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

May 1993

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

United States Department of Transportation
Federal Transit Administration

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

May 5, 1993

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 1994.

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

Sincerely,

Federico Peña

Enclosure

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

May 5, 1993

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

Dear Mr. Chairman:

I am pleased to 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 1994.

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Sincerely,

Federico Peña

Enclosure

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

May 5, 1993

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

Dear Mr. Shuster:

I am pleased to 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 1994.

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

Sincerely,

Federico Peña

Enclosure

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

May 5, 1993

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

Dear Senator D'Amato:

I am pleased to 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 1994.

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

Sincerely,

Federico Peña

Enclosure

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EXECUTIVE SUMMARY

This report provides the Department of Transportation's recommendations to Congress for allocation of funds to be made available for construction of new fixed guideway systems and extensions (Section 3 New Start funding) for Fiscal Year 1994. The report is required by section 3(j) of the Federal Transit Act (FT Act).

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) identifies over $6 billion in funding authorizations or earmarks for specific projects through FY 1997, the life of the authorization. However, it authorizes a total of only $5 billion in section 3 funding for these projects, including $820 million in FY 1994. This means that, during each year of the ISTEA authorization, some prioritization of the authorized projects will be necessary.

The President's budget for FY 1994 proposes $657.20 million for the Section 3 New Start program. After setting aside three-quarters of one percent of these funds for Project Management Oversight, $652.27 million is available for project grants. This report recommends 16 projects for funding in FY 1994.

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

- Projects that already have Full Funding Grant Agreements should be funded before any new commitments are made.

- Statutory authorizations contained in the ISTEA should be honored to the extent that projects are ready for funding. However, funds should not be provided before they are actually needed, and initial planning should not be funded by section 3; instead, Section 8 or 9 funds should be used.

- Projects should meet the project justification, finance, and process criteria established by section 3(i) of the FT Act.

- Full Funding Grant Agreements, which commit future funding to complete a project, should not be made until preliminary engineering is completed.

- 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.

- Funding should be provided to the most worthy projects to allow them to proceed through the process on a reasonable schedule.

Using these principles, the Department recommends the following allocation of the FY 1994 Section 3 New Start funds:

- Provide $69.27 million for the Los Angeles/MOS-2 project and $15.20 million for St. Louis/Metrolink to complete funding of these projects;

- Provide $104.00 million in FY 1994 (and $333.51 million in future years) to Portland/Westside LRT under the existing Full-Funding Grant Agreement for this project;

- Negotiate Full-Funding Grant Agreements for two projects already under construction: Dallas/South Oak Cliff ($38.72 million in FY 1994 and $38.72 million in future funds) and San Francisco/Colma (using already-earmarked funds);

- Negotiate Full-Funding Grant Agreements for three projects in the Final Design stage of development: Los Angeles/MOS-3 ($163.05 million in FY 1994 and $492.25 million in future funds), New York/Queens Connection ($73.80 million in FY 1994 and $221.52 million in future funds), and Atlanta/North Line Extension ($54.00 million in FY 1994 and $208.80 million in future funds, assuming the resolution of certain funding issues);

- Provide funding in FY 1994 and, if appropriate, issue Letters of Intent and negotiate Full Funding Grant Agreements for the following projects:

  - Baltimore/LRT Extensions ($18.15 in FY 1994);
  - Houston/Regional Bus ($5.00 million in FY 1994 and $424.90 million in future funds);
  - New Jersey/Urban Core ($40.00 million in FY 1994 and $433.57 million in future funds);
  - Pittsburgh/Busway Extensions ($12.88 million in FY 1994 and $38.62 million in future funds);
  - San Francisco Area/Airport & Tasman ($28.20 million in FY 1994);

Table 1
FY 1994 Funding for New Start Authorizations
(millions of dollars)

