

Matt Welbes



U.S. Department
of Transportation

**Federal Transit
Administration**

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

June 1992



THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

June 15, 1992

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 submit 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 1993.

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

Sincerely,


Andrew H. Card, Jr.

Enclosure



THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

June 15, 1992

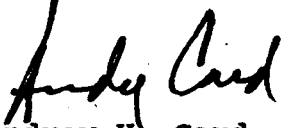
The Honorable Jake Garn
Ranking Minority Member
Committee on Banking, Housing, and
Urban Affairs
United States Senate
Washington, D.C. 20510-6075

Dear Senator Garn:

I am pleased to submit 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 1993.

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Andrew H. Card, Jr.

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THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

June 15, 1992

The Honorable Robert A. Roe
Chairman, Committee on Public
Works and Transportation
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

I am pleased to submit 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 1993.

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, reading 'Andy Card', is written over the typed name 'Andrew H. Card, Jr.'.

Andrew H. Card, Jr.

Enclosure



THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

June 15, 1992

The Honorable John Paul Hammerschmidt
Ranking Minority Member
Committee on Public Works and
Transportation
House of Representatives
Washington, D.C. 20515

Dear Congressman Hammerschmidt:

I am pleased to submit 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 1993.

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 black ink, appearing to read 'Andy Card', is written over the typed name.

Andrew H. Card, Jr.

Enclosure

Report on Funding Levels and Allocations of Funds

Report of the Secretary of
Transportation to the
United States Congress

June 1992

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 Department of Transportation's recommendations to Congress for allocation of Section 3 New Start funding for FY 1993. The report is required by Section 3(j) of the Federal Transit Act (FT Act).

The Intermodal Surface Transportation Efficiency Act (ISTEA) lists nearly \$6 billion worth of multiyear funding commitments which are to be made to specific projects over the life of the authorization. However, it authorizes a total of only \$5 billion in Section 3 funding for these projects, including \$812 million in FY 1993. Thus, during each year of the authorization, some prioritization of the authorized projects will be required.

The President's Budget proposes that \$400 million be provided in Section 3 New Start funding for FY 1993. Of these funds, 3/4 percent is set aside for Project Management Oversight, leaving \$397 million for New Start project grants.

The Department recommends that these funds be set aside for New Start projects in accordance with these principles:

- o Existing commitments should be honored before any new commitments are made.
- o Statutory authorizations contained in the ISTEA should be honored to the extent that projects are ready for funding. However, funds should not be provided ahead of the time at which they are actually needed nor should initial planning be funded with Section 3 funds. Instead, Section 8 or 9 funds should be used.
- o Projects should meet the project justification, finance and process criteria established by Section 3(i) of the FT Act.
- o Full Funding Grant Agreements, which commit future funding to complete a project, should not be made until preliminary engineering is completed.
- o Letters of Intent (ultimately anticipating Full Funding Grant Agreements) should be issued only (at the end of alternatives analysis) to worthy projects which have proceeded far enough along that their justification and level of local financial commitment can be established with some certainty.
- o Funding should be provided to the most worthy projects to allow them to proceed through the process on a reasonable schedule.

In accordance with these principles, the Department recommends the following allocation of the FY 1993 Section 3 New Start funds:

- o Provide \$5.07 million for the Miami Metromover extensions, \$20 million for St. Louis - Metrolink and \$118.89 million for Los Angeles - MOS 2 to complete funding of these projects.
- o Negotiate Full Funding Grant Agreements for the following projects which are ready for funding commitments:
 - Atlanta - North Extension (\$40.00 million in FY 1993 funding and \$196.86 million in future funds),
 - Dallas - South Oak Cliff (\$28.16 million in FY 1993 and \$91.46 million in future years),
 - Portland - Westside project (\$30.00 million in FY 1993 and \$471.69 million in future funds),
 - San Francisco - Colma (using already earmarked funds), and
 - Baltimore - Hunt Valley (\$15.14 million in FY 1993 funds).
- o Consider as candidates for Letters of Intent and provide sufficient funding to allow project development to continue for the following projects:
 - New York - Queens (\$10.00 million),
 - Los Angeles - North Hollywood (no funding),
 - Honolulu (\$24.98 million),
 - Orange County (\$7.70 million), and
 - Baltimore - BWI and Penn Station (\$14.86 million).
- o Provide project development funding for Pittsburgh (\$8.0 million) and the Maryland Commuter Rail extensions (\$10.0 million).
- o Complete Federal funding on a number of other projects including Chattanooga (Downtown - \$1.00 million), Boston to Portland (Commuter Rail - \$30.00 million), Dallas (RAILTRAN - \$3.20 million), Los Angeles - San Diego Commuter Rail (\$10.00 million), New York (Midtown Ferry - \$11.00 million), and Vallejo (Ferry - \$9.00 million).
- o No funding is recommended in FY 1993 for the following projects which have FY 1993 funding authorizations in the ISTEA:
 - San Jose - Tasman
 - Chicago - Central
 - Cleveland - Dual Hub
 - New Jersey - Waterfront
 - New Jersey - Lakewood/Freehold Commuter Rail
 - San Diego - Mid Coast
 - Charlotte - Priority Corridor
 - Detroit - LRT

- Kansas City - LRT
- New Jersey - Hawthorne Commuter Rail
- North East Ohio - Commuter Rail
- Washington, D.C. - Largo Extension

Table 1 summarizes the recommendations in this report for FY 1993 funding and overall funding commitments and compares them with the funding authorizations contained in the ISTEA. For each project in the New Start process, the first column indicates the amount of funds which have already been obligated to the project. The second column shows the amount of FY 1991 and prior year earmarked funds which have not yet been obligated. The third column shows the amount of funds available in FY 1992 as a result of the ISTEA and DOT Appropriations Acts. The fourth column summarizes this report's recommendations for funding in FY 1993. The fifth column shows the maximum amount of outyear funding that this report recommends be committed to these projects through Letters of Intent and Full Funding Grant Agreements.

The sixth column in Table 1 sums the first five columns and shows the total amount which would be made available for each project from Section 3 over the life of that project. The seventh column shows the total amount authorized in the ISTEA for each project over the authorization period.

The final column in Table 1 shows any specific FY 1993 authorizations in the ISTEA. This column may be compared with the recommendations for allocations of FY 1993 funds which is displayed in the fourth column.

Table 1
COMPARISON OF NEW STARTS AUTHORIZATIONS IN THE
INTERMODAL SURFACE TRANSPORTATION ASSISTANCE ACT OF 1991
WITH FUNDING RECOMMENDATIONS IN THIS REPORT
(millions of dollars)

City/Project	FY 1991 and Prior Year Obligated	FY 1991 and Unobligated Earmarks	FY 1992 Adjusted Earmarks	FY 1993 Proposed Funding	Maximum Outyear Funds	Total	Total ISTE Specific FY 92-97 Earmarks	FY 1993 Earmark
TOTALS BY PHASE								
Under Construction	\$886.30	\$39.70	\$90.66	\$143.96	-	\$1,160.62	-	-
Final Design	41.90	127.00	91.85	98.16	\$1,455.01	1,813.92	\$1,711.10	-
Preliminary Engineering	24.10	25.60	114.33	80.68	1,074.18	1,318.89	1,305.90	\$146.14
Alternatives Analysis	41.40	173.00	53.11	-	14.00	281.51	1,533.35	62.00
System Planning & Other	-	-	182.91	74.20	-	257.11	1,388.30	195.63
GRAND TOTAL	\$993.70	\$365.30	\$532.86	\$397.00	\$2,543.19	\$4,832.05	\$5,938.65	\$403.77
UNDER CONSTRUCTION								
Los Angeles MOS-2	\$479.00		\$69.11	\$118.89		\$667.00		
Miami - DPM Extensions	135.60	\$39.70	5.63	5.07		186.00		
St. Louis - Metrolink	271.70		15.92	20.00		307.62		
SUBTOTAL	\$886.30	\$39.70	\$90.66	\$143.96	-	\$1,160.62	-	-
FINAL DESIGN								
Atlanta - North	\$30.20	\$51.70	\$10.24	\$40.00	\$196.86	\$329.00	\$247.10	
Dallas - South Oak Cliff		19.90	20.48	28.16	91.46	160.00	140.10	
Jacksonville - South			5.12			5.12	71.20	
Los Angeles - N Hollywood					695.00	695.00	695.00	
Portland - Westside		1.00	13.31	30.00	471.69	516.00	515.00	
San Francisco - Colma	11.70	54.40	42.70			108.80	42.70	
SUBTOTAL	\$41.90	\$127.00	\$91.85	\$98.16	\$1,455.01	\$1,813.92	\$1,711.10	-
PRELIMINARY ENGINEERING								
Baltimore - Hunt Valley	\$2.00	\$14.30	\$2.56	\$15.14		\$34.00	\$17.70	\$15.14
Baltimore - Airport				14.86	\$6.14	21.00	21.00	12.30
Honolulu	15.50	0.40	20.48	24.98	556.64	618.00	602.10	
New York - Queens			11.00	10.00	285.10	306.10	306.10	18.70
Orange Co - Central				7.70	226.30	234.00		
Pittsburgh - Busways			7.68	8.00		15.68		
Salt Lake City	6.60	8.90	2.56			18.06	131.00	
San Jose - Tasman		2.00	70.05			72.05	228.00	100.00
SUBTOTAL	\$24.10	\$25.60	\$114.33	\$80.68	\$1,074.18	\$1,318.89	\$1,305.90	\$146.14

Table 1.(continued)
COMPARISON OF NEW STARTS AUTHORIZATIONS IN THE
INTERMODAL SURFACE TRANSPORTATION ASSISTANCE ACT OF 1991
WITH FUNDING RECOMMENDATIONS IN THIS REPORT
(millions of dollars)

City/Project	FY 1991 and		FY 1992	FY 1993	Maximum	Total	Total ISTEA Specific	
	Prior Year Earmarks Obligated	Unobligated	Adjusted Earmarks	Proposed Funding	Outyear Funds		FY 92-97 Earmarks	FY 1993 Earmark
ALTERNATIVES ANALYSIS								
Baltimore - Perin Station					\$14.00	\$14.00	\$21.30	
Boston - Piers			\$10.75			10.75	278.00	
Buffalo - Amherst								
Chicago - Central	\$1.00	\$15.90	21.00			37.90	260.00	\$55.00
Cleveland - Dual Hub		7.00	2.00			9.00	5.00	2.00
Denver - Southwest								
Houston - Connector		146.10	15.36			161.46	500.00	
Los Angeles - E Central								
Los Angeles - W Central								
Los Angeles - Pico/SanV								
Milwaukee - East/West							200.00	
New Jersey - Waterfront	39.90					39.90		
Portland - Hillsboro								
St Louis - St Clair	0.50	3.60	2.00			6.10		
San Diego - Mid Coast		0.40	2.00			2.40	27.00	5.00
San Francisco - Airport							242.05	
	\$41.40	\$173.00	\$53.11	-	\$14.00	\$281.51	\$1,533.35	\$62.00

Table 1 (continued)
COMPARISON OF NEW STARTS AUTHORIZATIONS IN THE
INTERMODAL SURFACE TRANSPORTATION ASSISTANCE ACT OF 1991
WITH FUNDING RECOMMENDATIONS IN THIS REPORT
(millions of dollars)

City/Project	FY 1991 and Prior Year Earmarks		FY 1992 Adjusted	FY 1993 Proposed	Maximum Outyear Funds	Total	Total ISTE FY 92-97 Earmarks	Specific FY 1993 Earmark
	Obligated	Unobligated	Earmarks	Funding				
SYSTEM PLANNING AND OTHER								
Altoona - Pedestrian							\$3.20	
Boston - Portland CR				\$30.00		\$30.00	30.00	
Chattanooga - Dwntrn Trl			\$1.00	1.00		2.00	2.00	\$1.00
Dallas - RAILTRAN			2.48	3.20		5.68	5.68	3.20
Los Angeles - Multimodal							15.00	
Los Angeles-San Diego CR			10.00	10.00		20.00	20.00	5.00
Maryland - MARC Exts				10.00		10.00	160.00	60.00
New Jersey - Hawthorne			35.71			35.71	46.87	11.16
New York - Midtown Ferry			1.00	11.00		12.00	12.00	11.00
New Jersey Urban Core			95.90			95.90	634.40	71.70
San Jose - Gilroy CR			8.00			8.00	21.00	
Seattle - CR			5.12			5.12	25.00	
Seattle - Rail							300.00	
Vallejo - Ferry			8.00	9.00		17.00	17.00	9.00
Atlanta - Buckhead PM			0.20			0.20	0.20	
Atlanta - CR							0.10	
Boston - NS-SS Link			0.25			0.25	0.25	
Charlotte - Priority			0.13			0.13	0.50	0.38
Cleveland - CR			0.80			0.80	1.60	0.80
Cleveland - Highland Hls							1.20	
Detroit - LRT			10.00			10.00	20.00	10.00
Kansas City - LRT			1.50			1.50	5.90	4.40
Long Beach - MetroLink							4.00	
New Jersey - Lkwd-Frhld CR			1.80			1.80	7.80	3.00
New Orleans							4.80	
Orlando - OSCAR			0.51			0.51	5.00	
Philadelphia - Cross Cty			0.51			0.51	2.40	
Philadelphia - N East CR							0.40	
Pittsburgh - LR Rehab							5.00	
Sacramento							26.00	
Washington - Dulles							6.00	
Washington - Largo							5.00	5.00
TOTAL	-	-	\$182.91	\$74.20	-	\$257.11	\$1,388.30	\$195.63

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." Section 3 is now a partially discretionary and partially formula capital grant program of the Federal Transit Administration (FTA). (The Rail Modernization category is now apportioned by formula.) 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."

With respect to allocation of Section 3 funds, Section 3006(d) of the Intermodal Surface Transportation Assistance Act (ISTEA) of 1991 (Pub. L. 102-240) revised Section 3(k)(1) to specify that of the amount available in fiscal years 1992 through 1997 --

"(A) 40 percent shall be available for fixed guideway modernization;

(B) 40 percent shall be available for construction of new fixed guideway systems and extensions to fixed guideway systems; and

(C) 20 percent shall be available for the replacement, rehabilitation, and purchase of buses and related equipment and the construction of bus-related facilities."

The former Section 3(k)(1)(C) set aside only 10 percent for bus and bus related facilities and equipment and specified under Section 3(k)(1)(D) that the remaining "10 percent shall be available for the purposes described in subparagraphs (A) through (C), as determined by the Secretary." Since Section 3(k)(1)(D) was repealed by the ISTEA, and all of the Section 3 funds are fully allocated among the three categories provided under the revised Section 3(k)(1), it is no longer necessary for this report to describe a proposal by the Department for allocation of these funds. Instead, this report will focus on the requirements of Section 3(j)(2).

Accordingly, the purpose of this report is to describe the Department's recommendations for allocating the funds for New Starts. This report is a collateral document to the proposed FY 1993 Federal Budget as submitted by the President. It is meant to be a constructive element in the administration of the urban mass transportation program, enriching the information exchange between the Executive and Legislative Branches at the beginning of the appropriations cycle for the next fiscal year.

II. RECENT CHANGES TO THE FEDERAL TRANSIT ACT

Since the funding authorizations for the Federal mass transportation assistance program expired at the end of FY 1991, new legislation was required to extend these authorizations. This legislation, the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991, was signed by the President on December 18, 1991. The ISTEA amended the former Urban Mass Transportation Act of 1964, as amended, renaming it the Federal Transit Act. The Urban Mass Transportation Administration was renamed the Federal Transit Administration (FTA) and a number of other significant changes were made in FTA's program. The major changes affecting the Section 3 program are described below.

The ISTEA reauthorized the Federal transit assistance program for six years (1992-1997) for a total of \$31.5 billion. Of the \$31.5 billion, \$18.2 billion (58 percent) is to come from the Mass Transit Account of the Highway Trust Fund and is contract authority. The remaining \$13.3 billion is an authorization for appropriations from the General Fund. The Mass Transit Account is credited with 1.5 cents per gallon of the 11.5 cents motor fuel tax over the life of the bill.

The ISTEA set the basic matching ratio for capital projects at 80 percent Federal, the same as for highway projects in the Federal Highway Administration (FHWA) program. This is the same as prior law for the Section 9 formula program but is an increase from the former 75 percent for Section 3. The matching ratio is 90 percent Federal for the incremental cost of vehicle-related equipment needed to meet the requirements of the Clean Air Act and Americans with Disabilities Act.

The Section 3 program is authorized at \$12.4 billion over 6 years. As noted earlier, funds are split 40 percent for New Starts, 40 percent for Rail Modernization and 20 percent for bus and other.

The Section 3 Rail Modernization Funds are allocated by formula rather than on a discretionary basis as was the case under prior law. Statutory percentages are established to allocate the first \$497.7 million to the 11 historic rail modernization cities. The next \$70 million is to be allocated one-half to the historic rail cities and one-half to all cities with fixed guideways at least seven years old (and any other fixed guideway city which can demonstrate rehabilitation needs), on the basis of the Section 9

Rail Tier formula factors. Any remaining funds are allocated to the same cities.

The ISTEA made major changes in the requirements for New Start projects. Section 3(i) sets the criteria which New Start projects must meet to be eligible for Federal assistance under Section 3. The second of these criteria was amended to read that a New Start project must be "justified based on a comprehensive review of its mobility improvements, environmental benefits, cost effectiveness and operating efficiencies," rather than only "cost-effective." The other two criteria, which require projects to be based on the results of alternatives analysis and preliminary engineering and supported by an acceptable degree of local financial commitment, remained essentially unchanged.

Project justification must be based on the costs of relevant alternatives and benefits such as congestion relief, improved mobility, air pollution, energy consumption, the mobility of the transit dependent population, and economic development. Guidelines are to be issued on the approval process and criteria. The degree of local financial commitment may be considered acceptable only if projects are supported by an adequate financial plan which 1) covers contingencies, 2) identifies sources of local capital and operating funding which are stable, reliable and available, and 3) indicates that local resources are sufficient to operate the entire transit system in the area, including the new investment. Projects may not advance from alternative analysis to preliminary engineering unless the project meets these requirements and is considered likely to do so at the end of preliminary engineering.

The criteria are waived 1) if the project is in an extreme or severe nonattainment area and the project is required to carry out an approved State Implementation Plan, 2) if the project requires less than \$25 million in Section 3 funds, or 3) the Federal share is less than one-third. Portions of projects funded with FHWA funds are also exempt.

In accordance with Section 3(a)(6), an "assured timetable" is established for advancing projects through successive stages of the project development process. The steps covered include 1) circulation of the draft Environmental Impact Statement (EIS), 2) entry into preliminary engineering after selection of the locally preferred alternative, 3) entry into final design after completion of the final EIS, and 4) entry into a Full Funding Grant Agreement after entry into final design.

A number of priority "Programs of Interrelated Projects" are established which are to be treated as a whole for the purposes of the process. These programs include the New Jersey Urban Core projects, San Francisco Bay Area projects (BART extensions and the Tasman Corridor in San Jose), Los Angeles MOS-3, Baltimore-Washington projects, Portland Westside, New York - Queens Local/Express and the Dallas light rail system.

Projects are to be advanced with Full Funding Grant Agreements (FFGA's) which establish the maximum amount of Federal funding. This puts prior administrative practice into law. As in earlier law and practice, the sum of existing FFGA's and Letters of Intent may not exceed the total authorized for New Starts. However, "Contingent Commitments" may be made for funds beyond the authorized amount up to one-half of the uncommitted cash balance in the Mass Transit Account, subject to the availability of funds from subsequent authorizations and appropriations. Early System Work Agreements may be entered once a Record of Decision is issued for projects likely to receive an FFGA in order to permit work to proceed prior to issuance of the FFGA.

III. FY 1993 BUDGET

While the Federal Transit Act authorizes funding for FTA's programs, it is the annual appropriations process which actually sets the amount of funds which can be obligated in any fiscal year. For FY 1993, the President's Budget proposes an obligation limitation for Section 3 of \$1.00 billion, compared with a total authorized amount of \$2.03 billion. In accordance with the FT Act, 40 percent of this amount, or \$400 million would be available for New Starts.

IV. NEW STARTS ALLOCATIONS AND RECOMMENDATIONS

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.

As noted, the funding level proposed for FY 1993 for New Starts is \$400 million. Once the three-quarter percent for Project Management Oversight is taken down from this amount, \$397 million is available for projects. This report recommends the allocation of these funds among the various New Start projects that have been proposed. The recommendations are based on the following principles:

- o Existing FTA Full Funding Grant Agreement (FFGA) commitments should be honored before any additional commitments are made.
- o Statutory authorizations contained in the ISTEA should be honored to the extent that projects are ready for funding. However, funds should not be made available by FTA ahead of the time at which 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.

- o Any project recommended for new funding commitments should meet the project justification, finance and process criteria established by Section 3(i).
- o Funds should be allocated in a manner to ensure that operable facilities are completed; the "operable segment" concept.
- o Funds should be allocated to projects that are expected to complete preliminary engineering in FY 1992 or 1993 and will then be ready to begin final design and construction.
- o Firm funding commitments, embodied in Full Funding Grant Agreements, 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.
- o Letters of Intent (ultimately anticipating Full Funding Grant Agreements) 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) that their justification and level of local financial commitment can be established with some certainty.
- o Letters of Intent should be awarded to the best projects, in terms of cost-effectiveness and financial commitment, in an order which is based on the degree to which each project meets these criteria.
- o Funding should be provided to the most worthy projects to allow them to proceed through the process on a reasonable schedule.

A. Candidate Projects for New Start Funding

Candidate projects for New Start funding are derived from several sources. Most projects become candidates for funding by virtue of having successfully completed the appropriate steps in the project development process. In order to assure that projects proposed for New Start funding meet the requirements of the FT Act for such projects, the Department has required that project sponsors undertake a defined project development process. Additional projects have become candidates for New Start funding because they have been earmarked for funding in Appropriations Reports or authorized funding in the ISTEAs.

The steps in the process begin with Systems Planning during which general plans for new fixed guideway projects are developed. Projects then are subjected to Alternatives Analysis and Preliminary Engineering to develop information on the justification for the projects and 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.

The ISTEA continues this stepwise process by continuing the requirement that alternatives analysis and preliminary engineering be completed before a project is eligible for New Start funding. In addition, the ISTEA establishes an "assured timetable" for advancing from one step to the next. More detail is provided on the New Start project development process in Appendix A. Appendix A also includes a table which indicates the merits of each project in terms of project justification and local financial commitment.

Table 2 lists those projects which are now candidates for New Start funding. The list includes those projects which already have commitments of Federal funding in the form of Full Funding Grant Agreements (FFGA's) as well as those now in Final Design, Preliminary Engineering, Alternatives Analysis and Systems Planning or other initial stages. The Table also shows which of these projects have been provided authorizations for funding by the ISTEA. For projects listed in the ISTEA to receive funding in FY 1992, the first column shows the amount authorized. For other projects, the first column shows an amount calculated by taking the balance of FY 1992 authorizations for New Starts and allocating it to those projects which were earmarked for funding in the FY 1992 Appropriations Conference Report. The result totals \$532.86 million, the amount of New Start funding available in FY 1992.

The remaining columns show any authorized amounts specified in the ISTEA by fiscal year. The "Total" column is the total authorized for each project by the ISTEA, less any earmarks still outstanding from FY 1991 and before. For a number of projects which were in the project development process, no funds have been authorized by the ISTEA (e.g., Buffalo - Amherst, Denver - Southwest, Orange County - Central). It should be noted that the total amount authorized for specific projects totals about \$5.9 billion while the maximum amount authorized for the New Start category totals only \$4.9 billion. As a result, there will need to be some prioritization of these projects for funding each year during the life of the authorization. In addition, some of these projects may, in the end, not receive the amount of funding specified.

In general, the amounts authorized are intended for the construction of the projects indicated once the project reaches that stage in the process. However, for a number of projects, particularly those in the systems planning or other preliminary stages, the earmarked funds cover only the alternatives analysis and preliminary engineering or other study stages and no construction funding is yet authorized. The final column of the chart indicates which projects are authorized only project development funding.

TABLE 2
CANDIDATE NEW START PROJECTS AND AUTHORIZATIONS IN THE
INTERMODAL SURFACE TRANSPORTATION ASSISTANCE ACT OF 1991
(millions of dollars)

City/Project	Adjusted 1992	1993	1994	1995	1996	1997	TOTAL
TOTALS BY PHASE							
Under Construction	\$90.66	-	-	-	-	-	-
Final Design	91.85	-	-	-	-	-	\$1,711.10
Preliminary Engineering	114.33	\$146.14	\$144.45	\$76.80	\$121.80	-	1,305.90
Alternatives Analysis	53.11	62.00	154.35	162.00	126.00	\$26.00	1,533.35
Systems Planning & Other	182.91	195.63	122.80	196.00	128.00	128.00	1,388.30
GRAND TOTAL	\$532.86	\$403.77	\$421.60	\$434.80	\$375.80	\$154.00	\$5,938.65
UNDER CONSTRUCTION							
Los Angeles - MOS 2	\$69.11						
Miami - Metromover Exts	5.63						
St. Louis - Metrolink	15.92						
SUBTOTAL	\$90.66	-	-	-	-	-	-
FINAL DESIGN							
Atlanta - North	\$10.24						\$247.10 \$329m total authorized
Dallas - South Oak Cliff	20.48						140.10 \$160m total authorized
Jacksonville - South	5.12						71.20
Los Angeles - N Hollywood							695.00
Portland - Westside	13.31						515.00
San Francisco - Colma	42.70						42.70
SUBTOTAL	\$91.85	-	-	-	-	-	\$1,711.10
PRELIMINARY ENGINEERING							
Baltimore - Hunt Valley	\$2.56	\$15.14					\$17.70
Baltimore - Airport		12.30	\$8.70				21.00
Honolulu	20.48						602.10 \$618m total authorized
New York - Queens	11.00	18.70	77.80	\$76.80	\$121.80		306.10
Orange Co - Central							
Pittsburgh - Busways	7.68						
Salt Lake City	2.56						131.00
San Jose - Tasman	70.05	100.00	57.95				228.00
	\$114.33	\$146.14	\$144.45	\$76.80	\$121.80	-	\$1,305.90

TABLE 2 (continued)
CANDIDATE NEW START PROJECTS AND AUTHORIZATIONS IN THE
INTERMODAL SURFACE TRANSPORTATION ASSISTANCE ACT OF 1991
(millions of dollars)

City/Project	Adjusted 1992	1993	1994	1995	1996	1997	TOTAL
ALTERNATIVES ANALYSIS							
Baltimore - Penn Station			\$21.30				\$21.30
Boston - Piers	\$10.75						278.00
Buffalo - Amherst							
Chicago - Central	21.00	\$55.00	70.00	\$62.00	\$26.00	\$26.00	260.00
Cleveland - Dual Hub	2.00	2.00	1.00				5.00 AA
Denver - Southwest							
Houston - Connector	15.36						500.00
Los Angeles - E Central		(\$535m in Advance Construction Authority)					
Los Angeles - W Central							
Los Angeles - Pico/SanV							
Milwaukee - East/West							200.00
New Jersey - Waterfront							
Portland - Hillsboro							
St Louis - St Clair	2.00						
San Diego - Mid Coast	2.00	5.00	20.00				27.00 AA, PE&ROW
San Francisco - Airport			42.05	100.00	100.00		242.05
	\$53.11	\$62.00	\$154.35	\$162.00	\$126.00	\$26.00	\$1,533.35

TABLE 2 (continued)
CANDIDATE NEW START PROJECTS AND AUTHORIZATIONS IN THE
INTERMODAL SURFACE TRANSPORTATION ASSISTANCE ACT OF 1991
(millions of dollars)

City/Project	Adjusted 1992	1993	1994	1995	1996	1997	TOTAL
SYSTEM PLANNING AND OTHER							
Altoona - Pedestrian							\$3.20
Boston - Portland CR							30.00
Dallas - RAILTRAN	\$2.48	\$3.20					5.68
Los Angeles - Multimodal							15.00
Los Angeles-San Diego CR	10.00	5.00	\$5.00				20.00
Maryland - MARC Exts		60.00	50.00	\$50.00			160.00
New Jersey - Hawthorne	35.71	11.16					46.87
New Jersey - Urban Core	95.90	71.70	64.80	146.00	\$128.00	\$128.00	634.40
New York - Midtown Ferry	1.00	11.00					12.00
San Jose - Gilroy CR	8.00						21.00
Seattle - CR	5.12						25.00
Seattle - Rail							300.00
Vallejo - Ferry	8.00	9.00					17.00
Atlanta - Buckhead PM	0.20						0.20 Concept Eng
Atlanta - CR							0.10 Study
Boston - NS-SS Link	0.25						0.25 Feasibility
Charlotte - Priority	0.13	0.38					0.50 AA
Chattanooga - Trolley	1.00	1.00					2.00 AA
Cleveland - CR	0.80	0.80					1.60 Feasibility
Cleveland - Highland Hls							1.20 AA&PE
Detroit - LRT	10.00	10.00					20.00 AA&PE
Kansas City - LRT	1.50	4.40					5.90 AA&PE
Long Beach - MetroLink							4.00 AA&PE
New Jersey - Lakwd - Frh	1.80	3.00	3.00				7.80 AA, PE&EIS
New Orleans							4.80 AA, PE&EIS
Orlando - OSCAR	0.51						5.00 AA&PE
Philadelphia - Cross Cty	0.51						2.40 AA&PE
Philadelphia - N East CR							0.40 Study
Pittsburgh - LR Rehab							5.00 PE
Sacramento							26.00 AA, PE&FD
Washington - Dulles							6.00 AA&PE
Washington - Largo		5.00					5.00 AA, PE&EIS
SUBTOTAL	\$182.91	\$195.63	\$122.80	\$196.00	\$128.00	\$128.00	\$1,388.30

B. Existing Full Funding Grant Agreements

Three projects, St. Louis, Miami and Los Angeles - MOS-2, have existing Full Funding Grant Agreements (FFGA's) which commit the FTA to provide specified levels of Federal funding. The Section 3(j) report for FY 1992 (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 Urban Mass Transportation Act of 1964, as amended, May 1991), recommended that sufficient Section 3 New Start funds for FY 1992 be allocated to these projects to allow them to be completed. However, as a result of the provisions of the ISTEA, which earmarked available FY 1992 funding to other projects, combined with the instructions provided in the Conference Report accompanying the FY 1992 Department of Transportation and related agencies appropriations bill (House Report 102-243), sufficient funds are not available in FY 1992 to complete these projects. Sufficient funding was made available for St. Louis to complete the funding commitment made in the original FFGA. However, changes to the project at the Airport end which are within the scope of the FFGA will require another \$20 million. Los Angeles - MOS-2 still needs \$118.89 million and the project in Miami needs \$5.07 million in order that the FFGA commitments can be met. It is recommended that these amounts be provided to Los Angeles, St. Louis, and Miami in FY 1993. This will complete the commitments to these projects. The allocations to these projects would leave \$253.04 million of the \$397 million available for other projects.

C. Projects in Final Design without FFGA's

After taking into account projects already under FFGA's, the next category of projects to be considered for funding consists of those which have completed preliminary engineering and which are now in the final design process, but which do not have FFGA's. This category includes Atlanta - North, Dallas - South Oak Cliff, Jacksonville - South, Los Angeles - North Hollywood, Portland - Westside and San Francisco - Colma.

It is recommended that a total of \$98.16 million in FY 1993 funding be allocated to three of these projects (\$40 million for Atlanta - North, \$30 million for Portland - Westside and \$28.16 million for Dallas - South Oak Cliff). Full Funding Grant Agreements would be negotiated for each. In addition, an FFGA would be negotiated for the San Francisco - Colma project, using FY 1992 and prior year funds. A Letter of Intent would be issued for the Los Angeles - MOS-3 project (the North Hollywood segment). The remainder of the MOS-3 project is discussed in a following section. No action is proposed on the Jacksonville - South project until local financial details are finalized. The rationale for these recommendations is provided below.

The following table summarizes the recommendations for projects in Final Design including FY 1993 funds and the maximum amount of

outyear funds committed by Full Funding Grant Agreement or Letter of Intent (in millions of dollars):

	<u>Commitment</u>	<u>FY 1993</u>	<u>Maximum</u>	
	<u>Instrument</u>	<u>Funding</u>	<u>Outyear</u>	<u>Comment</u>
			<u>Funds</u>	
Atlanta - North	FFGA	\$40.00	\$196.86	
Dallas - So. Oak Cliff	FFGA	28.16	\$ 91.46	
Jacksonville - South	None	-0-	-0-	Financial plan needed
Los Angeles - N. Hllywd	LOI	-0-	695.00	
Portland - Westside	FFGA	30.00	471.69	
San Francisco - Colma	FFGA	-0-	-0-	
TOTAL		<u>\$98.16</u>	<u>\$1,473.17</u>	

1. Atlanta - North

Preliminary engineering of the Atlanta - North Extension project has been completed and the project is now in Final Design. This project would extend the North Line from Medical Center to North Springs, a distance of 3.1 miles. The 5.7-mile North Line extension from south of the Lenox station to Medical Center is now in Final Design and is to be constructed completely with local funds.

The justification for the North Line extension to North Springs and the stability and reliability of its operating assistance plan are questionable. Yet, the Atlanta area continues to have a strong commitment to the completion of the MARTA rail system and has adequate funds to complete the project. In addition, through FY 1992, \$92.14 million has been earmarked for this project (\$30.2 million of which has already been obligated). The 3.1-mile North Line Extension to North Springs would require a total of \$329.0 million of Section 3 funds. Section 3035(tt) of the ISTEA requires the Department to sign a multiyear grant agreement in this amount. The Department intends to abide by this requirement through issuance of a Full Funding Grant Agreement for this project, subject to resolution of certain funding issues. A total of \$40 million in FY 1993 is recommended for this project.

2. Dallas - South Oak Cliff

Dallas is studying a 20-mile, \$600 million light rail line from the Central Business District through South Oak Cliff and West Oak Cliff. Preliminary engineering of the 11-mile South Oak Cliff part of this line, for which a Federal Alternatives Analysis was conducted, has been completed and the project is now in Final Design. The request for Section 3 funding is expected to be limited to the most cost-effective portion of the South Oak Cliff line, a 6.4-mile segment from downtown to Illinois Avenue. The total cost of this line is \$300 million and Dallas is requesting \$160 million in Federal funds. Section 3035(i) of the ISTEA

requires the Department to issue a multiyear grant agreement in this amount.

Through FY 1992, \$40.38 million is earmarked for this project. Although the justification of this project is questionable, local funding is strong for both the capital and operating costs of this line as well as the entire system. Because of the strength of the local funding commitment and the requirements of the ISTEA, the Department intends to negotiate a Full Funding Grant Agreement for the 6.4-mile segment of the project in the amount of \$160 million in Federal funds. FY 1993 funding in the amount of \$28.16 million is recommended, to permit this project to proceed without delay.

3. Jacksonville

In FY 1991 and prior years, Congress had earmarked a total of \$28.4 million in Section 3 funds for extensions of the Automated Skyway Express (ASE) system and directed FTA to sign an FFGA after Jacksonville's completion of a financing plan for the project. This was sufficient funding to permit Jacksonville to proceed with a northern extension of the existing system. In compliance with congressional direction, the Department, upon receipt of a satisfactory financial plan, negotiated a Full Funding Grant Agreement for this extension.

In the Appropriations Report for FY 1992, Congress earmarked an additional \$10 million for the southward extension of the ASE. The ISTEA authorizations result in this amount being adjusted to \$5.12 million. In addition, Section 3035(vv) of the ISTEA authorizes a total of \$71.2 million for this project over the six-year authorization period. However, because of continuing concerns about the justification and local financial commitment of the remainder of this project, additional funding for Jacksonville is not recommended in FY 1993. Local project sponsors are requesting a total of \$96 million in Federal funds for this project. The benefits which would accrue from this next segment simply do not warrant such an expenditure.

4. Los Angeles - North Hollywood

Section 338 of the Surface Transportation and Uniform Relocation Assistance Act of 1987 requires the Department to enter into an FFGA for the completion of three phases of the Los Angeles Metrorail system. Section 3(a)(8) of the FT Act, which was added to the FT Act by Section 3011 of the ISTEA, indicates that certain "Programs of Interrelated Projects" are to be treated as single projects for the purposes of the project development process and the application of the Section 3(i) criteria. Section 3(a)(8)(C)(iii) defines the third phase of the Los Angeles Metrorail system, MOS-3, to include three lines (North Hollywood, Pico/San Vicente and East Side) for the purposes of these requirements. Section 3034(b)(3)(A) of the ISTEA authorizes a total of \$695 million in Federal funding for the cost of

construction for MOS-3. In addition, Section 3034(b)(5) provides \$535 million in advance construction authority for this project. These funds would be converted to grants in FY 1998 through 2000, subject to the availability of funds.

The North Hollywood segment is now in Final Design and is estimated to cost \$1.31 billion. The overall Metrorail project is justified and is being constructed with a local share in excess of the statutory minimum. The cost effectiveness of this project is quite good with high ridership potential. It connects central Los Angeles with a dense corridor in which other transportation alternatives are unavailable. In addition, the local financial plan is especially strong, relying heavily on stable sources of local funding. The proposal for the North Hollywood segment provides for a local share of 50 to 60 percent. These local funds are available from a variety of sources, including Propositions 108, 111 and 116 funds. In addition, the area is undertaking a number of other transit capital improvements which are being funded only with local funds.

Based on the justification of the project and the status of the efforts in Los Angeles to develop local funding, the next step in the process for the North Hollywood segment is a Letter of Intent. The FY 1993 funding proposed for MOS-2 will be sufficient to complete the Federal commitment to that phase of the project. Given its status, the project can proceed on schedule without additional funding in FY 1993. Thus, no additional funding is recommended for the Los Angeles project beyond that provided for MOS-2. The first increment of a total Federal share of \$695 million over the life of the project would be provided later and a Full Funding Grant Agreement would be negotiated for this amount at the appropriate time.

5. Portland - Westside

Portland is proposing an 11.5-mile light rail line from downtown Portland through the West Hills to Beaverton and suburban Washington County with an estimated cost of about \$756 million as far as 185th Avenue. An extension to Hillsboro costing an additional \$180 million is in the Alternatives Analysis phase.

Because this project was in preliminary engineering before passage of the STURAA in 1987, it is not subject to the requirements of Section 3(i) that projects be justified and supported by an adequate local financial commitment to be eligible for Section 3 New Start funding. In addition, in the FY 1991 and FY 1992 Appropriations Acts, the Department of Transportation was instructed to execute a Full Funding Grant Agreement for this project. Congress also directed that an FFGA for the Portland - Westside project be amended in the future to include the Hillsboro extension. Section 3(a)(8)(C)(v) of the FT Act defines the Portland - Westside and Hillsboro extensions to be elements of a single Program of Interrelated Projects which are to be considered as a single unit for the purposes of any Federal requirements. In

addition, Section 3035(b) of the ISTEA directs the Department to negotiate a multiyear grant agreement in the amount of \$515 million for this project over the six-year authorization period. These funds are to be used for construction of the project as far as 185th Street and alternatives analysis, preliminary engineering, and completion of an environmental impact statement for the Hillsboro extension.

Based on the requirements of the Appropriations Acts and the ISTEA, the Department will issue a Full Funding Grant Agreement for a project in Portland at an appropriate time. The amount authorized in the ISTEA would be nearly sufficient to complete the line as far as 185th Street. If it is not, based on final cost estimates, one option would be to negotiate an FFGA for a Minimum Operable Segment. A Sunset terminus, for example, has a total cost of \$356 million with an estimated Federal share of \$250 million. Through FY 1992, Congress has earmarked a total of \$14.31 million toward this project. The Department recommends that a further \$30 million be provided in FY 1993 funding to permit this project to move ahead on a reasonable schedule. No funding is now recommended for the project for the extension from 185th Avenue to Hillsboro.

6. San Francisco - Colma

This project, which will extend BART into San Mateo County about 0.3 miles to a new station with extensive parking, is well justified and has a highly rated local capital funding plan. The project rates well in terms of cost effectiveness because of the relatively low cost and large potential for attracting new riders due to the greatly expanded opportunities for park-and-ride trips. It is recommended that this project be funded through a Full Funding Grant Agreement.

Section 3(a)(8)(C)(ii) defines the BART extensions to San Francisco Airport (through Colma), Warm Springs, Dublin, and West Pittsburg, together with 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 of the ISTEA authorizes \$112.75 million in FY 1992 and \$100 million for each of FY 1993 through 1996, or a total of \$512.75 million for the Federally funded elements of this program (the Airport and Tasman extensions).

The total cost of the Colma portion of the Airport extension project is \$144.0 million with a proposed Federal share of \$108 million. For FY 1992 and prior years, Congress has authorized a total of \$180.85 million for projects in the Bay Area (of which \$11.7 million has already been obligated), including funding for the Tasman Corridor in San Jose. Congressional guidance stipulates that local officials are to decide the allocation of these funds between the elements of the program. However, these funds are sufficient to provide the full amount needed for the Colma project. Thus, the FFGA will be

negotiated from FY 1992 and prior year funds and no FY 1993 funding is needed.

D. Projects in Preliminary Engineering

The next category of projects to be considered consists of those now in the preliminary engineering phase but which are likely to be through this phase by the end of FY 1993. As mentioned earlier, this is the stage in project development where funding commitments should first be considered, since better information on cost and benefits is available. Projects now in preliminary engineering include Baltimore - Hunt Valley, Baltimore - BWI, Honolulu, New York - Queens Local/Express, Orange County, Pittsburgh - Busways, Salt Lake City and San Jose - Tasman.

Six of these projects are recommended for funding in FY 1993: Baltimore - Hunt Valley (\$15.14 million), Baltimore - BWI (\$14.86 million), Honolulu (\$24.98 million), New York - Queens Local/Express (\$10 million), Orange County (\$7.7 million) and Pittsburgh - Busways (\$8.0 million). Total FY 1993 funding for these projects would be \$80.68 million. Together with the projects now under construction (\$143.96 million) and in Final Design (\$98.16 million), this would commit a cumulative total of \$322.80 million of the \$397 million proposed to be available in FY 1993.

These projects (Baltimore - Hunt Valley and BWI, Honolulu, New York - Queens Local/Express and Orange County) are expected to demonstrate a reasonable level of project justification and/or strong local financial commitment. These projects are candidates for pledges of funding through Full Funding Grant Agreements or Letters of Intent. The project in Pittsburgh will be a candidate at a later time. In the interim, sufficient funding should be provided in FY 1993 to permit these projects to continue to progress without delay. Questions remain about the local financial plan for the Salt Lake City and San Jose - Tasman projects. Thus, no funding is recommended for these projects. The following table summarizes the recommendations for FY 1993 and outyear funds (in millions of dollars):

	Commitment <u>Instrument</u>	FY 1993 <u>Funding</u>	Maximum Outyear <u>Funds</u>	<u>Comment</u>
Baltimore - Hunt Valley	FFGA	\$15.14	\$ -0-	
Baltimore - BWI	LOI	14.86	\$ 6.14	
Honolulu	LOI	24.98	556.64	
New York - Queens L/E	LOI	10.00	285.10	
Orange County	LOI	7.70	226.30	
Pittsburgh - Busways	None	8.00	-0-	PE Only
Salt Lake City	None	-0-	-0-	Financial Plan lacking
San Jose - Tasman	None	-0-	-0-	Financial Plan lacking
TOTAL		<u>\$80.68</u>	<u>\$1,074.18</u>	

1. Baltimore - Hunt Valley and BWI

Using State and local funds, the Maryland Mass Transit Administration is constructing a 22.5-mile light rail line from Timonium on the north, through the Baltimore Central Business District to Dorsey Road on the south. The MTA has proposed three Federally funded extensions of this line: a 4-mile extension northward from Timonium to Hunt Valley; a 2-mile branch off the mainline to Baltimore-Washington International Airport (BWI); and a 0.5-mile spur to Penn Station in downtown Baltimore. The entire undertaking has an estimated cost of \$446 million. The Federal share of the three extensions would total \$69 million (\$34 million for Hunt Valley, \$21 million for BWI and \$14 million for Penn Station). Through FY 1992, \$18.86 million had been earmarked for the Baltimore extensions (of which \$2 million has already been obligated).

Section 3(a)(8)(C)(iv) of the FT Act designates the Baltimore-Washington Transportation Improvements Program (including the three light rail extensions, MARC commuter rail extensions to Waldorf and Frederick and an extension of the Washington Metro system to Largo) as portions of a Program of Interrelated Projects. Section 3035(nn) of the ISTEA provides \$60 million for the light rail extensions from FY 1993 and 1994 funds. In addition, \$160 million is authorized from FY 1993, 1994, and 1995 funds for the MARC extensions and \$5 million in FY 1993 funds is authorized for preliminary engineering of the Metro extension to Largo.

At the present time, the Hunt Valley and BWI extensions are in preliminary engineering. The first project ready to be funded is the Hunt Valley extension. Although the results of the alternatives analysis and preliminary engineering provide limited justification for this project, the local financial commitment is strong. The Federal share of the entire light rail line undertaking is to be only 15 percent. Thus, the project is exempt from the requirements of Section 3(i). Accordingly, the

Department will negotiate a Full Funding Grant Agreement for the Hunt Valley extension and issue Letters of Intent for the remaining two extensions. Congress has earmarked \$2.56 million in FY 1992 funds for this project. This amount, combined with the \$16.3 million in funds already earmarked (\$2.0 million of which has already been obligated), leaves a total requirement of \$15.14 million. It is recommended that this amount be provided for the Hunt Valley project in FY 1993. Further, it is recommended that the remainder of the \$30.0 million specified in the ISTEA for FY 1993 funding for Baltimore projects (\$14.86 million) be allocated to the BWI extension. The Letter of Intent for the BWI project would indicate that the remaining \$6.14 million would be provided in FY 1994, subject to the availability of funds.

2. Honolulu

Honolulu is planning a 16.0-mile fixed guideway system from Waipahu through downtown to the University of Hawaii with a total estimated cost of \$2.07 billion. Preliminary engineering could be completed for the Honolulu project by September 1992. While final decisions on funding this project should await completion of preliminary engineering and the local funding plan, this project appears to have significant potential. Section 3035(w) of the ISTEA directs the Department to enter into a multiyear grant agreement totaling \$618 million over the six-year authorization period.

A major concern at this time is the need for a local funding source for \$37 million in annual operating and maintenance costs of the proposed system. While potential sources to cover this amount are available, the allocation of these sources for this purpose must be confirmed. In FY 1991 and prior years, \$15.9 million was made available for Honolulu (of which \$15.5 million has already been obligated). In addition, \$20.48 million was earmarked in FY 1992 as a result of the Appropriations Conference Report and ISTEA. Thus, an additional \$581.62 million will be needed to meet the total estimated Federal share of \$618 million. Due to the high total cost of the project, it will ultimately be necessary to limit total Federal participation through an FFGA with a cap of Federal funding of this amount.

Subject to the results of preliminary engineering and contingent on the availability of local operating resources, the project in Honolulu is a good candidate for a Letter of Intent. For FY 1993, it is recommended that, because of the magnitude of the undertaking, \$24.98 million be allocated to Honolulu to permit the project to proceed without delay.

3. New York - Queens Local/Express Connection

New York is proposing a connection from the recently opened 63rd Street tunnel line to the Queens Boulevard subway lines. The

project would involve construction of about one-quarter mile of new line and a considerable amount of track and signal work at a total cost of about \$645 million. This project appears to be one of the most cost-effective in the country in terms of cost per hour, relieving severe overcrowding on the Queens Boulevard Lines and improving access to Manhattan.

The New York Metropolitan Transit Authority (MTA) has a long history of overmatching Federal transit funds, primarily for rail modernization. It is expected that the MTA would provide at least 50 percent of the funding, leaving a required Federal share of \$322 million. For these reasons, this project is an excellent candidate for a Letter of Intent.

Section 3(a)(8)(C)(vi) defines the Queens Local/Express Connector Program as a Program of Interrelated Projects for the purposes of the application of Federal requirements. In addition, Section 3033 of the ISTEA provides \$11 million in FY 1992, \$18.7 million in FY 1993, \$77.8 million in FY 1994, \$76.8 million in FY 1995 and \$121.8 million in FY 1996 for this project, or a total of \$306.1 million. In FY 1993, it is recommended that \$10 million be provided to New York to cover the remaining costs of Final Design and right-of-way acquisition, to allow this project to proceed through these steps without delay. The funds available for FY 1992 and FY 1993 should be sufficient to permit final design to proceed on schedule.

4. Orange County

Orange County is proposing a transitway project which has a total estimated cost of about \$312 million, although the components of the program are still being developed. The area is now proposing a Federally assisted project with a Federal share of \$234 million. The project is likely to be extremely well justified, with the best cost-per-new-rider of any project now in preliminary engineering. Local capital funding commitments appear to be falling into place.

Based on the cost-effectiveness of this project, once the process has proceeded to an appropriate point, the Department believes that this project is a good candidate for a Letter of Intent. In FY 1993, it is recommended that \$7.70 million be provided to Orange County to permit this project to complete final design of the transitway ramps without delay. Actual construction funding can be made available in subsequent years once the project is developed further.

