percent. Carbon monoxide concentrations will be reduced at some receptors and increased at others.

Operating Efficiencies. On a corridor-wide basis, the operating cost per passenger is estimated to be \$2.01 (1989\$) with the project in place. This compares with \$2.65 for the No Build alternative and \$2.80 for the TSM alternative. FTA has no information on how the project will affect systemwide operating efficiencies.

Local Financial Commitment

The Section 3 share of the project's capital cost is 75 percent. Three sources will be used for the local share: general obligation bonds backed by local property taxes, contributions by affected local jurisdictions, and State bonds backed by the lottery. In 1990 Portland voters authorized Tri-Met to issue \$125 million in bonds, \$80 million of which is available for this project. These bonds have now been issued. Local governments have entered into a regional compact and intergovernmental agreements which establish a commitment and schedule for \$21 million in local government contributions. State legislation was enacted in 1991 which made available \$113.6 million in State funding. In addition, Tri-Met has recently secured an \$85 million letter of credit from the international banking community for added financial flexibility. FTA has given the capital finance plan a "medium" rating.

The stability and reliability of Tri-Met's operating revenues are also rated "medium." Tri-Met's analysis shows that a Westside LRT could be operated without a new funding source, assuming that increases in operating and maintenance costs can be contained at about 5.5 percent per year while payroll tax revenues grow at 6.6 to 7.4 percent per year. This conclusion is sensitive to changes in the local economy and other uncertainties. Tri-Met's bus replacement program reduced the average age of the bus fleet from 11.5 years in 1989 to 7.3 years in 1992, making it better than the national average.

Westside LRT to 185th -- Portland, Oregon

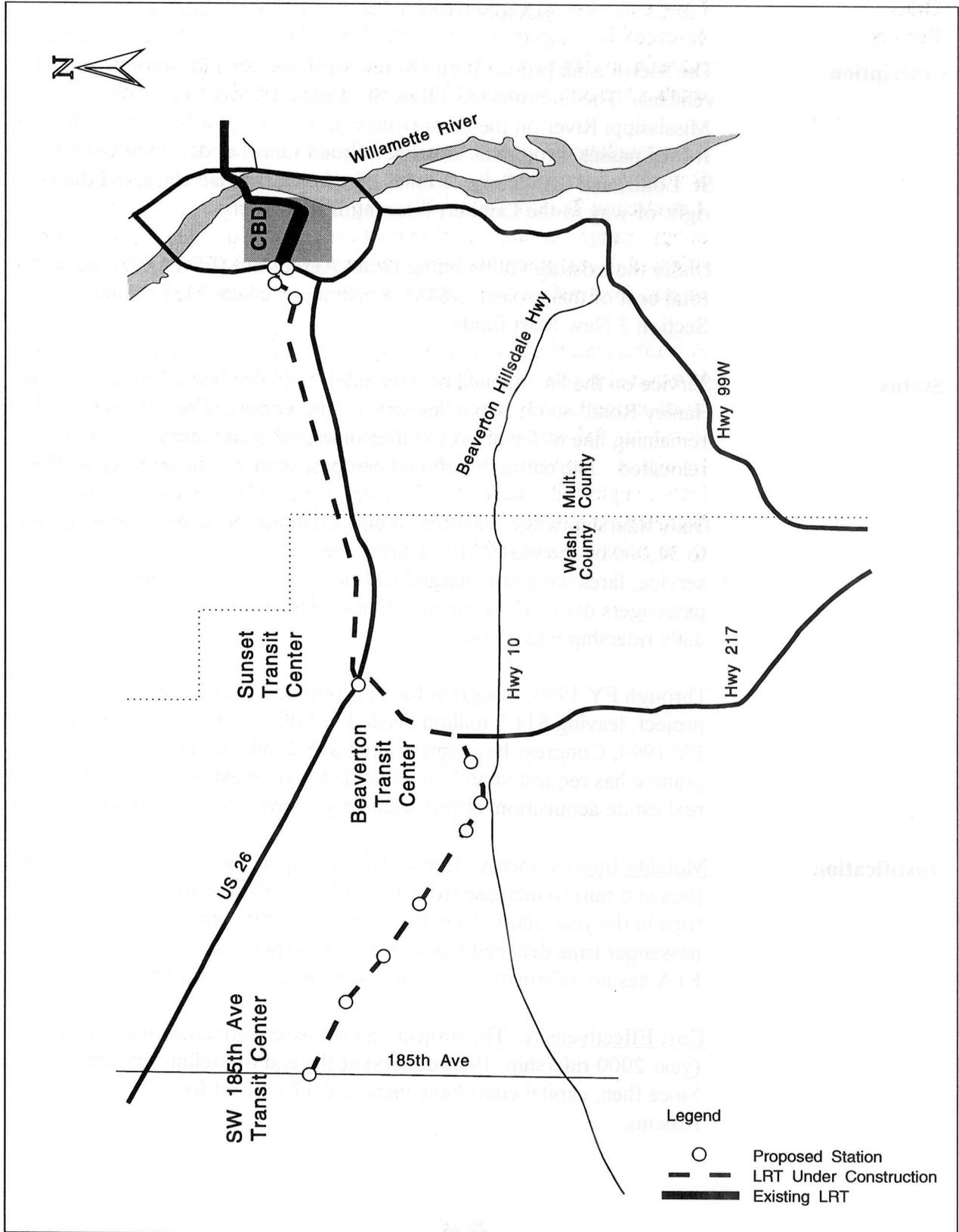
Other Factors

Land Use. Oregon land use law requires cities and counties to adopt enforceable comprehensive plans. Since the mid-1970's, the land use plans in all cities and counties in the Westside corridor have been established on the basis of high capacity transit in the corridor.

The state law also required the adoption of a regional Urban Growth Boundary that designates the area in which urban development can occur. The Oregon Transportation Planning Rule requires local governments to adopt changes to their development ordinances to require more transit oriented development patterns. In addition, the Rule requires the MPO to plan for a reduction in vehicle miles travelled per capita.

A station area planning and development program is underway for the Westside Project. Participants include Tri-Met, Metro, ODOT, Washington County, and the cities of Beaverton, Hillsboro, and Portland. Tri-Met expects that new comprehensive plans, development regulations, and capital improvement programs will be adopted in 1995. Interim light rail station area development regulations were adopted by Washington County in July 1993 and are expected to be adopted by the three cities in early 1994.

Portland: Westside Light Rail to 185th



"Metro Link" LRT to Airport

St. Louis, MO.

(October 1993)

Description

The Metro Link project is an 18-mile LRT line with 20 stations and 31 vehicles. The line runs from East St. Louis, Illinois, across the Mississippi River on the Eads Bridge into the City of St. Louis, Missouri. It then passes through an existing railroad tunnel under downtown St. Louis, and then along 11 miles of existing railroad track and the I-70 right-of-way to the Lambert International Airport.

Under the existing Full Funding Grant Agreement (FFGA), the estimated total cost of this project is \$451.4 million, of which \$338.6 million is Section 3 New Start funds.

Status

Service on the line opened on July 31, 1993. The line currently ends at Hanley Road, about two miles short of the airport. Construction on the remaining line to the airport will resume once a cemetery has been relocated. The entire line should be operational by the summer of 1994.

Daily ridership was forecasted to be 17,000 for the opening year, growing to 31,000 by the year 2010. During the first three days of MetroLink service, fares were not charged and ridership averaged about 60,000 passengers daily. Over the next five weeks of revenue service, average daily ridership was 25,600.

Through FY 1993, Congress has appropriated \$326.9 million for the project, leaving \$11.7 million needed to fulfill the FFGA commitment. In FY 1994, Congress has appropriated \$15.2 million. However, the grantee has requested additional funds to cover extraordinary costs (i.e. real estate acquisition, airport cemetery delays, etc.) incurred by Bi-State.

Justification

Mobility Improvements. Local planners expect total systemwide ridership (bus and rail) to increase from 112,000 in 1985 to 160,000 daily linked trips in the year 2000. Between 1981 and 1991, however, unlinked passenger trips declined from 71.3 million (per year) to 46.3 million. FTA has no information on how the project will affect transit travel time.

Cost Effectiveness. The project had a cost-effectiveness index of \$9 (year 2000 ridership, 1986 dollars) at the end of preliminary engineering. Since then, capital costs have increased 17 percent for a variety of reasons.

"Metro Link" LRT to Airport -- St. Louis, Missouri

Environmental Benefits. St. Louis is a "moderate" nonattainment area for ozone and a "not classified" nonattainment area for carbon monoxide. The LRT project is expected to cause a 0.3 percent reduction in total regional vehicle miles traveled. It will thus have a very small impact on regional emissions.

Operating Efficiencies. FTA has no information on the operating efficiencies that will result from this project.

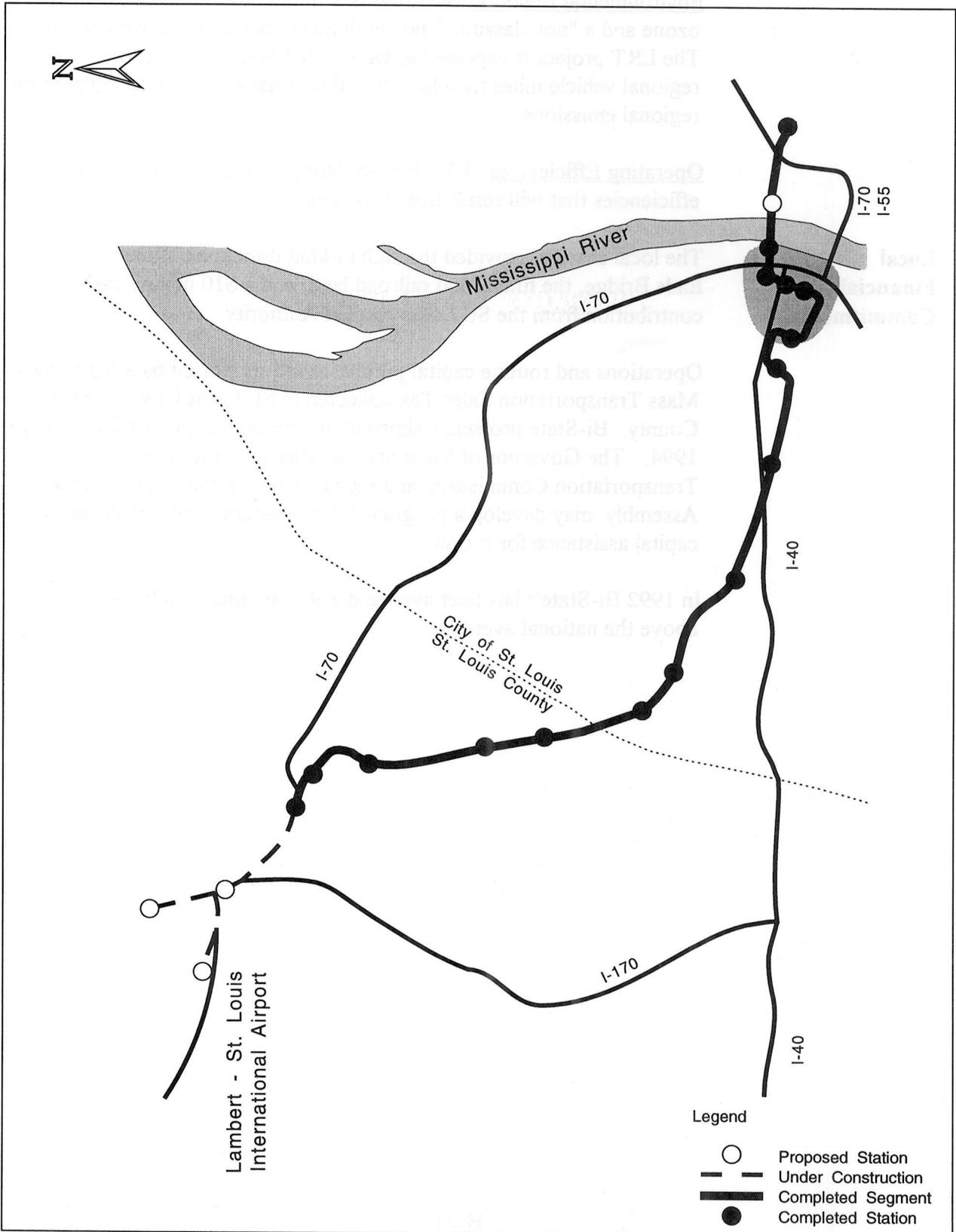
Local Financial Commitment

The local share is provided through in-kind donations of the Eads Bridge, the tunnel and railroad land, and a \$10 million cash contribution from the St. Louis Airport Authority.

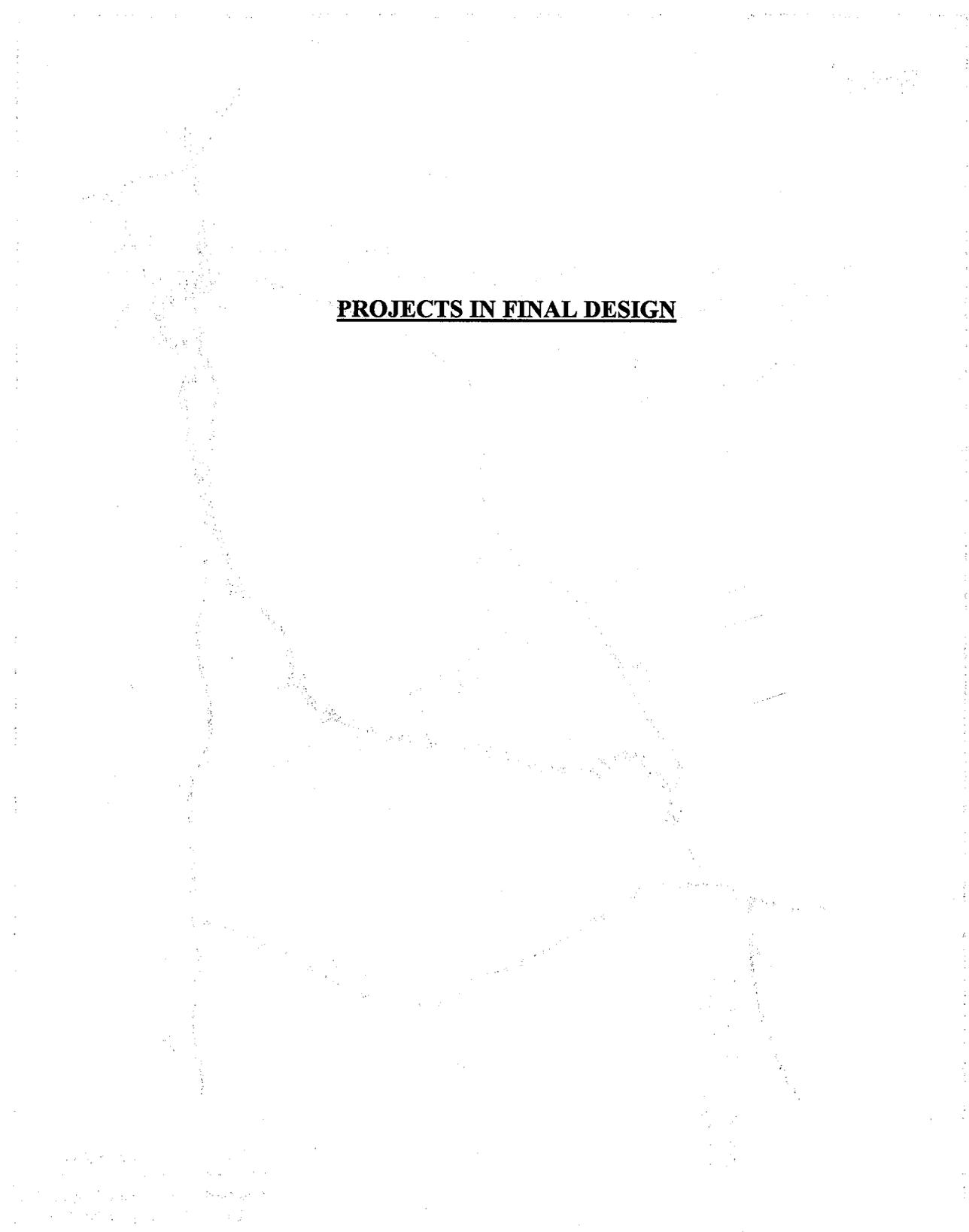
Operations and routine capital purchases are supported by a 0.5 percent Mass Transportation Sales Tax collected in St. Louis City and St. Louis County. Bi-State projects a shortfall in operating expenses for fiscal year 1994. The Governor of Missouri, the Missouri Highways and Transportation Commission, and members of the Missouri General Assembly may develop a program for permanent state operating and capital assistance for transit.

In 1992 Bi-State's bus fleet averaged 8.9 years old, which is slightly above the national average.

St. Louis: Metro Link to Airport



PROJECTS IN FINAL DESIGN



North Line Extension

Atlanta, Georgia

(October 1993)

Description:

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is designing a 9-mile, five-station North Line extension to its heavy rail rapid transit system. The initial segment of the North Line starting just south of the existing Lenox Station and extending north to the Medical Center Station (5.7 miles) will be built by MARTA, without FTA assistance, in the median of Georgia State Route 400, which Georgia DOT is now constructing with FHWA assistance. MARTA is seeking FTA funding for a 3.1-mile, three-station extension of the North Line from Medical Center to North Springs.

The 3.1-mile extension and 24 rail vehicles are estimated to cost \$497 million (escalated dollars). MARTA seeks an 80 percent Federal share of \$398 million. Daily ridership on the rail extension in the year 2005 is estimated at 33,000 riders including 11,000 new riders. The ridership projection assumes that substantial new development will occur in the service area.

Status

The final EIS was completed in April 1991, and FTA signed an environmental Record of Decision in August 1991. MARTA is now doing final design of the extension with grant assistance from FTA.

Section 3035(tt) of ISTEA requires FTA to negotiate and sign a multiyear grant agreement for the project. Through FY 1993, Congress has appropriated \$122 million for the extension.

FTA has made a \$92 million grant for final design and construction of a segment of the extension connecting the Medical Center and Dunwoody. An additional \$6.1 million is being sought to fully fund this segment. MARTA intends to seek construction funds for the Dunwoody to North Springs segment and associated vehicles in FY 1995 thru FY 1999.

MARTA did not seek additional funding in FY 1994 and does not plan to seek funding in FY 1995 for this extension. Funding during these years has instead been sought to support the procurement of buses. In FY 1996, MARTA intends to seek funding for the completion of this extension.

North Line Extension -- Atlanta, Georgia

Justification

Mobility Improvements. The North Atlanta Corridor is the fastest growing portion of the Atlanta area. The North Line and its extension will connect this area with the rest of the region and thereby provide better transit service for inner city residents traveling to expanding job opportunities in the suburbs. The project will also serve more traditional commuter trips from the North Corridor to downtown.

Cost Effectiveness. The project has a cost-effectiveness index of \$5 per new transit rider (2005 ridership, 1990 dollars).

Environmental Benefits. EPA has classified Atlanta as a "serious" nonattainment area for ozone and as an attainment area for carbon monoxide. The project will cause a 0.2 percent reduction in VMT regionwide and a similar marginal reduction in the emission of ozone precursors from transportation sources.

Operating Efficiencies. The systemwide operating cost per passenger for the Atlanta North Line Extension is estimated to be \$2.89 for the build alternative, \$2.90 for the no build, and \$2.90 for the TSM alternative.

Local Financial Commitment

MARTA's financial plan calls for a Federal share of 80 percent for the capital cost of the project. The FTA share of the MARTA rail program in service thus far has been 56 percent.

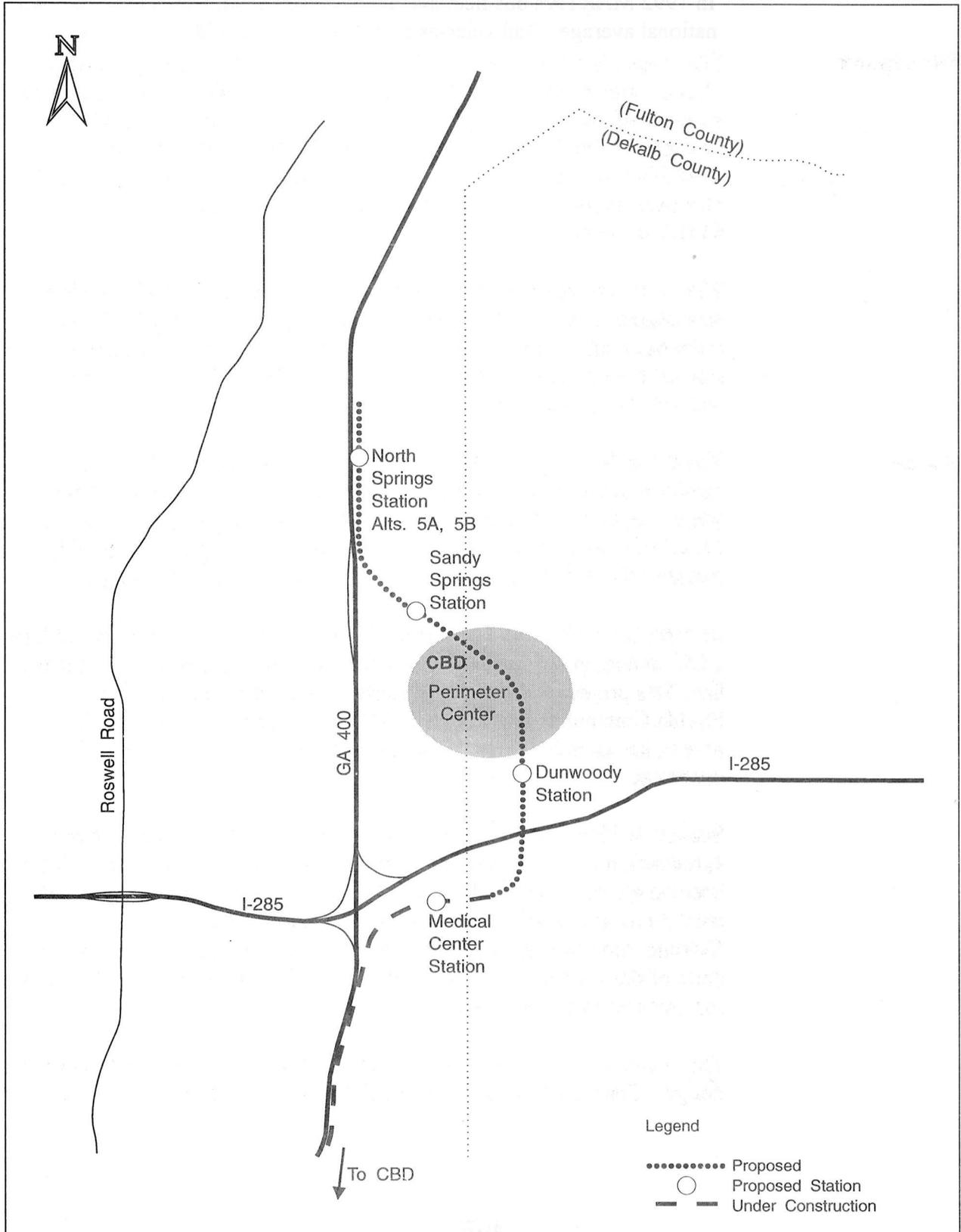
MARTA's capital financing plan is rated as "medium." MARTA receives the revenue of a 1 percent sales tax which it uses to subsidize its operations and support its construction program. Fluctuations in the rate of growth of the sales tax revenue and other increasing demands on the revenue are major concerns. A maximum of 50 percent of the sales tax revenue may be dedicated to capital expenditures. MARTA has now increased its operating rail system to 38 miles with a commensurate increase in operating subsidy. MARTA is programmed to stay within its legal debt capacity.

The stability and reliability of MARTA's operating assistance plan is rated as "medium," but it, too, should be carefully monitored. The financial plan assumes a significant increase in average fares (from \$0.89 to \$1.47 over a 15-year period) and a resulting increase in "operating ratio," the percent of operating costs covered by fares. The FY 1993 systemwide operating ratio was 41 percent, and MARTA projects an increase to 51 percent by 2005. In comparison with historic trends, MARTA's projected increases in ridership and operating ratio are optimistic. The plan assumes an annual 5 percent increase in sales tax revenue.

North Line Extension -- Atlanta, Georgia

In 1992 MARTA's bus fleet averaged 6.1 years old, which is better than the national average. Rail vehicles averaged 8.9 years old.

Atlanta: North Line Extension



South Extension of the Automated Skyway Express (ASE)

Jacksonville, Florida

(October 1993)

Description

The project is a 1.2-mile extension of the Automated Skyway Express (ASE) south of downtown Jacksonville. The extension would consist of an elevated, double track guideway running across the St. Johns River through the South Bank Business District to St. Johns Place. It would include a permanent central maintenance and storage facility and four new stations. The current estimated cost of this extension is \$133.7 million (escalated dollars).

The most current ridership projection for the full 2.5-mile ASE system was done in 1988. The Jacksonville Transportation Authority (JTA) estimates that, depending on development and parking assumptions, ridership would range from 38,000 to 51,000 in 2005. JTA is using 38,000 as its planning estimate.

Status

The 0.7-mile Phase 1-A segment or "starter line" opened for revenue service in June 1989. The line is averaging about 1600 riders per day. Most riders are park-and-ride patrons who pay a single fee to park in a JTA facility and ride the system. The current ridership is considerably less than the forecast of 10,000 originally used to justify the project.

In September 1991, at congressional direction, FTA and JTA entered into a full funding grant agreement for a 0.6-mile north extension of the starter line. This project will extend the starter line through downtown to Florida Community College. The \$29 million Federal share for this project has already been appropriated and civil construction is well underway.

Section 3035(vv) of ISTEA directs FTA to enter into a multiyear grant agreement for \$71.2 million to complete the 2.5-mile ASE system. It has become evident that the ISTEA authorization and currently committed local funds are insufficient to complete the full ASE system.

Consideration is being given to a variety of strategies such as deferring parts of the system, increased local funding, and combined procurements for the north and south segments.

The environmental process is complete, and the south extension is in final design. Congress has appropriated \$15 million for the south extension.

South Extension of the Automated Skyway Express (ASE) -- Jacksonville, Florida

Justification The project predates the issuance of FTA's Major Capital Investment Policy and is exempt from the new start criteria.

Mobility Improvements. In 1988, JTA estimated that 38,000 riders per day would use the 2.5-mile system in 2005. This is more conservative than the JTA's earlier estimate of 42,000 riders by 1995. The latest estimate assumed significant new development along the alignment. In recent years, growth and development in downtown Jacksonville has slowed considerably. In view of this fact, the low ridership on the starter line, and the low ridership on Miami's Metro Mover (11,000 actual vs. 40,000 projected daily trips) and Detroit's DPM (13,000 actual vs. 70,000 projected), JTA's estimate is thought to be optimistic. FTA has no information on the travel time impacts of the project.

Cost Effectiveness. Cost effectiveness indices have not been computed for this proposal.

Environmental Benefits. The Jacksonville area is classified as a "transitional" nonattainment area for ozone. For carbon monoxide, Jacksonville is an attainment area. The proposed project will not reduce auto trips sufficiently to affect regional air quality.

Operating Efficiencies. FTA has no information on how the project would affect the systemwide operating cost per passenger.

Local Financial Commitment

JTA has been proposing the maximum Federal share resulting in a Section 3 cost of \$107 million for the south extension. However, recent discussions have raised the possibility of a higher local share to allow the north and south extensions to be partially completed with existing appropriations within the \$71.2 million ISTEA earmark.

JTA does not have an ongoing dedicated funding source to support its transit capital program. JTA's 0.5 percent sales tax, which went into effect in 1989, is primarily dedicated to retiring existing highway toll bonds. Additional local and state funds have recently been made available to provide for a 49% local share for the completion of the system.

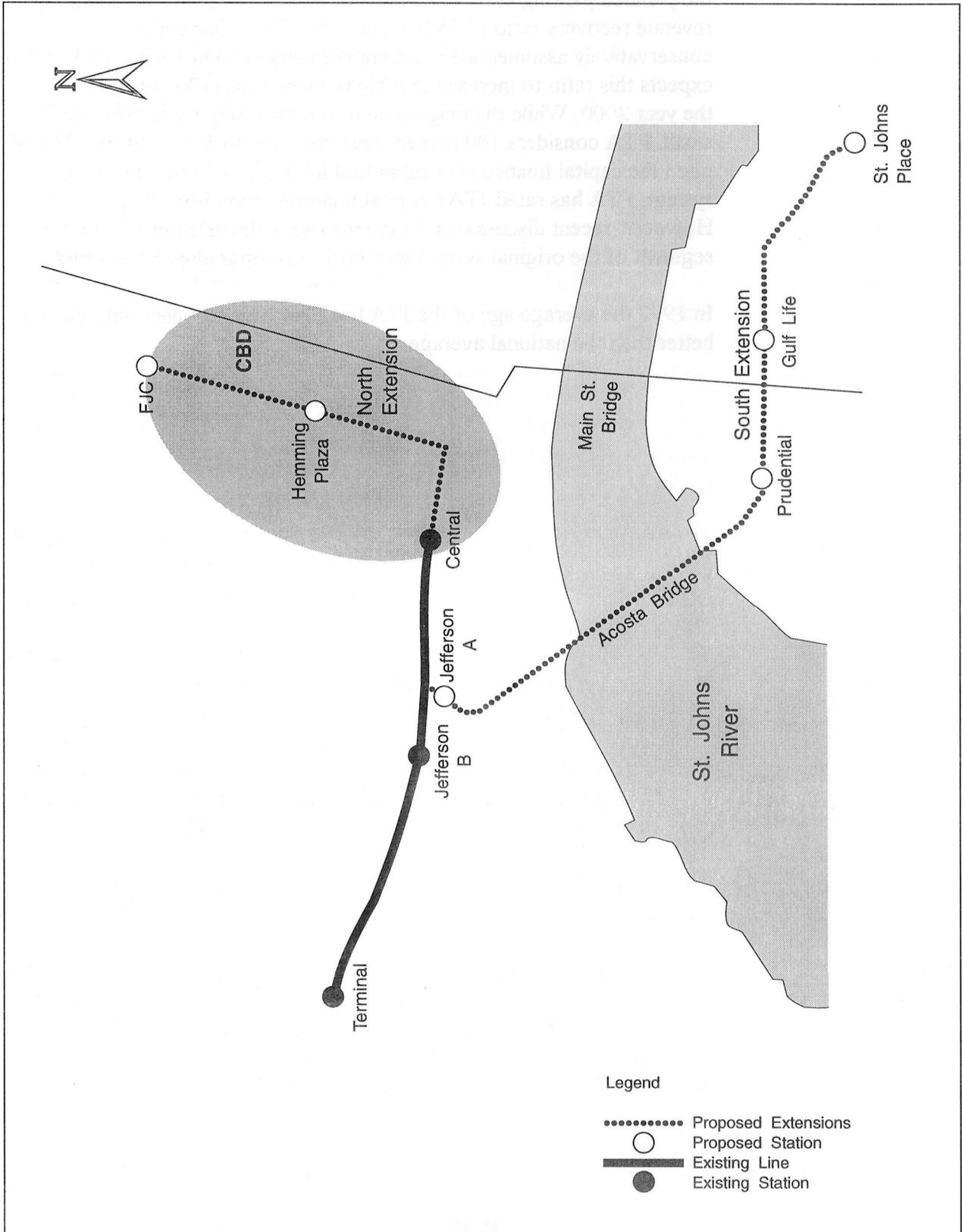
The stability and reliability of JTA's operating revenues are rated "medium". JTA expects to cover operating expenses from the system's operating revenue stream. The existing 0.7 mile segment, with only half

South Extension of the Automated Skyway Express (ASE) -- Jacksonville, Florida

the planned parking currently available, achieved a first year operating revenue recovery ratio of 55 percent. The JTA's financial plan conservatively assumed a 35 percent recovery ratio in 1991. JTA expects this ratio to increase to a break-even basis (100 percent) by the year 2000. While the magnitude of the operating subsidy is relatively small, FTA considers 100 percent cost recovery to be unrealistic. Based upon the capital finance plan submitted for the completion of the entire system, FTA has rated JTA's capital financing commitment "low". However, recent discussions for completing a shorter, lower-cost, segment of the original system may lead to an upgrading of this rating.

In 1992 the average age of the JTA bus fleet was 7.2 years old, which is better than the national average.

Jacksonville: Automated Skyway Express



Mid-City and North Hollywood Segments of MOS-3

Los Angeles, California

(October 1993)

Description

The 22-mile, \$5.3 billion Metro Rail Red Line Project in Los Angeles has been broken into "minimum operable segments" (MOSs) for funding purposes. The 4.4-mile, 5-station segment called MOS-1 opened for revenue service in January 1993. The 7-mile, 8-station section known as MOS-2 is under construction, and during FY 1994 FTA expects to complete its financial commitment to MOS-2 as set forth in the MOS-2 full funding grant agreement (FFGA) of April 10, 1990 between FTA and the Los Angeles County Metropolitan Transportation Authority (LACMTA). ISTEA defined MOS-3 to include three segments: the Mid-City segment, the North Hollywood segment, and part of the proposed East Side extension. The Mid-City and North Hollywood segments are part of the original 20-mile Red Line for which planning and environmental work has been completed and a FFGA has been signed. The other MOS-3 segment, the proposed East Side extension, is still under development and environmental review and is separately profiled in this report.

The Mid-City segment of MOS-3 extends the Wilshire Boulevard branch generally to the west beyond the MOS-2 terminus at Western Avenue. It adds 2.3 miles and two stations, all in subway, to the line. It avoids the "High Risk Zone" of naturally occurring methane gas identified along Wilshire Boulevard by swinging southwest beneath Crenshaw Boulevard and then west beneath Pico Boulevard to a terminal at Pico and San Vicente Boulevards. The North Hollywood segment of MOS-3 is 6.3 miles long with three stations, all in subway. It follows Hollywood Boulevard west from the MOS-2 terminus near Vine Street, then turns north through the Santa Monica mountains to North Hollywood where it follows Lankershim Boulevard to a terminus at Chandler Boulevard.

The estimated cost in escalated dollars of the Mid-City segment is \$491 million and of the North Hollywood segment is \$1.31 billion.

Status

The LACMTA and FTA signed a FFGA for MOS-3 in May 1993 which provides \$1.23 billion, plus interest, in Section 3 New Start funds and advance construction authority for the three segments of MOS-3. Through FY 1994, Congress has appropriated \$160 million in Section 3 New Start funds for MOS-3. In addition, the FY 1994 appropriation is

Mid-City and North Hollywood Segments of MOS-3 -- Los Angeles, California

sufficient to complete the FTA commitment to MOS-2. The North Hollywood segment of MOS-3 is now under construction.

Justification

The original 20-mile Red Line, including the Mid-City and North Hollywood segments of MOS-3, was exempted from the new start criteria by the Surface Transportation and Uniform Relocation Assistance Act of 1987. ISTEA exempted all of MOS-3 from the new start criteria.

Mobility Improvements. Los Angeles has the third highest transit patronage of any system in the country and notoriously congested freeways. The original 20-mile Red Line, which includes the Mid-City and North Hollywood segments of MOS-3, is expected to attract 245,000 daily riders in 2010. A forecast for MOS-3 by itself is not available. There are no inexpensive ways to improve bus service in the corridors served by these segments. The 20-mile Red Line will reduce the travel time for typical transit trips to downtown Los Angeles by 30 to 35 minutes compared to the Null (All Bus) Alternative. Transit trips originating on the east side destined to west side attractions such as the Los Angeles City College, Braille Institute, and Wiltern Theatre will save an average of 15 minutes compared to the Null Alternative. Transit trips to Universal City and other destinations north of the Santa Monica mountains will save 30 to 60 minutes compared with the Null Alternative. At a 30-minute savings per rider, a total of 122,500 person hours of transit travel time will be saved each day with the 20-mile Red Line in operation.

Cost effectiveness. Cost effectiveness indices for the projects are not available.

Environmental Benefits. Los Angeles' air quality problems are unique. EPA has classified it as the only "extreme" nonattainment area for ozone, as the only "serious" nonattainment area for carbon monoxide (CO), and as the only nonattainment area for nitrogen dioxide. It is unlikely that MOS-3 will have a noticeable effect on pollution levels in Los Angeles on a regional scale. However, the Red Line is part of a larger commitment to meeting the goals of the South Coast Air Quality Management Plan through a Regional Mobility Plan which includes an

Mid-City and North Hollywood Segments of MOS-3 -- Los Angeles, California

extensive network of rail lines, electric bus lines, high-occupancy vehicle (HOV) facilities, and an aggressive travel demand management program. In addition, the Mid-City and North Hollywood segments should reduce localized CO concentrations in the corridors served by eliminating buses from the traffic stream.

The Pico/San Vicente station on the Mid-City segment adjoins a block which was destroyed in the 1992 riots. LACMTA is pursuing joint development of the area.

Operating Efficiencies. In 2000, the operating and maintenance cost of the regional bus and 20-mile Red Line, which includes the Mid-City segment, is expected to be \$1.37 per transit trip compared to a cost of \$2.10 per transit trip for the Null Alternative.

Local Financial Commitment

Under the MOS-3 FFGA, the Section 3 share for MOS-3 is 50 percent, or \$1.23 billion. LACMTA intends to fund an additional 7 percent or more of MOS-3, that is, at least \$166 million, from the flexible Surface Transportation Program (STP). LACMTA and the other local and State funding partners are also financing in excess of \$2 billion worth of major transit projects with nonfederal funds.

The citizens of the State of California and Los Angeles County have established by vote several significant taxes and bond issues which are wholly or partly dedicated to transit capital improvements. These revenue sources include county sales taxes, State gas taxes, and general obligation bonds. In addition to the local share of the Metro Rail Red Line, these revenues are financing or have recently financed: the LRT Blue Line now operating between downtown Los Angeles and Long Beach; the LRT Green Line now under construction from Norwalk to El Segundo; a 200-mile regional commuter rail system called "Metrolink", of which 4 lines are now operating; a planned Blue Line Extension to Pasadena; and a planned Green Line Extension from Norwalk to El Segundo and the Los Angeles International Airport.

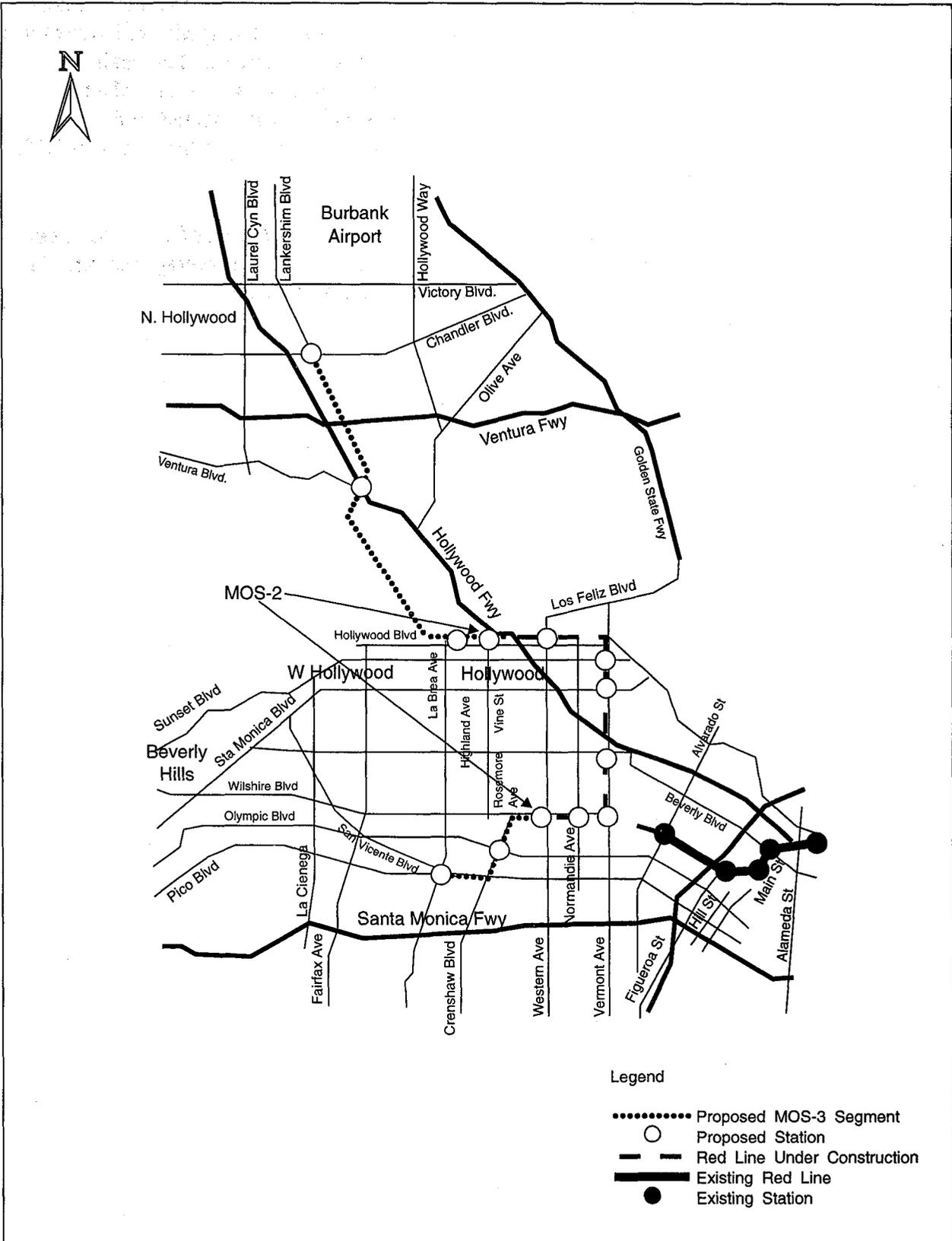
The revenue from State and local resources are adequate to finance construction and operation of all segments of the 20-mile Red Line,

Mid-City and North Hollywood Segments of MOS-3 -- Los Angeles, California

the bus system, the Blue Line, and the operational commuter rail lines. However, additional elements of the planned countywide rail system will require additional resources to complete, operate, and maintain. Although the revenue sources dedicated to transit are vast, the tax revenues have not grown as fast as had been anticipated, and construction and operating costs have exceeded predictions. LACMTA is currently revising its financing plan.

In 1992, the publicly-owned bus fleet in Los Angeles County averaged 8.3 years old, which is comparable to the national average bus age. In 1993, the rail vehicle fleet averaged 2.5 years old.

Los Angeles: North Hollywood and Mid City Segments of MOS-3



Queens Local/Express Connection
New York, New York
(October 1993)

- Description** The Queens Local/Express Connection would relieve overcrowding on the Queens Boulevard subway lines by diverting service to the recently opened 63rd Street Tunnel from the 53rd Street Tunnel bottleneck. Construction would include about 1/3 mile of new tunnel, a significant amount of track, signal work, real estate acquisition and design at a cost of \$645 million (escalated dollars).
- Status** The New York City Transit Authority (NYCTA) completed the final EIS and preliminary engineering in mid-1992. The real estate acquisition process has begun, final design is underway, and construction is scheduled to begin in mid-1994.
- Section 3033 of ISTEA directs FTA to negotiate and enter into a full funding grant agreement in the amount of \$306.1 million for the elements of the Queens Local/Express Connection which can be fully funded in FY 1992 through FY 1996. Through FY 1994, \$91.3 million has been earmarked by Congress. Negotiations on the full funding grant agreement are underway.
- Justification** Mobility Improvements. The Queens project would serve more transit riders than any other project considered in the 3(j) Report. It would provide attractive alternative subway service to the overcrowded E and F Express trains from Queens to Manhattan, thereby reducing the number of passenger miles traveled under severely overcrowded conditions by 300,000 each peak hour in 2005. Existing passengers on the E and F lines would save about 3.5 minutes per trip. All passengers would save a total of 7.6 million hours per year.
- Cost Effectiveness. When the capital and operating costs of this project are compared to its travel time benefits, the cost of saving an hour of travel time is estimated to be \$4.50 (2005 ridership, 1993 dollars). The "cost per hour" index is an alternative to the "cost per new trip" index and is used for projects whose primary benefit is to existing riders. This is the most cost effective project in the country in terms of the cost of saving an hour of passenger travel time.
- Environmental Benefits. The New York/New Jersey region is a "severe" nonattainment area for ozone and a "moderate >12.7" nonattainment area for carbon monoxide. The project, because it has few "new" riders, is expected to have an insignificant impact on regional air quality.

Queens Local/Express Connection -- New York, New York

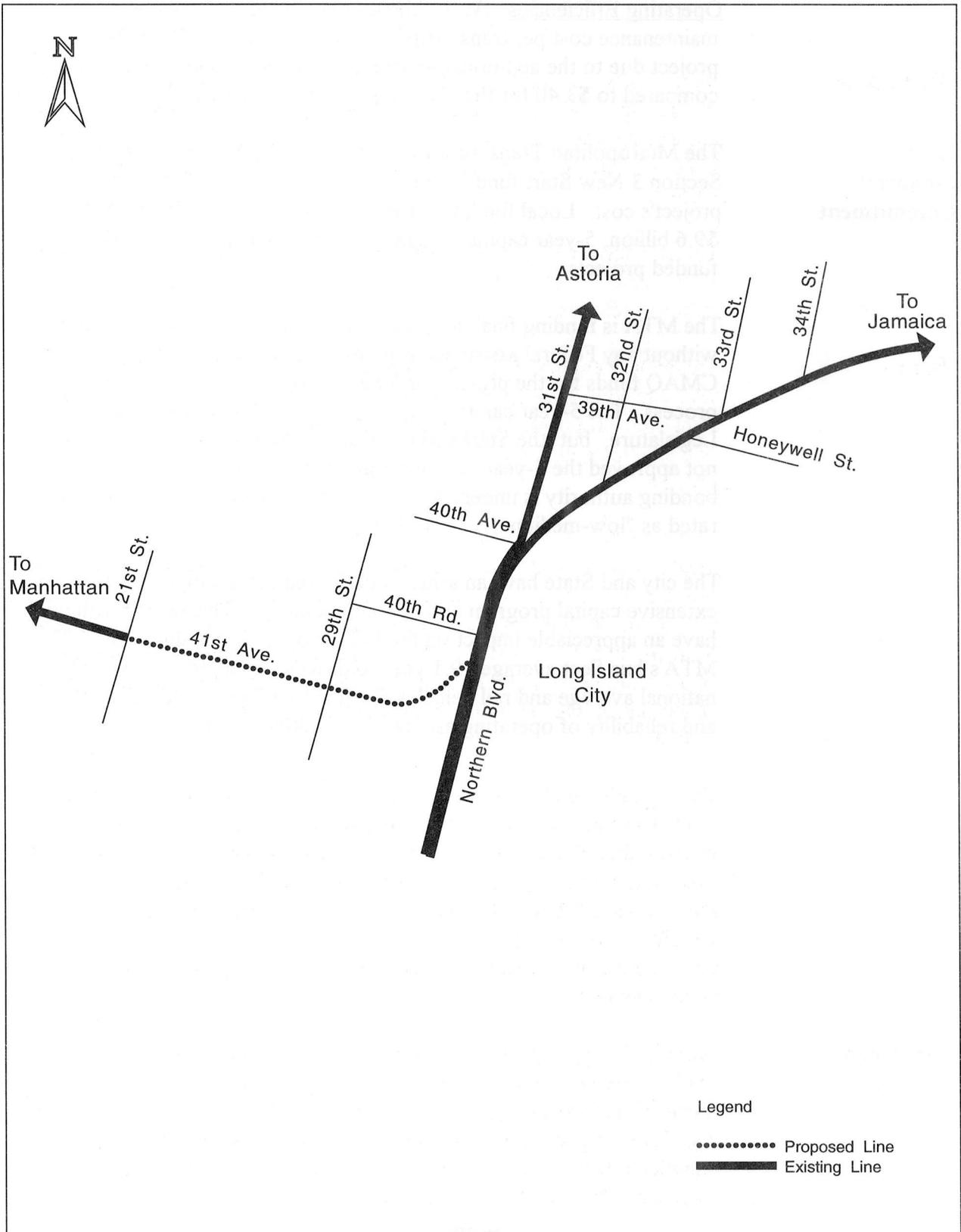
Operating Efficiencies. At the corridor level, the operating and maintenance cost per transit trip is forecast increase to \$3.92 for this project due to the additional service provided to relieve overcrowding compared to \$3.40 for the No Additional Construction alternative.

Local Financial Commitment The Metropolitan Transportation Authority (MTA) is expected to seek Section 3 New Start funding for less than 50 percent of the project's cost. Local funding for this project is included in the MTA's \$9.6 billion, 5-year capital program which also includes many locally funded projects.

The MTA is funding final design for the Queens project (\$33 million) without any Federal assistance and has received \$22.7 million in flexible CMAQ funds for the project through a competitive MPO selection process. The 5-year capital program has been approved by the State Legislature, but the State's MTA Capital Program Review Board has not approved the 5-year capital program and a court challenge on bonding authority is underway. Therefore the capital financing plan is rated as "low-medium."

The city and State have an array of dedicated taxes supporting both an extensive capital program and operating deficits. This project will not have an appreciable impact on the MTA's operating budget. In 1992 the MTA's bus fleet averaged 9.1 years old, which is slightly above the national average and rail vehicles averaged 19.8 years old. The stability and reliability of operating assistance are rated "medium."

New York: Queens Local Connection



Tasman LRT
San Jose, California
(October 1993)

Description

Santa Clara County Transit District (SCCTD) plans to build a 12.4-mile surface light rail transit (LRT) line from Milpitas to Mountain View, with a connection to the existing Guadalupe LRT in northern Santa Clara County. The project would also connect with the Caltrain commuter rail system.

The estimated capital cost of the LRT portion of the Tasman project is \$480 million (escalated dollars). The project includes another \$9 million in bus purchases.

Status

Preliminary engineering was completed in August 1992, and final design was started in May 1993. The final EIS was approved in December 1992. However, proposed changes to the alignment have required the initiation of a supplemental Draft Environmental Impact Report under State procedures.