City/Project	FY 1992 and Prior Year Earmarks Obligated	FY 1992 and Prior Year Earmarks Unobligated	FY 1993 Adjusted Earmarks	FY 1994 Recommended Funding	Maximum Outyear Funds	Total Recommended Funding	Total ISTEA Earmarks
TOTALS BY PHASE							
Under Construction	$1,053.06	$112.82	$141.52	$123.19	$38.72	$1,469.31	$293.36
Final Design	117.55	5.12	162.67	394.85	1,256.08	1,936.27	1,916.30
Preliminary Engineering	81.16	269.55	220.08	79.23	463.52	1,113.54	2,046.73
Alternatives Analysis	24.22	114.95	154.18	45.00	433.57	771.92	1,218.10
System Planning & Other	1.17	83.82	37.86	10.00	0.00	132.85	682.20
GRAND TOTAL	$1,277.16	$586.26	$716.31	$652.27	$2,191.89	$5,423.89	$6,156.69
UNDER CONSTRUCTION							
Dallas - South Oak Cliff	$0.00	$40.38	$42.18	$38.72	$38.72	$160.00	$160.00
Los Angeles MOS-2	548.11	0.00	49.62	69.27	0.00	667.00	69.11
Miami - DPM Extensions	135.63	45.34	7.54	0.00	0.00	188.51	5.63
St. Louis - Metrolink	287.62	0.00	42.18	15.20	0.00	345.00	15.92
San Francisco - Colma	81.70	27.10	0.00	0.00	0.00	108.80	42.70
SUBTOTAL	**$1,053.06**	**$112.82**	**$141.52**	**$123.19**	**$38.72**	**$1,469.31**	**$293.36**
FINAL DESIGN							
Atlanta - North	$92.24	$0.00	$29.78	$54.00	$208.80	$384.82	$329.00
Jacksonville - South	0.00	5.12	9.92	0.00	0.00	15.04	71.20
Los Angeles - MOS-3	0.00	0.00	39.70	163.05	492.25	695.00	695.00
New York - Queens	11.00	0.00	15.78	73.80	221.52	322.10	306.10
Portland - Westside	14.31	0.00	67.49	104.00	333.51	519.31	515.00
SUBTOTAL	**$117.55**	**$5.12**	**$162.67**	**$394.85**	**$1,256.08**	**$1,936.27**	**$1,916.30**
PRELIMINARY ENGINEERING							
Baltimore - LRT Extensions	$2.00	$16.87	$24.81	$18.15	$0.00	$61.83	$60.00
Chicago - Central	17.07	19.19	21.09	5.00	0.00	62.35	260.00
Honolulu - Rapid Transit	36.38	0.00	75.93	0.00	0.00	112.31	618.00
Houston - Regional Bus	6.40	155.03	33.74	5.00	424.90	625.07	500.00
Orange Co - Transitway	0.00	0.00	0.00	10.00	0.00	10.00	0.00
Pittsburgh - Busways	0.00	7.68	16.87	12.88	38.62	76.05	7.68
Salt Lake City - South LRT	6.56	11.48	2.98	0.00	0.00	21.02	131.00
SF Area - Airport/Tasman	12.75	59.30	44.66	28.20	0.00	144.91	470.05
SUBTOTAL	**$81.16**	**$269.55**	**$220.08**	**$79.23**	**$463.52**	**$1,113.54**	**$2,046.73**
ALTERNATIVES ANALYSIS							
Austin - North Central	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Boston - Piers	10.75	0.00	37.96	0.00	0.00	48.71	278.00
Cleveland - Dual Hub	0.00	8.96	1.49	0.00	0.00	10.45	5.00
Dallas - North Central	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Denver - Southwest	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kansas City - South LRT	0.37	1.13	0.00	0.00	0.00	1.50	5.90
Los Angeles - E Central	0.00	0.00	19.85	0.00	0.00	19.85	(*535.00)
Los Angeles - W Central	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maine/Boston - Portland CR	0.00	0.00	25.30	5.00	0.00	30.30	30.00
Milwaukee - East/West	0.00	0.00	0.00	0.00	0.00	0.00	200.00
Minneapolis-Central	0.00	0.00	0.00	0.00	0.00	0.00	0.00
New Jersey - Urban Core	12.60	95.90	64.93	40.00	433.57	647.00	634.40
New Orleans - Canal Street	0.00	0.00	0.00	0.00	0.00	0.00	4.80
Orlando - OSCAR	0.00	0.51	1.98	0.00	0.00	2.49	5.00
Portland - Hillsboro	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sacramento - South	0.00	0.00	0.99	0.00	0.00	0.99	26.00
St Louis - St Clair	0.50	6.05	0.00	0.00	0.00	6.55	2.00
San Diego - Mid Coast	0.00	2.40	1.68	0.00	0.00	4.08	27.00
SUBTOTAL	**$24.22**	**$114.95**	**$154.18**	**$45.00**	**$433.57**	**$771.92**	**$1,218.10**