5. Pittsburgh - Busways

Local officials are studying two extensions to the existing Martin Luther King, Jr. Busway. One would extend the existing 6.8-mile busway 2.5 miles further to the east together with park-and-ride lots. The total cost of this extension is estimated to be \$40 million, with a Federal share of no more than \$20 million.

The second extension would be to the west in the 20-mile corridor between downtown Pittsburgh and the Greater Pittsburgh International Airport. A 7.7-mile busway, with a preliminary cost estimate of \$200 million is being considered for the area in which congestion is worst. At the present time, the east extension is undergoing preliminary engineering while the Airport extension is in the alternatives analysis phase.

Local officials are committed to raising 50 percent of the cost of these projects from non-Federal sources. Sections 1069(e) and 1108(b) of the highway title of the ISTEA authorize highway program funds for the projects. In addition, recent passage of dedicated funding for transit capital in Pennsylvania could contribute to a strong financial package. However, a detailed financial plan has not yet been developed.

Preliminary estimates indicate that these projects would be extremely well justified. It is recommended that \$8 million be made available in FY 1993 to allow project development to continue.

6. Salt Lake City

The project proposed in Salt Lake City is a 17-mile light rail line extending from downtown Salt Lake City to the south along a little used railroad line. The estimated capital cost is \$200 million with an estimated Federal share of about \$100 million. Through FY 1991, Congress had earmarked \$15.5 million for this project (of which \$6.6 million has already been obligated). The FY 1992 Appropriations Conference Report and the ISTEA have resulted in a further earmark of \$2.56 million in FY 1992 funds. Section 3035(f) of the ISTEA requires the Department to negotiate a multiyear grant agreement totaling \$131 million during the period FY 1992 through FY 1997.

Preliminary engineering is proceeding well on this project. However, significant questions exist about the local financing plan for this project. Thus, no funding is recommended for Salt Lake City in FY 1993.

7. San Jose - Tasman

Santa Clara County has selected a 12.2-mile light rail line from Milpitas to Mountain View with a connection to the existing Guadalupe light rail line in northern Santa Clara County as the locally preferred alternative. Capital costs are estimated at \$460 million.

Through FY 1991, a total of \$68.1 million had been earmarked for San Francisco area projects, including \$2.0 million for this project. The Tasman Corridor is included in the Bay Area Program of Interrelated Projects described in Section 3(a)(8)(C)(ii). In addition, Section 3032 of the ISTEA requires the Department to negotiate a multiyear grant agreement providing \$112.75 million

for FY 1992 and \$100 million per year for FY 1993 through FY 1996 for this program, or a total of \$512.75 million. Assuming that \$42.70 million of the \$112.75 million authorized for the Bay Area in FY 1992 is used to complete funding for the Colma extension, as recommended above, then \$70.05 million would be available for funding of the initial costs of the Tasman corridor. Significant concerns exist about the justification and local financial plan for the Tasman Corridor project. Accordingly, it is recommended that no further funding be provided for this project in FY 1993.

E. Projects in Alternatives Analysis

Sixteen projects are currently in the Alternatives Analysis phase of the project development process. These projects are listed in Table 1. During the Alternatives Analysis phase, a range of alternatives are evaluated, the locally preferred alternative is selected and a draft environmental impact statement is completed. Prior to completion of this phase, therefore, the details of the project, including its cost, are not yet known. Thus, it is premature to provide substantial amounts of funding for these projects from Section 3. However, as shown in Table 2, a number of these projects have been authorized funding as a result of the FY 1992 Appropriations Conference Report and/or the ISTEA. As noted earlier, alternatives analysis should be funded with Sections 8 or 9 funds. Thus, no funding is recommended for the analysis phase of these projects.

The following table summarizes the recommendations for projects in alternatives analysis:

		Commitment FY 1993	Maximum	
	<u>Instrument</u>	<u>Funding</u>	<u>Outyear</u>	<u>Comment</u>
			<u>Funds</u>	
Baltimore - Penn Station	LOI	-0-	\$14.00	
Cleveland - Dual Hub	None	-0-	-0-	Premature
San Diego - Mid Coast	None	-0-	-0-	Premature
Chicago - Circulator	None	-0-	-0-	Premature
New Jersey - Waterfront	None	-0-	-0-	Premature
Houston - Priority	None	-0-	-0-	Loc. consensus required
St. Louis - St. Clair	None	-0-	-0-	Premature
Boston - South Piers	None	-0-	-0-	Premature
San Francisco - Airport	None	-0-	-0-	Premature
TOTAL		-0-	\$14.00	

1. Baltimore - Penn Station

As noted earlier, three Federally funded extensions are proposed to the 22-mile light rail line being constructed using State and local funds. Although the Penn Station project is only in the alternatives analysis phase, because the Federal share of the project is less than \$25 million and of the overall undertaking is

about 15 percent, this project is exempt from the requirements of Section 3(i). Accordingly, it is recommended that a Letter of Intent be provided for this remaining extension, a 0.5-mile spur to Penn Station in downtown Baltimore. The Federal share of this extension would be \$14 million. No FY 1993 funding is recommended for this project. These funds can be provided in FY 1994 from the funds allocated by Section 3035(nn) of the ISTEA.

2. Cleveland - Dual Hub

Local officials in Cleveland are conducting an alternatives analysis assessing alternative replacements for the existing rapid transit line segment between downtown Cleveland and the University Circle area. The alternative considered most likely to be selected is a surface light rail line on Euclid Avenue with an estimated capital cost of \$568 million.

Section 3035(t) of the ISTEA allocates \$2.0 million in FY 1992, \$2.0 million in FY 1993 and \$1.0 million in FY 1994 for completion of the alternatives analysis. In addition, \$7.0 million has been earmarked for this project by Congress in FY 1991 and prior years. These funds have not yet been obligated. However, as noted earlier, Section 8 or 9 funds should be used to fund alternatives analysis. Thus, it is recommended that no Section 3 funding be allocated to Cleveland in FY 1993.

3. San Diego - Mid Coast

The Metropolitan Transit Development Board is assessing alternatives in the Mid Coast Corridor from I-8 near Old Town north to the vicinity of Del Mar. Capital costs range from \$12 million for the Transportation System Management alternative to \$337 million for a 19.9-mile light rail line.

Section 3035(u) of the ISTEA sets aside \$2.0 million in FY 1992, \$5.0 million in FY 1993 and \$20.0 million in FY 1994 for completion of alternative analysis, an environmental impact statement and right of way acquisition. In addition, Congress has earmarked \$0.4 million in FY 1991 funds for this project. As noted earlier, Section 8 or 9 funding should be used for alternatives analysis. Thus, it is recommended that no Section 3 funding be provided for this project in FY 1993.

4. Chicago - Circulator

The Chicago Central Area Circulator would be a multilegged transit system within the Chicago Central Business District connecting the commuter rail stations and other locations within the Central Business District with the loop and two subway lines. The estimated capital cost for all segments is about \$750 million, the Federal share of which is estimated to be \$250 million.

Section 3035(e) of the ISTEA provides authorizations for a total of \$260 million for this project, including \$21.0 million in FY 1992 and \$55.0 million in FY 1993 and \$70.0 million in FY 1994.

In addition, another \$16.9 million has been earmarked by Congress for this project in FY 1991 and earlier, of which \$1.0 million has been obligated for planning. Given that this project has not yet completed alternatives analysis and that existing funding (\$36.9 million) should be more than adequate to permit preliminary engineering to proceed on schedule, it will be premature to provide further funding in FY 1993. Accordingly, it is recommended that no additional funds be allocated to Chicago in FY 1993 and that further funds not be made available to Chicago until preliminary engineering is complete.

5. New Jersey - Waterfront

Section 3(a)(8)(C)(i) 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 the ISTEA defines this program to include the Secaucus Transfer, the Kearny Connection, the Waterfront Connection, the Northeast Corridor Signal System Improvements, the Hudson River Waterfront Transportation System, the Newark-Newark International Airport-Elizabeth Transit Link, a Newark Penn Station-Broad Street Station rail link and New York Penn Station Concourse Improvements. Section 3031(c) exempts these projects from the requirements of Section 3(i) of the FT Act except that an alternatives analysis is to be conducted on the Hudson River Waterfront Transportation System. Such an analysis is already underway. Section 3031(a)(2) provides a total of \$634.4 million in Section 3 funding for this program including \$95.9 million in FY 1992 and \$71.7 million in FY 1993. In FY 1991 and prior years, Congress has earmarked a total of \$39.9 million for these projects, all of which has already been obligated.

While only the Hudson River Waterfront Project is to undergo an alternatives analysis, the other projects in the program will have to be better defined before funds can actually be obligated towards any of the elements of the program. Further, the Hudson River Waterfront Project is not likely to be at a stage in FY 1993 where large amounts of funds can be obligated for it. Therefore, it is recommended that no FY 1993 funds be allocated to the New Jersey projects. The \$95.9 million in FY 1992 funds available should permit the program development process to proceed on a reasonable schedule and could permit funding of any of the elements of the program which do not require an alternatives analysis but which can have environmental studies completed by the end of FY 1993.

6. Houston - Priority Corridor

Houston METRO is undertaking an alternatives analysis in its "Priority Corridor" from downtown Houston, through Greenway Plaza and the Uptown Galleria area to the western suburbs. However, local officials have decided not to proceed with the previously selected alternative and a decision is forthcoming on a new Locally Preferred Alternative.

Through FY 1991, Congress had earmarked a total of \$146.1 million for this project. In addition, \$15.36 million was earmarked as a result of the FY 1992 Appropriations Conference Report and the ISTEA. Section 3035(uu) of the ISTEA provides \$500 million for this project over the six-year authorization period. However, until a local consensus develops around a project for Federal funding, no further allocations of funding, including FY 1993 funds, are recommended.

7. Boston - South Boston Piers

The Massachusetts Bay Transportation Authority (MBTA) is proposing an underground transitway between the existing transit system and the South Boston Piers area. The cost of the project is estimated at over \$400 million depending on final decisions on mode and alignment.

As a result of the FY 1992 Appropriations Conference Report and the ISTEA, \$10.75 million in FY 1992 funds have been earmarked for this project. Section 3035(j) of the ISTEA directs the Department to negotiate a multiyear grant agreement totaling \$278 million for this project over the six-year authorization period.

Given that this project is still in the alternatives analysis phase and will not complete preliminary engineering for some time, it is not appropriate to provide additional funds for this project until later in the process when more details are known. Accordingly, no FY 1993 funding is recommended for this project. The FY 1992 funds should be adequate to permit the project development process to proceed.

8. San Francisco - Airport

In addition to completing Final Design of an extension to BART to Colma and Preliminary Engineering on the Tasman Corridor project in San Jose, Bay Area officials are conducting an alternatives analysis on further extension of BART from Colma to San Francisco International Airport. As noted earlier, Section 3(a)(8)(C)(ii) of the FT Act defines the BART extensions to San Francisco Airport (through Colma), Warm Springs, Dublin, and West Pittsburg, together with 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 of the ISTEA authorizes \$112.75 million in FY 1992 and \$100 million for each of FY 1993 through 1996, or a total of \$512.75 million for the Federally funded elements of this program (the Airport and Tasman extensions).

The total cost of the Colma-to-Airport portion of the Airport extension project is about \$1.0 billion with a proposed Federal share of \$750 million. In accordance with the ISTEA, local officials may opt to use the funds provided to the Bay area in FY 1992 for the Airport extension in lieu of the Tasman project.

Since these funds are more than adequate to permit either project to proceed on a reasonable schedule, no FY 1993 funding is recommended for the Colma to Airport portion of the Airport extension project.

9. Other Projects in Alternatives Analysis

As noted in Table 2, a number of other projects are in the Alternatives Analysis phase, but which were not authorized funding in the ISTEA. These are: Buffalo - Amherst, Denver - Southwest, Los Angeles - East Central, West Central and Pico/San Vicente, Portland - Hillsboro and St. Louis - St. Clair. Of these projects, only St. Louis - St. Clair has received funding in the past (\$4.1 million earmarked of which \$0.5 million has been obligated). Because these projects have not yet completed alternatives analysis, and thus are not ready for further major funding, it is recommended that they receive no FY 1993 funding.

F. Projects in Systems Planning and Other Initial Phases

Although it is generally not appropriate for projects not yet in Alternatives Analysis to receive Section 3 New Start funding, a number of such projects were authorized funding in the ISTEA. Table 2 displays these authorizations.

1. Study Grants

A number of projects are authorized funding for the conduct of alternatives analysis and/or preliminary engineering or for other initial studies. It is more appropriate for such studies to be conducted with Section 8 Planning or Section 9 Formula funds. Thus, it is recommended that no Section 3 New Start funds be made available for these projects:

Charlotte - Priority	Alternatives Analysis (AA)
Detroit - LRT	AA & Prelim. Engineering (PE)
Kansas City - LRT	AA & PE
NJ - Lakewood - Freehold CR	AA & PE
No East Ohio Comm Rail	Feasibility
Washington - Largo	AA & PE

2. Project Grants

A number of other small projects have been authorized for funding by the ISTEA. Preliminary analysis of these projects has shown that the benefits are commensurate with their relatively modest costs. In addition, the scale of these projects is such that either they will be exempt from the requirements of Section 3(i) because they would have a Federal share of less than \$25 million or they can complete alternatives analysis and other preliminary steps fairly quickly. A number of these projects have FY 1992 funding earmarked as a result of the FY 1992 Appropriations Conference Report and ISTEA. Allocation of FY 1993 funds will complete the Federal commitment to these projects.

The following table summarizes the recommendations for funding these smaller projects (in millions of dollars):

	<u>FY 1992 Earmark</u>	<u>Proposed FY 1993 Allocation</u>
Maryland - MARC Extensions	-0-	\$10.00
Boston to Portland CR	-0-	30.00
Chattanooga - Downtown	\$ 1.00	1.00
Dallas - RAILTRAN	2.48	3.20
Los Angeles - San Diego CR	10.00	10.00
New York - Midtown Ferry	1.00	11.00
New Jersey - Hawthorne CR	35.71	-0-
Vallejo - Ferry	<u>8.00</u>	<u>9.00</u>
 TOTAL	 <u>\$58.19</u>	 <u>\$74.20</u>

Maryland - MARC Extensions. The Mass Transit Administration of Maryland is considering extensions of the Maryland Commuter Rail (MARC) system to provide commuter rail service to Washington, D.C. from Waldorf, Maryland and Frederick, Maryland. Section 3035(nn)(2) of the ISTEA provides \$160 million in Section 3 funding for these extensions, including \$60 million in FY 1993 and \$50 million in FY 1994 and 1995. In addition, Section 3(a)(8)(C)(iv) of the FT Act requires these extensions to be considered as part of a Program of Interrelated Projects for the purposes of Federal requirements.

A system planning study is underway for the extension to Waldorf and thus any Section 3 funding for that project is premature. However, the Frederick extension, which would involve only track, signal, and station improvements on an existing freight line would be exempt from the requirements of Section 3(i) because the estimated Federal share of \$18.6 million would be less than \$25 million. Project development studies and an environmental assessment now underway will be completed before the end of FY 1993. Based on the benefits of this project relative to its relatively modest cost, it is recommended that \$10 million be provided in FY 1993 to permit project development to continue.

Boston - Portland Commuter Rail. State and local officials in the Boston, Massachusetts to Portland, Maine corridor are developing plans to initiate commuter rail service between these two cities. Section 3035(pp) of the ISTEA provides \$30 million for this project. The project would involve station and track improvements and the acquisition of rolling stock at a total cost of \$50 million.

Because the total Federal share required for this project exceeds \$25 million, it is not exempt from the Section 3(i) New Starts criteria. Thus, the project will be subject to an alternatives analysis. However, because of the relatively simple nature of the

project, it is expected that this analysis will be completed by the end of 1992.

Given the relatively small scale of the project and the results of preliminary analysis, it is expected that this project will meet the project justification requirements of Section 3(i). Thus, it is recommended that \$30 million be provided for this project in FY 1993, which will complete the Federal commitment to this project.

Chattanooga - Downtown Trolley. The Chattanooga Area Regional Transportation Authority and city officials are planning a downtown circulator system using battery powered, rubber-tired buses. As a result of earlier analysis, it was decided not to implement an earlier plan to use fixed-rail trolley cars. The overall plan includes a three mile circulator route and three parking garages, with a total cost of \$17 million.

Section 3035(v) of ISTEA provides \$1.0 million in FY 1992 and 1993 for this project. Although the ISTEA indicates that these funds are for alternatives analysis, because local officials have decided to use rubber-tired buses instead of fixed-rail trolley cars, such an analysis would not be needed. In addition, \$1.0 million in prior year Section 3 bus funds are earmarked for this project.

Because of the small amount of Federal funds involved in this project, no additional detailed analysis is needed. Estimates made of the patronage on the bus plan indicate that the project is well justified at this level of Federal funding. It is recommended that an additional \$1.0 million in Section 3 New Starts funds be provided for this project in FY 1993 to complete the Federal commitment to this project.

Dallas - RAILTRAN. This project would initiate commuter rail service between Dallas and Fort Worth, Texas, with a spur to Dallas/Fort Worth Airport. The right of way for this service was purchased with FTA assistance in 1984. Section 3035(x) of the ISTEA provides \$2.48 million in FY 1992 and \$3.2 million in FY 1993 for preliminary engineering and initial construction for this service.

Because of the small Federal share proposed for this project, it is exempt from the requirements of Section 3(i) of the FT Act. An initial planning study has been completed for this project and it is expected that the FY 1992 funds will be obligated prior to the end of FY 1992. Given the relationship of the benefits identified in preliminary analyses and the small amount of Federal funds involved, it is expected that the project will be justified. Thus, it is recommended that \$3.2 million be allocated to this project in FY 1993, completing the Federal commitment to the project.

Los Angeles - San Diego Commuter Rail. This project would enhance the commuter rail service presently provided in the Los Angeles - San Diego corridor by making track improvements and eliminating grade crossings as part of a regional effort to improve commuter rail service. Section 3035(g) of the ISTEA provides a total of \$20 million for this project, \$10 million in FY 1992 and \$5 million in FY 1993 and 1994.

Federal funds would be used for the grade crossing elimination elements of the overall regional effort to improve rail service in the corridor. FY 1992 funds would be used for two improvements for which engineering has already been completed. Because of the expected safety benefits of this project and the relatively small share of the overall program that this funding represents it is expected that this project will be justified. In addition, because the total amount of Federal funding involved is less than \$25 million, this project is exempt from the requirements of Section 3(i) of the FT Act. Other preliminary studies, including engineering and the required environmental assessment on the remaining grade crossing improvements will be complete by late 1992. Thus, it is recommended that \$10 million be allocated to this project in FY 1993 to complete the Federal commitment.

New York - Midtown Ferry. The purpose of this project is to expand the existing Staten Island Ferry service to serve a new terminal in midtown Manhattan. Section 3035(d) of ISTEA provides \$12 million for this project, \$1 million in FY 1992 and \$11 million in FY 1993.

Because the Federal share for this project will be for less than \$25 million, this project is exempt from the requirements of Section 3(i) of the FT Act. Local officials in New York have completed preliminary studies on this project which indicate that the project, because of its benefits and modest cost, is likely to be justified. Thus, it is recommended that \$11 million be allocated to this project in FY 1993 to complete the Federal commitment.

New Jersey - Hawthorne Commuter Rail. Restoration of commuter rail service has been proposed in the corridor from Hawthorne, New Jersey to Warwick, New York. The project would include equipment, station rehabilitation and track improvements. Section 3035(a) of the ISTEA provides \$46.866 million for this project, \$35.71 million in FY 1992 and \$11.156 million in FY 1993.

Because this project has a proposed Federal share in excess of \$25 million, it is not exempt from the requirements of Section 3(i) of the FT Act. Thus, an alternatives analysis is required. However, local officials have not yet initiated this analysis nor has the likely grantee been identified. Thus, it is unlikely that funds will be needed in FY 1993. Thus, it is recommended that no funding be provided for this project in FY 1993.

Vallejo - Ferry. Local officials in Vallejo, California have developed a project to improve ferry service between Vallejo and San Francisco. The project would involve purchase of high speed ferries to replace conventional vessels for the service.

Section 3035(c) of the ISTEA provides \$17.0 million for this project, including \$8.0 million in FY 1992 and \$9 million in FY 1993. Because of the small scale of this project, it is exempt from the requirements of Section 3(i) of the FT Act.

Preliminary analysis indicates that the increase in speed which can be achieved from the investment in high speed ferries will result in significant increases in patronage. Because of the relatively low cost of this project, it is recommended that \$9.0 million be allocated to this project to complete the Federal commitment to it.

G. Summary of Funding Allocations By Project Phase

The following table shows how much is recommended to be allocated in FY 1993 to projects in each phase of the project development process:

Under Construction	\$143.96 million
Final Design	98.16 million
Preliminary Engineering	80.68 million
Alternatives Analysis	-0- million
Not in Process	<u>74.20 million</u>
 TOTAL	 <u>\$397.00 million</u>

H. Summary of Recommended FFGA's and Candidates for LOI's

The following chart indicates the FY 1993 and potential outyear implications of the FFGA's and candidates for commitments and pledges recommended above (in millions of dollars):

		Maximum	Total Funding
	FY 1993 Funds	Outyear Funds	FY 1993 & beyond
<u>Existing Full Funding Grant Agreements</u>			
Los Angeles - MOS-2	\$118.89	\$ -0-	\$118.89
St. Louis - Metrolink	20.00	-0-	20.00
Miami - Metromover Exts	5.07	-0-	5.07
Jacksonville - North	-0-	-0-	-0-
<u>Proposed Full Funding Grant Agreements</u>			
Atlanta - North	\$ 40.00	\$196.86	\$236.86
Dallas - So Oak Cliff	28.16	91.46	119.62
Portland - Westside	30.00	471.69	501.69
San Francisco - Colma	-0-	-0-	-0-
Baltimore - Hunt Valley	15.14	-0-	15.14

	<u>FY 1993 Funds</u>	<u>Maximum Outyear Funds</u>	<u>Total Funding FY 1993 & beyond</u>
<u>Candidates for Letters of Intent</u>			
Baltimore - BWI	\$ 14.86	\$ 6.14	\$ 21.00
Baltimore - Penn Sta	-0-	14.00	14.00
New York - Queens	10.00	285.10	295.10
Los Angeles - No Hllywd	-0-	695.00	695.00
Honolulu	24.98	556.64	581.62
Orange County	7.70	226.30	234.00
TOTALS	<u>\$314.80</u>	<u>\$2,543.19</u>	<u>\$2,857.99</u>

Another \$82.20 million is proposed to be allocated in FY 1993 to projects now in Systems Planning and other preliminary stages, based on authorizations contained in the ISTEA. Thus, the total of \$397.00 million proposed to be available in the FY 1993 budget for New Start projects would be fully allocated.

The potential maximum amount of New Start funding which was made available by the ISTEA is about \$4.4 billion for FY 1993 through 1997. As noted earlier, Section 3(a)(4) limits the total amount of Letters of Intent and FFGA's which can be issued at any time to the remaining balance of the authorization, plus one-half of the uncommitted cash balance in the Mass Transit Account of the Highway Trust Fund. The sum of commitments which are proposed in this report is well within the total amount authorized.

V. CONCLUSION

The \$400 million available for FY 1993 will allow funding a number of attractive projects that will have beneficial impacts on local congestion problems as well as completing a number of projects which have had prior year funding earmarked by Congress. We intend to:

- o Provide \$5.07 million for the Miami Metromover extensions, \$20 million for St. Louis - Metrolink and \$118.89 million for Los Angeles - MOS 2 to complete funding of these projects.
- o Assuming satisfactory progress is made on funding plans and completion of preliminary engineering, negotiate Full Funding Grant Agreements for the following projects:
 - Atlanta - North Extension (\$40 million in FY 1993 funding and \$196.86 million in future funds),
 - Dallas - South Oak Cliff (\$28.16 million in FY 1993 and \$91.46 million in future years),
 - Portland - Westside (\$30 million in FY 1993 and \$471.69 million in future funds),

- San Francisco - Colma (using already earmarked funds);
and
 - Baltimore - Hunt Valley (\$15.14 million in FY 1993 funds).
- o Assuming satisfactory progress is made on preliminary engineering and funding plans, consider as candidates for Letters of Intent New York, Los Angeles (North Hollywood), Honolulu, Orange County, and Baltimore (BWI and Penn Station). These projects will be ready for construction funding within the authorization period. During FY 1993, sufficient funding is recommended to permit these projects to proceed through the next steps in the process without delay. The amounts recommended are \$24.98 million for Honolulu, \$10 million for New York, \$7.7 million for Orange County, and \$14.86 million for Baltimore.
 - o Provide continued funding for project development for Pittsburgh (Airport - \$8 million) and Maryland (Commuter Rail Extensions - \$10 million).
 - o Complete Federal funding on a number of other projects including Chattanooga (\$1 million), Boston to Portland (Commuter Rail - \$30 million), Dallas (RAILTRAN - \$3.2 million), Los Angeles - San Diego Commuter Rail (\$10 million), New York (Midtown Ferry - \$11 million), and Vallejo (Ferry - \$9 million).

The Letters of Intent and Full Funding Grant Agreements proposed would involve a commitment of about \$2.94 billion in FY 1993 and future year funds, well below the \$4.4 billion authorized for New Starts.

APPENDIX A. REQUIREMENTS OF SECTION 3(i) OF THE FT ACT

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

"(i) New Start 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 dependant population or promotes economic development, and other factors 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 the 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 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, this 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 Federal Transit Act sets up an assured timetable for the completion of the steps in the project development process. Specifically, it requires the following:

- o The draft environmental impact statement be approved for circulation 45 days after it is submitted to the Secretary.
- o 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).
- o The project shall be permitted to begin final design 120 days after completion of the final environmental impact statement.
- o A Full Funding Grant Agreement shall be entered into within 120 days of the start of Final Design.

In summary, the ISTEA made a number of significant changes to Section 3(i). It modified the determinations under Section 3(i)(1) to broaden the second criteria from "cost-effective" to include a much wider range of project justification criteria. It added the five additional 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 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 FFGA's for New Start projects.

Thus, before a New Start project can be considered for funding under Section 3, the expanded criteria in Section 3(i) must be met and the Secretary must make an affirmative finding that this is the case. The project development process which implements these requirements was contained in the Policy on Major Capital Investments issued on May 18, 1984. While the changes in Section 3(i) will require modifications in FTA's policy statement and the issuance of this statement as a regulation, the major tenets of the process will remain in place. This process provides for an objective determination of the merits of projects under consideration. The requirements of Section 3(i) and the Major Capital Investments Policy allow for the prudent management of limited Federal resources. To assure that Federal funds are used to their best advantage, it is vital that projects for which Federal funds are contemplated be developed carefully, complying with all the environmental requirements and other tenets of good planning.

Such projects should be shown to generate substantial benefits compared to the costs and other impacts of the projects. In addition, local funding should be sufficient to assure that the projects will be completed in a timely manner and will be operated as planned and the local financial commitment should be more than sufficient to assure that other transportation programs will not have to be reduced to allow adequate funding for the new project's operation.

A key component of the Section 3(i) criteria is the requirement that Federal funding decisions be based on the results of alternatives analysis and preliminary engineering. These two stages are part of the overall project development process. This process is critical to assuring the effective use of Federal funds.

- o The process begins with system planning, where the most pressing transportation problems are identified. Based on the results of system planning, a priority corridor and a small set of promising alternatives are selected for further study in alternatives analysis.
- o Alternatives analysis explores options for serving the transportation demand in the region's highest priority corridor by estimating the costs, ridership and other impacts of a range of possible alternatives. At the end of alternatives analysis, the environmental impacts, potential benefits, and estimated costs are available, supporting local decisions on a preferred mode and alignment and on a plan for financing the project's capital and operating costs.

- o Promising projects are then advanced to preliminary engineering. At the end of this stage, the Final Environmental Impact Statement is completed, firm cost estimates are available, financial commitments should be in place and a final decision on building the project can be made.
- o If a project appears to be worthy of a Federal investment at the completion of preliminary engineering, FTA may, after notifying Congress of its plans, issue a Letter of Intent to pledge Section 3 funding for the project.
- o Once a decision is made to proceed with construction of a project, final design begins. It is at the completion of this stage that a Full Funding Grant Agreement (FFGA) is normally entered into. Such an agreement obligates initial construction funding and a firm Federal commitment of future funding.

Table A-1 provides a summary of the projects now in the New Starts "pipeline" and a summary evaluation of the project in terms of project justification and local financial commitment. This table lists projects which are under construction, in final design, in preliminary engineering and in alternatives analysis. It also shows those projects which have been authorized funding in the ISTEA but which have not yet entered the process. Appendix B provides more detail on each project, including the basis of the evaluation of the project.

For each project, the total capital cost is shown, followed by an estimate of the cost-per-new rider. This was the basis on which FTA determined the cost-effectiveness of the project when applying the cost-effectiveness criterion which was formerly contained in Section 3(i). Since this criterion was broadened to include a wider range of project justification factors (including cost-effectiveness), FTA will have to issue a regulation defining how these criteria will be evaluated. For the purposes of this report, and until complete evaluations of project justification can be made, the cost-effectiveness index will be displayed as one measure of project justification.

The remaining columns in the table show an assessment of each project's local financial commitment in terms of proposed non-Federal share, whether the project is an overmatch project, the acceptability of the project's capital financial commitment and the stability and reliability of operating funding.

TABLE A-1: SUMMARY OF FY1993 NEW START RATINGS

Phase and City (Project)	PROJECT JUSTIFICATION		LOCAL FINANCIAL COMMITMENT(h)			
	Cost (a) (million \$)	Total Cost per New Trip Index (\$/new trip)	Non-Federal Share of Project Cost	Overmatch City(c) (Yes/No)	Capital Financing Commitment	Stability & Reliability of Operating Assistance
<u>Final Design</u>						
Atlanta (North)	\$439	\$9(90\$)	25%	No	Acceptable	Acceptable
Dallas (South Oak Cliff)	\$360	\$9(89\$)	56%	Yes	Acceptable	Acceptable
Jacksonville (South ASE Ext.)	\$112	(b)	25%	No	Acceptable	Acceptable
Los Angeles (No. Hollywood)	\$1450	(b) (g)	50%	Yes	Acceptable	Acceptable
Portland (Westside to 185th)	\$756	\$19(90\$) (b)	25%	No	Acceptable	Acceptable
San Francisco (Colma)	\$145	\$6(90\$)	25%	Yes	Acceptable	Acceptable
<u>Preliminary Engineering</u>						
Baltimore (BWI Airport)	\$28	\$13	25%	Yes	Medium	Medium
Baltimore (Hunt Valley)	\$48	\$28	25%	Yes	Medium	Medium
Honolulu	\$2070	\$10(91\$)	70%	Yes	Medium	Low
New York (Queens)	\$645	(f)	50%	Yes	Low-Medium	Low-Medium
Pittsburgh (East Busway Ext.)	\$40	\$5	50%	No	High	Medium
Salt Lake City (South)	\$200	\$7-\$8(87\$)	50%	No	Low	Low
San Jose (Tasman)	\$460	\$21(89\$)	50%	No	Low	Low

Status and City (Project)	Cost (a) (million \$)	PROJECT JUSTIFICATION	LOCAL FINANCIAL COMMITMENT(h)			
		Total Cost per New Trip Index (\$/new trip)	Non-Federal Share of Project Cost	Overmatch City (c) (Yes/No)	Capital Financing Commitment	Stability & Reliability of Operating Assistance
<u>Alternatives Analysis</u>						
Baltimore (Penn Station)	\$12-\$18	\$10-\$18	25%	Yes	Medium	Medium
Boston (Piers)	\$500	NA	20%	No	Low-Medium	Medium
Buffalo (Amherst)	\$400	\$46-\$67 (85\$)	20%	No	Low	Low
Chicago (Connector)	\$750	\$22 (90\$)	67%	Yes	Medium	Medium
Cleveland (Dual Hub)	\$600	NA	50%	No	Low	Medium
Denver (Southwest)	\$200	NA	20%	No	Low	Medium
Houston (Priority Corridor)	\$1560	\$9-\$11 (88\$)	40%	No	Medium	Medium
Los Angeles (East Central)	\$1000 (90\$)	NA (b)	50%	Yes	NA	NA
Los Angeles (West Central)	\$2000	NA	50%	Yes	NA	NA
Los Angeles (Pico/SanVicente)	\$440	NA (b) (g)	50%	Yes	NA	NA
Milwaukee (East-West)	\$332 (91\$)	NA	20%	No	NA	NA
New Jersey (Waterfront)	\$330-\$490 (90\$)	\$3-\$27 (90\$) A (b)	20%	No	Low	Medium
Orange Co, CA (I-405/SR55)	\$312	\$4 (89\$) (e)	25%	No	Medium	High
Pittsburgh (Airport)	\$200	\$4 (e)	50%	No	High	Medium
Portland (Hillsboro)	\$180	(d)	25%	No	Medium	High
St. Louis (St. Clair)	\$300	NA	20%	No	Low	Low
San Diego (Mid Coast)	\$500	NA	25%	Yes	High	Medium
San Francisco (Airport)	\$800-\$1300	\$21-\$50 (\$91)	25%	Yes	Medium	Medium

System Planning

Altoona, PA (Pedestrian Crossing)	NA	NA	NA	No	NA	NA
Atlanta (Buckhead People Mover)	NA	NA	NA	No	NA	NA
Atlanta (Commuter Rail)	NA	NA	NA	No	NA	NA
Boston (North-South Station Rail)	NA	NA	NA	No	NA	NA
Boston (Portland Commuter Rail)	NA	NA	NA	No	NA	NA
Chattanooga (Trolley)	NA	NA	NA	No	NA	NA
Charlotte (Priority Corridor)	NA	NA	NA	No	NA	NA
Cleveland (Highland Hills)	NA	NA	NA	No	NA	NA
Cleveland (Commuter Rail)	NA	NA	NA	No	NA	NA

Status and City (Project)	PROJECT JUSTIFICATION		LOCAL FINANCIAL COMMITMENT(h)			
	Cost (a) (million \$)	Total Cost per New Trip Index (\$/new trip)	Non-Federal Share of Project Cost	Overmatch City (c) (Yes/No)	Capital Financing Commitment	Stability & Reliability of Operating Assistance
<u>System Planning (Cont.)</u>						
Dallas (Railtran)	NA	NA	NA	Yes	NA	NA
Detroit (LRT)	NA	NA	NA	No	NA	NA
Kansas City	\$300	\$50-\$89(e)	25%	No	Low	Low
Long Beach (Metro Link)	NA	NA	NA	Yes	NA	NA
Los Angeles (Multimodal Hwy)	\$30	NA	25%	Yes	NA	NA
Los Angeles (LOSSAN)	NA	NA	NA	Yes	NA	NA
Maryland (MARC Extensions)	NA	NA	NA	No	NA	NA
New Jersey (Allied Junction)	\$420	NA	NA	No	Medium	Medium
New Jersey (Urban Core)	NA	NA	NA	No	NA	NA
New Jersey (Lakewood-Freehold)	NA	NA	NA	No	NA	NA
New Jersey (Hawthorne-Warwick)	NA	NA	NA	No	NA	NA
Newark (Airport)	\$400	NA	NA	No	Medium	NA
New Orleans (Canal St.)	NA	NA	NA	No	NA	NA
New York (Staten Is. Ferry)	NA	NA	NA	NA	NA	NA
Orlando (OSCAR)	\$40	NA	50%	NA	Medium	Medium
Philadelphia (Cross County)	NA	NA	NA	No	Low	Low-Medium
Philadelphia (Northeast)	NA	NA	NA	No	NA	NA
Pittsburgh (IRT Rehabilitation)	NA	NA	NA	No	NA	NA
Sacramento	NA	NA	NA	No	NA	NA
San Jose (Gilroy Commuter Rail)	NA	NA	NA	No	NA	NA
Seattle-Tacoma Commuter Rail	\$200	NA	75%	No	Medium	Medium
Vallejo, CA (No. Bay Ferry)	NA	NA	NA	NA	NA	NA
Washington (Largo)	NA	NA	NA	No	NA	NA
Washington (Dulles)	\$1000	\$25(e)	NA	No	NA	NA

(a) Unless otherwise noted, costs are shown in escalated (year of construction) dollars and are based on most recent cost estimate. 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 estimate may change significantly.

(b) By statute, this project is exempt from the requirements of Section 3(i) of the Federal Transit Act of 1964, as amended, and need not be cost-effective to be eligible for Section 3 funding.

(c) The non-Federal share of the transit agency's overall capital program is 70 percent or greater.

(d) Based on preliminary estimates developed by the Metropolitan Service District, the cost-effectiveness index is likely to fall in the \$15 to \$20 per new trip range.

(e) This represents a preliminary cost-effectiveness index. The estimate of costs and ridership is subject to change as a result of FTA review and further local analyses.

(f) The project is considered to be cost-effective on the basis of a user benefit index of \$5.06 per hour of benefit.

(g) In 1984, the cost-effectiveness index for the 18-mile Metrorail line was computed as \$1.46 per new rider. While the cost of the project has escalated somewhat since 1984, and ridership forecasts have been reduced, FTA still considers the project to be a cost effective investment.

(h) 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.

NEW START PROJECT PROFILES

as of

January, 1992

Office of Grants Management
Federal Transit Administration
U. S. Department of Transportation

**NEW START PROJECT PROFILES
(January 1992)**

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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 1993. The Department's funding recommendations are being provided to the Congress pursuant to Section 3(j) of the Federal Transit Act of 1964, as amended. The funding recommendations are based in part on the decision criteria defined in Section 3(i) of the Federal Transit Act.

Under Section 3(i), 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 is:

- (1) Based on the results of alternatives analysis and preliminary engineering;
- (2) Justified based on a comprehensive review of its mobility improvements, environmental benefits, cost-effectiveness, and operating efficiencies; and
- (3) 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/}

These statutory requirements are first used to identify new start projects that are eligible for Federal discretionary funding. The Section 3(i) criteria also 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) requirements.

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 1993 to fulfill full funding contract commitments. A number of system planning studies, particularly those where congressional interest has been demonstrated, are also covered.

^{1/} Section 3(i) does 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 3(i) 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.

(3) Cost-effectiveness. This section provides information on the project's mobility benefits and presents the project's cost-effectiveness index. The calculation and use of the cost-effectiveness index are 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 rating factors. Other factors which may be important in identifying the most meritorious projects are described in this section. These factors include the project's contribution to improving air quality, support for economical and desirable urban development, and indicators of community support (as demonstrated through local 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 greatly broadened the Section 3(i) new start criteria. The cost-effectiveness requirement that existed in Section 3(i)(2) has now been revised to require a more comprehensive review of project justification that takes into account mobility improvements, environmental benefits, and operating efficiencies. These new provisions were not enacted in time to be fully incorporated into the FY 1993 ratings. The "cost-effectiveness" section of each profile contains, where possible, information on each project's mobility benefits, while the "other factors" section describes air quality benefits. The "cost-effectiveness" section stresses the project's cost-effectiveness, or investment worthiness, as in prior years.

Within FTA's rating system, 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. It is designed to address specific transportation problems in the corridor and to demonstrate the extent to which these problems can be solved without a major investment in new facilities. The TSM alternative is designed within real world limits--street capacity to accommodate bus movements, financial resources to fund operating deficits, and so forth--and is, therefore, a realistic option that represents a true alternative to major new transit facilities. The TSM alternative provides a baseline beyond which it is possible to isolate the added costs and added benefits of a proposed major investment and to compare potential investments in different cities.

For the purpose of the FY 1993 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. In the new trip index, these travel time savings are converted to their monetary equivalent using an average value of time, and are included in the calculations as an offset to costs. 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.

The 1984 policy statement established two tests to guide decisions on which new start proposals should advance from one phase to the next in the project development process. FTA will recommend that projects advance from alternatives analysis into preliminary engineering and qualify for consideration for discretionary funding at the end of preliminary engineering where:

- (1) The locally preferred alternative produces a gain in transit ridership, compared to the TSM alternative. This test is designed to ensure that potential major Federal capital investments provide transportation benefits above and beyond those that can be achieved through lower cost (TSM) improvements.
- (2) The alternative does not have an excessive cost-effectiveness index.

Data used to compute the indices were provided by the transit agencies and/or metropolitan planning organizations currently serving as lead local agency for project planning. Cost, ridership, and travel time savings estimates are produced as a routine part of the alternatives analysis and preliminary engineering phases. As guidance, FTA supplied each city with a manual, Procedures and Technical Methods for Transit Project Planning. As each city develops the input data needed to compute the cost-effectiveness indices, FTA reviews and concurs in the TSM alternative, the methods and assumptions used to estimate costs and benefits, and the reasonableness of the results.

Local Financial Commitment

The local financial commitment to a proposed project, including the stability and reliability of local sources of operating funds, is a factor used to order projects that rate similarly in terms of cost-effectiveness. The assessment of local fiscal effort 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. The financial ratings are supported by a series of independent assessments performed by FTA's financial consultant, Booz-Allen & Hamilton Inc.

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 in detail 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. For projects in final design, two rating categories are used to rate the strength of a local area's capital financing plan: acceptable and unacceptable. For projects in preliminary engineering, alternatives analysis, and system planning, the strength of the capital finance plan is rated high, medium, or low. The criteria used to assign these ratings are further explained in Table B-1 (page B-225).

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 expend to meet the incremental operating costs associated with a new fixed guideway investment and any other new services and facilities. Again, final design projects are rated either acceptable or unacceptable, while less advanced projects are rated high, medium, or low (see Table B-2 starting on page B-227).

PROJECTS UNDER CONSTRUCTION

PROJECT PROFILE

MOS-2 of Metro Rail Los Angeles, California (January 1992)

- Description**
- o The 17-mile, \$3.8-billion Los Angeles Metro Rail Project has been broken into "minimum operable segments" (MOSs) for funding purposes. The second minimum operable segment, or MOS-2, consists of 6.8 miles of heavy rail with eight stations, all in subway. (FTA has already fully funded MOS-1, the 4.4-mile, five-station segment under construction in downtown Los Angeles.) MOS-2 extends west from the western terminus of MOS-1 at MacArthur Park along Wilshire Boulevard to Vermont Avenue where it branches. One branch (the Orange Line) continues west beneath Wilshire to Western Avenue; the other branch (the Red Line) goes north beneath Vermont to Hollywood Boulevard and then goes west beneath Hollywood Boulevard to Vine Street in Hollywood.
 - o The estimated cost of MOS-2 is \$1.45 billion (escalated dollars).
 - o The initial 17-mile Metro Rail System is expected to attract 151,000 daily riders by 2010. A forecast for MOS-2 by itself is not available.
- Status**
- o In April 1990, FTA signed a full funding grant agreement (FFGA) with the Los Angeles County Transportation Commission (LACTC) for final design and construction of MOS-2. The FFGA for MOS-2 committed \$667 million in Section 3 funds, subject to congressional appropriation, of which FTA has obligated \$479 million. The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 earmarked funds for MOS-3 but neglected to explicitly mention MOS-2. Through FY 1992, a total of \$548.1 million has been appropriated for MOS-2, leaving a balance due of \$118.9 million.
 - o Final design of the project is being completed, and some construction is already underway.
- Cost-Effectiveness**
- o The 17-mile Metro Rail system is exempted from the cost-effectiveness requirement in Section 3(i) of the Federal Transit Act. Earlier studies had suggested that the Wilshire (Orange Line) branch would be cost-effective. The cost-effectiveness of the Hollywood (Red Line) branch has not been evaluated.
 - o Los Angeles has the third highest transit ridership of any system in the country. Its freeways are notoriously congested. The Wilshire Avenue (Orange Line) corridor carries the city's busiest bus lines. There are no

MOS-2 of Metro Rail — Los Angeles, California

inexpensive ways to improve bus levels of service in the MOS-2 service areas.

Local Financial Commitment

- o The Federal share for MOS-1 and MOS-2 together is 50 percent. In addition, LACTC and other State and local funding partners are financing numerous major transit investments without any Federal assistance. These projects include: the Blue Line between Los Angeles and Long Beach (\$877 million); the Green Line now under construction from Norwalk to El Segundo (\$886 million); several commuter rail projects for which right-of-way has already been purchased; a planned Blue Line Extension to Pasadena (\$688 million); and a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester (\$215 million).
- o Los Angeles' transit programs benefit from several State and local dedicated revenue resources. The primary local resource is a 0.5-percent county wide sales tax. Thirty-five percent of this tax, about \$130 million annually, is dedicated to the construction of a county wide rail system. An additional 0.5-percent sales tax dedicated to transit-related highway improvements was passed in 1990.
- o Funding for public transit was also enhanced at the State level in 1990 by the passage of three ballot measures. Proposition 111 gradually increased the State's motor fuels tax by a total of \$0.09 over 5 years to provide an estimated \$18.5 billion for transportation projects in a 10-year period. Proposition 116 authorized issuance of \$2 billion in general obligation bonds for rail transportation facilities. Proposition 108 authorized issuance of an additional \$1 billion in general obligation bonds for capital expenditures on urban, commuter, and intercity rail.
- o FTA has rated LACTC's capital and operating financing plan as "acceptable." In the long term, the revenue from State and local resources are adequate to finance all segments of the 17-mile Metro Rail System and the operating deficits of the bus and rail systems. However, in the short term, LACTC is facing a \$133 million shortfall in operating subsidies in the current fiscal year. In addition, new elements of the county wide system currently being planned may require additional resources to construct, operate, and maintain.

MOS-2 of Metro Rail -- Los Angeles, California

Other Factors

- o The Los Angeles bus fleet averages 6.9 years old, and its fleet of light rail vehicles average 1.2 years old. These average fleet ages are indicative of proper reinvestment in the existing transit system.
- o Air Quality. Los Angeles' air quality problems are unique. EPA has classified it as the only "extreme" nonattainment area for ozone in the country, as the only "serious" nonattainment area for carbon monoxide (CO) in the country, and as nonattainment for respirable particulates (PM10). It is unlikely that MOS-2 will have a noticeable effect on pollution levels at the regional scale. However, it is part of a larger commitment to meeting the goals of the Air Quality Management Plan through a Regional Mobility Plan which includes an extensive network of rail lines, electric bus lines and high-occupancy vehicle (HOV) facilities. In addition, MOS-2 should reduce localized CO and PM10 concentrations in the Wilshire corridor and in Hollywood by eliminating buses from the traffic stream.