Section 3032 of ISTEA directs FTA to approve the construction of the locally preferred alternative not later than 90 days after the completion of preliminary engineering, and to enter into a multiyear grant agreement for 50 percent of the project's cost unless this percentage is changed by the Metropolitan Transportation Commission (MTC). FTA is in the process of negotiating the Full Funding Grant agreement. However the agreement cannot be concluded until a court challenge to the local funding source is settled.

Through FY 1994, \$254 million of the \$568.5 million authorized by ISTEA in Section 3 New Start funds has been appropriated for metropolitan San Francisco with the provision that the MTC allocate the funds among the Colma BART extension, the BART Airport project and the Tasman LRT project. The affected agencies are currently working with MTC to determine this allocation. The Bay Area hopes to obtain a contingent commitment that would allow all three projects to be built simultaneously.

Justification

Mobility Improvements. The proposed project serves the work trip market between southern Alameda County and Silicon Valley where high levels of freeway congestion currently exist. The project will not have a significant impact on this congestion, but some transit trips will experience significant time savings. It is estimated that the project would result in a total weekday travel time savings of 3,300 hours.

Tasman LRT -- San Jose, California

Cost Effectiveness. The project has a cost per new trip of \$33 (2005 riders, 1993 dollars). The index reflects a relatively low number of new riders. The new riders are low because of the current land use characteristics of the corridor, which include free employee parking at numerous relatively low density and dispersed employment locations along the transit line. Various cities along the corridor have recently instituted zoning and local general plan changes which eventually are expected to result in increases in residential and employment densities adjacent to the LRT stations.

Environmental Benefits. San Jose is a "moderate" nonattainment area for ozone and a "moderate ≤ 12.7 " nonattainment area for carbon monoxide. Compared with the No Build alternative, the Tasman project would reduce vehicle miles traveled in the study area by less than 1 percent. Compared with the TSM alternative, vehicle miles would be reduced by 0.2 percent. Thus the project would have minimal impact on regional emissions.

Operating Efficiencies. The project is expected to lead to an increase in the systemwide operating cost per passenger. Estimates for the year 2005 are \$3.36, \$3.48, and \$3.79 for the No-Build, TSM and Locally Preferred Alternatives (1992 dollars).

Local Financial Commitment

SCCTD is seeking Section 3 New Start funds for about 50 percent of the capital cost of the project. The County has an existing 1/2 cent sales tax for transit and receives an additional one-quarter cent sales tax through the State. With passage of Measure A in November 1992, another 1/2 cent sales tax was also to be collected for rail transit projects beginning in 1995. This new tax would have been adequate to fund the County's 25 percent share of the capital cost of the project. However a state court has invalidated this tax. The new tax was also to be used to match the State's commitment to pay 25 percent of the capital costs. The Capital Financing plan has been rated as "low," but this rating could change if the court ruling is reversed on appeal or if a new financing plan is developed.

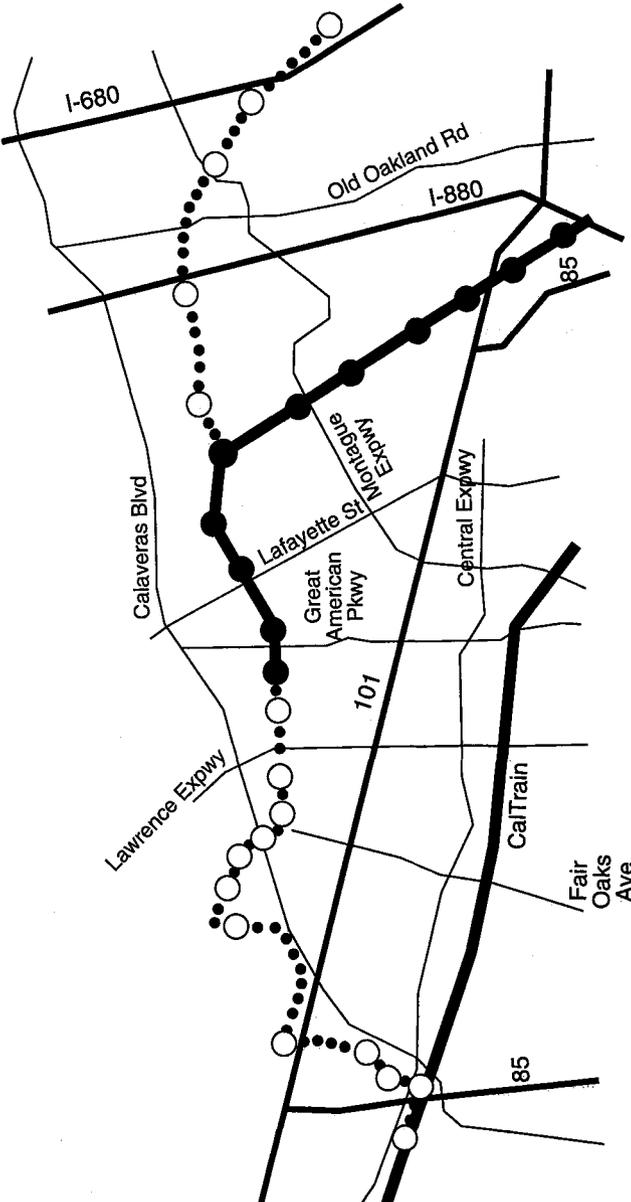
SCCTD currently covers less than 15 percent of its operating costs out of the farebox. Adding more light rail and buses will reduce the operating ratio further. The growth in revenues from existing sales taxes did not keep pace with increases in operating costs, requiring service levels to be cut by 10 percent last year (on top of a 5 percent cut the year before).

Tasman LRT -- San Jose, California

The new sales tax would have covered the operating cost of the expanded service envisioned by this project and the cost of ADA service. Since the existing tax sources are only able to cover the current costs of existing service and the source of funds for service expansion has been invalidated, SCCTD will not have the financial resources to operate an expanded system. Therefore, the stability and reliability of operating assistance for the SCCTD has been rated as "low."

In 1992 SCCTD's bus fleet averaged 8.4 years old, which is comparable to the national average.

San Jose: Tasman LRT



- Legend
- Proposed Line
 - Proposed Station
 - Existing Line
 - Existing Station

PROJECTS IN PRELIMINARY ENGINEERING

Baltimore Central LRT Extensions

Baltimore, Maryland

(October 1993)

Description

The Mass Transit Administration (MTA) of Maryland plans to complete a 29-mile central light rail transit (LRT) system from Hunt Valley north of Baltimore, through downtown Baltimore to Glen Burnie and the Baltimore-Washington International (BWI) Airport south of Baltimore. The MTA is completing the LRT main line, which runs 22.5 miles between Timonium and Glen Burnie with non-Federal funds, at a cost of \$364.4 million (escalated dollars).

Revenue service on the main line began in May 1992 and ridership has steadily increased to 18,600 trips per day. The ridership trend is consistent with the MTA ridership projection for 2010. In addition, Orioles baseball games accounted for 714,000 trips during the 1993 baseball season, and other special events yielded an additional 35,000 trips in 1993.

MTA is seeking Section 3 New Start assistance for three LRT extensions which, along with the remaining segment of the main line, would complete the 29-mile system. The three extensions are: a 2-mile, 2-station branch off the main line in Linthicum directly into the BWI Airport terminal; a 5-mile, 5-station extension from Timonium north to Hunt Valley; and a 0.25-mile, one-station spur off the main line into Pennsylvania Station in downtown Baltimore where Amtrak and MARC trains also stop. The BWI and Pennsylvania Station extensions will create "seamless" intermodal transfer connections consistent with ISTEA policy. The Penn Station extension will be constructed to allow a possible future extension of the line to serve the eastern portion of the downtown. The total cost of the three LRT extensions is \$106.3 million (escalated dollars).

Status

The final environmental documents and associated engineering work were completed in October 1993. FTA has selected the three projects for inclusion in the Turnkey Demonstration Program created by ISTEA. FTA and MTA have started negotiation of the full funding grant agreement (FFGA).

Section 3035(n) of ISTEA directs FTA to enter into a FFGA with MTA to provide not less than \$60 million in New Start funds to construct the

Baltimore Central LRT Extensions -- Baltimore, Maryland

three Baltimore LRT extensions. Prior to ISTEA enactment, \$17 million had already been appropriated, of which \$2 million has been used for preliminary engineering and environmental work. Through FY 1994, \$44 million in New Start funds have been appropriated for the three Baltimore LRT extensions.

Justification

Mobility Improvements. In 2010, the three LRT extensions are expected to carry about 5,400 trips per day of which about 2,800 will be new transit trips.

In 2010, the three projects will save transit riders an aggregate of about 390 hours of personal travel time each day.

Cost effectiveness. The composite cost effectiveness index for the three LRT extensions is roughly \$8 to \$9 per new transit rider.

Environmental Benefits. EPA has classified Baltimore as a "severe" nonattainment area for ozone and as a "moderate" nonattainment area for carbon monoxide (CO). The three LRT extensions are expected to result in very slight reductions in regional VMT and emissions of ozone precursors from transportation sources by attracting a few current automobile users to transit. About 20,000 daily vehicle miles of travel would be eliminated by the projects.

Operating Efficiencies. The operating and maintenance cost per trip on the regional bus and rail transit system is not changed appreciably by the LRT extensions. In FY 1993, the operating cost per passenger on the transit system was \$1.74.

Local Financial Commitment

MTA seeks a Section 3 New Start share of 80 percent, or \$85 million (escalated dollars) for the LRT extensions. The proposed Federal cost of the three extensions is only 18 percent of the \$470 million cost of the entire 29-mile LRT system.

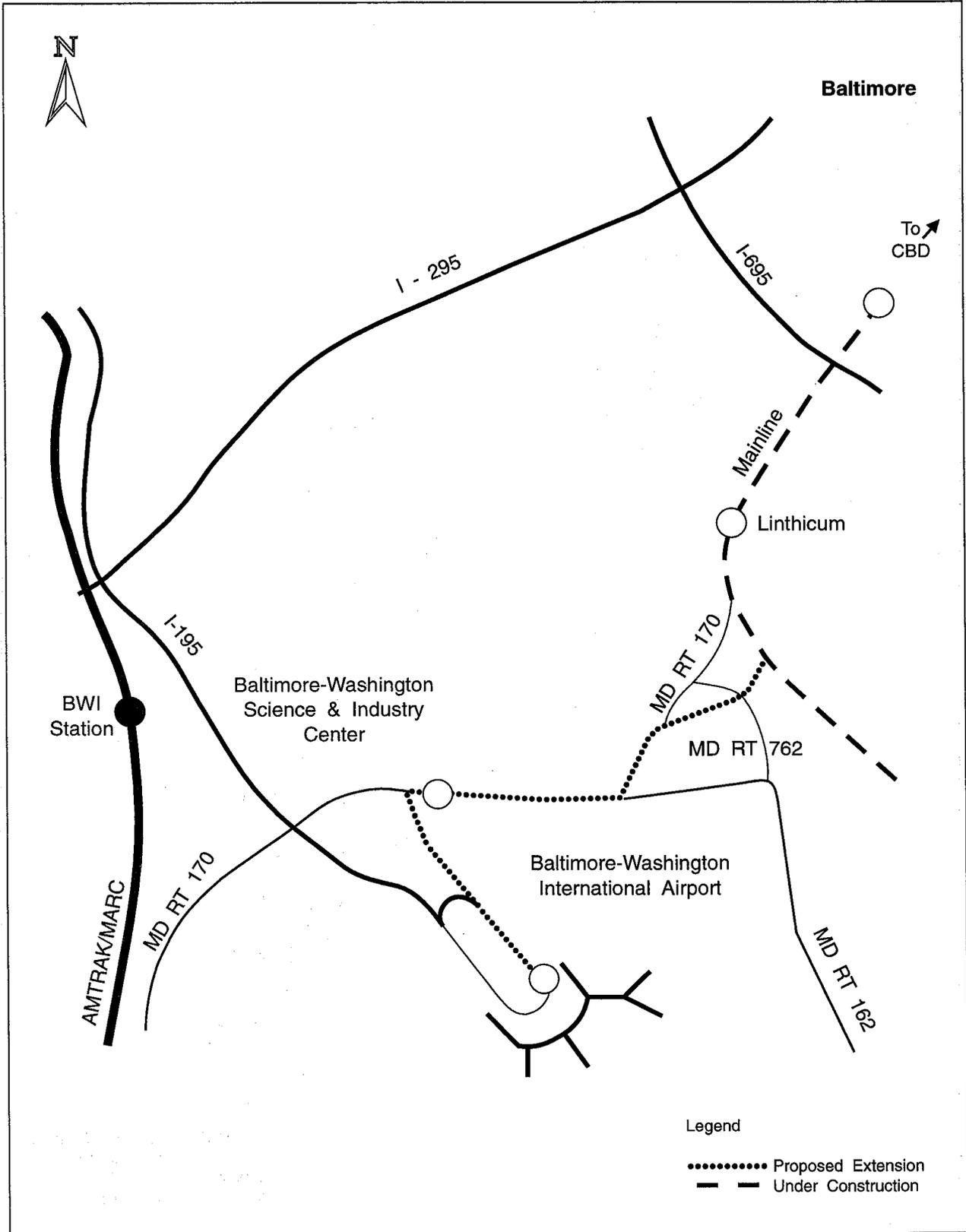
Baltimore Central LRT Extensions -- Baltimore, Maryland

The capital financial plan is rated as "medium." The local share of \$21 million for the three LRT extensions will be provided from the State Transportation Trust (STT) Fund.

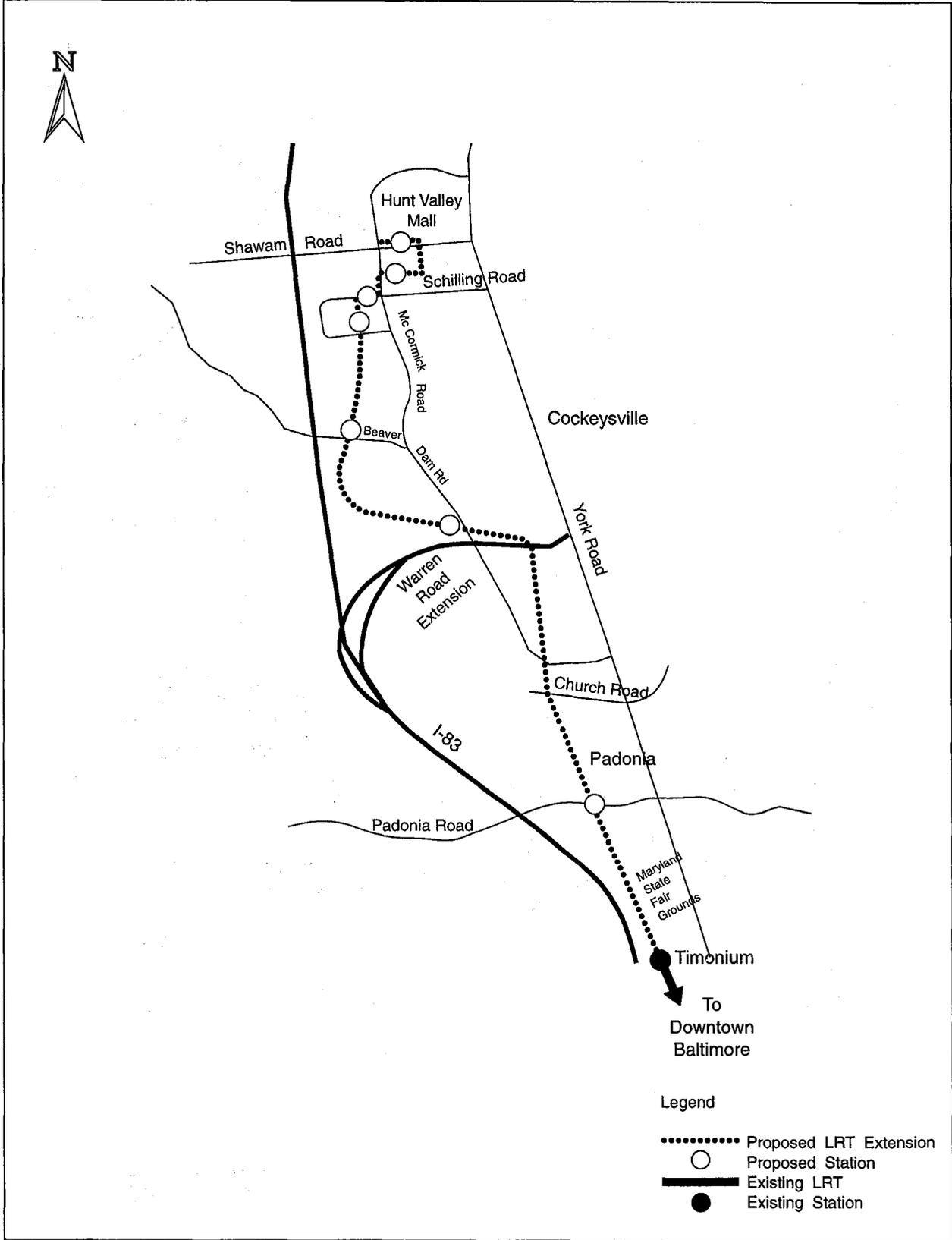
The stability and reliability of MTA's operating assistance are rated as "medium." By State law, farebox revenues must cover 50 percent of the transit system's operating costs. MTA has a history of adequate funding of transit operations with contributions from the STT Fund.

In 1992, the MTA bus fleet averaged 6.4 years old, which is better than the national average. In 1992, its heavy rail vehicles averaged 7.4 years old, and its LRT vehicles were less than a year old.

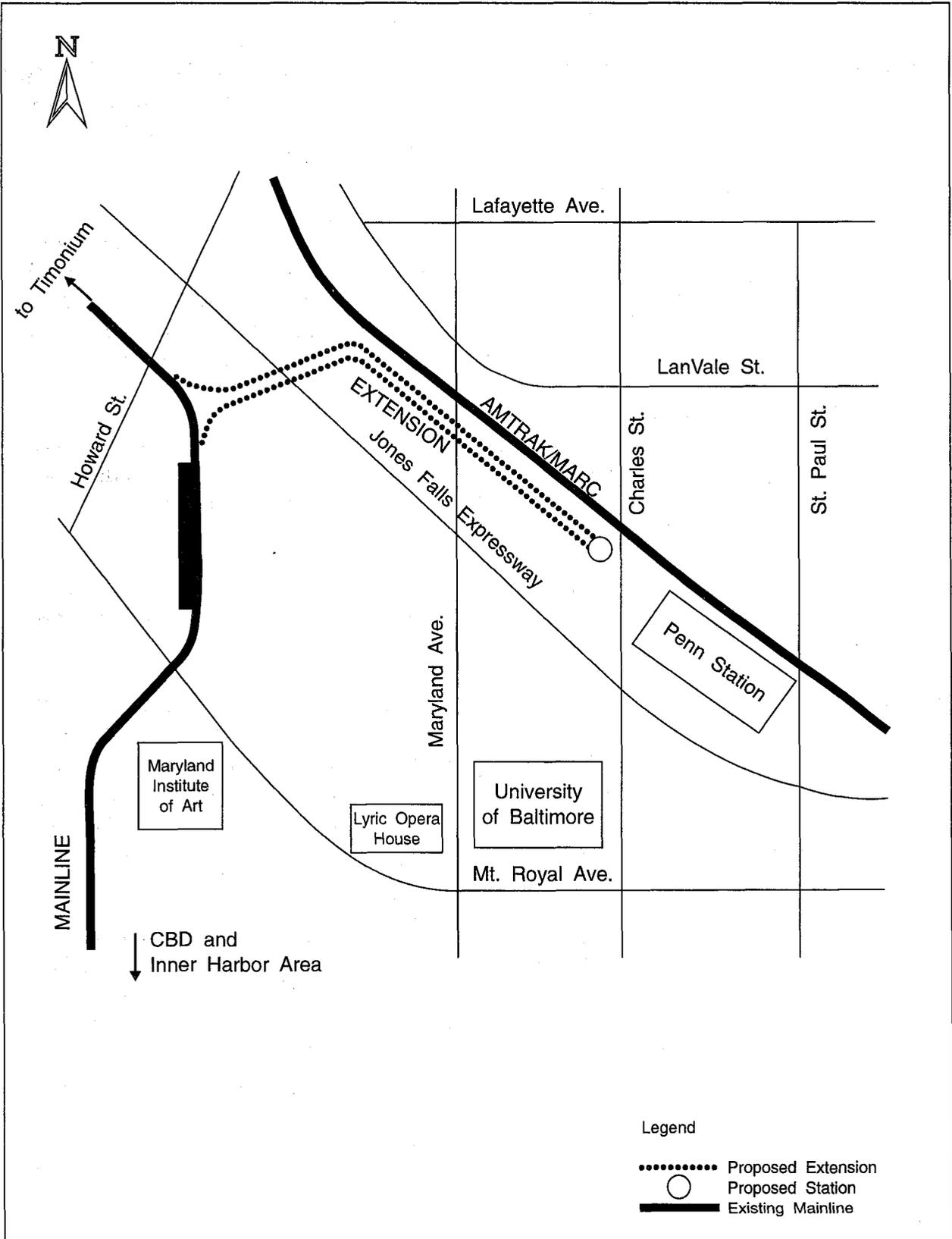
Baltimore: BWI Light Rail Extension



Baltimore: Hunt Valley Extension



Baltimore: Penn Station Extension



- Legend
- Proposed Extension
 - Proposed Station
 - Existing Mainline

South Boston Piers Transitway

Boston, Massachusetts

(October 1993)

Description

The Massachusetts Bay Transportation Authority (MBTA) is proposing to build an underground transitway connecting the MBTA's existing transit system with the South Boston Piers area, located on the fringe of downtown. The Piers area, which is connected to Boston's central business district (CBD) by three local bridges, is slated for future development. Electric powered trackless trolleys would operate in the transitway and on limited surface routes in the eastern end of the Piers area. Phase I of the project, connecting South Station to the World Trade Center by the year 2000, is estimated to cost \$438.4 million (escalated dollars). The second phase of the project, which extends the Transitway tunnel to Boylston Station, is scheduled to be completed by the year 2008 at an additional cost of \$302.8 million (escalated dollars).

The downtown Boston office market was quite strong during the 1980's, leading to interest in developing neglected areas peripheral to the CBD such as the South Boston Piers area. The MBTA contends that development levels in the Piers area are expected to grow from 9 million square feet today to more than 21 million by 2010. However, FTA believes that the timing and intensity of development projected for this area may be considered uncertain due to the current high vacancy rates and real estate market trends.

Status

FTA approved the initiation of alternatives analysis in August 1990. The draft EIS was made available to the public on November 20, 1992 and the locally preferred alternative was selected in February 1993. The locally preferred alternative is a 1.5-mile underground transit tunnel from Boylston Station to the World Trade Center combined with surface bus operations. The MBTA anticipates the completion of the final EIS by December 1993.

Section 3035(j) of ISTEA directs FTA to enter into a multiyear grant agreement with the MBTA for \$278 million. The MBTA is currently drafting this full funding grant agreement required for this project. The agreement would cover construction of Phase I. Through FY 1994, Congress has appropriated \$68.6 million for this project.

South Boston Piers -- Boston, Mass.

Justification

Mobility Improvements. Phases 1 and 2 of the project would significantly reduce travel time to the Piers area from near-in areas without direct service to South Station. They also reduce travel time from outlying areas to the north which are served by commuter rail service to North Station. Smaller travel time savings (under 5 percent) are projected from both near-in and distant areas that have service to South Station. Total travel times savings for the full build in the lower growth scenario is 184,555 minutes and 280,918 minutes in the high growth scenario.

Cost Effectiveness. To address the uncertainties regarding the timing and intensity of future development, the draft EIS analyzed two growth scenarios. The high growth scenario is based on development projections prepared for the Central Artery/Tunnel Project for the year 2010, while the lower growth scenario assumes that development projected for the year 2000 will not occur until 2010. The cost effectiveness indices for the locally preferred alternative are \$10 in the lower growth scenario and \$7 in the high growth scenario (1993 dollars, 2010 ridership). The cost effectiveness index for Phase I is \$16 in the lower growth scenario and \$9 in the high growth scenario. Project justification is highly dependent on a resumption of growth and development. Currently in downtown Boston, vacancy rates are 16.3 percent. The lower growth scenario may be optimistic.

Environmental Benefits. Metropolitan Boston is a "moderate" nonattainment area for carbon monoxide and a "serious" nonattainment area for ozone. Compared with the TSM alternative, the full build alternative is expected to reduce the percentage of vehicle miles traveled by .32 percent in the high growth scenario and .18 percent in the lower growth scenario. It is highly unlikely that any of the alternatives would have a noticeable effect on pollution levels at the regional scale. There may be a small but positive effect on carbon monoxide in the central business district.

Operating Efficiencies. The systemwide cost per passenger is projected to be \$2.36 for the No-Build alternative, \$2.38 for the TSM alternative, and \$2.36 for the Full Build Alternative in the high growth scenario.

Local Financial Commitment

The MBTA is proposing a Section 3 share of 80 percent with the local share to come from State bonds. A new cost estimate has been prepared based on advanced engineering. The ISTEA earmark is expected to cover 63 percent of Phase I.

South Boston Piers -- Boston, Mass.

A "low-medium" rating for the capital financing commitment is appropriate. The financing plan adopted at the conclusion of alternatives analysis is being revised to reflect the higher cost estimate developed in preliminary engineering. The MBTA will pursue an increase of \$72.7 million of federal funding to realize an 80 percent federal participation. Additionally, since the State is currently facing a \$3 billion shortfall for top priority transportation projects, the availability of State funding for the transitway is uncertain. Funding the State share through a State bond issue is to be considered by the legislature in the coming months.

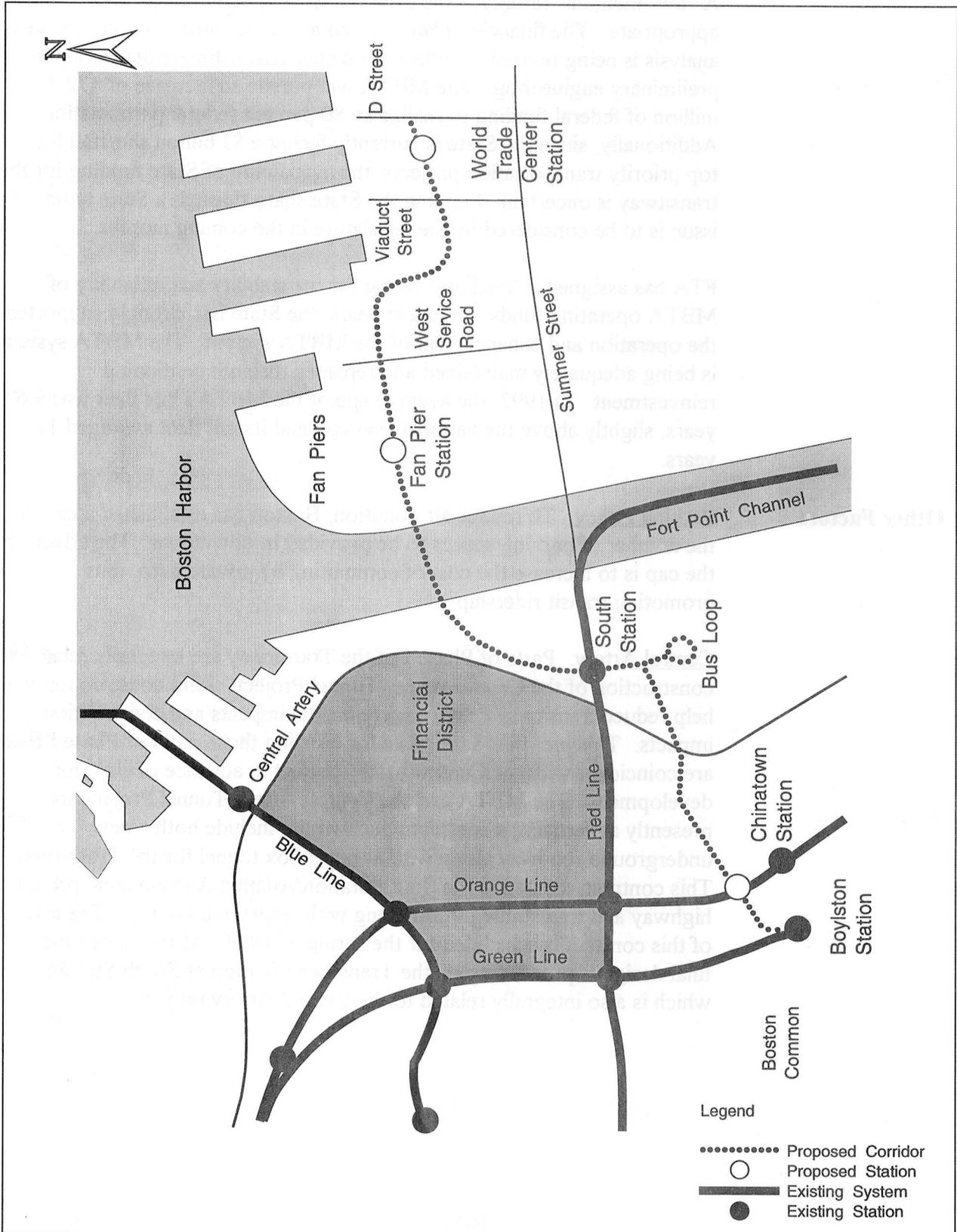
FTA has assigned a "medium" rating for the stability and reliability of MBTA operating funds. In recent years, the State has strongly supported the operation and enhancement of the MBTA system. The MBTA system is being adequately maintained and replaced through continuing reinvestment. In 1992, the average age of the MBTA's bus fleet was 9.6 years, slightly above the national average, and its rail fleet averaged 11 years.

Other Factors

Parking Policy. To reduce air pollution, Boston has established a cap on the number of parking spaces to be provided in downtown. The effect of the cap is to increase the cost of commuting by private auto, thus promoting transit ridership.

Central Artery. Parts of Phase I of the Transitway are integrally related to construction of the Central Artery/Tunnel Project. Joint construction will help reduce transitway costs, environmental impacts and construction impacts. This provides a rationale for building those parts of Phase I that are coincident with the Central Artery project in advance of corridor development. The MBTA and the Central Artery/Tunnel Project are presently advertising a contract which would include both a new underground roadway along with a transit box tunnel for the Transitway. This contract, located in the South Station/Atlantic Avenue area, provides highway and transit integration along with respective savings. The award of this contract is scheduled for the spring of 1994. At the same time, final design is proceeding on the Transitway Station at South Station which is also integrally related to the Central Artery project.

Boston: South Boston Piers



Central Area Circulator

Chicago, Illinois
(October 1993)

Description

The Chicago Central Area Circulator (CAC) project would be a multilegged light rail transit system within downtown Chicago, the second largest central business district (CBD) in the nation with 650,000+ jobs. Portions (17 percent) of the project would be grade separated or in protected right-of-way adjacent to streets. The remainder is in protected LRT-only lanes in street medians (42 percent) or curb lanes (41 percent). The LRT would take lanes currently used for car parking and traffic.

The cost of constructing all legs of the light rail alternative is estimated to be about \$775 million (escalated dollars). Ridership is projected to be about 120,000 trips per day. The make-up of these riders are users of the regional transit network transferring to the CAC (49%), people who formerly made internal circulation trips on other transit modes (29%), internal circulation trips by people who formerly walked or did not make a trip (15%), and former auto and taxi users (7%).

Status

FTA approved initiation of preliminary engineering in April 1992. The City of Chicago expects to complete this phase in early 1994.

Section 3035(e) of the ISTEA directs FTA to enter into a multiyear grant agreement with the City of Chicago for \$260 million to carry out construction of the locally preferred alternative. Through FY 1994, Congress has earmarked \$90.1 million for preliminary engineering and design.

Justification

Mobility Improvements. The current rapid transit system, including both the "Loop" and two subways, does not directly connect the newly developing areas on the CBD's east side (e.g., in the northeast along North Michigan Avenue) with the rest of the CBD, particularly the commuter rail terminals which have an aggregate ridership of about 250,000 trips per day. The CAC would serve primarily distribution from transportation terminals and circulation within a downtown area approximately 6 miles square. The project would have a small effect in reducing overall CBD transit travel times, although there would be some significant time savings between certain origins and destinations. Because the LRT would operate at grade, there are a number of potential operating issues regarding traffic signal delays, pedestrian interference, and illegal parking blockages. A peer review group has

Central Area Circulator -- Chicago, Illinois

made a number of recommendations for changes to the operating plan/design which adequately address these issues and are expected to be incorporated into the project.

Cost Effectiveness. The cost effectiveness index for the locally preferred alternative (LPA), (1993 dollars, year 2010 ridership), has been estimated to be \$8 per new trip, based on analyses carried out for the PE/FEIS phase of the project. FTA has not had an opportunity to review the supporting documentation which produced this number.

Compared to the TSM alternative, LRT diverts approximately 6000 daily auto trips to transit. Of these, 4600 are to/from the downtown area with high average trip distances.

Environmental Benefits. Chicago is a "severe" nonattainment area for ozone and an attainment area for carbon monoxide. Marginal decreases in carbon monoxide and nitrogen oxide are expected as a result of the project. Some reductions in bus-related diesel emissions in the CBD are also expected.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from this project. Because of the large operating budget and ridership of the region's transit system, the CAC is expected to have minimal impact on the systemwide operating efficiency.

Local Financial Commitment

One-third of the capital cost of the system is proposed to come from the Section 3 New Start program, one-third from the State, and one-third from the private sector (and the city) by means of a tax on commercial property within a special service area taxing district.

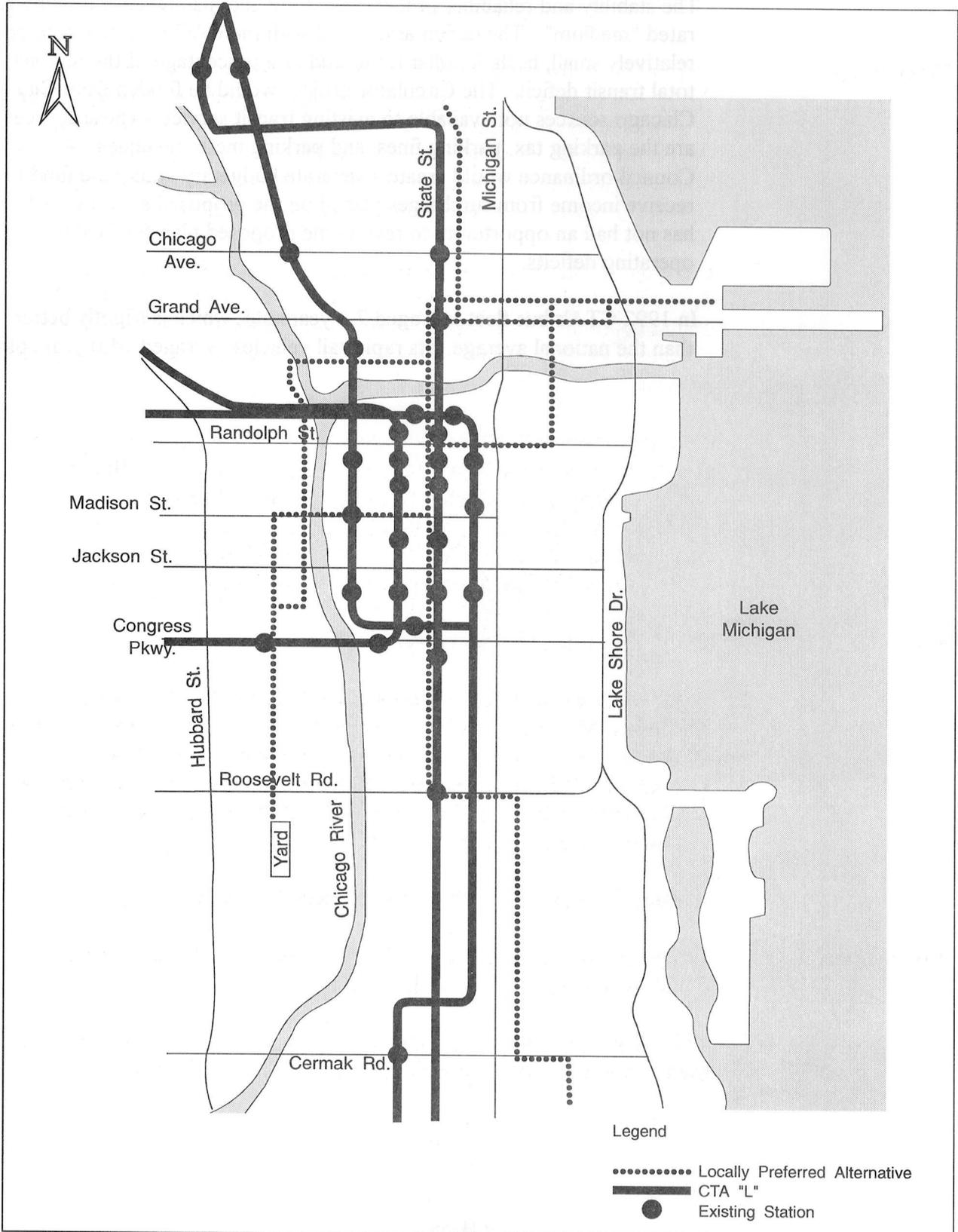
The city's capital plan has been rated "medium." The City has established a Special Service Taxing District to fund this specific project, and the local business community strongly supports the district. To date, there have been tax levies totaling \$28 million within the district. A third levy of \$14 million is expected to pass in the City Council in December 1993. The State has agreed to fund one-third of design costs, and has appropriated \$18 million of its \$20 million share for planning and design work. The Governor and State Legislature will be requested to commit to construction funding during preliminary engineering in early 1994.

Central Area Circulator -- Chicago, Illinois

The stability and reliability of local operating and maintenance funding is rated "medium". The deficit associated with the CAC project would be relatively small, both in dollar terms and as a percentage of the region's total transit deficit. The Circulator project would be funded from City of Chicago sources not available to existing transit service. These sources are the parking tax, parking fines, and parking meter revenues. A City Council ordinance would create a separate budgetary enterprise fund to receive income from surcharges placed on the proposed sources. FTA has not had an opportunity to review the proposed plan for funding operating deficits.

In 1992 CTA's bus fleet averaged 7.3 years old, which is slightly better than the national average. Its rapid rail vehicles averaged 14.0 years old.

Chicago: Central Area Circulator



Wisconsin Central Commuter Rail Line

Chicago, Illinois Metropolitan Area

(October 1993)

Description

This project will extend the Metra Commuter Rail service from downtown Chicago to the Wisconsin border (at Antioch, Illinois) via the Wisconsin Central rail line. Trains would switch from the Wisconsin Central to the Metra Milwaukee District West Line at Junction B-12 in Franklin Park, Illinois (shown on the map). The Wisconsin Central segment of the route (from Antioch to B-12) is 41 miles.

The scope of the Wisconsin Central project includes costs for land acquisition, track and signal upgrades, station platform facilities, and other operations-related improvements associated with commuter service requirements. The capital cost is estimated to be \$81.4 million (escalated dollars).

Boardings for year 2010 are estimated to be 7,400 per day, of which about 7 percent would be air travelers to/from O'Hare. One-third to one-half of the total projected boardings could be diversions from existing Metra lines. Since other adjacent rail lines already experience congested station parking facilities, a transfer of demand to Wisconsin Central could free parking for new riders on those lines.

Status

This project is in the preliminary engineering phase.

Negotiations for land acquisitions and trackage rights are underway. In November, Metra will send site concept plans for stations and parking to all communities. The Environmental Assessment began in July 1993, with a scheduled completion date of December 1993. With the approval of all federal Section 3 and CMAQ funds, Metra will be able to start service in the second quarter of 1996.

Through FY94, Congress has appropriated \$8.0 million.

Justification

This project is exempt from New Start criteria since the Section 3 share of the capital cost is less than \$25 million.

Mobility Improvements. It is currently estimated that 1,500 hours in daily travel time could be saved with the implementation of this project.

Wisconsin Central Commuter Rail Line -- Chicago, Illinois

Cost Effectiveness. A TSM alternative was not studied for this project, so the preliminary cost effectiveness index of \$8 per boarding is not directly comparable to other transit projects. The index does, however, seem to indicate that this is a cost effective project.

Environmental Benefits. Chicago is a "severe" nonattainment area for ozone and an attainment area for carbon monoxide. Metra estimates that the project would lead to a reduction of approximately 26 million vehicle-miles traveled per year, which is about 0.05 percent of current regional travel.

Operating Efficiencies. Metra has calculated an operating cost per passenger trip of \$4.43 for the Wisconsin Central service. For the Metra system as a whole, the cost is \$4.41.

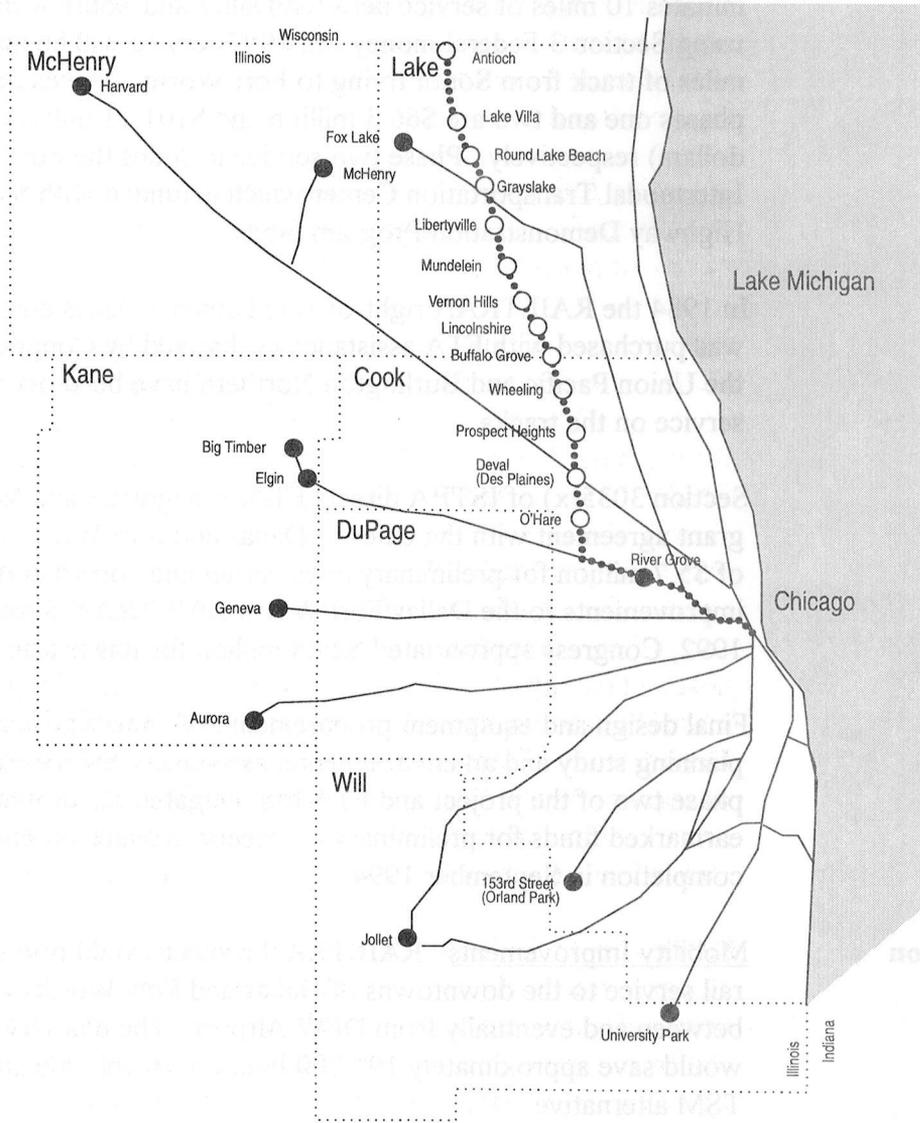
Local Financial Commitment

The Federal share of the capital cost is assumed to be 48 percent. Metra is seeking approximately 25 percent from Section 3 and 75 percent from CMAQ funds to finance the Federal portion of the costs. The MPO for northeast Illinois -- CATS -- has committed \$29.256 million in CMAQ funds for the project. The State of Illinois and Metra will provide the \$7.314 million local match required for the CMAQ funds. Metra has provided \$12.19 million for locomotives and ADA compliant rail cars for the Wisconsin Central service. Metra has required that the costs of the station/parking facilities and land acquisition be borne by the host community of each station. Possible sources of capital funds available to the communities include ISTEA flexible funds, the Illinois Department of Transportation, special taxation and assessment districts, intergovernmental agreements among neighboring communities, and private sector participation. Metra would provide the remainder of the local share. The capital financing plan is rated "medium".

Metra would take responsibility for provision, operation and maintenance of trains, tracks, right-of-way and station platforms. The local communities would be responsible for provision and maintenance of station structures, parking, and access. Passenger fares are expected to cover about 61 percent of the operating costs. The remainder of the operating costs are covered by existing regional taxes. The operating plan is rated "high".

In 1992 Metra's commuter rail fleet averaged 22.6 years old.

Wisconsin Central Commuter Rail



Legend

- Proposed Extension
- Proposed Station
- Existing System
- Existing Station

RAILTRAN Commuter Rail
Dallas-Ft. Worth, Texas
(October 1993)

Description

The RAILTRAN project would initiate commuter rail service in two phases between Dallas and Fort Worth, with a future phase offering service on a spur to Dallas/Fort Worth (DFW) Airport. Phase one service will commence in 1995 when Dallas Area Rapid Transit (DART) initiates 10 miles of service between Dallas and South Irving without using Section 3 Federal money. In 1997 service will be initiated on 25 miles of track from South Irving to Fort Worth. The capital costs of phases one and two are \$66.3 million and \$101.11 million (inflated dollars) respectively. Phase two service includes the Fort Worth Intermodal Transportation Center which is funded with \$13.4 million in Highway Demonstration Program funds.

Status

In 1984 the RAILTRAN right-of-way between Dallas and Fort Worth was purchased with FTA assistance as directed by Congress. Since then the Union Pacific and Burlington Northern have been operating freight service on the tracks.

Section 3035(x) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with the cities of Dallas and Fort Worth in the amount of \$5.7 million for preliminary engineering and construction of improvements to the Dallas/Fort Worth RAILTRAN System. In FY 1992, Congress appropriated \$2.48 million for this project.

Final design and equipment procurement are underway in phase one. A planning study and an environmental assessment have been completed for phase two of the project and FTA has obligated \$2.48 million of the earmarked funds for preliminary engineering, which is scheduled for completion in September 1994.

Justification

Mobility Improvements. RAILTRAN project would provide commuter rail service to the downtowns of Dallas and Fort Worth and the cities in between and eventually from DFW Airport. The phase two service would save approximately 190,000 hours of travel time annually over the TSM alternative.

Cost Effectiveness. The Council of Governments reports that phase two commuter rail service is expected to carry a total of about 10,200 riders a day in the corridor at a cost per new rider of \$8 (1992 dollars, year 2010 riders).

RAILTRAN Commuter Rail -- Dallas-Ft. Worth, Texas

Environmental Benefits. Dallas/Fort Worth is a "moderate" nonattainment area for ozone and an attainment area for carbon monoxide. FTA has not received any information on the reduction of vehicle miles traveled of this project when compared to the TSM alternative.

Operating Efficiencies. FTA has no information on the systemwide operating efficiencies that would result from this project. However in the corridor alone, the operating costs per passenger are estimated to be \$2.95 and \$2.66 for the TSM and commuter rail alternatives respectively.

Local Financial Commitment

Phase one of the project is fully funded with local (59 percent), Section 9 (26 percent) and CMAQ (15 percent) funds, and no Section 3 funds. The capital funding plan for phase two assumes funding from Section 3 (57 percent), CMAQ (10 percent), Highway Demonstration (13 percent) and local funds (20 percent). \$5.7 million of the \$57.5 million in Section 3 funds assumed in the plan, have been authorized in ISTEA and the source of the \$14 million in uncommitted local funds has not been identified. FTA has rated the capital financing plan as "low-medium."

FTA does not know what organization will operate the RAILTRAN system between South Irving and Ft. Worth nor does it currently have any information on the sources of funds which will be needed to cover the operating deficit. Therefore, FTA has rated the stability and reliability of the operating plan as "low."

Regional Bus Plan

Houston, Texas

(October 1993)

Description

Houston Metro's Locally Preferred Alternative is a package of major improvements to the bus system, known as the Regional Bus Plan (RBP). The \$1.25 billion LPA includes major service expansions in most of the region, new and extended HOV facilities and ramps, several transit centers and park & ride lots, as well as supporting facilities.

Status

A draft EIS was published in 1991. The document included fixed guideway, Better Bus, TSM and No-Build alternatives. The Better Bus alternative has evolved into the Regional Bus Plan.

Selection of the RBP alternative results in a program of projects having limited overall environmental consequences. The FTA has determined that preparation of a Final EIS is not warranted for the overall Regional Bus program. Instead, environmental follow-up to the 1991 Draft EIS is appropriate for each project within the RBP program of projects, each of which has independent utility. The specific project elements to be implemented with FY 1994 and 1995 funds have not yet been identified.

Section 3035(uu) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement for \$500 million, provided that a locally preferred alternative for the Priority Corridor fixed guideway project has been selected by March 1, 1992. This condition has been met and FTA will be negotiating a full funding grant agreement.

Houston received New Start appropriations between FY 1989 and 1994 totaling \$235 million.

Justification

Mobility Improvements. The Regional Bus Plan will significantly improve transit service by offering direct service to all major activity centers and one transfer service to many other destinations, resulting in a savings of about 6,750 hours of travel daily over the TSM alternative.

Cost Effectiveness. The cost effectiveness index is about \$2.64 per new rider (year 2010 ridership, 1993 dollars), indicating that the Better Bus alternative is extremely cost-effective.

Regional Bus Plan -- Houston, Texas

Environmental Benefits. Houston is a "severe" nonattainment area for ozone and an attainment area for carbon monoxide. The Regional Bus Plan project is expected to reduce emissions from mobile sources by less than 0.2 percent when compared to the TSM alternative and by less than 1 percent when compared to the No-Build alternative.