* Advance construction authority

- Provide funding in FY 1994 for the Chicago/Central Area Circulator ($5.00 million), Maine/Boston-Portland Commuter Rail ($5.00 million), Maryland/MARC Extensions ($10.00 million), and Orange County/Transitway ($10.00 million).

The potential maximum amount of New Start funding made available by the ISTEA is about $3.62 billion for FY 1994 through 1997. Section 3(a)(4) limits the total amount of Letters of Intent and FFGAs which can be issued at any time to the remaining balance of the authorization, or one-half of the uncommitted cash balance in the Mass Transit Account of the Highway Trust Fund. The sum of commitments which are proposed in this report ($2,844.16 million) is within the total amount authorized.

Table 1 summarizes the recommendations for FY 1994 funding and overall funding commitments, and compares them to 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 1992 and prior year earmarked funds which have not yet been obligated. The third column shows the amount of funds available in FY 1993 as a result of the ISTEA and DOT Appropriations Act. The fourth column summarizes the recommendations for funding in FY 1994. The fifth column shows the maximum amount of outyear funding recommended to be committed to these projects through Full Funding Grant Agreements, Letters of Intent, and project grants. 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, and the final column shows the total amount authorized in ISTEA for each project over the authorization period.

The Administration expects to develop, over the next few months, a set of interagency investment principles. The Administration hopes to work with Congress in implementing these principles, including project selection criteria, to ensure that sound infrastructure investment decisions are made across Government. Support for projects recommended in this report may, therefore, be reevaluated in future years in light of a new Administration infrastructure policy.

Table 1 (continued)
FY 1994 Funding for New Starts Authorizations
(millions of dollars)