PROJECT PROFILE

Metromover Legs Miami, Florida (January 1992)

- | | |
|----------------------------------|---|
| Description | <ul style="list-style-type: none">o The Metro-Dade Transit Agency is adding two extensions to its automated guideway system, the Metromover, which circles downtown Miami. The north extension, 1.4 miles in length, will connect downtown to hotels and a shopping mall in the Omni area. The 1.1 mile south extension will connect office developments in the Brickell area with downtown.o The two legs are estimated to cost \$248 million, of which \$186 million (75 percent) is to come from Section 3. |
| Status | <ul style="list-style-type: none">o At the direction of Congress, FTA signed a full funding contract with the MDTA in May 1989. Construction was initiated in 1991.o Congressional earmarks (thru 1992) total \$179 million, of which \$136 million has been obligated. The balance remaining to be appropriated under the FFGA is \$6.7 million. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o The MDTA expects that the Metromover legs will increase transit ridership by 5200 trips per day. Some 72 percent of the new riders will be taking short trips within the downtown. Existing Metrorail riders will save, on average, 2.8 minutes per trip, while existing bus riders would experience a 0.6 minute increase in travel time.o The cost-effectiveness index for the legs is \$15 per new transit rider which is much higher than most other FTA-funded New Starts, especially when viewed on a passenger-mile basis. Most of the new riders will be taking very short trips entirely within the downtown. |
| Local
Financial
Commitment | <ul style="list-style-type: none">o State and local funding provides 25 percent of the project's capital costs. The local share is being provided by the State (\$30 million), a benefit assessment district (\$23 million), and the City of Miami (\$7 million).o The capital finance plan is rated "acceptable" as all capital funding is in place. |

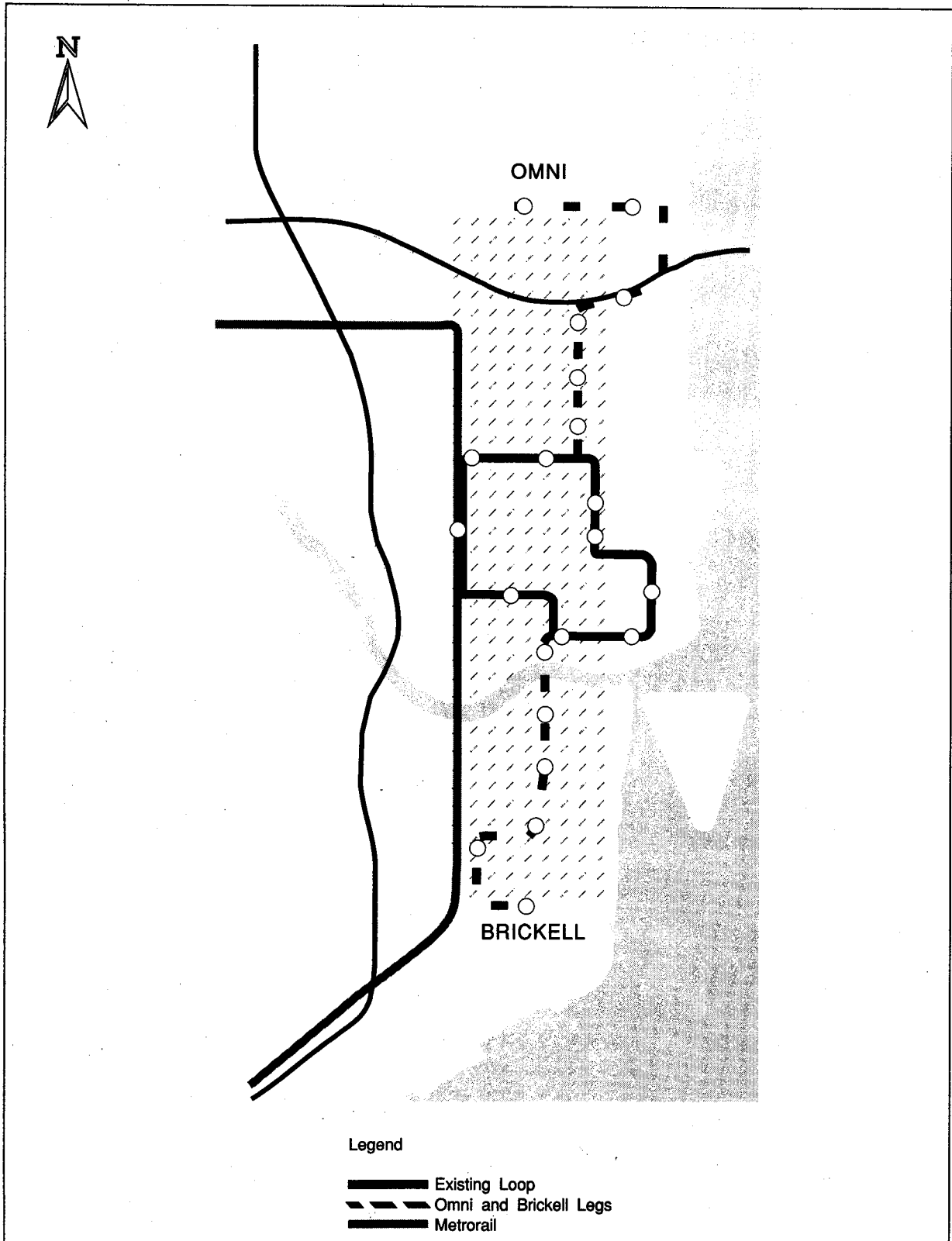
Metromover Legs — Miami, Florida

- o Miami has not established a stable and reliable funding source for transit. In recent years, the area has scaled back its bus system to reduce subsidy requirements. This is one reason why ridership on the Metrorail system is about 25 percent of projections. The Metromover legs will increase transit subsidy requirements by \$1.8 million per year. In the past 2 years, two local referenda to establish a dedicated sales tax for transit have been soundly defeated. Miami's bus system is being adequately maintained and replaced through continuing reinvestment. (In 1989, the average age of the MDTA's bus fleet was 6.2 years.)

Other Factors

- o Air Quality. The Miami-Ft. Lauderdale region is a "moderate" nonattainment area for ozone and an attainment area for carbon monoxide. Construction of the Metromover Legs would have no effect on ozone levels, but could very slightly reduce carbon monoxide concentrations in downtown Miami.

Miami: Metromover Legs



PROJECT PROFILE

"Metro Link" IRT to Airport

St. Louis, Mo.

(January 1992)

- Description
- o The Metro Link project is an 18-mile IRT 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 the St. Louis CBD, and then along 11 miles of existing railroad track and the I-70 right of way to the Lambert International Airport.
 - o The estimated total cost of this project is \$384 million of which \$288 million is Section 3 funds. The local share was provided through in-kind donations of the Eads Bridge, the tunnel, and railroad land.
 - o Opening year (1993) ridership was estimated in the FEIS to be 17,000 per day. Ridership was projected to increase to 37,000 by the year 2000 including 8000 new riders. The latest ridership forecast for the line is 31,000 by the year 2010.
- Status
- o The project is currently under construction. Service on the line is expected to open in July 1993. In accordance with congressional direction, a full funding grant agreement (FFGA) was executed in October 1988 between FTA and the Bi-State Development Agency, the transit operator for the St. Louis Region. The agreement provides for final design and construction of the project and identifies a Federal funding schedule. The Section 3 share under this agreement is \$288 million, virtually all of which has been appropriated.
 - o Bi-State is preparing two extraordinary cost claims which, if approved, would increase the Section 3 share above \$288 million. The first claim, for \$25 to \$30 million, would cover additional costs associated with changes in the project at the airport. The second claim, for possibly \$20 million, would cover increased right-of-way costs and other unanticipated expenses. Federal funding for these costs would require additional appropriations.
- Cost-Effectiveness
- o The project has a cost-effectiveness index of \$9 (1986 dollars). Since calculation of this index, the ridership forecast for the line has fallen 40 percent and costs have increased 13 percent.
 - o Local planners expect total system wide ridership (bus and rail) to increase from 112,000 in 1985 to 160,000 in the

"Metro Link" IRT to Airport — St. Louis, Missouri

year 2000. In view of ridership declines over the past 10 years, FTA considers this forecast to be highly optimistic.

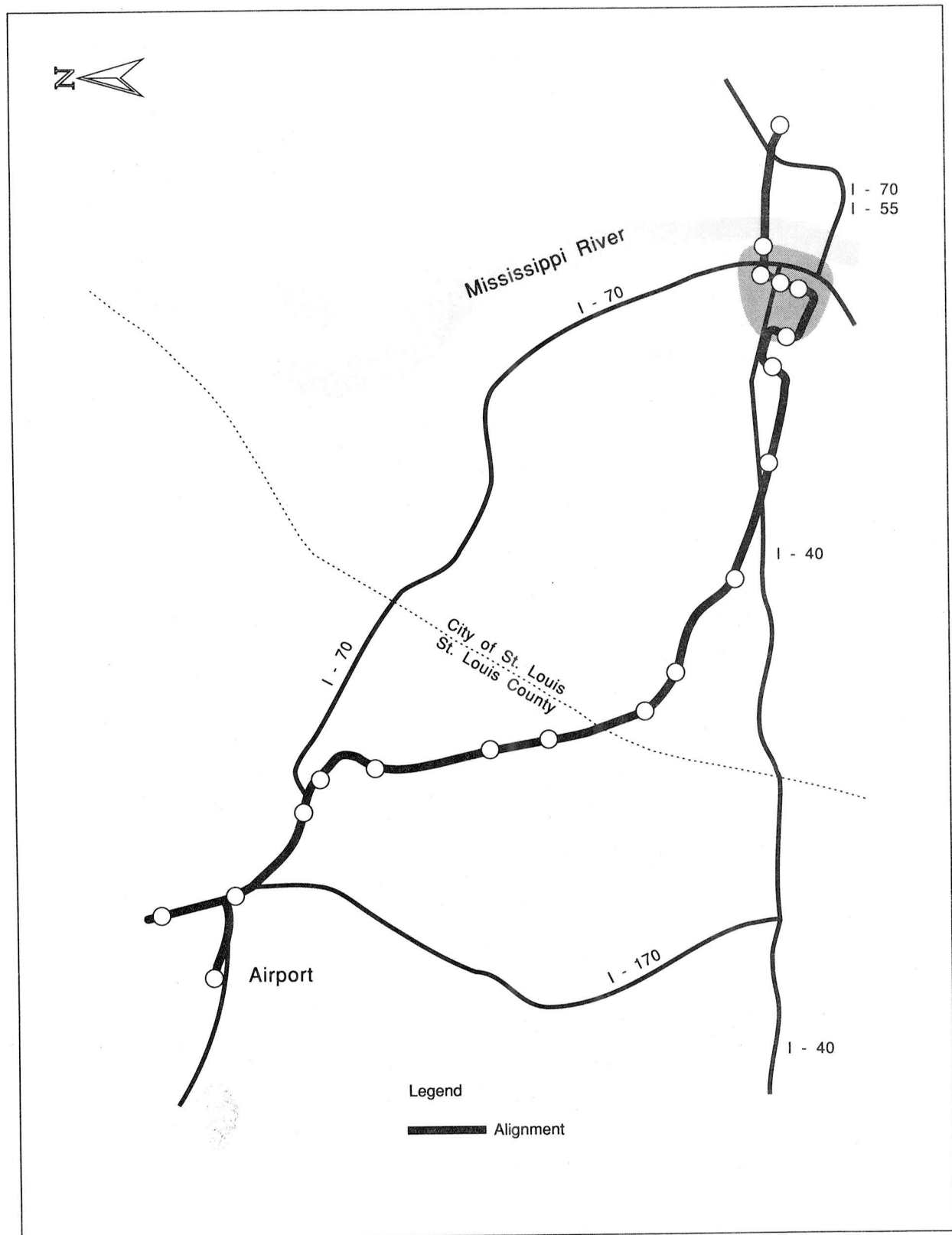
**Local
Financial
Commitment**

- o The project's capital financing plan is rated marginally acceptable. The local matching share (25 percent) consisted of donated assets (railroad rights-of-way and land). There was no cash match. Bi-State does not have sufficient financial reserves to meet unexpected cost overruns.
- o Operations and routine capital purchases are supported by a by a 0.5 percent State Transportation Sales Tax. There is growing concern that, when the IRT system opens in 1992, bus service will need to be scaled back to offset the operating deficit of the rail line. Currently, fare box revenues fund about 26 percent of Bi-State's operating budget.

**Other
Factors**

- o Air Quality. St. Louis is a "moderate" nonattainment area for ozone. The region has until November 1996 to meet EPA's air quality standard. St. Louis is also a "not classified" nonattainment area for carbon monoxide. The IRT project will cause a small (0.3 percent) reduction in total regional vehicle miles traveled and hence result in only a insignificant improvement in regional air quality.

St. Louis: Metro Link to Airport



PROJECTS IN FINAL DESIGN

PROJECT PROFILE

North Line Extension

Atlanta, Georgia
(January 1992)

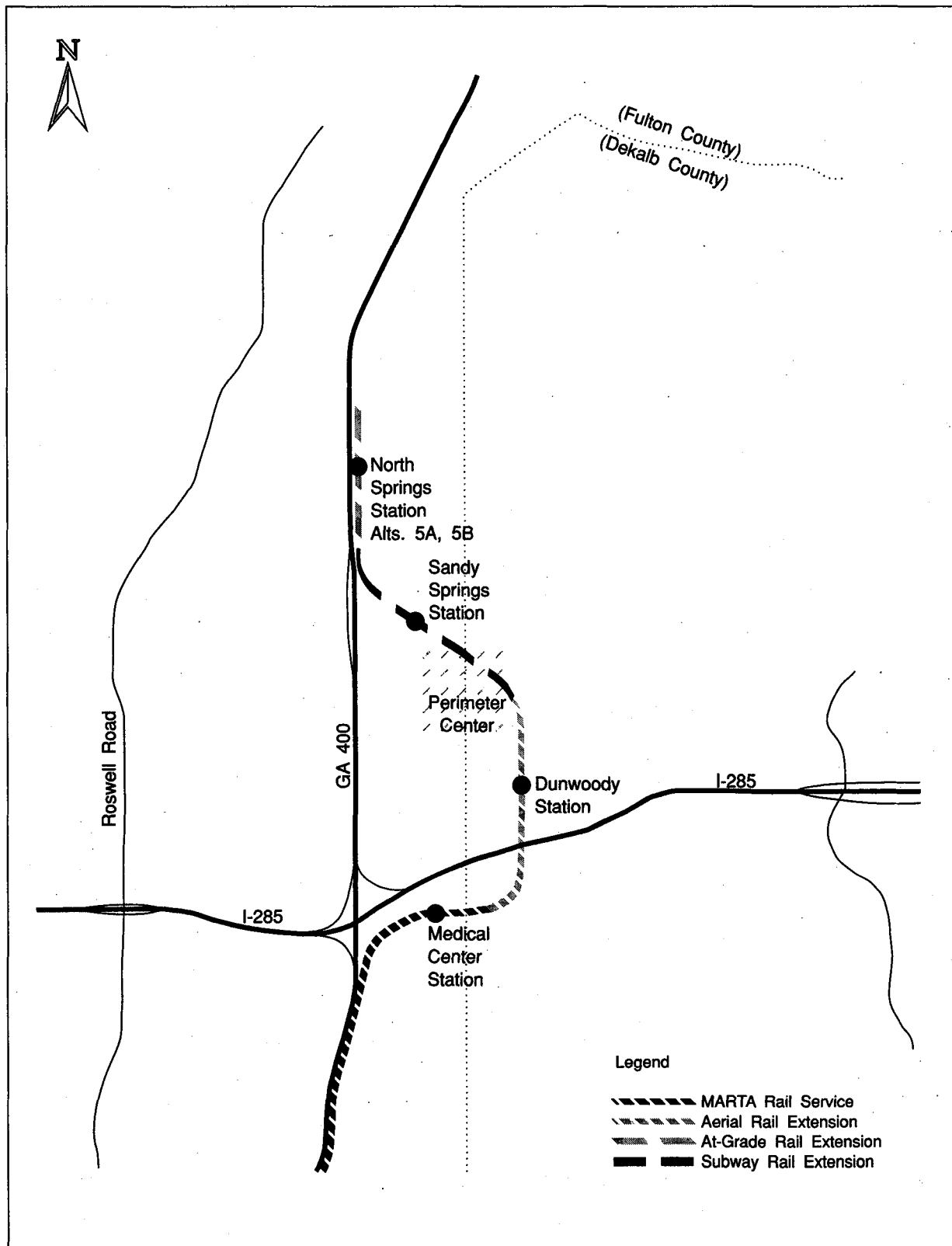
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|----------------------------------|--|
| Description | <ul style="list-style-type: none">o The Metropolitan Atlanta Rapid Transit Authority (MARTA) is designing a 9-mile, five-station North Line addition to its heavy rail rapid transit system. The initial segment of the North Line from just south of the existing Lenox Station to Medical Center (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 seeks FTA funding for a 3.1-mile, three-station extension of the North Line from Medical Center to North Springs.o The 3.1-mile extension is estimated to cost \$440 million (escalated dollars). MARTA seeks a 75 percent Federal share of \$329 million.o 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 | <ul style="list-style-type: none">o 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.o Section 3035(tt) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 requires FTA to negotiate and sign a multiyear grant agreement for the project. Through FY 1992, Congress has made available \$92 million for the extension. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o 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 travelling to expanding job opportunities in the suburbs as well as the traditional radial service from the North Atlanta Corridor to downtown.o The project has a cost-effectiveness index of \$9 per new transit rider (1990 dollars). |
| Local
Financial
Commitment | <ul style="list-style-type: none">o MARTA's financial plan calls for a Federal share of 75 percent for the capital cost of the project. The FTA share of the entire MARTA rail construction program thus far has been 53 percent. |

North Line Extension — Atlanta, Georgia

- o MARTA's capital financing plan is rated as "acceptable." 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 four rail extensions now under construction and one in final design. When these segments, totalling 15 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.
- o The stability and reliability of MARTA's proposed operating assistance plan is rated as "acceptable," but it, too, should be carefully monitored. The proposed 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 1990 systemwide operating ratio was 34 percent, and MARTA projects an increase to 51 percent by 2005. By comparison with historic trends, MARTA's projected increases in ridership and operating ratio are optimistic. Furthermore, the plan assumes a 5 to 7 percent increase in sales tax revenue which has been relatively stable or declining in recent years.
- o MARTA's bus fleet averages 8.0 years old. Its heavy rail vehicles average 6.9 years old. These average ages of the vehicle fleets are indicative of proper reinvestment in the existing transit system.
- o MARTA is building the first leg of the North line, a 5.7-mile, two-station segment costing \$230 million, entirely with non-FTA funds. FTA will require assurances that the first leg is fully funded before committing to the extension.
- o Air Quality. EPA has classified Atlanta as a "serious" nonattainment area for ozone, and as attainment for carbon monoxide and respirable particulates. 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.

Other
Factors

Atlanta: North Line Extension



PROJECT PROFILE

South Oak Cliff Corridor Dallas, Texas (January 1992)

- Description**
- o The Dallas Area Rapid Transit (DART) plans to build a \$375 million, 9.6-mile light rail line with 13 stations from downtown Dallas to Ledbetter Drive in the South Oak Cliff area of Dallas. All of the environmental and alternatives analysis requirements have been completed, allowing negotiations to begin on a full funding grant agreement between DART and Federal Transit Administration (FTA).
 - o The South Oak Cliff line would be part of a 20-mile, \$828 million light rail starter system planned by DART. Other elements of the system include a branch to West Oak Cliff and a North Central line. The 6.4-mile South Oak Cliff line is estimated to cost \$360 million, of which DART is requesting \$160 million from Section 3. DART plans to build the other two lines without Federal funding assistance.
 - o The South Oak Cliff Line to Ledbetter is expected to carry about 20,000 riders daily in 2005. This figure represents an increase of 4,400 transit trips over the number of trips carried by the best bus alternative.
- Status**
- o In September 1991, the final EIS was circulated for the South Oak Cliff line. FTA then signed a record of decision on the project, thereby completing all Federal environmental requirements. Final design is underway and construction is expected to begin shortly. Negotiations on a full funding grant agreement are underway.
 - o The FY 1991 and 1992 DOT appropriations reports earmarked \$40.4 million for the project.
 - o Section 3035(i) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to negotiate and sign a multiyear grant agreement with DART for \$160 million for constructing this project.
- Cost-Effectiveness**
- o The proposed project serves the most transit-dependent area of Dallas.
 - o The cost-effectiveness index for the best portion of the South Oak Cliff project is \$9 per new trip, reflecting the relatively low capital cost of the proposed at-grade rail line and modest benefits.

South Oak Cliff Corridor — Dallas, Texas

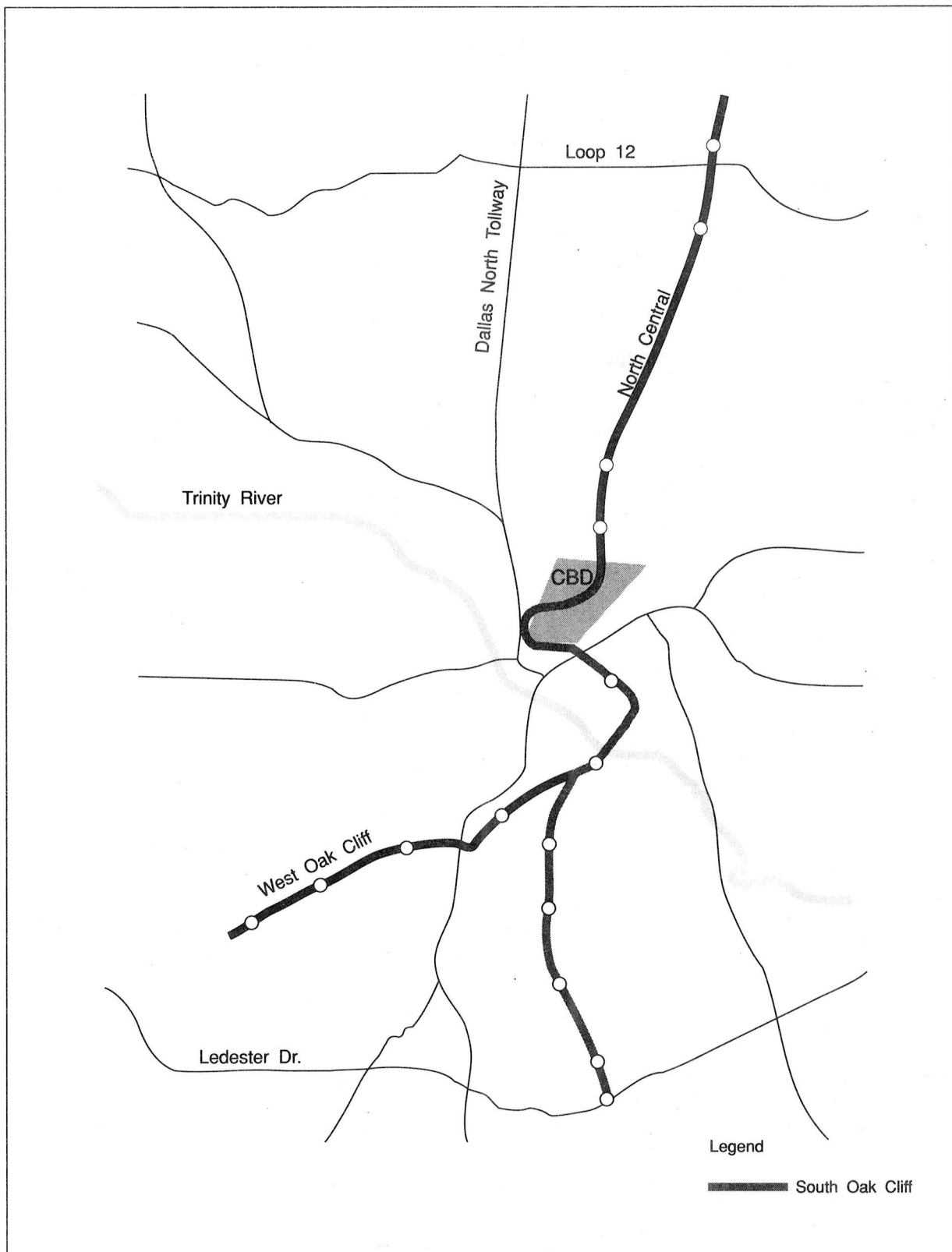
Local Financial Commitment

- o DART is seeking FTA funding for 20 percent of the cost of the 20-mile starter system. This funding would represent 45 percent of the cost of the Federally-assisted portion of the South Oak Cliff line (6.4 miles).
- o With a 1 percent sales tax, DART is in very good financial condition and enjoys sufficient surplus to build the 20-mile system. Therefore, the rating of DART's capital financing plan is "acceptable."
- o The 1 percent sales tax and other dedicated sources provide DART with ample funds to maintain and operate the bus and 20-mile rail systems. Therefore, the stability and reliability of operating revenue are rated "acceptable."

Other Factors

- o Air Quality. Dallas is a "moderate" nonattainment area for ozone. The region has until November 1996 to meet the National Ambient Air Quality Standard for that pollutant. Dallas is in attainment of the carbon monoxide standard. 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.

**Dallas:
South Oak Cliff Corridor**



PROJECT PROFILE

South Extension of the Automated Skyway Express (ASE) Jacksonville, Florida (January 1992)

- Description
- o The project is a 1.2-mile extension of the Automated Skyway Express in downtown Jacksonville. The extension would consist of an elevated, double track guideway running south 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 estimated cost to complete this extension is \$112 million (escalated dollars).
 - o The most current ridership projection for the full 2.5-mile 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. The JTA is using 38,000 as their planning estimate. FTA believes that this estimate is unrealistically high based on actual ridership levels for similar systems in Miami and Detroit.
- Status
- o The Phase 1-A segment or "Starter Line" opened for revenue service in June 1989. The line is averaging about 1,600 riders per day who are primarily park-and-ride patrons that pay a single fee to park in a JTA facility and ride the system. The current ridership is considerably less than the 1990 forecast of 10,000 originally used to justify the system.
 - o In September 1991, at congressional direction, FTA and JTA entered into a full funding grant agreement for a 0.6-mile extension of the starter line. This project would extend the system to the north to Florida Community College. The \$29 million Federal share for this project has already been appropriated.
 - o Pursuant to congressional direction, FTA has transferred \$7 million to the Federal Highway Administration for the widening of the Acosta Bridge. This will accommodate the south extension where it crosses the St. Johns River.
 - o Section 3035(vv) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to enter into a multiyear grant agreement for \$71.2 million to carry out the construction of this extension.
- Cost-Effectiveness
- o The project predates FTA's issuance of its Major Capital Investment Policy. A cost-effectiveness index has not been computed for the project.

Automated Skyway Express (ASE) Extension — Jacksonville, Florida

Local Financial Commitment

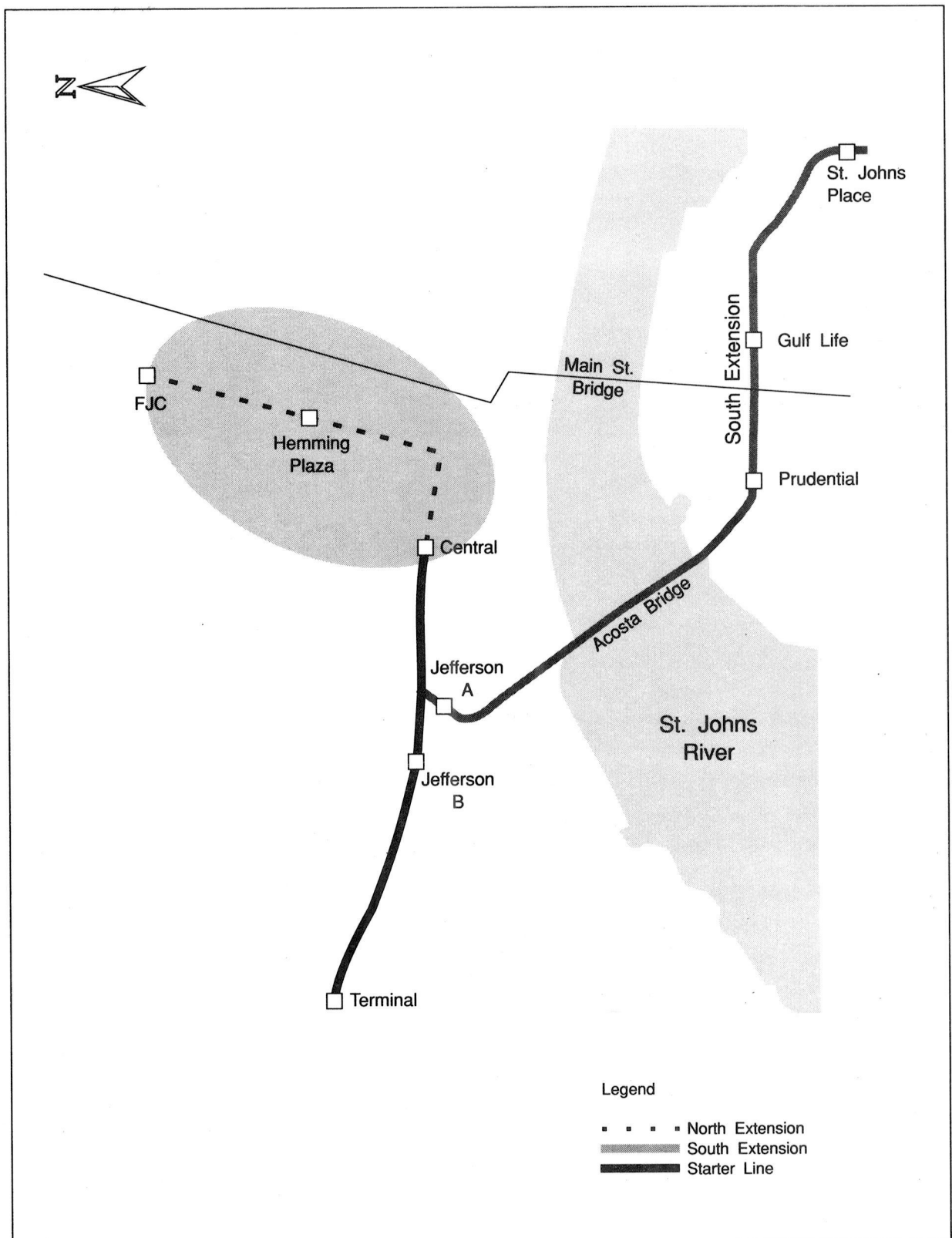
- o In 1983 JTA estimated that 42,000 riders per day would use the 2.5-mile system in 1995. The estimate assumed that significant new development would occur along the alignment. In recent years growth and development in downtown Jacksonville has slowed considerably. In view of this fact, the low ridership 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 considered highly optimistic.

- o JTA is proposing the maximum Federal share resulting in a Section 3 cost of about \$90 million.
- o JTA's has prepared a Capital Financing Plan which FTA found to be acceptable for the north extension. State funding has been provided for the complete project and the City Council has agreed to support the remaining local funds by a resolution. JTA does not have an ongoing dedicated funding source to support its transit capital program or an extensive contingency fund. JTA's 0.5 percent sales tax, which went into effect in January 1989, is primarily dedicated to retiring existing highway toll bonds. JTA has no revenue base or taxing power dedicated to transit capital, but intends to seek legislative authority to use the sales tax for general transportation purposes rather than just highways.
- o FTA understands that JTA is encountering cost overruns on the north extension and that additional State/local funding will be needed to complete this project. This could impact the availability of State/local funds for the south extension. In addition, similar cost overruns are possible on the south extension.
- o JTA expects to cover operating expenses from the system's operating revenue stream. The existing 0.7 mile segment, with only half the planned parking currently available, achieved a first year operating revenue recovery ratio of 55.3 percent. The JTA's Financial Plan conservatively assumes only a 35 percent recovery ratio in 1991. JTA expects this 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 very unrealistic.

Other Factors

- o Air Quality. 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.

Jacksonville: Automated Skyway Express



PROJECT PROFILE

North Hollywood Segment of Metro Rail Los Angeles, California (January 1992)

- Description**
- o The 17-mile, \$3.8-billion Los Angeles Metro Rail Project has been broken into "minimum operable segments" (MOSs) for funding purposes. Two segments known as MOS-1 and MOS-2 are under construction under full funding grant agreements (FFGAs) between FTA and the Los Angeles County Transportation Commission (LACTC).
 - o The North Hollywood segment is also part of the 17-mile Metro Rail Project. It is approximately 6 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 segment includes one station in Hollywood and two in North Hollywood.
 - o The estimated cost of the North Hollywood segment is \$1.45 billion (escalated dollars).
 - o The initial 17-mile Metro Rail System, which includes the North Hollywood segment, is expected to attract 151,000 daily riders in 2010. A forecast for the North Hollywood segment by itself is not available.
- Status**
- o Final design of the North Hollywood segment is underway, and major construction is scheduled to begin in 1994. Construction of a portion of the segment in Hollywood may be started sooner, in conjunction with MOS-2 construction, so that disruption of the community is minimized.
 - o Section 3034 of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to negotiate and sign an amendment to the MOS-2 full funding grant agreement with LACTC for \$695 million to provide construction funds for the North Hollywood segment and other Metro Rail segments.
- Cost-Effectiveness**
- o The North Hollywood segment is part of a program of interrelated projects which also includes the Pico-San Vicente segment and a portion of the East Side Extension. 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.
 - o ISTEA and the STURA Act of 1987 exempt the 17-mile Metro Rail system, which includes the North Hollywood segment, from the cost-effectiveness requirement.

North Hollywood Segment of Metro Rail — Los Angeles, California

Local Financial Commitment

- o Los Angeles has the third highest transit ridership in the country, and its freeways are notoriously congested. There are no inexpensive ways to improve bus levels of service in this corridor.
- o Federal funding sources account for 50 percent of the \$2.7 billion cost of MOS-1 and MOS-2. The Federal share for the North Hollywood segment has not been established but is expected to be in the range of 50 to 60 percent.
- o In addition to their 50 percent share of Metro Rail, LACTC and the other State and local funding partners are financing numerous major transit investments without any Federal assistance. These projects include: the recently completed Blue Line between Los Angeles and Long Beach (\$877 million); the Green Line now under construction from Norwalk to El Segundo (\$886 million); several commuter rail projects for which right-of-way has already been purchased; a planned Blue Line Extension to Pasadena (\$688 million); and a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester (\$215 million).
- o Los Angeles' transit programs benefit from several State and local dedicated revenue resources. The primary local resource is a 0.5 percent county-wide sales tax adopted in 1980. Thirty-five percent of this tax, about \$130 million annually, is dedicated to the construction of a county wide rail system. An additional 0.5-percent sales tax dedicated to transit-related highway improvements was passed in 1990.
- o Funding for public transit was also enhanced at the State level in 1990 by the passage of three ballot measures. Proposition 111 gradually increased the State's motor fuels tax by a total of \$0.09 over 5 years to provide an estimated \$18.5 billion for transportation projects in a 10-year period. Proposition 116 authorized issuance of \$2 billion in general obligation bonds for rail transportation facilities. Proposition 108 authorized issuance of an additional \$1 billion in general obligation bonds for capital expenditures on urban, commuter, and intercity rail.
- o FTA has rated LACTC's capital and operating financing plan as "acceptable." In the long term, the revenue from State and local resources is adequate to finance all segments of the 17-mile Metro Rail System and the operating deficits of

North Hollywood Segment of Metro Rail - Los Angeles, California

the bus and rail systems. However, in the short term, LACTC is facing a \$133 million shortfall in operating subsidies in the current fiscal year. In addition, new elements of the county wide system currently being planned may require additional resources to construct, operate, and maintain.

Other Factors

- o The Los Angeles bus fleet averages 6.9 years old, and its fleet of light rail vehicles averages 1.2 years old. These average fleet ages are indicative of proper reinvestment in the existing transit system.
- o Air Quality. Los Angeles' air quality problems are unique. EPA has classified it as the only "extreme" nonattainment area for ozone in the country, as the only "serious" nonattainment area for carbon monoxide (CO) in the country, and as nonattainment for respirable particulates (PM10). It is unlikely that the North Hollywood segment will have a noticeable effect on pollution levels at the regional scale. However, it is part of a larger commitment to meeting the goals of the Air Quality Management Plan through a Regional Mobility Plan which includes an extensive network of rail lines, electric bus lines and high-occupancy vehicle (HOV) facilities. In addition, the North Hollywood segment should reduce localized CO and PM10 concentrations between Hollywood and North Hollywood by eliminating buses from the traffic stream.

PROJECT PROFILE

Westside Light Rail to 185th

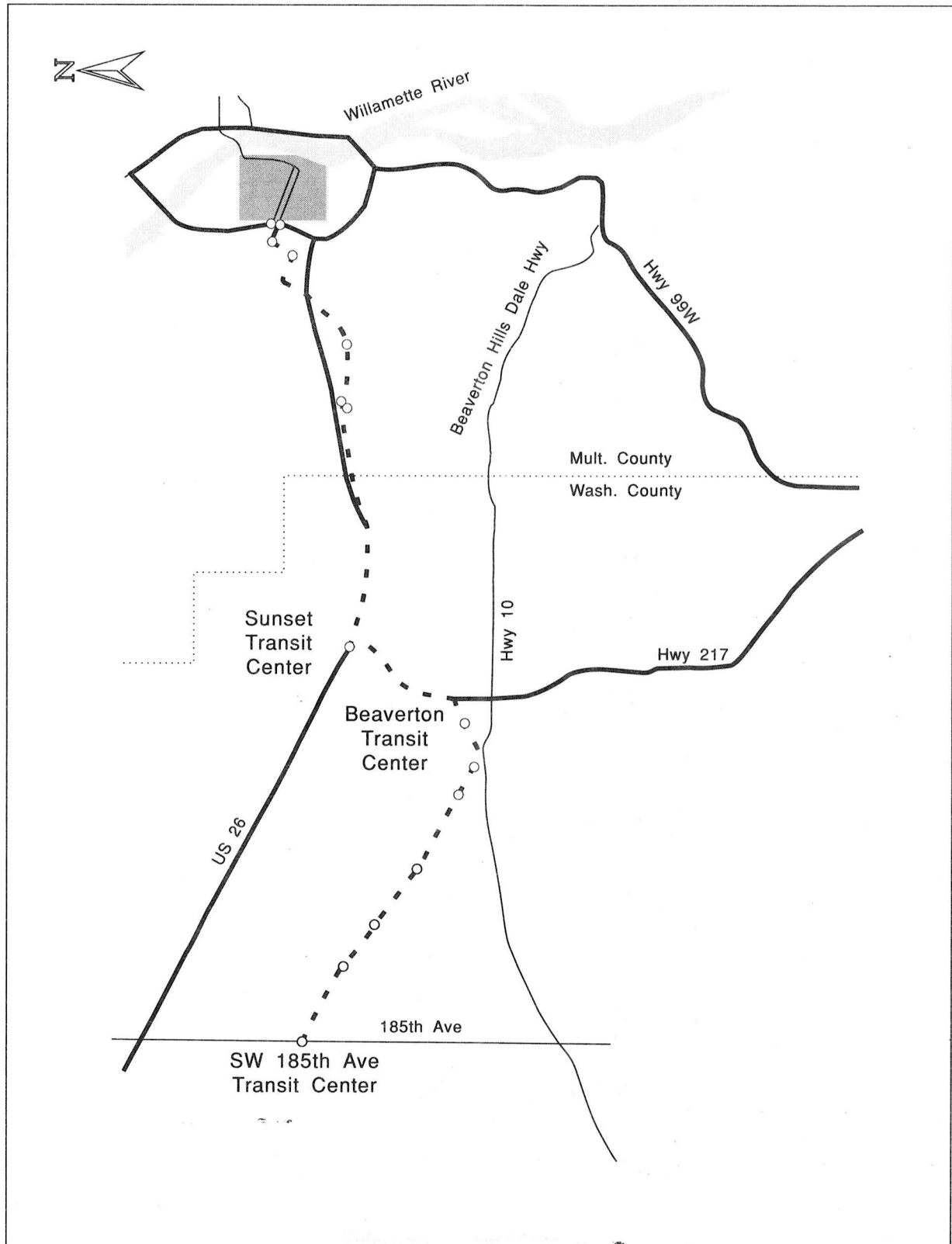
Portland, Oregon
(January 1992)

- Description**
- o The Tri-County Metropolitan Transportation District (Tri-Met) is proposing a 11.5-mile light rail line from downtown Portland, through the West Hills, to Beaverton and suburban Washington County. In downtown, the line would connect with the Banfield LRT line ("MAX") that operates between Portland and Gresham. Several alignment alternatives were considered as part of preliminary engineering, leading to the selection of the "long tunnel" option through the West Hills. Two "minimum operable segment" alternatives (5.7 and 9.3 miles long) and an all-bus alternative were also considered.
 - o Construction of the 11.5-mile LRT facility is estimated to cost \$756 million (escalated dollars).
 - o Portland's Metropolitan Service District estimates that a Westside LRT line would carry 25,200 passengers on an average weekday in 2005.
- Status**
- o The project is entering the final design phase of project development. FTA approved the final environmental impact statement in August 1991, signed the record of decision on November 7, and issued a Letter of No Prejudice for final engineering and design on November 20.
 - o In 1991, Congress earmarked \$1 million for the Westside LRT and, on September 30, 1991, FTA issued a letter of intent covering the \$1 million in earmarked funds.
 - o Section 3035(b) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to enter a multiyear grant agreement with Tri-Met in the amount of \$515 million. The agreement is to cover the construction of the Westside project as far as 185th Avenue, including system related costs.
- Cost-Effectiveness**
- o Tri-Met's ridership analyses indicate that, compared with a fiscally constrained No Build alternative, both an improved bus system and a LRT line would reduce transit travel time between downtown and the Westside. For much of the corridor, LRT would reduce transit travel time more than bus improvements, resulting in 4600 additional transit trips per weekday. There would be no real difference in traffic congestion between LRT and a "best bus" alternative.

Westside LRT to 185th — Portland, Oregon

- o The cost-effectiveness indices for the locally preferred LRT alignment alternative are \$19 per new rider. The high index is a reflection of the project's high cost compared with its transportation benefits. The project is grandfathered from the requirements of Section 3(i) and need not be cost-effective to be eligible for funding.
- Local
Financial
Commitment
- o Tri-Met is seeking 75 percent of the project's capital cost from Section 3. Three sources have been identified for the 25 percent local share: Tri-Met bonds backed by local property taxes, contributions by affected local jurisdictions, and State bonds backed by the lottery. In November 1990, Portland voters authorized Tri-Met to issue \$125 million in bonds, \$80 million of which is available for this project. Local governments have entered into a regional compact and intergovernmental agreements which establish a framework and schedule 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.
 - o The stability and reliability of Tri-Met's operating revenues are also rated "high." 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 an economic downturn and other uncertainties. To Tri-Met's credit, the agency's bus replacement program has reduced the average age of the bus fleet from 11.5 years in 1989 to 8.3 years today.
- Other
Factors
- o Land Use. The Portland area has undertaken a number of initiatives to link transit with urban development. One noteworthy example is a cap on the number of parking spaces to be provided in downtown Portland. The effect of the cap is to increase the cost of commuting by private auto, thus promoting transit ridership. A goal of local land use plans is to focus development near transit stations. This should eventually lead to somewhat higher transit ridership and farebox revenues. Tri-Met's ridership forecasts and cost-effectiveness indices take these parking policies and higher station area densities into account.
 - o Air Quality. 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 alternatives would reduce regional emissions by 1 percent. Carbon monoxide concentrations would be reduced at some receptors and increase at others.

**Portland:
Westside Light Rail to 185th**



PROJECT PROFILE

Colma Station San Francisco, California (January 1992)

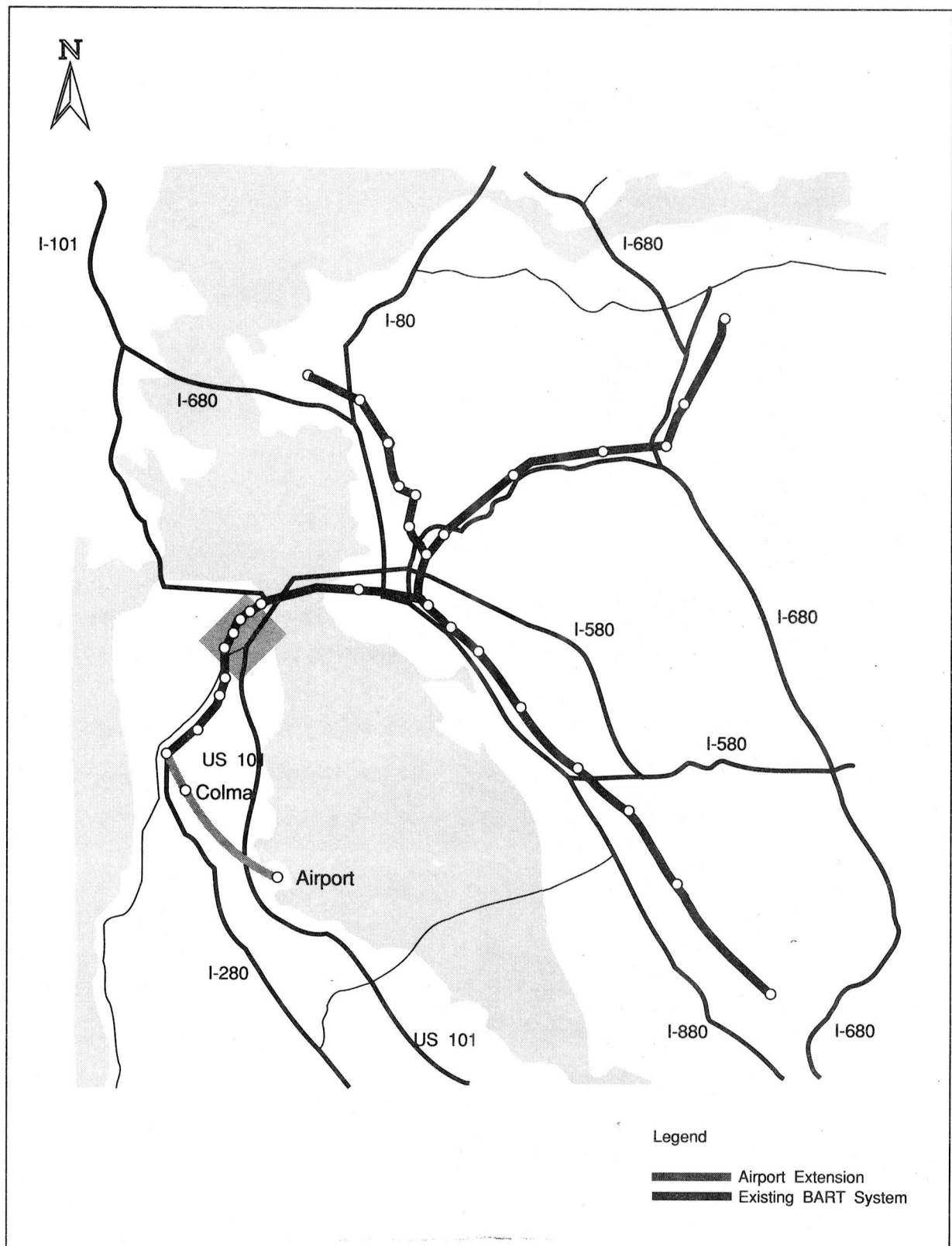
- Description**
- o San Mateo County is sponsoring the construction of a new Bay Area Rapid Transit (BART) station and parking structure with 1400 spaces about 1.5 miles from the Daly City station. The Colma station would be the first BART station in San Mateo County and would relieve the parking shortfall and congestion at the Daly City station.
 - o The project is estimated to cost \$145 million in escalated dollars.
- Status**
- o The final EIS was completed in December 1990. The project is now in the final design phase. FTA intends to negotiate a full funding grant agreement for the project.
 - o Congress has already earmarked sufficient new start funds to the San Francisco region to construct this project. However, per congressional direction, the Metropolitan Transportation Commission may allocate a portion of the earmarked funds to the Tasman project in San Jose.
 - o Section 3032(c)(1)(A) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to approve construction for BART Phase 1a to Colma not later than 90 days after the ISTEA was enacted. Section 3032(g)(1)(B) directs FTA to negotiate and enter into full funding grant agreements, consistent with Metropolitan Transportation Commission Resolution No. 1876, with BART for Phase 1a to Colma. The agreement is to be executed upon completion by BART of 85 percent of final design of the project.
- Cost-Effectiveness**
- o The Colma project is designed to capture additional auto trips coming north to the San Francisco CBD and to relieve parking congestion at the Daly City station which is currently the end of the BART line.
 - o The cost-effectiveness index for the Colma project is \$6 per new transit trip, indicative of a cost-effective project.
- Local Financial Commitment**
- o A regional rail financing agreement has tied this project to other fixed guideway projects in San Francisco, Alameda, and Contra Costa Counties. The agreement calls for 100 percent local funding of East Bay BART projects and 75 percent FTA funding of the Colma project, resulting in a 28 percent Federal funding share of the entire region's extension program.

Colma Station — San Francisco, California

- o The local funding for the Colma project has been assured by a regional rail capital program agreement and voter approval of all local tax increases needed to implement the financing plan. The plan calls for San Mateo County to pay \$200 million to East Bay Counties to buy into BART and partially fund BART extensions in those counties in exchange for San Mateo County's fixed guideway projects getting local priority in the competition for Federal new starts funding. Half of the \$200 million payment to BART will be made when the Colma station is under construction and the other half in installments tied to the Airport Extension construction.
- o The capital financing commitment is "acceptable" since local funding is in place to easily generate enough capital to cover the local share of construction cost of this modest project and to handle cost overruns.
- o San Mateo County has a 1 percent dedicated sales tax for transportation improvements and BART has 0.75 of 0.5 percent dedicated sales tax in the three BART counties which generate adequate revenues to operate their systems (including the modest expansion associated with the Colma station project). The stability and reliability of operating assistance for this project alone are therefore "acceptable."
- o Air Quality. The San Francisco Bay Area is a "moderate" nonattainment area for ozone. The region has until November 1996 to meet the National Ambient Air Quality Standard for that pollutant. The Bay Area is also classified as a "moderate ≤ 12.7 " nonattainment area for carbon monoxide. The Colma project would remove a small number of cars from the road, but not enough to have more than a minimal impact on regional air quality.