Operating Efficiencies. The operating and maintenance cost per passenger for the TSM and Better Bus alternatives are \$3.31 and \$3.21 respectively in year 2010 (1993 dollars).

Local Financial Commitment

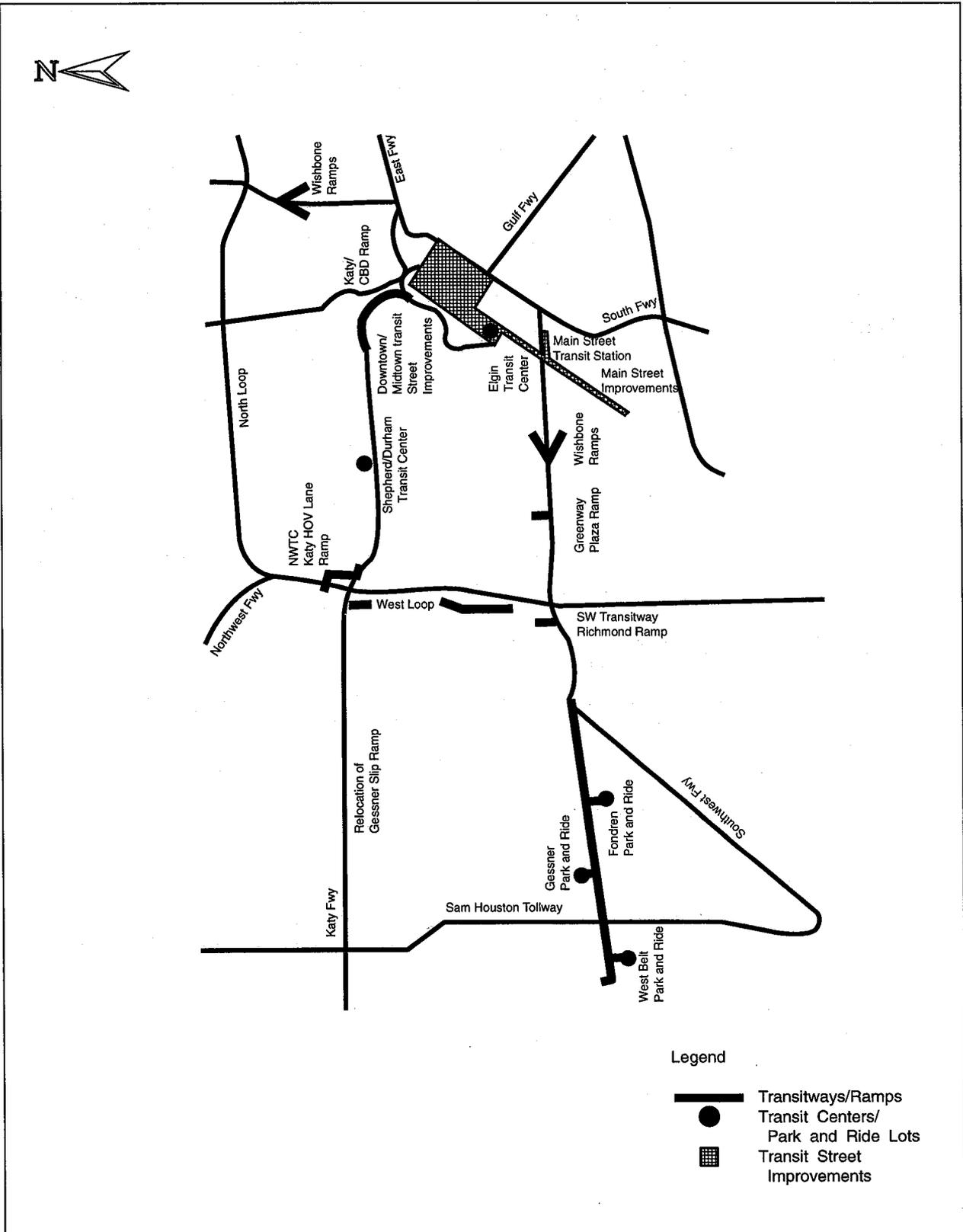
Houston Metro is supported by a 1 percent sales tax which generates substantial revenue above that required to operate the existing transit system and meet other capital obligations. Metro has proposed that FTA fund approximately 50 percent of the cost of the project.

Houston's capital financing commitment is rated "medium". Metro is being asked to pay for an increasing amount of non-transit tasks such as city police work and street construction and the Metro Board Chairman has announced that Metro's reserves will be reduced from \$503 million in 1993 to \$68 million in 1997. Nevertheless, Metro should be able to finance the project and its existing system without incurring any debt.

The stability and reliability of financing for future operations are also rated "medium." The proposed system can be supported with existing dedicated sources of revenue, but the expanded service would result in smaller margins.

In 1992 Metro's bus fleet averaged 7.2 years old, which is better than the national average.

Houston: Regional Bus Plan



East Central Corridor

Los Angeles, California

(October 1993)

Description

The East Central Corridor project is one of three proposed extensions to the Los Angeles Metro Rail System. The Eastside Locally Preferred Alternative (LPA) extends from the eastern terminus of the Red Line at Union Station to Atlantic and Whittier Boulevards in East Los Angeles, a distance of 6.5 miles. The project is estimated to cost about \$1.64 billion (1992 dollars). A three mile-long, four-station initial segment was estimated in the Draft EIS to cost approximately \$880 million. This initial segment is considered to be part of MOS-3.

Status

On June 30, 1993, the Los Angeles County Metropolitan Transportation Authority (LACMTA) adopted its LPA and on September 7, 1993, the Federal Transit Administration (FTA) approved the initiation of preliminary engineering and the final EIS, which is expected to be completed in spring 1994.

Section 3034 of ISTEA directs FTA to amend the full funding grant agreement (FFGA) for Metro Rail segment MOS-2 to include \$695 million (plus \$535 in advance construction authority) for constructing the three segments of MOS-3. The new FFGA was signed on May 14, 1993 and reserves \$650 million for the initial Eastside segment.

Through FY 1993, Congress has appropriated \$60 million for MOS-3, including \$20 million for the initial three miles of the East Side Extension. For FY 1994, Congress earmarked \$170 million for MOS-2&3, without specifying whether any of the money would go to the East Side Extension.

Justification

ISTEA exempted MOS-3 from FTA's new start criteria.

Mobility Improvements. The project would connect the Red Line to the largely Hispanic East Side. Nearly four million hours of travel time would be saved annually with the LPA.

Cost Effectiveness. LACMTA did not include cost effectiveness indices in the draft EIS, nor has it provided the FTA with this information for the project as currently proposed.

East Central Corridor -- Los Angeles, California

Environmental Benefits. Metropolitan Los Angeles is an "extreme" nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. The LPA would result in a reduction of automobile air emissions of 540 pounds per day. Although this is not a significant reduction in air pollutants, the project is part of a larger commitment to meeting air quality goals through the Regional Mobility Plan which includes an extensive network of rail lines, electric bus lines, and high occupancy vehicle facilities, and an aggressive travel demand management program.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from a major transit investment in the corridor.

Local Financial Commitment

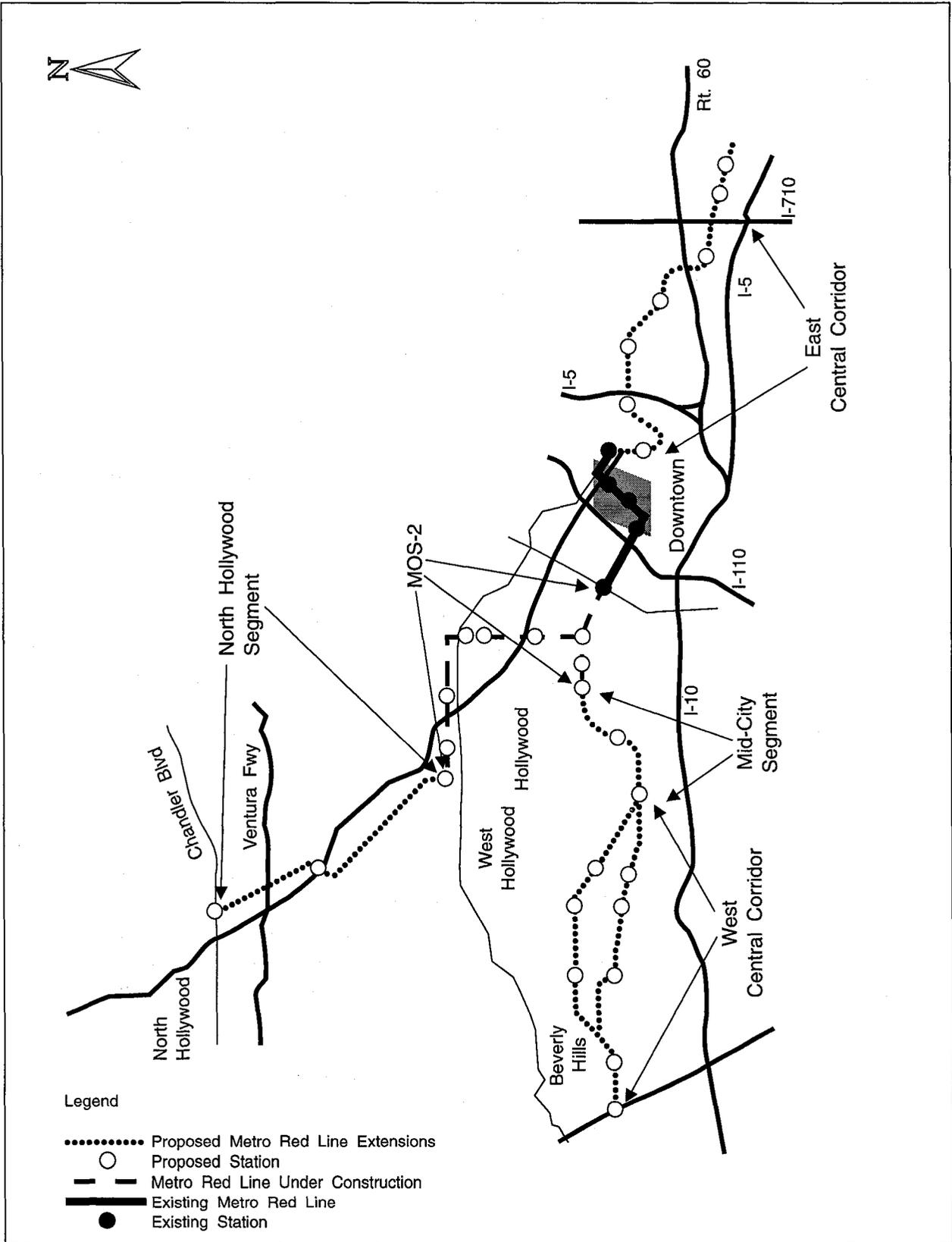
LACMTA is proposing a Federal share of about 50 percent, similar to MOS-1 and -2. In addition, LACMTA is financing several major transit investments without any Federal assistance. These projects include: the Blue Line between Los Angeles and Long Beach; a planned Blue Line Extension to Pasadena; the Green Line from Norwalk to El Segundo; and several commuter rail projects included in the region's Metrolink commuter rail service.

State and County residents have voted for several significant taxes which are dedicated to transit improvements. Los Angeles' transit programs benefit from several very significant State and local taxes, including county sales taxes, and State gas taxes, and general obligation bonds.

Although these taxes generate large amounts of revenue, the tax revenues have not grown as fast as had been anticipated. In addition, construction and operating costs have exceeded predictions. It is therefore not possible to fully finance the construction and operation of all of the projects in LACMTA's transit development plan from existing local, State and Federal sources. LACMTA is currently revising its financing plan, however, until this is done, both the capital financing plan and the stability and reliability of operating revenue are rated as "low" because the current financing plan is not adequate to cover committed capital and operating expenses.

In 1992 the Los Angeles County bus fleet averaged 8.3 years old, which is comparable to the national average. Rail vehicles averaged 3 years old.

Los Angeles: East Central Corridor



Hudson River Waterfront

Northern New Jersey

(October 1993)

Description

In February 1993, New Jersey Transit selected, as its locally preferred alternative (LPA), a 15.3-mile, 24-station at-grade LRT line from Vince Lombardi Park-and-Ride lot through Hoboken and Jersey City to Route 440 in Southwest Jersey City. Later in 1993, NJ Transit added a 5.4-mile, 9 station extension to Bayonne. Total capital cost for the full LPA is \$775 million (1990\$). An assumed 6.3-mile "First Construction Stage (FCS)" serving the Hoboken Terminal, and Jersey City (subject to further analysis during preliminary engineering (P.E.)) has been identified as having an inflated capital cost of \$357.4 million.

Status

In mid-1993 NJ Transit initiated PE and the preparation of the final EIS on the LPA.

Section 3031 of ISTEA requires FTA to negotiate and enter into a full funding grant agreement providing \$634 million for those elements of the New Jersey Urban Core Project which can be fully funded in FY 1992 through FY 1997. The Waterfront Project is identified as one of seven elements which would be eligible for funding.

In fiscal years 1992 through 1994 Congress appropriated \$240.47 million for the "New Jersey Urban Core Project" which includes this as well as the Secaucus Transfer, the Newark-Elizabeth Rail Link and other projects.

Justification

ISTEA states that the Urban Core project is not subject to the New Starts criteria.

Mobility Improvements. The proposed project would provide guideway transit service to existing and proposed new developments along the New Jersey waterfront. It would provide internal transit circulation along the waterfront, and would connect with NJ Transit Commuter Rail service at Hoboken, with PATH trains to Newark and Manhattan and with the Port Imperial Ferry from Weehauken to Manhattan. The original LPA (without the Bayonne extension) is estimated to save almost 22,000 hours of travel time daily over the TSM alternative.

Cost Effectiveness. The cost effectiveness index for the original LPA is \$5 per new rider and the Bayonne extension by itself is estimated to have a cost effectiveness index of less than \$2.11.

Hudson River Waterfront - Northern New Jersey

Environmental Benefits. Northern New Jersey is a "severe" nonattainment area for ozone. The region is categorized as a "moderate 12.7" nonattainment area for carbon monoxide. FTA does not have information specifically on the impact of the LPA on regional air quality. However, the First Construction Stage is expected to reduce emissions by about 0.3 percent in the study area and the LPA would reduce emissions by approximately double that amount.

Operating Efficiencies. FTA does not have information on how the LPA would affect NJ Transit's operating cost per passenger. Considering the size of NJ Transit's overall operation and the limited scope of this project, the effect would probably be negligible.

Local Financial Commitment

Originally the project was proposed for private sector funding. The financial plan calls for FTA to pay for 94.5 percent of the First Construction Stage with the balance from private sources.

NJ Transit will use locally funded projects such as the Kearny and Waterfront Connections, and New Jersey Turnpike projects as local match for Secaucus Transfer, Waterfront and the Rail Link projects, as authorized in ISTEA Sections 1044 and 3031. The NJ Transit Capital Program has allocated \$192 million of the \$634 million authorized in ISTEA for the First Construction Stage of this project. In order to finish the construction of this stage an additional \$139 million in Federal funds will be required. FTA has rated the capital financing plan as "medium."

The stability and reliability of operating assistance for an expanded system are rated "medium" because, despite past financial difficulties, NJ Transit has always received adequate funding from the State to support the continued operation of its transit service. In 1992 the average vehicle age of NJ Transit's bus fleet was 8.3 years, which is comparable to the national average. The average age of the rail fleet is 18.2 years.

Northern New Jersey: Hudson River Waterfront



Newark-Elizabeth Rail Link

Northern New Jersey

(October 1993)

Description

NJ Transit has selected as its locally preferred alternative (LPA) an 8-mile, 12 station LRT line linking the cities of Newark and Elizabeth and Newark International Airport. Also included in the LPA is a commuter rail station on the Northeast Corridor, an extension to the airport people mover, new LRT vehicles and a maintenance yard. The commuter rail station and the people mover extension have independent utility and will not use FTA funds. The capital cost of the LRT portion of the LPA is estimated to be \$845 million (1992\$), but a plausible first operating segment of two miles, with associated stations, vehicles and yard, would cost \$255 million (inflated dollars).

Status

NJ Transit has selected an LPA and is in the early stages of preliminary engineering (PE) and draft EIS preparation, which are scheduled for completion by spring 1995.

FTA has approved a grant for PE and draft EIS preparation for the LRT element of the project.

In FY 1989 and FY 1990, Congress appropriated \$12 million for the project. In addition, in 1992 through 1994, \$240.47 million was appropriated for the "New Jersey Urban Core Project" which includes the this as well as the Secaucus Transfer, Hudson River Waterfront and other projects.

Section 3031 of ISTEA authorized \$634.4 million for the New Jersey Urban Core project and directed the FTA to negotiate and enter into a full funding agreement for those elements of the New Jersey Urban Core Project that can be fully funded in fiscal years 1992 through 1997.

Justification

ISTEA exempted the Urban Core Project from the New Start criteria.

Mobility Improvements. The alternatives would improve access to the airport, transfers between commuter rail lines, access to new development sites, and internal circulation in downtown Newark. Preliminary estimates indicate that the LPA could save almost 390,000 hours of travel time annually.

Cost Effectiveness. The light rail element of the LPA has an estimated cost of \$11 per new rider (1992 dollars in 2010).

Newark-Elizabeth Rail Link -- Northern New Jersey

Environmental Benefits. Northern New Jersey is a "severe" nonattainment area for ozone and a "moderate > 12.7" nonattainment area for carbon monoxide. The impact of the proposed project on regional air quality has not been determined, but it is not likely to be significant.

Operating Efficiencies. FTA does not have information on how the project would affect NJ Transit's operating cost per passenger.

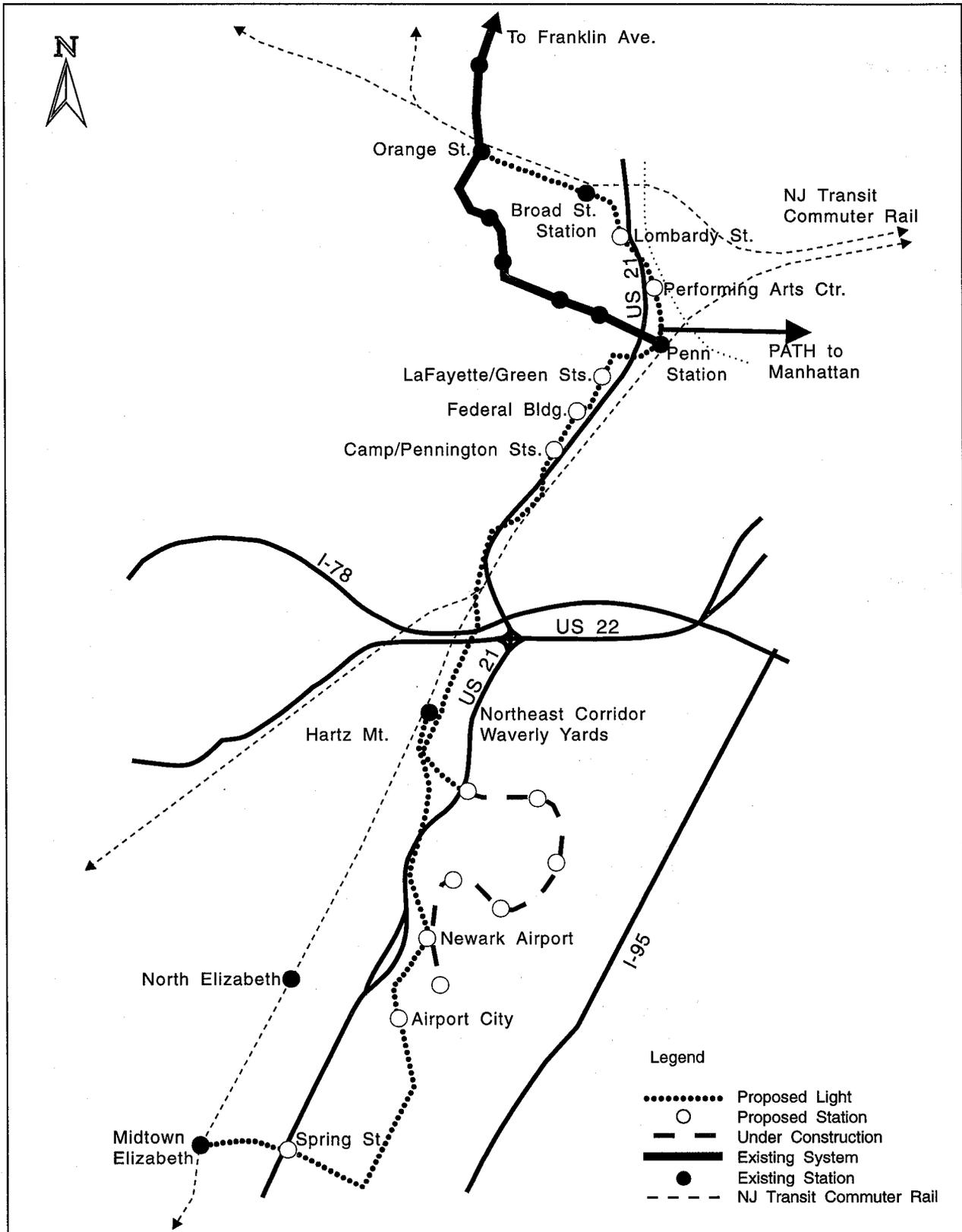
Local Financial Commitment

NJ Transit hopes to use locally funded projects such as the Kearny and Waterfront Connections, and the New Jersey Turnpike as local match for Secaucus Transfer, Waterfront and the Rail Link projects, as authorized in ISTEA Sections 1044 and 3031. It is expected that New Jersey Transit will seek FTA funding for 100 percent of the light rail element of this project. In light of the ISTEA earmark, other programmed funds and the availability of "soft match" in New Jersey, the capital financing plan is rated "medium".

The stability and reliability of operating assistance for an expanded system are rated "medium" because, despite past financial difficulties, NJ Transit has always received adequate funding from the State to support the continued operation of its transit service.

In 1992 the average vehicle age of NJ Transit's bus fleet was 8.3 years, which is comparable to the national average. The average age of the rail fleet is 18.2 years.

Northern New Jersey: Newark-Elizabeth Rail Link



Secaucus Transfer Station

Northern New Jersey

(October 1993)

Description

The New Jersey Transit Corporation (NJ Transit) plans to construct a commuter rail transfer station in Secaucus where its Main Line intersects the Northeast Corridor (NEC) Line. The new station would allow rail passengers on the Main Line and on the Bergen County Line to transfer to NEC commuter trains destined to Penn Station in midtown Manhattan or to Penn Station in Newark. At present, commuters on the Bergen and Main Lines and on the Pascack Valley and Port Jervis Lines must continue on into Hoboken where the lines terminate.

The rail transportation components of this project are: (1) construction of a three-level transfer station at the intersection of the NEC and Main lines; (2) expansion of 2 miles of the NEC from two to four tracks; (3) upgrading of tracks and bridges on the Main Line near the new station; and (4) construction of a platform on the Bergen County Line connected by an elevated walkway to the new station. The Secaucus Transfer Station is estimated to cost approximately \$374 million (escalated dollars).

Status

NJ Transit originally proposed to construct the station simultaneously with major office and retail development of the area by the Allied Junction Corporation (AJC). AJC had planned to contribute about \$100 million for the construction of certain components of the rail project. However, the AJC project has encountered delays. Although local businesses are advocates of the AJC development, it has generated some community opposition. A new NJ Turnpike interchange is needed to handle the traffic generated by the development but is opposed by some air quality interests. NJ Transit participated in the public hearings conducted in November 1993 by the U.S. Army Corps of Engineers on the combined rail and development project. The Corps has taken the lead as the Section 404 permitting agency for the combined rail and development project.

NJ Transit and AJC have executed an agreement which provides NJ Transit with access to the AJC property needed for the Secaucus Transfer Station. The agreement also provides that AJC will reimburse NJ Transit approximately \$62 million if the development project is built. In exchange, NJ Transit will design the Secaucus Transfer Station so that it can structurally support AJC commercial building(s) above it.

Secaucus Transfer Station -- Northern New Jersey

Section 3031 of ISTEA identifies the Secaucus Transfer Station as an element of the New Jersey Urban Core Project, along with the Kearny connection, the Waterfront connection, the NEC signal system, the Hudson River Waterfront transportation system, the Newark-to-Newark International Airport-to-Elizabeth Transit Link, the Newark Penn Station--Broad Street Station rail connection, and the Penn Station New York Concourse. ISTEA requires FTA to enter into a full funding grant agreement (FFGA) for those elements of the New Jersey Urban Core Project which can be fully funded in FY 1992 through FY 1997. The total amount of Section 3 funds authorized by ISTEA for the NJ Urban Core Project is \$634.4 million. Through FY 1994, \$240.47 million in New Start funds have been appropriated for the eight elements of the Urban Core Project.

Justification

Section 3031 of ISTEA states that the elements of the Urban Core Project, including the Secaucus Transfer project, are not subject to the new start criteria of ISTEA, nor are they subject to FTA's major transit investment policy.

Mobility Improvements. The Secaucus Transfer project would serve 26,700 daily trips. It would shorten the transit commuting time to midtown Manhattan from Bergen and Passaic counties by 10 to 15 minutes per trip. The Secaucus Transfer project has the potential of attracting additional commuter rail riders because of the improved accessibility from these areas to midtown Manhattan and downtown Newark. The project promotes the ISTEA policy of providing intermodal connections by improving access to Amtrak at Penn Station Newark and Penn Station New York. FTA has no information on the aggregate travel time benefits that would result from the project.

Cost Effectiveness. A cost effectiveness index for the project is not available.

Environmental Benefits. EPA has classified the New York metropolitan area, including northern New Jersey, as a "severe" nonattainment area for ozone and as a "moderate" nonattainment area for carbon monoxide (CO). It is unlikely that the Secaucus Transfer project, by itself, would have a noticeable effect on pollution levels in northern New Jersey at the

Secaucus Transfer Station -- Northern New Jersey

regional scale. However, the Urban Core Project, which includes the Secaucus Transfer project, evidences a commitment to meeting the mobility needs of the region through massive investments in transit with minimal degradation of air quality.

NJ Transit and FTA are committed to replacing the beneficial functions of the 11 acres of wetlands that will be destroyed or degraded by the project by restoring previously degraded wetlands in the same watershed.

Operating Efficiencies: Any increase in operating and maintenance (O&M) cost due to the Secaucus Transfer project would be small and proportional to the increase in transit ridership. Therefore, the project would not affect the O&M cost per passenger of the NJ Transit bus and rail system in northern New Jersey.

Local Financial Commitment

Section 3031 of ISTEA directs FTA to consider nonfederal contributions to the capital cost of the Urban Core Project made since 1987 as local match for the Urban Core project. NJ Transit invested \$146.4 million of nonfederal funds on Urban Core elements between January 1, 1987 and August 7, 1992. In addition, Section 1044 of ISTEA allows certain highway toll revenues which are reinvested in building or maintaining the highway system to be credited as the required local matching funds for any Federally assisted highway or transit project. Although NJ Transit has not submitted a financial plan to FTA for the Urban Core Project or its individual elements, it appears that sufficient nonfederal funds to constitute local match for the Secaucus Transfer project, in accordance with Sections 1044 and 3031 of ISTEA, have already been expended.

The stability and reliability of operating assistance for the expanded transit system are rated as "medium." NJ Transit, despite financial difficulties during the recent recession, has a history of funding transit operations adequately. The Secaucus Transfer project would not significantly increase operating costs.

In 1992 NJ Transit's bus fleet averaged 8.3 years old, which is comparable to the national average. Its commuter rail vehicles averaged 18.2 years old.

I-405/SR-55 Transitway and Direct Access HOV Ramps

Orange County, California

(October 1993)

Description

The Orange County Transportation Agency (OCTA) and the California Department of Transportation (Caltrans) have recently constructed HOV lanes on three Orange County freeways including I-405, SR-55, and SR-57. Construction of HOV facilities is currently taking place on I-5 and SR-91, however, construction of other HOV facilities in the County has slowed down. The transitway project consists of the construction of exclusive HOV connections between the transitways on I-405 and SR-55, HOV ramps between the transitways and adjacent activity centers, park and ride lots and an expanded level of express bus service. OCTA has also added an intermodal transportation center adjacent to Disneyland to the overall project.

The capital cost of the transitway segments and direct access ramps is estimated to be \$254 million (escalated dollars). The proposed park-and-ride lots, including the intermodal transportation center, are estimated to cost approximately \$261 million. The capital cost associated with express bus service expansion is estimated to be \$100 million (escalated dollars). The total cost of the project is \$615 million (escalated dollars).

Status

The Environmental Assessment is anticipated to be completed by February 1994, following which OCTA plans to submit a capital grant application for final design. Environmental work on the intermodal transportation center has been initiated. FTA has raised several questions on the transportation center and its impact on other elements of this project. Additionally, the FTA believes that the population and employment forecasts used to develop the ridership estimates are high.

In FY 1994, Congress appropriated \$15.5 million for this project.

Justification

Mobility Improvements. The direct access ramps and exclusive HOV connections are designed to save travel time and increase safety for buses and other high-occupancy vehicles. Without the ramps, buses and other high occupancy vehicles must weave across the congested general traffic lanes to enter and exit the HOV lanes. OCTA estimates the direct access ramps would reduce HOV travel time by approximately 4 minutes compared to the TSM alternative for an average trip. No systemwide travel time savings have been calculated for this project.

I-405/SR55 Transitway -- Orange County, California

Cost Effectiveness. Based upon calculations performed in alternatives analysis, the project's cost effectiveness index (CEI) was \$4 per new trip (1989 dollars, 2010 ridership) compared to the TSM alternative. However, due to increases in the project cost, this figure is considered to be low. Additionally, delay in bus service expansion and park and ride lot construction, associated with the Transportation Center, defers many of the benefits to transit riders. OCTA has not recalculated the CEI to reflect these changes.

Environmental Benefits. Southern California is classified as an "extreme" nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. Implementation of this project is not likely to have a noticeable effect on pollution levels at the local level.

Operating Efficiencies. OCTA's cost per transit passenger on a systemwide basis for the year 2010 is projected to be \$1.68 for the No-Build alternative, \$2.14 for the TSM alternative and \$2.10 for the Build alternative.

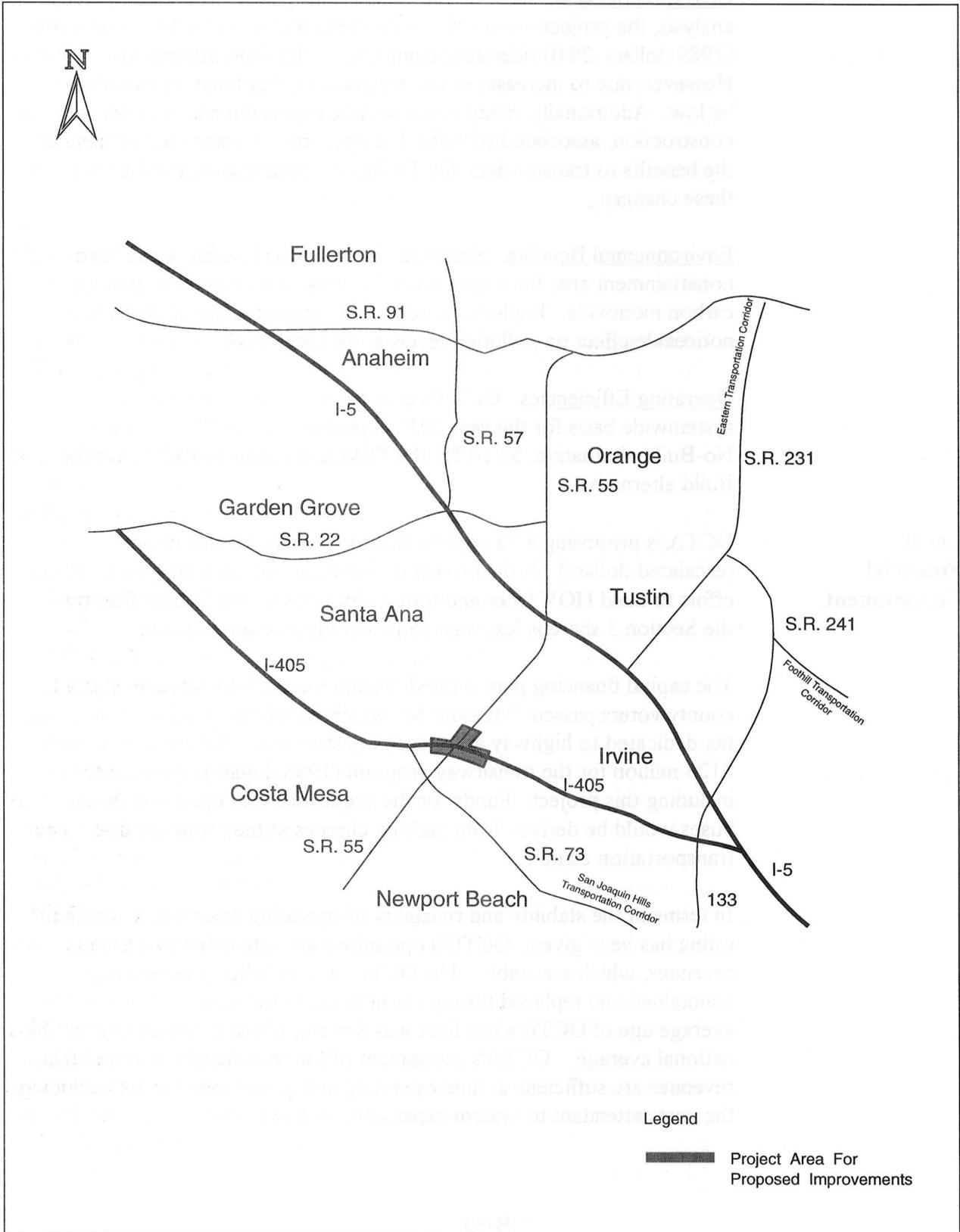
Local Financial Commitment

OCTA is proposing a 52 percent Section 3 share for this project (escalated dollars). If the project is viewed as part of a 20-year local/State effort to build HOV lanes and transitways on Orange County freeways, the Section 3 share is less than 15 percent in escalated dollars.

The capital financing plan is rated "medium-high." In November 1990, county voters passed "Measure M" which establishes a 1/2 cent local sales tax dedicated to highway and transit construction. The measure included \$125 million for the transitway program (1988 dollars), specifically including this project. Funds for the acquisition and operation of new buses would be derived from parking charges at the proposed intermodal transportation center.

In terms of the stability and reliability of operating revenues, a "medium" rating has been given. OCTD's operations are supported by general revenues, which are stable. The OCTD system is being adequately maintained and replaced through continuing reinvestment. In 1991, the average age of OCTD's bus fleet was 8 years, which is comparable to the national average. OCTA's assessment of financial feasibility found that revenues are sufficient to fund operating and maintenance costs, including the costs attendant to system expansion, through 2010.

Orange County, CA: I-405 Transitway Interchange



OSCAR
Orlando, Florida
(October 1993)

Description:

The City of Orlando is seeking FTA funds for a proposed transit project which would serve downtown Orlando. The **Orlando streetcar (OSCAR)** project would consist of an electrified trolley system or busways separated from traffic. The 2.7 mile system would circulate passengers in the downtown and would connect to regional transit centers and parking facilities on the fringe of the downtown core.

The estimated capital cost for this project is \$50 million (escalated dollars).

Ridership on OSCAR is projected to be 8200 passengers daily in 2010. Free shuttle buses currently serve the same market, carrying about 1700 riders per day.

Status

The City of Orlando completed an alternatives analysis and environmental assessment by selecting a locally preferred alternative (LPA) in June 1993. Orlando was given approval to enter the preliminary engineering phase in October 1993.

Section 3035(l) of ISTEA directs FTA to enter into a multiyear grant agreement with the City of Orlando in the amount of \$5 million for alternatives analysis and preliminary engineering. Through FY 1994, Congress has appropriated \$5.5 million, primarily for final design and engineering.

Justification

Mobility Improvements. The proposed trolley system would increase transit speeds in the central business district by 2-3 miles per hour. Buses in the TSM alternative were assumed to operate in mixed traffic. The trolley alternative would operate entirely within exclusive right-of-way. Comparisons of a few selected origin-destination pairs shows that the LPA may result in travel savings of 0-3 minutes compared to the TSM alternative. Total one-way travel time for all the alternatives is less than 10 minutes.

Cost Effectiveness. The cost effectiveness index for the LPA is \$6 (1991 dollars, year 2010 ridership). Most of the new riders would be taking relatively short trips within the downtown or between the downtown and parking garages on the periphery of the CBD. The ridership projections assume a 150 percent increase in CBD employment during the period 1985 to 2010.

OSCAR -- Orlando, Florida

Environmental Benefits. Orlando is an attainment area for ozone and carbon monoxide and the project can be expected to have virtually no impact on regional emissions.

Operating Efficiencies. Within the downtown area, the operating cost per passenger is estimated to be \$0.64 for the No Build alternative, \$0.80 for the TSM alternative, and \$0.98 for the LPA.

Local Financial Commitment

Orlando's financing plan anticipates a Federal share of 80 percent. Half of the non-Federal share will be funded by the State of Florida. The other half of the local share will be financed by the City's General Operating Budget, which receives most of its funds from ad valorem taxes. The City has set aside about \$4.6 million in capital matching funds for the LPA in its Transportation Improvements Projects portion of the 5-year Capital Improvement Program. The capital financing plan is rated as "high".

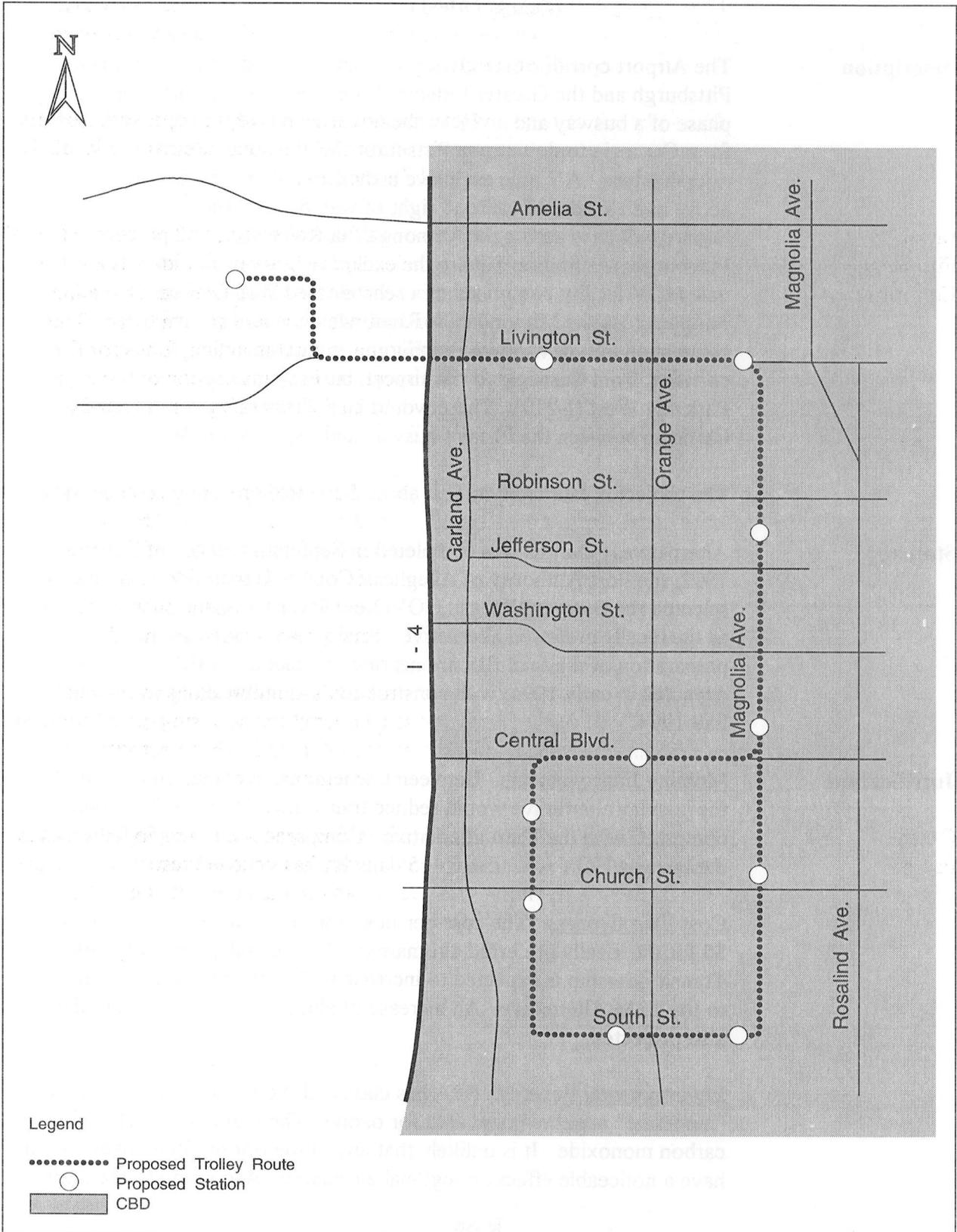
OSCAR would be free to riders, and therefore, operating costs must be financed from sources other than farebox revenue. The City has committed to full funding of operations and maintenance of the project. No Federal, state, or Tri-County funds will be required for operations. Sources of operating funds include tax increment financing and the Parking Enterprise Fund. The operating plan is rated as "high".

OSCAR is not expected to affect the city's appropriations to regional transit. The city plans to increase its overall financial support of regional mass transit. In 1992 the average age of Orlando's bus fleet was 7.4 years, which is slightly better than the national average.

Other Factors

Parking Policy. A high number of parking spaces per employee exists in Orlando's CBD today. However, the city has imposed restrictions on the availability of downtown parking per an ordinance adopted in 1990.

Orlando: OSCAR Project



Phase I Airport Busway/Wabash HOV

Pittsburgh, Pennsylvania

(October 1993)

Description

The Airport corridor extends approximately 20 miles between downtown Pittsburgh and the Greater Pittsburgh International Airport. The first phase of a busway and an HOV facility is proposed for the first 8.1 miles from Carnegie to downtown Pittsburgh, where congestion is worst and ridership best. A 7 mile exclusive busway would follow sections of an active and abandoned railroad right of way from Carnegie to Station Square, which is across the Monongahela River from downtown Pittsburgh. At Station Square the exclusive busway would intersect a 1.1 mile HOV facility comprised of a rehabilitated Wabash Tunnel and new bridge across the Monongahela River, which would complete the connection into downtown Pittsburgh. In the remaining 12 miles of the corridor, from Carnegie to the airport, buses would operate on the Parkway West (I-279). There would be a direct ramp connection in Carnegie between the Phase I busway and the Parkway West.

The project is estimated to cost about \$293 million (escalated dollars).

Status

Alternatives Analysis was completed in September 1992. In October 1992, the Port Authority of Allegheny County Transit (PAT) Board selected the Busway/Wabash HOV/New River Crossing to Market Street as the locally preferred alternative. Preliminary Engineering and preparation of the final EIS are nearing completion. FEIS approval is expected in early 1994, with construction groundbreaking scheduled for Fall 1994.

Justification

Mobility Improvements. Between Carnegie and downtown Pittsburgh, the busway alternative would reduce transit travel time by 26 minutes compared with the TSM alternative. Compared with the TSM alternative, the busway/HOV will save 6,415 daily hours of travel time.

Cost Effectiveness. The cost-per-new transit trip would be approximately \$5 for the locally preferred alternative (2005 ridership; 1995 dollars). Transit ridership is expected to increase by 11,000 daily riders compared to the TSM Alternative. An increase of about 550 HOV trips per day is also projected.

Environmental Benefits. EPA has classified the Pittsburgh region as a "moderate" nonattainment area for ozone. The region is not classified for carbon monoxide. It is unlikely that any of the transit alternatives would have a noticeable effect on regional air quality. According to the draft

Airport Corridor -- Pittsburgh, Pennsylvania

EIS, the busway/HOV project would lead to a 0.1 percent reduction in regional vehicle miles travelled.

Operating Efficiencies. The systemwide operating cost per passenger is projected to be \$1.86 for the No-Build, \$1.98 for the TSM alternative and \$1.94 for the locally preferred alternative in the year 2005.

Local Financial Commitment

Of the total cost of \$293 million (escalated dollars), \$223 million is comprised of a combination of federal funds. An amount of \$9.8 million in contract authority is provided to the Airport Busway through Section 1108(b) of ISTEA. In addition, Section 1069(e) of ISTEA authorized under Title I \$39.5 million in general funds for the Airport Busway. Congress has not appropriated any funding pursuant to Section 1069(e). To the extent that Section 1069(e) funds are made available for the project, less Section 3 New Start appropriations will be needed. An additional \$76.5 million in flexible Title I funds is being programmed for the project. Congress has earmarked \$66 million in Section 3 New Start funds for the Busway/HOV project between FY 1992 and FY 1994. The Port Authority may seek the remaining \$70.7 million in New Start or 1069(e) funds in FY 1995.

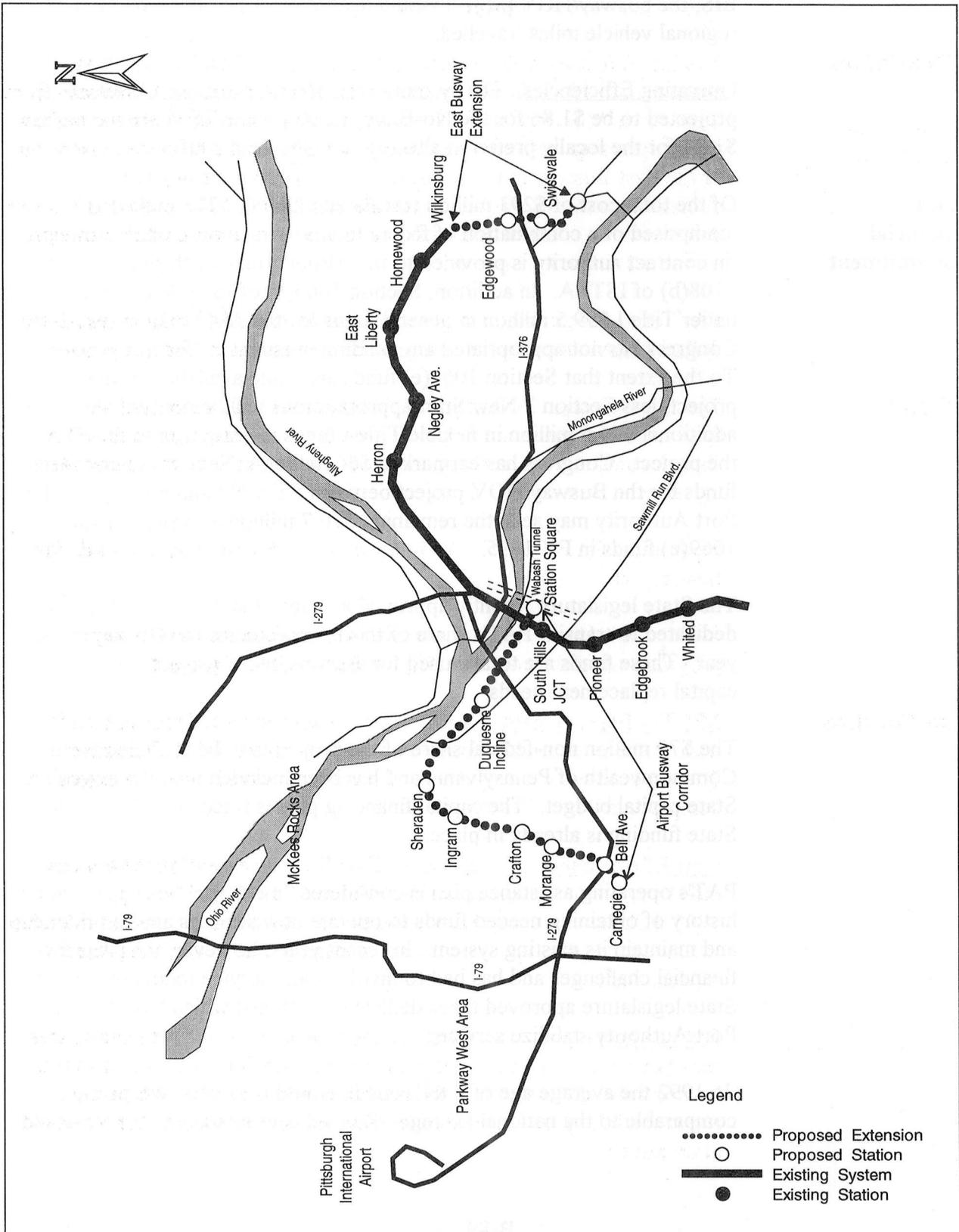
The State legislature recently approved a series of small taxes which are dedicated to transit. PAT's share of this is expected to be \$39 million per year. These funds are totally used for asset maintenance and routine capital replacement needs.

The \$70 million non-federal share of the project is to be provided by the Commonwealth of Pennsylvania and has been included in an approved State capital budget. The capital financing plan is rated "high" since the State funding is already in place.

PAT's operating assistance plan is considered "medium." PAT has a good history of obtaining needed funds to operate new services and to operate and maintain its existing system. In recent years, however, PAT has faced financial challenges and has had to invoke some service reductions. The State legislature approved taxes dedicated to transit which have helped Port Authority stabilize service.

In 1992 the average age of PAT's bus fleet was 8.3 years, which is comparable to the national average. Rail vehicles averaged 15.3 years old.

Pittsburgh: Airport Busway Corridor Phase 1



Martin Luther King, Jr. East Busway Extension
Pittsburgh, Pennsylvania
(October 1993)

Description

The first 6.8 miles of the Martin Luther King, Jr. East Busway was completed in 1983. It carries more than 30,000 riders each weekday from downtown Pittsburgh to Wilkinsburg, serving a corridor with the highest transit ridership in Allegheny County. Phase I of the proposed extension of the East Busway is a 2.3-mile extension serving the adjacent communities of Edgewood, Swissvale and Rankin. The extended busway will eventually include park-and-ride lots, a feature which does not exist on the existing East Busway.