City/Project	FY 1992 and Prior Year Earmarks Obligated	FY 1992 and Prior Year Earmarks Unobligated	FY 1993 Adjusted Earmarks	FY 1994 Proposed Funding	Maximum Outyear Funds	Total Recommended Funding	Total ISTEA Earmarks
SYSTEM PLANNING AND OTHER							
Altoona - Pedestrian	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3.20
Chattanooga - Trolley	0.00	1.00	0.00	0.00	0.00	1.00	2.00
Dallas - Railtran	0.00	2.48	0.00	0.00	0.00	2.48	5.68
Los Angeles - Multimodal	0.00	0.00	0.00	0.00	0.00	0.00	15.00
Los Angeles-San Diego CR	0.00	10.00	0.00	0.00	0.00	10.00	20.00
Maryland - MARC Exts	0.00	0.00	9.92	10.00	0.00	19.92	160.00
New Jersey - Hawthorne	0.00	35.71	4.45	0.00	0.00	40.16	46.87
New York - Midtown Ferry	0.00	1.00	0.00	0.00	0.00	1.00	12.00
San Jose - Gilroy CR	0.00	8.00	0.00	0.00	0.00	8.00	21.00
Seattle - CR	0.00	5.12	15.18	0.00	0.00	20.30	25.00
Seattle - Rail	0.00	0.00	0.00	0.00	0.00	0.00	300.00
Vallejo - Ferry	0.00	8.00	0.00	0.00	0.00	8.00	17.00
Atlanta - Buckhead PM	0.00	0.20	0.00	0.00	0.00	0.20	0.20
Atlanta - CR	0.00	0.00	0.00	0.00	0.00	0.00	0.10
Boston - NS-SS Link	0.25	0.00	0.00	0.00	0.00	0.25	0.25
Charlotte - Priority	0.12	0.00	0.00	0.00	0.00	0.12	0.50
Cleveland - CR	0.80	0.00	0.00	0.00	0.00	0.80	1.60
Cleveland - Highland Hls	0.00	0.00	0.00	0.00	0.00	0.00	1.20
Detroit - LRT	0.00	10.00	0.00	0.00	0.00	10.00	20.00
Long Beach - MetroLink	0.00	0.00	0.00	0.00	0.00	0.00	4.00
New Jersey - Lkwd-Frhld CR	0.00	1.80	2.98	0.00	0.00	4.78	7.80
Philadelphia - Cross Cty	0.00	0.51	0.69	0.00	0.00	1.20	2.40
Philadelphia - N East CR	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Pittsburgh - LR Rehab	0.00	0.00	0.00	0.00	0.00	0.00	5.00
Tri-County Commuter Rail	0.00	0.00	4.64	0.00	0.00	4.64	0.00
Washington - Dulles	0.00	0.00	0.00	0.00	0.00	0.00	6.00
Washington - Largo	0.00	0.00	0.00	0.00	0.00	0.00	5.00
SUBTOTAL	**$1.17**	**$83.82**	**$37.86**	**$10.00**	**$0.00**	**$132.85**	**$682.20**

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 Fixed Guideway 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 Efficiency Act of 1991 (ISTEA) (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. Section 3(k)(1)(D)

provided 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 ISTEA and all section 3 funds are fully allocated among the three categories provided under the revised section 3(k)(1), it is no longer necessary 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. New fixed guideway systems and extensions (e.g., a light rail line, a subway line or a busway/high occupancy vehicle (HOV) facility) are referred to in this document as "New Starts" and are considered to be major capital investments.

This report is a collateral document to the proposed FY 1994 budget submitted by the President. It is meant to be a constructive element in the administration of the Federal transit assistance program, enriching the information exchange between the Executive and Legislative Branches at the beginning of the appropriations cycle for the next fiscal year.

II. FY 1994 BUDGET PROPOSAL

While the FT Act authorizes funding for Federal Transit Administration programs, the annual appropriations process actually sets the amount of funds which can be obligated in any fiscal year. The President's budget for FY 1994 focuses increased funding on formula grants. Discretionary section 3 grants would total $1.772 billion. Of this amount, $657.20 million is proposed for New Starts. This represents approximately 37 percent of total section 3 funds, slightly less than the 40 percent specified in the FT Act. The difference would be used to address the backlog of section 3 fixed-guideway modification projects, which presents a greater need for funding at this time.

III. NEW STARTS ALLOCATIONS AND RECOMMENDATIONS

As noted, the funding level proposed for FY 1994 for New Starts is $657.20 million. Once the three-quarters of one percent for FTA oversight activities is subtracted from this amount, $652.27 million remains 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:

- Existing FTA Full Funding Grant Agreement (FFGA) commitments should be honored before any additional commitments are made.

- Statutory authorizations contained in ISTEA should be honored to the extent that projects are ready for funding. However, funds should not be made available by FTA before obligations are required to permit project development to proceed nor should initial planning be funded with section 3 funds. Instead, section 8 or 9 funds should be used.

- Any project recommended for new funding commitments should meet the project justification, finance, and process criteria established by section 3(i).

- Funds should be allocated in a manner to ensure that operable facilities are completed (the "operable segment" concept).

- Funds should be allocated to projects that are expected to complete preliminary engineering in FY 1993 or 1994 and will then be ready to begin final design and construction.

- Firm funding commitments, embodied in FFGAs, should not be made until preliminary engineering is completed since costs, benefits, and impacts are not accurately known until this level of engineering has been completed.