Other Factors

San Francisco: Colma and Airport Extensions



PROJECTS IN PRELIMINARY ENGINEERING

PROJECT PROFILE

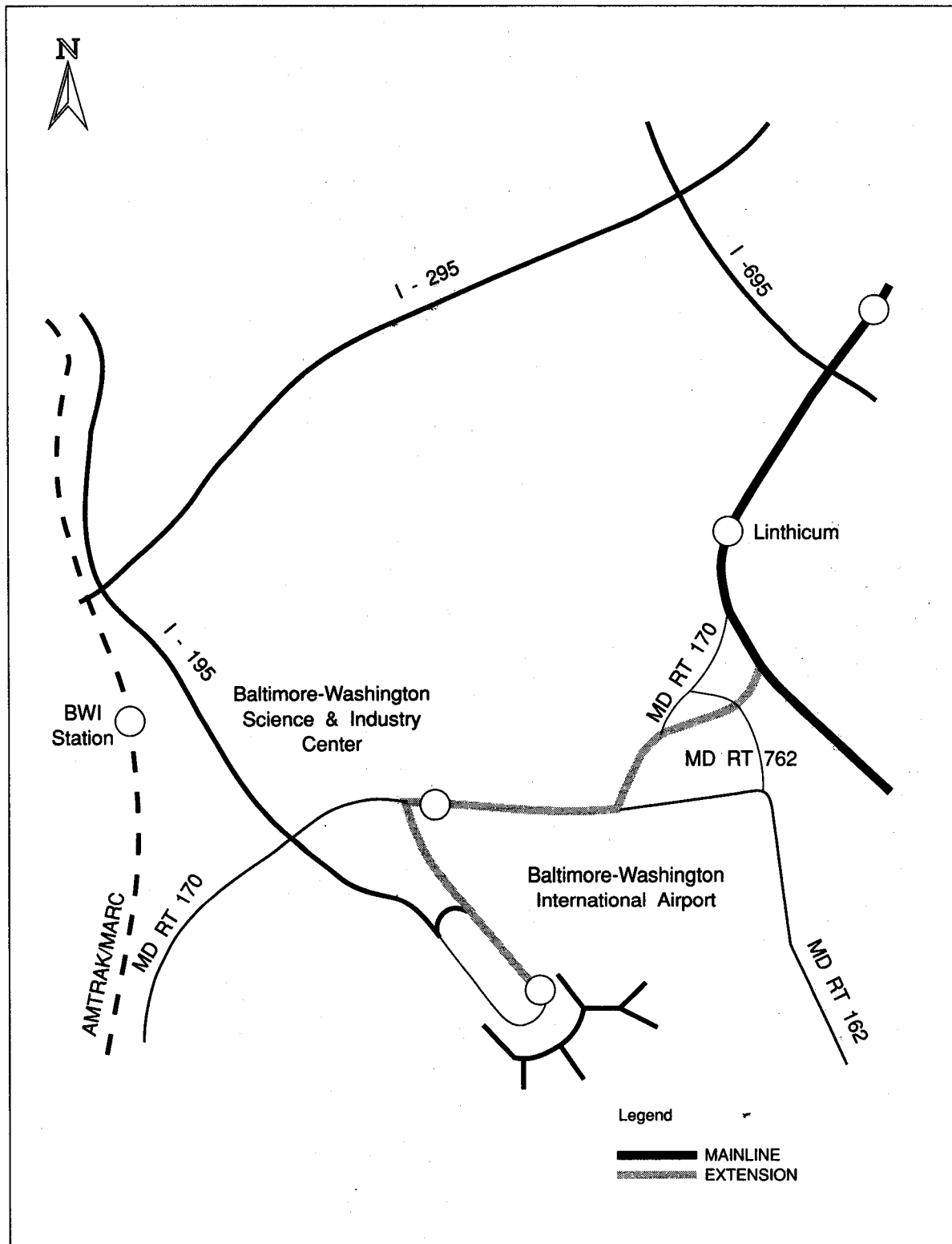
BWI Airport Extension Baltimore, Maryland (January 1992)

- Description**
- o The Mass Transit Administration (MTA) of Maryland, using money from the State Transportation Trust Fund and local funds, is constructing a 22.5-mile light rail transit (LRT) line from Timonium in the north through downtown Baltimore to Glen Burnie near Baltimore-Washington International (BWI) Airport in the south. MTA is seeking Federal assistance for three associated projects, including this 2-mile, two-station branch off the LRT main line directly into BWI Airport.
 - o The BWI Airport extension is estimated to cost \$28 million. MTA seeks a 75 percent Federal share, or \$21 million (escalated dollars).
 - o The BWI branch is expected to carry about 2,800 daily trips including about 2,300 new transit riders per day in 2005.
- Status**
- o The alternatives analysis and draft EIS for the branch to BWI Airport was published in May 1991. In January 1992, FTA approved the initiation of preliminary engineering and preparation of a final EIS on the locally preferred alternative.
 - o Section 3035(n) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to enter into a full funding grant agreement with MTA for \$60 million to carry out construction of the three projects associated with the Central Light Rail system. Through FY 1992, Congress has made available \$20 million for the three LRT extensions, of which \$2.0 million has been obligated for the alternatives analysis and preliminary engineering.
- Cost-Effectiveness**
- o The BWI Airport branch is part of a program of interrelated projects which also includes LRT branches to Hunt Valley and Pennsylvania Station in Baltimore, and Metrorail and MARC extensions 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.
 - o The BWI Airport branch has a cost-effectiveness index of \$13 per new rider.

BWI Airport Extension — Baltimore, Maryland

- o The project is consistent with the National Transportation Policy objective of improving intermodal connections.
- Local
Financial
Commitment
- o The State has pledged \$300 million from its Transportation Trust Fund and three local counties have committed \$15 million each to build the 22.5-mile main line. The proposed Federal cost of \$65 million for the three associated projects is only 15 percent of the \$450 million cost of the entire Central Light Rail system.
 - o The capital financial plan is rated as "medium" for this stage of the project development process. The local share (\$22 million) for the three associated projects will be provided from the State Transportation Trust Fund. The projects are programmed in Maryland DOT's six-year Consolidated Transportation Program which totals \$4.7 billion. However, the State is expecting a serious shortfall in the next 12 to 18 months due to declining revenues.
 - o The stability and reliability of MTA's operating assistance are rated as "medium." MTA has a history of adequate funding of transit operations with contributions from the State Transportation Trust Fund. However, that Trust Fund is under financial pressure and cannot support construction and operation of all the transportation projects in the program. The addition of 27 route miles of LRT service will place additional operating cost burdens on the Fund. The State is considering additional revenue sources to bolster the Fund. By State law, farebox revenues must cover 50 percent of the transit system's operating costs.
 - o MTA's bus fleet averages 6.4 years old. Its heavy rail vehicles average 5.4 years old. The LRT vehicles have not yet been accepted from the manufacturer. These average ages of the vehicle fleets are indicative of proper re-investment in the existing transit system.
- Other
Factors
- o Air Quality. EPA has classified Baltimore as a "serious" nonattainment area for ozone, as a "moderate" nonattainment area for carbon monoxide (CO), and as an attainment area for respirable particulates. The three LRT extensions are not expected to affect regional VMT or emissions of ozone precursors from transportation sources substantially. However, the entire Central Light Rail system is estimated to carry 33,000 daily trips by the year 2010. The resulting elimination of buses from downtown streets during peak periods may result in measurable reductions in CO emissions in downtown.

BWI Light Rail Extension



PROJECT PROFILE

Hunt Valley Extension

Baltimore, Maryland

(January 1992)

- Description
- o The Mass Transit Administration (MTA) of Maryland, using money from the State Transportation Trust Fund and local funds, is constructing a 22.5-mile light rail transit (LRT) line from Timonium in the north through downtown Baltimore to Glen Burnie near Baltimore-Washington International (BWI) Airport in the south. MTA is seeking Federal assistance for three associated projects, including this 4-mile, 5-station extension from Timonium north to Hunt Valley.
 - o The Hunt Valley extension is estimated to cost \$45 million. MTA seeks a 75 percent Federal share, or \$34 million (escalated dollars).
 - o The Hunt Valley extension is estimated to carry 1,900 daily trips including about 700 new transit riders per day in 2005. MTA is reevaluating its ridership forecast because certain major new attractions, such as Camden Yard Stadium, were omitted and because a new land use forecast by the Baltimore Regional Council of Governments for Hunt Valley makes the current estimates too conservative.
- Status
- o In September 1991, FTA approved the initiation of preliminary engineering and preparation of a final EIS on the locally preferred alternative for the Hunt Valley extension.
 - o Section 3035(nn) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to enter into a full funding grant agreement with MTA for \$60 million to carry out construction of the three projects associated with the Central Light Rail system. Through FY 1992, Congress has made available \$20 million for the three LRT extensions, of which \$2.0 million has been obligated for the alternatives analyses and preliminary engineering.
- Cost-Effectiveness
- o The Hunt Valley extension is part of a program of interrelated projects which includes LRT branches to BWI Airport and Pennsylvania Station in Baltimore, and Metrorail and MARC extensions 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.
 - o The Hunt Valley extension has a cost-effectiveness index of \$28 per new rider. The MTA is updating its ridership

Hunt Valley Extension — Baltimore, Maryland

estimate for Hunt Valley and expects the cost-effectiveness index to improve as a result. According to the DEIS, the extension will attract only 700 more daily riders than the transportation system management (TSM) alternative at an additional cost of \$44 million. FTA gave approval to proceed with preliminary engineering in recognition of the local financial commitment to the Central Light Rail System and congressional earmarks.

Local Financial Commitment

- o The State has pledged \$300 million from its Transportation Trust Fund and three local counties have committed \$15 million each to build the 22.5-mile main line. The proposed Federal cost of \$65 million for the three associated projects is only 15 percent of the \$450 million cost of the entire Central Light Rail system.
- o The capital financial plan is rated as "medium" for this stage of the project development process. The local share (\$22 million) for the three associated projects will be provided from the State Transportation Trust Fund. The projects are programmed in Maryland DOT's six-year Consolidated Transportation Program. However, the State is expecting a serious shortfall in the next 12 to 18 months due to declining revenues.
- o The stability and reliability of MTA's operating assistance are rated as "medium." MTA has a history of adequate funding of transit operations with contributions from the State Transportation Trust Fund. However, that Trust Fund is under financial pressure and cannot support all of the transportation projects in the program. The addition of 27 route miles of LRT service will place additional operating cost burdens on the Fund. The State is considering additional revenue sources to bolster the Fund. By State law, farebox revenues must cover 50 percent of the transit system's operating costs.
- o MTA's bus fleet averages 6.4 years old. Its heavy rail vehicles average 5.4 years old. These averages indicative of proper reinvestment in the existing transit system.

Other Factors

- o Air Quality. EPA has classified Baltimore as a "serious" nonattainment area for ozone, as a "moderate" nonattainment area for carbon monoxide (CO), and as an attainment area for respirable particulates. The three LRT extensions are not expected to affect regional VMT or emissions of ozone precursors from transportation sources substantially. However, the entire Central Light Rail system is estimated to carry 33,000 daily trips by the year 2010. The resulting elimination of buses from downtown streets during peak periods may result in measurable reductions in CO levels in downtown.

PROJECT PROFILE

Rapid Transit Project Honolulu, Hawaii (January 1992)

- Description**
- o The city and county of Honolulu are proposing a 16.0-mile fixed guideway system stretching from Waipahu on the west, through downtown, to the University of Hawaii on the east. The system would be on elevated structure and would utilize driverless trains. The project is currently estimated to cost \$2.07 billion (year of construction dollars) and to carry 140,000 riders per day in 2005.
- Status**
- o Alternatives analysis was completed in 1990 with circulation of a draft environmental impact statement, selection of a preferred alternative, and adoption of a financing plan.
 - o FTA approved the initiation of preliminary engineering in October 1990. In November 1991, the city amended the downtown alignment and deleted the Waikiki branch due to cost and community impact concerns. A supplemental draft EIS is being prepared. The city expects to complete the PE phase in the fall of 1992.
 - o The city has selected a turnkey contractor to perform system design, construction, and operation.
 - o Section 3035(w) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to sign a multiyear grant agreement with Honolulu for \$618 million. The agreement will cover construction of this project. Congress earmarked \$36.4 million for the project in the FY-1991 and 1992 Conference Reports.
- Cost-Effectiveness**
- o Given Honolulu's topography, its development patterns, and the large transit patronage already present in the corridor, a fixed guideway system in the corridor would carry a relatively large number of riders. A transit guideway would have substantial transportation benefits in terms of generating new transit riders and travel time savings for existing riders. However, the project is one of the most costly in the new start pipeline.
 - o The project has a cost-effectiveness index of \$10 per new trip (1991 dollars). This index reflects several changes that have occurred since the end of alternatives analysis: the deletion of the downtown tunnel and Waikiki branch, a higher cost estimate, and an enhanced ridership forecasting procedure.

Rapid Transit Project — Honolulu, Hawaii

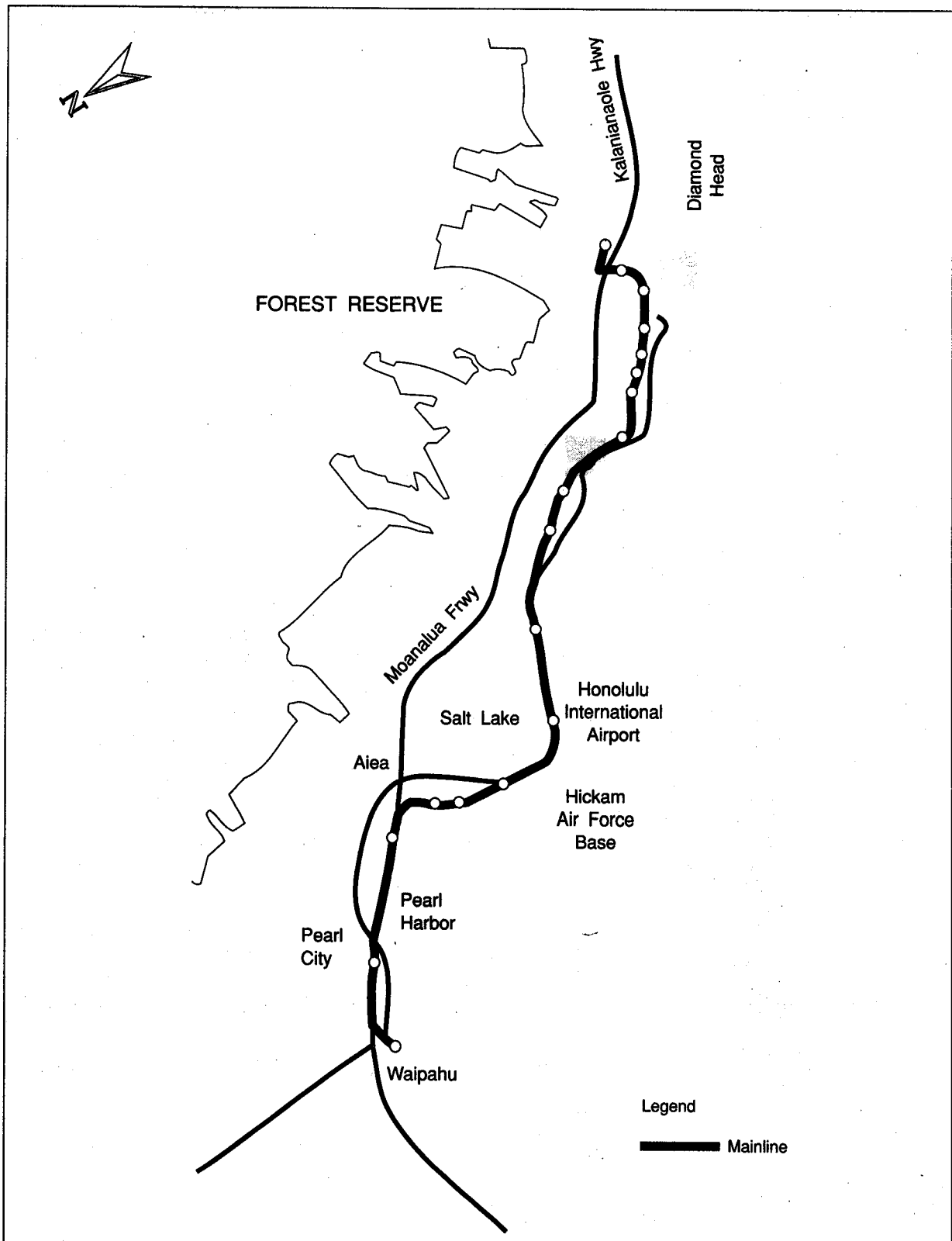
Local Financial Commitment

- o Local and State officials expect to provide 70 percent of the 16.0-mile project's \$2.07 billion capital cost from non-Federal sources. The city has entered into a development agreement with the State under which the city will impose a 0.5 percent general excise and use tax for 10 years beginning in 1993. The City Council must still vote to impose the tax.
- o Honolulu's capital finance plan has been given a "medium" rating. The city's transit system is currently in reasonably sound financial condition. The capital finance plan is considered to be realistic, and is based on reasonably conservative assumptions, but offers little margin of safety.
- o 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 dependable source of operating assistance. The bus system is being adequately maintained and replaced through continuing reinvestment. (In 1989, the average age of Honolulu's bus fleet was 8.2 years.)
- o Implementation of rapid transit and related bus system improvements would lead to a \$37 million (1991 dollars) or 57 percent increase in the transit system's annual operating deficit. This added burden may be difficult to absorb without a new source of revenue. The city has the authority, as a general purpose local government, to raise these additional revenues by a variety of means. Three sources have been proposed but not adopted: parking reduction fees, tax increment financing, and joint development. 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 on a funding source. Pending local decisions on a how to fund the operating deficit, a "low" rating has been assigned.

Other Factors

- o Air Quality. Honolulu has met the National Ambient Air Quality Standards during the last 3 years. According to the air quality analysis in the draft EIS, implementation of a fixed guideway transit project would reduce regional pollutant emissions by only 1 to 2 percent.

Honolulu: Rapid Transit Project



PROJECT PROFILE

Queens Local/Express Connection

New York, New York

(January 1992)

- | | |
|----------------------------|---|
| Description | <ul style="list-style-type: none">o 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.o Construction costs would include about one-third mile of new tunnel, a significant amount of track, signal work, and real estate acquisition at a cost of \$645 million (escalated dollars). |
| Status | <ul style="list-style-type: none">o The New York City Transit Authority (NYCTA) completed a supplemental draft environmental impact statement (EIS) and alternatives analysis (AA) in May 1990, and FTA approved initiation of preliminary engineering (PE) in December 1990. The final EIS should be complete by early 1992 and PE should be complete by the middle of 1992.o Section 3033 of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs the 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 fiscal years 1992 through 1997. |
| Cost-Effectiveness | <ul style="list-style-type: none">o The project would relieve severe overcrowding on the Queens Boulevard Lines by improving utilization of the East River tunnel capacity to and from Manhattan.o Updated cost-effectiveness data indicates that the project would cost \$5 per hour of user benefit. 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. The value for this project is indicative of a highly cost-effective project. |
| Local Financial Commitment | <ul style="list-style-type: none">o The MTA is expected to ask FTA for less than 50 percent of the project's cost. It also has a very large locally funded capital program. The MTA plans to fund final design for the Queens project (\$33 million) without any Federal assistance.o The draft capital plan for FY 1992-96, which includes local money for 50 percent of the \$612 million (escalated) cost of construction and property acquisition, has been approved by the MTA Board and is currently being considered by the State Legislature which will have to approve many of the funding sources assumed in the plan. Although the cost of |

Queens Local/Express Connection — New York, New York

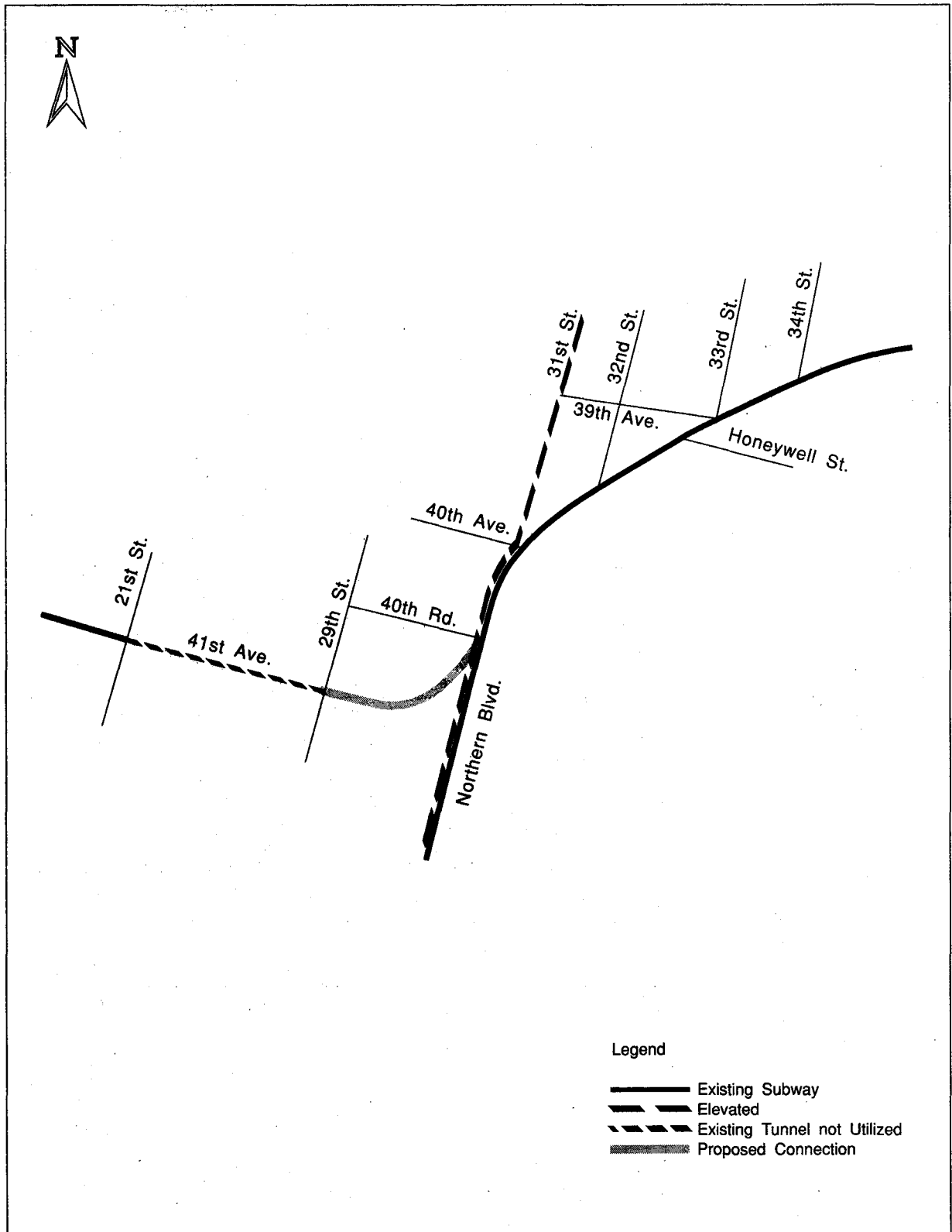
vehicles was included in the cost-effectiveness calculation, the funding for additional rail vehicles has not been programmed during the next 5 years. Neither the plan nor the funding mechanisms have been approved to date. A project in the latter stages of PE should have an approved capital financing plan in place. Since the financing plan for this project has not yet been approved, the capital financing plan is rated as "low."

- o The City and State have an array of dedicated taxes supporting both an extensive capital program and operating deficits. Although this project will not have an appreciable impact on the MTA's operating budget, money has become tight, and cut backs in service have been proposed. Therefore the stability and reliability of operating assistance are rated as "low/medium."

**Other
Factors**

- o Air Quality. The New York/New Jersey region is a "severe" nonattainment area for ozone. The region has until November 2007 to meet the National Ambient Air Quality Standard for that pollutant. The region is also 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.

New York:
Queens Local Connection



PROJECT PROFILE

East Busway Extension Pittsburgh, Pennsylvania (January 1992)

- Description**
- o 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 expansion of the East Busway is a 2.5-mile extension serving the adjacent communities of Edgewood and Swissvale. The extended busway will include park-and-ride lots, a feature which does not exist on the existing East Busway
 - o Estimates put the cost of the project at about \$40 million (1990 dollars). The busway is expected to carry about 48,000 daily riders by the year 2005.
- Status**
- o 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 spring 1992. Since the section 3 share of the project's cost is less than \$25 million, PAT is not required to perform alternatives analysis.
 - o Sections 1069(e) and 1108(b) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 authorize \$71.0 million of highway funds for this project and the Airport Busway project. Congress has also earmarked \$7.7 million in section 3 new start funds for Pittsburgh's busway program. PAT has not yet decided whether to seek additional new start funds from FTA, or to fund the project from the highway program.
- Cost-Effectiveness**
- o Preliminary data indicate that the proposed East Busway is very cost-effective with a cost per new rider of about \$5. This low cost-per-new rider is due to the substantial increase in ridership expected, the reduction in travel times for a large number of existing riders, and the project's modest cost.
- Local Financial Commitment**
- o PAT is committed to raising 50 percent of the project costs from non-Federal sources. In recent years, PAT has suffered from financial difficulties and has had to reduce service. Because PAT wanted to modernize its existing light rail system, extend its East Busway, build a busway in the airport corridor, and build a rail project in the Spine Line corridor, FTA required a financial capability analysis as the first part of the alternatives analysis. The "Preliminary Local Financial Analysis" was issued in March 1988. Last year the State Legislature approved a

East Busway Extension — Pittsburgh, Pennsylvania

series of small taxes which are dedicated to transit.
Pittsburgh share of this is expected to be \$46 million.

- o Since the above analysis, PAT has delayed implementation of the Spine Line project and money for 50 percent of the capital cost for both the East Busway extension and Airport Busway has been included in the State capital budget. The capital financing plan is rated "high" since the local funding is already in place.
- o 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 without the need for major service cuts and fare increases. (In 1990, the average age of PAT's bus fleet was 9.2 years, its rail fleet was 13.3 years.)
- o Air Quality. Pittsburgh is a "moderate" nonattainment area for ozone and is not classified for carbon monoxide due to insufficient information. The region has until November 1996 to meet EPA's ozone standard. The project's impact on air quality has yet to be determined, though it is likely to be small.

Other
Factors

PROJECT PROFILE

South IRT Salt Lake City, Utah (January 1992)

- Description** o The Utah Transit Authority (UTA) is proposing to build a 15- to 17-mile at-grade light rail line from downtown Salt Lake City to suburban areas to the south. The line would follow a lightly used Union Pacific Railroad alignment, and is currently estimated to cost \$200 million (escalated dollars).
- Status** o This project was approved to enter preliminary engineering in February 1991. The completion date for this phase is estimated to be February 1993.
- o Section 3035(f) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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.
- o The UTA is considering the possibility of acquiring right-of-way owned by the Union Pacific Railroad as a protective "buy." UTA believes that the purchase is necessary now to guarantee its availability for the IRT project, if constructed. Procedural issues associated with such an advance acquisition are being discussed with FTA. UTA may develop a "tiered" final EIS to allow early right-of-way acquisition.
- Cost-
Effectiveness** o The alternatives analysis results indicate that IRT would provide much the same level of transit service as an expanded bus system. Compared to better bus service, some parts of the corridor would benefit from a slight reduction in transit travel time, while other areas would experience increased transit travel time due to forced transfers from bus to rail. Compared with the all-bus alternative, IRT is projected to increase transit ridership by about 4200 trips per day or 4.5 percent. IRT would not have a noticeable effect on traffic congestion.
- o The locally preferred alternative has a cost-effectiveness index of \$7 to \$8 (1987\$) per new transit trip. The IRT cost estimate assumes a bare bones design with a projected cost-per-mile lower than the actual costs of any other IRT system already constructed in North America. The cost estimate (and the cost-effectiveness index) may increase when preliminary engineering is performed.

South IRT — Salt Lake City, Utah

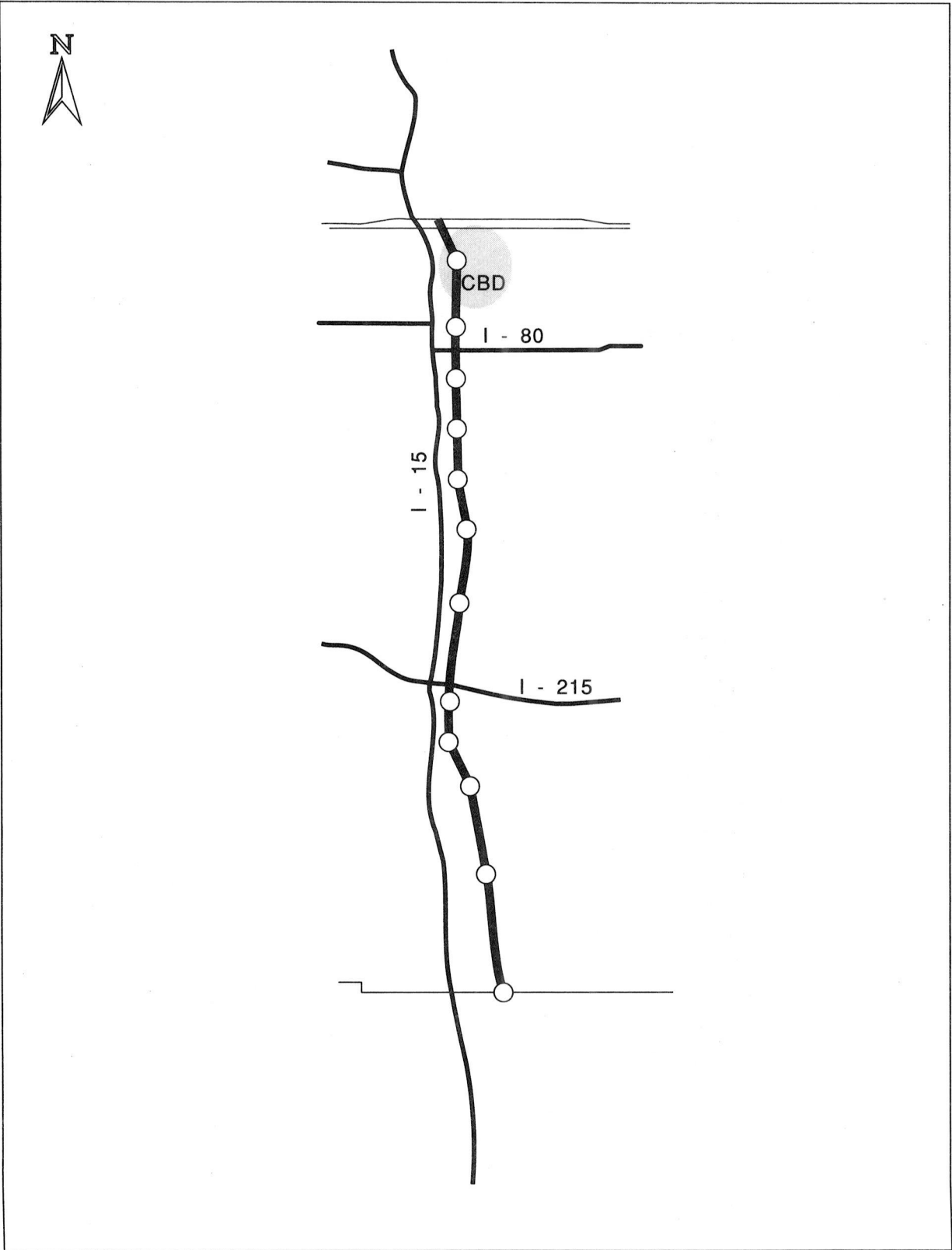
Local Financial Commitment

- o The locally adopted finance plan anticipates a 50 percent non-Federal share. The plan depends upon passage of a referendum to raise UTA's current 1/4 cent sales tax by 3/16 cent. The referendum is scheduled for November 1992. UTA's finance plan anticipates that Salt Lake City will receive 50 percent section 3 funding (\$100 million) for the rail project plus 50 percent section 3 funding for bus replacement and bus fleet expansion after all of section 9 funds are used. Some funding for the requisite bus expansion was authorized out of new start funds by ISTEA.
- o FTA has reservations about the UTA capital finance plan. Sales tax revenues are assumed to grow more rapidly than historic trends. The finance plan is vulnerable to increases in project cost and/or declines in projected rates of revenue growth. The plan does not have a contingency or capital reserve fund. Pending resolution of these concerns, the capital financing plan is rated "low."
- o Salt Lake City receives a "low" rating for the stability and reliability of local operating funds. To the UTA's credit, the agency has a strong bus maintenance and replacement program. (In 1990, the average age of UTA's bus fleet was 6.3 years.) A sales tax provides a stable and reliable revenue source. However, the adopted finance plan raises questions about the UTA's financial capacity to operate and maintain the proposed expanded bus and rail system, even assuming passage of the sales tax referendum.

Other Factors

- o Air Quality. The Salt Lake City region is a "moderate" nonattainment area for ozone. The region has also been designated as a nonattainment area for carbon monoxide and sulfur dioxide. 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.

Salt Lake City:
South LRT



PROJECT PROFILE

Tasman LRT
San Jose, California
(January 1992)

- | | |
|------------------------|--|
| Description | <ul style="list-style-type: none">o Santa Clara County has selected a 12.2-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, as its locally preferred alternative. The project would also connect with the Caltrain commuter rail system.o The estimated capital cost of the LRT portion of the LPA is \$460 million (escalated dollars). The LPA assumes another \$57 million in bus purchases. |
| Status | <ul style="list-style-type: none">o The draft EIS was completed and circulated for public comment in May 1991. The preferred alternative was selected in July. In December, FTA approved the Santa Clara County Transit District's (SCTD) request to initiate preliminary engineering.o Congress has earmarked new start funds for metropolitan San Francisco with the provision that the Metropolitan Transportation Commission may allocate the funds among the various Bay Area projects, including this one.o Section 3032 of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to make a grant to SCTD for preliminary engineering and an environmental impact statement on the locally preferred alternative. ISTEA also 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. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o The proposed project serves the work trip market between southern Alameda County and Silicon Valley where high levels of freeway congestion currently exist.o Transit ridership in Santa Clara County is forecast to increase by 6,400 new daily riders if the LRT project is built.o The LPA has a cost per new trip of \$21. This poor cost-effectiveness is mainly due to the land use characteristics of the corridor which include free employee parking at numerous employment locations which are low density and dispersed with respect to the transit line. |

Tasman LRT — San Jose, California

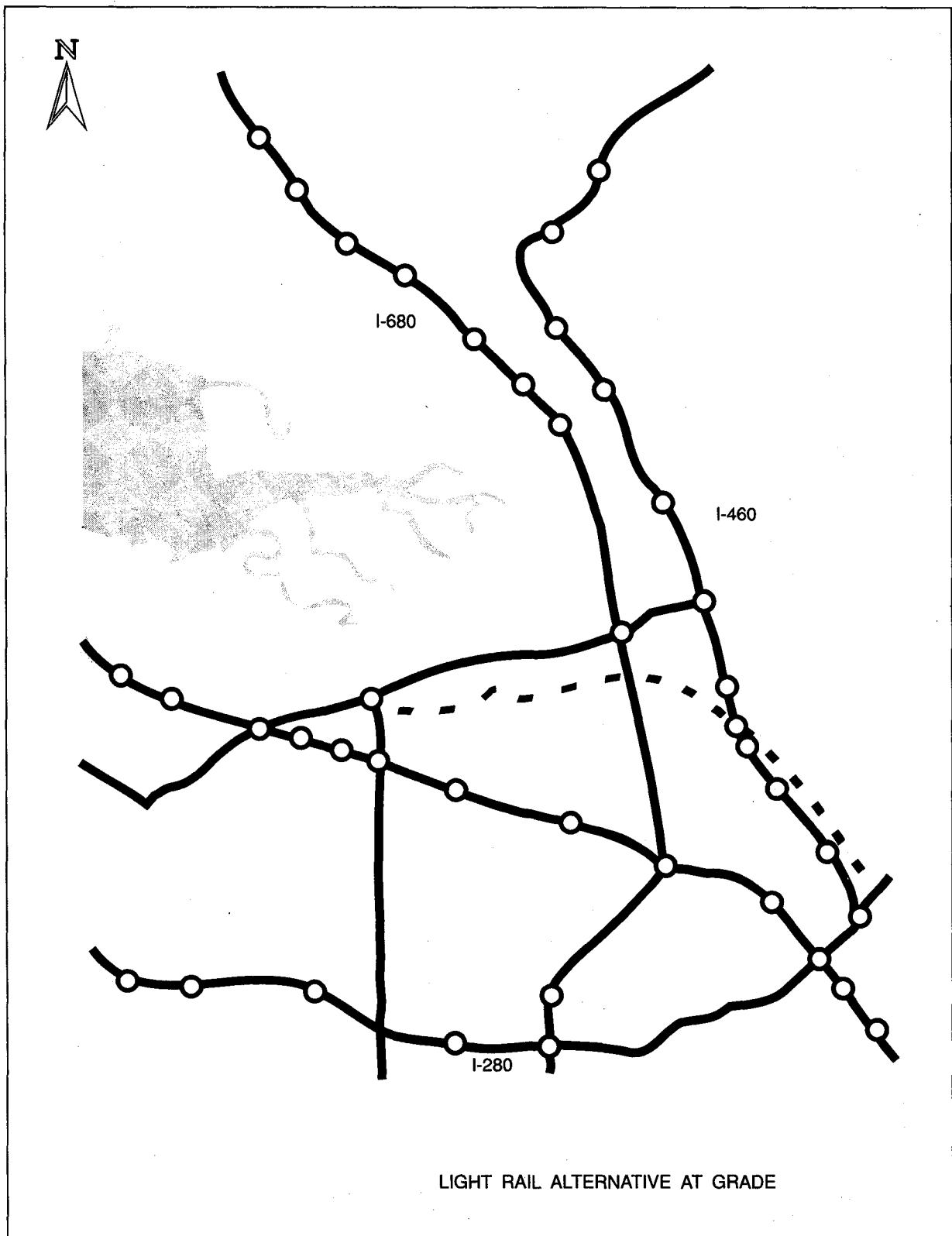
**Local
Financial
Commitment**

- o SCCID is asking FTA to pay about 50 percent of the capital cost of the project. By comparison, the sponsors of other projects in the Bay Area are expected to request about 30 percent Federal funding of their projects, which are primarily BART extensions.
- o The County has a 1/2 cent sales tax for transit and another 1/2 cent sales tax to build three highway projects. However, the county cannot afford to pay its share of the capital cost of this project and the expanded operations assumed for the project without additional revenues above and beyond those called for in the financial plan. Therefore, the capital finance plan has been rated "low." One possible source of funds would be to roll over the 1/2 cent tax for the highway projects when it expires in a couple of years.
- o SCCID 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. Although local agencies have historically provided adequate financing for expanded operations with dedicated sources, the service expansions envisioned for this project do not appear to be financially affordable at the assumed levels of rail and bus service and taxes. Thus, the stability and reliability of operating assistance has been rated "low."

**Other
Factors**

- o Air Quality. San Jose is a "moderate" nonattainment area for ozone. The region has until November 1996 to meet the National Ambient Air Quality Standard for that pollutant. For carbon monoxide, the Bay Area is classified as a "moderate <= 12.7" nonattainment area. The Tasman project would reduce vehicle miles travelled in the study area by less than 1 percent over the no-build alternative and by only less than 0.2 percent over the TSM alternative, and thus would have minimal impact on pollution.

San Jose:
Tasman Light Rail



PROJECTS IN ALTERNATIVES ANALYSIS

PROJECT PROFILE

Penn Station Extension Baltimore, Maryland (January 1992)

- | | |
|--------------------------------|--|
| Description | <ul style="list-style-type: none">o The Mass Transit Administration (MTA) of Maryland, using money from the State Transportation Trust Fund and local funds, is constructing a 22.5-mile light rail transit (LRT) line from Timonium in the north through downtown Baltimore to Glen Burnie near Baltimore-Washington International (BWI) Airport in the south. MTA is seeking Federal assistance for three associated projects, including this 0.5-mile, one-station spur directly into Pennsylvania Station in downtown Baltimore where Amtrak and MARC trains also stop.o Preliminary estimates indicate that the Penn Station extensions will cost between \$12 and \$17 million. MTA seeks a 75 percent Federal share, or \$9 to \$13 million (escalated dollars).o The Penn Station spur is expected to carry 800 daily trips including 200 to 400 new transit riders per day in 2005. |
| Status | <ul style="list-style-type: none">o MTA has released an environmental assessment of the project to the public, selected a locally preferred alternative, and requested FTA concurrence in initiating preliminary engineering. The FTA awaits comments from other Federal agencies on the proposed demolition of a historic railroad building before making its decision.o Section 3035(n)(1) of ISTEA of 1991 requires that FTA enter into a full funding grant agreement with MTA for \$60 million to carry out construction of the three projects associated with the Central Light Rail system. Through FY 1992, Congress has made available \$20 million for the three LRT extensions, of which \$2.0 million has been obligated for the alternatives analyses and preliminary engineering. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o The Penn Station spur is part of an interrelated program of projects which also includes LRT branches to Hunt Valley and BWI Airport in Baltimore, and Metrorail and MARC extensions 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.o Information on the Penn Station spur is preliminary at this time. Its cost-effectiveness index is \$10 to \$18 per new rider. More definitive information will be developed |

Pennsylvania Station Extension — Baltimore, Maryland

during preliminary engineering. The project is consistent with the National Transportation Policy objective of improving intermodal connections.

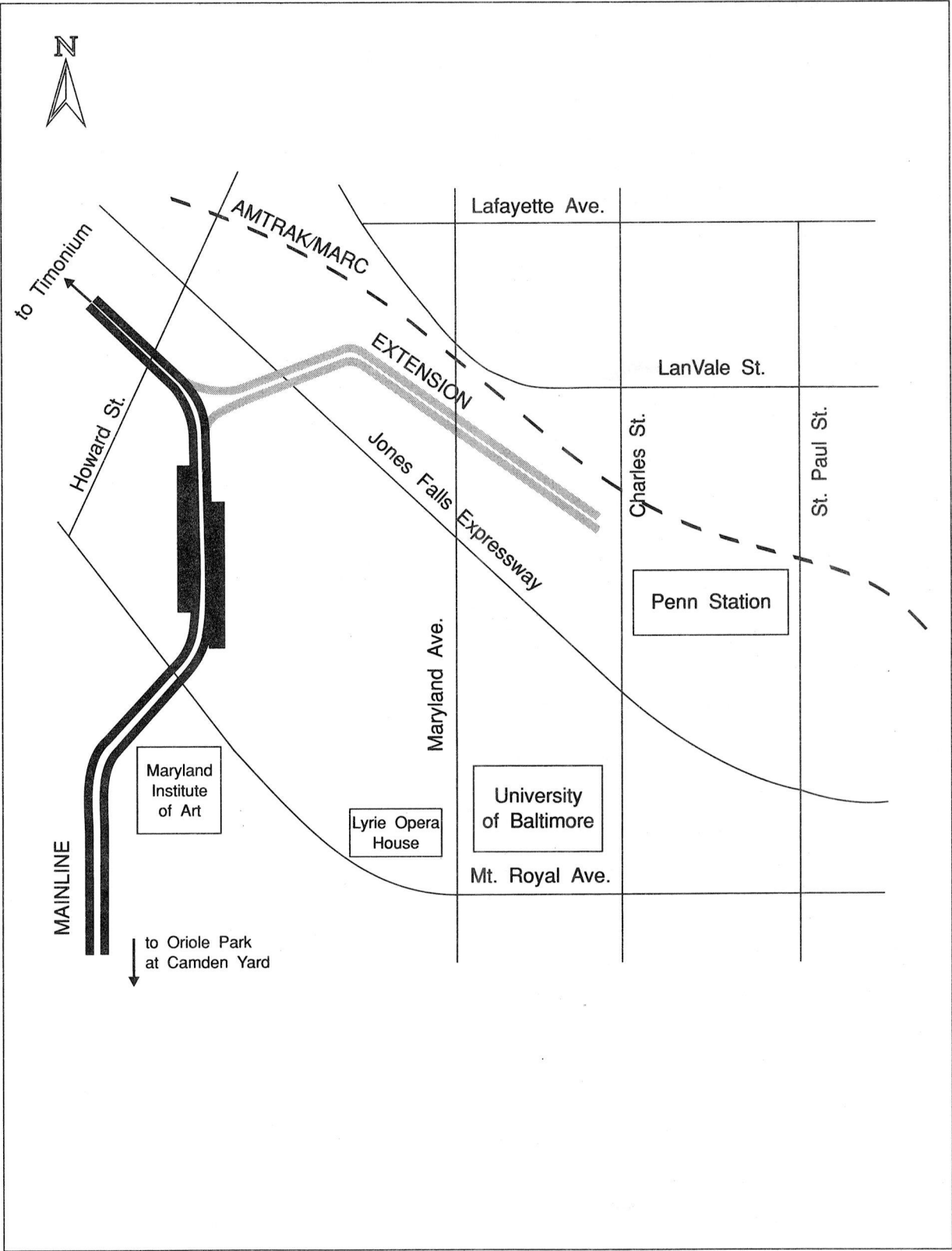
Local Financial Commitment

- o The State has pledged \$300 million from its Transportation Trust Fund and three local counties have committed \$15 million each to build the 22.5-mile main line. The proposed Federal cost of \$65 million for the three associated projects is only 15 percent of the \$450 million cost of the entire Central Light Rail system.
- o The capital financial plan is rated as "medium" for this stage of the project development process. The local share (\$22 million) for the three associated projects will be provided from the State Transportation Trust Fund. The projects are programmed in Maryland DOT's six-year Consolidated Transportation Program. However, the State is expecting a serious shortfall in the next 12 to 18 months due to declining revenues.
- o The stability and reliability of MTA's operating assistance is rated as "medium." MTA has a history of adequate funding of transit operations with contributions from the State Transportation Trust Fund. However, that Trust Fund is under financial pressure and cannot support all of the transportation projects in the program. The addition of 27 route miles of LRT service will place additional operating cost burdens on the Fund. The State is considering additional revenue sources to bolster the Fund. By State law, farebox revenues must cover 50 percent of the transit system's operating costs.
- o MTA's bus fleet averages 6.4 years old. Its heavy rail vehicles average 5.4 years old. These averages are indicative of proper reinvestment in the existing transit system.

Other Factors

- o Air Quality. EPA has classified Baltimore as a "serious" nonattainment area for ozone, as a "moderate" nonattainment area for carbon monoxide (CO), and as an attainment area for respirable particulates. The three extensions are not expected to affect regional VMT or emissions of ozone precursors from transportation sources substantially. However, the entire Central Light Rail system is estimated to carry 33,000 daily trips by the year 2010. The resulting elimination of buses from downtown streets during peak periods may result in measurable reductions in CO emissions in downtown.

Pennsylvania Station Light Rail Extension



PROJECT PROFILE

South Boston Piers Boston, Massachusetts (January 1992)

- Description o The Massachusetts Bay Transportation Authority (MBTA) is proposing to build an underground transitway between the MBTA's existing transit system and the South Boston Piers area, located on the fringe of downtown. The transitway would use either electric trolley buses or dual mode buses. The cost of the project could exceed \$500 million depending upon the termini, alignment, and vehicle technology chosen.
- Status o FTA approved the initiation of alternatives analysis in August 1990. The study is now in the intermediate stages. The MBTA's schedule anticipates the approval of a draft EIS by February 1992 and a final EIS by June 1992. FTA considers this schedule to be highly optimistic.
- o The MBTA is attempting to advance the project quickly so that it can be incorporated into the final design work for the reconstruction of Boston's Central Artery. The MBTA contends that the transitway will not be a viable project unless the environmental process is completed and a Federal funding commitment is obtained by July 1992.
- o Section 3035(j) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to enter into a multiyear grant agreement with the MBTA for \$278 million. The agreement would cover construction of the project between South Station and the World Trade Center.
- o Through FY 1992, Congress has appropriated \$10.8 million for this project.
- Cost-
Effectiveness o The downtown Boston office market was quite strong during the 1980's, leading to interest in developing neglected areas peripheral to the CBD. One area receiving development attention was the South Boston Piers/Fort Point Channel area. Boston is forecasting an additional 12 to 13 million square feet of development in the piers area by 2010, with land use shifting from industrial to office and retail uses. Since much of the piers area is not well served by public transportation, the anticipated development would aggravate Boston's already severe traffic congestion unless new transit services are provided.
- o Preliminary cost-effectiveness indices, based on system planning results, were in the range of \$4 to \$8 per new transit trip. The current study has not progressed to the

South Boston Piers — Boston, Mass.

point where revised cost-effectiveness indices have been developed. The cost-effectiveness of the project is highly dependent upon the level of development in the South Boston Piers area, which, in turn is dependent on a turnaround in the currently depressed Boston real estate market.