PAT estimates put the cost of the project at about \$43 million (escalated dollars). PAT is currently updating the cost estimates for this project.

Status

The Port Authority of Allegheny County (PAT) has submitted an Environmental Assessment for the East Busway extension to the FTA. This document is currently under review, and PAT expects to complete the environmental process by early 1994.

Section 1108(b) of ISTEA authorized \$21.7 million in Title I funds for this project.

In FY 1994, Congress appropriated \$41.7 million for the busway program, which includes the Airport Busway/HOV project.

Justification

Mobility Improvements. The 2.3 mile extension would reduce transit travel time by up to 17 minutes compared with the TSM alternative. There would be 448 daily hours of travel time saved with the extension compared with the TSM alternative.

Cost Effectiveness. The proposed East Busway extension is very cost effective with a cost per new rider of about \$4 (2005 ridership, 1995 dollars). This low index reflects the substantial increase in ridership, the reduction in travel times for some existing riders, and the project's modest cost.

Environmental Benefits. Pittsburgh is a "moderate" nonattainment area for ozone and is not classified for carbon monoxide. According to the Environmental Assessment, the project would lead to a 0.06 percent reduction in regional vehicle miles traveled compared with the No-Build alternative.

Martin Luther King, Jr. East Busway Extension -- Pittsburgh, Pennsylvania

Operating Efficiencies. Systemwide operating cost per passenger for Port Authority bus mode is projected to be \$2.08 for the No-Build, \$2.08 for the TSM alternative and \$2.07 for the busway alternative in 2005 (1992 dollars).

Local Financial Commitment

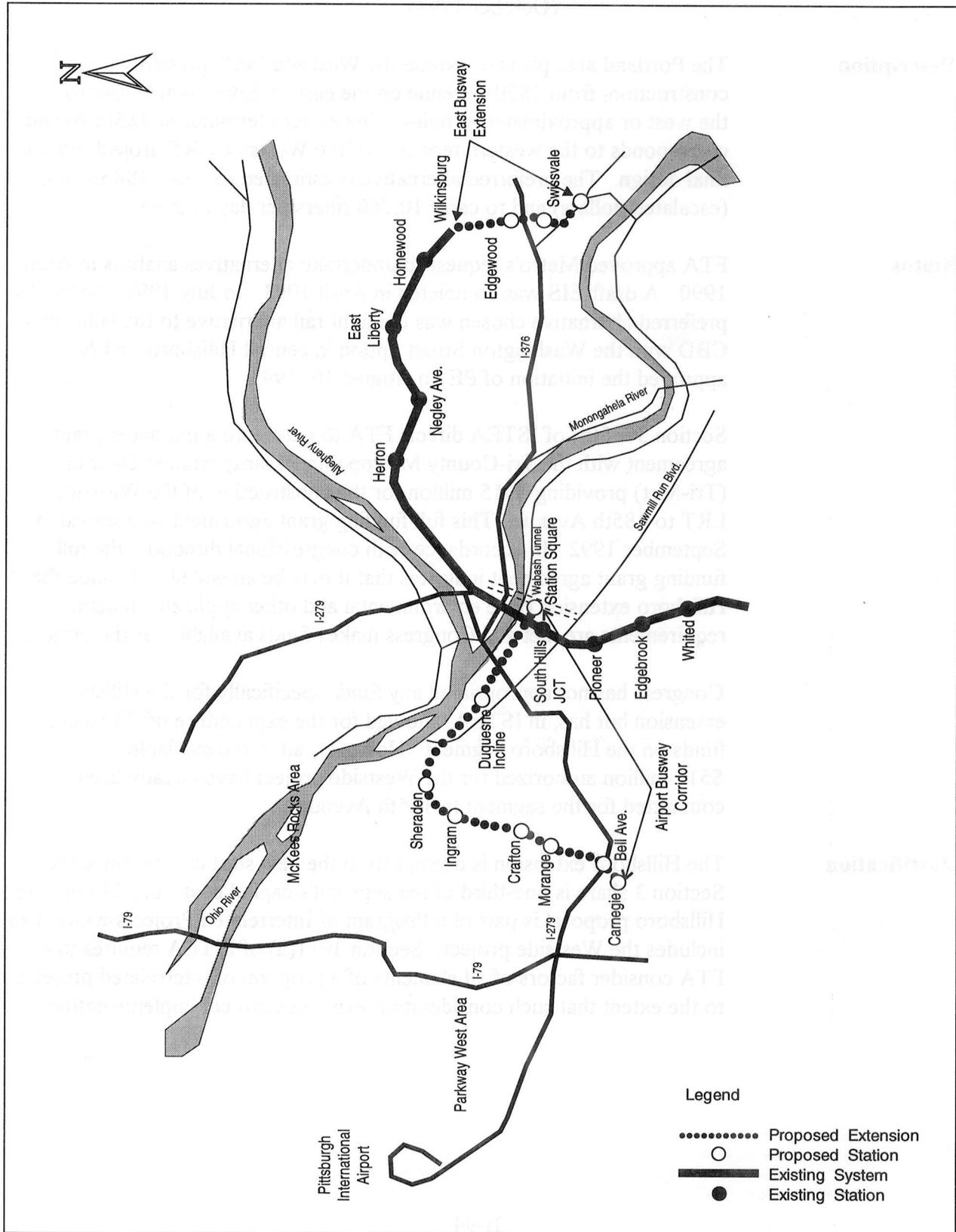
Up to 50 percent of the project costs will be raised from non-Federal sources. The State portion of the anticipated project funding plan has been included in the State capital budget. The Port Authority proposes using Section 1108 funds for the federal share. The capital financing plan is rated "high" since the local funding is already in place.

The State legislature recently approved a series of small taxes which are dedicated to transit. PAT's share of this is expected to be \$39 million per year. These funds are totally used for asset maintenance and routing capital replacement needs.

PAT's operating assistance plan is considered "medium." PAT has a good history of obtaining needed funds to operate new services and to operate and maintain its existing system. In recent years, however, PAT has faced financial challenges and has had to invoke some service reductions. The State legislature approved taxes dedicated to transit which have helped Port Authority stabilize service.

In 1992, the average age of PAT's bus fleet was 8.3 years, which is comparable to the national average. Rail vehicles averaged 15.3 years old.

Pittsburgh: Martin Luther King, Jr., East Busway Extension



Hillsboro Corridor

Portland, Oregon

(October 1993)

Description

The Portland area plans to extend the Westside LRT, presently under construction, from 185th Avenue on the east to downtown Hillsboro on the west or approximately 6 miles. The eastern terminus at 185th Avenue corresponds to the western terminus of the Westside LRT project, now in final design. The preferred alternative is estimated to cost \$198 million (escalated dollars) and to carry 10,760 riders per day in 2005.

Status

FTA approved Metro's request to undertake alternatives analysis in April 1990. A draft EIS was completed in April 1993. In July 1993, the locally preferred alternative chosen was the light rail alternative to the Hillsboro CBD with the Washington Street option in central Hillsboro. FTA approved the initiation of PE on August 16, 1993.

Section 3035(b) of ISTEA directs FTA to enter into a multiyear grant agreement with the Tri-County Metropolitan Transportation District (Tri-Met) providing \$515 million for the construction of the Westside LRT to 185th Avenue. This full funding grant agreement was signed in September 1992. In accordance with congressional direction, the full funding grant agreement indicates that it may be amended to include the Hillsboro extension once environmental and other applicable federal requirements are met and Congress makes funds available for the project.

Congress has not appropriated any funds specifically for the Hillsboro extension but has, in ISTEA, allowed for the expenditure of "Westside" funds on the Hillsboro segment. However, all of the available \$515 million authorized for the Westside project have already been committed for the segment to 185th Avenue.

Justification

The Hillsboro extension is exempt from the new start criteria since the Section 3 share is one-third of the segment's capital cost. In addition, the Hillsboro proposal is part of a Program of Interrelated Projects which also includes the Westside project. Section 3011(a) of ISTEA requires that FTA consider factors of all elements of a program of interrelated projects to the extent that such consideration expedites project implementation.

Hillsboro Corridor -- Portland, Oregon

Mobility Improvements. Between downtown Hillsboro and Beaverton, the LRT alternative would reduce transit travel time by 11 minutes compared with the TSM alternative. A Hillsboro extension would attract about 420 new transit trips compared to the TSM alternative on an average weekday in 2005. The Westside project as a whole, including the Hillsboro extension, would attract 5660 new transit trips on an average weekday. The total daily travel time savings for existing riders would be 264 hours for the Hillsboro project and 2,000 hours for the Hillsboro and Westside projects combined.

Cost Effectiveness. The cost effectiveness index is approximately \$16 per new trip for the Westside and Hillsboro projects combined (1991 dollars, 2005 ridership). For the Hillsboro extension alone it is \$75 per new trip.

Environmental Benefits. EPA has classified the Portland region as a "marginal" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. The locally preferred alternative would have a very small effect on air quality. The LRT extension is expected to lead to a 0.4 percent change in regional vehicle miles traveled.

Operating Efficiencies. For the Westside and Hillsboro corridors combined, the systemwide operating cost per passenger for the year 2010 is projected to be \$2.04 for the No-Build alternative, \$2.07 for the TSM alternative and \$2.10 for the LRT alternative.

Local Financial Commitment

Tri-Met is seeking Section 3 New Start funds for 33 percent of the cost of the LRT extension. Other committed sources of funding are \$44 million in STP funds, \$22 million in Section 9 funds, and \$67 million in local funding. In July 1992, Tri-Met issued \$125 million in bonds (\$30 million available to this project). Local governments have entered into a regional compact which establishes the framework for local government contributions. State legislation was enacted in 1991 which put the State funding in place. FTA has given the capital finance plan a "high" rating.

The stability and reliability of Tri-Met's operating revenues are rated "medium" since dedicated sources are in place and are sufficient to operate the project as planned. Tri-Met's analysis shows that a Westside LRT could be operated without a new funding source, assuming that operating and maintenance costs can be contained at about 5.5 percent per

Hillsboro Corridor -- Portland, Oregon

year while payroll tax revenues grow at 6.6 to 7.4 percent per year. This conclusion, however, is vulnerable to an economic downturn and other uncertainties.

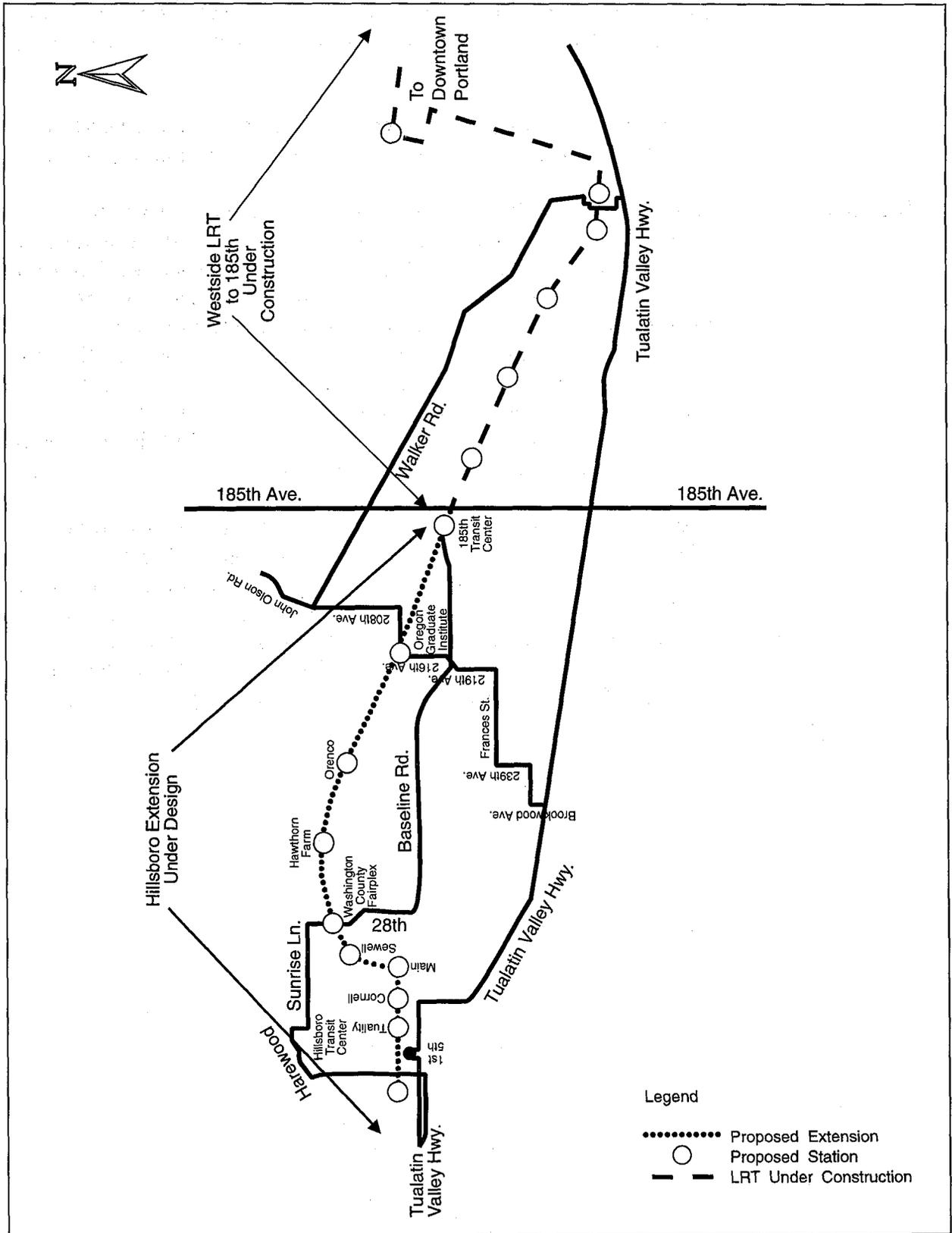
In 1992 the average age of Tri-Met's bus fleet was 7.3 years, which is better than the national average. Tri-Met's rail fleet averaged 7 years.

Other Factors

Land Use. Oregon land use law requires cities and counties to adopt enforceable comprehensive plans. Since the mid-1970's, the land use plans in all cities and counties in the Westside corridor have been established on the basis of high capacity transit in the corridor. The state law also required the adoption of a regional Urban Growth Boundary that designates the area in which urban development can occur. The Oregon Transportation Planning Rule requires local governments to adopt changes to their development ordinances to require more transit oriented development patterns. In addition, the Rule requires the MPO to plan for a reduction in vehicle miles travelled per capita.

A station area planning and development program is underway for the Hillsboro Project. Participants include Tri-Met, Metro, ODOT, Washington County, and the cities of Beaverton, Hillsboro, and Portland. Tri-Met expects that new comprehensive plans, development regulations, and capital improvement programs will be adopted in 1995. Interim light rail station area development regulations were adopted by Washington County in July 1993 and are expected to be adopted by the three cities in early 1994.

Portland: Hillsboro Corridor



South LRT
Salt Lake City, Utah
(October 1993)

Description

The Utah Transit Authority (UTA) plans to construct a 15- to 17-mile at-grade light rail line from downtown Salt Lake City to suburban areas to the south. The line would be an at-grade facility located on downtown streets and in a railroad right-of-way owned by UTA. The project is currently estimated to cost \$275 million (1992 dollars), including expanded bus service, maintenance facilities, and park-and-ride centers.

Status

FTA approved the initiation of preliminary engineering in February 1991. A supplemental draft EIS is being prepared. Preliminary engineering is expected to be completed in March 1994.

UTA is considering significant changes to the project in reaction to the November 1992 defeat of the sales tax referendum which was necessary to fund the local share of the project as originally defined. A first phase implementation plan would have fewer stations and sections of single track, but the length of the alignment would remain the same. Although funding constraints on the local share of the project costs have led to the planned phasing of the LRT project, UTA assumes that the full project will eventually be built. The information in this profile reflects the full-build project.

Section 3035(f) of ISTEA directs FTA to enter into a multiyear grant agreement with the Utah Transit Authority which includes \$131 million to carry out the construction of the initial segment of the locally preferred alternative. Discussions on a full funding grant agreement are underway.

Through FY 1994, Congress has appropriated \$24 million for advanced right-of-way acquisition, engineering, and design.

UTA purchased Union Pacific Railroad right-of-way for the southern 13 miles of the proposed project. FTA provided \$12.5 million in Federal participation for this acquisition.

Justification

Mobility Improvements. The LPA would increase transit trips in year 2010 to 96,800, compared with 90,800 for the TSM alternative. The 1991 transit travel time between Sandy (the southern terminus of the proposed project) and Salt Lake City was 76 minutes. The LPA would reduce this travel time to 59 minutes in the year 2010.

South LRT -- Salt Lake City, Utah

The projected difference in average travel time in 2010 between the TSM and LPA alternatives is 6 minutes, a 9 percent improvement.

Cost Effectiveness. The locally preferred alternative has a cost effectiveness index of \$4 per new transit trip (1992 dollars, 2010 ridership). The LRT cost estimate assumes a bare bones design.

Environmental Benefits. The Salt Lake City region is a "moderate" nonattainment area for ozone and a "not classified" nonattainment area for carbon monoxide. The air quality analysis for the draft EIS found that the build alternatives would reduce regional emissions by no more than 1 percent, and would have negligible impact at local receptors.

Operating Efficiencies. The systemwide operating cost per passenger in year 2010 (1992 dollars) is estimated to be \$2.04 for the No Build alternative, \$2.73 for the TSM alternative, and \$2.35 for the locally preferred alternative. The current cost per passenger is \$2.33.

Local Financial Commitment

A revised finance plan calls for \$50 million of Section 3 funds, \$100 million of Federal Highway Demonstration funds, and \$50 million in local funds.

The capital finance plan relies heavily on the availability of Highway Demonstration funds. However, such funds have not been authorized or appropriated for this project. The local share of the capital costs relies, in part, on an increase in the state gas tax. This tax increase has not yet been approved by the Utah Legislature. Based on these concerns, the capital financing plan is rated "low."

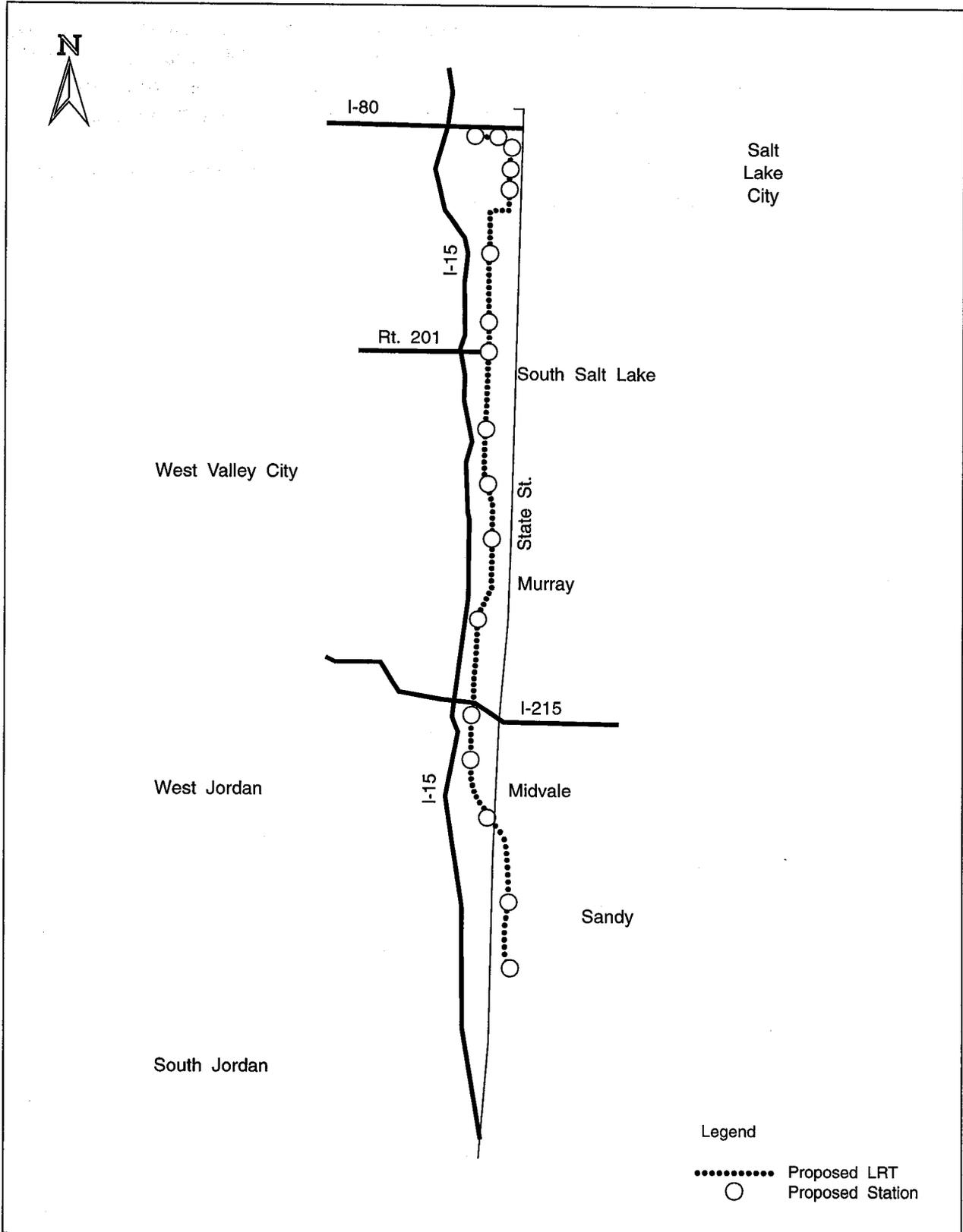
Salt Lake City receives a "low" rating for the stability and reliability of local operating funds. Although a referendum that would have raised UTA's current 1/4 cent sales tax by 3/16 cent was defeated in the November 1992 election, the proposed finance plan assumes that an additional 1/4 percent sales tax will provide operating funds for this project in year 2001. Furthermore, in September 1993, the Wasatch Front

South LRT -- Salt Lake City, Utah

Regional Council decided that LRT cannot be paid for with a tax increase. Without the additional revenue of the increase in the sales tax, UTA may lack the resources to operate both a LRT line and its expanded bus system. UTA will need to demonstrate that it has a stable and reliable revenue base to operate the overall proposed transit system.

In 1992 the average age of UTA's bus fleet was 6.3 years, which is better than the national average.

Salt Lake City: South LRT



Airport Corridor
San Francisco, California
(October 1993)

Description

The Bay Area Rapid Transit (BART), San Mateo County Transit District (SamTrans), and the Metropolitan Transportation Commission (MTC) have selected as the locally preferred alternative (LPA) a 6.4-mile, three station BART extension from Colma to an external intermodal station near San Francisco International Airport. The project is estimated to cost \$960 million (escalated dollars). However, alternate termini which could reduce costs and impacts are also under consideration.

Status

The draft EIS was completed in 1992 and a locally preferred alternative was selected. Preliminary engineering and a Supplemental DEIS/Recirculated DEIR are underway. New alignments are being considered in the environmental documents and a new proposed alignment for implementation is expected to be selected in spring 1994. BART expects to complete the final environmental documents in September 1994.

Section 3032(c) of ISTEA directs FTA to approve the construction of the locally preferred alternative for the BART San Francisco International Airport Extension, including Phase 1a to Colma and Phase 1b to San Francisco Airport. Section 3032(c)(2) mandates the execution of a multiyear grant agreement with BART to permit expenditure of funds for the construction of the BART airport extension. The Federal share of the project is not to exceed 75 percent of the project cost unless Metropolitan Transportation Commission Resolution 1876 is modified to state otherwise.

Through FY 1994, \$254 million of the \$568.5 authorized by ISTEA in Section 3 New Start funds has been appropriated for metropolitan San Francisco with the provision that the MTC allocate the funds among the Colma BART extension, the BART Airport project and the Tasman LRT project. The affected agencies are currently working with MTC to determine this allocation. The Bay Area hopes to obtain a contingent commitment that would allow all three projects to be built simultaneously.

Justification

The project is exempt from the 3(i) criteria because the Federal share of the regional transit improvement program is less than 33 percent.

Mobility Improvements. The BART extension to the Airport would improve transit access from San Francisco and the East Bay to the Airport and would also improve transit service along the Peninsula to

Airport Corridor -- San Francisco, California

San Francisco. The LPA would save about 7500 hours of transit travel time per day over the TSM alternative in 2010.

Cost Effectiveness. The cost effectiveness index for the LPA is \$22.53 per new trip (1993 dollars, 2005 ridership).

Environmental Benefits. The San Francisco Bay Area is a "moderate" nonattainment area for ozone and a "moderate ≤ 12.7 " nonattainment area for carbon monoxide. The Airport BART extension is forecast to reduce regional vehicle miles traveled by less than 1 percent over the No-Build alternative, and only 0.1 percent compared with the TSM alternative. Thus it would have minimal impact on regional air quality. In addition, the LPA would have serious adverse impacts on wetlands and endangered and threatened species. Alternatives are being considered in a supplemental DEIS which would significantly reduce the impact.

Operating Efficiencies. Compared with the TSM alternative, a BART-Airport extension would increase systemwide operating costs from \$1.73 to \$1.77 per rider (1993 dollars).

Local Financial Commitment

A regional financing agreement has tied this project to other fixed guideway projects in San Francisco, Alameda, and Contra Costa Counties. The regional plan calls for 100 percent local funding of East Bay projects and 75 percent Section 3 funding of this project, resulting in a 27 percent Section 3 funding share of the entire region's fixed guideway extension program of projects.

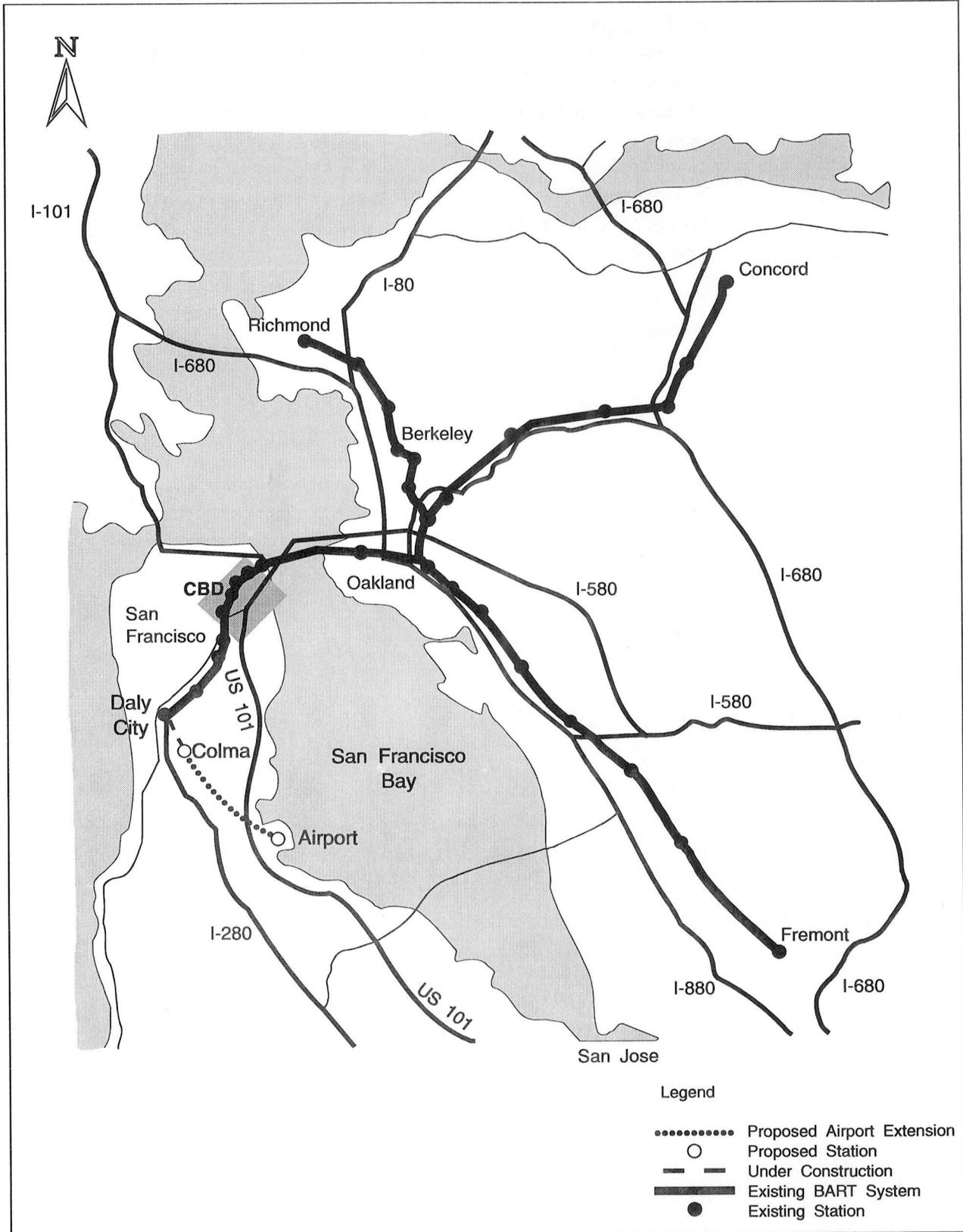
Many of the local and state funding mechanisms called for in the original regional capital financing plan are in place. Furthermore, although State Proposition 156 bonding authority failed in a November 1992 referendum, the BART extension money included in this Proposition has been replaced by other State money. However, specific funding sources have not been identified for the \$173 million cost of alignment modifications to the project requested by the cities of South San Francisco, San Bruno and Colma. Capital cost estimates for many of the other projects have escalated substantially and a \$153 million shortfall exists for the Warm Springs extension. The MTC is currently revising the financing plan to address the shortfall, however, BART feels that design modifications and alignment adjustments can be adopted which would eliminate the shortfall. Therefore, the capital financing plan is currently rated "medium."

Airport Corridor -- San Francisco, California

Existing dedicated sales taxes could support a modest SamTrans and BART expansion. Therefore, the stability and reliability of operating assistance have been rated "medium." However, there is some concern because the capital shortfall for expansions and capital replacement may negatively impact operating assistance in the out years of the financial plan.

In 1992 the average age of SamTrans bus fleet was 8.1 years, which is comparable to the national average. BART's rail vehicles averaged 14.7 years old.

San Francisco: Colma and Airport Extensions



PROJECTS IN ALTERNATIVES ANALYSIS

Austin - Northwest/North Central Corridor

Austin, Texas
(October 1993)

Description	Capital Metro has resumed its alternatives analysis to evaluate transit alternatives in the 14-mile Northwest/North Central Corridor. The 14-mile light rail alternative would use an at-grade alignment that will make use of both street and railroad right-of-way. Alignment options exist in the downtown area and north Austin. The total estimated cost of the light rail alternative is \$304 million (escalated dollars).
Status	<p>FTA approved the resumption of alternatives analysis in November 1992. Capital Metro is currently updating its transportation forecasting models. Capital Metro's schedule calls for the completion of a draft EIS in spring 1994. Capital Metro plans to hold a bond referendum after the draft EIS is circulated, probably in September 1994. Capital Metro recently completed a station area and planning project to begin the process of linking land use planning with transit infrastructure investments.</p> <p>Congress has not authorized or appropriated any funds for this project.</p>
Justification	<p><u>Mobility Improvements.</u> The North Central/Northwest corridor has an exceptionally large number of jobs for a city the size of Austin. Information on the mobility improvements of the various alternatives will be developed during alternatives analysis.</p> <p><u>Cost Effectiveness.</u> In the prior alternatives analysis study, the most cost effective light rail alternative had an index of \$15/new rider. Updated indices will be developed during alternatives analysis.</p> <p><u>Environmental Benefits.</u> Austin is in attainment of the National Ambient Air Quality Standards for ozone and carbon monoxide. FTA has no information about the reduction in emissions that would result from any of the alternatives. Environmental benefits will be addressed in the draft EIS.</p> <p><u>Operating Efficiencies.</u> FTA has no information on the operating efficiencies that would result from the alternatives. This information will be contained in the draft EIS.</p>
Local Financial Commitment	Capital Metro is expected to seek Section 3 New Start funding for 50 percent of the cost of a 14-mile starter system. When Capital Metro was formed back in 1985, it was authorized to collect up to one percent

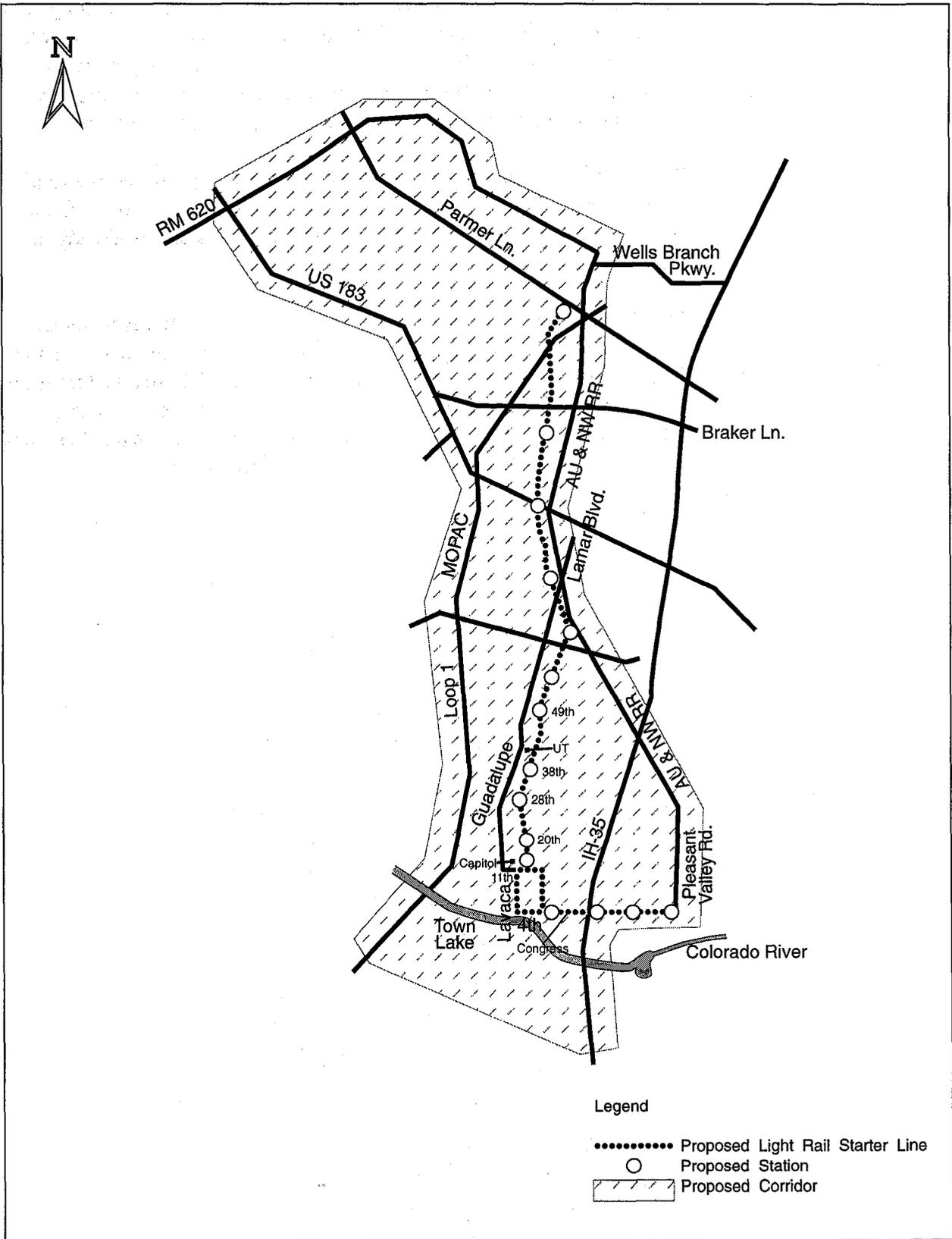
Northwest/North Central Corridor -- Austin, Texas

in sales tax to support operations and capital programs. Presently, three quarters of one cent is being collected. Early projections indicate that a 50 percent local share of the capital investment could be generated without an increase in the 3/4 percent sales tax. A bond referendum would be required to approve funding for the proposed project.

Capital Metro's Board recently raised its fixed guideway reserve fund from \$5 million to \$8.5 million. FTA has rated Austin's capital financing plan as "high" since a funding source for the local share is already in place.

The stability and reliability of Capital Metro's operating revenues are rated "high". Operating costs are covered by the 3/4 percent sales tax, farebox revenues, and Federal assistance. Capital Metro's system is being more than sufficiently maintained and replaced through continuing reinvestment. In 1992 the average age of Capital Metro's bus fleet was 6.6 years, which is better than the national average.

Austin: Northwest/North Central Corridor



Legend

- Proposed Light Rail Starter Line
- Proposed Station
- ▨ Proposed Corridor

Red Line Relocation, Dual Hub Corridor

Cleveland, Ohio

(October 1993)

Description

The Dual Hub corridor connects two major employment centers, downtown Cleveland and University Circle, which are 5.6 miles apart. Cleveland's existing Red Line just touches the edges of these employment centers. Between them, the Red Line follows an old industrial railroad alignment well south of the busiest transit corridor on the eastside. The LRT-like Red Line and the Shaker Heights LRT lines serve only a single station in downtown. This study is considering alternatives for relocating the eastside Red Line farther north and connecting in the Shaker Heights lines so that all lines serve the major employment sites at University Circle, then follow the busiest eastside bus route to downtown with multiple stations in the heart of downtown.

The alternative considered most likely to be selected as the locally preferred alternative follows Euclid Avenue. It would be in subway downtown and on the street outside of downtown. The latest capital cost estimate is \$489 to \$536 million (escalated dollars).

Status

The Greater Cleveland Regional Transit Authority (GCRTA) is using a tiered approach to project decision making. A draft EIS has been prepared to help narrow the large number of rail alignment alternatives. In a second phase of alternatives analysis, GCRTA will correct deficiencies in its traffic demand models, ridership estimates, cost effectiveness indices, and cost estimates, leading to a supplemental draft EIS evaluating the No-Build, TSM, and best rail alternatives. The estimated completion date of this phase is late 1994, after which GCRTA will proceed with preliminary engineering on a locally preferred alternative.

Section 3035(t) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with GCRTA to complete the alternatives analysis. Through FY 1994, Congress has appropriated \$11.24 million in New Start funds for the project.

Justification

Mobility Improvements. It is not yet known whether the relocation of the rail line will attract sufficient new riders and save present riders enough travel time to justify the major expense. A well-designed TSM alternative may accomplish the same objectives at a much lower cost.

Red Line Relocation, Dual Hub Corridor -- Cleveland, Ohio

The rationale for the project is that: (1) the rail system does not serve the entire downtown, so many rail passengers must use the downtown loop buses to reach their final destinations, (2) the current eastside alignment misses the best transit corridor on that side of town, (3) dwindling ridership has resulted in under utilization of a rail system that is expensive to maintain and operate, and (4) the city would like to focus new development in the Dual Hub Corridor.

Cost Effectiveness. FTA has not yet evaluated the cost-effectiveness of a major transit investment in the corridor. This information will be developed in the second phase of alternatives analysis.

Environmental Benefits. EPA classifies Cleveland as a "moderate" nonattainment area for ozone and as a "moderate ≤ 12.7 " nonattainment area for carbon monoxide (CO). Although the VMT analysis is incomplete, FTA expects the project to have minimal impact on regional pollutants such as ozone because of its relatively small attraction of new transit riders. However, the project may have a measurable impact on peak-period CO concentrations in downtown because it would eliminate the need for most downtown loop and Euclid Avenue buses in downtown.

Operating Efficiencies. FTA does not have information on the operating efficiencies of a major transit investment in the corridor. Such information will be developed in the second phase of alternatives analysis.

Local Financial Commitment

GCRTA's preliminary financial plan calls for funding from FTA (50 percent), the State of Ohio (10 to 12 percent), the City of Cleveland (5 percent), GCRTA (25 to 35 percent), and benefit assessment taxes (10 to 20 percent).

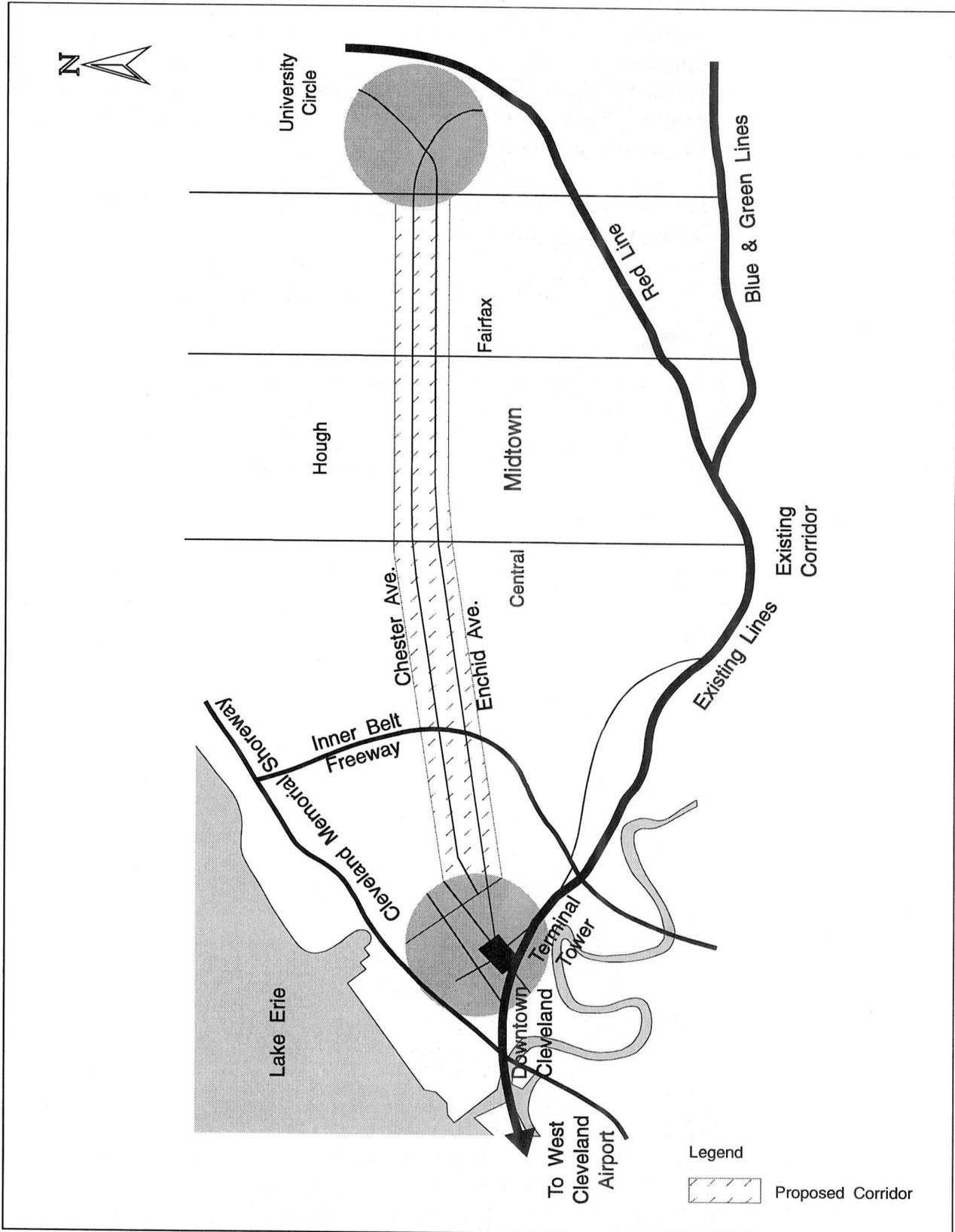
The capital financing plan for the project has been proposed but has not been adopted. The draft plan is rated "medium" for this stage in FTA's project development process. No commitments have been made by any funding partner, and State legislation to impose the special transit benefit tax assessments is not in place. Both capital and operating expenses are supported by a 1 percent sales tax in Cuyahoga County which allows GCRTA to have a modest, 100 percent locally funded capital program. However, the sales tax revenue is committed to operating and maintaining the existing system for the most part, with little left over for new initiatives.

Red Line Relocation, Dual Hub Corridor -- Cleveland, Ohio

The stability and reliability of GCRTA's operating assistance are rated as "medium." The 1 percent sales tax revenue covers 64 percent of the operating expenses, and farebox revenue covers another 25 percent. The remainder is provided by FTA (6 percent) and the State (5 percent). The recession has slowed the growth of sales tax revenues and GCRTA has had to reduce service 5 percent.

In 1992 GCRTA's existing bus fleet averaged 6.5 years old, which is better than the national average.

Cleveland: Dual Hub Corridor



Columbus Fixed Guideway
Columbus, Ohio
(October 1993)

Description This proposal involves an 11.6 mile fixed guideway facility to connect northern suburban areas with downtown Columbus and a people mover connection to Ohio State University. The Central Ohio Transit Authority's (COTA) preliminary capital cost estimates are \$43 million for the TSM and \$436 million for the light rail alternative (1992\$).

Status The Mid-Ohio Regional Planning Commission (MORPC) and COTA have examined the feasibility of providing additional transit service in several corridors around Columbus and have determined that the north corridor will have the highest level of highway congestion. COTA selected a consultant to begin alternatives analysis in July of 1993.

Congress has not authorized or appropriated funds for this corridor.

Justification Mobility Improvements. FTA does not have any information on the mobility benefits of a major transit investment in the corridor. The levels of congestion in the north corridor are increasing, with the level of service on I-71 expected to decrease from the current level of E and F to F by 2010. Additional transit service would help accomodate the projected increase in work trips to downtown Columbus.

Cost Effectiveness. A very preliminary cost effectiveness index based on COTA's system planning analysis for the light rail alternative was \$8 per new passenger (1992\$). This information will be further developed in alternatives analysis.

Environmental Benefits. Columbus, Ohio is a "marginal" nonattainment area for ozone and an attainment area for carbon monoxide. Information on the air quality benefits of a major transit investment will be developed in alternatives analysis.

Operating Efficiencies. FTA has not evaluated the operating efficiencies that would result from a major transit investment in the corridor. This information will be developed in alternatives analysis.

Local Financial Commitment The financial plan for the proposed fixed guideway assumes a Federal share of 70 percent, a 20 percent State share, and a 10 percent local share. COTA currently has a .25 percent sales tax and would need additional local revenues to implement a major transit investment. A local

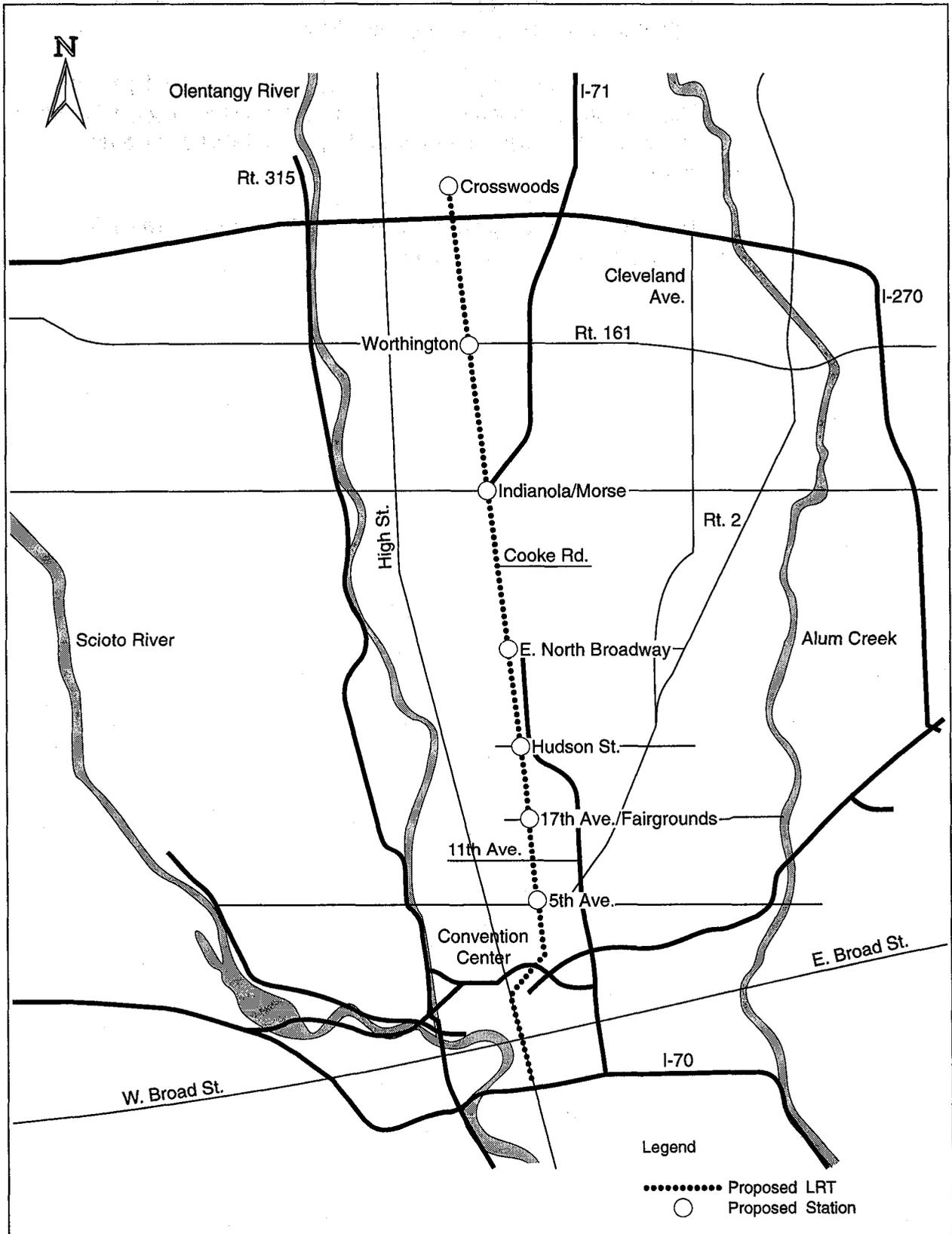
Columbus Fixed Guideway -- Columbus, Ohio

funding plan or strategy has not yet been identified. As a result, the capital finance plan is currently rated "low".