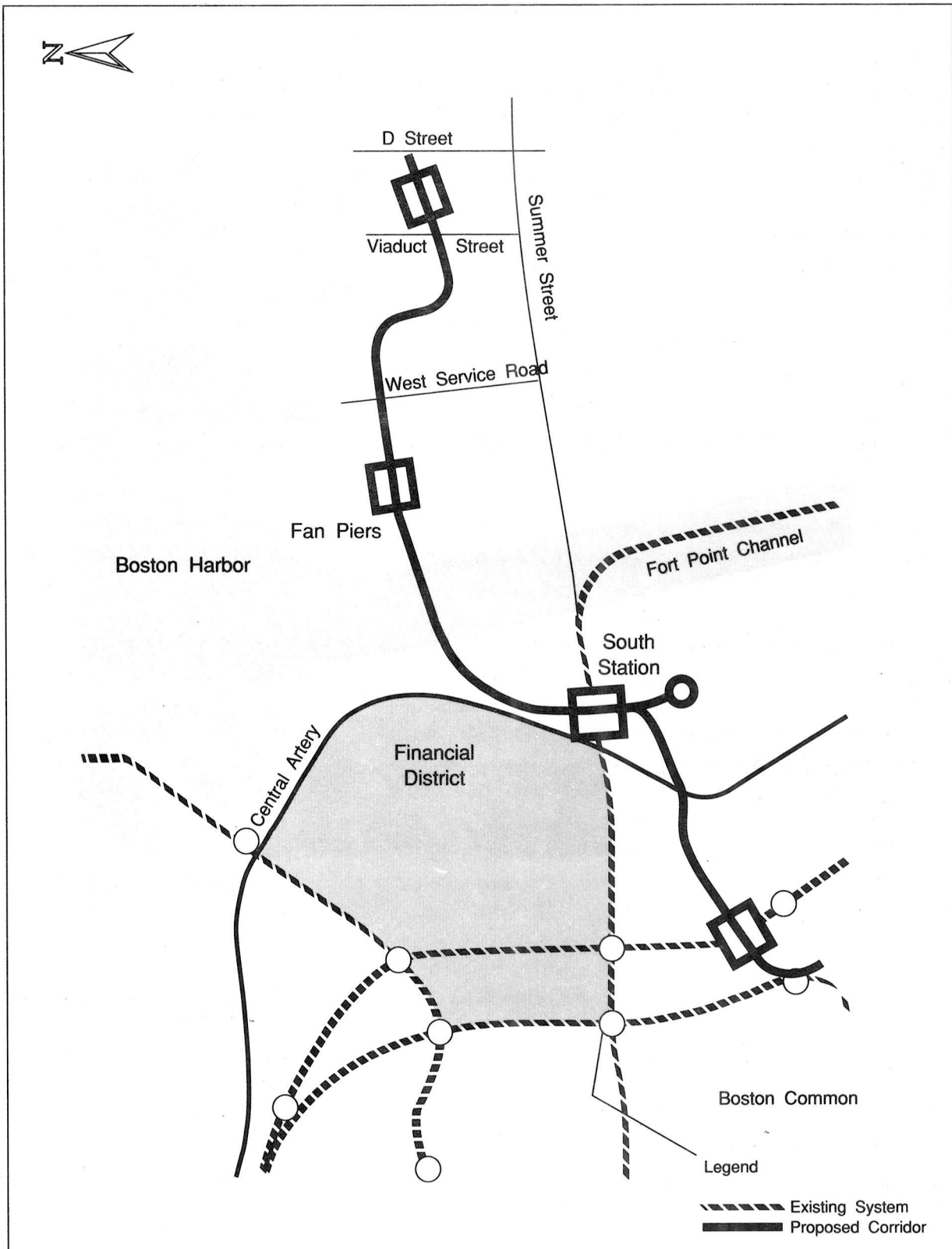
**Local
Financial
Commitment**

- o The MBTA is currently proposing a Federal share of 80 percent. In the past, the MBTA had agreed to seek 50 percent or less from Federal sources, and was expecting that the private sector would contribute up to 25 percent of the project's capital cost.
- o A "low to medium" rating for the capital financing commitment is appropriate at this stage of planning. Due to the condition of the State budget, the availability of State funding is uncertain. The MBTA has not yet provided a financial analysis or funding plan for the project.
- o 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 1990, the average age of the MBTA's bus fleet was 9.9 years, its rail fleet 9.7 years.) The MBTA has imposed a fare increase and is attempting to reduce operating costs due to budget constraints.

**Other Rating
Factors**

- o Air Quality. Metropolitan Boston is a "moderate" nonattainment area for carbon monoxide and a "serious" nonattainment area for ozone. It is highly unlikely that any of the alternatives would have a noticeable effect on pollution levels at the regional scale. There could be a small but positive effect on carbon monoxide in the central business district. Air quality impact analyses have not yet been completed.
- o 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.

Boston: South Boston Piers



PROJECT PROFILE

Amherst Corridor Buffalo, New York (January 1992)

- Description**
- o The Amherst Corridor extends some 6 miles from the north end of the Niagara Frontier Transportation Authority's (NFTA) light rail rapid transit line. An extension of the existing line, connecting the north and south campuses of the University of New York at Buffalo (SUNYAB), has been a part of local plans since the early 1970's. Several alignment and termini options have been proposed. A continuation or expansion of existing bus service is another alternative.
 - o The NFTA's capital cost estimate for a 6.1-mile LRT extension to Amherst and Audubon is \$400 million (1991 dollars).
- Status**
- o FTA approved the initiation of alternatives analysis in 1982, subject to the selection of a priority corridor. The NFTA's Northern Corridors Refinement Study led to the selection of the Amherst Corridor in 1986.
 - o Since 1988, the NFTA has been performing an Economic Development/Value Capture Study to estimate the economic benefits of an LRT extension. The study found that an Amherst LRT extension, by itself, would have virtually no impact on the amount of economic activity in the region, and only marginal redistributive effects on economic activity in the corridor and station areas. Greater impacts could occur if local jurisdictions adopted supportive land use policies. The consultant has recommended that the NFTA not move forward with further studies on the line for the foreseeable future. Local officials are seriously considering this recommendation.
- Cost-Effectiveness**
- o According to NFTA projections, an Amherst LRT extension would have little impact on regional transit ridership and traffic congestion. Compared with a low cost all-bus alternative, LRT would attract only about 3000 more daily transit riders. Local studies show somewhat greater impacts if supportive land use policies were adopted. The NFTA's operating costs would increase by several million dollars per year with the LRT extension.
 - o The Northern Corridors Refinement Study yielded cost-effectiveness indices of \$46 to \$67 per new regional transit trip (1985\$). If University of New York at Buffalo students (who currently use buses between two campuses) were counted as new riders, the extension would cost \$8 to \$37 per new NFTA rider. It is highly unlikely that further study will show a LRT extension to be cost-effective.

Amherst Corridor — Buffalo, New York

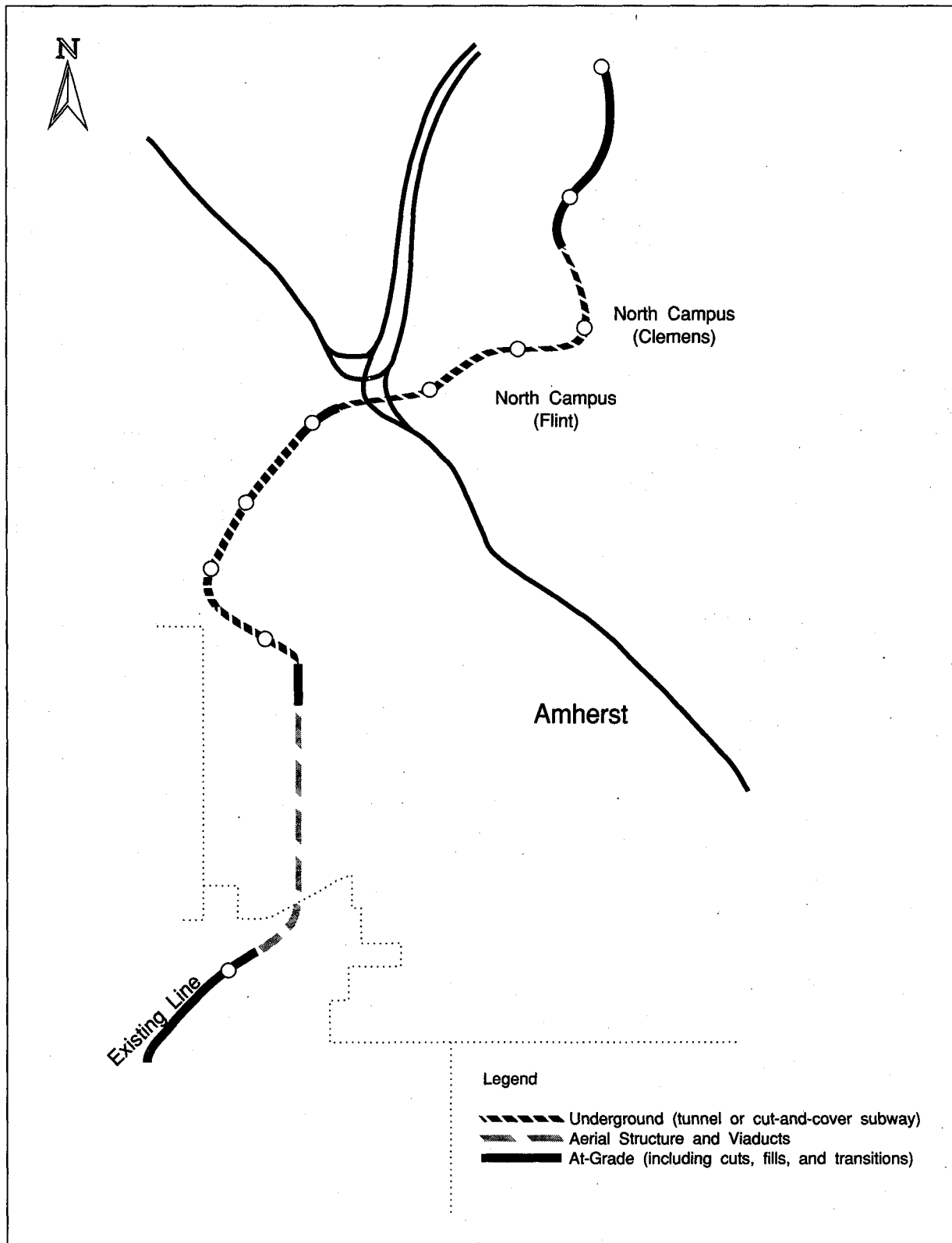
Local Financial Commitment

- o Because of local and State financial difficulties, FTA assumes that the NFTA would seek 80 percent funding from Section 3.
- o The NFTA's only regular source of capital funding has been State appropriations. The State is now insisting upon a greater financial effort by local governments, but Buffalo area jurisdictions have consistently demonstrated a reluctance to fund the NFTA. The NFTA system briefly shut down in March 1990 due to a lack of operating funds. The project has been assigned a "low" capital finance rating.
- o The stability and reliability of NFTA operating revenues are also rated "low." To the NFTA's credit, the agency has undertaken a bus replacement program which has reduced the average age of the bus fleet from 11.0 years in 1984 to 9.4 years in 1989. In addition, following the 1990 shutdown, local governments agreed to a low level of dedicated funding for NFTA operations. The "low" rating reflects the fact that the NFTA has been forced to rely on emergency appropriations by the State and other stop-gap measures to avoid major service cuts and, new dedicated funds notwithstanding, the NFTA remains highly dependent on local and State appropriations for its operating revenues. The stability and reliability of these sources are in doubt, as demonstrated by the 1990 shutdown.

Other Factors

- o Air Quality. The Buffalo region is a "marginal" nonattainment area for ozone. It is unlikely that any of the alternatives would have a noticable effect on pollution levels at the regional scale because of the small number of auto driver trips they would eliminate.

Buffalo: Amherst Corridor



PROJECT PROFILE

Central Area Circulator

Chicago, Illinois

(January 1992)

- Description
- o 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 of the project would be grade-separated (14 percent). The remainder is in protected LRT-only lanes in street medians (50 percent) or curb lanes (36 percent). The LRT would take lanes currently used for car parking and traffic.
 - o The cost of constructing all legs of the light rail alternative is estimated to be about \$750 million (escalated dollars). Ridership is projected to be about 120,000 trips per day. The majority of riders would either be existing transit users or people who formerly walked, although some would be former auto and taxi users.
- Status
- o The city's alternatives analysis is essentially complete. FTA approved the DEIS for public review in August 1991. The locally preferred alternative has been selected, and a locally preferred alternative report is being prepared.
 - o Section 3035(e) of the Intermodal Surface Transportation Efficiency Act of 1991 directs FTA to enter into a multiyear agreement with the City of Chicago for \$260 million to carry out construction of the locally preferred alternative.
- Cost-Effectiveness
- o 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.
 - o The project would have little overall impact on transit travel times, although there would be some reduction between certain key origins and destinations. LRT would primarily operate at grade and, therefore, be subject to traffic signal delays as well as possible illegal parking blockages. Downtown congestion could potentially worsen since the light rail system would take away lanes currently used by general traffic. However, more study is required to determine the actual effects of a LRT system operating on downtown streets.
 - o The cost effectiveness index is \$22 for the full-build alternative. The project results in a very marginal

Central Area Circulator — Chicago, Illinois

increase in transit trips originating outside the downtown core. About one-half of the new transit trips are short trips made within the core of the city during off peak periods. Compared to the TSM alternative, LRT diverts approximately 6000 auto trips to transit. Of these, 4600 are to/from the downtown area with high average trip distances.

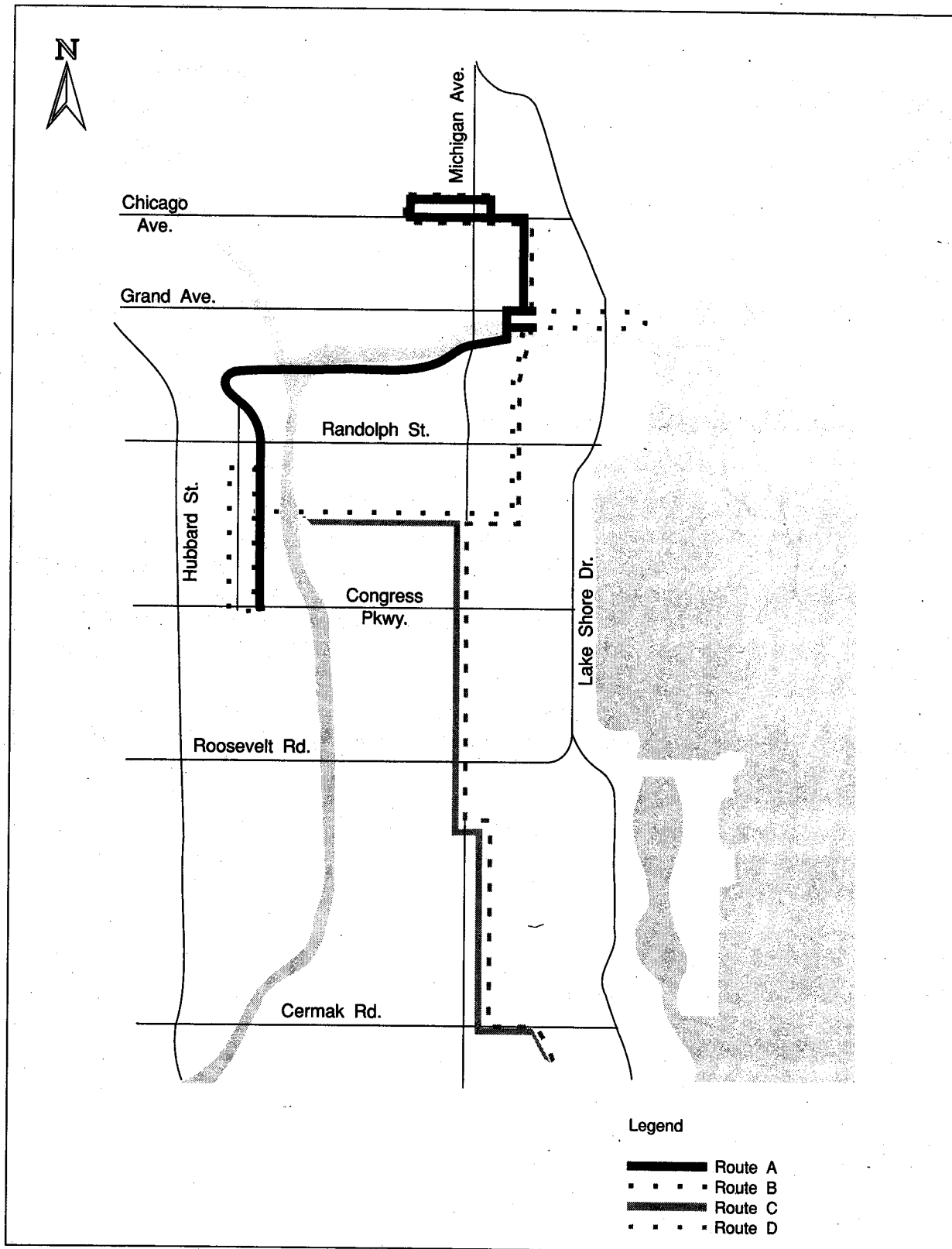
Local Financial Commitment

- o One-third of the capital cost of the system is proposed to come from the Federal Government, 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.
- o The city's capital plan has been rated "medium." The city as established a Special Service Taxing District to fund this specific project, and the local business community strongly supports the district. The State has agreed to fund one-third of design costs, and has appropriated half of its share. The Governor and State Legislature will be requested to commit to construction funding during preliminary engineering.
- o The Chicago transit system is facing large deficits and may require extra State money that may jeopardize funding for the CAC project.
- o The stability and reliability of local operating and maintenance funding is rated "medium". The CTA's operating deficits are rising faster than dedicated sources of revenue are growing and the CTA is currently considering service cuts to erase a budget deficit. Service cuts and fare increases were imposed in December 1991 to reduce the deficit. Additional cutbacks are expected over the next 3 years. 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.

Other Factors

- o Air Quality. Chicago is a "severe" nonattainment area for ozone. The region has 17 years to reach desired levels. Because few of the new riders attracted to the rail project are from automobiles, there will be negligible improvements in regional air quality resulting from the project. There would, however, be some reductions in bus-related diesel emissions in the CBD. The full-build alternative shows only marginal decreases in carbon monoxide and nitrogen oxide, again because of the minimal impact on auto usage. Chicago is an attainment area for carbon monoxide.

Chicago: Central Area Circulator



PROJECT PROFILE

Dual Hub Corridor Cleveland, Ohio (January 1992)

- Description
- o 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 IRT-like Red Line and the Shaker Heights IRT lines serve only a single station in downtown Tower City. 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.
 - o The alternative considered most likely to be selected as the locally preferred alternative follows Euclid Avenue, in subway downtown and on the street outside of downtown. It has an estimated capital cost of \$600 million (escalated dollars).
 - o Systemwide ridership peaked in the early 1980's at over 120 million annual passengers, but declined steadily to fewer than 70 million riders in 1988. The drop in ridership was most dramatic on the Red Line. More recently, rail ridership has increased somewhat as the Greater Cleveland Regional Transit Authority (GCRTA) improved service frequency and reliability.
- Status
- o An alternatives analysis underway since 1983 should be completed in FY 1992. The study has progressed slowly partly because, until recently, the GCRTA showed little interest in the project.
 - o The alternatives being examined are the No-Build, a TSM alternative, and a number of rail realignments that range in cost from \$300 to \$800 million. The city of Cleveland and the Northeast Ohio Area-wide Coordinating Agency (NOACA, the MPO) have already endorsed the Euclid Avenue rail alternative. GCRTA will not take action until after the draft EIS has been circulated for public comment.
 - o Section 3035(t) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to negotiate and sign a multiyear grant agreement with GCRTA to complete the alternatives analysis. Through FY 1992, Congress has earmarked \$9 million in new start funds for the project.

Dual Hub Corridor — Cleveland, Ohio

Cost- Effectiveness

- o 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.
- o 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 underutilization 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. However, because the realigned trains would operate on surface streets outside of downtown, existing riders to the important Tower City area of downtown would be subject to longer travel times than at present. The eastside corridor is now well served by buses and not so congested that a train operating at street level would improve travel times.
- o A cost-effectiveness index for the proposed action has not been determined.

Local Financial Commitment

- o 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).
- o The capital financing plan for the project has been proposed but has not been adopted. The draft plan is rated "low" 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.
- o The stability and reliability of GCRTA's operating assistance are rated as "medium." The 1-percent sales tax revenue covers 62 percent of the operating expenses, and farebox revenue covers another 26 percent. The remainder is provided by FTA (7 percent) and the State (5 percent).

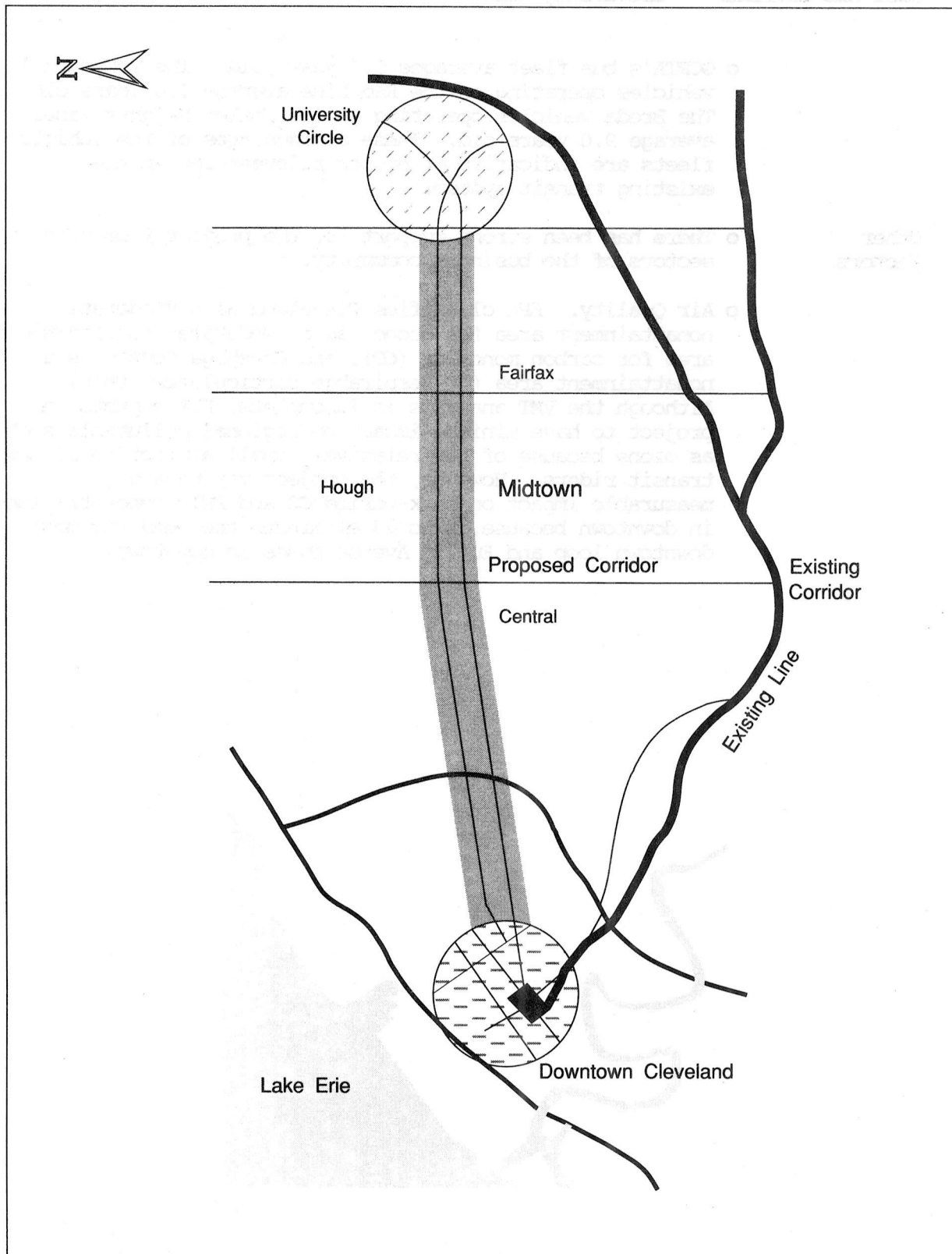
Dual Hub Corridor — Cleveland, Ohio

- o GCRTA's bus fleet averages 5.8 years old. The Tokyu rail vehicles operating on the Red Line average 7.0 years old. The Breda vehicles operating on the Shaker Heights lines average 9.0 years old. These average ages of the vehicle fleets are indicative of proper reinvestment in the existing transit system.

Other Factors

- o There has been strong support for the project from certain sectors of the business community.
- o Air Quality. EPA classifies Cleveland as a "moderate" nonattainment area for ozone, as a "moderate" nonattainment area for carbon monoxide (CO), and Cuyahoga County as a nonattainment area for respirable particulates (PM10). 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 and PM10 concentrations in downtown because it would eliminate the need for most downtown loop and Euclid Avenue buses in downtown.

Cleveland: Dual Hub Corridor



PROJECT PROFILE

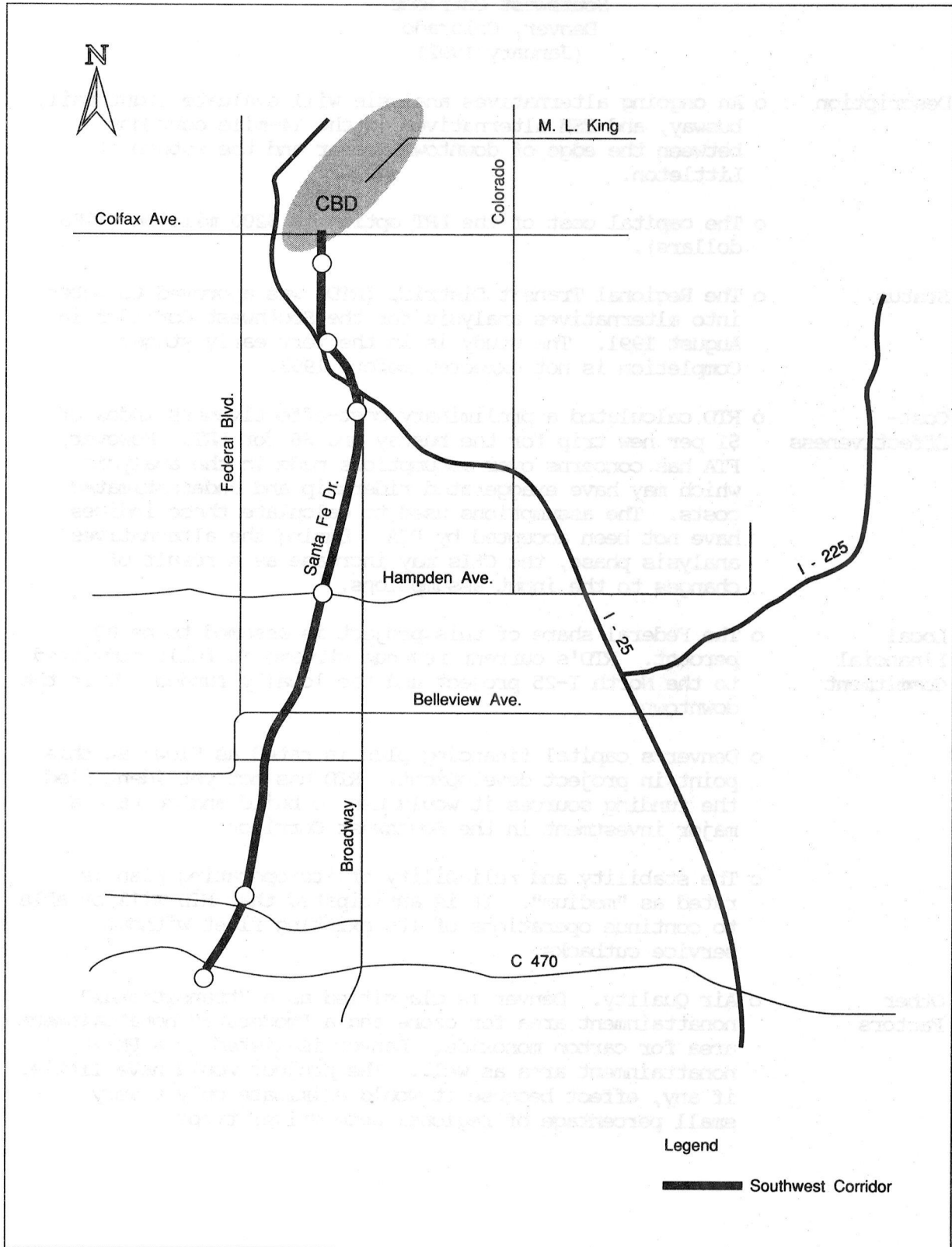
Southwest Corridor

Denver, Colorado

(January 1992)

- | | |
|----------------------------------|---|
| Description | <ul style="list-style-type: none">o An ongoing alternatives analysis will evaluate light rail, busway, and TSM alternatives in the 14-mile corridor between the edge of downtown Denver and the suburb of Littleton.o The capital cost of the LRT option is \$200 million (1988 dollars). |
| Status | <ul style="list-style-type: none">o The Regional Transit District (RTD) was approved to enter into alternatives analysis for the Southwest Corridor in August 1991. The study is in the very early stages. Completion is not expected before 1993. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o RTD calculated a preliminary cost-effectiveness index of \$1 per new trip for the busway and \$6 for LRT. However, FTA has concerns over assumptions made in the analysis which may have exaggerated ridership and underestimated costs. The assumptions used to calculate these indices have not been accepted by FTA. During the alternatives analysis phase, the CEIs may increase as a result of changes to the input assumptions. |
| Local
Financial
Commitment | <ul style="list-style-type: none">o The Federal share of this project is assumed to be 80 percent. RTD's current revenue streams is fully committed to the North I-25 project and the locally funded LRT in the downtown.o Denver's capital financing plan is rated as "low" at this point in project development. RTD has not yet identified the funding sources it would use to build and operate a major investment in the Southwest Corridor.o The stability and reliability of its operating plan is rated as "medium". It is anticipated that RTD will be able to continue operations of its existing fleet without service cutbacks. |
| Other
Factors | <ul style="list-style-type: none">o Air Quality. Denver is classified as a "transitional" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. Denver is listed as a PM-10 nonattainment area as well. The project would have little, if any, effect because it would eliminate only a very small percentage of regional auto driver trips. |

Denver: Southwest Corridor



PROJECT PROFILE

Priority Corridor

Houston, Texas

(January 1992)

- Description
- o Houston Metro has selected a 14-mile monorail to serve its Priority Corridor which traverses downtown Houston, Greenway Plaza, Uptown Galleria, and the western suburbs. The monorail is to be supplied under a modified turnkey contract. The Priority Corridor is the first segment of a planned 24-mile system which would also serve the Texas Medical Center/Astrodome area and the University of Houston/Texas Southern University area in southeast Houston. The total estimated capital cost for this 24-mile system is \$1.56 billion. However, congressional and local opposition has succeeded in halting the project.
- Status
- o In March 1991 the Metro Board endorsed the monorail project and selected a supplier for the system. For at least two reasons, this decision is unlikely to be implemented. First, Congress earmarked \$30 million for Houston, but the Conference Committee stated, "... that no money should be obligated specifically for Houston monorail without a strong consensus within the public, along with local, state and federal representatives consistent with FTA rules and regulations applicable to new start projects." Second, the new mayor of Houston is a strong opponent of the monorail and his appointees will control a new Metro Board.
 - o Houston received new start earmarks in FY 1989, 1990, 1991 and 1992 totaling \$161.5 million. The FY 92 Conference Committee report directs FTA to leave the previous years earmarks unobligated and not to use the FY 92 money on the monorail until a local consensus is reached.
 - o Section 3035(uu) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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.
- Cost Effectiveness
- o Cost-effectiveness indices for year 2005 indicate that the cost-per-new rider of the monorail project varies between \$7 and \$12 per new rider, making the proposed project of "medium" cost-effectiveness in the continuum of new start projects. However, a \$500 million, "better bus alternative" would cost about \$4 per new rider, making it extremely cost-effective.

System Connector — Houston, Texas

Local Financial Commitment

- o 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 60 percent of the cost of the Priority Corridor project, although only \$500 million has been earmarked in ISTEA.
- o Houston's capital financing commitment is rated "medium" because Metro's financing plan includes several assumptions which may be difficult to achieve, including a very large increase in the operating ratio (percent of operating costs covered by fares) of the bus system and an assumed private sector contribution of \$130 million. Nevertheless, even without implementing some of these assumptions, Metro should be able to finance the project.
- o 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 higher cost alternatives would have smaller margins.

Other Factors

- o Air Quality. Houston is a "severe" nonattainment area for ozone. The region has until November 2007 to meet the National Ambient Air Quality Standard for that pollutant. For carbon monoxide, Houston is considered to be an attainment area. The monorail project, because of its low new ridership attraction in comparison to regional auto trips, is expected to reduce air pollutants in the region by less than 0.2 percent of the region's emissions from mobile sources when compared to the TSM alternative and by less than 1 percent when compared to the no-build alternative.

PROJECT PROFILE

East Central Corridor Los Angeles, California (January 1992)

- Description**
- o The East Central Corridor project is one of several proposed extensions to the Los Angeles Metro Rail System. The corridor extends from the eastern terminus of the Red Line at Union Station to Atlantic and Whittier Boulevards in East Los Angeles, a distance of about 5.5 miles. Six separate alignments are being considered.
 - o The current cost estimate for an eastern Metrorail extension is about \$1 billion (1990 dollars).
 - o Ridership on the eastern extension has initially been estimated at about 36,000 daily boardings.
- Status**
- o FTA approved the Los Angeles County Transportation Commission's (LACTC) request to initiate alternatives analysis in July 1991. The study is currently in the scoping phase in which potential issues and alternatives are being identified.
 - o Section 3034 of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to amend the full funding contract for Metro Rail segment MOS-2 for \$695 million for construction of MOS-3. The eastern extension is considered to be part of MOS-3.
- Cost-Effectiveness**
- o LACTC has calculated preliminary cost-effectiveness indices for the combined East and West Extensions of the Orange Line. The preliminary indices vary between \$9 and \$10 per new rider and depend on the alignment selected. These indices will be recomputed as the alternatives analysis produces more refined estimates of cost, ridership, and travel time.
- Local Financial Commitment**
- o LACTC is proposing a Federal share of about 50 percent, similar to MOS-1 and -2. In addition, LACTC is financing several major transit investments without any Federal assistance. These projects include: the Blue Line between Los Angeles and Long Beach (\$877 million); a planned Blue Line Extension to Pasadena (\$688 million); the Green Line from Norwalk to El Segundo (at least \$1 billion); a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester (\$215 million); and several planned commuter rail projects.
 - o Los Angeles' transit programs benefit from several State and local dedicated revenue resources. The primary local resource is a 0.5 percent county wide sales tax, known as Proposition A, which was adopted in 1980. Thirty-five

East Central Corridor — Los Angeles, California

percent of this tax, about \$130 million annually, is dedicated to the construction of a county wide rail system. An additional 0.5 percent sales tax dedicated to transit and transit related highway improvements was enacted in November 1990.

- o In June 1990, funding for public transit in California was enhanced by the passage of Propositions 111, 116 and 108. Proposition 111 increases the State's motor fuels tax by a total of 9 cents over 5 years, providing \$18.5 billion for transportation projects over the next 10 years. Proposition 116 authorized \$2 billion in general obligation bonds for rail transportation facilities. Proposition 108 authorized an additional \$1 billion in general obligation bonds for the acquisition of right-of-way, rolling stock, and other capital expenditures for urban, commuter, and intercity rail.
- o The revenues from State and local resources currently appear adequate to finance all segments of the Red Line and the operating deficits of the bus and rail systems. However, other elements of the county wide system currently being planned will require new funding sources for their construction, operation, and maintainance. County officials are facing a \$133 million budget shortfall for the current fiscal year. Financial ratings for this project have not yet been established.
- o The Los Angeles bus fleet averages 6.9 years old, and its rail vehicle fleet averages 1.2 years old. These averages are indicative of proper reinvestment in the existing transit system.

Other Factors

- o Air Quality. 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 will 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.

PROJECT PROFILE

West Central Corridor Los Angeles, California (January 1992)

- | | |
|----------------------------------|---|
| Description | <ul style="list-style-type: none">o 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 Orange Line to Westwood near the University of California campus, a distance of about 7 miles.o The estimated cost for the western extension is \$2.0 billion (escalated dollars).o Ridership for the western extension has been initially estimated at 92,000 daily boardings. |
| Status | <ul style="list-style-type: none">o FTA approved the Los Angeles County Transportation Commission's (LACTC) request to initiate alternatives analysis in July 1991. The study has not yet been initiated. LACTC is awaiting the outcome of the EIS reevaluation on the Pico/San Vicente extension before undertaking this alternatives analysis. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o LACTC 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. |
| Local
Financial
Commitment | <ul style="list-style-type: none">o LACTC is proposing a Federal share of about 50 percent, similar to MOS-1 and -2. In addition, LACTC is financing several major transit investments without any Federal assistance. These projects include: the Blue Line between Los Angeles and Long Beach (\$877 million); a planned Blue Line Extension to Pasadena (\$688 million); the Green Line from Norwalk to El Segundo (at least \$1 billion); a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester (\$215 million); and several planned commuter rail projects.o Los Angeles' transit programs benefit from several State and local dedicated revenue resources. The primary local resource is a 0.5 percent county wide sales tax, known as Proposition A, which was adopted in 1980. Thirty-five percent of this tax, about \$130 million annually, is dedicated to the construction of a county wide rail system. |

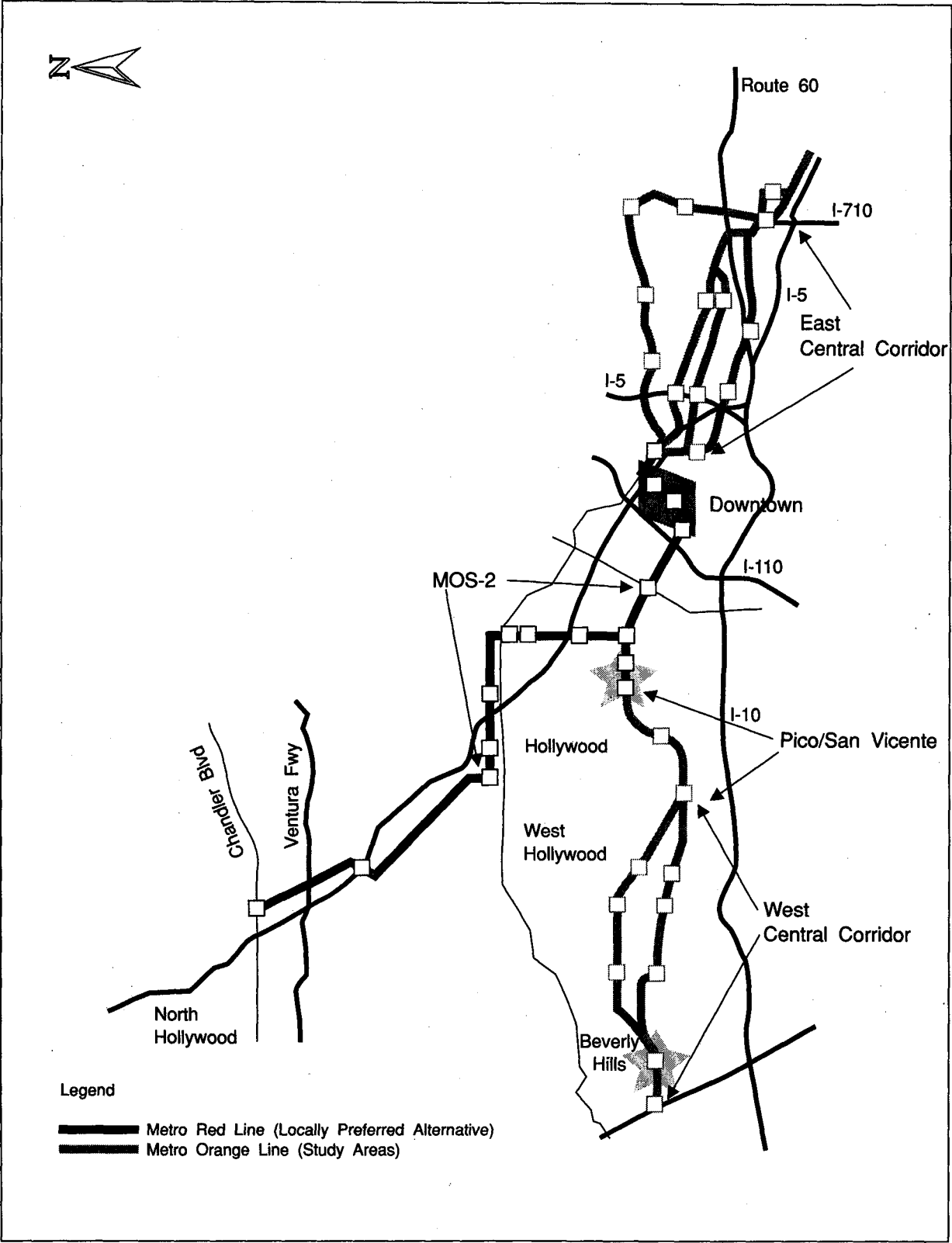
West Central Corridor — Los Angeles, California

An additional 0.5 percent sales tax dedicated to transit and transit-related highway improvements was enacted in November 1990.

- o In June 1990, funding for public transit in California was enhanced by the passage of Propositions 111, 116, and 108. Proposition 111 increases the State's motor fuels tax by a total of 9 cents over a 5-year period, providing \$18.5 billion for transportation projects over the next 10 years. Proposition 116 authorized \$2 billion in general obligation bonds for rail transportation facilities. Proposition 108 authorized an additional \$1 billion in general obligation bonds for the acquisition of right-of-way, rolling stock, and other capital expenditures for urban, commuter, and intercity rail.
- o The revenues from State and local resources currently appear adequate to finance all segments of the Red Line and the operating deficits of the bus and rail systems. However, other elements of the county wide system currently being planned will require new funding sources for their construction, operation, and maintainance. County officials are facing a \$133 million budget shortfall for the current fiscal year. Financial ratings for this project have not yet been established.
- o Air Quality. 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 will 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.

Other
Factors

**Los Angeles:
East Central and West Central Corridors**



PROJECT PROFILE

Pico/San Vicente Segment of Metro Rail Los Angeles, California (January 1992)

- Description**
- o The Pico/San Vicente segment of Metro Rail extends the Wilshire Boulevard (Orange) Line generally to the west beyond the MOS-2 terminus at Western Avenue. It adds 2.6 miles and two stations, all in subway, to the 17-mile Metro Rail system. It skirts the 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.
 - o The estimated cost of the Pico/San Vicente segment is \$440 million (escalated dollars).
 - o The 17-mile Metro Rail System would attract 151,000 daily riders in 2010. A comparable forecast for the 19.9-mile system including the Pico/San Vicente segment is not available.
- Status**
- o The Los Angeles County Transportation Commission (LACTC) is preparing a written evaluation of the 1987 environmental study of the Los Angeles Metro Rail Project to reconsider the locally preferred alternative. The 1987 environmental document included the Pico/San Vicente alignment. If the environmental document is found to be current, the project would be subject to a public hearing and comment period, and a supplemental final EIS would be prepared. MOS-1, MOS-2, and the North Hollywood segments would not be affected by the proposed change in the designation of the locally preferred alternative.
 - o Section 3034 of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to negotiate and sign an amendment to the MOS-2 full funding grant agreement with LACTC to provide \$695 million in construction funds for the Pico/San Vicente segment and other Metro Rail segments.
- Cost-Effectiveness**
- o The Pico/San Vicente segment is part of the a program of interrelated projects which also includes the North Hollywood segment and a portion of the East Side Extension. 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.
 - o The Pico/San Vicente segment is exempted from the cost-effectiveness requirement in section 3(i) of the Federal Transit Act.

Pico/San Vicente Segment of Metro Rail — Los Angeles, California

- o Los Angeles has the third highest transit ridership in the country, and its freeways are notoriously congested. There are no inexpensive ways to improve bus levels of service in the Wilshire corridor.

Local Financial Commitment

- o Federal funding sources account for 50 percent of the \$2.7 billion cost of MOS-1 and MOS-2. The Federal share for the Pico-San Vicente segment has not been established but is expected to be in the range of 50 to 60 percent.
- o In addition to their 50 percent share of Metro Rail, LACTC and the other State and local funding partners are financing numerous major transit investments without any Federal assistance. These projects include: the Blue Line between Los Angeles and Long Beach (\$877 million); the Green Line now under construction from Norwalk to El Segundo (\$886 million); several commuter rail projects for which right-of-way has already been purchased; a planned Blue Line Extension to Pasadena (\$688 million); and a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester (\$215 million).
- o Transit programs in Los Angeles benefit from several State and local dedicated revenue sources. The primary local resource is a 0.5-percent county wide sales tax. Thirty-five percent of this tax, about \$130 million annually, is dedicated to the construction of a county wide rail system. An additional 0.5-percent sales tax dedicated to transit-related highway improvements was passed in 1990.
- o Funding for public transit was also enhanced at the State level in 1990 by the passage of three ballot measures. Proposition 111 gradually increased the State's motor fuels tax by a total of \$0.09 over 5 years to provide an estimated \$18.5 billion for transportation projects in a 10-year period. Proposition 116 authorized issuance of \$2 billion in general obligation bonds for rail transportation facilities. Proposition 108 authorized issuance of an additional \$1 billion in general obligation bonds for capital expenditures on urban, commuter, and intercity rail.
- o The revenues from State and local resources currently appear adequate to finance all segments of the Red Line and the operating deficits of the bus and rail systems. However, other elements of the county wide system currently being planned will require new funding sources for their

Pico/San Vicente Segment of Metro Rail — Los Angeles, California

construction, operation, and maintainance. County officials are facing a \$133 million budget shortfall for the current fiscal year. Financial ratings for this project have not yet been established.

- o The Los Angeles bus fleet averages 6.9 years old, and its fleet of light rail vehicles average 1.2 years old. These average fleet ages are indicative of proper reinvestment in the existing transit system.

Other Factors

- o Air Quality. Los Angeles' air quality problems are Unique. EPA has classified it as the only "extreme" nonattainment area for ozone in the country, as the only "serious" nonattainment area for carbon monoxide (CO) in the country, and also as nonattainment for respirable particulates (PM10). It is unlikely that the Pico-San Vicente segment will have a noticeable effect on pollution levels at the regional scale. However, it is part of a larger commitment to meeting the goals of the Air Quality Management Plan through a Regional Mobility Plan which includes an extensive network of rail lines, electric bus lines and high occupancy vehicle (HOV) facilities. In addition, the Pico-San Vicente segment should reduce localized CO and PM10 concentrations in the Wilshire corridor by eliminating buses from the traffic stream two miles farther from downtown.

PROJECT PROFILE

East-West Corridor Milwaukee, Wisconsin (January, 1992)

- Description
- o The Wisconsin Department of Transportation (WisDOT) is initiating alternatives analysis in the Central Milwaukee East-West Corridor. The corridor extends from the University of Wisconsin-Milwaukee (UW-M), southwest through the CBD, west to the County Grounds/Zoo area and to the City of Waukesha. A minimum operable segment (MOS) would extend from the UW-M campus to the County Grounds/Zoo.
 - o The alternatives analysis is evaluating various IRT alignments and termini, a busway/HOV-lane alternative, as well as a TSM and No-Build alternative. At least one of the variations would extend west to the City of Waukesha.
 - o Current estimated construction cost of the MOS segment of LRT in the corridor is \$332 million (1991 dollars).
- Status
- o As directed by Congress, FTA approved the initiation of the East-West Corridor alternatives analysis on January 15, 1992. WisDOT intends to complete the draft EIS by January 1993.
 - o Section 3035(o) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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.
- Cost-Effectiveness
- o The portion of I-94 between the CBD and the County Grounds is the most congested segment of interstate highway in the Milwaukee area. The extent to which a main transit investment would reduce traffic congestion is unknown.
 - o WisDOT has computed a cost-effectiveness index for the cost and ridership estimates. WisDOT used current ridership, rather than a TSM alternative, as the base estimating the number of new riders attributable to IRT. WisDOT's estimate assumes that improved bus service and other low cost alternatives would not attract any more

East-West Corridor — Milwaukee, Wisconsin

riders than the current system. Furthermore, their calculation gives LRT the benefit of any new riders resulting from population and employment growth. FTA takes issue with these assumptions and believes that the resulting cost-effectiveness index of \$8-11 (1990 dollars) per new trip overstates the project's merit.