In 1995, COTA will seek to restore its local sales tax to .5 percent. This is contingent upon voter approval. At this early stage, a "medium" rating has been assigned for the stability and reliability of operating assistance.

1992 COTA's existing bus fleet averaged 7.4 years old, which is better than the national average.

Columbus: North Corridor LRT Alignment



North Central Corridor

Dallas, Texas

(October 1993)

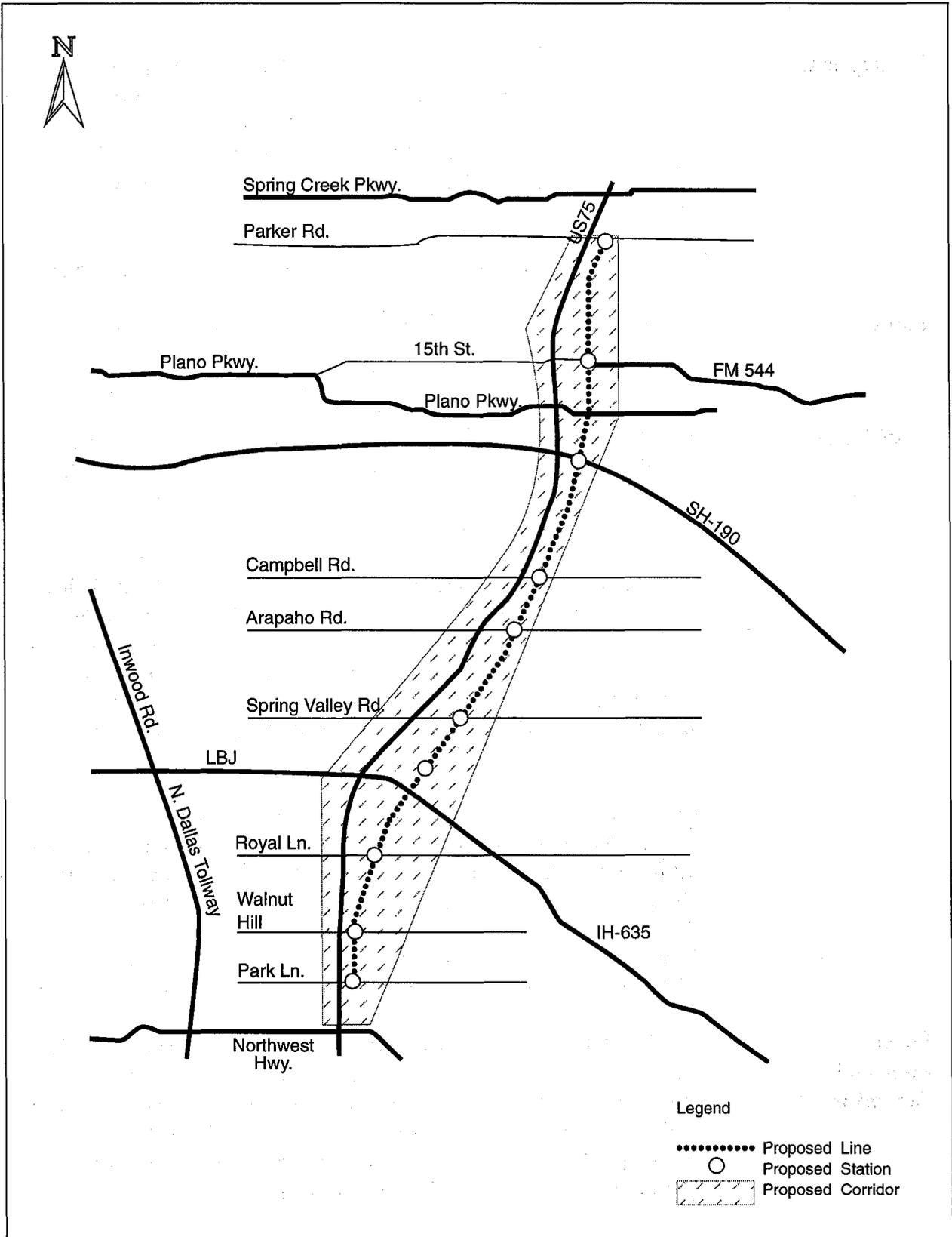
Description	<p>Dallas Area Rapid Transit (DART) is conducting an alternatives analysis to evaluate transit alternatives in the 12.2-mile North Central Corridor. The corridor, which extends beyond the terminus of the 20-mile light rail Starter System DART is presently building, includes portions of three cities: Dallas, Richardson, and Plano. Alternatives being considered include a no build alternative; transportation system management (TSM) alternative, and two light rail transit alternatives. The estimated cost of the light rail alternative is \$306 million (1993 dollars). DART estimates that ridership will be 24,300 in the corridor.</p>
Status	<p>FTA approved the initiation of alternatives analysis in August 1992. Completion of the alternatives analysis is expected around the end of 1993 and the draft EIS will be completed during preliminary engineering on the Locally Preferred Alternative, probably in 1995.</p> <p>Congress has not authorized or appropriated any funds for this corridor.</p>
Justification	<p><u>Mobility Improvements.</u> The North Central Corridor is the highest populated of any transportation corridor within the DART service area. Employment and population are expected to grow 34 percent and 11 percent respectively by the year 2010. Travel time savings have not yet been calculated.</p> <p><u>Cost Effectiveness.</u> A very preliminary cost effectiveness index is \$11 per new trip.</p> <p><u>Environmental Benefits.</u> Dallas is a "moderate" nonattainment area for ozone and an attainment area for carbon monoxide. The alternatives analysis will generate information on the extent to which a transit investment would reduce emissions.</p> <p><u>Operating Efficiencies.</u> FTA has no information on the operating efficiencies that would result from a major transit investment in this corridor.</p>
Local Financial Commitment	<p>DART is seeking Section 3 New Start funding for 80 percent of the cost of whatever project results from the alternatives analysis.</p>

North Central Corridor -- Dallas, Texas

With a 1 percent sales tax, DART is in very good financial condition to build the 20-mile system. In the past, the sales tax has provided DART with a cash surplus after systemwide operating and capital expenses. DART has no long term debt. However, whether the 1 percent sales tax alone is sufficient to build the starter line as well as build future extensions without Federal assistance and future cash infusions is being examined as part of DART's financial planning process. FTA has rated DART's capital financing plan as "medium" given the preliminary stage of planning and the fact that the 1 cent sales tax is likely to be able to fund a portion of the planned extensions.

The stability and reliability of DART's operating revenues are rated "high" because of their continuous ability to operate the existing system and to replace capital equipment on a timely basis. In 1992 DART's bus fleet averaged 7.8 years old, which is comparable to national average.

Dallas: North Central Corridor



Southwest Corridor

Denver, Colorado

(October 1993)

Description

An ongoing alternatives analysis is evaluating light rail, busway, commuter rail, and TSM alternatives in the 14-mile corridor between the edge of downtown Denver and the Highlands Ranch community in northern Douglas County. The alternatives would connect with the locally funded "MAC" light rail line currently under construction in downtown Denver.

Preliminary capital costs (1992 dollars) range from \$75-130 million.

Status

Completion of the alternatives analysis is expected in May 1994.

Congress has not authorized or appropriated any funds for this corridor.

Justification

Mobility Improvements. FTA has no quantitative information on the mobility benefits of a major transit investment in the corridor. The proposed fixed guideway would be parallel and adjacent to the HOV lanes being developed along South Santa Fe Drive.

Cost Effectiveness. In system planning, RTD calculated a preliminary cost-effectiveness index of \$1 per new trip for the busway and \$6 for LRT. FTA questioned a number of assumptions underlying this analysis. In addition, some of the benefits identified in system planning will be achieved by the locally funded MAC extension to I-25 (under construction). RTD is in the process of computing revised cost effectiveness indices in alternatives analysis.

Environmental Benefits. Denver is classified as a "transitional" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. The alternatives analysis will generate information on the extent to which a transit investment would reduce emissions.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from a major investment in the corridor.

Local Financial Commitment

The Federal share of this project is assumed to be 80 percent. A financial plan will be developed during alternatives analysis. Existing sources of revenue available to RTD include sales and use taxes, investment income, and farebox revenues. Potential additional sources of funds will be investigated, such as cost reduction techniques, funding strategies proposed in ISTEA, and other types of taxes and fees.

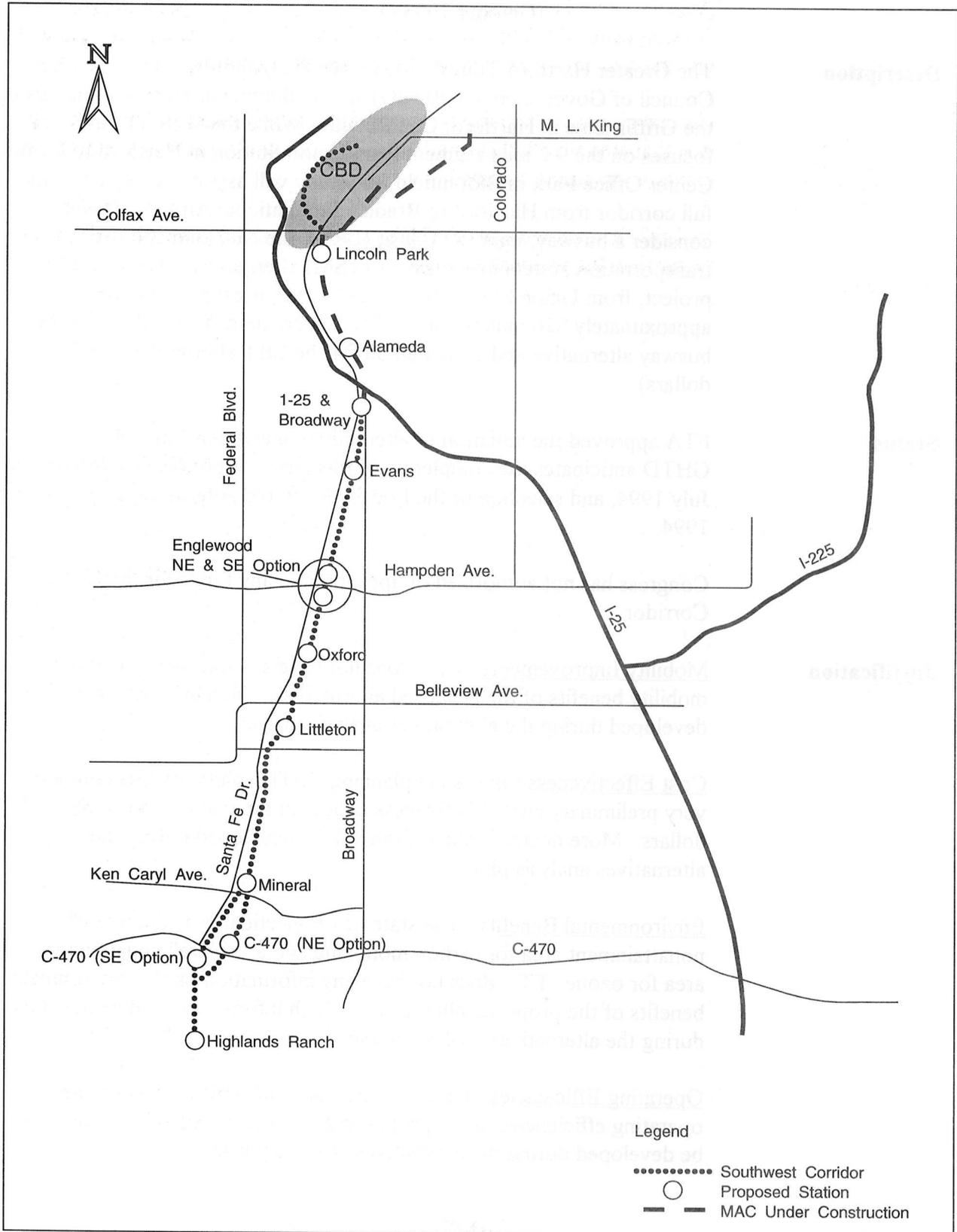
Southwest Corridor -- Denver, Colorado

Denver's capital financing plan is rated as "low" at this point in project development. RTD has not yet identified a funding strategy to build and operate a major investment in the Southwest Corridor.

The stability and reliability of its operating plan is rated as "medium". It is anticipated that RTD would be able to operate a major investment and continue operating its existing system.

In 1992 the average age of RTD's bus fleet was 7.2 years old, which is better than the national average.

Denver: Southwest Corridor



Griffin Line Corridor
Hartford, Connecticut
(October 1993)

Description

The Greater Hartford Transit District (GHTD) and the Capitol Region Council of Governments (CRCOG) are conducting alternatives analysis on the Griffin Line in Hartford, Connecticut. While the Griffin Line Study focuses on the 9.2 mile segment from Union Station in Hartford to Griffin Center Office Park in Bloomfield, the study will assess the impact of the full corridor from Hartford to Bradley International Airport. It will consider a busway, light rail transit (LRT), the No Build and the transportation system management (TSM) alternatives. The cost of the project, from Union Station to Griffin Center, is estimated to be approximately \$26 million for the TSM alternative, \$99 million for the busway alternative and \$162 million for the LRT alternative (1992 dollars).

Status

FTA approved the initiation of alternatives analysis in June 1993. The GHTD anticipates the completion of this phase of project development by July 1994, and selection of the Locally Preferred Alternative in September 1994.

Congress has not authorized or appropriated any funds for the Griffin Line Corridor.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of the proposed alternatives. Such information will be developed during the alternatives analysis phase.

Cost Effectiveness. In system planning, GHTD and CRCOG computed very preliminary cost effectiveness indices in the range of \$4 to \$8 in 1992 dollars. More detailed information will be developed during the alternatives analysis phase.

Environmental Benefits. The state of Connecticut is a "moderate" nonattainment area for carbon monoxide and a "severe" nonattainment area for ozone. FTA does not have any information on the environmental benefits of the proposed alternatives. Such information will be developed during the alternatives analysis phase.

Operating Efficiencies. FTA does not have any information on the operating efficiencies of the proposed alternatives. Such information will be developed during the alternatives analysis phase.

Griffin Line Corridor -- Hartford, Connecticut

Local Financial Commitment

GHTD is working closely with the CT Department of Transportation, the CT State Legislature, CRCOG and private sector representatives to design a workable financing plan for the corridor. The CT State Legislature has mandated that a comprehensive capital and operating financing plan be submitted for their consideration in the Spring 1994 Session. Potential new revenue sources will be identified and evaluated during the alternatives analysis phase.

A "low to medium" rating for the capital financing commitment is appropriate since the design of the financing plan is still in progress.

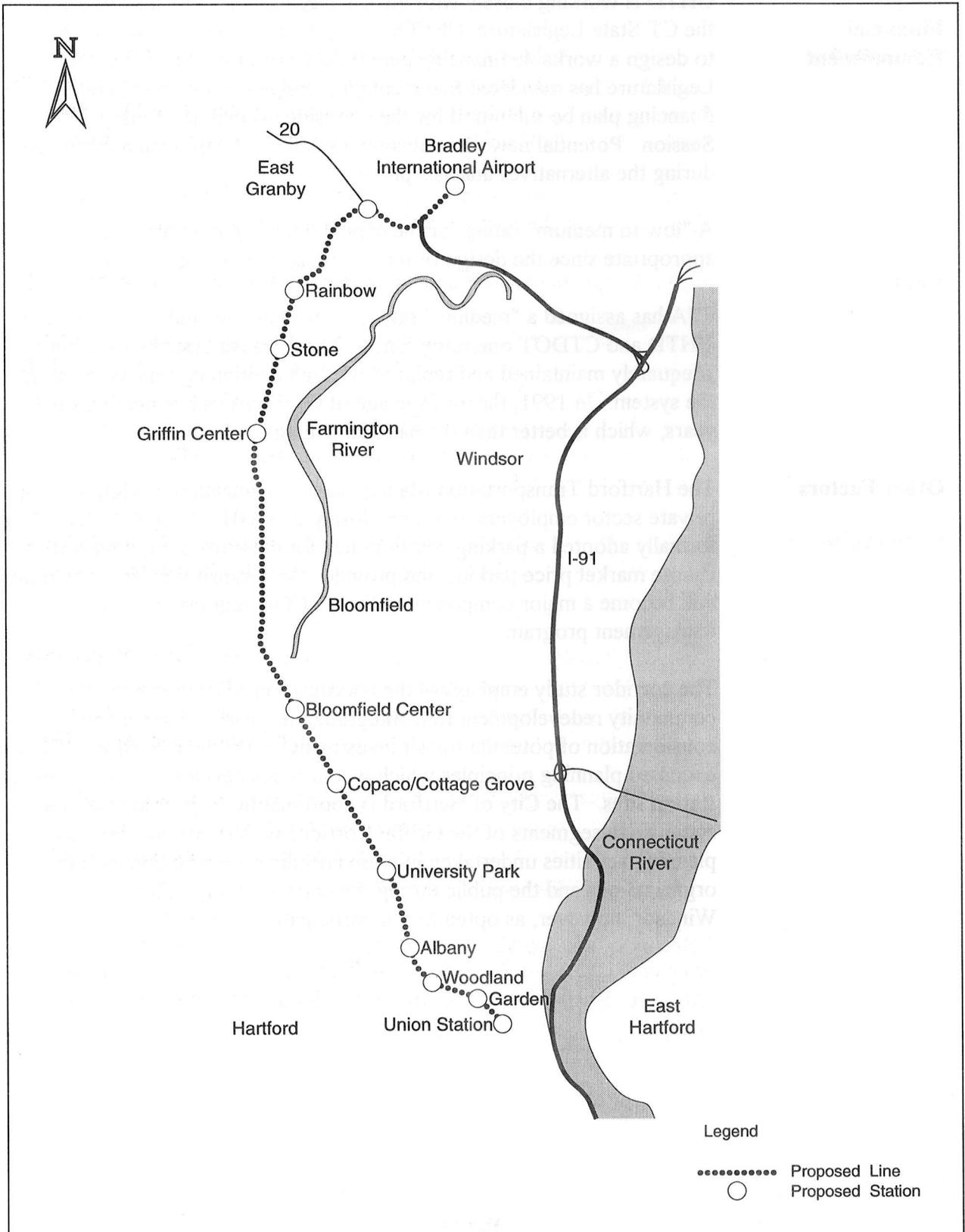
FTA has assigned a "medium" rating for the stability and reliability of GHTD and CTDOT operating funds. These transit systems have been adequately maintained and replaced through continuing reinvestment in the system. In 1991, the average age of CT Transit's bus fleet was 6.3 years, which is better than the national average.

Other Factors

The Hartford Transportation Management Organization (TMO) and major private sector employers, working closely with GHTD and CRCOG, have formally adopted a parking/transit policy for downtown employers to charge market price parking and provide a \$60 transit subsidy. The policy will become a major component in the CRCOG regional demand management program.

The corridor study emphasizes the coordination of economic and community redevelopment fully integrated into early planning and consideration of potential transit investment. The Town of Bloomfield has endorsed planning principles which would focus development at potential station sites. The City of Hartford is coordinating major redevelopment activities in segments of the Griffin Corridor with transit and land use planning activities undertaken in close coordination with community organizations and the public during the corridor study. The Town of Windsor, however, has opted to not participate in the study.

Hartford: Griffin Line Corridor



Southtown Corridor

Kansas City, MO

(October 1993)

Description

The Kansas City Area Transportation Authority (KCATA) is performing an alternatives analysis in the Southtown Corridor. The corridor extends from the riverfront and downtown Kansas City south to I-435. The alternatives being considered include several LRT and bus options.

KCATA's preliminary capital cost estimate for a 10-to-11-mile LRT alternative is in the range of \$200-260 million (1993 dollars).

Status

KCATA expects to select a locally preferred alternative in March 1994.

Section 3035(k) of ISTEA directs FTA to enter into a multiyear grant agreement in the amount of \$5.9 million with the KCATA to provide for the completion of alternatives analysis and preliminary engineering. In 1993, Congress appropriated \$1.1 million for the completion of alternatives analysis and preliminary engineering. No funds were appropriated in FY 94.

Justification

Mobility Improvements. Quantitative information on each alternative's mobility benefits will be developed in the current alternatives analysis study.

Cost Effectiveness. Early system planning indicated that fixed guideway transit would not be particularly cost effective in this corridor. However, the current study is developing new estimates of cost and ridership based on more detailed analyses. The results will be available in early 1994.

Environmental Benefits. The Kansas City metropolitan area is in attainment of the ozone and carbon monoxide standards. The alternatives analysis will generate information on the extent to which a transit investment would affect emissions.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from a major transit investment in the corridor. Such information will be developed in the current alternatives analysis.

Southtown Corridor -- Kansas City, Missouri

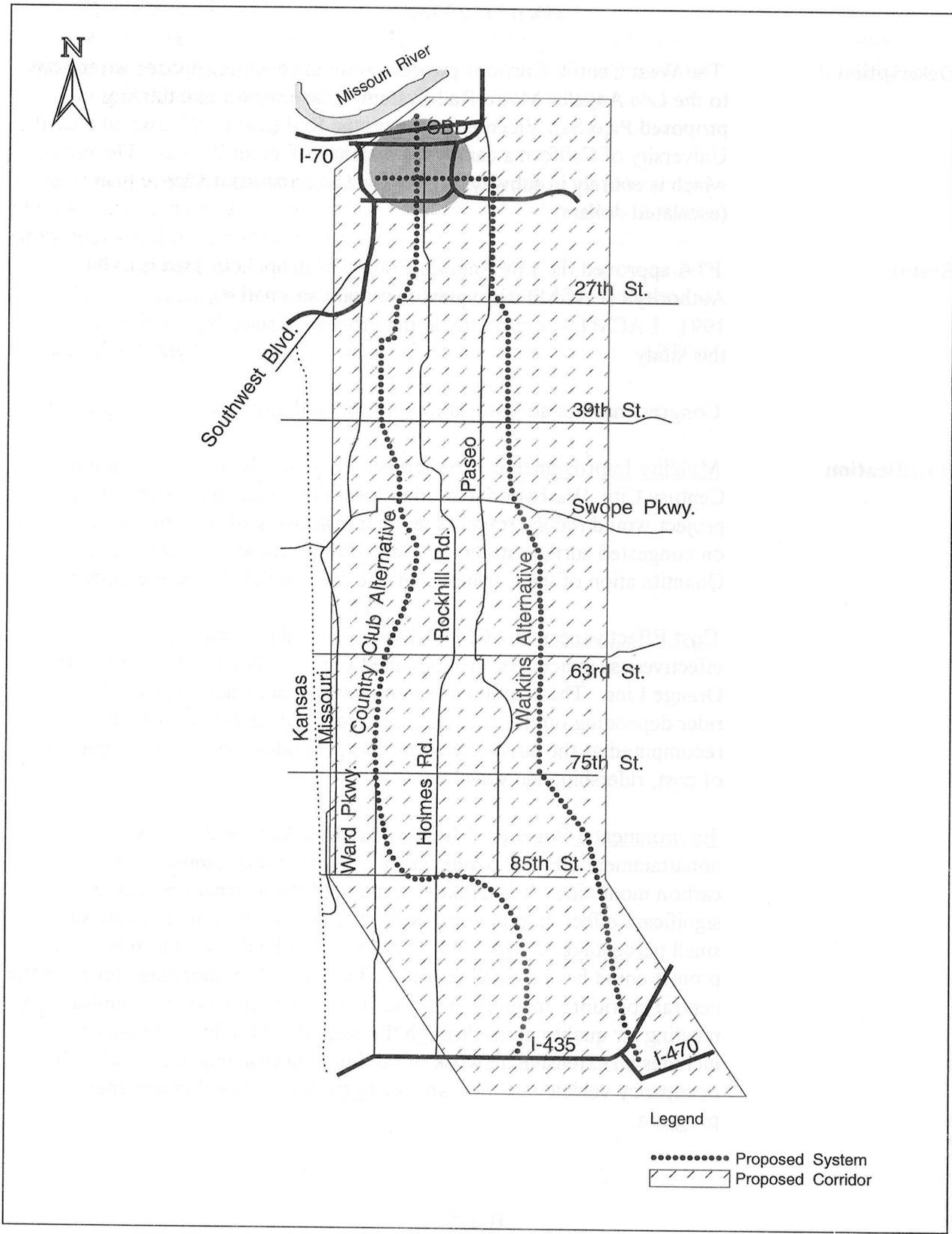
Local Financial Commitment

The Section 3 share of this project is assumed to be 80 percent. No source of local capital funding has yet been identified. The capital financing plan is rated as "low-medium" since KCATA does not yet have a financing strategy but is attempting to develop a State funding program.

The stability and reliability of the operating and maintenance plan is also rated "low-medium" at this time. The financial analysis performed during system planning concluded that the transit agency lacked the resources to build and operate a major transit project. A financial plan is to be developed as part of the current alternatives analysis.

In 1992 the average age of KCATA's bus fleet was 7.4 years, which is comparable to the national average.

Kansas City: South Corridor



West Central Corridor

Los Angeles, California

(October 1993)

Description

The West Central Corridor project is one of several proposed extensions to the Los Angeles Metro Rail System. The corridor extends from the proposed Pico/San Vicente station on the Red Line to Westwood near the University of California campus, a distance of about 7 miles. The project, which is entirely in subway, is estimated to cost about \$2.8 billion (escalated dollars).

Status

FTA approved the Los Angeles County Metropolitan Transportation Authority's (LACMTA) request to initiate alternatives analysis in July 1991. LACMTA is currently in the process of selecting a consultant for this study.

Congress has not authorized or appropriated any funds for this project.

Justification

Mobility Improvements. The project would connect the Red Line to Century City, Westwood and other locations to be determined. This project would reduce travel time for transit users who currently ride buses on congested surface streets between downtown and the west side. Quantification of these benefits will be done in the alternatives analysis.

Cost Effectiveness. LACMTA has calculated preliminary cost effectiveness indices for the combined East and West Extensions of the Orange Line. These preliminary indices vary between \$9 and \$10 per new rider depending on the alignment selected. These indices will be recomputed as the alternatives analysis generates more refined estimates of cost, ridership, and travel time.

Environmental Benefits. Metropolitan Los Angeles is an "extreme" nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. It is unlikely that any of the alternatives would have a significant effect on pollution levels at the regional scale, because such a small percentage of regional auto trips would be diverted to transit. The project could have a small positive effect on carbon monoxide levels in the central corridor. In addition, the project is part of a larger commitment to meeting air quality goals through the Regional Mobility Plan which includes an extensive network of rail lines, electric bus lines, and high occupancy vehicle facilities, and an aggressive demand management program.

West Central Corridor -- Los Angeles, California

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from a major investment in the corridor.

Local Financial Commitment

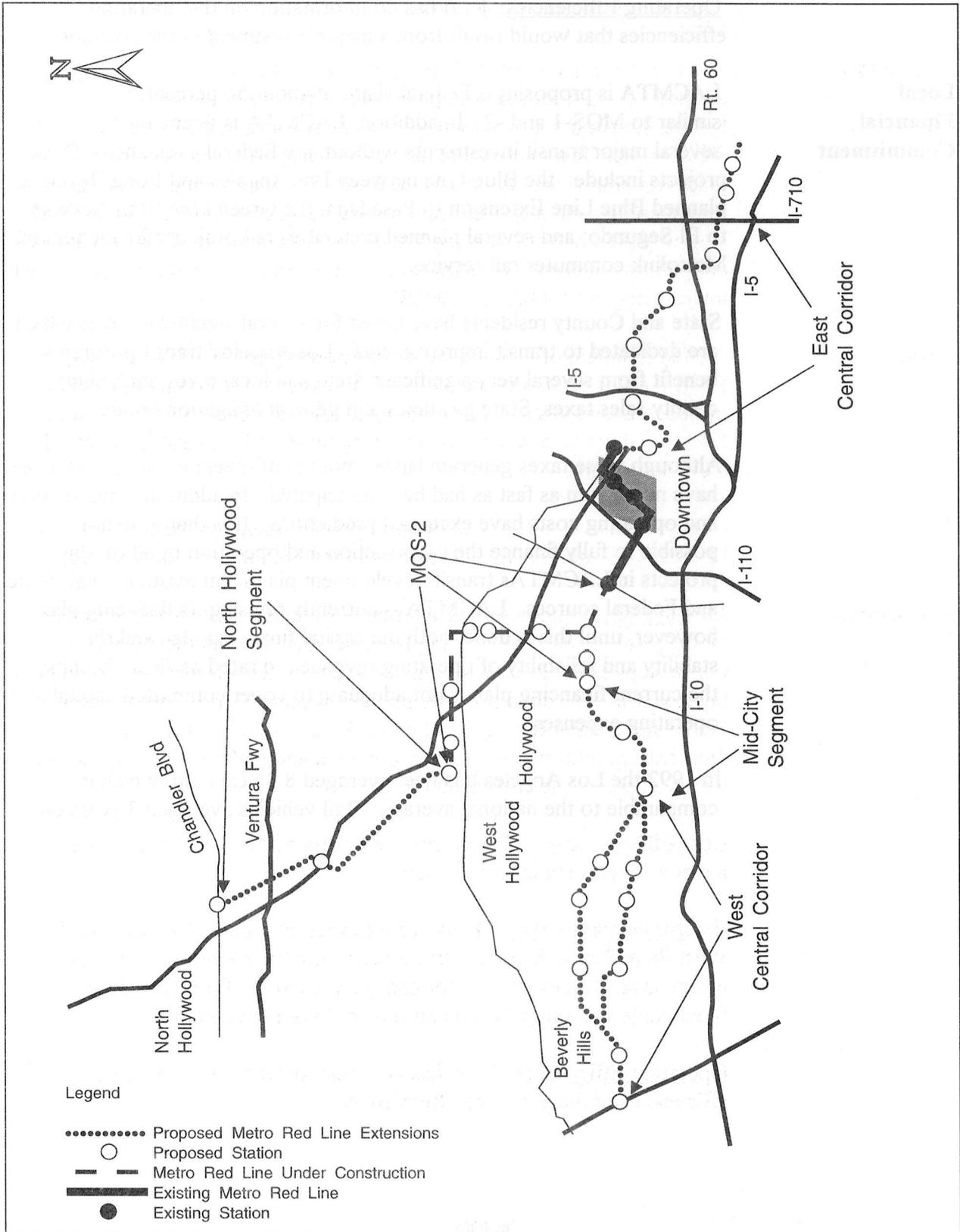
LACMTA is proposing a Federal share of about 50 percent, similar to MOS-1 and -2. In addition, LACMTA is financing several major transit investments without any Federal assistance. These projects include: the Blue Line between Los Angeles and Long Beach; a planned Blue Line Extension to Pasadena; the Green Line from Norwalk to El Segundo; and several planned commuter rail projects for the region's Metrolink commuter rail service.

State and County residents have voted for several significant taxes which are dedicated to transit improvements. Los Angeles' transit programs benefit from several very significant State and local taxes, including county sales taxes, State gas taxes and general obligation bonds.

Although these taxes generate large amounts of revenue, the tax revenues have not grown as fast as had been anticipated. In addition, construction and operating costs have exceeded predictions. It is therefore not possible to fully finance the construction and operation of all of the projects in LACMTA's transit development plan from existing local, State and Federal sources. LACMTA is currently revising its financing plan, however, until this is done, both the capital financing plan and the stability and reliability of operating revenue are rated as "low" because the current financing plan is not adequate to cover committed capital and operating expenses.

In 1992 the Los Angeles bus fleet averaged 8.3 years old, which is comparable to the national average. Rail vehicles averaged 3 years old.

Los Angeles: West Central Corridor



Airport to Seaport Corridor

Miami, Florida
(October 1993)

Description

The Florida Department of Transportation (FDOT) has recently begun a multimodal corridor study to investigate a variety of new facilities for linking the airport, downtown Miami, the seaport, and Miami Beach. The facilities include a multimodal terminal, an airport to seaport fixed guideway transit facility, and State Route 836 improvements. A variety of technology and alignment options are being considered. The Federal Highway Administration is the lead Federal agency with FTA serving as a cooperating agency. A preliminary capital cost of estimate for the overall undertaking is \$1.4 billion (1992\$).

Status

A Memorandum of Understanding has been signed by FHWA, FTA, FAA, the Coast Guard, and MARAD to assist in the completion of the project planning phase. The ongoing study will generate information that FTA could use to evaluate any resulting projects for possible Section 3 New Start funds.

Congress has not authorized or appropriated funds for the corridor. The Florida DOT and FHWA have contributed \$8.5 million for the study.

Justification

Mobility Improvements. The alternatives are intended to help improve mobility for tourists transferring from rail facilities and the Airport to cruise ships at the Port of Miami. In addition, the alternatives would help improve travel to downtown Miami, the airport, Florida International University, Miami Beach, the Orange Bowl, and other attractions. Quantitative information on the mobility benefits of the alternatives will be developed in the current study.

Cost Effectiveness. FTA has not yet evaluated the cost effectiveness of a major investment in this corridor.

Environmental Benefits. EPA has classified the Miami-Ft. Lauderdale, West Palm Beach Area as a "moderate" nonattainment area for ozone. Miami is an attainment area for carbon monoxide. Possible effects of the fixed guideway extensions on air quality have not been quantified.

Operating Efficiencies. FTA has no information on the operating efficiencies of the proposed alternatives.

Airport to Seaport Corridor -- Miami, Florida

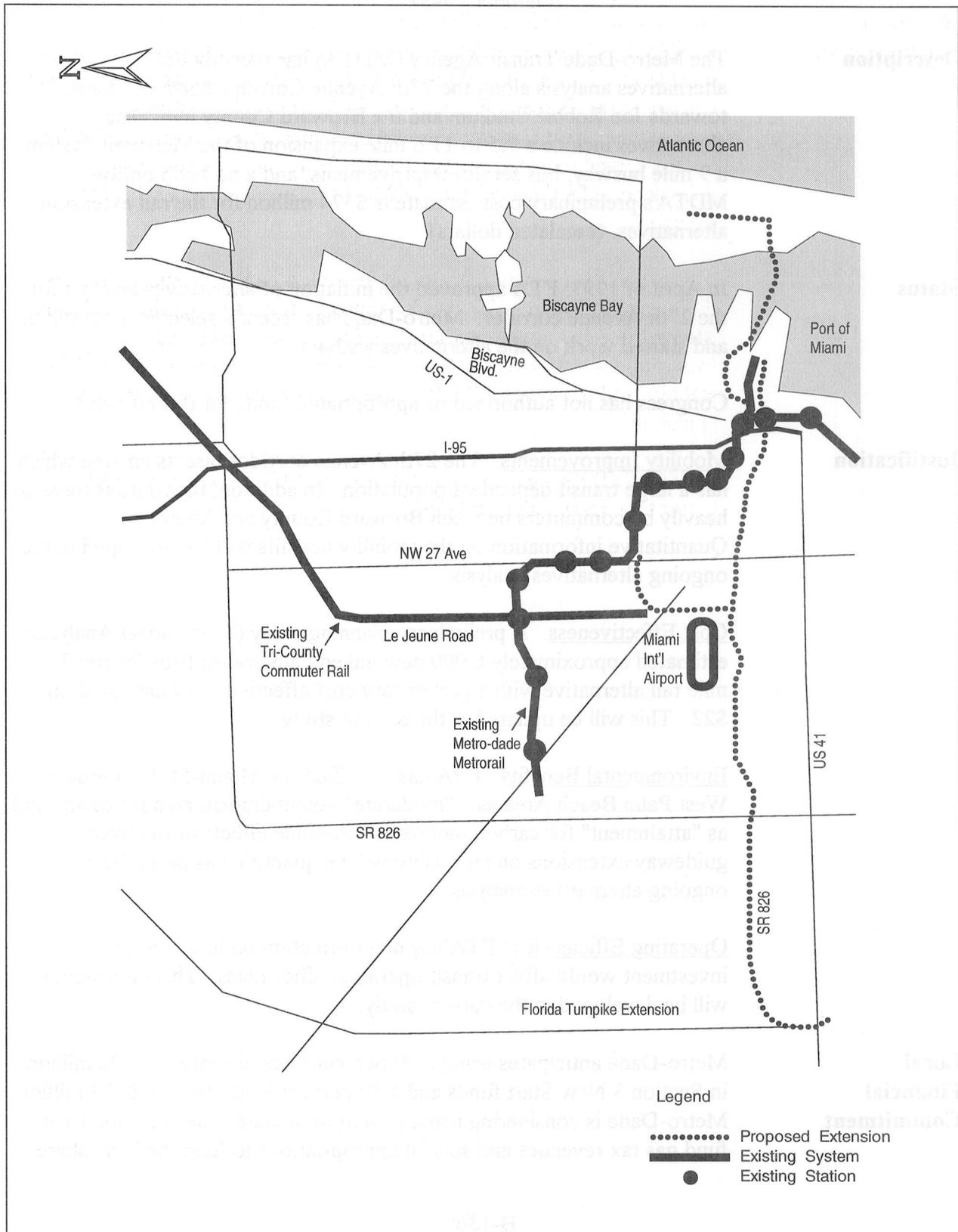
Local Financial Commitment

A preliminary financing strategy for the \$1.4 billion undertaking envisions \$412 million in Section 3 New Start funds, \$428 million in flexible ISTEA funds, \$280 million in State funds, and \$280 million in local funds. This proposed project financing would require a 60 percent Federal share. Specific sources for the State and local share have not yet been identified. At this early planning stage, a "medium" rating for the capital finance plan has been assigned since a preliminary strategy is in place. The financial plan will be further developed in the current study.

Metro-Dade is considering using a mixture of state transportation trust fund gas tax revenues and special appropriations to fund the local share. Metro-Dade has a one-cent local option gas tax dedicated to transit operations which will be implemented in January of 1994. The stability and reliability of Metro-Dade's operating revenues are rated "medium".

In 1992, MDTA's existing bus fleet averaged 7.1 years old, which is better than the national average.

Miami: Airport - Seaport



North 27th Avenue Corridor

Miami, Florida

(October 1993)

Description	<p>The Metro-Dade Transit Agency (MDTA) has recently begun alternatives analysis along the 27th Avenue Corridor north of Miami towards Joe Robbie Stadium and the Broward County line. The alternatives include a 9.5 to 11.6 mile expansion of the Metrorail System, a 9 mile busway, bus service improvements, and a no build option. MDTA's preliminary cost estimate is \$574 million for the rail extension alternatives. (escalated dollars)</p>
Status	<p>In April of 1993, FTA approved the initiation of alternatives analysis for the 27th Avenue corridor. Metro-Dade has recently selected a consultant and started work on the alternatives analysis.</p> <p>Congress has not authorized or appropriated funds for this corridor.</p>
Justification	<p><u>Mobility Improvements.</u> The 27th Avenue corridor bisects an area which has a large transit dependent population. In addition, the route is traveled heavily by commuters between Broward County and Miami. Quantitative information on the mobility benefits will be developed in the ongoing alternatives analysis.</p> <p><u>Cost Effectiveness.</u> A preliminary planning study (Transitional Analysis) estimated approximately 6,000 new linked daily transit trips for the 9.5 mile rail alternative with a preliminary cost effectiveness index of about \$22. This will be updated in the current study.</p> <p><u>Environmental Benefits.</u> EPA has classified the Miami-Ft. Lauderdale-West Palm Beach Area as a "moderate" nonattainment area for ozone and as "attainment" for carbon monoxide. Possible effects of the fixed guideway extensions on air quality will be quantified as part of the ongoing alternatives analysis.</p> <p><u>Operating Efficiencies.</u> FTA has no information on how a major investment would affect transit operating efficiencies. This information will be developed in the current study.</p>
Local Financial Commitment	<p>Metro-Dade anticipates using a 70 percent Federal share of \$402 million in Section 3 New Start funds and a 30 percent local share of \$172 million. Metro-Dade is considering using a mixture of state transportation trust fund gas tax revenues and special appropriations to fund the local share.</p>

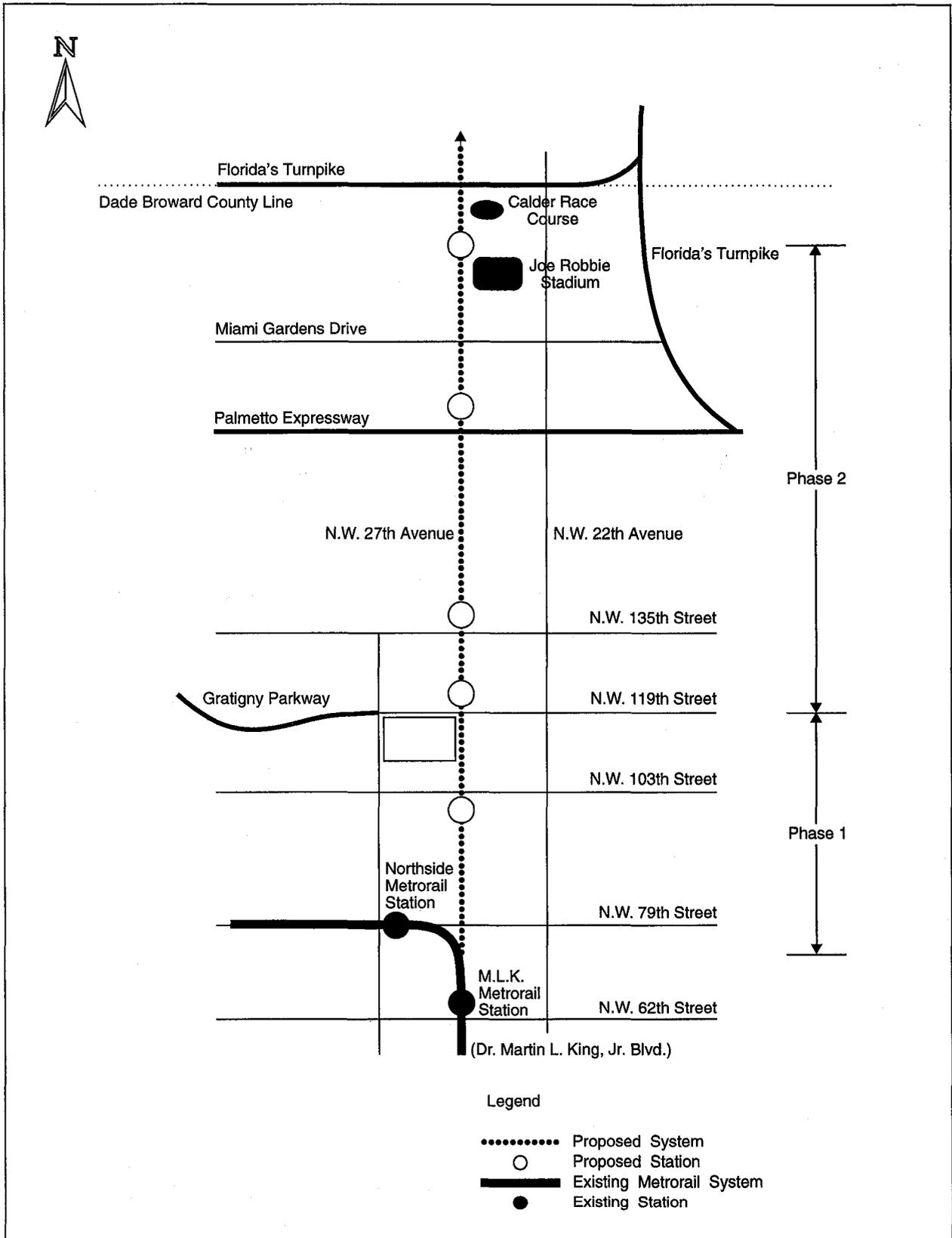
North 27th Avenue Corridor -- Miami, Florida

Metro-Dade has a one-cent local option gas tax dedicated to transit operations which will be implemented in January of 1994. The stability and reliability of Metro-Dade's operating revenues are rated "medium".

Half of the local share will come from a special appropriation and the other half coming from a recently implemented five-cent local option gas tax. At this early planning stage, a "medium" rating has been assigned to the capital finance plan.

In 1992, MDTA's existing bus fleet averaged 7.1 years old, which is better than the national average.

Miami: North 27th Avenue Metrorail Extension



East-West Corridor
Milwaukee, Wisconsin
(October 1993)

Description

The Wisconsin Department of Transportation (WisDOT) is performing alternatives analysis in the Central Milwaukee East-West Corridor. The corridor extends from Glendale and the University of Wisconsin-Milwaukee (UW-M), southwest through the CBD, the near north side of Milwaukee, and western suburbs to the city of Waukesha.

The alternatives analysis is evaluating various LRT alignments and termini, a busway alternative, HOV lanes, as well as a TSM and a No Build alternative. Several combination alternatives employing different technologies in different parts of the corridor are also under consideration.

The estimated construction costs (1992 dollars) of the various alternatives are as follows: bus and carpool lanes along IH 94 -- \$425 million; rapid busway for carpools and buses -- \$465 million; comprehensive transit investment package (including HOV, bus lanes, and LRT) -- \$822 to 1,082 million.

Status

The East-West Corridor is nearing the end of the alternatives analysis phase of study. Updated information on ridership will be completed within the next few months, but was not available for this report. A locally preferred alternative is expected to be selected in early 1994.

Section 3035(oo) of ISTEA directs FTA to enter into a multiyear grant agreement with the State of Wisconsin for \$200 million. The grant agreement would cover construction of an initial segment of the locally preferred alternative identified in the alternatives analysis. In FY 1994, Congress has appropriated \$3 million in reprogrammed FY 93 funds for this project.

Justification

Mobility Improvements. Preliminary numbers show that the number of daily SOV trips diverted to transit (LRT, buses, carpools) for the build alternatives versus the TSM alternative ranges from 4,000 to 16,000. Transit travel time savings range from 1800 to 4500 hours per day. FTA has not had the opportunity to review the supporting documents that produced these numbers.

Cost Effectiveness. The preliminary cost effectiveness indices range from \$5 for the busway alternative to \$43 for express LRT, based on 1992 dollars and year 2010 ridership forecasts. WisDOT shows a cost

East-West Corridor -- Milwaukee, Wisconsin

effectiveness index for the combination alternative at \$12. FTA has not had an opportunity to evaluate these numbers.

Environmental Benefits. Milwaukee is a "severe" nonattainment area for ozone and an attainment area for carbon monoxide. The alternatives would have a minimal effect on reducing pollutant emissions.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from a major investment in this corridor.

Local Financial Commitment

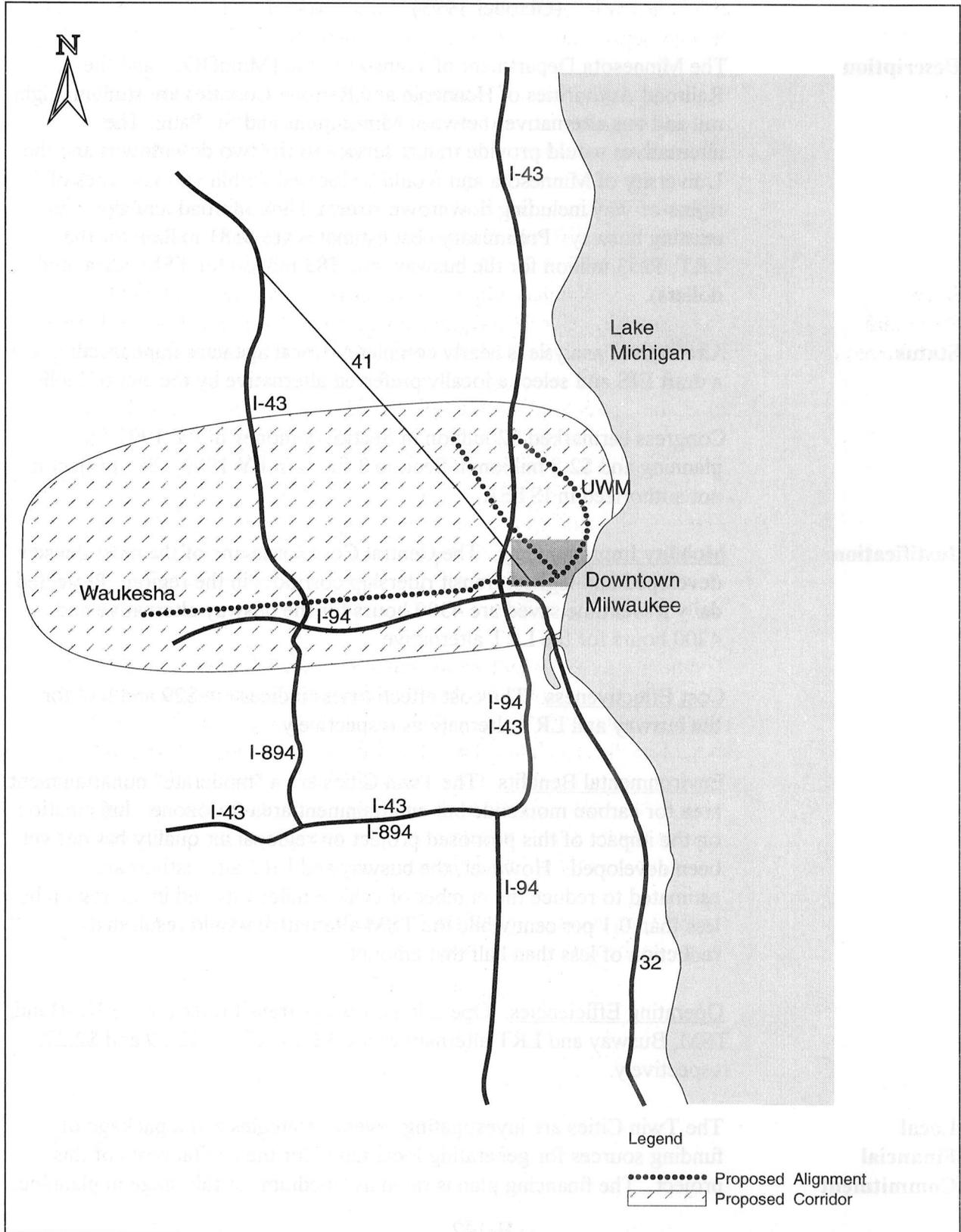
WisDOT's preliminary funding strategy assumed \$289 million of Interstate Transfer funding in accordance with Section 1045 of ISTEA. It is assumed that Section 3 New Start funding will be sought for 80 percent of the balance of the capital cost. Matching funds for the funds pursuant to Section 1045 and Section 3 funds are to be split 50/50 between the State and local jurisdictions, but there are no specific financial plans at present.