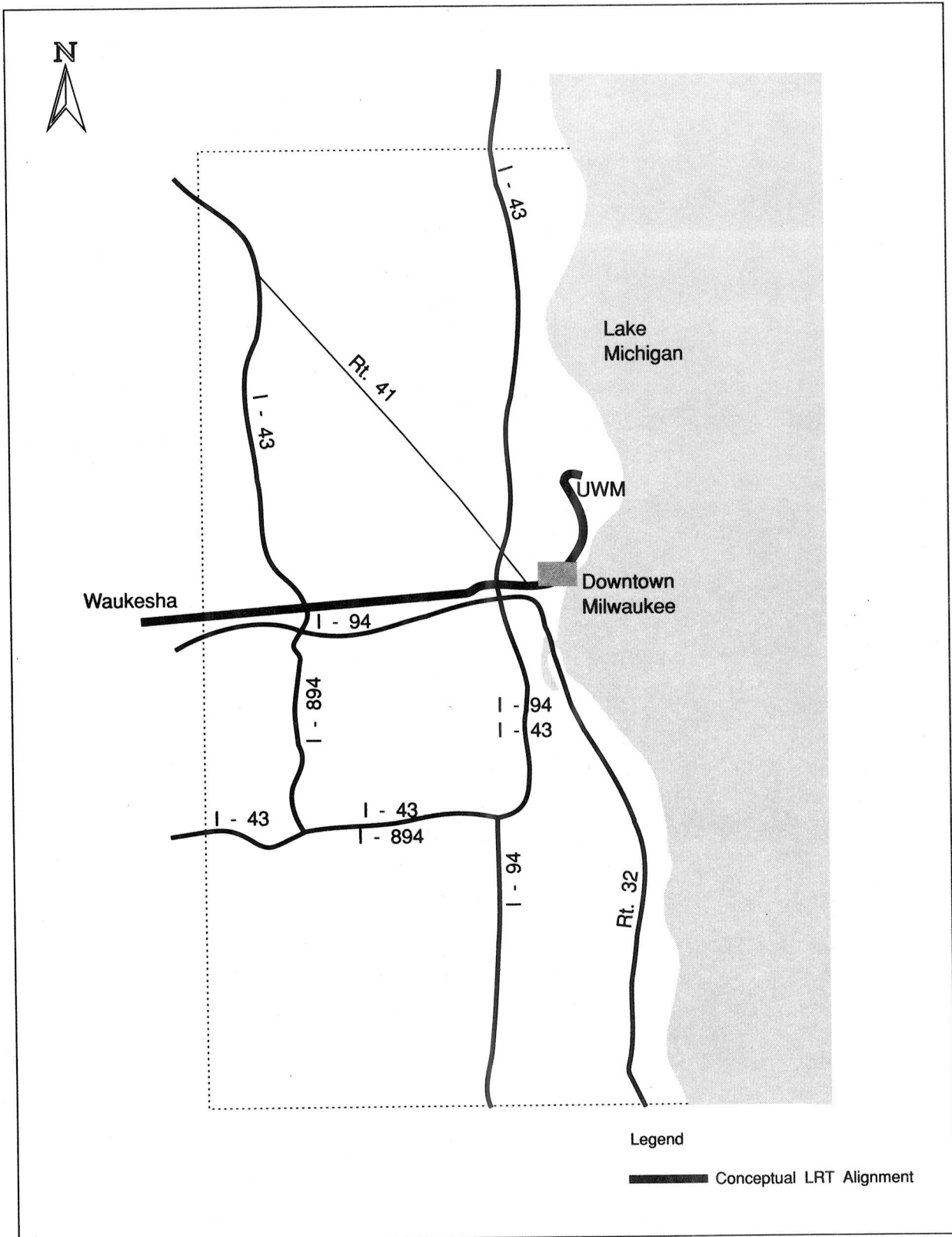
Local Financial Committment

- o WisDOT's preliminary funding strategy assumes a \$332 million project (i.e., the light rail MOS) to be funded by three sources: (a) \$125 million of Interstate Cost Estimate (ICE) funding, (b) \$141 million of section 3 new start funds, and (c) \$66 million in State/local funds. FTA has not yet rated the capital finance plan.
- o No funding sources have yet been identified for operating and maintenance costs.

Other Factors

- o Air Quality. Milwaukee is a "severe" nonattainment area for ozone and an attainment area for carbon monoxide. However, it has yet to be determined whether a transit improvement would have a noticeable effect on pollutant emissions.

Milwaukee: East-West Corridor



PROJECT PROFILE

Hudson River Waterfront

Northern New Jersey

(January 1992)

- Description**
- o New Jersey Transit is studying several Light Rail Transit (LRT), automated guideway transit (AGT) and busway alternatives including several park-and-ride options for a north-south corridor along the Hudson River waterfront. The most expensive alternative consists of 3.7 miles of busway, 7.8 miles of LRT and 1.6 miles LRT and busway on the same right-of-way. These alternatives would serve the planned redevelopment along the Hudson River waterfront across from Manhattan, as well as local residents travelling to Manhattan.
 - o The capital costs of these alternatives range from \$330 to \$487 million (1990\$).
- Status**
- o Alternatives analysis was initiated in November 1988 and is expected to be complete by late spring 1992. The locally preferred alternative could be selected by summer 1992.
 - o In FY 1991, \$20 million of section 3 funds were earmarked for transportation system management (TSM) improvements which would complement any major investment ultimately made. In addition, Congress has earmarked \$95.9 million for the New Jersey Urban Core Project which includes this project as well as others such as the Secaucus Transfer and the Newark-Elizabeth Rail Link. FTA understands that the Secaucus Transfer Project is a higher local priority, so it is unlikely that any of this earmark will be available for the waterfront.
 - o Section 3031 of the Intermodal Surface Transportation and Efficiency Act (ISTEA) of 1991 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 fiscal years 1992 through 1997. The waterfront project is identified as one element which would be eligible for full funding in fiscal years 1992 through 1997.
- Cost-Effectiveness**
- o The proposed project would provide guideway transit service to the waterfront, would provide internal transit circulation along the waterfront, and would connect with NJ Transit Commuter service at Hoboken and with PATH trains to Newark and Manhattan.
 - o According to preliminary estimates of ridership and cost, the cost-effectiveness indices for the alternatives range from \$3 to \$27 per new trip. The alternative most likely to be chosen as the locally preferred alternative has an index of less than \$6 per new trip.

Hudson River Waterfront — Northern New Jersey

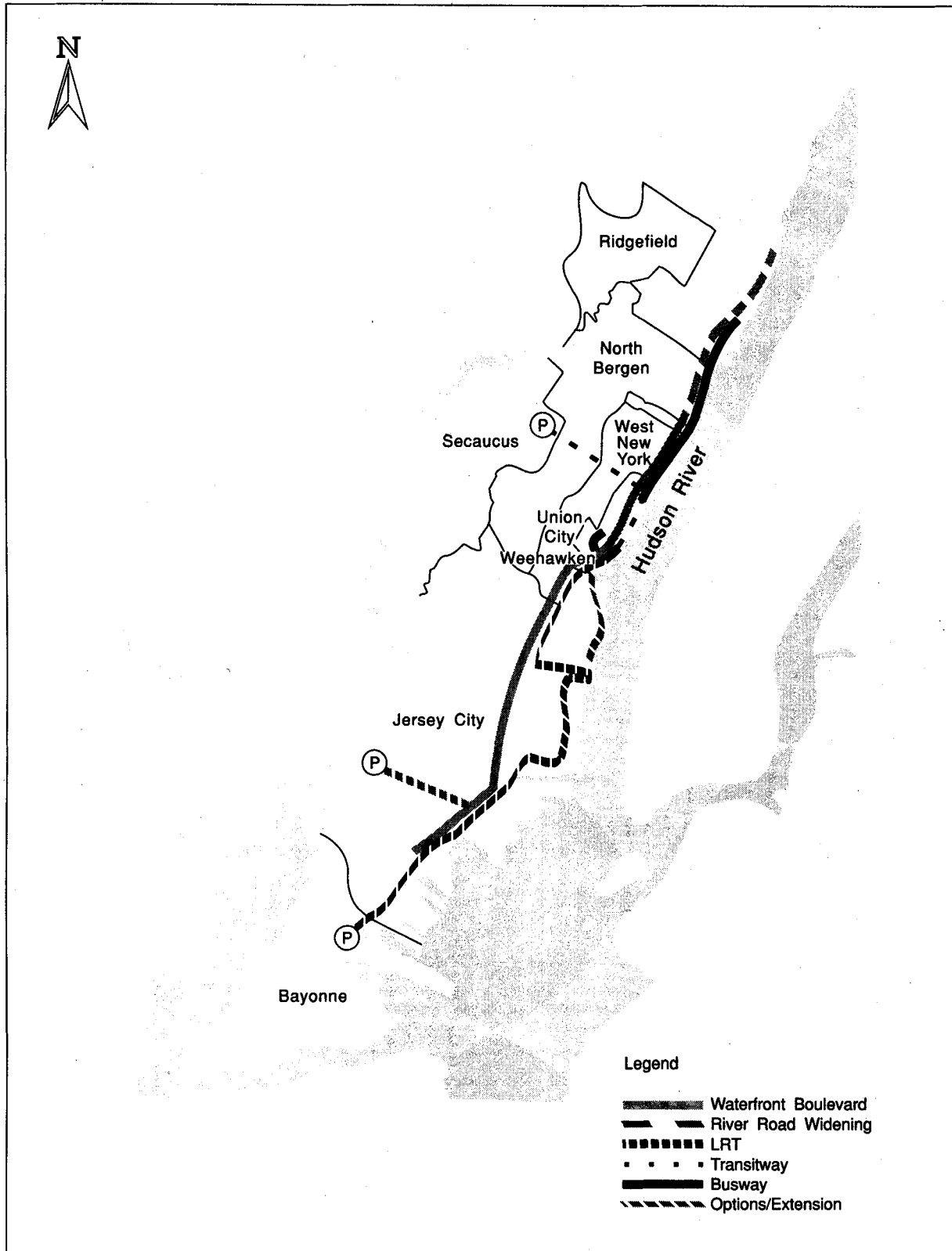
Local Financial Commitment

- o Originally the project was proposed for private sector funding. It now appears that NJ Transit will want to maximize Federal financial participation, though modest private sector participation in this project is possible in the form of right-of-way easements.
- o NJ Transit hopes to use locally funded transit projects such as the Kearny and Waterfront Connections as local match for Secaucus Transfer, Waterfront and the Air Link projects. It is unclear at this time if this is legally possible, but even if it is, the local funds identified are not sufficient to match the Waterfront project alone. Furthermore, the Secaucus Transfer project, which is a higher priority locally, may require some or all of this local match. Therefore the capital financing plan is rated as "low."
- o The stability and reliability of operating assistance for an expanded system are rated "medium" because, despite its current financial difficulties, NJ Transit has a good history of funding transit service.

Other Factors

- o Air Quality. Northern New Jersey is a "severe" nonattainment area for ozone. The region has until November 2007 to meet the National Ambient Air Quality Standard for that pollutant. The region is categorized as a "moderate > 12.7" nonattainment area for carbon monoxide. The impact of the proposed project on regional air quality is not likely to be significant.

Northern New Jersey: Hudson River Waterfront



PROJECT PROFILE

I-405/SR-55 Transitway and Direct Access HOV Ramps Orange County, California (January 1992)

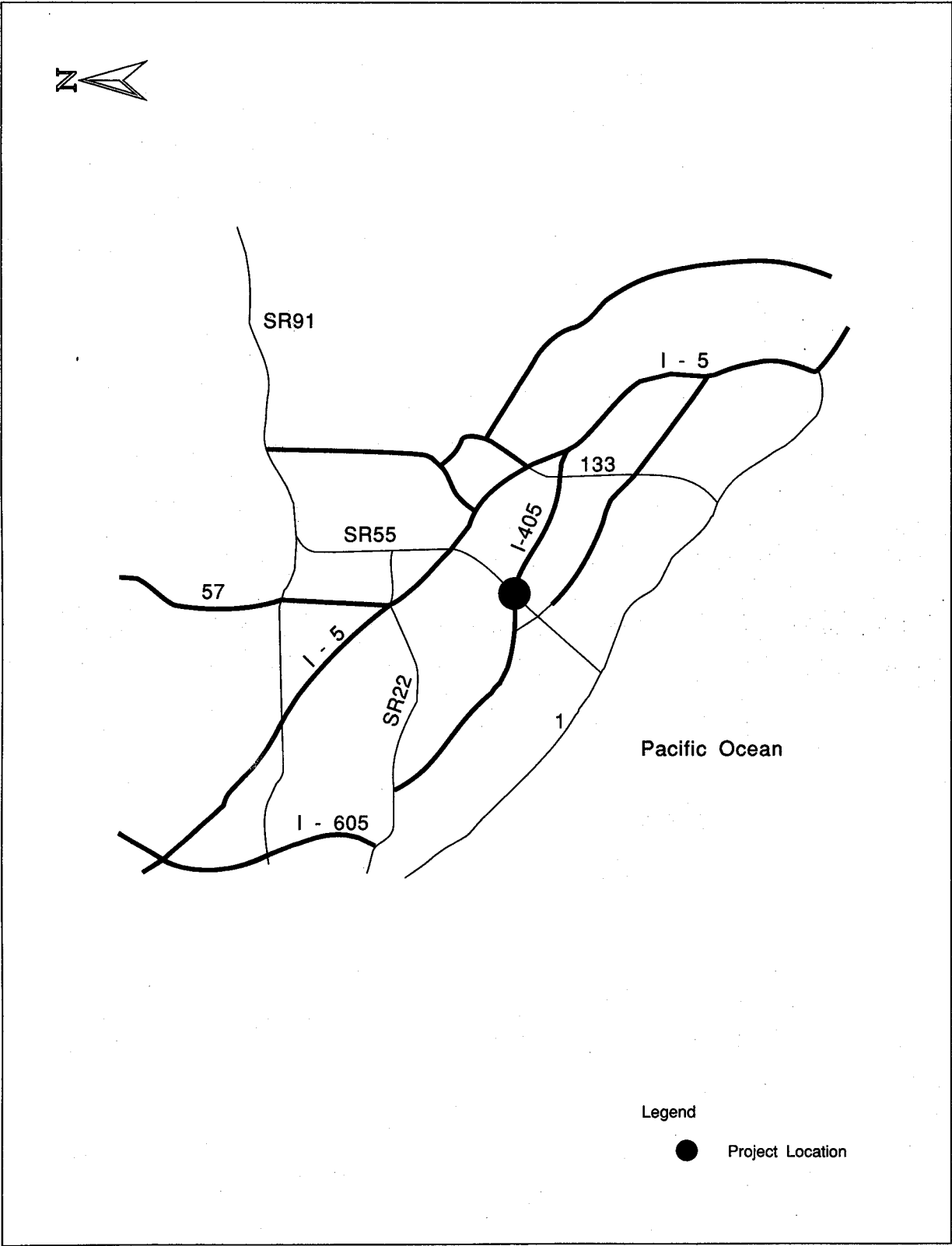
- Description**
- o The Orange County Transportation Authority (OCTA) and the California Department of Transportation (Caltrans) are constructing HOV lanes on a number of Orange County freeways including I-5, I-405, SR-55, and SR-57. OCTA is performing alternatives analysis and preliminary engineering to evaluate the construction of 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. TSM and No-Build alternatives are also being considered.
 - o The capital cost of the transitway segments and direct access ramps is estimated to be \$184.1 million (escalated dollars). The proposed project also includes park-and-ride lots (\$50.6 million) and bus acquisition (\$77.4 million). The total cost of the project is \$312.1 million.
- Status**
- o OCTA is performing alternatives analysis and preliminary engineering simultaneously. There are only two build alternatives under consideration, and since these are limited in scope, the analysis is straightforward. A draft of the Environmental Assessment is presently under FTA review. OCTA's schedule anticipates the completion of alternatives analysis and preliminary engineering by early 1992, following which OCTA plans to submit a capital grant application.
 - o Congress has not appropriated any funds for this project.
- Cost-Effectiveness**
- o 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.
 - o The OCTA has calculated a preliminary cost-effectiveness index of \$4.42 per new trip, which would make the project one of the most cost-effective projects in the new starts pipeline.
- Local Financial Commitment**
- o Orange County is proposing a 75 percent Federal share for this particular project. 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 Federal share is only 39 percent.

I-405/SR55 Transitway — Orange County, California

- o The capital financing plan is rated "medium." 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, specifically including this project.
- o In terms of the stability and reliability of operating revenues, a "medium to high" rating has been given. OCTA's operations are supported by general revenues, which are extremely stable and growing rapidly. The OCTA system is being adequately maintained and replaced through continuing reinvestment. (In 1990, the average age of OCTA's bus fleet was 7.0 years.) 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.
- o Air Quality. Southern California is a nonattainment area for transportation pollutants. This region's EPA classification for carbon monoxide is serious, and it is the only area in the country that receives a classification of extreme for ozone. Implementation of this project is not likely to have a noticeable effect on pollution levels at the regional or local level because there will only be a very small change in regional vehicle miles traveled.

Other
Factors

**Orange County, California:
I - 405/SR - 55 Transitway**



PROJECT PROFILE

Airport Corridor Pittsburgh, Pennsylvania (January 1992)

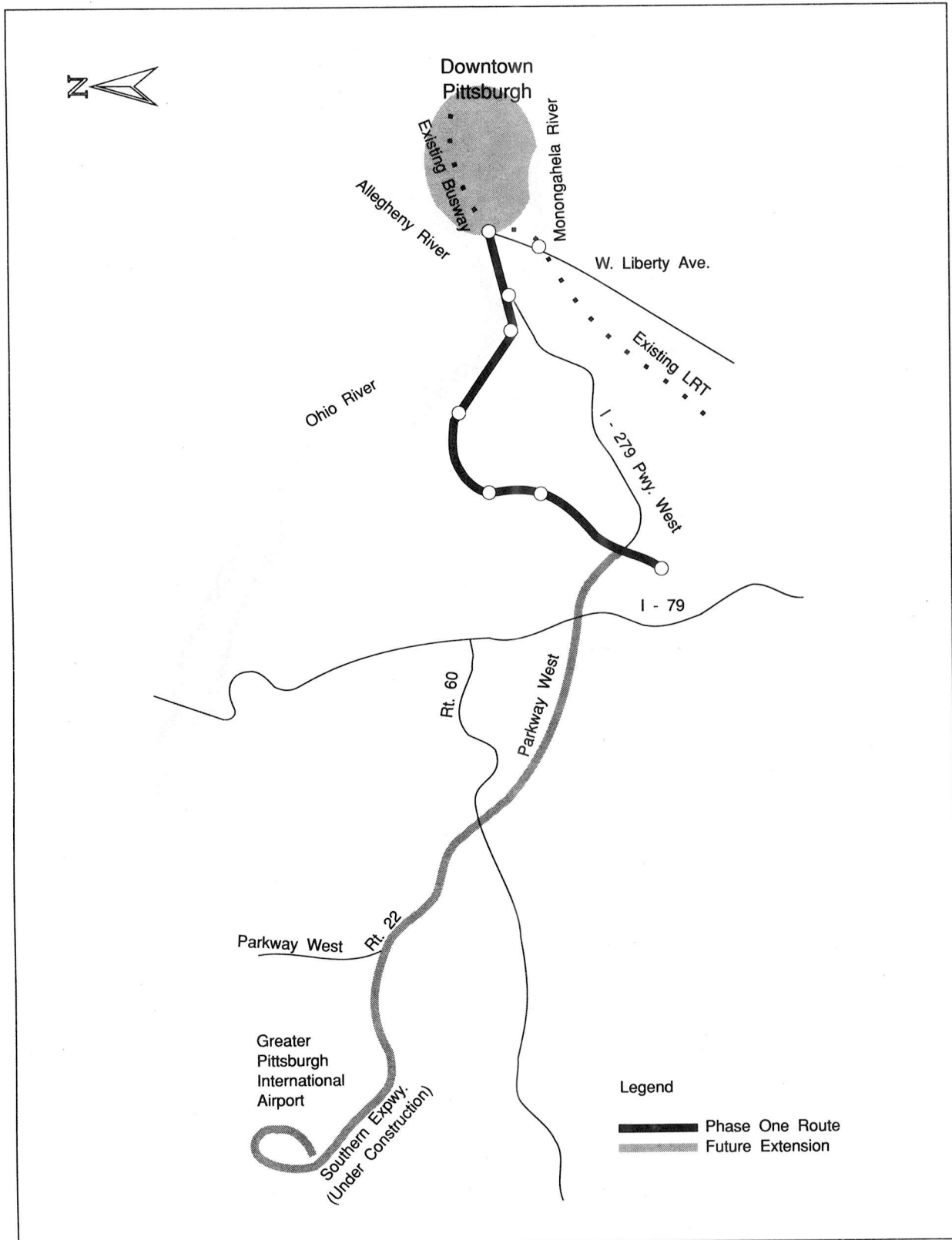
- Description
- o The Airport corridor extends approximately 20 miles between downtown Pittsburgh and the Greater Pittsburgh International Airport. A busway is proposed for the first 7.5 miles where congestion is worst and ridership best. The proposed busway would be largely along an abandoned railroad right-of-way except for a section along the Ohio River which would be adjacent to an active railroad and a new river crossing into downtown. In the remaining 12.5 miles of the corridor, buses would operate on the Parkway West.
 - o Preliminary estimates put the cost of the project at about \$200 million and indicate that the busway would increase transit ridership by about 40 percent in the corridor.
- Status
- o The Port Authority of Allegheny County (PAT) entered into alternatives analysis in May 1991. PAT is in the intermediate stages of alternatives analysis. Several methodology reports developed for a previous alternatives analysis have been applied, in whole or in part, to this study, thereby accelerating the schedule. The expected completion date for this study is late summer 1992.
 - o \$71 million has been reserved for this project in the highway portion of the Intermodal Surface Transportation Efficiency Act of 1991. PAT has not yet submitted a final version of the financial plan which will delineate the amount of FTA funds, if any, that will be required.
- Cost-Effectiveness
- o Preliminary data indicates that the proposed busway is very cost-effective with a cost per new rider of about \$4. The project is expected to increase transit ridership substantially and reduce travel times up to 50 percent for a large number of existing riders.
- Local Financial Commitment
- o PAT is committed to raising 50 percent of the project costs from non-Federal sources. In recent years, PAT has suffered from financial difficulties and has had to reduce service. Because PAT wanted to modernize its existing light rail system, extend its East Busway, build a busway in the airport corridor, and build a rail project in the Spine Line corridor, FTA required a financial capability analysis as the first part of the alternatives analysis. The "Preliminary Local Financial Analysis" was issued in March 1988 and will be completed during the Alternatives Analysis. Last year the state legislature approved a series of small taxes which are dedicated to transit. Pittsburgh share of this is expected to be \$46 million.

Airport Corridor — Pittsburgh, Pennsylvania

- o Since the above analysis, PAT has delayed implementation of the Spine Line project and money for 50 percent of the capital cost for both the East Busway extension and Airport Busway have been included in the State capital budget. Therefore, the capital financing plan is rated as "high" since the local funding is already in place.
- o 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 without the need for major service cuts and fare increases. (In 1990, the average age of PAT's bus fleet was 9.2 years, its rail fleet was 13.3 years.)
- o Air Quality. Pittsburgh is a moderate nonattainment area for ozone and is not classified for carbon monoxide due to insufficient information. The region has until November 1996 to meet EPA's air quality standards. The project's impact on air quality has yet to be determined, though it is likely to be small.

Other Factors

Pittsburgh: Airport Corridor



PROJECT PROFILE

Hillsboro Corridor

Portland, Oregon

(January 1992)

- | | |
|------------------------|---|
| Description | <ul style="list-style-type: none">o The Metropolitan Service District (Metro) is conducting a study of bus and light rail alternatives in the Hillsboro Corridor. The corridor extends from 185th Avenue on the east to the town of Hillsboro on the west, a distance of about 6 miles. The eastern terminus at 185th Avenue corresponds to the western terminus of the Westside LRT project, now in final design.o Tri-Met's latest capital cost estimate for a LRT extension to Hillsboro is \$180 million (escalated dollars, assuming project completed in 1998-1999 time frame). |
| Status | <ul style="list-style-type: none">o FTA approved Metro's request to undertake alternatives analysis in April 1990. The study is now in the intermediate stages of analysis. FTA and Metro have agreed on the alternatives to be studied and are discussing the analysis methodologies. The estimated completion date for the alternatives analysis is late 1992.o Under section 328 of the Department's FY 1991 appropriations act, the full funding agreement for the Westside light rail project shall provide for a future amendment, under the same terms and conditions, covering the Hillsboro project. The bill directs the Secretary to initiate preliminary engineering once local officials select a preferred alternative.o Section 3035(b) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to enter into a multiyear grant agreement with Tri-Met providing \$515 million for the construction of the Westside LRT to 185th Avenue. The agreement shall also provide for the completion of alternatives analysis, the final environmental impact analysis, and preliminary engineering for the Hillsboro extension. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o FTA has been provided very little information on the potential benefits of a Hillsboro extension. Metro's early (system planning) estimates indicate that a Hillsboro extension would attract about 1,920 new transit trips per day in 2005. In total, Metro projects that the extension would carry 5000 to 6000 riders. Based on Metro's early cost and ridership projections, the cost-per-new transit trip would be close to \$20. FTA has not reviewed the technical support for these preliminary forecasts. |

Hillsboro Corridor — Portland, Oregon

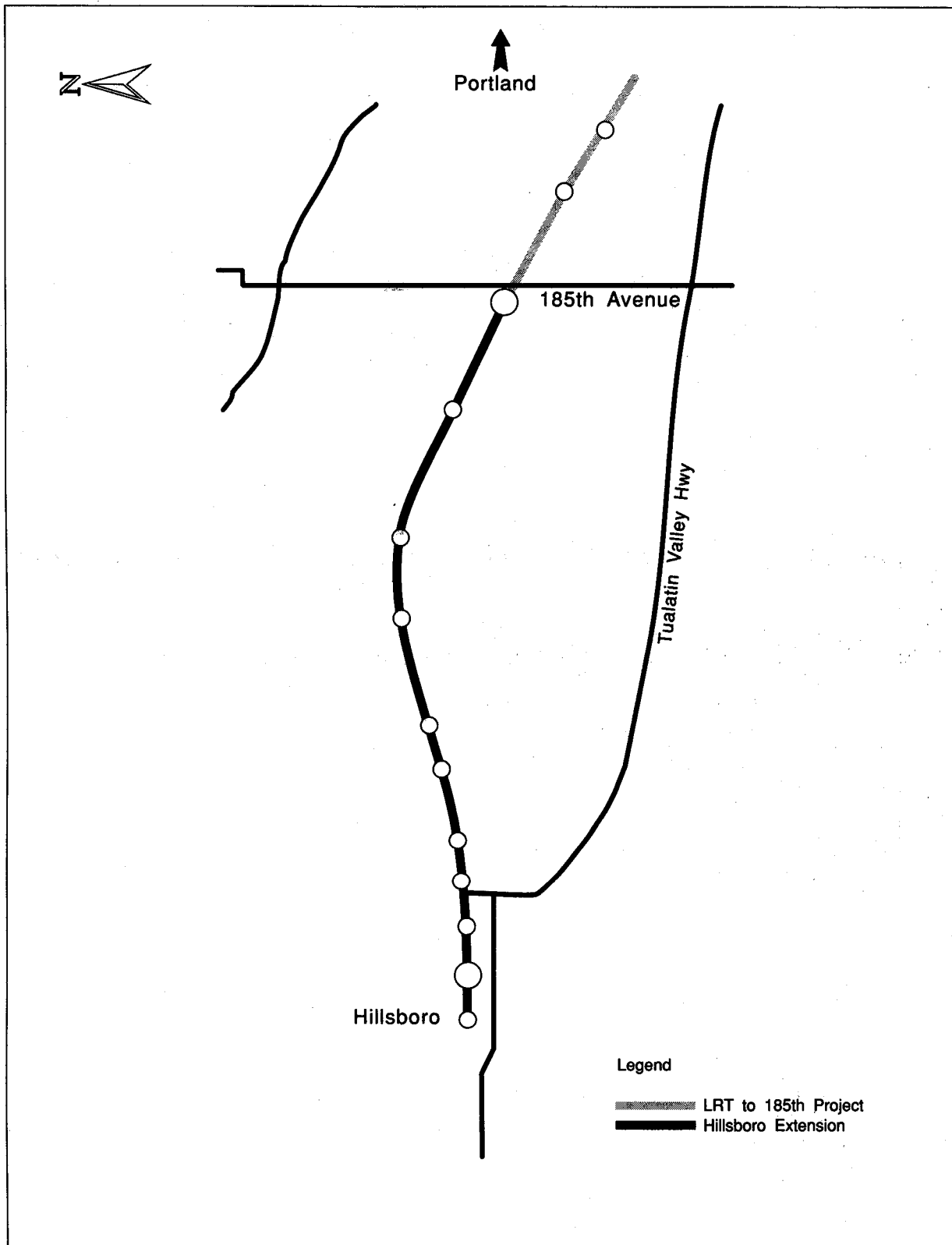
Local Financial Commitment

- o Portland hopes to receive 75 percent of the capital cost from section 3. Three source have been identified for the 25 percent local share: Tri-Met bonds backed by local property taxes, contributions by affected local jurisdictions, and State bonds backed by the lottery. In November 1990, Portland voters authorized Tri-Met to issue \$30 million in bonds for the project. Local governments have entered into a regional compact which establishes the framework for local government contributions, although their ability to contribute may be affected by a tax limitation initiative passed by the voters in November 1990. State legislation was enacted in 1991 which put the State funding in place. FTA has given the capital finance plan a "medium" rating.
- o The stability and reliability of Tri-Met's operating revenues are rated "high" since dedicated sources are in place and are sufficient to operate the project as planned. Tri-Met's analysis shows that a Westside LRT (downtown to 185th) could be operated without a new funding source, assuming that 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 vulnerable to an economic downturn and other uncertainties. (The average age of Tri-Met's bus fleet was 9.6 in 1990.)

Other Factors

- o Land Use. The Portland area has undertaken a number of initiatives to link transit with urban development. One noteworthy example is a cap on the number of parking spaces to be provided in downtown Portland. The effect of the cap is to increase the cost of commuting by private auto, thus promoting transit ridership. A goal of local land use plans is to focus development near transit stations. This should eventually lead to somewhat higher transit ridership and farebox revenues. Tri-Met's ridership forecasts and cost-effectiveness indices take these parking policies and higher station area densities into account.
- o Air Quality. The Portland region has an EPA classification of marginal for ozone and moderate for carbon monoxide. It is unlikely that any of the transit alternatives would have a noticeable effect on air quality because of the small percent change in regional vehicle miles traveled.

Portland: Hillsboro Corridor



PROJECT PROFILE

St. Clair Corridor St. Louis, Missouri Metropolitan Area (January 1992)

- Description
- o The East West Gateway Coordinating Council (EWGCC) is performing alternatives analysis for the corridor between downtown East St. Louis, Illinois, and the vicinity of Scott Air Force Base. One alternative being considered is an 18-to-20 mile extension of the Metro Link light rail project now under construction in St. Louis. The light rail alternative would include 10 to 12 stations and 23 additional light rail vehicles.
 - o EWGCC's preliminary cost estimate for the light rail alternative is \$213 million (1989 dollars), or about \$300 million in escalated dollars. Its preliminary ridership estimate is 13,100 trips in the year 2010.
- Status
- o FTA approved EWGCC's application to enter alternatives analysis FTA in January 1991 per congressional direction. The study is still in the scoping phase and is not expected to be completed before 1993.
- Cost-
Effectiveness
- o FTA found significant technical problems with the system planning work used to justify entry into alternatives analysis.
 - o EWGCC expects total system wide ridership (bus and rail) to increase from 112,000 in 1985 to 160,000 in the year 2000. FTA considers this forecast to be highly optimistic.
 - o There are only 12,300 existing daily transit trips in the corridor, indicating that there is not presently a strong market for public transportation.
- Local
Financial
Commitment
- o The Federal share of the capital cost is assumed to be 80 percent. Sources of State/local matching funds have not been identified.
 - o Preliminary analyses by EWGCC indicate that that the existing sources of revenue are inadequate to implement a new major transit project. Local match may be difficult to obtain because existing sales tax funds are used to fund operations, and are insufficient to meet operating requirements. State funding depends on the willingness of the State of Illinois, which has already dedicated most of its available funds to the Chicago area transit systems. The capital financing plan is rated "low."

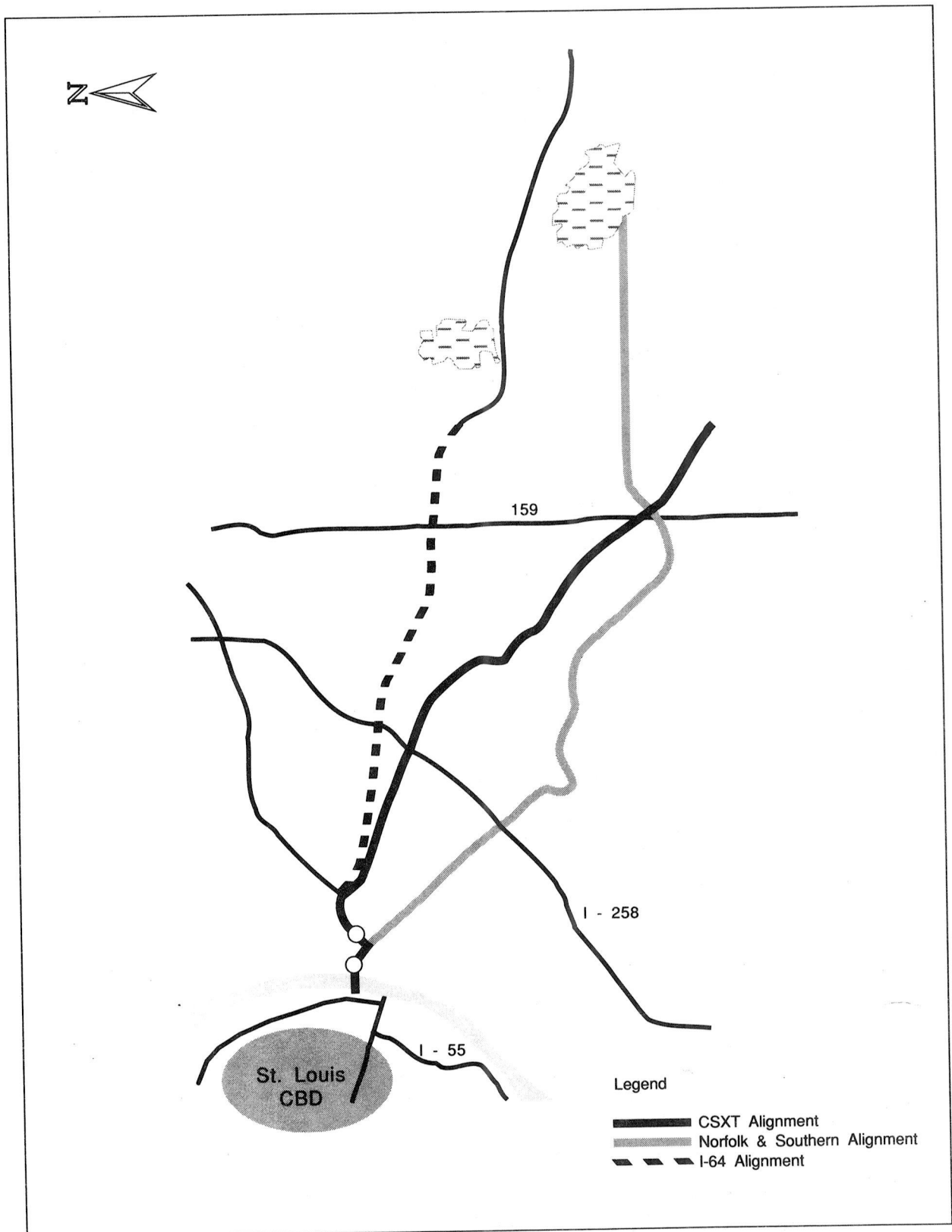
St. Clair Corridor — St. Louis, Missouri

- o 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 when it opens for service in 1993. There is growing concern that bus service will need to be reduced to offset the rail line's operating deficit. The St. Clair extension would lead to an additional \$8 million increase in the annual operating deficit, and no funding sources have yet been identified. In 1990, the average age of the bus fleet was 9.9 years, which suggests some deferred replacement of aged vehicles.

Other Factors

- o St. Louis is a "moderate" nonattainment area for ozone. The region has until November 1996 to meet EPA's air quality standard. St. Louis is also a "not classified" nonattainment area for carbon monoxide. The project would probably have very minimal impact on air quality, although specific data has not yet been developed.

**St Louis:
St. Clair Corridor**



PROJECT PROFILE

Mid-Coast Corridor San Diego, California (January 1992)

- | | |
|----------------------------|---|
| Description | <ul style="list-style-type: none">o The Mid-Coast corridor extends about 16 miles along the Pacific Ocean from I-8 near Old Town north to the vicinity of Del Mar. The Metropolitan Transit Development Board (MTDB) is studying several alignments and termini within this corridor for a possible LRT extension. Two other possible build alternatives are a transportation system management (TSM) alternative consisting of express bus improvements, and a high occupancy vehicle (HOV) lane alternative on I-5.o According to system planning estimates, the capital cost of the alternatives ranges from \$12 million for the TSM alternative to \$500 million for an LRT alternative. |
| Status | <ul style="list-style-type: none">o FTA approved the initiation of alternatives analysis in October 1989. The study is in the intermediate stages and a draft EIS is not expected to be completed before late-1992.o Section 3035(u) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to sign a multiyear grant agreement with the San Diego Metropolitan Transit Development Board providing \$27 million for the completion of alternatives analysis and the final environmental impact statement and to purchase right-of-way. |
| Cost-Effectiveness | <ul style="list-style-type: none">o Freeways and arterial streets in the corridor are highly 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. The MTDB estimates that, for an average transit trip, the LRT alternative would reduce travel time by 3 minutes (compared with an expanded bus alternative). Transit ridership is projected to increase by 12,000 trips per day.o Preliminary cost-effectiveness indices for the LRT alternatives, developed in system planning, fall between \$7.50 and \$24 per new trip. These indices can be expected to change significantly as the alternatives analysis progresses. |
| Local Financial Commitment | <ul style="list-style-type: none">o The MTDB is expected to seek 75 percent section 3 funding for a Mid-Coast Corridor project. If the project is viewed as part of the MTDB's overall fixed guideway construction program, the Federal share would be only 30 percent. |

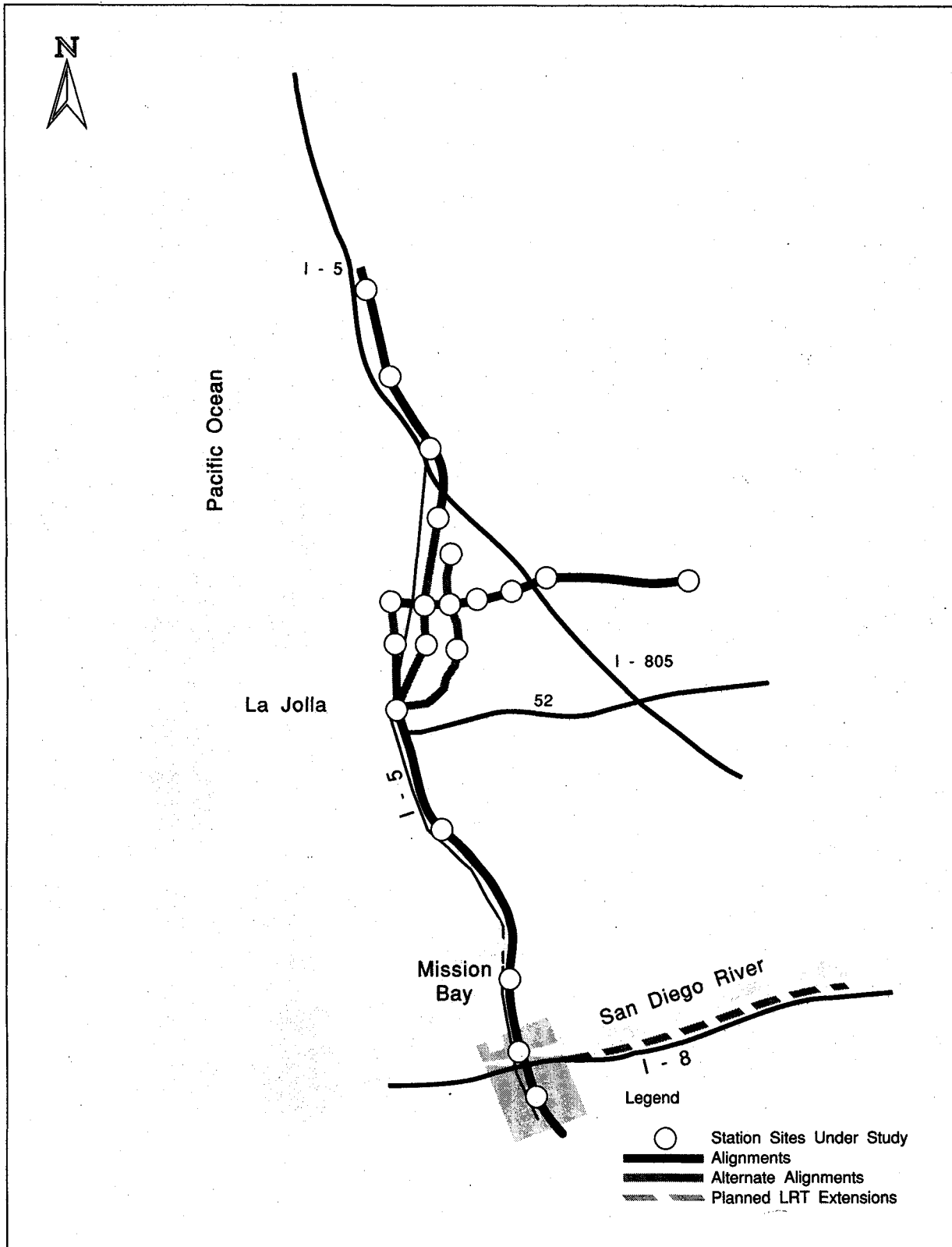
Mid-Coast Corridor — San Diego, California

- o The MIDB's capital financing plan is rated "medium." 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. The transit agency is in reasonably sound financial condition. However, MIDB faces a \$600 million capital funding deficit over the next 20 years—primarily due to a lack of funds for capital replacement.
- o In terms of the stability and reliability of operating revenues, the MIDB 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. (As of 1990, San Diego's existing bus fleet was a relatively old 12.5 years, but the MIDB has purchased 130 buses which will substantially reduce the fleet age.) 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.

Other Rating Factors

- o Air Quality. The San Diego region is a nonattainment area for ozone and carbon monoxide. Their EPA classification for carbon monoxide and ozone is moderate and serious, respectively. It is unlikely that any of the transit alternatives would have a significant effect on air quality at the regional level.

San Diego: Mid-Coast Corridor



PROJECT PROFILE

Airport Corridor San Francisco, California (January 1992)

- Description o This study is investigating a 6-to-7 mile, 3 to 4 station extension of Bay Area Rapid Transit (BART) from Colma to San Francisco International Airport. The BART extensions are estimated to cost \$0.9 to \$1 billion (escalated dollars). Various alignment options, as well as the TSM and No-Build alternatives, are being considered.
- Status o In 1988, the Bay Area entered into a regional agreement on financing rail extensions in San Francisco, San Mateo, Alameda, Contra Costa, and Santa Clara Counties. All of the extensions are to be funded without Federal assistance except those in San Mateo, San Francisco, and Santa Clara Counties.
- o Also included in the regional agreement is the relocation of the CalTrain San Francisco Terminal to Market Street which would greatly improve the attractiveness of this alternative to many of the same commuters who could also potentially use the BART extension.
- o The alternatives analysis phase is nearing completion. FTA is currently reviewing a working draft of the EIS. It is expected that the draft EIS will be approved for public review in February or March, 1992.
- o Section 3032(c) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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.
- Cost-
Effectiveness o The extension of BART is proposed in order to offer an improved transit alternative to the congested highways of Northern San Mateo County as well as to provide BART service to San Francisco Airport. Compared with the TSM alternative, the extension would increase transit's share of the work trips between San Mateo County and downtown San Francisco by 2 to 4 percent, reaching about 42 percent. The difference in mode split depends upon whether the relocation of the CalTrain Terminal is assumed to be in place.

Airport Corridor — San Francisco, California

- o A working draft of the draft EIS indicates that the cost-effectiveness of the proposed extension will be between \$21 and \$51 per new rider, depending upon the alignment in the vicinity of the airport (i.e., a station inside the airport terminal or at the edge of the facility) and whether the CalTrain Terminal relocation is assumed. These numbers indicate that the proposed extension is far less cost-effective than other proposed new start projects.
- Local
Financial
- o 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 FTA funding of this project, resulting in a 28 percent Federal funding share of the entire region's fixed guideway extension program of projects. Therefore, the airport extension has been considered under the Secretary's Overmatch Initiative.
 - o All of the local funding mechanisms called for in the original regional capital financing plan are in place. However, the capital financing plan for this proposed project has been rated "medium" because capital cost estimates for many of the projects have escalated substantially and additional local funding will be required. The Bay Area is currently revising the financing plan to address the shortfall. In addition, a 1991 State Supreme Court decision has raised questions about the legality of the proposed local funding source.
 - o Existing dedicated sales taxes could support a modest SanTrans and BART expansion. Therefore, the stability and reliability of operating assistance have been judged "medium." However, there is some concern because the capital shortfall may negatively impact operating assistance in the out years of the financial plan.
- Other
Factors
- o Air Quality. The San Francisco Bay Area is a "moderate" nonattainment area for ozone. The region has until November 1996 to meet the National Ambient Air Quality Standard for that pollutant. For carbon monoxide, the Bay Area is classified as a "moderate ≤ 12.7 " nonattainment area. The Airport BART extension is forecast to reduce regional vehicle miles travelled by less than 1 percent over the No-Build alternative, or only 0.1 percent over the TSM alternative and, thus, would have minimal impact on regional air quality.

PROJECTS IN SYSTEM PLANNING

PROJECT PROFILE

Pedestrian Crossover Altoona, Pennsylvania (January 1992)

- | | |
|----------------------------|---|
| Description | o This proposed project is to construct a pedestrian crossover at 14th Street in Altoona, Pennsylvania. |
| Status | <p>o This proposal is currently considered to be in the system planning phase of development.</p> <p>o Section 3035(ddd) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to sign a multiyear grant agreement for \$3.2 million with the City of Altoona for construction of the pedestrian crossover.</p> |
| Cost Effectiveness | o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of this proposal. |
| Local Financial Commitment | o The FTA does not currently have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. |
| Other Factors | o Air Quality. The Altoona area is classified as a "marginal" nonattainment area for ozone, and has not been classified for carbon monoxide. It is unlikely that this project would have a significant effect on pollution levels. |

PROJECT PROFILE

Buckhead People Mover

Atlanta, Georgia

(January 1992)

- | | |
|----------------------------------|--|
| Description | <ul style="list-style-type: none">o The Atlanta Regional Council (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.o The FTA has no information on the cost of the project.o The FTA has no estimate of ridership on the proposed people mover. |
| Status | <ul style="list-style-type: none">o The project is considered to be in the system planning phase of project development.o Section 3035(s) of ISTEA of 1991 requires that FTA enter into a multiyear grant agreement with ARC for \$0.2 million to complete the conceptual engineering of the proposed system. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of the proposed project. It is presumed that such information would be developed during the conceptual engineering study called for in ISTEA. |
| Local
Financial
Commitment | <ul style="list-style-type: none">o The FTA does not currently 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 would be developed during the conceptual engineering study called for in ISTEA.o In the past, MARTA's rail rapid transit program has been the region's highest priority requiring all of the section 3 funding and local tax revenue 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 rate of growth of the 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 four rail extensions now under construction and one in final design. When these segments, totalling 15 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. |

Buckhead People Mover — Atlanta, Georgia

**Other
Factors**

- o Air Quality. EPA has classified Atlanta as a "serious" nonattainment area for ozone, and as attainment for carbon monoxide and respirable particulates. The effects of the proposed people mover on air quality have not been determined.

PROJECT PROFILE

Greensboro Commuter Rail

Atlanta, Georgia

(January 1992)

- | | |
|----------------------------------|--|
| Description | <ul style="list-style-type: none">o 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.o The FTA has no information on the cost of the project.o The FTA has no estimate of ridership on the proposed line. |
| Status | <ul style="list-style-type: none">o Section 3035(rr) of ISTEA of 1991 requires that FTA enter into a multiyear grant agreement with ARC for \$0.1 million to study the feasibility of the proposed commuter rail line. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of the proposed project. It is presumed that such information would be developed during the feasibility study called for in the ISTEA. |
| Local
Financial
Commitment | <ul style="list-style-type: none">o The FTA does not currently 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 such information would be developed during the feasibility study called for in the ISTEA.o In the past, MARTA's rail rapid transit program has been the region's highest priority requiring all of the section 3 funding and local tax revenue 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 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 four rail extensions now under construction and one in final design. When these segments, totalling 15 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. |

Greensboro Commuter Rail — Atlanta, Georgia

Other Factors

- o Air Quality. EPA has classified Atlanta as a "serious" nonattainment area for ozone, and as attainment for carbon monoxide and respirable particulates. 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.

PROJECT PROFILE

North Station - South Station Rail Link

Boston, Massachusetts

(January 1992)

- | | |
|----------------------------|---|
| Description | o 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 possibly permit AMIRAK service north of Boston. |
| Status | o Section 3035(ii) of the Intermodal Surface Transportation Efficiency Act of 1991 directs FTA to provide \$0.25 million to fund a feasibility study in fiscal year 1992. |
| Cost Effectiveness | o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of this proposal. |
| Local Financial Commitment | o The FTA does not currently have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. Recently the Massachusetts Bay Transportation Authority (MBTA) has experienced financial constraints with other FTA funded projects. Therefore, it is likely MBTA would seek a Federal share of 80 percent. |
| Other Factors | o Air Quality. The Boston area is a "moderate" nonattainment area for ozone and a "serious" nonattainment for carbon monoxide. It is unlikely that this project would have a significant effect on pollution levels at the regional scale. |

PROJECT PROFILE

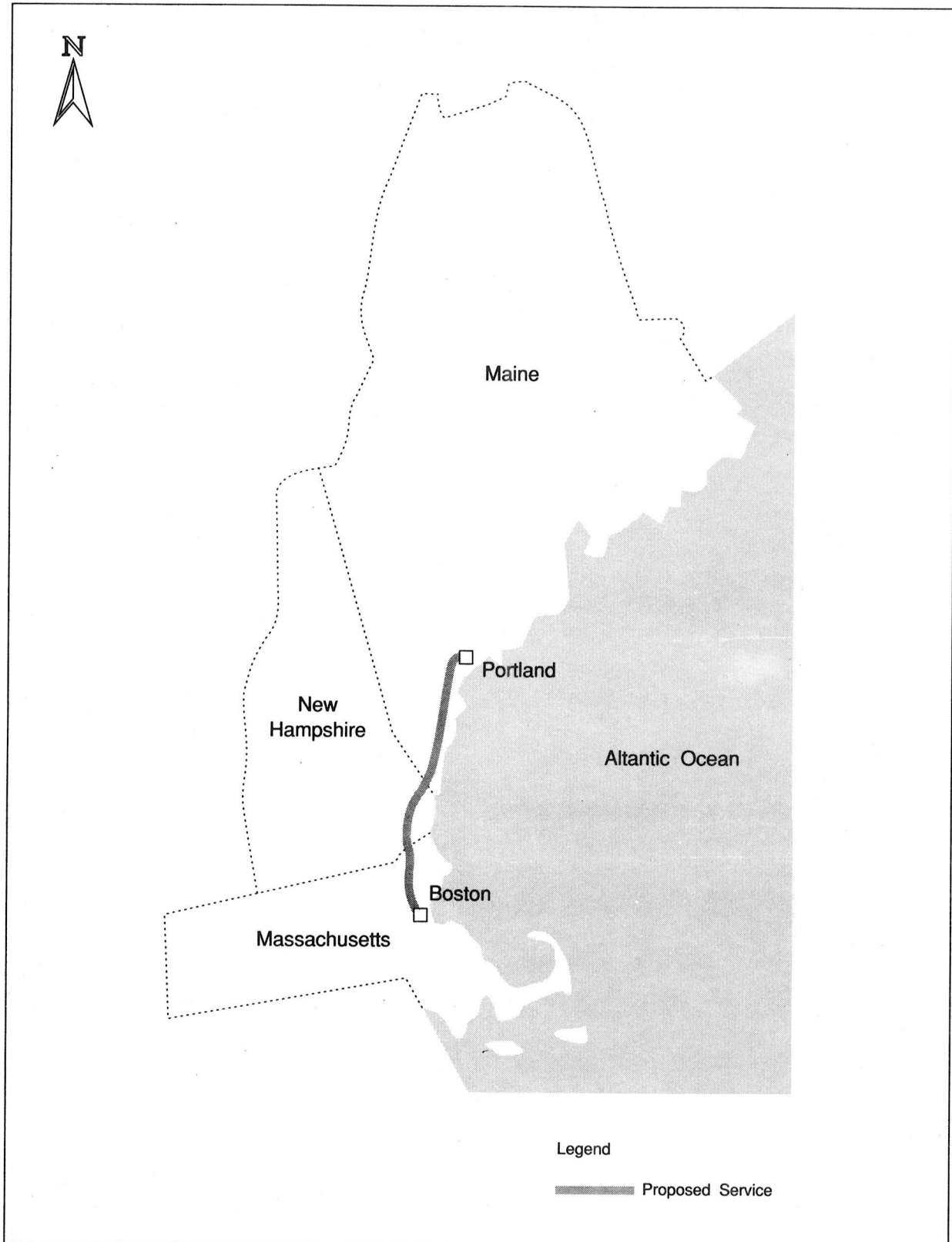
Boston to Portland Commuter Rail Boston, Massachusetts (January 1992)

- Description**
- o This project would initiate commuter rail service between Boston, Massachusetts and Portland, Maine. Currently, no passenger rail service is provided on much of this 114 mile route. The first 38 miles of track, between Boston's North Station and the New Hampshire State line, is owned by the Massachusetts Bay Transportation Authority (MBTA). This segment of the track is well maintained. The remaining 76 miles are owned by Guilford Transportation Industries (GTI) where a substantial amount of rail rehabilitation would be required.
 - o A very preliminary feasibility study found that the project would cost \$50 million in 1991 dollars -- \$30 million for track, signals, etc. and \$20 million for rolling stock. The cost of stations, parking lots, feeder buses, etc. are not included in this estimate. Amtrak estimated over \$5 million in annual operating costs. Ridership is estimated at 1,000 trips per day.
- Status**
- o Section 3035(pp) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 authorizes \$30 million for investment in the project.
 - o Because the total Section 3 share is expected to exceed \$25 million, the project is likely to be subject to the Section 3(i) new starts criteria. However, because of the relative simplicity of the project, alternatives analysis could possibly be completed by the end of 1992.
 - o This proposal is currently considered to be in the system planning phase of project development. The feasibility study conducted by the Maine and New Hampshire Departments of Transportation determined preliminary corridor alignments and station locations.
- Cost Effectiveness**
- o Other than the ridership forecast noted above, FTA does not currently have any substantive information on the mobility benefits or cost-effectiveness of this proposal.
- Local Financial Commitment**
- o The FTA does not currently have any definitive information on the proposed Federal share, or the sources of State/local funding for capital and operations.

Other
Factors

- o Air Quality. For ozone, Boston is a "serious" nonattainment area and Portland is a "moderate" nonattainment area. For carbon monoxide, Boston is a "moderate" nonattainment area and Portland has not yet been classified. It is unlikely that this project would have a significant effect on pollution levels at the regional scale.

Boston - Portland Commuter Rail



PROJECT PROFILE

Charlotte Priority Corridor Charlotte, North Carolina (January 1992)

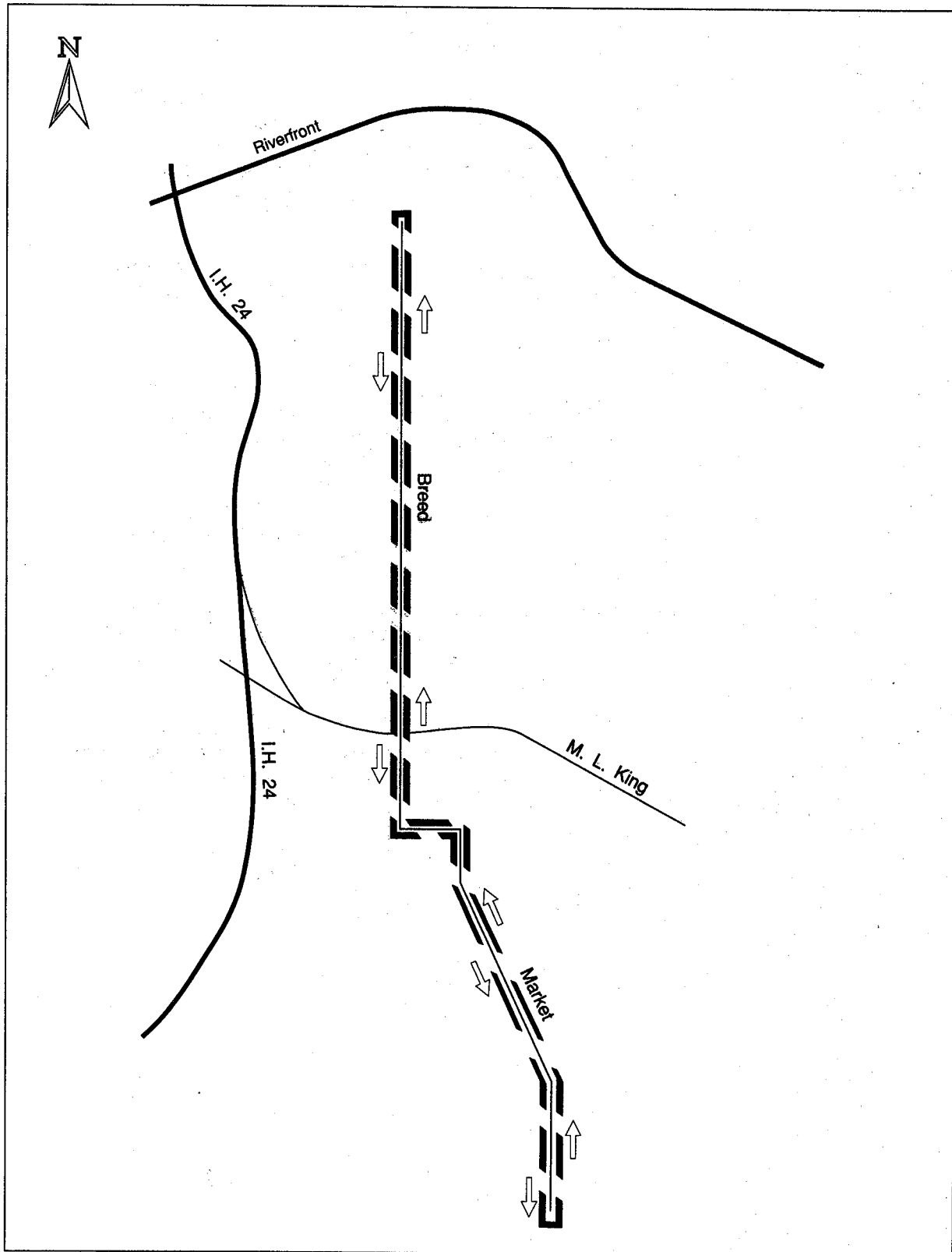
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|----------------------------|---|
| Description | o The City of Charlotte intends to examine the potential benefits of light rail and other transit alternatives in several corridors, leading to the selection of a priority corridor for more detailed study. |
| Status | <p>o This proposal is currently considered to be in the system planning phase of development.</p> <p>o Section 3035(r) of the Intermodal Surface Transportation Efficiency Act of 1991 directs FTA to sign a multiyear grant agreement with the City of Charlotte providing \$0.5 million for the completion of systems planning and alternatives analysis for a priority corridor.</p> |
| Cost Effectiveness | o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of this proposal. |
| Local Financial Commitment | o The FTA does not currently have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. |
| Other Factors | o Air Quality. The Charlotte area is a "moderate" nonattainment area for ozone and it is not classified for carbon monoxide. It is unlikely that this project would have a significant effect on pollution levels at the regional scale. |

PROJECT PROFILE

Downtown Trolley Chattanooga, Tennessee (January 1992)

- | | |
|----------------------------------|---|
| Description | <ul style="list-style-type: none">o The Chattanooga Area Regional Transportation Authority (CARTA) is proposing a 3-mile, downtown trolley circulator and three parking garages. The circulator would use battery-powered, rubber-tired buses. Ridership for the year 2001 is estimated at about 5000 trips per day. The cost estimate is \$17 million. |
| Status | <ul style="list-style-type: none">o CARTA has performed system planning and is in the process of preparing an application for \$11.9 million in Section 3 bus funding. Congress has earmarked \$2 million Section 3 funds for the project.o Section 3035(v) of the Intermodal Surface Transportation Efficiency Act of 1991 directs FTA to sign a multiyear grant agreement with CARTA for \$2 million to provide for the completion of alternatives analysis. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o Other than the ridership forecasts noted above, FTA has not seen substantive information on the mobility benefits or cost-effectiveness of the project. |
| Local
Financial
Commitment | <ul style="list-style-type: none">o CARTA is seeking 70 percent Federal funding under the Section 3 program. State funding of 11.7 percent is being set aside and local funding of 18.3 percent is being programmed in the city's capital budget.o The stability and reliability of CARTA's operating assistance plan have not been rated. Local officials are proposing to subsidize the trolley circulator's operating cost with presumed surplus revenues from the parking garages. |
| Other
Factors | <ul style="list-style-type: none">o Air Quality. The Chattanooga region is an attainment area for transportation pollutants. |

Chattanooga: Downtown Trolley



PROJECT PROFILE

Highland Hills Extension

Cleveland, Ohio

(January 1992)

Description o This project 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 o 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 the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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.

Cost Effectiveness o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of this proposal.

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

Other Factors o Air Quality. The Cleveland area is a "moderate" nonattainment area for ozone and a "moderate" nonattainment for carbon monoxide. It is unlikely that this project would have a significant effect on pollution levels at the regional scale.

PROJECT PROFILE

Northeast Ohio Commuter Rail Cleveland, Ohio (January 1992)

- | | |
|----------------------------|--|
| Description | o This proposal involves commuter rail service to connect urban and suburban areas of northeastern Ohio. |
| Status | o This proposal is currently considered to be in the system planning phase of development.

o Section 3035(w) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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. |
| Cost Effectiveness | o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of this proposal. |
| Local Financial Commitment | o The FTA does not currently have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. |
| Other Factors | o Air Quality. The northeastern region of Ohio is a "moderate" nonattainment area for ozone and a "moderate" nonattainment for carbon monoxide. It is unlikely that this project would have a significant effect on pollution levels at the regional scale. |

PROJECT PROFILE

RAILTRAN Commuter Rail Dallas-Ft. Worth, Texas (January 1992)

- Description:**
- o The RAILTRAN project would initiate commuter rail service between Dallas and Fort Worth, with a spur serving the Dallas/Fort Worth (DFW) Airport. Approximately 35 miles of service would be offered jointly by the cities of Dallas and Fort Worth at a capital cost of about \$120 million.
 - o Implementation of commuter rail service is planned for three stages: 1) Dallas to South Irving, 2) extending service on to Ft. Worth, 3) service to DFW Airport.
- Status:**
- o In 1984 the RAILTRAN right-of-way was purchased with FTA assistance as directed by Congress. Since then, Railtran has been operating freight service on the tracks.
 - o An Environmental Assessment (EA) is being prepared for the first phase of service. A planning and implementation study should be completed by March 1992. Complete service is expected to be offered in 1998.
 - o Section 3035(x) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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.
 - o Because of the small Federal share proposed for this project, it is not subject to the new starts criteria in Section 3(i) of the Federal Transit Act. An initial planning study has been completed for the project and it is expected that the earmarked FY 1992 funds will be obligated prior to the end of FY 1992.
- Cost-Effectiveness**
- o Newspaper reports indicate that RAILTRAN is expected to carry about 8,000 riders a day. FTA has no other information on the mobility benefits or cost-effectiveness of this proposed project.
- Local Financial Commitment**
- o FTA does not know what organization will build or operate the RAILTRAN system, nor does it currently have any information on the cost of the proposal, the proposed Federal share, or the sources of State/local funds for capital and operations.

RAILTRAN-Commuter Rail — Dallas and Fort Worth, Texas

**Other
Factors**

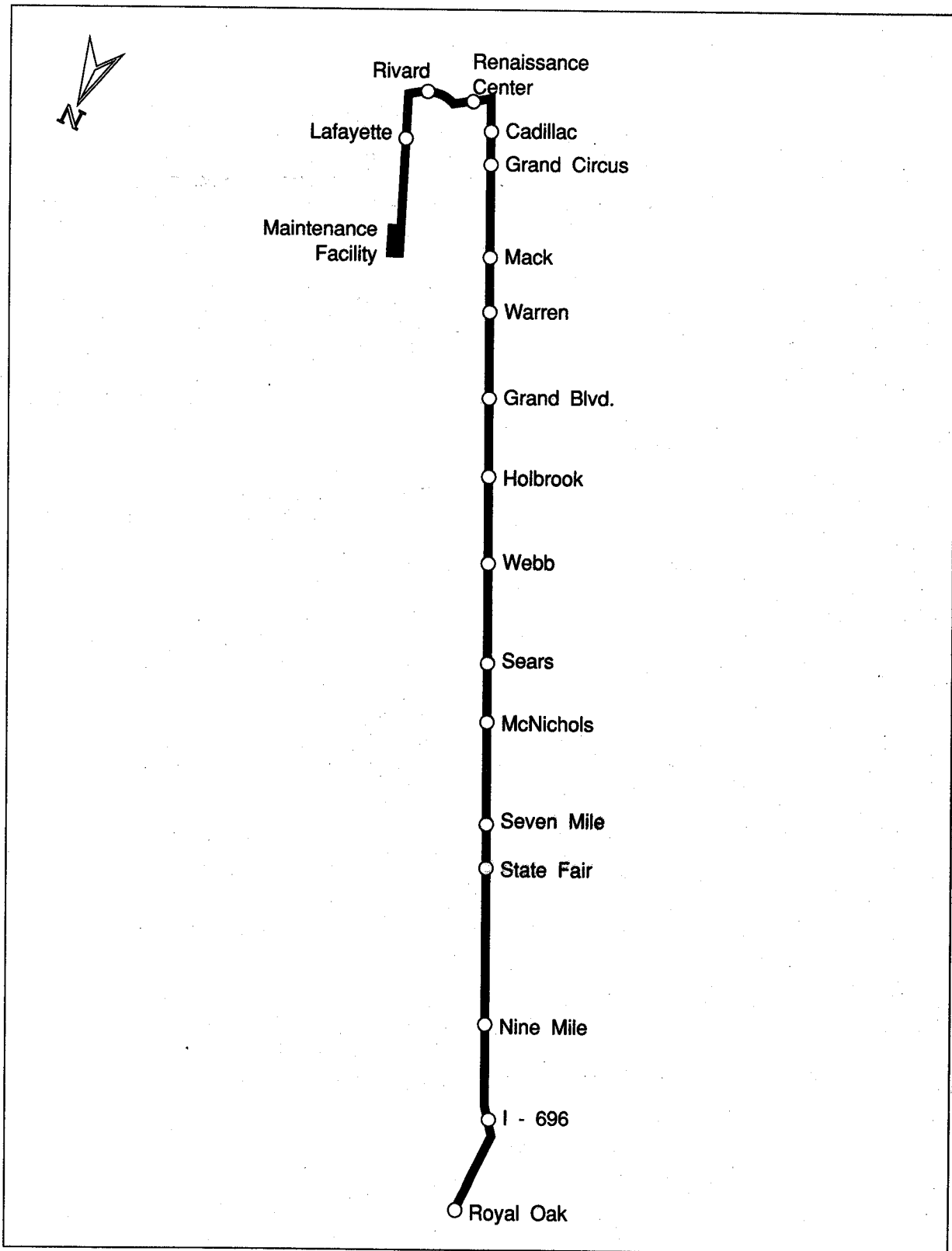
- o Air Quality. Dallas is a "moderate" nonattainment area for ozone. The region has until November 1996 to meet the National Ambient Air Quality Standard for that pollutant. For carbon monoxide, Dallas is an attainment area. The RAILTRAN project, because of its low attraction of new transit ridership in comparison to total regional auto trips, is expected to have minimal impact on regional air quality.

PROJECT PROFILE

Woodward Corridor Detroit, MI (January 1992)

- Description o 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. 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 o Section 3035(m) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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.
- o 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 not contacted the FTA to continue work on this project. Much of the information developed in the earlier studies would need to be updated if project planning is resumed.
- Cost-
effectiveness o FTA does not have any current information on the mobility benefits or cost-effectiveness of this proposal. In 1984 and 1985, FTA rated this project and concluded that it would not be competitive with other candidates for new start funding.
- Local
Financial
Commitment o FTA does not have any current information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. Traditionally, the State of Michigan has provided the 20 percent local share required for transit capital investments in Detroit.
- Other
Factors o Air Quality. Detroit is a "moderate" nonattainment area for ozone and a "not classified" nonattainment area for carbon monoxide. It is unlikely that this project would have a significant effect on pollution levels at the regional scale.

**Detroit:
Woodward Corridor**



PROJECT PROFILE

South Corridor
Kansas City, MO
(January 1992)

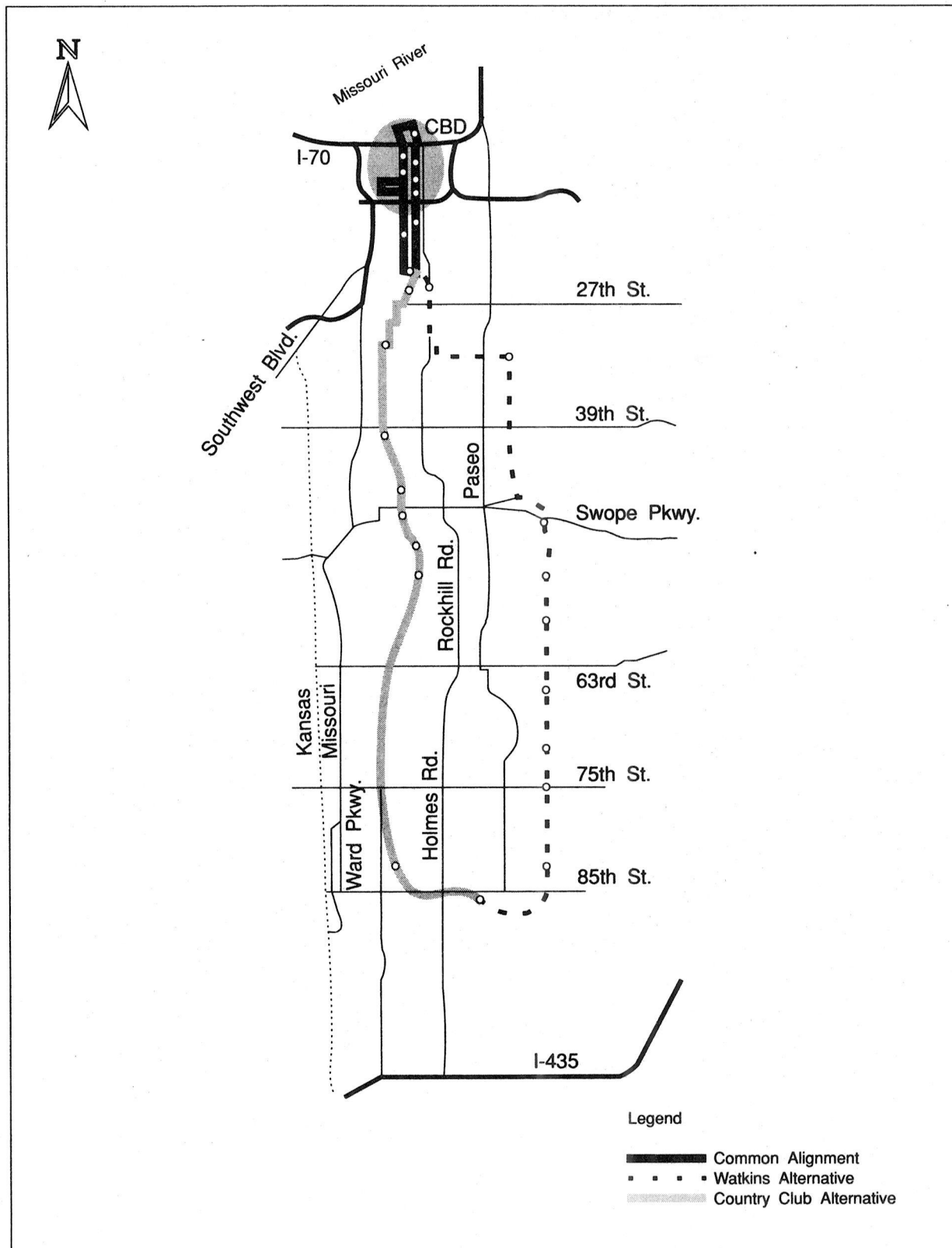
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|-----------------------------------|---|
| Description | <ul style="list-style-type: none">o The Kansas City Area Transportation Authority (KCATA) is interested in undertaking alternatives analysis in the South Corridor. The corridor extends from the riverfront and downtown Kansas City south via Crown Center to 85th Street. The alternatives to be considered include LRT and busway/HOV lanes.o KCATA's preliminary capital cost estimate for the 10-to-11-mile LRT alternative is \$245 million (1990 dollars). |
| Status | <ul style="list-style-type: none">o KCATA completed a system planning study in May 1991 and is now applying to enter alternatives analysis. KCATA's reasons for wanting to enter alternatives analysis are to see if the project is affordable and "if strong local support exists."o Section 3035(k) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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. |
| Cost-Effectiveness | <ul style="list-style-type: none">o According to KCATA's preliminary studies, few few transportation problems solvable by LRT currently exist in the study area. These studies also indicate that LRT would cost at least 10 times as much as an all-bus alternative and attract no more than 4 percent more riders, thus generating few transportation or other benefits.o Preliminary cost-effectiveness indices are \$50 to \$89 per new trip for the two LRT alignments studied. The indices for the busway/HOV alternatives for the same alignments are \$1747 and \$2261 per new trip. These value are far above any reasonable test of cost-effectiveness. FTA has seen few, if any, transit proposals that appear to be less cost-effective at this stage in the planning process. |
| Local Financial Commitment | <ul style="list-style-type: none">o The Federal share of this project is assumed to be 80 percent. No source of local capital funding has yet been identified.o The capital financing plan and the stability and reliability of operating and maintenance funds are rated "low." FTA considers the assumptions made in the KCATA's financial analysis to be highly questionable. Nevertheless, the analysis concluded that KCATA lacks the resources to build and operate a major transit project. |

South Corridor — Kansas City, Missouri

**Other
Factors**

- o Air Quality. Kansas City is classified as a "submarginal" nonattainment area for ozone. It is in violation of the standards but has a minimal design value. For carbon monoxide, Kansas City is considered to be an attainment area. The effect of the project on air quality is likely to be minimal.

Kansas City: South Corridor

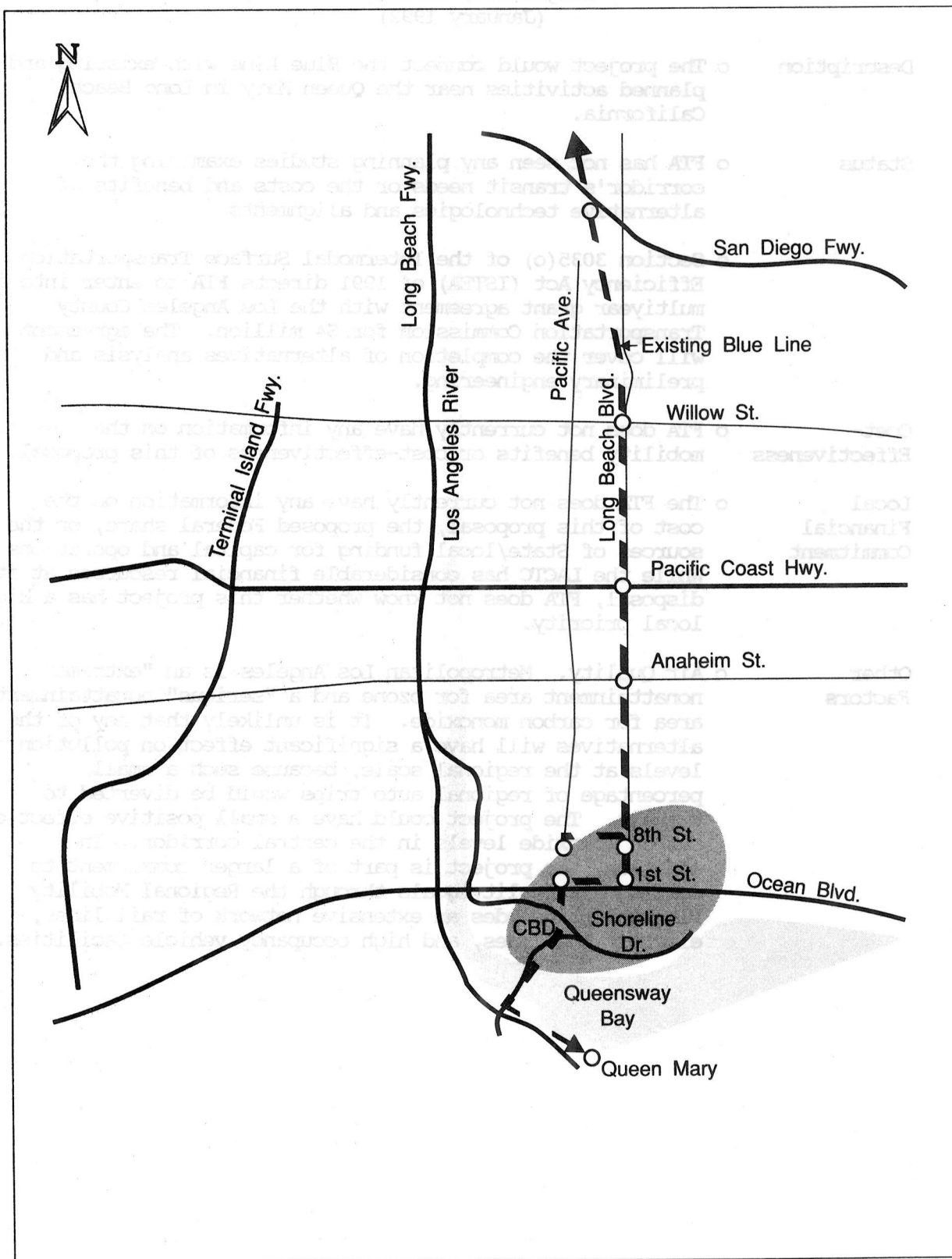


PROJECT PROFILE

Metro Link Long Beach, California (January 1992)

- | | |
|----------------------------------|---|
| Description | o The project would connect the Blue Line with existing and planned activities near the Queen Mary in Long Beach, California. |
| Status | <p>o FTA has not seen any planning studies examining the corridor's transit needs or the costs and benefits of alternative technologies and alignments.</p> <p>o Section 3035(o) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to enter into a multiyear grant agreement with the Los Angeles County Transportation Commission for \$4 million. The agreement will cover the completion of alternatives analysis and preliminary engineering.</p> |
| Cost-
Effectiveness | o FTA does not currently have any information on the mobility benefits or cost-effectiveness of this proposal. |
| Local
Financial
Commitment | o The FTA does not currently have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. While the LACTC has considerable financial resources at its disposal, FTA does not know whether this project has a high local priority. |
| Other
Factors | o Air Quality. 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 will 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. |

Long Beach Metro Link



PROJECT PROFILE

Multimodal Transit Parkway Los Angeles, California (January 1992)

- Description** o The Los Angeles County Transportation Commission (LACTC) is proposing to undertake a study of highway and transit alternatives in the Santa Monica Boulevard corridor. The study would 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 \$30 million.
- Status** o 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. LACTC is now negotiating for the purchase of a railroad right-of-way in the corridor and is proposing to revive the consideration of alternatives.
- o Section 3035(eee) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to enter into a multiyear grant agreement with LACTC for \$15 million. This agreement would cover the construction of the initial 2.5-mile segment. An additional \$8.9 million was authorized in section 1108 of ISTEA.
- Cost-Effectiveness** o The FTA has not been provided any information on the mobility benefits or cost-effectiveness of this proposal.
- Local Financial Commitment** o LACTC is proposing a Federal share of about 75 percent. It should be noted, however, that LACTC is financing several major transit investments without any Federal assistance. These projects include: the Blue Line between Los Angeles and Long Beach (\$877 million); a planned Blue Line Extension to Pasadena (\$688 million); the Green Line from Norwalk to El Segundo (at least \$1 billion); a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester (\$215 million); and several planned commuter rail projects.
- o Los Angeles' transit programs benefit from several State and local dedicated revenue resources. The primary local resource is a 0.5 percent countywide sales tax, known as Proposition A, which was adopted in 1980. Thirty-five

Multimodal Transit Parkway —Los Angeles, California

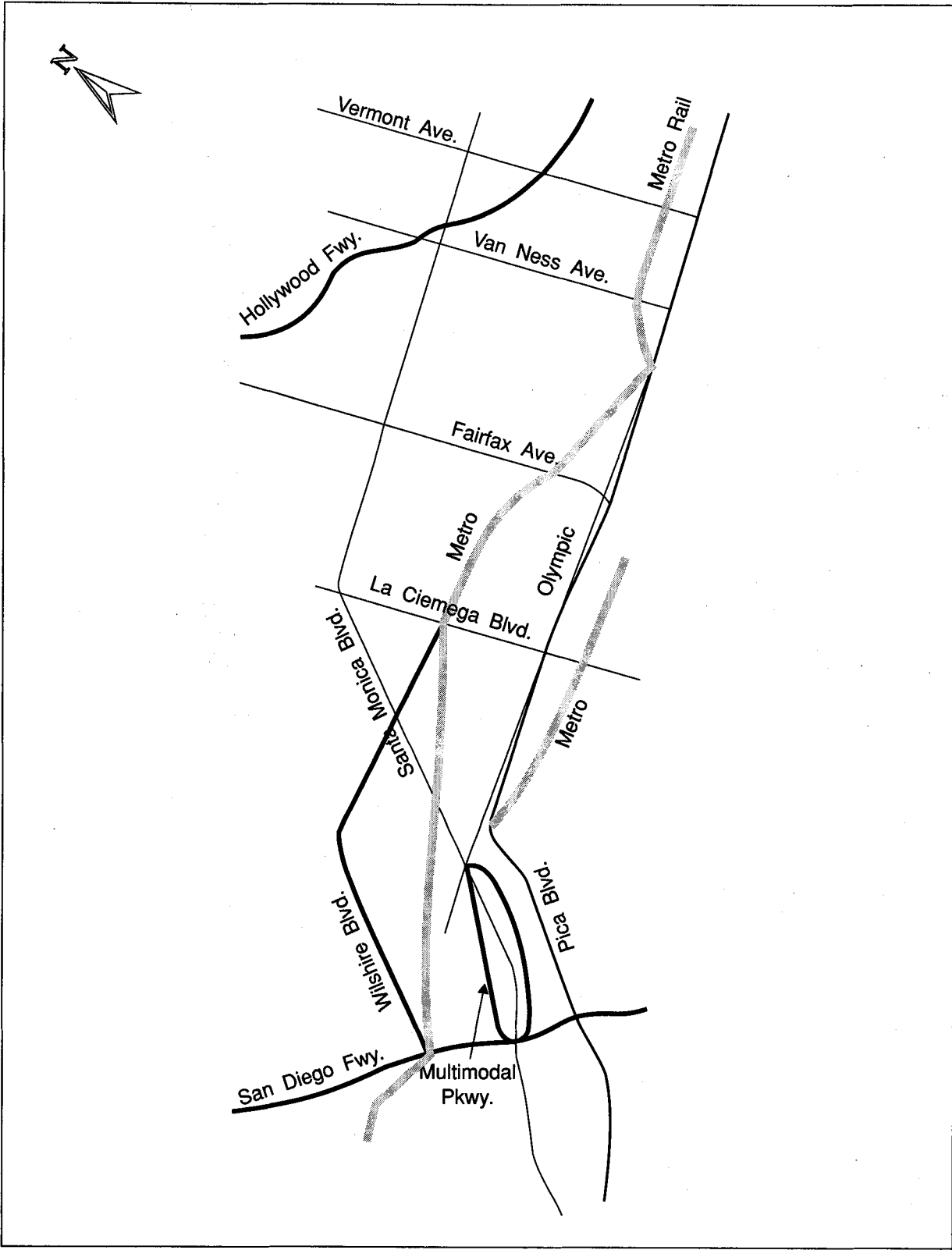
percent of this tax, about \$130 million annually, is dedicated to the construction of a countywide rail system. An additional 0.5 percent sales tax dedicated to transit and transit-related highway improvements was enacted in November 1990.

- o In June 1990, funding for public transit in California was enhanced by the passage of Propositions 111, 116, and 108. Proposition 111 increases the State's motor fuels tax by a total of 9 cents over a 5-year period, providing \$18.5 billion for transportation projects over the next 10 years. Proposition 116 authorized \$2 billion in general obligation bonds for rail transportation facilities. Proposition 108 authorized an additional \$1 billion in general obligation bonds for the acquisition of right-of-way, rolling stock, and other capital expenditures for urban, commuter, and intercity rail.
- o The revenues from State and local resources currently appear adequate to finance all segments of the Red Line and the operating deficits of the bus and rail systems. However, other elements of the countywide system currently being planned will require new funding sources for their construct, operation, and maintainance. County officials are facing a \$133 million budget shortfall for the current fiscal year. Financial ratings for this project have not yet been established.
- o The Los Angeles bus fleet averages 6.9 years old, and its rail vehicle fleet averages 1.2 years old. These average fleet ages are indicative of proper reinvestment in the existing transit system.

Other Factors

- o Air Quality. 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 will 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 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.

**Los Angeles:
Multi Modal Transit Parkway**



PROJECT PROFILE

LOSSAN Rail Corridor Improvement Project

Los Angeles, Orange, Riverside, and San Diego Counties, California
(January 1992)

- Description** ○ The LOSSAN project will enhance commuter and intercity rail service throughout southern California. Local officials have not yet identified the elements of the project for which they will seek Federal funds, but these elements could include grade separations and track improvements to the existing railroad corridor.
- Status** ○ AMTRAK currently operates eight round trip trains in the corridor, and one commuter train operates daily between San Juan Capistrano and Los Angeles. The southern California Commuter Rail Regional System Plan (1991) calls for expanding service to nine commuter round trips in the fall of 1993. This initial project is fully funded with at \$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. Implementation is planned to occur two years after local agencies gain authority to operate trains on the Santa Fe trackage.
- The elements of the project to be proposed for FTA funding are considered to be in the system 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 the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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 earmarked \$15 million in Section 3 new start funds for the project (\$10 million in FY 1992 and \$5 million in FY 1993).
- Because of the small Section 3 share proposed for the project, it is not subject to the new starts criteria in Section 3(i) of the Federal Transit Act.
- Cost-Effectiveness** ○ Local agencies expect that commuter rail ridership will increase from 3500 daily trips to over 20,000 upon implementation of the Regional System Plan.
- FTA will not be able to assess the cost-effectiveness of the proposed Federal project until local officials identify those elements for which they wish to receive FTA assistance.

IOSSAN Rail Corridor Improvement Project — California

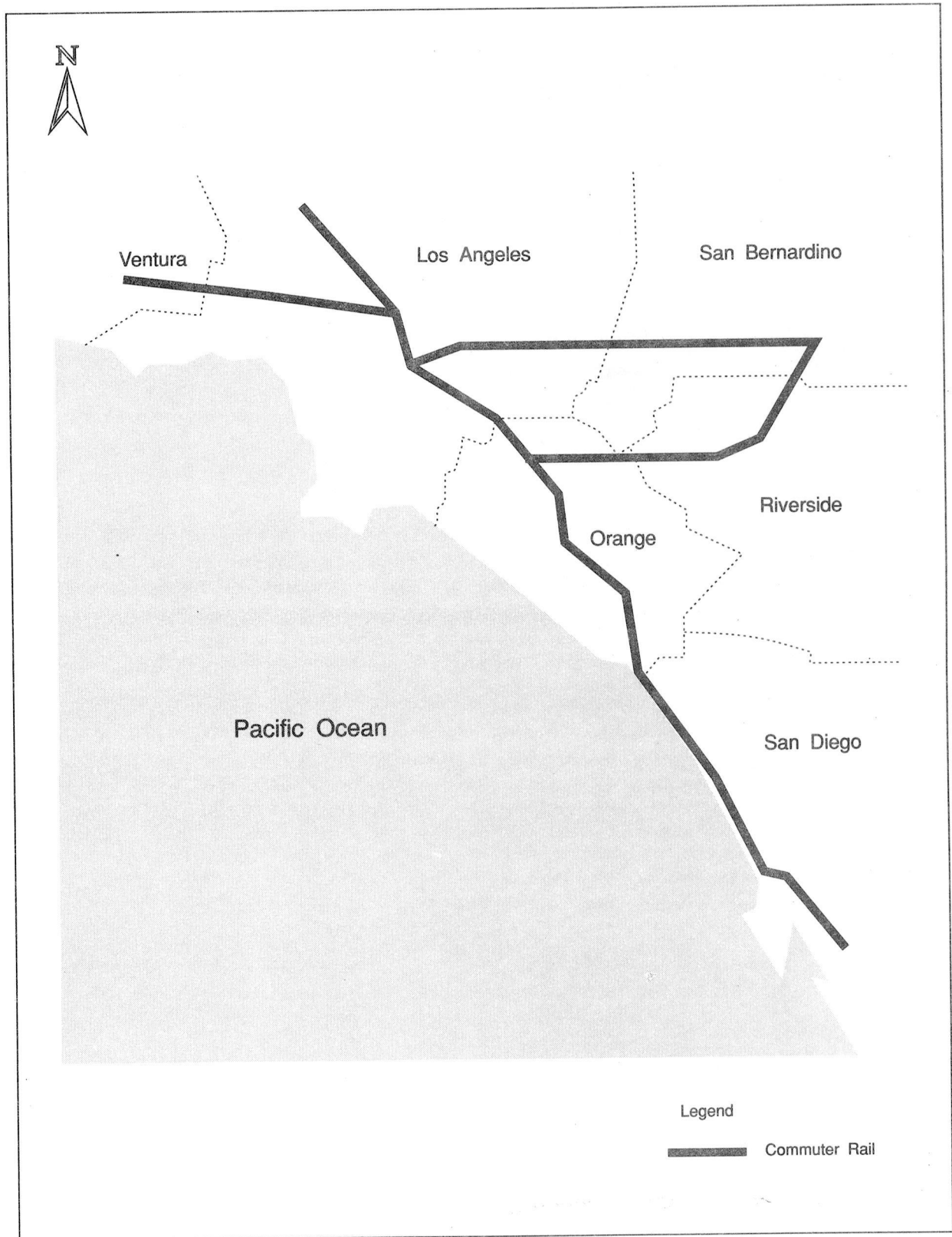
Local Financial Commitment

- o Initial elements of this project are fully funded with State and local monies.

Other Factors

- o Air Quality. Metropolitan Los Angeles is an "extreme" non-attainment area for ozone and a "serious" nonattainment area for carbon monoxide. It is unlikely that any of the alternatives will 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.

**Los Angeles:
LOSSAN Project**



PROJECT PROFILE

MARC Extensions Maryland (January 1992)

- Description**
- o 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 Waldorf, Maryland, and from Frederick, Maryland. The system presently consists of two lines between Washington and Baltimore and a third line between Washington and Martinsburg, West Virginia.
- Status**
- o 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 environmental impact studies required by the National Environmental Policy Act of 1969, as amended, have 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.
 - o 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 now underway will be completed before the end of FY 1993.
 - o Section 3035(nn)(2) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to enter into a full funding grant agreement with MTA totaling \$160 million, including \$60 million in FY 1993 and \$50 million in FY 1994 and 1995, to carry out MARC service extensions and other improvements including the purchase of rolling stock and station improvements and expansions.
- Cost-Effectiveness**
- o The MARC extensions are part of a program of interrelated projects which also includes three IRT 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.
 - o FTA does not currently have any information on the mobility benefits or cost-effectiveness of the proposed MARC extensions.

Maryland Commuter Rail Extensions — Washington, D.C.

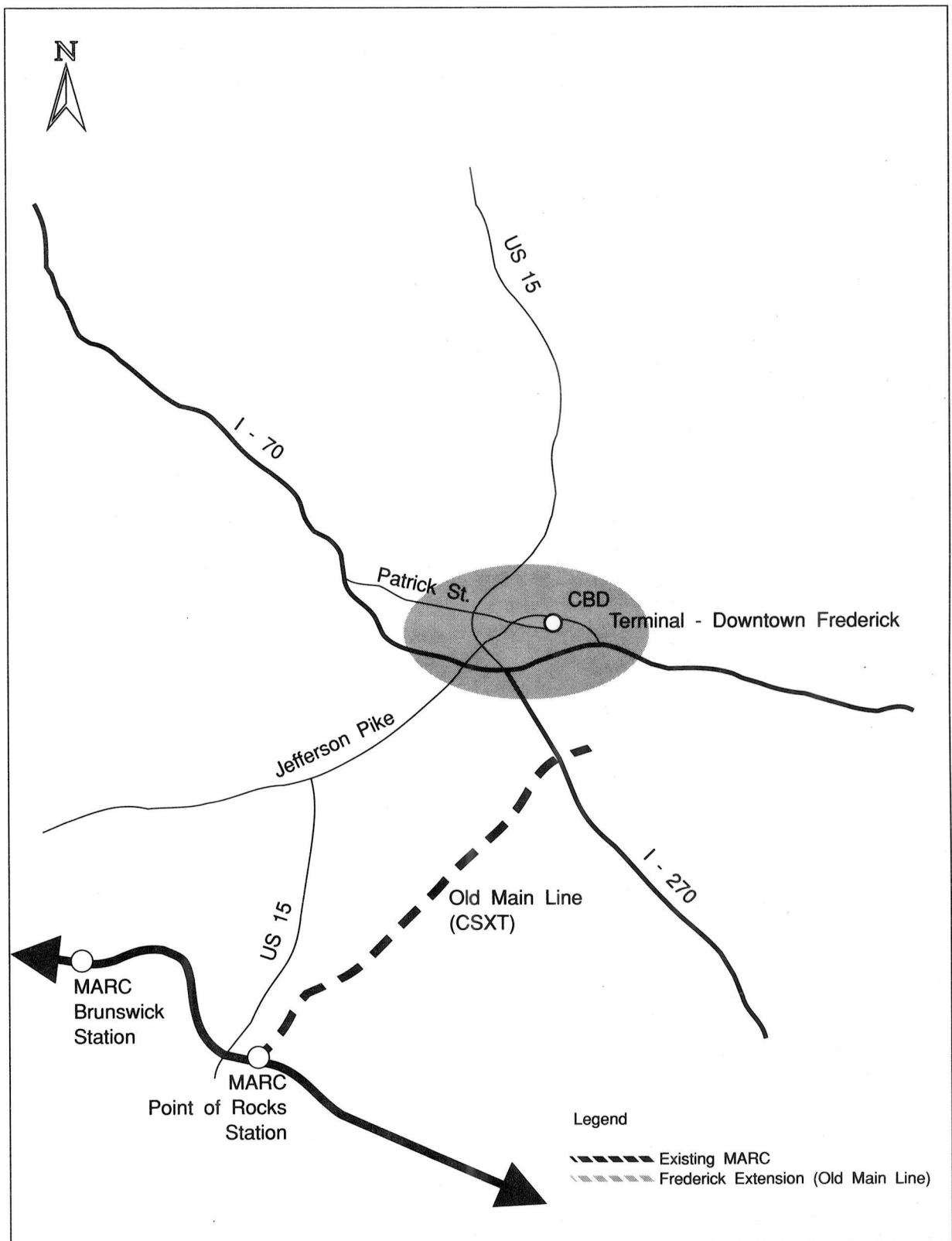
Local Financial Commitment

- o The FTA does not currently have any information on the cost of the MARC extensions, the proposed Federal share, or the sources of non-Federal funding for capital and operations.
- o The National Capital Transportation Act of 1969, as amended, requires a 37.5 percent local match of funds authorized for the four remaining segments of the 103-mile Washington Metrorail system. The State of Maryland has not yet identified sources of matching funds for the two unconstructed segments of the original Metrorail system in Maryland. Completion of the 103-mile system has been the Washington area's highest priority.

Other Factors

- o Air Quality. EPA has classified Washington as a "serious" nonattainment area for ozone, as a "moderate" nonattainment area for carbon monoxide (CO), and as an attainment area for respirable particulates. Possible effects of the MARC extensions on air quality have not been quantified. In the short term, this type of project may result in 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, is likely to contribute to urban sprawl and the increased pollutant emissions associated with very low-density urbanization.

MARC Extension to Frederick



PROJECT PROFILE

Canal Street Corridor New Orleans, Louisiana (January 1992)

- Description o The Regional Transit Authority (RTA) has proposed that light rail transit (LRT) be restored to the median of Canal Street. The proposed project is about 6.8 miles long, starting in downtown. Preliminary estimates of the capital cost are about \$80 million.
- Status o The RTA is currently completing system planning. It is developing preliminary cost-effectiveness indicators and a proposed work plan for alternatives analysis.
- o Section 3035(fff) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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.
- Cost-
Effectiveness o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of the proposed Canal Street project. Buses on Canal Street currently carry 25,000 daily riders, creating the potential of travel times savings in the corridor. However, the existence of both a busway on a portion of the right-of-way and cross streets at every block may mean that an LRT system would not offer better transit service than the existing buses.
- Local
Financial
Commitment o The FTA does not currently have a financing proposal for the project. However, some private and local government money has been proposed for this project.
- Other
Factors o Air Quality. The New Orleans metropolitan area has not violated the ozone standard in the last 3 years, making it a transitional nonattainment area for ozone. The area is in attainment of the carbon monoxide standard.