The capital financing plan is rated as "low-medium". The financing plan assumes Section 3 funding beyond that authorized in ISTEA. A source of local matching funds has not been identified. State funds could be derived from a transportation trust fund.

The operating and maintenance funding is rated "low-medium". Operating costs would be shared by State and local governments. The State would pay 50 percent of the total operating cost. The local portion would be the remaining share minus farebox revenues. Local funding sources are being still being investigated at this stage in the study. The system has reduced service in recent years, although the existing transit system has been well maintained. The financial strategy depends on a continuation of a strong State subsidy.

In 1992 the average age of the Milwaukee bus fleet was 10.1 years, which is above the national average.

Milwaukee: East-West Corridor



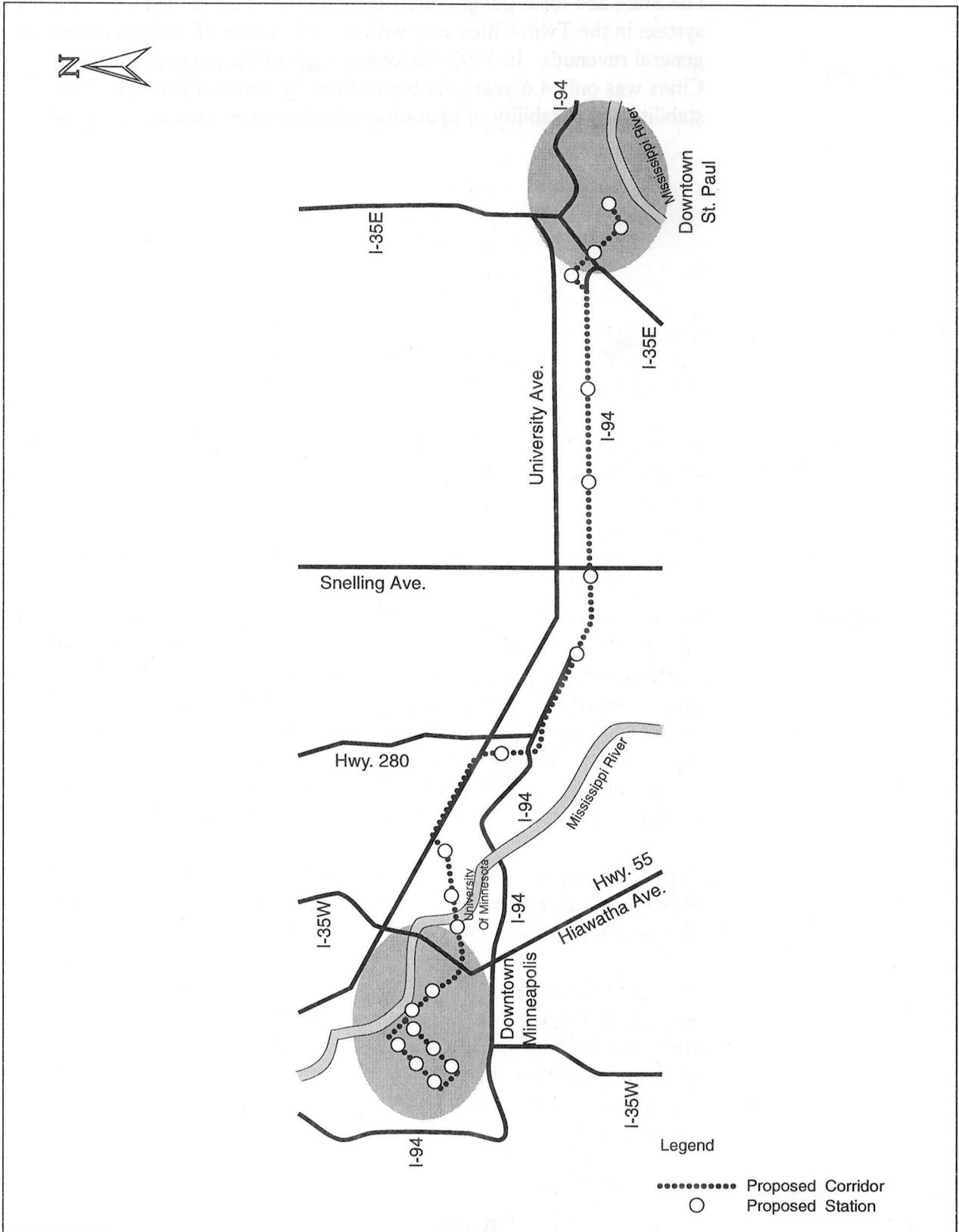
Central Corridor
Minneapolis-St. Paul, Minnesota
(October 1993)

Description	The Minnesota Department of Transportation (MinnDOT) and the Railroad Authorities of Hennepin and Ramsey Counties are studying light rail and bus alternatives between Minneapolis and St. Paul. The alternatives would provide transit service to the two downtowns and the University of Minnesota and would be located within various types of rights-of-way including downtown streets, I-94, railroad and along an existing busway. Preliminary cost estimates are \$581 million for the LRT, \$253 million for the busway, and \$83 million for TSM (escalated dollars).
Status	<p>Alternatives analysis is nearly complete. Local agencies hope to complete a draft EIS and select a locally preferred alternative by the end of 1993.</p> <p>Congress earmarked \$2 million in Section 8 money in FY 1991 for planning and \$2.8 million in Section 3 funds in FY 1994. The project is not authorized in ISTEA.</p>
Justification	<p><u>Mobility Improvements.</u> The Central Corridor is one of the most densely developed and highest transit ridership corridors in the region. Projected daily travel time saved are 4300 hours for the busway alternative and 4700 hours for the LRT alternative.</p> <p><u>Cost Effectiveness.</u> The cost effectiveness indices are \$29 and \$34 for the busway and LRT alternatives respectively.</p> <p><u>Environmental Benefits.</u> The Twin Cities are a "moderate" nonattainment area for carbon monoxide but an attainment area for ozone. Information on the impact of this proposed project on regional air quality has not yet been developed. However, the busway and LRT alternatives are estimated to reduce the number of vehicle miles traveled in the region by less than 0.1 per cent while the TSM alternative would result in a reduction of less than half that amount.</p> <p><u>Operating Efficiencies.</u> Operating costs per transit rider for the No-Build, TSM, Busway and LRT alternatives are \$2.06, \$2.18, \$2.29 and \$2.27, respectively.</p>
Local Financial Commitment	The Twin Cities are investigating several strategies and a package of funding sources for generating local funds for the capital costs of this project. The financing plan is rated as "medium" at this stage in planning.

Central Corridor -- Minneapolis-St. Paul, Minnesota

The State and local governments have traditionally funded a good transit system in the Twin Cities area with a combination of dedicated taxes and general revenues. In 1992 the average age of the buses in the Twin Cities was only 4.6 years, far better than the national average. The stability and reliability of operating assistance are rated as "medium".

Minneapolis - St. Paul: Central Corridor



Canal Street Corridor

New Orleans, Louisiana

(October 1993)

Description

The Regional Transit Authority (RTA) has initiated alternatives analysis to evaluate transit alternatives on the 4.9-mile Canal Street Corridor. The light rail alternatives would follow the current Canal Cemeteries bus route from the Mississippi River to City Park Avenue. An additional leg of the route would connect Canal Street with the Union Passenger Terminal and possibly a parking area for proposed riverboat casinos. A very preliminary estimate of the capital cost of the light rail alternative is \$90 million (1990 dollars).

Status

Alternatives analysis was initiated in September 1992 and a consultant was selected in the spring of 1993. RTA hopes to be able to select a locally preferred alternative in late spring of 1994.

Section 3035(ff) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with the City of New Orleans in the amount of \$4.8 million for the completion of alternatives analysis, preliminary engineering, and an environmental impact statement for the proposed project. In FY 1994 Congress earmarked \$3.6 million for this project.

Justification

Mobility Improvements. Daily ridership on the Canal Street bus line is 22,000. It is a route that experiences a large amount of transfers from interconnecting routes as well as from outer parish travelers. The current bus route is heavily impacted during peak hours with an unpredictable number of riders, resulting in high incidence of overcrowded vehicles and people left at the stop to wait for the next vehicle. The study is evaluating bus and rail alternatives which would help accommodate peak demand. Information on travel time savings is not yet available.

Cost Effectiveness. Preliminary cost effectiveness indices are in the \$7 to \$9 per new trip range. The RTA is refining the underlying cost and ridership forecasts as part of the ongoing alternatives analysis.

Environmental Benefits. The New Orleans metropolitan area has not violated the ozone standard in the last several years, making it a transitional nonattainment area for ozone. The area is in attainment of the carbon monoxide standard. The alternatives analysis will generate information on the extent to which a transit investment would reduce emissions.

Canal Street Corridor -- New Orleans, Louisiana

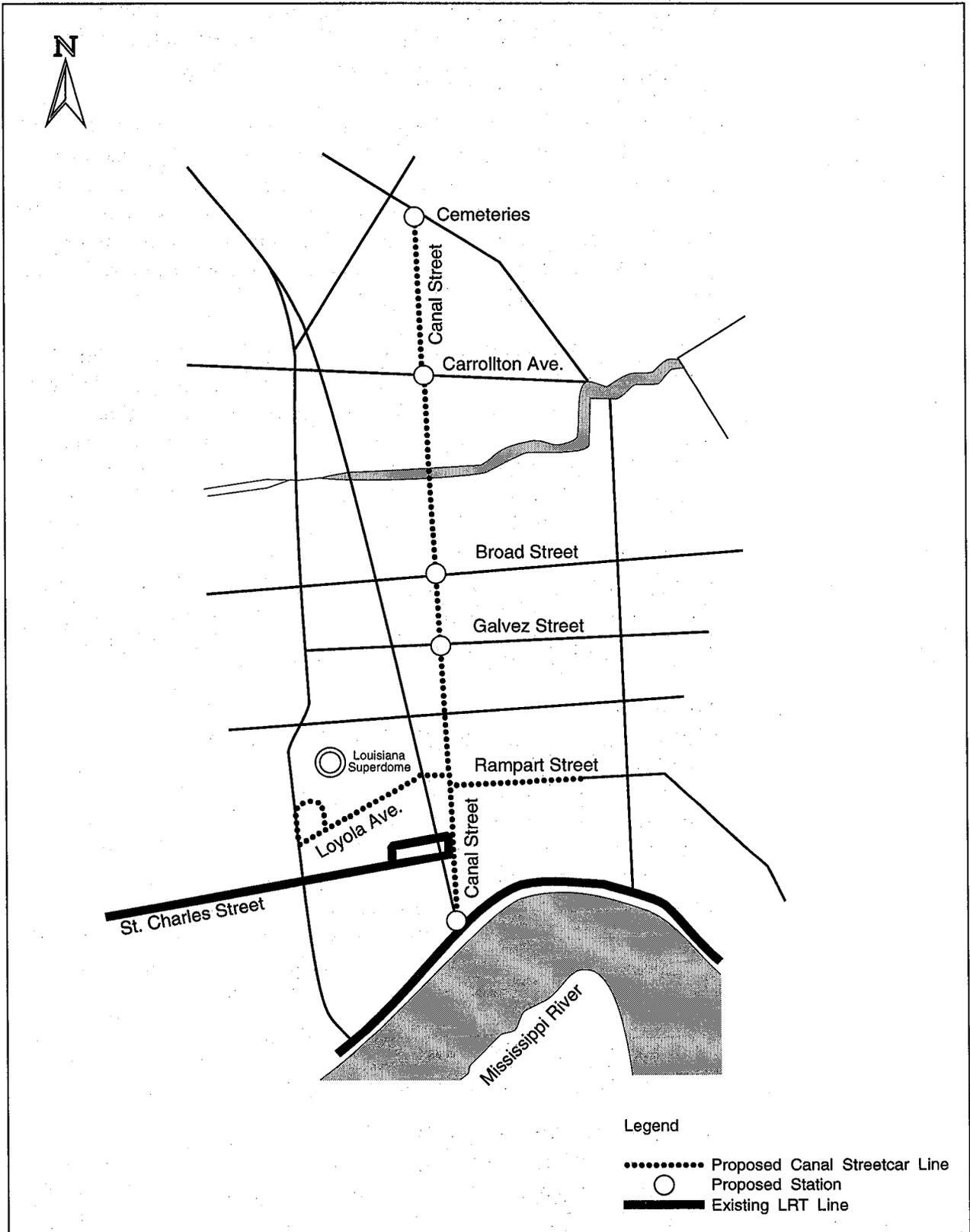
Operating efficiencies. FTA has no information on the operating efficiencies that would result from a major investment in the corridor. This information will be developed in the current study.

Local Financial Commitment

RTA is expected to seek Section 3 funding for 80 percent of the cost of the 4.9-mile light rail alternative. The local share would consist of a \$1.2 million grant from the City of New Orleans' Economic Development Trust Fund. This local appropriation was approved in November 1992. The State of Louisiana has pledged \$3.2 million per year for six years once the project begins construction. The capital financial plan is rated "high" since the local share is in place.

In terms of stability and reliability of operating revenues a "medium" rating has been given. RTA's operating revenues are supported by a city sales tax, fare revenues, and a small portion of Federal and State assistance. In 1992 the average age of RTA's bus fleet was 9.8 years, which is slightly above the national average.

New Orleans: Canal Street Corridor



Norfolk Fixed Guideway

Norfolk, Virginia
(October 1993)

- Description** Tidewater Regional Transit (TRT) is studying a 10 mile proposed fixed guideway facility to connect Pembroke Mall/Columbus Center in Virginia Beach with downtown Norfolk and the Norfolk Naval Base. Alternatives being considered include light rail, TSM, and no-build. The estimated cost is \$125 million (1991\$).
- Status** TRT has completed several system planning studies which examined the feasibility of providing additional transit service in several corridors around Norfolk, Virginia Beach, Portsmouth, and Hampton, Virginia (collectively known as South Hampton Roads). The studies indicate that the corridor between Pembroke Mall, Downtown Norfolk, and the Norfolk Naval Base will have the highest level of congestion. FTA approved the initiation of alternatives analysis in August 1993. TRT will select a consultant to begin the analysis in the Spring of 1994.
- Congress has not authorized or appropriated funds for this corridor.
- Justification**
- Mobility Improvements. FTA does not have any information on the mobility benefits of a major transit investment in the corridor. This corridor serves approximately 220,000 vehicles per day, which is the largest vehicle travel market in the Hampton Roads area aside from the Norfolk Naval Base. The current level of service (LOS) ranges from D to F on Route 44/I-264, the main throughway in this corridor.
- Cost Effectiveness. TRT's system planning produced preliminary cost effectiveness indices ranging from \$19 to \$35 for several 18 mile light rail alternatives from Norfolk to Virginia Beach. More recently, the corridor has been shortened to include the segment with the highest ridership potential. FTA does not have any information on the cost effectiveness of the shorter segment. This information will be developed in alternatives analysis.
- Environmental Benefits. Norfolk is a "marginal" nonattainment area for ozone and an attainment area for carbon monoxide. Information on the air quality effects of a major transit investment will be developed in alternatives analysis.
- Operating Efficiencies. FTA does not have any information on the operating efficiencies that would result from a major transit investment in the corridor. This information will be developed in alternatives analysis.

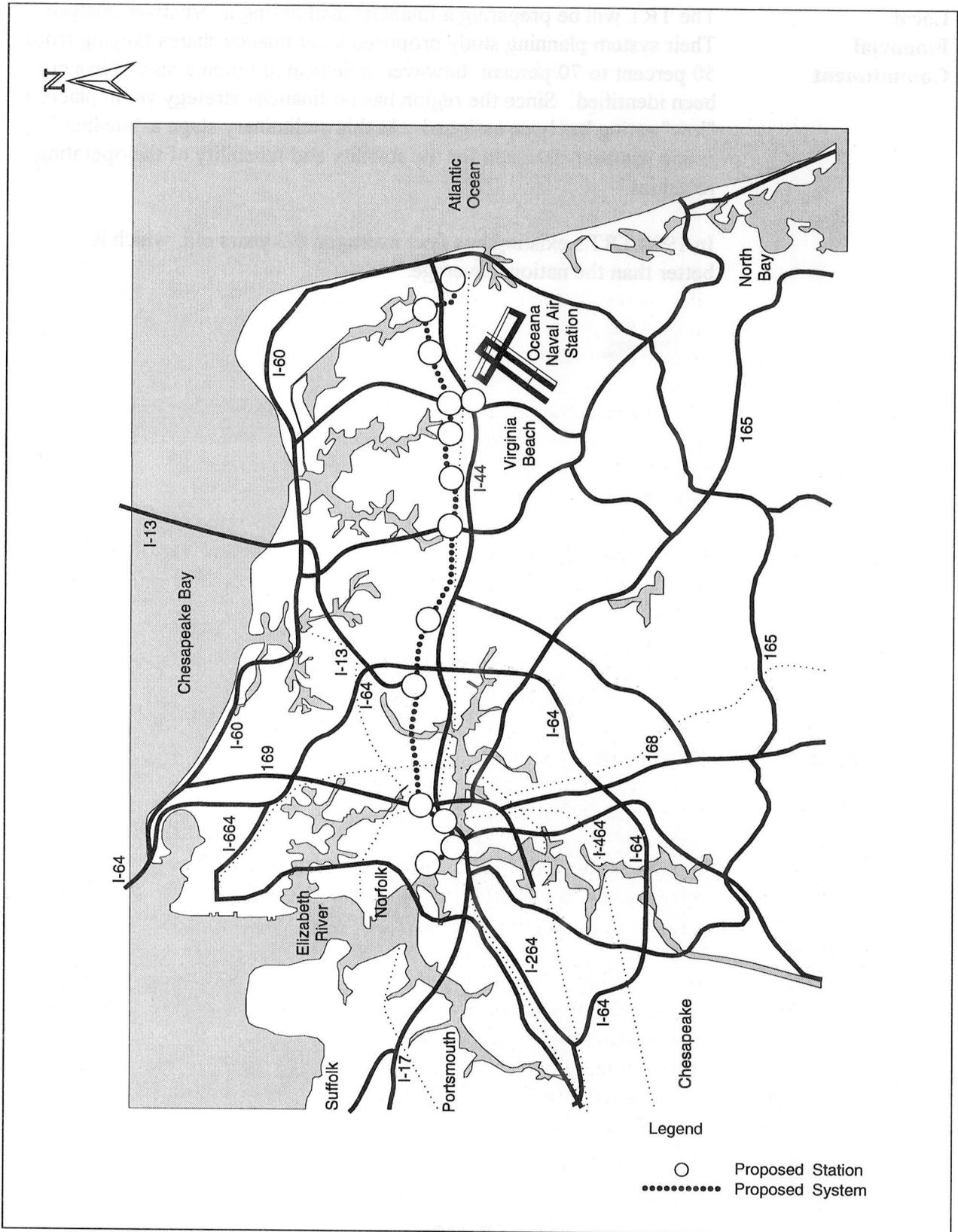
Norfolk Fixed Guideway -- Norfolk, Virginia

Local Financial Commitment

The TRT will be preparing a financial plan during alternatives analysis. Their system planning study proposed local finance shares ranging from 50 percent to 70 percent, however, a dedicated funding source has not been identified. Since the region has no financial strategy yet in place, a "low" rating has been assigned. At this preliminary stage a "medium" rating has been assigned for the stability and reliability of the operating revenues.

In 1992 TRT's existing bus fleet averaged 6.2 years old, which is better than the national average.

Norfolk: Fixed Guideway



South/North Corridor

Portland, Oregon and Vancouver, Washington
(October 1993)

Description

The South/North Corridor extends from Oregon City, Oregon in the south to N.E. 179th Street in Vancouver, Washington. The proposed corridor is approximately 45 miles long if all branches are included. Due to the length and complexity of the corridor, planning is being undertaken in two phases. The first phase will include analysis of the following alternatives: No Build, transportation system management (TSM) with highway improvements, busway, a Willamette River transit alternative, commuter rail, and LRT. At the end of Phase I, the number of alternatives will be reduced and it is likely that the alternatives carried into Phase II of the analysis will be the No Build, TSM and LRT alternatives. Phase II will involve the preparation of the draft EIS and the selection of the locally preferred alternative.

The preliminary cost of a project from Oregon City, Oregon, to 179th Street in Vancouver, Washington, is estimated to be between \$1 billion and \$1.7 billion (1994 dollars). The revised estimate will be developed during the Phase I process.

Status

FTA approved Metro's request to undertake alternatives analysis in September 1993. Phase I of the project development process is estimated to be completed by mid-1994.

Congress has not authorized or appropriated any funds for the South/North Corridor.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of the proposed alternatives. Such information will be developed during the alternatives analysis phase.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of the proposed alternatives. Such information will be developed during the alternatives analysis phase.

Environmental Benefits. EPA has classified the Portland, Oregon, and Vancouver, Washington, region as a "marginal" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. FTA does not have any information on the environmental benefits of the proposed alternatives. Such information will be developed during the alternatives analysis phase.

South/North Corridor -- Portland, Oregon, Vancouver, Washington

Operating Efficiencies. FTA does not have any information on the operating efficiencies of the proposed alternatives. Such information will be developed during the alternatives analysis phase.

Local Financial Commitment

Information on the financing plan will be developed during alternatives analysis. The finance plan will be bi-state in nature. To date, voters on the Oregon side of the region have approved \$15 million in General Obligation bonds to pay for planning, engineering and emergency right-of-way acquisition. The Oregon legislature has approved another \$2 million of lottery proceeds for the planning and engineering studies. In addition, the Washington Legislature has committed \$2.5 million per year for planning and engineering studies. C-Tran has committed to match these funds on a 80/20 basis.

The capital financing plan is rated as "low-medium" because there is no funding strategy yet in place. The region has demonstrated an ability to generate revenues for other major transit investments.

The stability and reliability of Tri-Met's operating revenues are rated "medium" since dedicated sources are in place and are sufficient to operate its current system and planned extensions to the west. This conclusion, however, is vulnerable to an economic downturn and other uncertainties. The financing plan for the south/north corridor's operation is being developed in alternatives analysis.

In 1992, the average age of Tri-Met's bus fleet was 7.3 years, which is better than the national average. Tri-Met's rail fleet averaged 7 years. In 1992, the average age of C-Tran's bus fleet was 9.2 years old, which is greater than the national average.

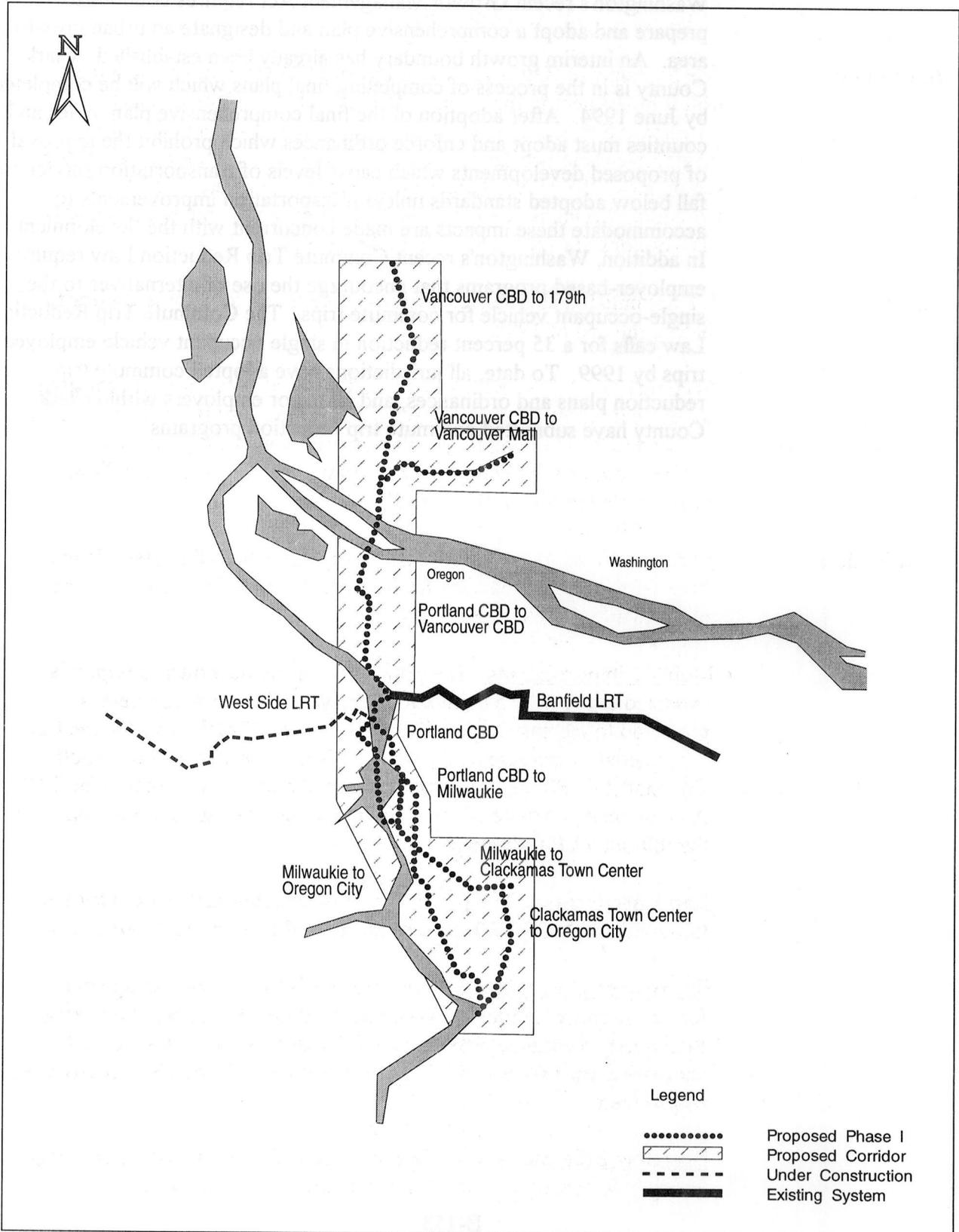
Other Factors

Land Use. Oregon land use law requires cities and counties to adopt enforceable comprehensive plans. Since the mid-1970's, the land use plans in all cities and counties in the Westside corridor have been established on the basis of high capacity transit in the corridor. The state law also required the adoption of a regional Urban Growth Boundary that designates the area in which urban development can occur. The Oregon Transportation Planning Rule requires local governments to adopt changes to their development ordinances to require more transit oriented development patterns. In addition, the Rule requires the MPO to plan for a reduction in vehicle miles traveled per capita.

South/North Corridor -- Portland, Oregon, Vancouver, Washington

Washington's recent Growth Management Act requires counties to prepare and adopt a comprehensive plan and designate an urban growth area. An interim growth boundary has already been established. Clark County is in the process of completing final plans which will be completed by June 1994. After adoption of the final comprehensive plan, cities and counties must adopt and enforce ordinances which prohibit the approval of proposed developments which cause levels of transportation service to fall below adopted standards unless transportation improvements to accommodate these impacts are made concurrent with the development. In addition, Washington's recent Commute Trip Reduction Law requires employer-based programs that encourage the use of alternatives to the single-occupant vehicle for commute trips. The Commute Trip Reduction Law calls for a 35 percent reduction in single occupant vehicle employee trips by 1999. To date, all jurisdictions have adopted commute trip reduction plans and ordinances, and all major employers within Clark County have submitted commute trip reduction programs.

Portland, Oregon - Vancouver, Washington: South/North Corridor



South Corridor
Sacramento, California
(October 1993)

Description

The Sacramento Regional Transit District (RT) is considering a major transit investment in the South Corridor. This corridor extends from downtown Sacramento to Elk Grove, a distance of about 13 miles. Alternatives being considered include full-build and minimum operable segment (MOS) light rail, high-occupancy vehicle lanes, TSM and No-Build. Preliminary capital cost estimates for the full build and MOS LRT options are \$560 and \$380 million (1992 dollars).

Status

RT has initiated alternatives analysis and expects to complete a draft EIS before the end of 1994.

Section 3035(xx) of ISTEA directs FTA to enter into a multiyear grant agreement with the Sacramento Regional Transit District for \$26 million to provide for the completion of alternatives analysis, preliminary engineering, and final design. Of that amount, a total of \$2 million was appropriated in FYs 1993 and 1994.

Justification

FTA and RT are currently discussing adjustments to the travel demand forecasting procedures, which will probably result in revisions to the preliminary information presented below:

Mobility Improvements. The population of the Sacramento region is expected to grow by 51 percent by the year 2010. Employment is projected to increase regionally by 50 percent. Employment in the CBD is projected to increase by 24 percent. Major roadways in the South Corridor (I-5, SR 99) are projected to reach or exceed capacity by 2010. A preliminary estimate of the daily travel time savings is 2,600 hours for the full-build LRT alternative.

Cost Effectiveness. The preliminary cost-effectiveness indices for the full-build and MOS LRT options are \$9 and \$14 per new transit trip.

Environmental Benefits. Sacramento is a "serious" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. Preliminary forecasts of regional VMT reductions over the no-build alternative are 1.07% and 0.71% for the full-build and MOS alternatives respectively.

Operating Efficiencies. FTA has no information on the effect of a major transit investment on the operating efficiencies of the system.

South Corridor -- Sacramento, California

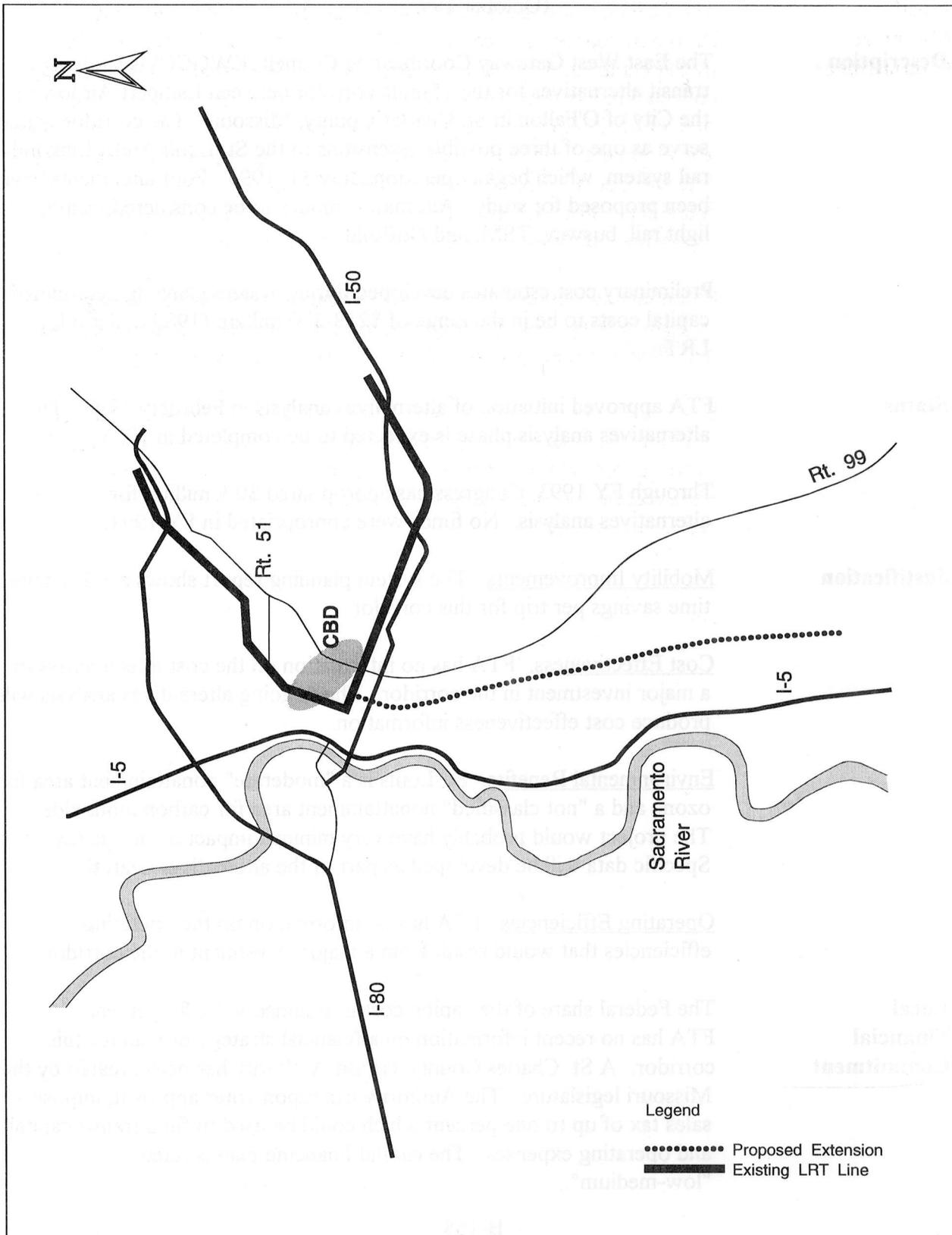
Local Financial Commitment

The Federal share is assumed to be 80 percent Section 3 funding. Proposed sources of local capital funds include: (a) formula funds for transit capital and operation which are allocated based on sales tax dollars collected in a county, (b) a 1/2 cent sales tax increase for road, transit, and air quality improvements, and (c) Consolidated Roadway and Transit Development Fees, to be used for specified roadway and transit capital improvements. Five potential sources of State funds have been identified. Since RT has a financing strategy, FTA has assigned a "medium" rating to the capital finance plan at this early stage.

Potential new sources of operating revenue which will be investigated include parking fees, development impact fees, sales tax increase, and service area assessments. A "medium" rating has been assigned.

In 1992 the average age of the RT bus fleet was 12.7 years, which is substantially above the national average. However, a recently placed order for a substantial number of compressed natural gas (CNG) buses should bring the bus fleet age to below the national average in 1994. The rail fleet averaged 3.9 years old.

Sacramento: South Corridor



St. Charles, Missouri Corridor
St. Louis, Missouri Metropolitan Area
(October 1993)

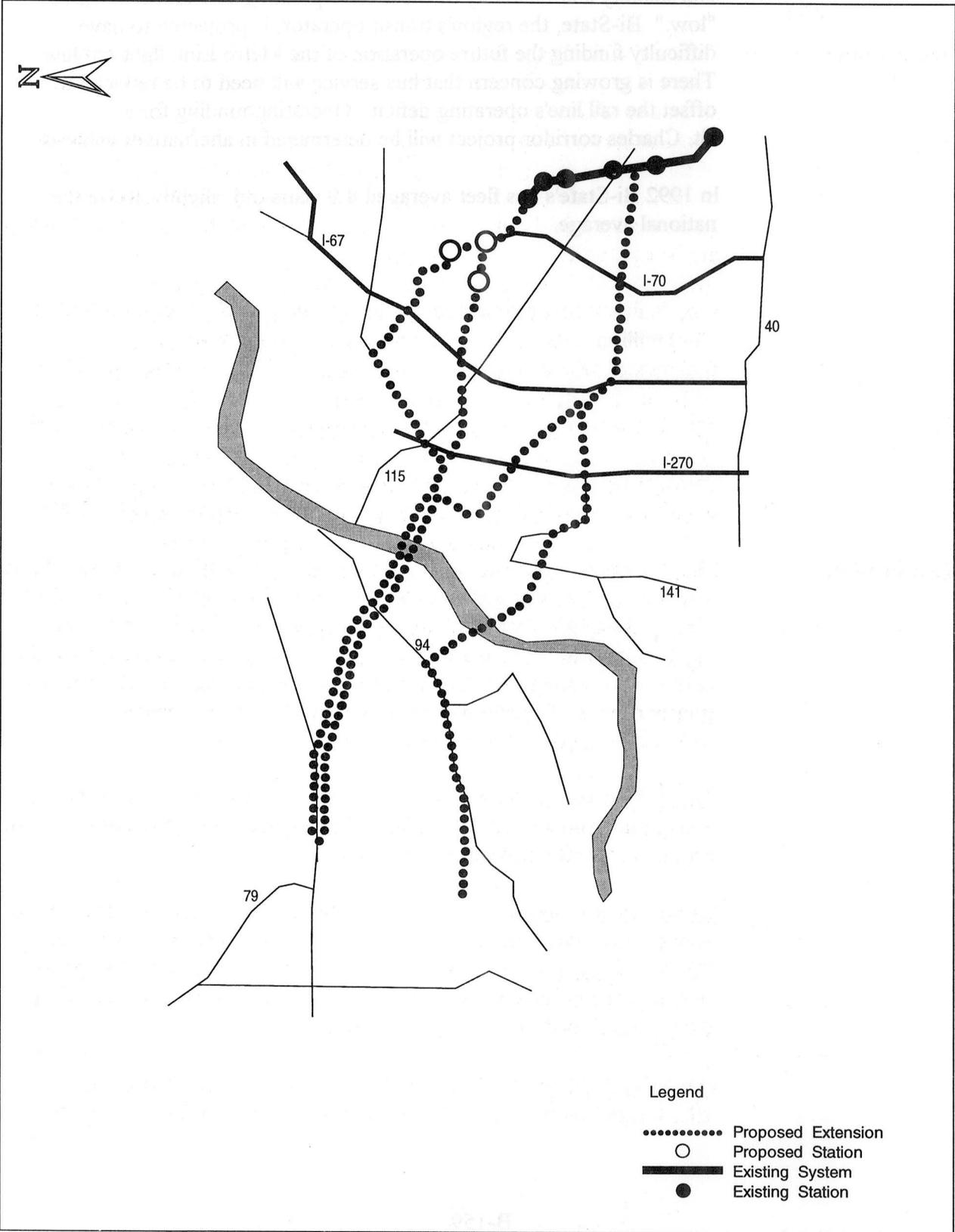
Description	<p>The East West Gateway Coordinating Council (EWGCC) is studying transit alternatives for the 15-mile corridor between Lambert Airport to the City of O'Fallon in St. Charles County, Missouri. The corridor would serve as one of three possible extensions to the St. Louis MetroLink light rail system, which began operations July 31, 1993. Four alignments have been proposed for study. Alternative modes to be considered include light rail, busway, TSM, and NoBuild.</p> <p>Preliminary cost estimates developed during system planning determined capital costs to be in the range of \$218-270 million (1989 dollars) for LRT.</p>
Status	<p>FTA approved initiation of alternatives analysis in February 1993. The alternatives analysis phase is expected to be completed in 1995.</p> <p>Through FY 1993, Congress has appropriated \$0.5 million for alternatives analysis. No funds were appropriated in FY 1994.</p>
Justification	<p><u>Mobility Improvements.</u> The system planning report shows a 1.2 minute time savings per trip for this corridor.</p> <p><u>Cost Effectiveness.</u> FTA has no information on the cost effectiveness of a major investment in the corridor. The ongoing alternatives analysis will produce cost effectiveness information.</p> <p><u>Environmental Benefits.</u> St. Louis is a "moderate" nonattainment area for ozone and a "not classified" nonattainment area for carbon monoxide. The project would probably have very minimal impact on air quality. Specific data will be developed as part of the alternatives analysis.</p> <p><u>Operating Efficiencies.</u> FTA has no information on the operating efficiencies that would result from a major investment in the corridor.</p>
Local Financial Commitment	<p>The Federal share of the capital cost is assumed to be 80 percent. FTA has no recent information on a financial strategy or plan for this corridor. A St. Charles County Transit Authority has been created by the Missouri legislature. The Authority can, upon voter approval, impose a sales tax of up to one percent which could be used to fund transit capital and operating expenses. The capital financing plan is rated "low-medium".</p>

St. Charles Corridor -- St. Louis, Missouri

The stability and reliability of the area's operating assistance are rated "low." Bi-State, the region's transit operator, is projected to have difficulty funding the future operation of the Metro Link light rail line. There is growing concern that bus service will need to be reduced to offset the rail line's operating deficit. Operating funding for a St. Charles corridor project will be determined in alternatives analysis.

In 1992 Bi-State's bus fleet averaged 8.9 years old, slightly above the national average.

St. Louis: St. Charles Alignments



St. Clair County, Illinois Corridor
St. Louis, Missouri Metropolitan Area
(October 1993)

Description

The East West Gateway Coordinating Council (EWGCC) is studying transit alternatives for the 20-mile corridor between downtown East St. Louis, Illinois, and the vicinity of Scott Air Force Base. Fixed-guideway alternatives being considered include both an extension of the Metro Link light rail project (which opened in July 1993) and construction of a busway which would terminate at the Metro Link station in East St. Louis. Various alignments of each of these alternatives are being studied.

A preliminary cost estimate range for the light rail alternatives is \$330 to \$340 million (1992 dollars), depending on the alignment. The preliminary ridership estimate for LRT is 13,100 trips in the year 2010.

Status

The alternatives analysis phase is expected to be completed in early 1994.

Through FY 1993, Congress appropriated \$8.1 million for preliminary engineering and final design. No funds were appropriated in FY 1994.

Justification

Mobility Improvements. During system planning, EWGCC estimated that total systemwide ridership (bus and rail) would increase from 112,000 in 1985 to 160,000 in the year 2000. FTA considers this forecast to be highly optimistic. There are only 12,300 existing daily transit trips in the corridor, indicating that there is not presently a strong market for public transportation. The alternatives analysis will produce updated information on the mobility benefits of each alternative.

Cost Effectiveness. FTA has no information on the cost effectiveness of a major investment in the corridor. The ongoing alternatives analysis will produce cost effectiveness information.

Environmental Benefits. St. Louis is a "moderate" nonattainment area for ozone and a "not classified" nonattainment area for carbon monoxide. The Illinois portion of the St. Louis region is in attainment. The project would probably have very minimal impact on air quality. Specific data will be developed as part of the alternatives analysis.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from a major investment in the corridor.

St. Clair Corridor -- St. Louis, Missouri

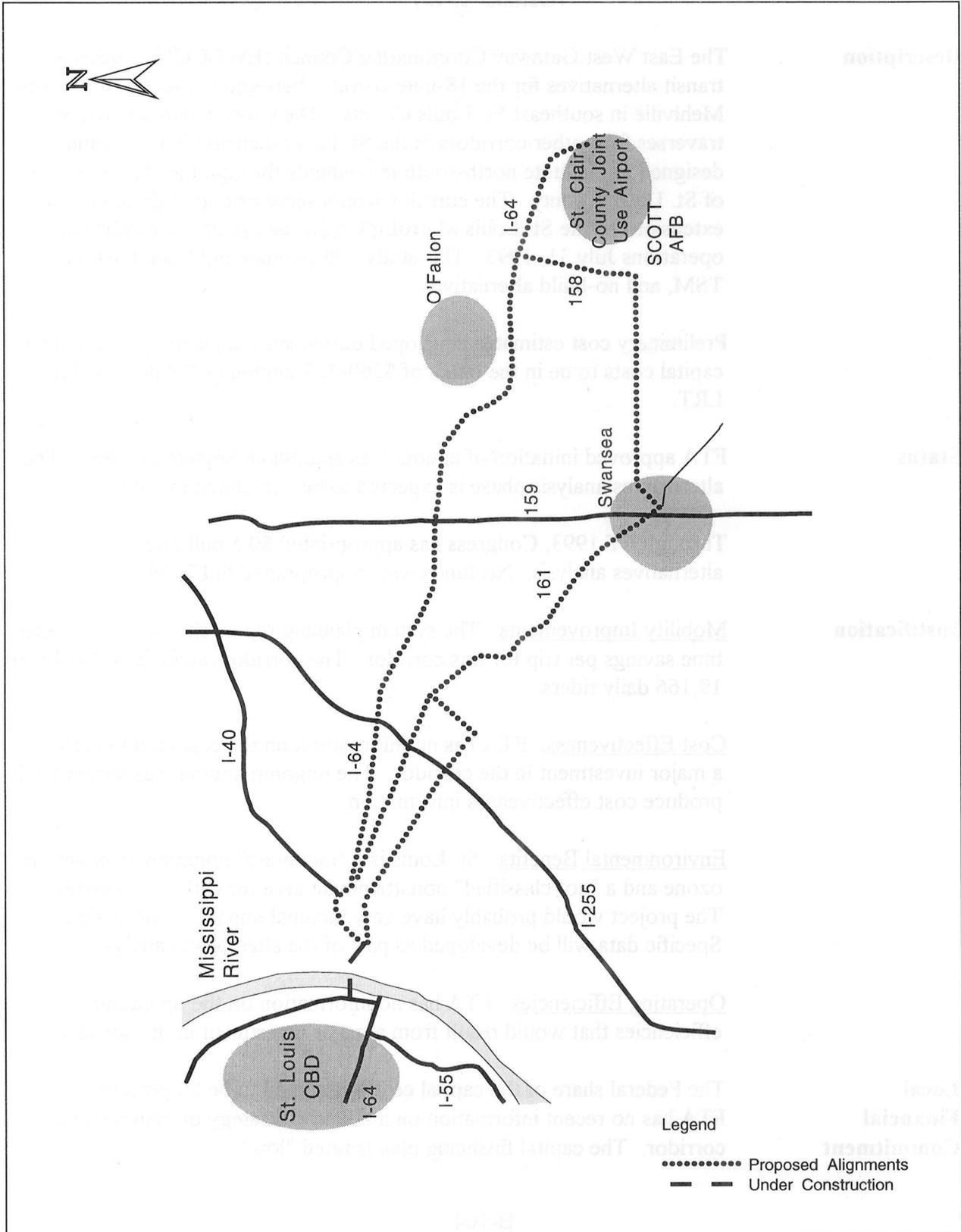
Local Financial Commitment

The Federal share of the capital cost is assumed to be 80 percent. Possible sources of local funds include State of Illinois long-term general obligation bonds and a dedicated sales tax at the county level for transit usage. Voters in St. Clair County (Illinois) will be asked in a November 2, 1993 election to consider approval of a one-half cent sales tax increase to fund the local capital and operating costs of a transit project. If this tax passes, it is expected to be sufficient to cover costs incurred in building and operating a Metro Link extension. The additional tax would go into effect in January 1995. The capital financing plan is currently rated "medium" on the assumption that the voters will approve the sales tax increase.

Bi-State, the region's transit operator, is projected to have difficulty funding the future operation of the Metro Link light rail line. There is growing concern that bus service will need to be reduced to offset the rail line's operating deficit. However, assuming passage of the sales tax increase, FTA has rated the stability and reliability of operating assistance as "medium" for the St. Clair corridor.

In 1992 Bi-State's bus fleet averaged 8.9 years old, slightly above the national average.

St. Louis: St. Clair Corridor



Cross-County Corridor

St. Louis, Missouri Metropolitan Area

(October 1993)

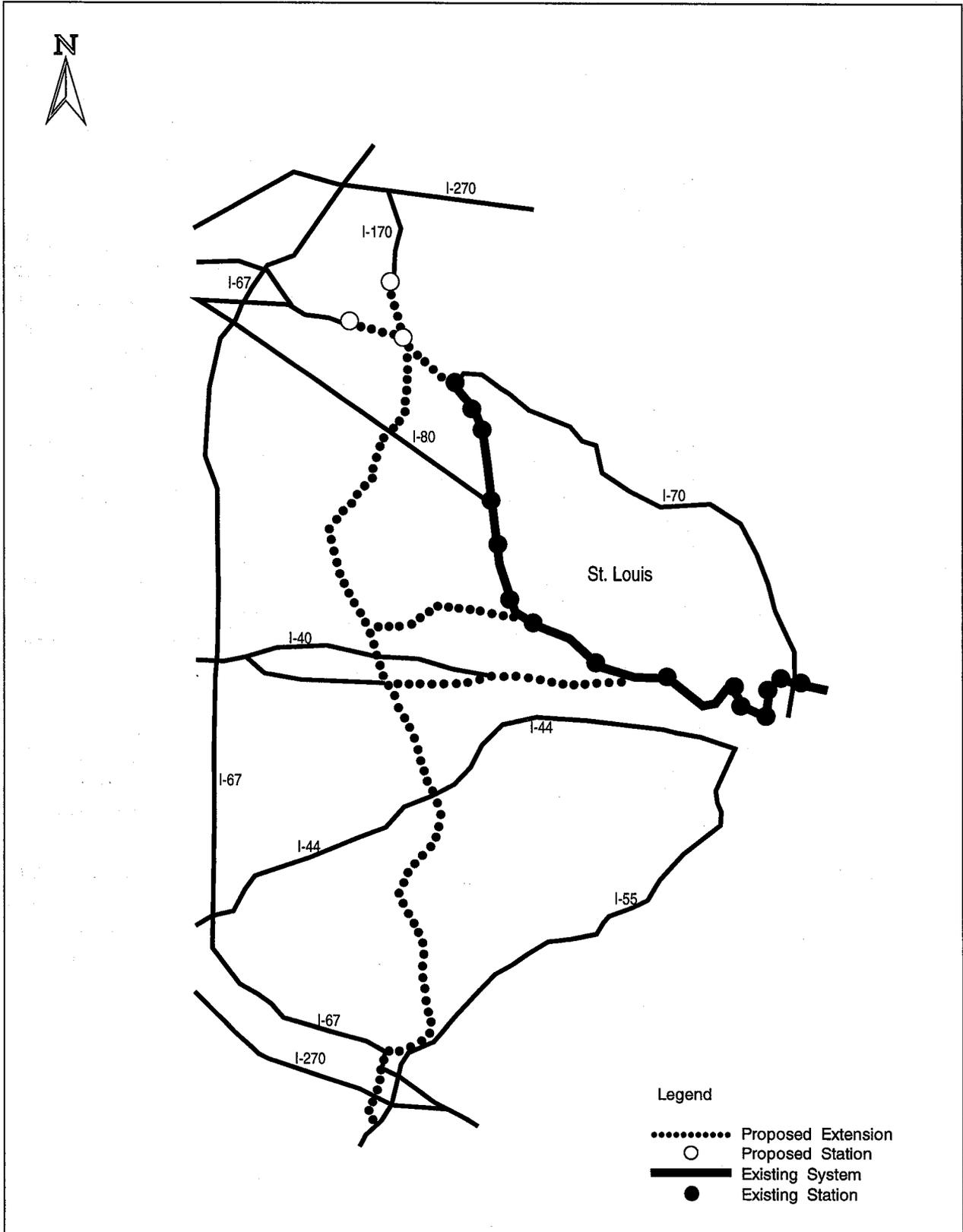
Description	<p>The East West Gateway Coordinating Council (EWGCC) is studying transit alternatives for the 18-mile corridor between Lambert Airport and Mehlville in southeast St. Louis County. The Cross-County corridor traverses four other corridors in the St. Louis metropolitan area and is designed to facilitate north-south movements through the central portion of St. Louis County. The corridor would serve as one of three possible extensions to the St. Louis MetroLink light rail system, which began operations July 31, 1993. This study will evaluate light rail, busway, TSM, and no-build alternatives.</p> <p>Preliminary cost estimates developed during system planning determined capital costs to be in the range of \$269-307 million (1989 dollars) for LRT.</p>
Status	<p>FTA approved initiation of alternatives analysis in September 1993. The alternatives analysis phase is expected to be completed in 1995.</p> <p>Through FY 1993, Congress has appropriated \$0.5 million for alternatives analysis. No funds were appropriated in FY 94.</p>
Justification	<p><u>Mobility Improvements.</u> The system planning report shows a 2.4 minute time savings per trip for this corridor. The corridor ridership in 1988 was 19,166 daily riders.</p> <p><u>Cost Effectiveness.</u> FTA has no information on the cost effectiveness of a major investment in the corridor. The ongoing alternatives analysis will produce cost effectiveness information.</p> <p><u>Environmental Benefits.</u> St. Louis is a "moderate" nonattainment area for ozone and a "not classified" nonattainment area for carbon monoxide. The project would probably have very minimal impact on air quality. Specific data will be developed as part of the alternatives analysis.</p> <p><u>Operating Efficiencies.</u> FTA has no information on the operating efficiencies that would result from a major investment in the corridor.</p>
Local Financial Commitment	<p>The Federal share of the capital cost is assumed to be 80 percent. FTA has no recent information on a financial strategy or plan for this corridor. The capital financing plan is rated "low".</p>

Cross-County Corridor -- St. Louis, Missouri

The stability and reliability of the area's operating assistance are also rated "low." Bi-State, the region's transit operator, is projected to have difficulty funding the future operation of the Metro Link light rail line. There is growing concern that bus service will need to be reduced to offset the rail line's operating deficit. The operating costs and financing of this project will be determined in alternatives analysis.

In 1992 Bi-State's bus fleet averaged 8.9 years old, slightly above the national average.

St. Louis: Cross-County



Mid-Coast Corridor

San Diego, California

(October 1993)

Description

The Mid-Coast Corridor extends about 10 miles along I-5 near the Pacific Ocean from I-8 near Old Town north to the vicinity of the University of California San Diego and the University Towne Centre shopping mall. The Metropolitan Transit Development Board (MTDB) is studying several transit technologies, alignments and termini within this corridor. The alternatives being considered are a transportation system management (TSM) alternative consisting of express bus improvements and park and ride lots; a TSM/Commuter Rail alternative consisting of all projects from the TSM alternative, plus two additional commuter rail stations located in the University Towne Centre area; a high occupancy vehicle (HOV) lane alternative on I-5; and a light rail transit (LRT) alternative with two alignment options, which would be an extension of the Old Town Line.

The capital cost of the alternatives range are estimated to be \$61 million for the TSM alternative, \$74.8 million for the TSM/Commuter Rail alternative, \$167.2 million for the HOV alternative and \$354.5 million for the Genessee Avenue LRT alternative (1992 dollars).

Status

FTA approved the initiation of alternatives analysis in October 1989. The study is approaching the final stages and a draft EIS is expected to be completed in mid-1994. Due to several changes in the alternatives to be studied, this study has undergone delays.

Section 3035(u) of ISTEA directs FTA to sign a multiyear grant agreement with the MTDB providing \$27 million for the completion of alternatives analysis and the final EIS and to purchase right-of-way. Through FY 1994, Congress appropriated \$4.1 million for this corridor.

Justification

Mobility Improvements. Freeways and arterial streets in the corridor are congested due to rapid growth and the lack of alternative routes. Existing bus service must contend with the same highway congestion as the private auto. MTDB estimates that the LRT alternatives would reduce travel time by 12 minutes per trip, while the HOV alternative would reduce travel time by 7 minutes (both compared with the TSM alternative).

Mid-Coast Corridor -- San Diego, California

Cost Effectiveness. MTDB has calculated preliminary cost-effectiveness indices of \$12 for the TSM/Commuter rail alternative, \$31 for the HOV alternative (transit only) and \$2.63 (transit and carpools), \$11 for the LRT I-5 alternative and \$14 for the LRT Genessee alternative (2005 ridership, 1992 dollars). Technical issues underlying the ridership forecasts are still being resolved.

Environmental Benefits. The San Diego region is a "serious" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. It is unlikely that any of the transit alternatives would have a significant effect on air quality at the regional level. MTDB estimates that the alternatives would reduce regional vehicle miles traveled by 0.2 percent or less.

Operating Efficiencies. San Diego's cost per passenger on a systemwide basis for the year 2005 is projected to be \$3.00 for the No-Build alternative, \$3.08 for the TSM, \$3.08 for the TSM/Commuter Rail alternative, \$3.10 for the HOV alternative and about \$3.04 for both LRT alternatives.

Local Financial Commitment

MTDB is expected to seek 80 percent Section 3 Federal funding for a Mid-Coast Corridor project. If the project is viewed as part of MTDB's overall fixed guideway construction program, the Federal share is expected to be less than one-third. MTDB is advancing several LRT projects without Federal funding. These include an LRT line from downtown to Old Town, a West Mission Valley Line, and an extension of the East Urban Line to Santee.

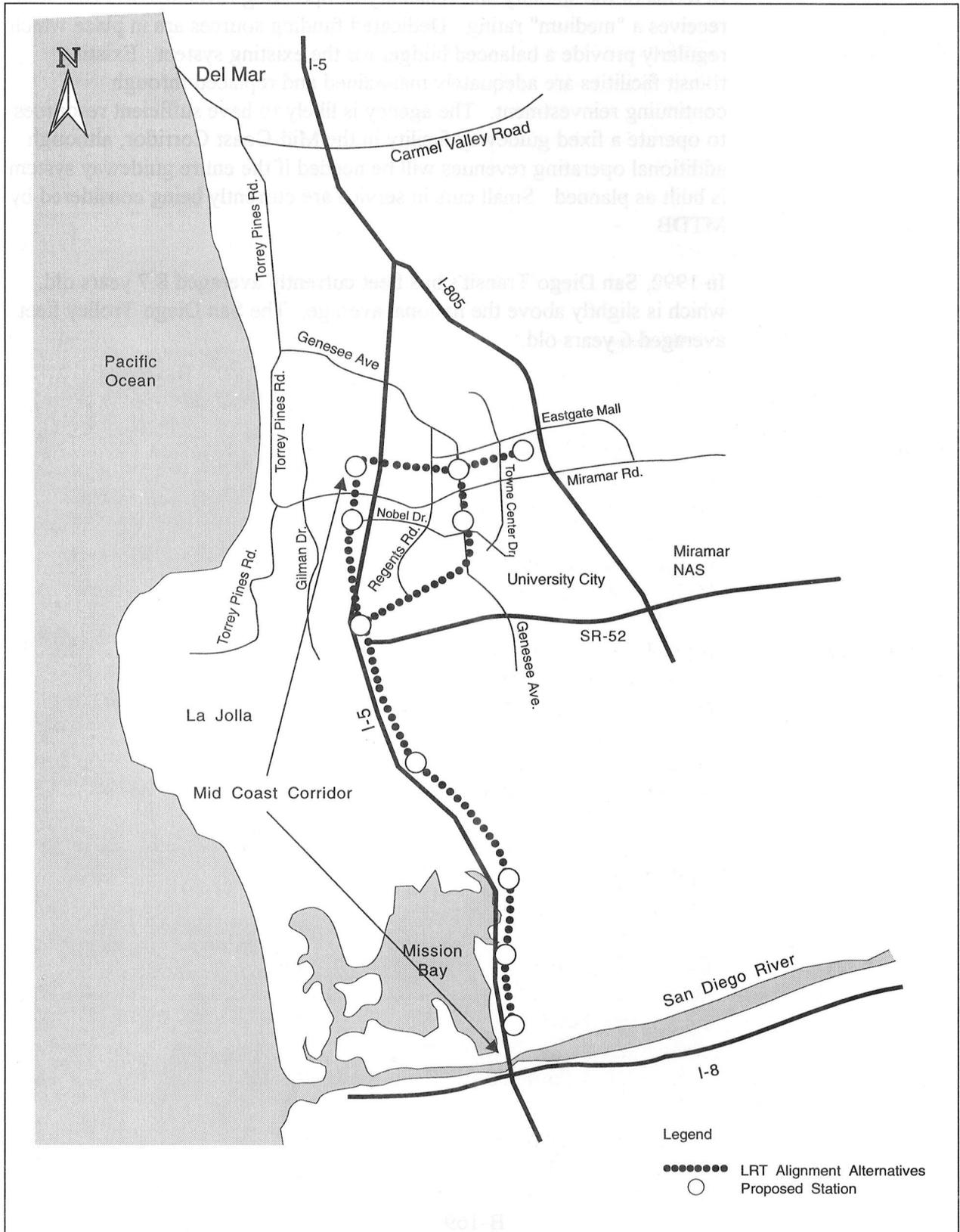
MTDB's capital financing plan is rated "high." In 1987 San Diego voters approved a 1/2 cent local sales tax dedicated to transportation. One-third of the revenues, or \$750 million over 20 years, is earmarked for capital improvements to public transit, and a major share of this is for LRT extensions. Other funds are expected to come from the City of San Diego. On March 25, 1993, the MTDB Board of Directors approved a capital funding plan which includes the Mid-Coast and Mission Valley East projects. This plan calls for Federal assistance of \$400 million, or 33 percent, toward a total rail improvement program of \$1.2 billion. The transit agency is in reasonably sound financial condition. However, MTDB faces a \$175 million capital funding deficit over the next 20 years -- primarily due to a lack of funds for capital replacement.

Mid-Coast Corridor -- San Diego, California

In terms of the stability and reliability of operating revenues, MTDB receives a "medium" rating. Dedicated funding sources are in place which regularly provide a balanced budget for the existing system. Existing transit facilities are adequately maintained and replaced through continuing reinvestment. The agency is likely to have sufficient resources to operate a fixed guideway facility in the Mid-Coast Corridor, although additional operating revenues will be needed if the entire guideway system is built as planned. Small cuts in service are currently being considered by MTDB.

In 1992, San Diego Transit's bus fleet currently averaged 8.7 years old, which is slightly above the national average. The San Diego Trolley fleet averaged 6 years old.

San Diego: Mid Coast Corridor



Mission Valley East Corridor
San Diego, California
(October 1993)

Description

The Mission Valley East corridor is approximately 5.5 miles long, following I-8 from Interstate 15 to near Baltimore Drive in La Mesa. The Mission Valley East Corridor would be an extension of the future locally funded Mission Valley West Line (which extends from Old Town to Interstate 15). The total length of the corridor is approximately 12 miles. The Metropolitan Transit Development Board (MTDB) is studying several transit technologies and alignments within this corridor. The alternatives being considered are the No Build, a Best Bus alternative, and LRT with alignment variations at San Diego State University.

Depending on the route option selected at San Diego State University, the project is estimated to cost between \$255 million and \$305 million (1993 dollars).

Status

FTA approved the initiation of alternatives analysis in April 1993 and public scoping meetings were held in May 1993. MTDB estimates the completion of the alternatives analysis phase to be in April 1995.

Congress has not authorized or appropriated any funds for the Mission Valley East Corridor.

Justification

Mobility Improvements. Freeways and arterial streets in the corridor are congested due to rapid growth and the lack of alternative routes. Existing bus service must contend with the same highway congestion as the private auto. FTA does not have any quantitative information on the mobility benefits of the proposed alternatives. Such information will be developed during the alternatives analysis phase.

Cost Effectiveness. A preliminary cost effectiveness index is between \$16 and \$17. This information will be further developed during the alternatives analysis phase.

Environmental Benefits. The San Diego region is a "serious" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. FTA does not have any information on the environmental benefits of the proposed alternatives. Such information will be developed during the alternatives analysis phase.

Operating Efficiencies. FTA does not have any information on the operating efficiencies for the proposed alternatives. Such information will be developed during the alternatives analysis phase.

Mission Valley East Corridor -- San Diego, California

Local Financial Commitment

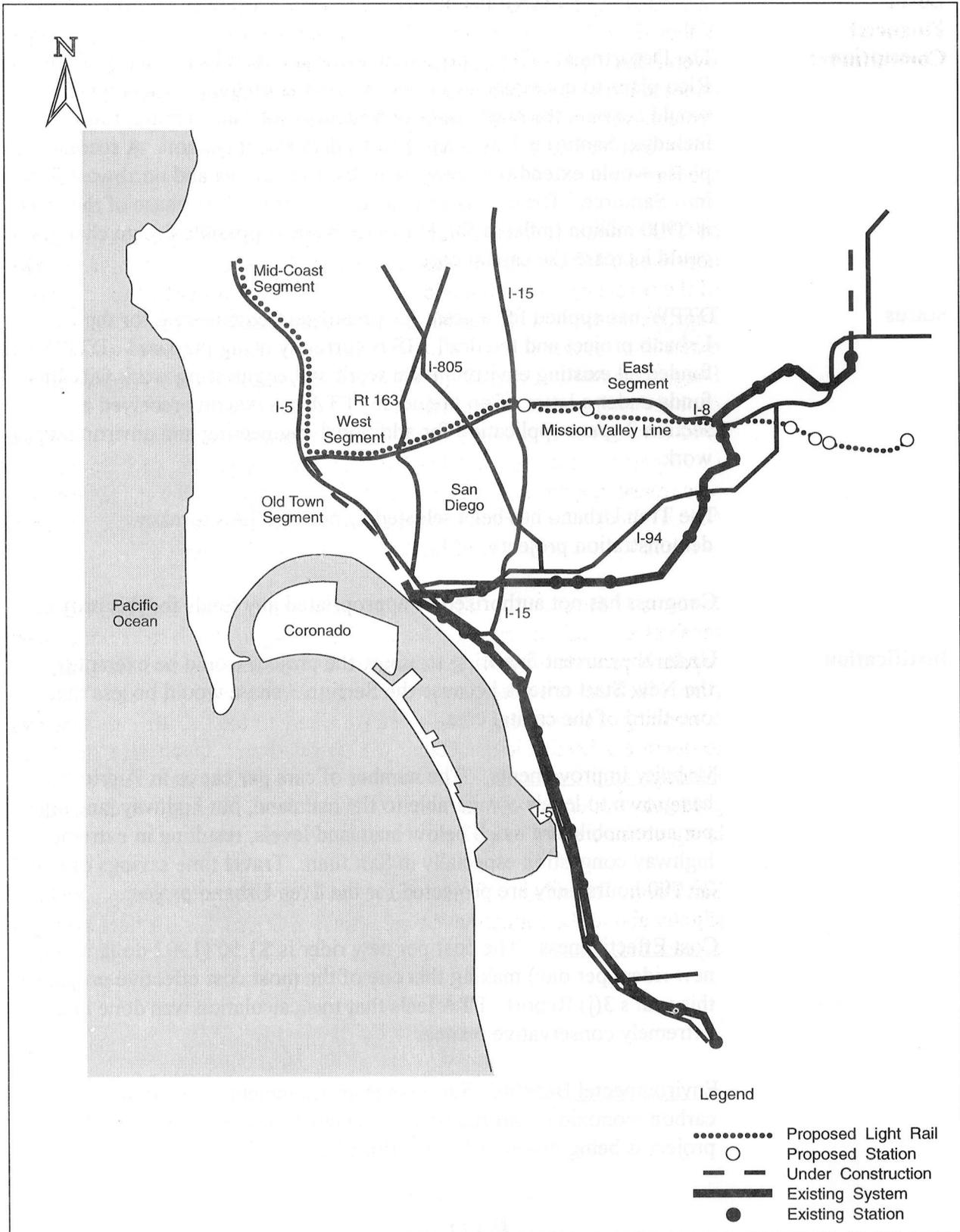
MTDB is expected to seek 80 percent Section 3 funding for the Mission Valley East Corridor project. If the project is viewed as part of MTDB's overall fixed guideway construction program, the Federal share is expected to be less than one-third. MTDB is advancing several LRT projects without Federal funding. These include an LRT line from downtown to Old Town, a Mission Valley West Line, and an extension of the East Urban Line to Santee.

MTDB's capital financing plan is rated "high." In 1987 San Diego voters approved a 1/2 cent local sales tax dedicated to transportation. One-third of the revenues, or \$750 million over 20 years, is earmarked for capital improvements to public transit, and a major share of this is for LRT extensions. Other funds are expected to come from the City of San Diego. On March 25, 1993, the MTDB Board of Directors approved a capital funding plan which includes the Mission Valley East and Mid-Coast projects. This plan calls for Federal assistance of \$400 million, or 33 percent, toward a total rail improvement program of \$1.2 billion. The transit agency is in reasonably sound financial condition. However, MTDB faces a \$175 million capital funding deficit over the next 20 years -- primarily due to a lack of funds for capital replacement.

In terms of the stability and reliability of operating revenues, MTDB receives a "medium" rating. Dedicated funding sources are in place which regularly provide a balanced budget for the existing system. Existing transit facilities are adequately maintained and replaced through continuing reinvestment. The agency is likely to have sufficient resources to operate a fixed guideway facility in the Mission Valley East Corridor, although additional operating revenues will be needed if the entire guideway system is built as planned. Small cuts in service are currently being considered by MTDB.

San Diego Transit's bus fleet currently averages 8.7 years old, which is slightly above the national average. The San Diego Trolley fleet averages 6 years old.

San Diego: Mission Valley East



Tren Urbano
San Juan, Puerto Rico
(October 1993)

Description

The Department of Transportation and Public Works (DTPW) of Puerto Rico plans to construct an 11.8-mile, 16-station light rail line which would connect the major activity centers in the San Juan Region, including Santurce, Hato Rey, Rio Piedras and Bayamon. A second phase would extend the rail system east to Carolina and northwest further into Santurce. The estimated capital cost for the first phase of the project is \$900 million (inflated \$). However, several possible design changes could increase the capital cost.

Status

DTPW has applied for a grant for preliminary engineering for the Tren Urbano project and the draft EIS is currently being prepared. DTPW has funded all existing environmental work and engineering work with local funds under a letter of no prejudice. FTA has recently received a Section 3 grant application for additional engineering and environmental work.

The Tren Urbano has been selected as one of FTA's turnkey demonstration projects.

Congress has not authorized or appropriated any funds for this project.

Justification

Under the current financing strategy, the project would be exempt from the New Start criteria because the Section 3 share would be less than one-third of the capital cost.

Mobility Improvements. The number of cars per capita in Puerto Rico has grown to levels comparable to the mainland, but highway lane miles per automobile are much below mainland levels, resulting in extreme highway congestion especially in San Juan. Travel time savings of over 20,000 hours daily are projected for the Tren Urbano project.

Cost Effectiveness. The cost per new rider is \$3.50 (1992 dollars, 54,700 new riders per day) making this one of the most cost effective projects in this year's 3(j) Report. FTA feels that this calculation was done in an extremely conservative manner.

Environmental Benefits. San Juan is an attainment area for ozone and carbon monoxide. Information on the environmental impacts of this project is being developed in the draft EIS.

Tren Urbano -- San Juan, Puerto Rico

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from the Tren Urbano project.

Local Financial Commitment

DTPW's original financing plan proposed the use of local highway and FHWA flexible funding money to fund 94 percent of the cost of the Tren Urbano project, with the rest coming from the municipalities (2.9 percent), the private sector (1.5 percent) and FTA Section 9 funds (1.6 percent). Two unique features of the DTPW financing plan are the use of 1) \$300 million (37.6 percent) in Certificates of Participation, backed by FHWA formula funds and 2) bonds backed by highway tolls which would cover 56.3 percent. Puerto Rico is currently modifying the financing plan to include Section 3 funds equal to about one-third of the cost of the Tren Urbano project. These section 3 funds would be used to free up local funds for expanded TSM and congestion relief highway projects and to reserve local matching financial capability for future phases of Tren Urbano.

The Tren Urbano financing plan is rated as "medium" because, although the local and federal funds proposed for the project are from existing sources, the final financing plan is not yet in place.

Funding for the existing bus system comes from appropriations by the Commonwealth, the Tren Urbano deficits would be covered largely by Highway Authority funds, and the Publico (Jitneys) operations are privately operated and funded. These funding sources have been adequate in the past and therefore the stability and reliability of funding for operations is rated as "high." In 1992 the average age of the bus fleet for the Metropolitan Bus Authority was 7 years, which is better than the national average.

San Juan: Tren Urbano Phase 1



Largo Corridor
Washington, D.C., Metropolitan Area
(October 1993)

Description

The State of Maryland Department of Transportation (MDDOT) is considering an extension of the Washington Metrorail system and other transit alternatives for the corridor between the Addison Road Metrorail Station and Largo, Maryland. The proposed extension is beyond the 103-mile Metrorail system authorized by the National Capital Transportation Act of 1969, as amended.

Preliminary estimates put the capital cost of a Metrorail extension between \$228 and \$400 million (1991 dollars), depending on the length of the extension and the number of stations. Preliminary estimates of ridership for the proposed extension range from 27,000 to 29,000 daily trips.

Status

Based upon the findings of the MDDOT's system planning study, FTA approved the initiation of alternatives analysis in June 6, 1993. The study is examining a number of alternatives including a Metrorail extension to Largo, a busway, and light rail for all or part of a corridor extending as far as Bowie.

Section 3035(nn)(3) of ISTEA directs FTA to enter into a full funding grant agreement with the State of Maryland or its designee for up to \$5 million to carry out an alternatives analysis and preliminary engineering for the proposed rail extension. Congress has not appropriated any funds for alternatives analysis or preliminary engineering.

Justification

The Metrorail extension is part of a Program of Interrelated Projects which also includes three LRT extensions in Baltimore and MARC Commuter Rail extensions to Waldorf and Frederick, Maryland. Section 3011(a) of ISTEA requires that FTA consider the assessment factors of all elements of a program of interrelated projects to the extent that such consideration expedites project implementation. However, information on this program as a whole is not available.

Mobility Improvements. FTA does not have any information on the mobility benefits of a major transit investment in this corridor. It is presumed that such information would be developed during the alternatives analysis called for in ISTEA.

Largo Corridor -- Washington, D.C., Metropolitan Area

Cost Effectiveness. MDOT's system planning produced preliminary cost effectiveness indices ranging from \$16 to \$83 for the rail alternatives. This information will be refined during alternatives analysis.

Environmental Benefits. The Washington area is a "serious" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. Information on the air quality effects of a major transit investment will be developed in the alternatives analysis.

Operating Efficiencies. FTA does not have any information on the operating efficiencies that would result from a major transit investment in this corridor. It is presumed that such information would be developed during the alternatives analysis called for in ISTEA.

Local Financial Commitment

A preliminary financial analysis is being conducted as part of MDDOT's current study and will be completed during alternatives analysis. FTA is not currently aware of the State/local matching share or the sources of non-Federal funding for capital and operations. Since the region has no financial strategy yet in place, a "low" rating has been assigned.

The National Capital Transportation Act of 1969, as amended, requires a 37.5 percent local match of funds authorized for the remaining segments of the 103-mile Metrorail system. Until now, completion of the 103-mile system has been the Washington area's highest priority. Capital replacement and rehabilitation of the Metrorail system will require a growing commitment of regional resources. The stability and reliability of WMATA's operating revenues are rated "low-medium".

In 1992 WMATA's bus fleet averaged 12.4 years, which is substantially above the national average. The advanced age of the bus fleet is a concern since it suggests that the transit agency is not adequately reinvesting in its existing system.

SYSTEM PLANNING/OTHER PROJECTS

Pedestrian Crossover

Altoona, Pennsylvania

(October 1993)

Description	This proposed project is to construct a pedestrian crossover at 14th Street in Altoona, Pennsylvania.
Status	This proposal is currently considered to be in the system planning phase of development.
agreement for	Section 3035(ddd) of ISTEA directs FTA to sign a multiyear grant \$3.2 million with the City of Altoona for construction of the pedestrian crossover. No funds have yet been appropriated.
Justification	<p>Since the Section 3 share is less than \$25 million, this project would be exempt from the new start criteria.</p> <p><u>Mobility Improvements.</u> FTA does not have any information on the mobility benefits of this proposal.</p> <p><u>Cost Effectiveness.</u> This proposal would not lead to an increase in transit ridership and thus would not be cost effective as a transit investment.</p> <p><u>Environmental Benefits.</u> The Altoona area is classified as a "marginal" nonattainment area for ozone and has not been classified for carbon monoxide. This project would not have an effect on pollution levels.</p> <p><u>Operating Efficiencies.</u> This project would have no effect on the operating efficiency of the transit system.</p>
Local Financial Commitment	<p>The FTA does not have any information on the cost of this proposal the proposed Federal share, or the sources of State/local funding for capital and operations.</p> <p>In 1992, the average age of Altoona's bus fleet was 18.1 years, which is substantially above the national average.</p>

Buckhead People Mover

Atlanta, Georgia

(October 1993)

Description

The Atlanta Regional Commission (ARC) is conducting conceptual engineering of a people mover system in the Buckhead area of Atlanta, Georgia. Buckhead has 60,000 residents, 9 million square feet of office space, 4 million square feet of retail space, and 3,000 hotel rooms, and will have two MARTA rapid rail stations.

FTA has no information on the cost of the project. Such information will be developed in the conceptual engineering study.

FTA has no estimate of ridership on the proposed people mover. Such information will be developed in the conceptual engineering study.

Status

The project is considered to be in the system planning phase of project development.

Section 3035(s) of ISTEA of 1991 directs FTA to enter into a multiyear grant agreement with ARC for \$0.2 million to complete a conceptual engineering study of the proposed system.

FTA approved a grant for the study in February of 1993 and it is expected to be completed by Spring of 1994.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of the proposed project. It is presumed that preliminary information will be developed during the conceptual engineering study called for in ISTEA.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of the proposed project. It is presumed that preliminary information will be developed during the conceptual engineering study.

Environmental Benefits. EPA has classified Atlanta as a "serious" nonattainment area for ozone and as an attainment area for carbon monoxide. It is unlikely that this project would have a significant effect on pollution levels at the regional scale.

Buckhead People Mover -- Atlanta, Georgia

Operating Efficiencies. FTA does not have any information on the operating efficiencies of the proposed project. It is presumed that preliminary information will be developed during the conceptual engineering study.

Local Financial Commitment

FTA does not have any information on the cost of the people mover, the proposed Federal share, or the sources of non-Federal funding for capital and operations. It is presumed that such information will be developed during the conceptual engineering study.

In the past, MARTA's rail rapid transit program has been the region's highest priority requiring all of the Section 3 New Start funding available to Atlanta. MARTA receives the revenue of a 1 percent sales tax which it uses to subsidize its operations and support its construction program. Fluctuations in the growth of sales tax revenue and increasing demands on the revenue are major concerns. A maximum of 50 percent of the sales tax revenue may be dedicated to capital expenditures. MARTA has one rail extension now under construction and one in final design. When these segments, totaling 9 miles, are completed, MARTA will increase its operating rail system to 44 miles with a commensurate increase in operating subsidy. As a result, MARTA's working capital will continue to decrease. MARTA is approaching its legal debt capacity.

In 1992 MARTA's bus fleet averaged 6.1 years old, which is better than the national average. Rail vehicles averaged 7.9 years old.

Greensboro Commuter Rail

Atlanta, Georgia

(October 1993)

Description	<p>The Atlanta Regional Commission (ARC) is considering the feasibility of instituting commuter rail service between Greensboro, Georgia, and downtown Atlanta. The corridor is approximately 70 miles long.</p> <p>FTA has no information on the cost of the project or ridership on the proposed line.</p>
Status	<p>Section 3035(rr) of ISTEA directs FTA to enter into a multiyear grant agreement with ARC for \$0.1 million to study the feasibility of the proposed commuter rail line. No funds have been appropriated for the feasibility study.</p>
Justification	<p><u>Mobility Improvements.</u> FTA does not have any information on the mobility benefits of the proposed project. Such information will be developed in the feasibility study called for in ISTEA.</p> <p><u>Cost Effectiveness.</u> FTA does not have any information on the cost effectiveness of the proposed project. Such information will be developed in the feasibility study called for in ISTEA.</p> <p><u>Environmental Benefits.</u> EPA has classified Atlanta as a "serious" nonattainment area for ozone and as an attainment area for carbon monoxide. The effects of the proposed commuter rail line on air quality have not been quantified. In the short term, this type of project may result in very small decreases in the emission of air pollutants. In the long term, however, a project of this length, serving an area well beyond the existing suburbs, could contribute to urban sprawl and the increased pollutant emissions associated with very low density urbanization.</p> <p><u>Operating Efficiencies.</u> FTA does not have any information on the operating efficiencies of the proposed project. Such information will be developed in the feasibility study called for in ISTEA.</p>
Local Financial Commitment	<p>FTA does not have any information on the cost of the commuter line, the proposed Federal share, or the sources of non-Federal funding for capital and operations. It is presumed that preliminary information would be developed during the feasibility study called for in ISTEA.</p>

Greensboro Commuter Rail -- Atlanta, Georgia

In the past, MARTA's rail rapid transit program has been the region's highest priority requiring all of the Section 3 New Start funding available to Atlanta. MARTA receives the revenue of a 1 percent sales tax which it uses to subsidize its operations and support its construction program. Fluctuations in the growth of sales tax revenue and other increasing demands on the revenue are major concerns. A maximum of 50 percent of the sales tax revenue may be dedicated to capital expenditures. MARTA has two rail extensions now under construction and one in final design.

When these segments, totaling 9 miles, are completed, MARTA will increase its operating rail system to 44 miles with a commensurate increase in operating subsidy. As a result, MARTA's working capital will continue to decrease. MARTA is approaching its legal debt capacity.

In 1991 MARTA's bus fleet averaged 6.1 years old, which is better than the national average. Rail vehicles averaged 7.9 years old.

North Station - South Station Rail Link

Boston, Massachusetts

(October 1993)

Description

This proposal involves a rail tunnel linking North Station and South Station in downtown Boston. The tunnel would permit commuter rail trains to serve both downtown stations and permit Amtrak to provide through-service to communities north of Boston. Two alignments are being studied: a Congress Street alignment and an alignment following the Central Artery. The rail tunnel, electrification, and rolling stock are estimated to cost \$2 to \$4 billion.

Status

Section 3035(ii) of ISTEA directs FTA to conduct a feasibility study of a proposed rail link between North Station and South Station in Boston. An interim report was completed in April 1993, and FTA expects to complete the study in early 1994. The study is assessing the costs and benefits of several tunnel alternatives.

In 1993, the Central Artery Rail Link Task Force, under Massachusetts' Executive Office of Transportation and Construction, studied a rail link in the Central Artery alignment and concluded that it would be feasible. The Task Force proposed that the Central Artery design be modified to allow for the construction of the rail link at a later date. These initial modifications are estimated to cost \$100 million. Based on this study, Congress appropriated \$4 million (in the FY 1993 Amtrak supplemental) to begin engineering. Massachusetts intends to let construction contracts for affected portions of the Central Artery in early 1994.

Justification

Mobility Improvements. The project would reduce travel time between suburban areas north of Boston and job locations in Boston's financial district and Back Bay. In addition, the project could provide a transit alternative for some suburb to suburb commutes. The rail link would also permit Northeast corridor Amtrak service to extend through Boston to New Hampshire and Maine. These benefits will be quantified in the FTA feasibility study.

Cost Effectiveness. The FTA does not have any information on the cost effectiveness of this proposal. Such information will be developed in the FTA feasibility study.

Environmental Benefits. The Boston area is a "serious" nonattainment area for ozone and a "moderate" nonattainment for carbon monoxide. FTA's feasibility study is estimating the project's impacts on air quality.

North Station - South Station Rail Link -- Boston, Massachusetts

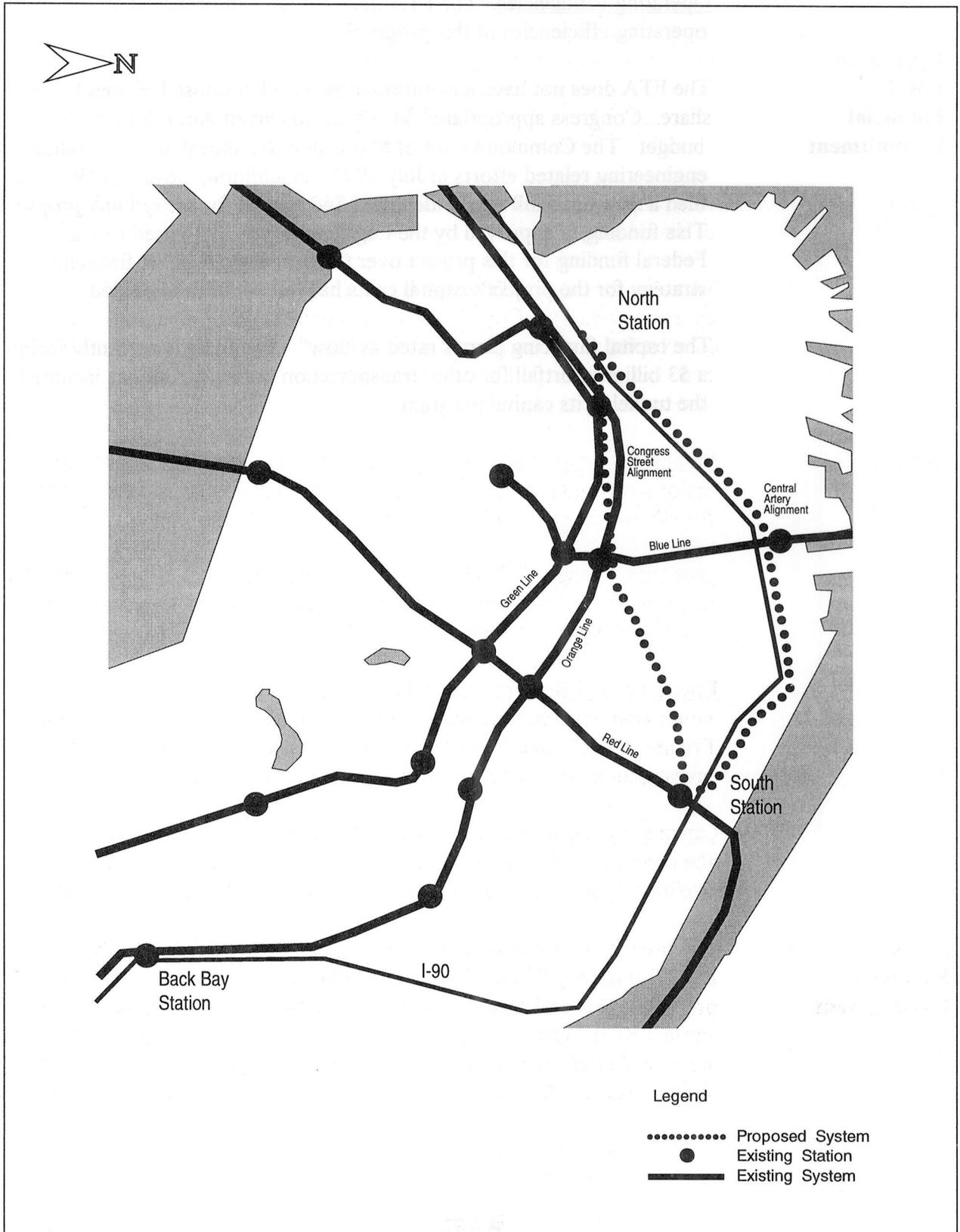
Operating Efficiencies. The FTA does not have information on the operating efficiencies of this proposal.

Local Financial Commitment

The FTA does not have any information on the proposed Federal share. Congress appropriated \$4 million as part of Amtrak's FY 1993 budget. The Commonwealth of Massachusetts allocated \$1.5 million for engineering related efforts in July 1993. In addition, Governor Weld has filed a new bond bill which identified \$60 million for the rail link project. This funding, if approved by the Legislature, would be used to match Federal funding for this project over the next few years. A financing strategy for the project's capital costs has not yet been identified.

The capital financing plan is rated as "low". The State is currently facing a \$3 billion shortfall for other transportation priorities, but has included the tunnel in its capital program.

Boston: North-South Station Rail Link



Charlotte Priority Corridor

Charlotte, North Carolina

(October 1993)

Description	<p>The City of Charlotte is studying the potential merits of light rail and other transit alternatives in several corridors. The study will lead to the selection of a priority corridor for more detailed study. A specific corridor or project has not yet been identified.</p>
Status	<p>This proposal is currently considered to be in the system planning phase of development.</p> <p>Section 3035(r) of ISTEA directs FTA to sign a multiyear grant agreement with the City of Charlotte providing \$0.5 million for the completion of system planning and alternatives analysis for a priority corridor. The City of Charlotte has almost completed work on the system planning study.</p>
Justification	<p><u>Mobility Improvements.</u> FTA has not evaluated the mobility benefits of a major transit investment. Preliminary information is being developed in the system planning study.</p> <p><u>Cost Effectiveness.</u> FTA has not yet evaluated the cost-effectiveness of a major transit investment in Charlotte. Preliminary information is being developed in the system planning study.</p> <p><u>Environmental Benefits.</u> The Charlotte area is a "moderate" nonattainment area for ozone and is not classified for carbon monoxide. Preliminary information on the air quality impacts of a major transit investment is being developed in the system planning study.</p> <p><u>Operating Efficiencies.</u> FTA does not have any information on the operating efficiencies of a major transit investment in Charlotte. Preliminary information is being developed in the system planning study.</p>
Local Financial Commitment	<p>The preliminary estimate of the cost of the proposed light rail alternative is \$600 million (1993\$). The preliminary finance strategy proposes a Federal share ranging from 50 percent to 80 percent of the project costs. Charlotte is considering pay-as-you-go financing and/or a new local sales tax in addition to the current property and privilege tax funding sources for the local share.</p>

Charlotte Priority Corridor -- Charlotte, North Carolina

The finance strategy will be further refined in the system planning study.

In 1992 the Charlotte CTS buses averaged 6.6 years old, which is better than the national average.

Cincinnati Commuter Rail Line

Cincinnati, Ohio
(October 1993)

Description

A proposed commuter rail line would extend from the Cincinnati/Northern Kentucky International Airport through downtown Cincinnati to Paramount's Kings Island Amusement Park in Warren County, Ohio. This 33-mile corridor paralleling I-71 generally runs in a northeasterly direction, and so is referred to as the Northeast Corridor.

The capital cost of this project developed during system level planning is \$585 million.

Status

The Ohio-Kentucky-Indiana Regional Council of Governments is ready to initiate more detailed corridor level planning.

In FY 1994, Congress appropriated \$1.35 million for the local MPO, Ohio-Kentucky-Indiana Regional Council of Governments, to begin alternatives analysis for this project.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of a major transit investment in Cincinnati.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of a major transit investment in Cincinnati.

Environmental Benefits. The Cincinnati region is a "moderate" nonattainment area for ozone and an attainment area for carbon monoxide. FTA has no information on the environmental benefits of a major transit investment in Cincinnati.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from a major transit investment in Cincinnati.

Local Financial Commitment

FTA does not have any information on the financial plan, the proposed Federal share, or the sources of State/local funding for capital and operations.

In 1992 the existing bus fleet averaged 6.3 years old, which is better than the national average.

Highland Hills Extension

Cleveland, Ohio

(October 1993)

Description This proposal would extend the Blue Line of Cleveland's rail system from the existing terminus at the intersection of Van Aken Boulevard and Warrensville Center Road in Shaker Heights to Highland Hills.

Status The project is considered to be in the system planning phase, since the FTA has not been involved and has not approved the initiation of more detailed planning or project development.

Section 3035(zz) of ISTEA directs FTA to enter into a multiyear grant agreement with the Greater Cleveland Regional Transit Authority for \$1.2 million to provide for the completion of alternatives analysis and preliminary engineering. Congress has not yet appropriated these funds.

Justification Mobility Improvements. FTA does not have any information on the mobility benefits of this proposal. Such information would be developed in alternatives analysis.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of this proposal. Such information would be developed in alternatives analysis.

Environmental Benefits. The Cleveland area is a "moderate" nonattainment area for ozone and a "moderate ≤ 12.7 " nonattainment for carbon monoxide. Information on the air quality impacts of a major transit investment would be developed in the alternatives analysis.

Operating Efficiencies. FTA does not have information on the operating efficiencies that would result from this proposal. Such information would be developed in alternatives analysis.

Local Financial Commitment The FTA does not have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations.

In 1992 GCRTA's existing bus fleet averaged 6.5 years old, which is better than the national average.

Northeast Ohio Commuter Rail

Cleveland, Ohio

(October 1993)

- Description** This proposal involves commuter rail service to connect urban and suburban areas of northeastern Ohio.
- Status** This proposal is currently considered to be in the system planning phase of development.
- Section 3035(w) of ISTEA directs FTA to sign a multiyear grant agreement with the Northeast Ohio Areawide Coordinating Agency in the amount of \$1.6 million for a feasibility study. The Northeast Ohio Areawide Coordinating Agency has received a grant for \$800,000 and has begun work on Phase 1 of the study.
- Justification**
- Mobility Improvements. FTA does not have any information on the mobility benefits of a major transit investment in the corridor. Preliminary information will be developed in the feasibility study.
- Cost Effectiveness. FTA does not have any information on the cost effectiveness of a major transit investment in the corridor. Preliminary information will be developed in the feasibility study.
- Environmental Benefits. The northeastern region of Ohio is a "moderate" nonattainment area for ozone and a "moderate <= 12.7" nonattainment area for carbon monoxide.
- Operating Efficiencies. FTA does not have any information on the operating efficiencies that would result from a major transit investment in the corridor. It is presumed that such information will be developed in the feasibility study.
- Local Financial Commitment** FTA does not have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. A cost estimate and funding strategy will be developed in the feasibility study.
- In 1992 GCRTA's existing bus fleet averaged 6.5 years old, which is better than the national average.

Woodward Corridor

Detroit, MI
(October 1993)

Description

The Woodward Corridor extends for a distance of about 14 miles northwest from the Detroit CBD. The area has been advanced as a possible light rail corridor, although the City of Detroit indicates an interest in considering other technologies and termini. There is no current cost estimate or ridership forecast. In the early 1980's, when planning for this proposal was suspended, the project had a cost estimate of \$1.4 billion.

Status

Section 3035(m) of ISTEA directs FTA to enter into a multiyear agreement with the City of Detroit in the amount of \$20 million for the completion of alternatives analysis and preliminary engineering for a light rail project. This corridor has been identified by the City of Detroit to be the Woodward Corridor. Congress has appropriated \$10 million for these studies.

In the 1970's and early 1980's, Detroit conducted alternatives analysis and nearly completed preliminary engineering for LRT in the Woodward Corridor. The project became inactive in 1985 due to a lack of funding. Detroit has applied for a grant to review the previous alternatives analysis and PE and prepare a work scope for necessary updates. The application is still pending upon receipt of additional information.

Much of the information developed in the earlier studies would need to be updated if project planning is resumed.

Justification

Mobility Improvements. FTA has no current information on the mobility benefits of a major investment in the Woodward Corridor. Such information would be developed in the alternatives analysis authorized in ISTEA.

Cost Effectiveness. FTA has no current information on the cost effectiveness of a major investment in the corridor. In 1984 and 1985, FTA rated the Woodward LRT project and concluded that it would not be competitive with other candidates for New Start funding.

Environmental Benefits. Detroit is a "moderate" nonattainment area for ozone and a "not classified" nonattainment area for carbon monoxide.

Woodward Corridor -- Detroit, Michigan

Information on the air quality impacts of a major transit investment would be developed in the alternatives analysis.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from a major investment in the corridor.

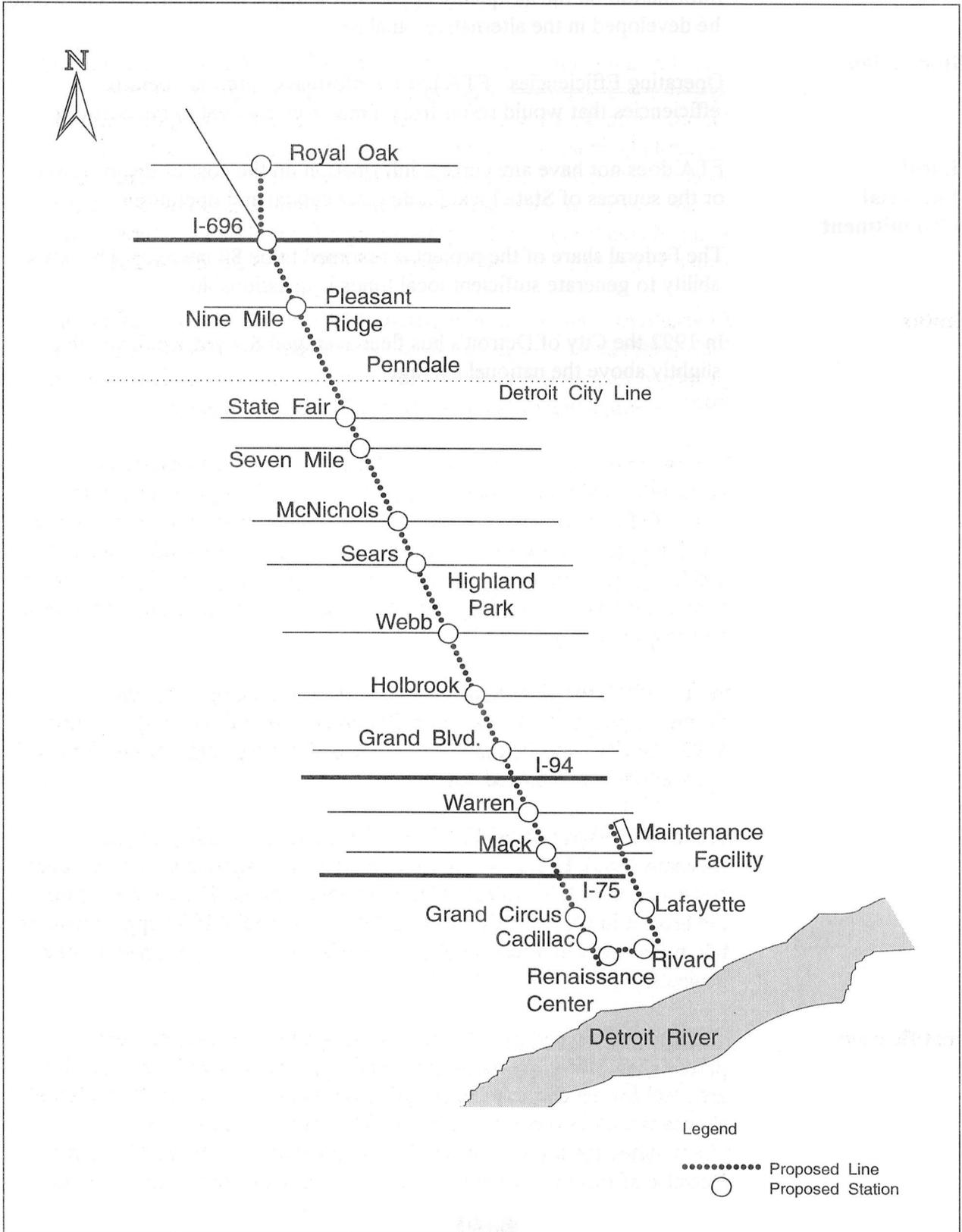
Local Financial Commitment

FTA does not have any current information on the cost of this proposal or the sources of State/local funding for capital and operations.

The Federal share of the project is assumed to be 80 percent. The city's ability to generate sufficient local funds is questionable.

In 1992 the City of Detroit's bus fleet averaged 8.7 years old, which is slightly above the national average.

Detroit: Woodward Corridor



Rapid Transit Project

Honolulu, Hawaii

(October 1993)

Description

The City and County of Honolulu proposed a 15.9-mile fixed guideway system traversing from Waiawa on the west, through downtown Honolulu, to the University of Hawaii on the east. The system would primarily be in an aerial configuration utilizing a fully automated, electric-powered, fixed guideway rapid transit technology. The rapid transit portion of the program is currently estimated to cost \$2.3 billion (year of construction dollars), including \$276 million for interest and other financing costs, and to carry 185,000 riders per day in 2005.

Status

Alternatives analysis was completed in 1990 with circulation of a draft EIS, selection of a locally preferred alternative, and identification of a proposed financing plan. Preliminary engineering was initiated and, in 1992, a supplemental draft and final EIS were completed.

In September 1992, the City Council did not approve an excise tax increase which would have funded 70 percent of the project's capital costs. Other alternative sources of local funding were explored, but these funding options were also not approved by the City Council. In April 1993, the city terminated the preliminary engineering work by the system contractor and decided not to issue notices to proceed to do further work on the project.

In June 1993, the city requested proposals for building the project through a private franchise (with 50 percent Federal funding). In July 1993, the city cancelled the RFP. The preliminary engineering effort has been subsequently closed out.

Section 3035(w) of ISTEA directs FTA to sign a multiyear grant agreement with Honolulu for \$618 million. The agreement would cover construction of this project. Congress appropriated \$112.3 million for the project in FY 1991 through FY 1993. In the FY 1994 appropriations bill, however, \$76.5 million of these funds were reprogrammed to other projects.

Justification

Mobility Improvements. Honolulu's topography, its development patterns, and the large transit patronage already present in the corridor are ideal for developing a fixed guideway system. The locally preferred alternative was expected to save 33,000 hours of travel time per day (7.3 minutes per transit trip) in 2005, compared with the TSM alternative. Because of this time savings, the project was expected to attract almost

Rapid Transit Project -- Honolulu, Hawaii

50,000 new daily riders to transit compared with the TSM alternative.