PROJECT PROFILE

Staten Island-Midtown Manhattan Ferry Service

New York, New York

(January 1992)

- | | |
|----------------------------------|--|
| Description | o The New York City Department of Transportation has proposed initiating ferry service between Staten Island and Midtown Manhattan. |
| Status | <p>o Initial planning work has been completed on this project. Since the proposed Section 3 share is less than \$25 million, the proposal is not subject to the new starts criteria in Section 3(i) of the Federal Transit Act.</p> <p>o Section 3035(d) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to negotiate and sign a multiyear grant agreement for \$1 million in FY 1992 and \$11 million in FY 1993 to carry out capital improvements for this proposed project.</p> |
| Cost-
Effectiveness | o Preliminary local studies indicate that the project would have modest costs and benefits. FTA currently lacks any substantive data on the mobility benefits and cost-effectiveness of the project. |
| Local
Financial
Commitment | o FTA does not currently have any information on the sources of State/local funding for capital and operations. New York 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. |
| Other
Factors | o Air Quality. New York City is a "severe" nonattainment area for ozone. The region has until November 2007 to meet the National Ambient Air Quality Standard for that pollutant. For carbon monoxide, the region is categorized as a "moderate > 12.7" nonattainment area. Because few (if any) people drive between Staten Island and Midtown Manhattan, it is unlikely that this project will have any impact on air quality. |

PROJECT PROFILE

Secaucus Transfer Northern New Jersey (January 1992)

- Description
- o The Secaucus Transfer project (also known as Allied Junction) would consist of the construction of a commuter rail transfer station where New Jersey Transit's Bergen and Main commuter rail lines cross the Northeast Corridor (NEC) tracks in the New Jersey Meadowlands. This \$420 million project would allow commuters on the Bergen and Main Lines to transfer to Northeast Corridor commuter trains going to the Penn Stations in either Midtown Manhattan or Newark, rather than continuing on to Hoboken where these lines terminate.
 - o The four rail transportation components of this program are: (a) the transfer station (on both the Northeast Corridor line and the Bergen/Main Lines), (b) the expansion of the NEC from two to four tracks, with provisions for an additional future track, (c) construction of tracks connecting the Bergen to the Main Line, and (d) upgrading and expansion of the Main Line from two to four tracks.
 - o The project has been proposed for construction simultaneously with a major office/retail development on top of the transfer station by the Allied Junction Corporation, which has promised about \$120 million for the construction of components (a), (c), and (d) as described above. Once the Bergen and Main Lines are combined, the developer would use the abandoned Bergen Line right-of-way for the construction of local street access to the site. Another major program component, a proposed future interchange from the New Jersey Turnpike, will provide access to the development as well as provide direct vehicular access to the New Jersey waterfront area. If the development were to lag behind the construction of the transfer station, the combining of the Bergen and Main Lines would not be required immediately.
- Status
- o FTA understands that this project is currently the first priority among the Northern New Jersey projects proposed for new start funding. Much engineering and environmental work has been completed, but since no Federal agency has been asked to be the lead Federal agency, it is not yet in compliance with the National Environmental Policy Act. The initiation of alternatives analysis has not been requested.
 - o The project is listed in the 1992 Appropriations Committee reports as part of the "New Jersey Urban Core" project for which \$95.9 million in new start funds have been earmarked.

Secaucus Transfer — Northern New Jersey

- o Section 3031 of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 requires FTA to negotiate and enter into full funding agreement for those elements of the New Jersey Urban Core Project which can be fully funded in fiscal years 1992 through 1997. The total amount of Federal funds provided for the project is \$634.4 million. ISTEA identifies the Secaucus Transfer as one element of the New Jersey Urban Core Project.
- Cost-Effectiveness
 - o The project has the potential of attracting additional transit riders to the Bergen and Main Commuter rail lines by making Midtown and Lower Manhattan and downtown Newark much more accessible. However, FTA has no information on the potential cost-effectiveness of this project.
- Local Financial Commitment
 - o New Jersey Transit has proposed three different sources of funds for the local share of the capital cost: (a) a \$120 million contribution from the developer, (b) money spent on the locally funded Kearny Connection, and (c) New Jersey bond money for transit. Although no written financing plan has been received by FTA and all of the proposed sources have difficulties associated with them, there seems to be a commitment to fund the local share of the project. The capital financing plan has been rated as "medium" at this stage of project planning.
 - o The stability and reliability of operating assistance for an expanded transit system are rated as "medium" because, despite its current financial difficulties, NJ Transit has a good history of funding transit service. This project would not add significant new operating costs.
- Other Factors
 - o Air Quality. Northern New Jersey is a "severe" nonattainment area for ozone. The region has until November 2007, to meet the National Ambient Air Quality Standard for that pollutant. The region is categorized as a "moderate > 12.7" nonattainment area for carbon monoxide. The impact of the proposed project on regional air quality is not known at this time.

PROJECT PROFILE

Lakewood-Freehold-Matawan or Jamesburg Commuter Rail Northern New Jersey (January 1992)

- | | |
|----------------------------------|---|
| Description | o New Jersey has proposed initiating rail service between Lakewood, Freehold, and Matawan or Jamesburg. |
| Status | <p>o The proposed project has not yet initiated alternatives analysis and, thus, is assumed to be in the system planning phase.</p> <p>o Section 3035(p) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to negotiate and sign a multiyear grant agreement for \$1.8 million in FY 92 and \$3 million in both FY 93 and FY 94 for alternatives analysis, preliminary engineering and the environmental impact statement for the proposed project.</p> |
| Cost-
Effectiveness | o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of the proposed project. |
| Local
Financial
Commitment | o The FTA does not currently have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding of capital and operations. |
| Other
Factors | o Air Quality. Northern New Jersey is a "severe" nonattainment area for ozone. The region has until November 2007 to meet the National Ambient Air Quality Standard for that pollutant. 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 at this time. |

PROJECT PROFILE

Hawthorne, New Jersey to Warwick, New York Commuter Rail Northern New Jersey/New York (January 1992)

- | | |
|----------------------------------|---|
| Description | <ul style="list-style-type: none">o New Jersey Transit has proposed the restoration of commuter rail service to Warwick, New York, by way of a connection to the New Jersey Main Line at Hawthorne, New Jersey. The project would include equipment, station rehabilitation and construction, parking facilities, and station improvements at Paterson, New Jersey, etc. |
| Status | <ul style="list-style-type: none">o FTA has no information on the status of this proposed project at this time. Since the Section 3 share for this project is expected to exceed \$25 million, alternatives analysis will be required. Alternatives analysis procedures have yet to be initiated at the local level.o Section 3035(a) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to negotiate and sign a multiyear grant agreement for this project for not less than \$35.71 million in FY92 and \$11.156 million in FY93. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of the proposed commuter rail project. |
| Local
Financial
Commitment | <ul style="list-style-type: none">o The FTA does not currently have any information on the cost of this proposal, the proposed Federal share or the sources of State/local funding for capital and operations. |
| Other
Factors | <ul style="list-style-type: none">o Air Quality. Northern New Jersey is a "severe" nonattainment area for ozone. The region has until November 2007 to meet the National Ambient Air Quality Standard for that pollutant. The region is a "moderate > 12.7" nonattainment area for carbon monoxide. At this point, it is not possible to ascertain if the proposed project would have any impact on air quality in the region. |

PROJECT PROFILE

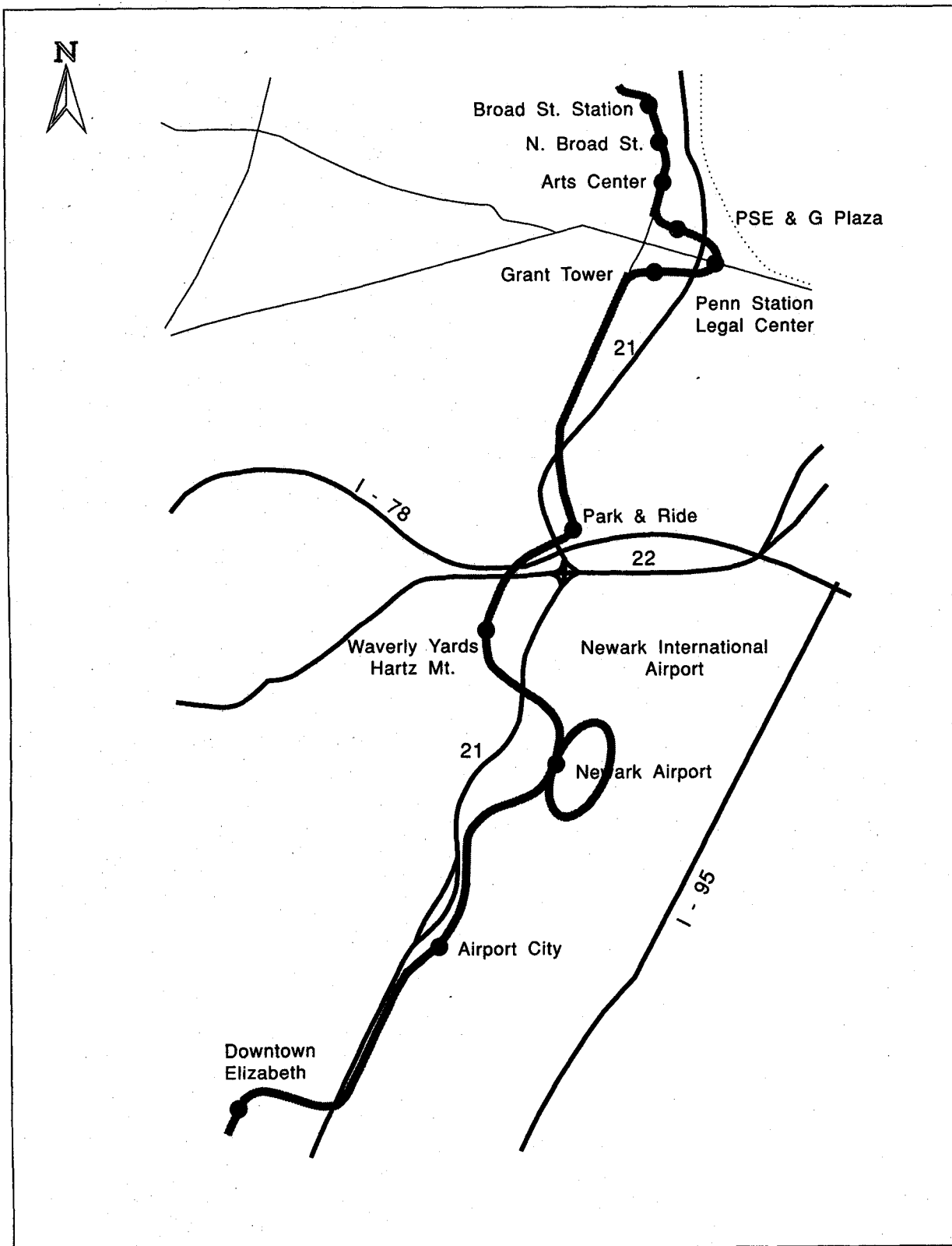
Newark-Elizabeth Rail Link Northern New Jersey (January 1992)

- Description
- o The Cities of Newark and Elizabeth have proposed an eight-mile-long fixed guideway system connecting the downtowns of those two cities by way of Newark International Airport. Light rail, heavy rail, automated guideway transit and commuter rail alternatives are being examined to improve: 1) access to the airport, 2) transfers between commuter rail lines, 3) access to new development sites, and 4) internal circulation in downtown Newark.
 - o An old and preliminary capital cost estimate for an elevated automated guideway link between the two CBD's, circulating through the airport, was \$400 million (1987 dollars).
 - o The original proposal assumed significant private sector financing of the project and no Federal construction funding.
- Status
- o In December 1989, UMTA made a \$2 million grant to support further planning work on the proposed project. The work will be divided into two phases. The first phase is currently underway and consists of a detailed exploration of private sector financing possibilities and related planning and engineering. If it is found that the available private, State and local funding is not sufficient to construct and operate the proposed system, and if FTA concurs, the second phase will be an Alternatives Analysis to support a request for Federal funding.
 - o In FY 89 and FY 90, \$2 million and \$5 million have been earmarked respectively by Congress for the project. In addition, the FY 92 appropriations conference report earmarked \$70 million for the "New Jersey Urban Core Project" which includes this project as well as others such as the Secaucus Transfer and the Hudson River waterfront. Since the Secaucus Transfer Project appears to be a higher priority, it is unlikely that any of this earmark will be available for the Rail Link.
 - o Section 3031 of the Intermodal Surface Transportation Efficiency Act of 1991 directs the FTA to negotiate and enter into a full funding agreement for the Newark Airport-Elizabeth Transit Link. This corridor is considered an element of the New Jersey Urban Core Project eligible for full funding for fiscal years 1992 through 1997.

Newark-Elizabeth Rail Link — Northern New Jersey

- Cost-Effectiveness
- o Cost-effectiveness data have not yet been developed, although earlier planning work done by the New York and New Jersey Port Authority suggested that the automated CBD link alternative examined earlier would have little transportation benefit.
- Local Financial Commitment
- o New Jersey Transit has proposed four sources of funds for the local share of the project's capital cost: 1) a \$60 million commitment from the Port Authority of New York and New Jersey, 2) private sector contributions, 3) money spent on the locally funded Kearny and Waterfront Connections, 4) airport passenger facility charges. Although no written financing plan has been received by FTA and all of the proposed sources (especially the last three) are uncertain, there seems to be a local commitment to examine possible local funding sources which is appropriate for this stage of the project development process and allows FTA to rate the project as "medium."
 - o New Jersey Transit is having difficulty finding sufficient State and local funds to operate their existing systems without service cuts and fare increases, although they may not be the operator of the proposed system. Information on the stability and reliability of operating assistance are unavailable and no rating is shown.
- Other Factors
- o Newark is a "severe" nonattainment area for ozone. The region has until November 2007 to meet the National Ambient Air Quality Standard for that pollutant. At this point, it is not possible to ascertain if the proposed project would have any impact on air quality in the region.

**Northern New Jersey:
Newark Air Link**



PROJECT PROFILE

OSCAR

Orlando, Florida
(January 1992)

- Description:
- o 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 1.7- to 3-mile system would circulate passengers in the downtown and connect to parking facilities on the fringe of the downtown core.
 - o Early capital cost estimates for the fixed guideway alternatives range from about \$30-42 million (1991 dollars).
 - o Ridership on OSCAR is projected to be about 5600 passengers daily in 2010. Free shuttle buses currently serve the same market, carrying about 1700 riders per day.
- Status
- o The system planning stage has just been completed and the number of alternatives has been reduced from 8 to 4. The City of Orlando has recently applied to enter alternatives analysis.
 - o Section 3035(1) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to enter into a multiyear grant agreement with City of Orlando in the amount of \$5.0 million for alternatives analysis and preliminary engineering.
- Cost-effectiveness
- o The proposed trolley system would increase transit speeds in the central business district by up to 3 miles per hour, according to Orlando's system planning report. Buses in the TSM alternative were assumed to operate in mixed traffic. The trolley alternatives predominantly assume exclusive lanes, although some portions of the routes for some alternatives may operate in mixed traffic. The modest transit travel time savings that OSCAR would provide would not be expected to have a significant effect on transit ridership.
 - o Preliminary cost-effectiveness indices range from \$6 to \$16. 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.
 - o The ridership projections assume doubling of the CBD employment by 2010.

OSCAR — Orlando, Florida

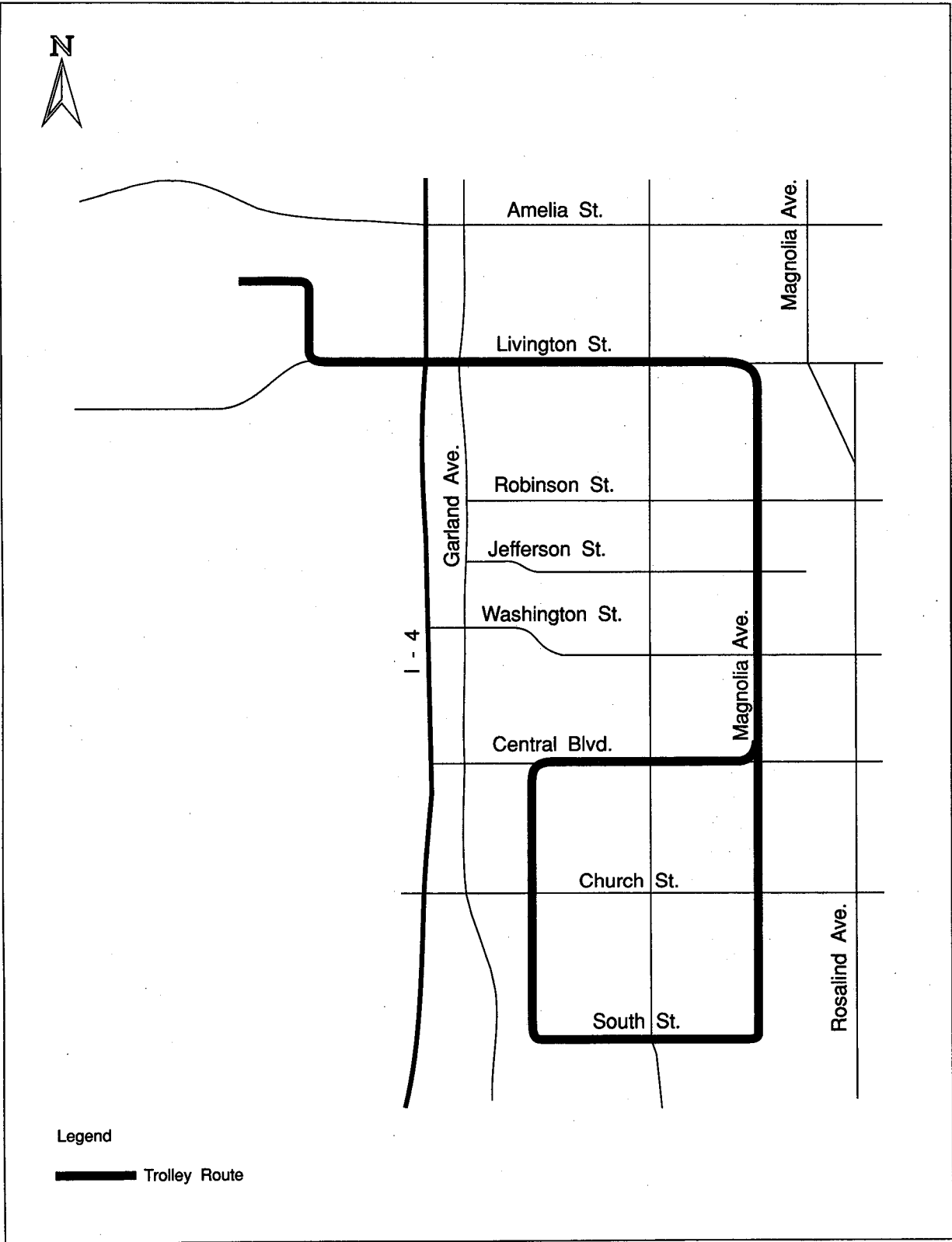
Local Financial Commitment

- o The Federal share of this project is assumed to be 50 percent. Half of the non-Federal share could be funded from a dedicated portion of state gasoline tax revenues via a transit capital program established by FDOT.
- o OSCAR would be free to riders, and therefore, operating costs must be financed from sources other than farebox revenue. Potential local sources of funding could include: (a) tax increment financing based on new development and increased property values in the downtown, (b) a parking enterprise fund supported by parking revenues, (c) a transportation utility fee, and (d) other conventional sources such as motor fuel taxes and ad valorem taxes.
- o 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.

Other Factors

- o Parking Policy. A high number of parking spaces per employee exists in Orlando's CBD today. However, the city is imposing restrictions on the availability of downtown parking and building parking facilities on the perimeter of the CBD.
- o Air quality. Orlando is an attainment area for ozone and carbon monoxide and the project can be expected to have virtually no impact on emissions.

Orlando:
OSCAR Project



PROJECT PROFILE

Cross County Metro Corridor Philadelphia, Pennsylvania (January 1992)

- | | |
|----------------------------------|--|
| Description | <ul style="list-style-type: none">o The Cross County Corridor extends approximately 53 miles from Downingtown to Morrisville. A proposal has surfaced 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. |
| Status | <ul style="list-style-type: none">o The FY 1991 Appropriations Conference Report directed FTA to provide planning funds for a feasibility study of the proposal. The study is to be undertaken by a consultant under contract to the southeastern Pennsylvania Transportation Authority (SEPTA). In April 1991, FTA met with SEPTA to discuss the initial draft of the Scope of Work for the study. SEPTA is preparing a revised scope which will consider a range of alternatives in this system planning effort.o Section 3035(yy) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o FTA does not have any information on the mobility benefits or cost-effectiveness of this proposal. |
| Local
Financial
Commitment | <ul style="list-style-type: none">o Potential local funding options for the capital and operating expenses associated with this proposal have not yet been explored. A cross county rail project might not rate well in terms of FTA's financial assessment criteria.o Last year the State legislature approved a series of taxes dedicated to transit. SEPTA expects to receive \$135 to \$140 million per year for capital and asset maintenance expenses from these dedicated taxes. |
| Other
Factors | <ul style="list-style-type: none">o Air Quality. The Philadelphia area is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. It is unlikely that the proposed project would have a significant effect on regional emissions. |

PROJECT PROFILE

Northeast Philadelphia Commuter Rail Philadelphia, Pennsylvania (January 1992)

- | | |
|----------------------------|---|
| Description | <ul style="list-style-type: none">o The Southeastern Pennsylvania Transportation Authority (SEPTA) is not familiar with this study proposal which appeared in section 3035(qq) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. According to SEPTA, this proposal could relate to the consideration of new transit service parallel to I-95 and SEPTA's existing R-3 line. |
| Status | <ul style="list-style-type: none">o The proposal is currently considered to be in the system planning phase of development.o Section 3035(qq) of the ISTEA of 1991 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. |
| Cost-Effectiveness | <ul style="list-style-type: none">o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of this proposal. It is presumed that such information would be developed in the feasibility study called for in the ISTEA. |
| Local Financial Commitment | <ul style="list-style-type: none">o The FTA does not currently have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. It is unlikely that a northeast commuter rail project would rate well in terms of FTA's financial assessment criteria.o Last year the State legislature approved a series of taxes dedicated to transit. SEPTA expects to receive \$135 to \$140 million per year for capital and asset maintenance expenses from these dedicated taxes. |
| Other Factors | <ul style="list-style-type: none">o Air Quality. The Philadelphia area is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. It is unlikely that the proposed project would have a significant effect on regional emissions. |

PROJECT PROFILE

Light Rail Rehabilitation Pittsburgh, Pennsylvania (January 1992)

- | | |
|----------------------------------|---|
| Description | o This project would help rehabilitate Pittsburgh's light rail transit service between downtown Pittsburgh and the South Hills area of Allegheny County. Stage II of this project involves the reconstruction of three existing trolley lines. The candidate lines are the Library Line, Drake Line, and the Overbrook Line. |
| Status | <p>o This proposal is currently considered to be between the system planning and alternatives analysis phases.</p> <p>o Section 3035(ss) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to sign a multiyear grant agreement with the Port Authority of Allegheny County for \$5.0 million to complete preliminary engineering for Stage II of the light rail rehabilitation project in Allegheny County, Pennsylvania.</p> |
| Cost
Effectiveness | o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of this proposal. |
| Local
Financial
Commitment | o The FTA does not currently have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. This information should be available by mid-1992. |
| Other
Factors | o Air Quality. The Pittsburgh area is classified as a "moderate" nonattainment area for ozone, and has not been classified for carbon monoxide. Since this project is a reconstruction of an existing system, it is unlikely that it would have a significant effect on pollution levels at the regional scale. |

PROJECT PROFILE

South Corridor Sacramento, California (January 1992)

- Description
- o The Sacramento Regional Transit Authority (RT) is considering a major transit investment in the South Corridor. This corridor extends from the Sacramento CBD south to Elk Grove, a length of about 11 to 12 miles. Alternatives being considered include light rail, high-occupancy vehicle lanes, and transportation system management.
 - o A preliminary capital cost estimate for the LRT option is \$151 million (1989 dollars).
- Status
- o Sacramento completed a system planning study in July 1991 and is now seeking FTA approval to initiate alternatives analysis.
 - o Section 3035(xx) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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.
- Cost-Effectiveness
- o The population of the Sacramento region is expected to grow by 51 percent by the year 2010. Employment is projected to increase regionally by 66 percent. Within the CBD, employment is projected to increase by 24 percent. Although most of the regional growth is expected to occur north and west of the City of Sacramento, the major roadways in the South Corridor (I-5, SR 160) are projected to reach or exceed capacity by 2010.
 - o The preliminary cost-effectiveness index for the LRT option is \$8 per new transit trip.
- Local Financial Commitment
- o The Federal share of this project is assumed to be 50 percent.
 - o No financial rating has been made for either the capital or operating funding plans.
 - o 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

South Corridor — Sacramento, California

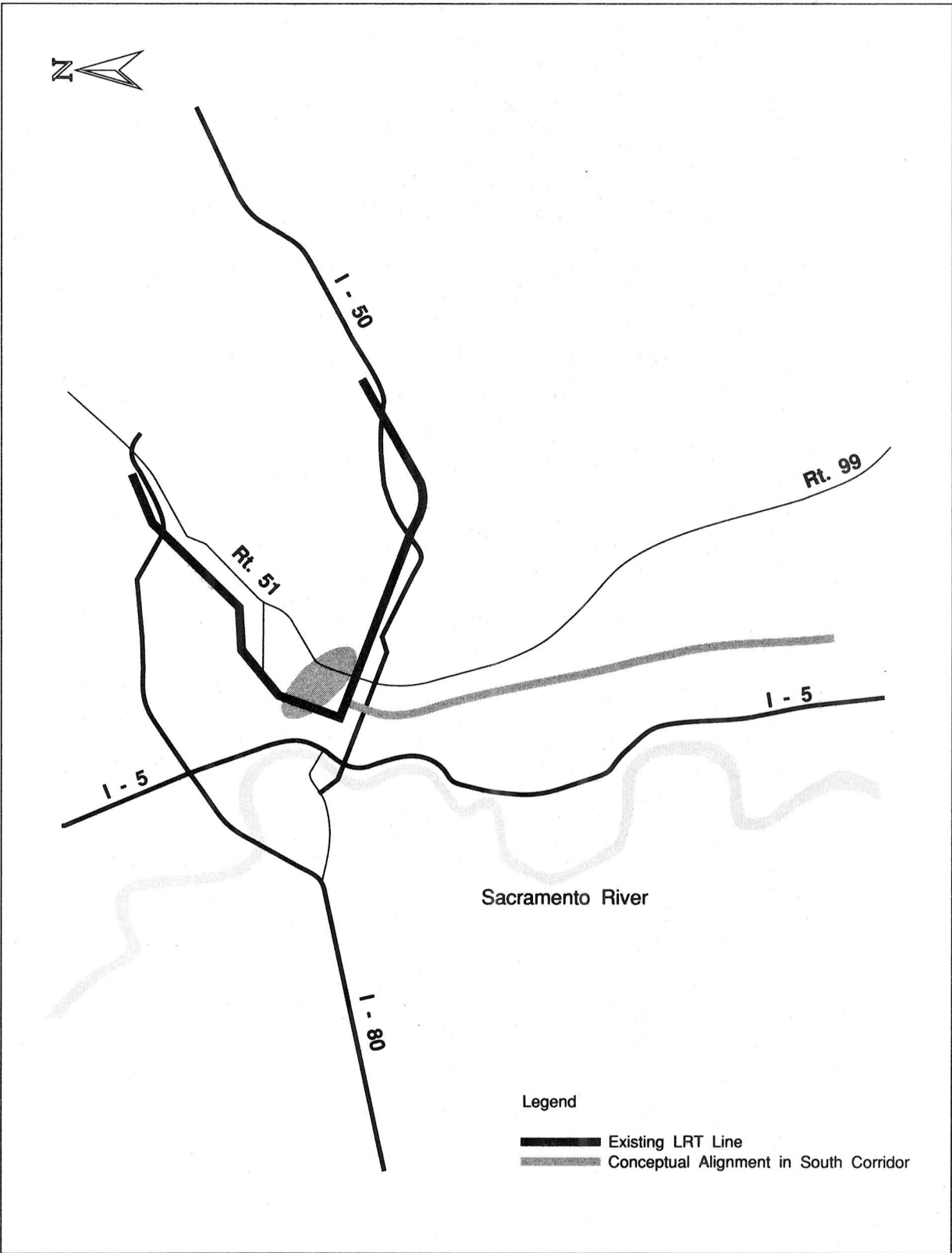
used for specified roadway and transit capital improvements. Five potential sources of State funds have been identified.

- o RT's preliminary financial analysis predicts operating deficits for all alternatives studied. Potential new sources of operating revenue which will be investigated include parking fees, development impact fees, sales tax increase, and service area assessments.

Other Factors

- o Sacramento is a "serious" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. The project would have only a minor effect on reducing emissions.

**Sacramento:
South Corridor**



PROJECT PROFILE

Core Rapid Transit Seattle, Washington (January 1992)

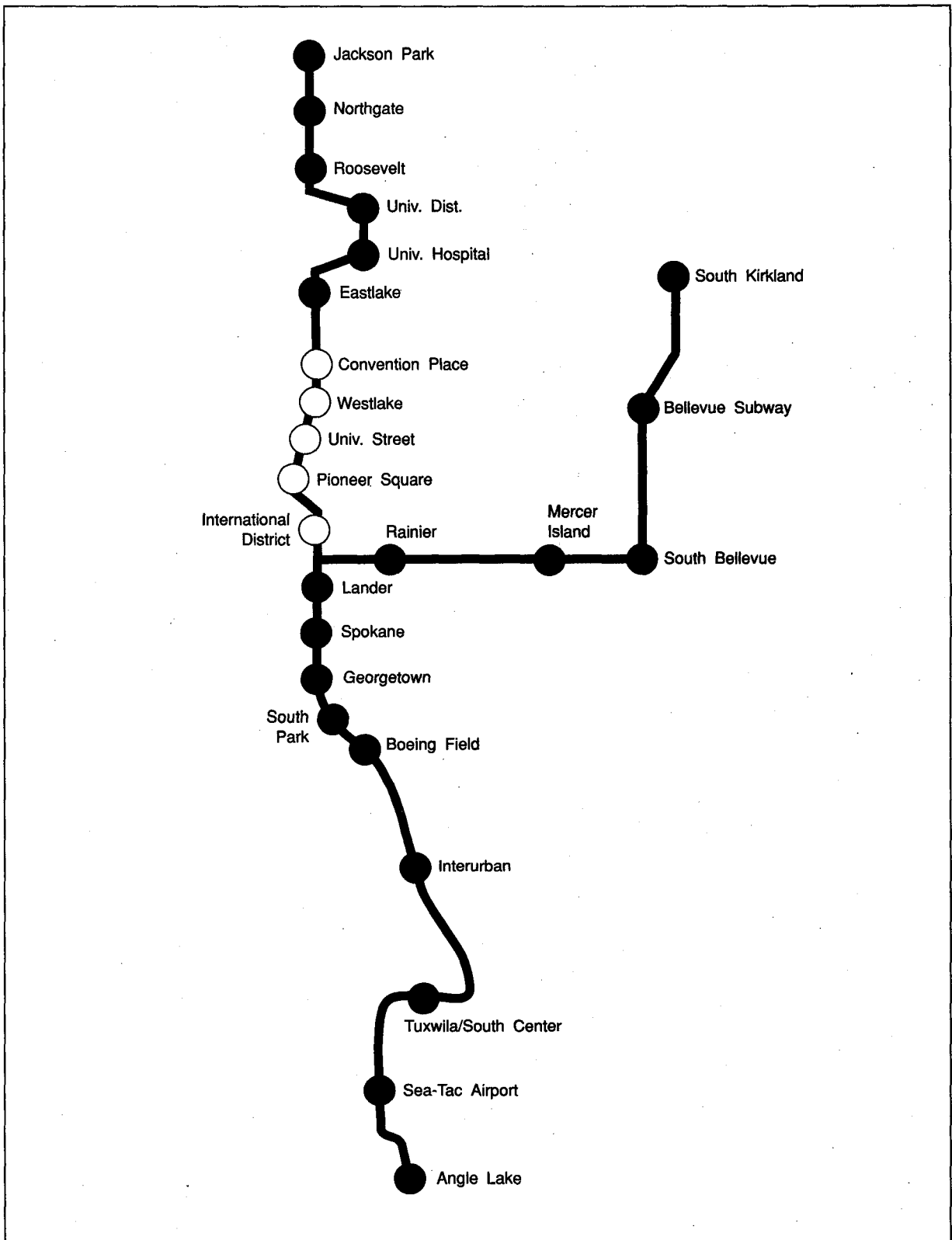
- Description**
- o The Municipality of Metropolitan Seattle (METRO) is studying a 40-mile, three-corridor, \$2.5 or more billion (1990\$) fixed guideway system in the Seattle area focused on downtown Seattle. The project is known locally as the "COG Box." The three corridors would converge on the CBD Bus Tunnel from Northgate, Bellevue and SeaTac Airport. Metro proposes to pay 80 percent of the capital costs with non-Federal funds.
- Status**
- o Washington State law provides several local option taxes for the construction of fixed guideway transit facilities. These funding sources can be voted on only after alternatives analyses have been performed.
 - o FTA and Metro have agreed that a Federal alternatives analysis can be performed in one corridor. FTA is awaiting a local decision on the priority corridor.
 - o Section 3035(bbb) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs the Secretary to enter into a multiyear grant agreement with METRO in the amount of \$300 million for this project.
- Cost-Effectiveness**
- o Preliminary data indicate that the projects in the three corridors, taken together, would have a cost-effectiveness index of more than \$10.00. Only further analysis will determine if a portion of the COG Box will be competitive with other new start proposals on the basis of cost-effectiveness.
- Local Financial Commitment**
- o Although Metro does not have voter approval for any of the new taxes needed to construct the rapid transit project, it does have legislative authority to go to the voters and also has a plan for financing the system. The capital financing commitment is rated as "medium" at this early stage in the project development process.
 - o Metro has adequate funding resources to operate its existing system and probably an expanded system, which has resulted in a rating at this time of "medium" for the stability and reliability of operating assistance. Once additional financial information is available the rating may change to "high."

Core Rapid Transit — Seattle, Washington

Other Factors

- o Air Quality. Seattle is not among the urban areas with identified ozone and carbon monoxide problems. However, like other transit projects, the percentage of regional auto drivers attracted by the proposed project is likely to be small.

Seattle: Core Rapid Transit



PROJECT PROFILE

Seattle-Tacoma Commuter Rail Seattle, Washington (January 1992)

- Description
- o The Municipality of Metropolitan Seattle (Metro), with the support of Pierce Transit of Tacoma, has proposed to initiate commuter rail service with stations every 5 miles along the approximately 33 miles of track between the two cities. To accommodate commuter rail and the existing freight service, 21 miles of new track would be needed. Metro's most recent estimate of the total capital cost of the project is \$200 million. Metro has stated that it intends to request only \$25 million from FTA for this project.
- Status
- o 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 alternatives analysis has been performed.
 - o The project is in the system planning phase. FTA has informed Metro that, to be eligible for Federal funding, alternatives analysis would have to be performed.
 - o Section 3035(ccc) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to negotiate and sign a multiyear grant agreement with the Municipality of Metropolitan Seattle for the Seattle-Tacoma Commuter Rail Project. This grant shall include \$25 million in new start funds.
- Cost-Effectiveness
- o The FTA currently has very little information on the mobility benefits and cost-effectiveness of this proposal. Washington State DOT is developing HOV lanes along I-5 in Seattle. This would allow for relatively fast express bus service in the corridor. A regional rail system (see the Profile for Core Rapid Transit Project) could also have a line in this corridor. Adding commuter rail parallel to the HOV lanes and rail system may not provide travel time advantages or attract substantial new ridership.
- Local Financial Commitment
- o Although Metro does not have voter approval for any of the new taxes needed to construct the commuter rail project, it does have legislative authority to go to the voters and also has a plan for financing this project as well as the Core Project. Therefore, the capital financing commitment is rated as "medium" at this early stage in the project development process.

Seattle-Tacoma Commuter Rail — Seattle, Washington

- o Metro has adequate funding resources to support its existing system and probably an expanded system, which has resulted in a rating at this time of "medium" for stability and reliability of operating assistance.

**Other
Factors**

- o Air Quality. Seattle is not among the urban areas with identified ozone and carbon monoxide problems. However, like other transit projects, the percentage of regional auto drivers attracted by the proposed project is likely to be small.

PROJECT PROFILE

North Bay Ferry Service Vallejo, California

(January 1992)

- | | |
|----------------------------------|---|
| Description | <ul style="list-style-type: none">o The City of Vallejo has proposed a demonstration program of capital improvements to the ferry service between Vallejo and San Francisco. The project would involve purchase of high speed ferries to replace conventional vessels for the service. |
| Status | <ul style="list-style-type: none">o The project is currently considered to be in the system planning phase. However, preliminary analyses of mobility benefits and costs have been completed. The project is not subject to the new starts criteria in Section 3(i) because the Section 3 share is less than \$25 million.o Section 3035(c) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 directs FTA to negotiate and sign a multiyear grant agreement with the City of Vallejo, California for \$8 million in FY 92 and \$9 million in FY 93 for capital improvements to the ferry system. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o Preliminary analysis indicates that the increase in speed which can be achieved from high speed ferries result in a significant increase in patronage at relatively low cost. |
| Local
Financial
Commitment | <ul style="list-style-type: none">o The FTA does not currently have any information on the sources of State/local funding for capital and operations. Local officials would need to demonstrate that they have sufficient financial capacity before a grant could be made for this project. |
| Other
Factors | <ul style="list-style-type: none">o Air Quality. The San Francisco metropolitan area is a "moderate" nonattainment area for ozone. The region has until November 1996 to meet the National Ambient Air Quality for that pollutant. The region is a "moderate ≤ 12.7" nonattainment area for carbon monoxide. While the impact of this proposed project on 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. |

PROJECT PROFILE

Dulles Corridor

Washington, D.C. Metropolitan Area
(January 1992)

- | | |
|----------------------------------|--|
| Description | <ul style="list-style-type: none">o A rail link has been proposed between the West Falls Church Metrorail Station and Dulles International Airport. Currently, shuttle bus service is provided from this station to the airport on an exclusive airport access highway. The proposed rail project would cost approximately \$1 billion. |
| Status | <ul style="list-style-type: none">o 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 buses operating in the Dulles Access Road.o Section 3035(aaa) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o A 1989 study conducted by Fairfax County computed a preliminary cost-effectiveness index of approximately \$25 per new trip.o The rail alternative would offer few transportation benefits beyond those achievable with the express bus system now being implemented. Express buses operating in the congestion-free access road will provide fast and high quality service to the corridor. |
| Local
Financial
Commitment | <ul style="list-style-type: none">o The FTA does not currently have any information on the proposed Federal share, or the sources of State/local funding for capital and operations. One potential source of funding may be surplus toll revenues from the Dulles toll road. |
| Other
Factors | <ul style="list-style-type: none">o Air Quality. The Washington Metropolitan area is a "serious" nonattainment area for ozone and a "moderate" nonattainment for carbon monoxide. It is unlikely that this project would have a significant effect on pollution levels at the regional scale. |

PROJECT PROFILE

Largo Corridor

Washington, D.C., Metropolitan Area
(January 1992)

- | | |
|------------------------|--|
| Description | <ul style="list-style-type: none">o The State of Maryland Department of Transportation (MdDOT) is considering an extension of the Washington Metrorail system from the Addison Road Metrorail Station to Largo, Maryland. This extension is beyond the 103-mile Metrorail system authorized by the National Capital Transportation Act of 1969, as amended. Two of the four segments of the original 103-mile system which are yet to be constructed (the Glenmont and Branch Avenue segments) are in the State of Maryland.o Preliminary estimates put the capital cost of the Metrorail extension between \$250 and \$400 million (1991 dollars), depending on the length of the extension and the number of stations.o The FTA has no estimate of ridership on the extension. |
| Status | <ul style="list-style-type: none">o MdDOT is conducting a preliminary study prior to the initiation of the Federal alternatives analysis process. 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. FTA has had little involvement in this study.o Section 3035(nn)(3) of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 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. |
| Cost-
Effectiveness | <ul style="list-style-type: none">o 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.o The FTA does not currently have any information on the mobility benefits or cost-effectiveness of this extension. It is presumed that such information would be developed during the alternatives analysis called for in ISTEA. |

Metrorail Extension to Largo, Maryland — Washington, D.C.

**Local
Financial
Commitment**

- o A preliminary financial analysis is being conducted as part 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.
- o 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.

**Other
Factors**

- o Air Quality, EPA has classified Washington as a "serious" nonattainment area for ozone, as a "moderate" nonattainment area for carbon monoxide (CO), and as an attainment area for respirable particulates. Possible effects of the Metrorail extension on air quality have not been determined.

TABLE B-1: FINANCIAL RATINGS: CAPITAL FINANCING COMMITMENTS

Final Design	Acceptable	<ul style="list-style-type: none"> * UMTA considers the applicant to be in reasonably sound financial condition based upon the reviews outlined in UMTA'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.
	Unacceptable	<ul style="list-style-type: none"> * UMTA 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.
Preliminary Engineering	High	<ul style="list-style-type: none"> * UMTA considers the applicant to be in sound financial condition based upon the reviews outlined in UMTA'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	<ul style="list-style-type: none"> * UMTA considers the applicant to be in reasonably sound financial condition based upon the reviews outlined in UMTA'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.

Alternatives Analysis and System Planning	Low	<ul style="list-style-type: none"> * UMTA does not consider the applicant to be in reasonably sound financial condition based upon the reviews outlined in UMTA's Financial Capacity Circular. * The applicant has not adopted a capital finance plan, or UMTA 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.
	High	<ul style="list-style-type: none"> * UMTA considers the implementing agency to be in reasonably sound financial condition based upon the reviews outlined in UMTA'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	<ul style="list-style-type: none"> * UMTA considers the implementing agency to be in reasonably sound financial condition based upon the reviews outlined in UMTA's Financial Capacity Circular. * The applicant's capital finance plan or preliminary funding strategy is considered by UMTA to be adequate to successfully undertake one or more of the proposed major transit investment alternatives. Uncertainties may exist the agency's ability to implement new funding sources as well as cash flow implications and the plan's sensitivity to risk and uncertainty.
	Low	<ul style="list-style-type: none"> * UMTA does not consider the proposed implementing agency to be in reasonably sound financial condition based upon the reviews outlined in UMTA'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	Acceptable	<ul style="list-style-type: none"> * 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.
	Unacceptable	<ul style="list-style-type: none"> * 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	<ul style="list-style-type: none"> * 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.

Medium

- * 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.
- * 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 UMTA 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.

FEDERAL TRANSIT ADMINISTRATION
NEW STARTS PIPELINE
(ESCALATED \$ IN MILLIONS)

1/1/92
TGM-22

PHASE	CITY & PROJECT	COST-EFF INDEX (COST/ NEW TRIP)	TOTAL COST (FED, STA & LOC)	SEC 3 COST	OTHER FEDERAL COST	STATE/ LOCAL COST	SEC 3 OBLIGATNS TO DATE (12-31-91)	SEC 3 COST TO COMPLETE	FY 1992 & PRIOR YEAR UNOBLIGATED EARMARKS	ESTIMATED COMPLETION DATE (THIS PHASE)
UNDER CONSTRUCTION	1 ATLANTA-EAST RRT	\$5	\$170	\$128	\$0	\$42	\$128.0	\$0.0		1993
	2 ATLANTA-NORTHEAST RRT	\$6	\$118	\$81	\$8	\$29	\$81.0	\$0.0		12/92
	3 BALTIMORE-HOPKINS RRT*	\$14	\$322	\$0	\$274	\$48	\$0.0	\$0.0		1994
	4 CHICAGO-SOUTHWEST RRT*	\$6	\$410	\$0	\$349	\$61	\$0.0	\$0.0		10/92
	5 DENVER-NORTH I-25 HOV*	\$4	\$230	\$70	\$64	\$96	\$70.0	\$0.0		9/95
	6 HOUSTON-EASTEX HOV	NA	\$128	\$0	\$62	\$66	\$0.0	\$0.0		1993
	7 HOUSTON-NORTH I-45 HOV*	\$5	\$78	\$47	\$0	\$31	\$47.0	\$0.0		1993
	8 HOUSTON-SOUTHWEST HOV*	\$5	\$102	\$62	\$0	\$40	\$62.0	\$0.0		1996
	9 LOS ANGELES - MOS-1 RRT*	\$6	\$1,450	\$605	\$91	\$754	\$605.0	\$0.0		6/93
	10 LOS ANGELES - MOS-2 RRT*	NA	\$1,446	\$667	\$0	\$779	\$479.0	\$188.0	\$69.1	1998
	11 MIAMI-DPM EXTENSIONS*	\$15	\$248	\$186	\$0	\$62	\$135.6	\$50.4	\$45.3	9/93
	12 MEMPHIS-TROLLEY	\$8	\$33	\$0	\$25	\$8	\$0.0	\$0.0		8/92
	13 ST. LOUIS-AIRPORT LRT*	\$9	\$384	\$288	\$2	\$94	\$271.7	\$16.3	\$15.9	7/93
	SUBTOTAL		\$5,119	\$2,134	\$875	\$2,110	\$1,879.3	\$254.7	\$130.3	
FINAL DESIGN	1 ATLANTA-NORTH EXT.	\$9	\$439	\$329	\$0	\$110	\$30.2	\$298.8	\$61.9	8/92
	2 DALLAS-SO. DAK CLIFF LRT	\$8	\$300	\$160	\$0	\$140	\$0.0	\$160.0	\$40.4	
	3 JACKSONVILLE-NORTH DPM EXT*	NA	\$38	\$29	\$0	\$11	\$28.8	\$0.0		1/92
	4 JACKSONVILLE-SOUTH DPM EXT	NA	\$120	\$96	\$0	\$24	\$0.0	\$96.0	\$5.1	1993
	5 LOS ANGELES-NO. HOLLYWOOD	NA	\$1,310	\$655	\$0	\$655	\$0.0	\$655.0		1994
	6 PORTLAND-WESTSIDE LRT	\$19	\$756	\$567	\$0	\$189	\$0.0	\$567.0	\$14.3	
	7 SAN FRANCISCO-COLMA	\$6	\$145	\$109	\$0	\$36	\$11.7	\$97.1	\$97.1	1992
	SUBTOTAL		\$3,108	\$1,945	\$0	\$1,163	\$70.7	\$1,873.9	\$218.8	
PRELIMINARY ENGINEERING	1 BALTIMORE-HUNT VALLEY	\$28	\$48	\$36	\$0	\$12	\$2.0	\$34.0	\$16.9	9/92
	2 HONOLULU	NA	\$2,070	\$618	\$0	\$1,452	\$15.5	\$602.5	\$20.9	9/92
	3 NEW YORK-QUEENS	\$50	\$645	\$322	\$0	\$323	\$0.0	\$322.0	\$11.0	2/92
	4 SALT LAKE CITY-SOUTH LRT	\$8	\$200	\$100	\$0	\$100	\$6.6	\$93.4	\$11.5	1993
	5 SAN JOSE-TASMAN	\$21	\$460	\$230	\$0	\$230	\$0.0	\$230.0	\$14.8	
	SUBTOTAL		\$3,423	\$1,306	\$0	\$2,117	\$24.1	\$1,281.9	\$75.1	
ALTERNATIVES ANALYSIS	1 BALTIMORE-AIRPORT	\$13	\$25	\$19	\$0	\$6	\$0.0	\$19.0		DONE
	2 BALTIMORE-PENN STATION	NA	\$18	\$14	\$0	\$4	\$0.0	\$14.0		DONE
	3 BOSTON-PIERS	NA	\$500	\$400	\$0	\$100	\$0.0	\$400.0	\$10.8	2/92
	4 BUFFALO-AMHERST	\$50	\$400	\$320	\$0	\$80	\$0.0	\$320.0		INACTIVE
	5 CHICAGO-CENTRAL	\$22	\$750	\$250	\$0	\$500	\$1.0	\$249.0	\$36.9	1/92
	6 CLEVELAND-DUAL HUB	NA	\$600	\$300	\$0	\$300	\$0.0	\$300.0	\$9.0	6/92
	7 DENVER-SOUTHWEST	\$10	\$200	\$160	\$0	\$40	\$0.0	\$160.0		1993
	8 HOUSTON-CONNECTOR	\$9-11	\$1,560	\$936	\$0	\$624	\$0.0	\$936.0	\$161.5	DONE
	9 LOS ANGELES-EAST CENTRAL	\$10	\$1,000	\$500	\$0	\$500	\$0.0	\$500.0		11/92
	10 LOS ANGELES-WEST CENTRAL	\$10	\$2,000	\$1,000	\$0	\$1,000	\$0.0	\$1,000.0		1993
	11 LOS ANGELES-PICO/SANVICENTE	NA	\$440	\$220	\$0	\$220	\$0.0	\$220.0		2/92
	12 NEW JERSEY-WATERFRONT	NA	\$950	\$713	\$0	\$237	\$39.9	\$673.1		3/92
	13 ORANGE CO. (CA)-CENTRAL	\$4	\$312	\$234	\$0	\$78	\$0.0	\$234.0		4/92
	14 PITTSBURGH-AIRPORT PHASE 1	\$4	\$200	\$100	\$0	\$100	\$0.0	\$100.0	\$7.7	8/92
	15 PORTLAND-HILLSBORO	NA	\$180	\$135	\$0	\$45	\$0.0	\$135.0		10/92
	16 ST. LOUIS-ST. CLAIR	NA	\$300	\$240	\$0	\$60	\$0.5	\$240.0	\$5.6	1993
	17 SAN DIEGO-MID COAST	NA	\$500	\$375	\$0	\$125	\$0.0	\$375.0	\$2.4	6/92
	18 SAN FRANCISCO-AIRPORT	\$21-50	\$1,000	\$750	\$0	\$250	\$0.0	\$750.0	\$57.3	2/92
	SUBTOTAL		\$10,935	\$6,666	\$0	\$4,269	\$41.4	\$6,625.1	\$291.2	
TOTAL: FOUR PHASES			\$22,585	\$12,051	\$875	\$9,662	\$2,015.5	\$10,035.6	\$715.4	

* = FULL FUNDING GRANT AGREEMENT IN PLACE
U = USER BENEFIT INDEX
NA = NOT AVAILABLE