Cost Effectiveness. The 15.9-mile project had a cost effectiveness index of \$6 per new trip (1991 dollars, 2005 ridership), making it one of the better projects in the new starts pipeline.

Environmental Benefits. Honolulu is in attainment of the National Ambient Air Quality Standards. According to the analysis in the EIS, the project would reduce regional pollutant emissions by 1 to 2 percent.

Operating Efficiencies. The operating cost per passenger was estimated to be \$1.51 for the locally preferred alternative, \$1.84 for the TSM alternative, and \$1.36 for the No Build alternative.

Local Financial Commitment

In September 1992, the City Council declined to establish a one-half percent general excise and use tax surcharge for the local matching share. Alternative funding sources were then considered, but an acceptable alternative funding source to provide the local matching share could not be found. Honolulu's capital financing plan has been given a "low" rating pending the adoption of a new financial plan.

In terms of the stability and reliability of operating assistance, Honolulu's bus system is supported through the city's general appropriations which have provided a stable and reliable source of operating assistance. The bus system is being adequately maintained and replaced through continuing reinvestment. In 1992 the average age of Honolulu's bus fleet was 9.8 years, which is slightly above the national average.

Implementation of rapid transit and related bus system improvements would lead to a \$37 million (1991 dollars) or 54 percent increase in the transit system's annual operating deficit. Honolulu has the ability to support all municipal services through the property tax, and has the power to establish transit fares, other fees and charges. Nevertheless, the added burden of operating the proposed transit improvements may be difficult to absorb without a new source of revenue. FTA is concerned about the size of the added burden that the combined rail and bus system would put on existing revenue sources, as well as the lack of a local decision to provide a new funding source. Pending local decisions on how to fund the operating deficit, a "low" rating has been assigned.

Santa Monica Boulevard Transit Parkway

Los Angeles, California

(October 1993)

Description

The Los Angeles County Metropolitan Transportation Authority (LACMTA) is undertaking a study of highway and transit alternatives in the Santa Monica Boulevard corridor (formerly called the Multimodal Transit Parkway). The study will initially consider alternatives in the corridor between Santa Monica and West Hollywood, then focus on a 2.5-mile segment of the corridor between I-405 and Beverly Hills. One alternative to be considered will be the reconstruction of Santa Monica Boulevard to include a dedicated transit or high occupancy vehicle lane. The estimated cost of this initial segment is \$66.4 million.

Status

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) issued a draft environmental impact statement (EIS) for corridor improvements in 1987. Caltrans' proposals generated controversy and a final EIS was never developed. LACMTA has purchased of a railroad right-of-way in the corridor. The Project Study Report (PSR) will be submitted to Caltrans in January 1994.

FTA and FHWA have agreed that FHWA will be the lead agency on this project.

After the PSR is adopted by Caltrans, FHWA and LACMTA will perform a value engineering study in early 1994 in an effort to reduce the project cost and consider construction alternatives.

Section 3035(eee) of ISTEA directs FTA to enter into a multiyear grant agreement with LACMTA for \$15 million. This agreement would cover the construction of the initial 2.5-mile segment. These funds have not yet been appropriated. An additional \$8.9 million was authorized in Section 1108 of ISTEA.

Justification

As currently proposed, the initial segment would be exempt from the new start criteria because the Section 3 share is less than \$25 million.

Mobility Improvements. The proposed project would connect several activity centers in the corridor. FTA has no information on how a transit investment in this corridor would improve mobility.

Cost Effectiveness. FTA has no information on the cost effectiveness of a transit investment in this corridor.

Santa Monica Boulevard Transit Parkway -- Los Angeles, California

Environmental Benefits. Metropolitan Los Angeles is an "extreme" nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. It is unlikely that any of the alternatives would have a significant effect on pollution levels at the regional scale, because such a small percentage of regional auto trips would be diverted to transit.

Operating Efficiencies. FTA has no information on the impact of a transit investment on operating efficiencies.

Local Financial Commitment

LACMTA is currently proposing a Section 3 share of 23 percent and a total Federal share of about 36 percent. It should be noted, that LACMTA is financing several major transit investments without any Federal assistance. These projects include: the Blue Line between Los Angeles and Long Beach; a planned Blue Line Extension to Pasadena; the Green Line from Norwalk to El Segundo; and several planned commuter rail projects for the region's Metrolink commuter rail service.

State and County residents have voted for several significant taxes which are dedicated to transit improvements. Los Angeles' transit programs benefit from several very significant State and local taxes, including county sales taxes, State gas taxes and general obligation bonds.

Although these taxes generate large amounts of revenue, the tax revenues have not grown as fast as had been anticipated. In addition, construction and operating costs have exceeded predictions. It is therefore not possible to fully finance the construction and operation of all of the projects in LACMTA's transit development plan from existing local, State and Federal sources. LACMTA is currently revising its financing plan, however, until this is done, both the capital financing plan and the stability and reliability of operating revenue are rated as "low" because the current financing plan is not adequate to cover committed capital and operating expenses.

In 1992 Los Angeles' bus fleet averaged 8.3 years old, which is comparable to the national average. The rail vehicle fleet averaged 3 years old.

LOSSAN Rail Corridor Improvement Project
Los Angeles, Orange, and San Diego Counties, California
(October 1993)

Description The LOSSAN projects will enhance commuter and intercity rail service throughout southern California. Local officials have identified the elements of the project for which they will seek Federal funds, including grade separations in Los Angeles, Orange and San Diego Counties with a total cost of \$31.8 million.

Status Amtrak currently operates nine daily round trips between Los Angeles and San Diego, and four daily round trips between Los Angeles and Santa Barbara. Amtrak also operates one round trip daily between San Juan Capistrano and Los Angeles for the Orange County Transportation Authority (OCTA). In March 1994, OCTA plans to increase service to three round trips daily and add two more round trips in May 1994. This initial project is fully funded with \$121.8 million in State/local funds.

In addition, San Diego is in final design for upgrading commuter rail service between Oceanside and San Diego. This \$70 million project is fully funded with non-Federal monies. The right-of-way between Fulerton and San Diego is owned by Orange and San Diego Counties.

The elements of the project to be proposed for FTA funding are considered to be in the planning phase, as the FTA has not been involved and has not approved the initiation of more detailed planning or project development.

Section 3035(g) of ISTEA directs FTA to enter into a multiyear grant agreement with the Los Angeles-San Diego Rail Corridor Agency to provide for track and safety improvements to the corridor. ISTEA authorized \$20 million in Section 3 new start funds for the project, and \$10 million was appropriated in FY 1992. No Section 3 money was appropriated in FY 1993.

The LOSSAN Rail Corridor Agency has identified one major grade separation project in each county (Los Angeles, Orange and San Diego) for Section 3 funding.

Justification As currently proposed, the project would be exempt from the new start criteria because the Section 3 share is less than \$25 million.

LOSSAN Rail Corridor Improvement Project -- California

Mobility Enhancements. Local agencies expect that commuter rail ridership will increase from 3500 daily trips to over 20,000 upon implementation of the Southern California Commuter Rail Regional System Plan. The grade separation projects will improve travel time by allowing speed restrictions to be lifted at these hazardous grade crossings.

Cost Effectiveness. The calculation of cost effectiveness index is not required for this project.

Environmental Benefits. Metropolitan Los Angeles is an "extreme" nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. Although some drivers are likely to be diverted to transit with this project, it is unlikely that any of the federally funded improvements would have a significant effect on pollution levels of the region.

Operating Efficiencies. The projects will allow for the construction of additional tracks and higher speeds which will improve the operating efficiencies of the current service.

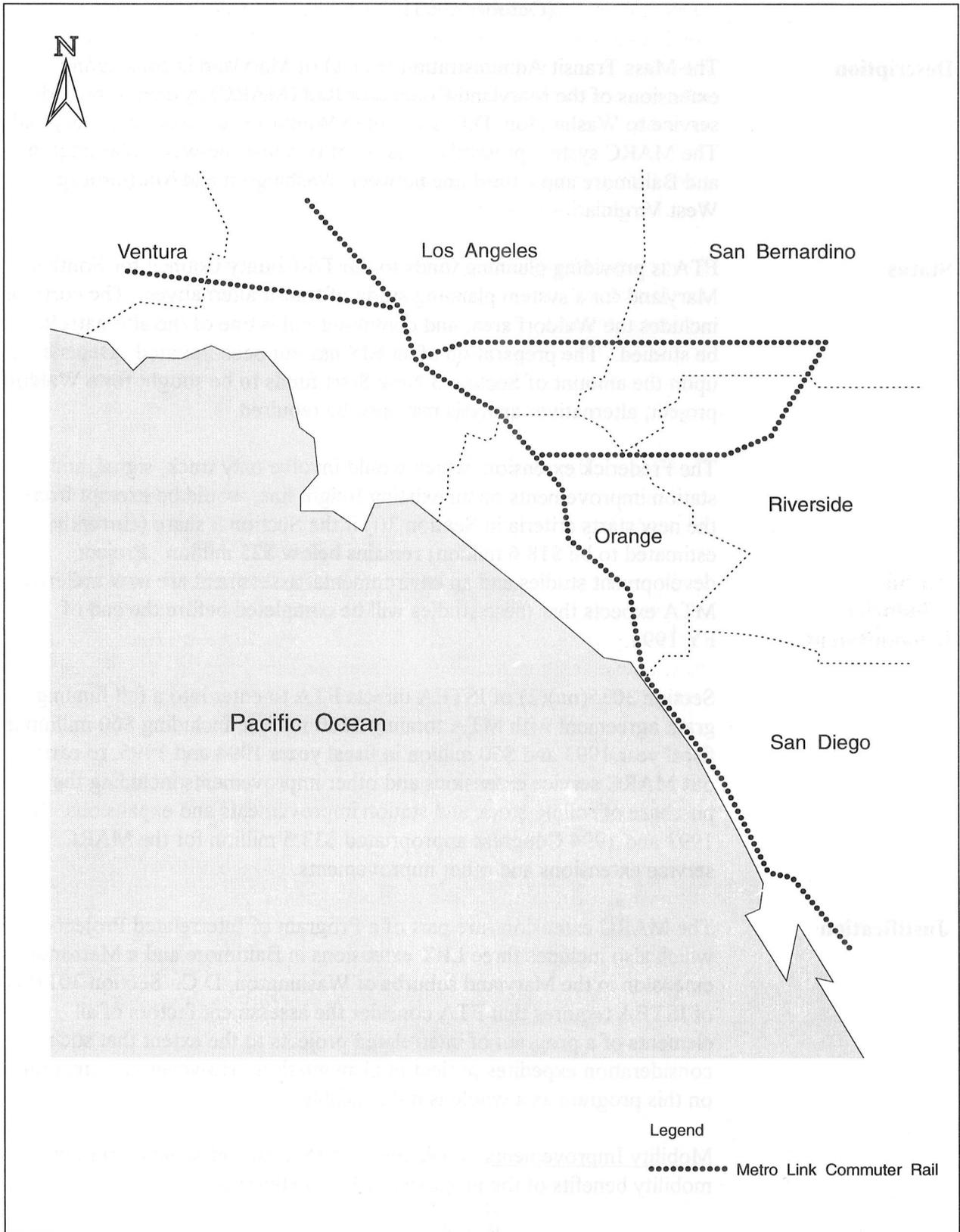
Local Financial Commitment

Initial elements of this project are fully funded with state and local monies. The Los Angeles area has a wide variety of funding sources potentially available for the local share of future improvements. Over the next five years, the State of California plans to spend \$172.3 million using State bond funds and State transit capital improvement funds for intercity rail improvement projects in the LOSSAN corridor. In addition, the Counties of Los Angeles, Orange and San Diego plan to spend \$161.6 million of State bond funds for commuter rail projects.

However, the existing regional financing plan for Los Angeles County is being revised since it will not generate enough money to build and operate all projects included in its 30-year plan.

FTA has no information on the stability and reliability of the operator of the commuter rail system and therefore has not established a rating.

Los Angeles: Metro Link Project



MARC Extensions

Maryland

(October 1993)

Description

The Mass Transit Administration (MTA) of Maryland is considering extensions of the Maryland Commuter Rail (MARC) system to provide service to Washington, D.C. from both Waldorf and Frederick, Maryland. The MARC system presently consists of two lines between Washington and Baltimore and a third line between Washington and Martinsburg, West Virginia.

Status

FTA is providing planning funds to the Tri-County Council for Southern Maryland for a system planning study of transit alternatives. The corridor includes the Waldorf area, and commuter rail is one of the alternatives to be studied. The preparation of an EIS has not been initiated. Depending upon the amount of Section 3 New Start funds to be sought for a Waldorf project, alternatives analysis may also be required.

The Frederick extension, which would involve only track, signal, and station improvements on an existing freight line, would be exempt from the new starts criteria in Section 3(i) if the Section 3 share (currently estimated to be \$18.6 million) remains below \$25 million. Project development studies and an environmental assessment are now underway. MTA expects that these studies will be completed before the end of FY 1994.

Section 3035(nn)(2) of ISTEA directs FTA to enter into a full funding grant agreement with MTA totaling \$160 million, including \$60 million in fiscal year 1993 and \$50 million in fiscal years 1994 and 1995, to carry out MARC service extensions and other improvements including the purchase of rolling stock and station improvements and expansions. In 1993 and 1994 Congress appropriated \$33.5 million for the MARC service extensions and other improvements.

Justification

The MARC extensions are part of a Program of Interrelated Projects which also includes three LRT extensions in Baltimore and a Metrorail extension in the Maryland suburbs of Washington, D.C. Section 3011(a) of ISTEA requires that FTA consider the assessment factors of all elements of a program of interrelated projects to the extent that such consideration expedites project implementation. However, information on this program as a whole is not available.

Mobility Improvements. FTA does not have any information on the mobility benefits of the proposed MARC extensions.

MARC Extensions -- Maryland

Cost Effectiveness. FTA does not have any information on the cost effectiveness of the proposed MARC extensions.

Environmental Benefits. EPA has classified the Washington Metropolitan Area as a "serious" nonattainment area for ozone and as a "moderate" nonattainment area for carbon monoxide. Possible effects of the MARC extensions on air quality have not been quantified. In the short term, this type of project may result in very small decreases in the emission of air pollutants. In the long term, however, a project of this length, which serves an area well beyond the existing suburbs, could contribute to urban sprawl and the increased pollutant emissions associated with very low density urbanization.

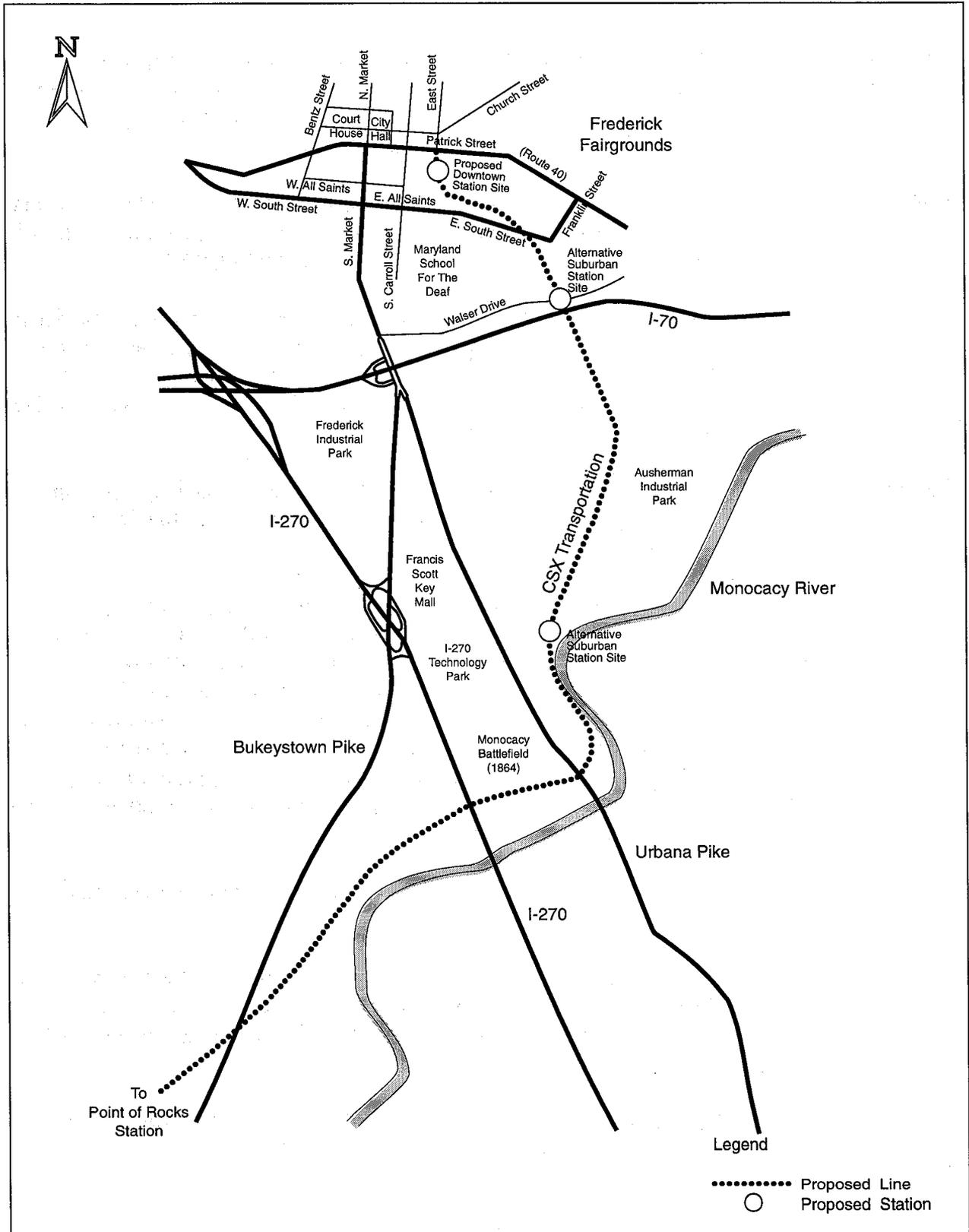
Operating Efficiencies. FTA has no information on the operating efficiencies of the proposed MARC extensions.

Local Financial Commitment

FTA has no information on the total cost of the MARC extensions, the proposed Federal share, or the sources of non-Federal funding for capital and operations.

The State of Maryland has not yet identified sources of matching funds for completion of the two remaining segments of the original Metrorail system in Maryland. Replacement and rehabilitation of the existing Metrorail system will require a growing commitment of regional resources. Thus, the ability of MTA to generate local funds for MARC extensions may be questionable.

Maryland: MARC Extension to Frederick



Staten Island-Midtown Manhattan Ferry Service

New York, New York

(October 1993)

Description

The New York City Department of Transportation (NYCDOT) has proposed initiating high speed ferry service between Staten Island and Midtown Manhattan. The service would be operated by a private company without public operating subsidies.

Status

Initial planning work has been completed on this project. NYCDOT and the New York State Department of Transportation are in the process of selecting a contractor to provide the service by late 1994.

Section 3035(d) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement for \$12 million to carry out capital improvements for this proposed project. Congress appropriated \$1 million in FY 1992. FTA expects to receive a grant application in 1994 to modify an existing ferry slip on Staten Island.

Justification

Since the proposed Section 3 share is less than \$25 million, this proposal is not subject to the new start criteria in Section 3(i) of the Federal Transit Act.

Mobility Improvements. Approximately 20,000 people commute daily from Staten Island to Midtown Manhattan. Of these, some 25 to 30 percent use the existing Staten Island Ferry in combination with the subway. About 12,000 commuters travel in buses and vans; 2000 commute in cars. Most of the bus, van, and auto commuters rely on the Gowanus Expressway in Brooklyn, which is highly congested and undergoing a 10-year period of reconstruction. The proposed project would provide an attractive alternative. FTA has no quantitative data on the travel time benefits of the project.

Cost Effectiveness. FTA has no information on the cost effectiveness of the proposed project.

Environmental Benefits. New York City is a "severe" nonattainment area for ozone. For carbon monoxide, the region is categorized as a "moderate > 12.7" nonattainment area. FTA has no information on the environmental benefits of this project.

Operating Efficiencies. FTA has no information on how this project would affect operating efficiencies.

Staten Island-Midtown Manhattan Ferry Service -- New York, New York

**Local
Financial
Commitment**

FTA does not have any information on the sources of State/local funding for the capital expenses of the project. New York City DOT would need to demonstrate that it has sufficient financial capacity before a grant could be made. The project would have a very small impact on the city's overall budget, especially since the city expects all operating expenses to be covered by the future private operator.

In 1992 the average age of ferry boats operated by the New York City DOT was 16.4 years. Several of the older ferries are in need of replacement.

Hawthorne-Warwick Commuter Rail

Northern New Jersey/New York

(October 1993)

Description

New Jersey Transit (NJT) has proposed the restoration of commuter rail service on the New York, Susquehanna & Western (NYS&W) rail line, possibly as far as Warwick, N.Y. The service would connect to the New Jersey Main Line at Hawthorne, New Jersey, where trains would connect to Hoboken. The project includes track and signal improvements, new stations and parking facilities, equipment acquisition and rehabilitation of the Patterson (N.J.) Station on the NJT main Line.

Status

NJT has begun a \$1.5 million study which includes conceptual design of the NYS&W line, an environmental assessment, capital cost estimates and preliminary design and engineering of the Patterson station upgrade project.

Section 3035(a) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with NJT for \$46.9 million. The agreement would cover the construction of this project. Through FY 1994, Congress has appropriated \$46.9 million in New Start funds for the project.

Justification

Information on mobility improvements, cost effectiveness, environmental benefits and operating efficiencies is being developed in the planning study.

Mobility Improvements. The proposed project has the potential to divert some trans-Hudson and intra New Jersey auto trips to transit.

Environmental Benefits. Northern New Jersey is a "severe" nonattainment area for ozone. The region is a "moderate >12.7" nonattainment area for carbon monoxide.

Local Financial Commitment

FTA has no information on the cost of this proposal, the proposed Federal share, or the sources of funding for capital and operations. It is expected that NJT will seek to use toll revenue expenditures as a credit toward the non-Federal matching share, as permitted in Section 1044 of ISTEA.

In 1992 the average age of the different types of commuter rail vehicles operated by NJT ranged from 15.3 to 19.8 years.

Lakewood-Freehold-Matawan or Jamesburg Commuter Rail

Northern New Jersey

(October 1993)

Description New Jersey has proposed initiating diesel commuter rail service between Lakewood and Newark by connecting into the Northeast Corridor or the Jersey Coast Line, with intermediate service to Freehold or Jamesburg. Approximately 25 to 40 miles of new service is being examined, depending on the alignment.

Status Initial planning has been completed, and NJ Transit and FTA are discussing the scope of work for the corridor planning phase of the project.

Section 3035(p) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement for \$1.8 million in FY 1992 and \$3 million in both FY 1993 and FY 1994 for alternatives analysis, preliminary engineering and the environmental impact statement for the proposed project. In FY 1993 and 1994 a total of \$7.8 million was appropriated for this project.

Justification Mobility Improvements. FTA does not have any information on the mobility benefits of this proposal. It is presumed that such information will be developed during the corridor planning phase.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of this proposal. It is presumed that such information will be developed during the corridor planning phase.

Environmental Benefits. Northern New Jersey is a "severe" nonattainment area for ozone. The region is a "moderate > 12.7" nonattainment area for carbon monoxide. The impact of the proposed project on regional air quality is not known. It is presumed that such information will be developed during the corridor planning phase.

Operating Efficiencies. FTA does not have any information on the operating efficiencies that would result from this proposal. Information on operating efficiencies will be developed in the corridor study currently getting underway.

Local Financial Commitment The FTA does not have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding of capital and operating expenses.

In 1992 the average age of the various types of commuter rail vehicles operated by New Jersey Transit ranged from 15.3 to 19.8 years.

Cross County Metro Corridor

Philadelphia, Pennsylvania

(October 1993)

Description

The Cross County Corridor extends approximately 53 miles from Downingtown to Morrisville. In 1990, Southeastern Pennsylvania Transportation Authority (SEPTA) initiated a proposal under which a circumferential rail line would be built parallel to the existing "Trenton Cut-off" CONRAIL freight line. The facility would share the same CONRAIL right-of-way for 40 miles, and utilize trackage of the R5 service between Downingtown and Glenloch (13 miles). SEPTA has developed a very preliminary cost estimate of \$100 million in its 12-year capital program for a Cross County Metro service without specifying a mode.

Status

Section 3035(yy) of ISTEA directs FTA to enter into a multiyear grant agreement with SEPTA in the amount of \$2.4 million for the completion of alternatives analysis and preliminary engineering for this proposal. To date, Congress has appropriated \$1.2 million for preliminary engineering and design.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of this proposal. It is presumed that preliminary information will be developed as part of the system planning study.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of this proposal. It is presumed that preliminary information will be developed as part of the system planning study.

Environmental Benefits. The Philadelphia area is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. Information on the project's air quality impacts will be developed in the feasibility study and any subsequent alternatives analysis.

Operating Efficiencies. FTA does not have any information on the operating efficiencies of this proposal. It is presumed that preliminary information will be developed as part of the system planning study.

Local Financial Commitment

Potential local funding options for the capital and operating expenses associated with this proposal have not yet been explored. A cost estimate and funding strategy will be developed as part of the system planning study.

Cross County Metro Corridor -- Philadelphia, Pennsylvania

The State legislature has approved a series of taxes dedicated to transit. SEPTA expects to receive \$100 million per year for capital and asset maintenance expenses from these dedicated taxes.

In 1992 the average age of the SEPTA bus fleet was 7.8 years, which is comparable to the national average.

Northeast Philadelphia Commuter Rail

Philadelphia, Pennsylvania

(October 1993)

Description

This study is authorized in Section 3035(qq) of ISTEA. According to the Southeastern Pennsylvania Transportation Authority (SEPTA), this proposal could relate to the consideration of new transit service parallel to I-95 and SEPTA's existing R-3 and R-7 regional rail lines. The Pennsylvania Department of Transportation has proposed a major reconstruction and intermodal project for I-95.

Status

The proposal is currently considered to be in the system planning phase of development. A draft scope of work has been prepared.

Section 3035(qq) of ISTEA directs FTA to enter into a multiyear grant agreement with SEPTA for \$0.4 million to provide for a study of the feasibility of instituting commuter rail service in the corridor. Congress has not appropriated funds for the proposed study.

The Philadelphia City Planning Commission has retained a consultant to perform a related technical study (Northeast Philadelphia Rapid Transit Extension Study) for estimating ridership, costs and impacts of alternative rail modes and alignments to serve the Route 1 corridor in Northeast Philadelphia. The study's primary goal is to assess the feasibility of a major rapid transit extension and to gauge public opinion in the Northeast as to the project's merits and impacts. Completion of this study is estimated to be October 1994.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of this proposal. It is presumed that such information would be developed in the feasibility study called for in ISTEA.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of this proposal. It is presumed that such information would be developed in the feasibility study called for in ISTEA.

Environmental Benefits. The Philadelphia area is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. Information on the project's air quality impacts will be developed in the feasibility study and any subsequent alternatives analysis.

Operating Efficiencies. FTA does not have any information on the operating efficiencies of this proposal. It is presumed that such information would be developed in the feasibility study called for ISTEA.

Northeast Philadelphia Commuter Rail -- Philadelphia, Pennsylvania

Local Financial Commitment

The FTA does not have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. A financing strategy would be developed as part of the feasibility study.

The State legislature has approved a series of taxes dedicated to transit. SEPTA expects to receive \$87+ million per year for capital and asset maintenance expenses from these dedicated taxes.

In 1992 the average age of SEPTA's bus fleet was 7.8 years, which is comparable to the national average.

Stage II Light Rail Rehabilitation
Pittsburgh, Pennsylvania
(October 1993)

Description

During the 1980s, 12 miles of the 25-mile rail system in Pittsburgh were reconstructed to light rail standards under the Stage I Light Rail Transit project. The Stage II system consists of the Overbrook, Library and Drake trolley lines, which comprise the remaining 12 miles.

The Stage II project would reconstruct these three lines to LRT standards, double-track the single-track segments on the Overbrook and Library lines, replace antiquated trolleys with new light rail vehicles, and add over 2,000 park and ride spaces.

The estimated cost for this project is \$320 million (escalated dollars).

Status

Port Authority of Allegheny County has submitted an Environmental Assessment for the Stage II LRT system and expects to complete the environmental process early in 1994. Port Authority will then undertake preliminary engineering and final design.

Section 3035(ss) of ISTEA directs FTA to sign a multiyear grant agreement with the Port Authority of Allegheny County for \$5.0 million to complete preliminary engineering for the Stage II project. While PAT is developing a financial plan to undertake reconstruction, PAT estimates that \$80 million in Section 3 funding will be available for the Stage II improvement through 1997. The remainder of the estimated project cost will be sought through a funding program that includes 80 percent Federal funding matched by Commonwealth of Pennsylvania and Allegheny County funding.

Congress has not appropriated any funds for this project.

One of the Stage II sections, the 5 mile Overbrook line, was closed in 1993 due to safety concerns related to system deterioration. The Library and Drake lines will also eventually have to be closed due to deterioration.

Justification

Mobility Improvements. LRT construction would increase operating speeds on all three lines. The greatest increase would occur between Castle Shannon and South Hills Junction on the Overbrook Line where travel times would be reduced by 9 minutes.

Stage II Light Rail Rehabilitation -- Pittsburgh, Pennsylvania

Cost Effectiveness. FTA has no information on the cost effectiveness of this proposal.

Environmental Benefits. The Pittsburgh area is classified as a "moderate" nonattainment area for ozone, and has not been classified for carbon monoxide. According to the draft Environmental Assessment, the Stage II reconstruction would remove about 2,000 average daily automobile trips from South Hills roads compared with the TSM alternative; however, it is unlikely that it would have a significant effect on pollution levels at the regional scale.

Operating Efficiencies. Replacement of all three lines with buses operating on local streets would yield operating costs in the South Hills corridor of \$1.65 per passenger. Operating costs in the corridor with the Stage II improvement in place would be \$1.58 per passenger.

Implementation of the Stage II project would permit shifting many LRT trips which presently operate on the slower Beechview Line to the faster Overbrook Line. PAT will examine operation of express services on this line.

Local Financial Commitment

PAT anticipates 80 percent Federal funding for this project. The Commonwealth of Pennsylvania has traditionally provided for 16 2/3 percent of PAT's capital costs with the remaining 3 1/3 percent coming from Allegheny County. PAT's plan for financing this project assumes State and local participation at the same rates.

The State legislature recently approved a series of small taxes which are dedicated to transit. PAT's share of this is expected to be \$39 million per year. These funds are exclusively used for asset maintenance and routine capital replacement needs.

In 1992, the average age of PAT's bus fleet was 8.3 years, which is comparable to the national average. Rail vehicles averaged 15.3 years old.

Core Rapid Transit

Seattle, Washington

(October 1993)

Description

The newly formed, three-county, Puget Sound Regional Transit Authority (RTA) proposes to initiate preliminary engineering and draft EIS preparation for the Central Corridor, a 15-mile, \$1.9 billion (1993 dollars) rapid transit line running both north and south from the existing Downtown Seattle Transit Tunnel.

Status

The Central Corridor is part of the Regional Transit System Plan (RTSP), a 25-year, \$10 billion (1993 dollars) capital program of rapid transit, commuter rail, bus and TSM improvements adopted in May 1993. The RTSP is the mass transit element of the regional multi-modal transportation plan proposed to support state-mandated growth management plans now being formulated for the region. The current plan assumes that two-thirds of the capital costs would come from State and local sources.

The project has completed the corridor planning phase of project development. The RTA is currently reviewing the RTSP, developing a financial program and completing a phasing strategy which will allow a local vote on new taxes as early as the fall of 1994. As part of this review, the RTA will prepare, adopt and submit a report on its Locally Preferred Alternative (LPA). At that point the preparation of the draft EIS and preliminary engineering can commence with FTA approval.

Section 3035(bbb) of ISTEA directs FTA to enter into a multiyear grant agreement with Metro in the amount of \$300 million for this project. No funds have yet been appropriated.

Justification

Mobility Improvements. The Central Corridor rail line would serve the congested, I-5 corridor to the north and south of the Seattle CBD, and would generate over 13,000 hours of travel time savings daily, over the TSM alternative.

Cost Effectiveness. The cost per new rider of the Central Corridor is estimated to be \$17 (1993 dollars, 2010 ridership).

Environmental Benefits. Seattle is a "marginal" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. The Central Corridor Rapid Transit line will reduce year 2010 auto travel by

Core Rapid Transit -- Seattle, Washington

48 million vehicle miles traveled per year. Additional information on the environmental impacts and benefits of this project will be developed in the EIS.

Operating Efficiencies. The systemwide operating costs per passenger are estimated to be \$4.07 and \$3.97 (1993 dollars in 2010) for the TSM and rail alternatives, respectively.

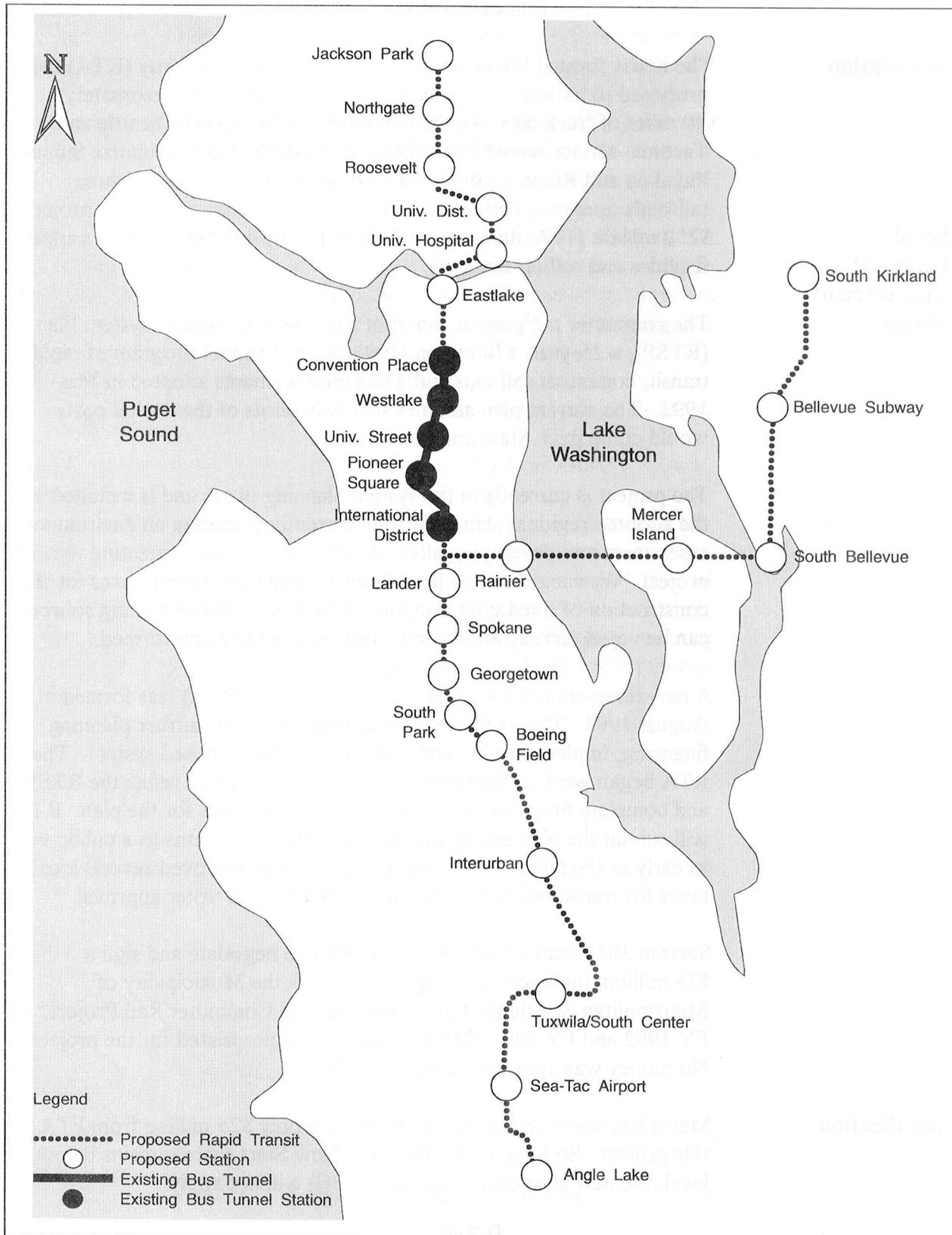
Local Financial Commitment

Although the RTA does not have voter approval for any of the new taxes needed to construct the rapid transit system, it does have legislative authority to go to the voters for these taxes and plans a ballot measure for this purpose as early as the fall of 1994. The RTA is currently developing a plan for financing the two-thirds of the cost of the system with local funds. The capital financing commitment is rated as "medium" at this early stage in the project development process.

Transit operators in the three counties in the RTA have adequate funding resources to support the existing system. This has resulted in a rating at this time of "medium" for stability and reliability of operating assistance.

In 1992 Metro's bus and trolleybus fleet averaged 9.6 years old, which is slightly above the national average. However, Metro is in the process of purchasing 300 liquefied natural gas powered replacement buses, which should reduce the average fleet age considerably.

Seattle: Core Rapid Transit



Seattle-Tacoma Commuter Rail

Seattle, Washington

(October 1993)

Description

The newly formed Puget Sound Regional Transit Authority (RTA) has proposed to initiate commuter rail service along the approximately 40 miles of track between the two cities. In addition to Seattle and Tacoma, service would be provided to Tukwila, Kent, Auburn, Sumner, Puyallup and Renton. Service would be provided on one of three railroads operating between the cities. Total capital cost of the project is \$250 million (1993 dollars), including track up-grades, stations, parking facilities and rolling stock.

Status

The commuter rail project is part of the Regional Transit System Plan (RTSP), a 25-year, \$10 billion (1993 dollars) capital program of rapid transit, commuter rail, bus and TSM improvements adopted in May 1993. The current plan assumes that two-thirds of the capital costs would come from State and local sources.

The project is currently in the system planning phase and is included in the adopted regional plan. Metro is currently preparing an environmental assessment and developing alternate strategies for implementing the project. Washington State law allows several local option taxes for the construction of fixed guideway transit facilities. These funding sources can be voted on only after system planning has been performed.

A new three-county Regional Transit Authority (RTA) was formed in August 1993. This authority will be responsible for further planning, financing, implementation and operation of the proposed system. The RTA began work in September of 1993 to review and refine the RTSP and complete financial and implementation programs for the plan. RTA will submit the plan and financing and phasing programs to a public vote as early as the fall of 1994. The legislature has approved several local taxes for transit which could be implemented after voter approval.

Section 3035(ccc) of ISTEA directs FTA to negotiate and sign a \$25 million, multiyear grant agreement with the Municipality of Metropolitan Seattle for the Seattle-Tacoma Commuter Rail Project. In FY 1992 and FY 1993, \$20.3 million was appropriated for the project. No money was appropriated in FY 1994.

Justification

Metro has stated that it intends to request only \$25 million from FTA for this project. So long as the Section 3 New Start share remains below this level, the new start criteria in Section 3(i) will not apply.

Seattle-Tacoma Commuter Rail -- Seattle, Washington

Mobility Improvements. FTA has no quantitative information on the potential mobility benefits of this proposal. Washington State DOT is developing HOV lanes along I-5 in the Seattle region. This would allow for relatively fast express bus service in the corridor. The commuter rail service would attract 800 new transit riders a day compared to an express bus alternative, but FTA has no information on the travel time savings offered by this service.

Cost Effectiveness. FTA has no information on the cost effectiveness of this proposal.

Environmental Benefits. Seattle is a "marginal" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. The effects of the proposed commuter rail line on air quality have not been quantified.

Operating Efficiencies. FTA has no information on the systemwide operating cost per rider.

Local Financial Commitment

Although RTA does not have voter approval for any of the new taxes needed to construct the proposed project, it does have legislative authority to go to the voters for these taxes and plans a ballot measure as early as the fall of 1994. The RTA is currently developing a plan for financing the system. The capital financing commitment is rated as "medium" at this early stage in the project development process.

Transit operators in the three counties in the RTA have adequate funding resources to support the existing system. This has resulted in a rating at this time of "medium" for stability and reliability of operating assistance.

In 1992, Metro's bus and trolleybus fleet averaged 9.6 years old, which is slightly above the national average. However, Metro is in the process of purchasing 300 LNG powered replacement buses, which should reduce the average fleet age considerably.

Burlington/Gloucester Corridor

Southern New Jersey

(October 1993)

Description

New Jersey Transit, Delaware River Port Authority (and its subsidiary the Port Authority Transit Corporation (PATCO) and the Delaware Valley Regional Planning Commission are studying several rail alternatives in a 36-mile corridor extending from Glassboro in Burlington County to Mount Holly in Burlington County by way of Camden where it would either cross or join the existing Lindenwold Line. Several alternative technologies are being considered ranging from at-grade light rail to grade separated heavy rail compatible with the existing Lindenwold Line. The alternatives would operate within abandoned or existing rail rights of way for the most part. Very preliminary cost estimates indicate that capital costs for the longest alternatives could be between \$1.135 billion and \$1.490 billion (1991 dollars).

Status

New Jersey Transit has applied to FTA for permission to initiate a corridor study.

This project is not mentioned in ISTEA. However, the FY 1994 Appropriations Act includes \$500,000 for alternatives analysis in this corridor.

Justification

Information on the following topics will be developed in the corridor study:

Mobility Improvements. FTA has no information on the improvements to mobility that this proposed project will generate when compared to a Transportation System Management alternative.

Cost Effectiveness. FTA has no information on the cost effectiveness of this proposed project.

Environmental Benefits. The Philadelphia area is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. Information on the project's air quality impacts will be developed in the corridor study.

Operating Efficiencies. FTA has no information on the operating efficiencies of this proposed project.

Burlington/Gloucester Corridor -- Southern New Jersey

**Local
Financial
Commitment**

PATCO has the highest fare recovery ratio of any rail system in the country and also has bridge toll revenues to cover the deficit; however, there is currently no financing strategy in place to cover the capital or operating costs for the proposed project.

The average age are of PATCO's rail vehicles is 19.8 years old.

North Bay Ferry Service

Vallejo, California

(October 1993)

Description

The City of Vallejo has proposed a demonstration program of capital improvements to the ferry service between Vallejo and San Francisco. The project consists of the purchase of two high speed ferries to replace conventional vessels on the service.

Status

The funding application has been submitted to FTA, however environmental and 13(c) issues must be resolved before the grant can be awarded and design of the project completed.

Section 3035(c) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with the City of Vallejo for \$8 million in FY 1992 and \$9 million in FY 1993 for capital improvements to the ferry system. In FY 1992, \$8 million was appropriated, but no funds were appropriated in FY 1993 or FY 1994.

Justification

The project is not subject to the new starts criteria in Section 3(i) because the Section 3 share is less than \$25 million.

Mobility Improvements. Preliminary analysis indicates that the increase in speed which can be achieved from high speed ferries results in a significant increase in patronage at relatively low cost.

Cost Effectiveness. A cost effectiveness index has not been prepared for this project.

Environmental Benefits. The San Francisco metropolitan area is a "moderate" nonattainment area for ozone and a "moderate <= 12.7" nonattainment area for carbon monoxide. While the impact of this proposed project on regional air quality is not known at this time, it is likely to be very small considering the small percentage of trips that would be diverted from autos.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from this proposal.

North Bay Ferry Service -- Vallejo, California

**Local
Financial
Commitment**

The ferry system operating deficit will be funded from existing sources; therefore, the stability and reliability of operating assistance is rated as "high."

Local share for the capital is provided from Proposition 116 funds; therefore, the capital finance plan is rated "high."

Dulles Corridor

Washington, D.C. Metropolitan Area
(October 1993)

Description

A rail link has been proposed between the West Falls Church Metrorail Station and Dulles International Airport, continuing into Loudoun County. Currently, shuttle bus service is provided from this station to the airport on an exclusive airport access highway at a fare of \$7.00 one way. There is also a significant level of Washington Metropolitan Area Transit Authority and Fairfax Connector bus service in the corridor. The proposed rail project would cost approximately \$1 billion.

Status

This proposal is currently considered to be in the system planning phase of development. Studies of transit alternatives have previously been performed with FTA sponsorship. Based on these studies, Fairfax County is implementing an express bus system consisting of park-and-ride lots, bus stations, and express bus routes on planned, but not yet implemented, HOV lanes. These improvements would help develop a transit market in the corridor. In addition, the park-and-ride lots would preserve critical rights-of-way for stations on any eventual rail line in the corridor.

Section 3035(aaa) of ISTEA directs FTA to enter into a multiyear grant agreement with the State of Virginia in the amount of \$6 million for completion of alternatives analysis and preliminary engineering. No funds have yet been appropriated for this study. The Virginia Department of Rail and Public Transportation (VDRPT) is beginning initial planning work phase using State funds.

In FY 1993, Congress appropriated \$7.6 million for the Dulles corridor bus program. This supplements \$18.4 million, which was already granted in FY 1991.

Justification

Mobility Improvements. FTA has no information on the mobility benefits of the proposed alternatives. This information would be developed in the alternatives analysis called for in ISTEA.

Cost Effectiveness. FTA has not yet evaluated the cost-effectiveness of this project. This information would be developed in the alternatives analysis called for in ISTEA.

Dulles Corridor -- Washington, D.C. Metropolitan Area

Environmental Benefits. The Washington Metropolitan area is a "serious" nonattainment area for ozone and a "moderate" nonattainment for carbon monoxide. Information on air quality impacts would be developed in the alternatives analysis authorized in ISTEA.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from a major investment in the corridor. Such information would be developed in the alternatives analysis called for in ISTEA.

Local Financial Commitment

Potential sources of funding may include surplus toll revenues from the Dulles Toll Road and/or a special tax district. However, there has been no comprehensive funding strategy yet developed for the project. The first step in that direction is envisioned under the current work plan.

The National Capital Transportation Act of 1969, as amended, requires a 37.5-percent local match of funds authorized for the remaining segments of the 103-mile Metrorail system. Until now, completion of the 103-mile system has been the Washington area's highest priority. Capital replacement and rehabilitation of the Metrorail system will require a growing commitment of regional resources.

In 1992 the average age of the Washington Metropolitan Area Transit Authority's bus fleet was 12.4 years old, which is substantially above the national average. The advanced age of the bus fleet is a concern since it suggests that the transit agency is not reinvesting in its existing bus system to a satisfactory degree.

TABLE B-1: FINANCIAL RATINGS: CAPITAL FINANCING COMMITMENTS

Final Design	Medium	<ul style="list-style-type: none">* 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 provision for contingent cost overruns.
	Low	<ul style="list-style-type: none">* 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 provision for contingent cost overruns. For example, an "unacceptable" 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.
<hr/>		
Preliminary Engineering	High	<ul style="list-style-type: none">* 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 provision 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.

Alternatives
Analysis and
System Planning

High

- * FTA considers the implementing agency 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 is based on reasonably conservative assumptions and provides for contingent cost overruns.

Medium

- * FTA considers the implementing agency to be in reasonably sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular.

Low

- * The applicant's capital finance plan or preliminary funding strategy is considered by FTA to be adequate to successfully undertake one or more of the proposed major transit investment alternatives. Uncertainties may exist in the agency's ability to implement new funding sources as well as cash flow implications and the plan's sensitivity to risk and uncertainty.
 - * FTA does not consider the proposed implementing agency to be in reasonably sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular.
 - * The applicant lacks a preliminary funding strategy that would be adequate to successfully undertake a major investment alternative. If a plan or strategy exists, a "low" rating may also be given where the region has previously demonstrated an unwillingness to adopt new transit funding sources with the capacity that would be required to implement a new start.
-

TABLE B-2: FINANCIAL RATINGS: STABLE AND RELIABLE OPERATING REVENUE

Final Design

Medium

- * 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.
- * Existing transit facilities have been adequately maintained and replaced through continuing reinvestment in the system.
- * 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.

Low

- * 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.
 - * The applicant has a history of deferring capital replacement and/or routine maintenance.
 - * Financial projections show that the applicant does not currently have the financial capacity to operate the proposed project, supporting feeder systems, other programmed projects, and other elements of its transit system under reasonably conservative assumptions.
-

Preliminary
Engineering

High

- * 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.
- * Existing transit facilities have been well maintained and improved through continuing reinvestment in the system.
- * 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.

Medium

- * 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.
- * 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.
- * 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.

Low

- * 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.

- * 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.
- * 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 the 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 other elements of its transit system under reasonably conservative assumptions.

Alternatives
Analysis and
System Planning

High

- * 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.
- * Existing transit facilities have been adequately maintained and improved through continuing reinvestment in the system. Available evidence indicates that the applicant will be able to continue its maintenance and replacement program upon implementation of a major investment.
- * Financial projections show that the applicant currently has ample financial capacity to operate a major new transit investment, including supporting feeder systems, as well as other programmed projects, and other elements of its transit system under reasonably conservative ridership and other assumptions.

Medium

- * 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.
- * Existing transit facilities have been adequately maintained and replaced through continuing reinvestment in the system. Available evidence indicates that the applicant will be able to continue its maintenance and replacement program upon implementation of a major investment.
- * The applicant is considered by FTA to have a realistic chance of adopting and implementing a financing plan which would provide adequate financial capacity to operate and maintain a fixed guideway alternative, including supporting feeder systems, other programmed projects, and other elements of its transit system under reasonably conservative ridership and other assumptions.

Low

- * 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.
- * The applicant has a history of deferring capital replacement and/or routine maintenance, or available evidence suggests that a major investment could lead to financial strains that could adversely impact maintenance and replacement programs.
- * The region has demonstrated an unwillingness to adopt new transit funding sources with the capacity that would be required to operate and maintain a fixed guideway alternative, including supporting feeder systems, other programmed transit projects, and other elements of its transit system under reasonably conservative ridership and other assumptions.