- Letters of Intent (ultimately anticipating FFGAs), authorized by section 3(a)(4) of the FT Act, should be issued only to worthy projects which have progressed enough (generally through alternatives analysis) that their justification and level of local financial commitment can be established with some certainty.

- 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.

- Funding should be provided to the most worthy projects to allow them to proceed through the process on a reasonable schedule.

The Administration expects to develop, over the next few months, a set of interagency investment principles. The Administration hopes to work with Congress in implementing these principles, including project selection criteria, to ensure that sound

infrastructure investment decisions are made across Government. Support for projects recommended in this report may, therefore, be reevaluated in future years in light of a new Administration infrastructure policy.

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. To assure that projects proposed for New Start funding meet the requirements of the FT Act, the Department requires project sponsors to 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 ISTEA.

The steps in the process begin with System Planning, during which future needs are identified and strategies for addressing those needs are identified. Where a fixed guideway is identified as part of a strategy, an Alternatives Analysis is undertaken to evaluate the merits of alternative technologies and alignments. These studies and subsequent Preliminary Engineering develop information on the justification for the projects and the financial plans, which demonstrate the sponsor's ability to meet the local matching share and to build and operate the projects. Finally, projects undergo Final Design, during which detailed engineering takes place. Under ISTEA, each project advances from one step to the next under an "assured timetable." More detail is provided on the New Start project development process in Appendix A.

Table 2 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 potential 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 ISTEA but which have not yet entered the process. It does not list those projects (Miami/DPM Extensions, St. Louis/Airport LRT, Portland/Westside LRT, and Los Angeles/MOS-2) for which FFGAs have already been negotiated. Because funding to complete these projects has already been committed, any further evaluation would be meaningless. Appendix B provides more detail on each project, including the basis for the evaluation of the project.

For each project, the total capital cost is shown in the first column, followed by four columns which rate projects in terms of project justification. These columns correspond to the wider range of project justification factors (including cost-

effectiveness) stipulated in ISTEA. FTA will issue a regulation defining how these criteria will be evaluated in future years.

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

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

Table 2
Summary of FY 1994 New Start Ratings

Phase and City (Project)	Capital Cost (a) (million $)	Project Justification: Cost-Effectivenes (Cost/New Trip)	Mobility Improvements (i)	EPA Classification (j)	Operating Efficiencies (k)	Local Financial Commitment: Section 3 Share of Project Cos	Overmatch City (c) (yes/no)	Capital Financing Commitment	Stability & Reliability of Operating Assistance
Under Construction									
Dallas-South Oak Cliff	$360	$9(89$)	Medium	Mod./Attain.	Medium	44%	Yes	Acceptable	Acceptable
San Francisco-Colma	$171	$6(90$)	Medium	Mod./Mod.	NA	64%	Yes	Acceptable	Acceptable
Final Design									
Atlanta-North	$485	$9(90$)	NA	Serious/Attain.	NA	80%	No	Acceptable	Acceptable
Jacksonville-South ASE Extension	$134	NA(b)	NA	Trans./Attain.	NA	80%	No	Acceptable	Acceptable
Los Angeles-Mid City	$491	NA(b)(g)	NA	Extreme/Serious	NA	50%	Yes	Acceptable	Acceptable
Los Angeles-North Hollywood	$1,450	NA(b)(g)	NA	Extreme/Serious	NA	48%	Yes	Acceptable	Acceptable
New York-Queens	$645	(f)	High	Severe/Mod.	Low	50%	Yes	Acceptable	Acceptable
Preliminary Engineering									
Baltimore-BWI Airport	$35	$16	NA	Serious/Mod.	NA	78%	Yes	Medium	Medium
Baltimore-Hunt Valley	$49	$11	NA	Serious/Mod.	NA	78%	Yes	Medium	Medium
Baltimore-Penn Station	$18	$17	NA	Serious/Mod.	NA	78%	Yes	Medium	Medium
Chicago-Central	$750	$17(19$)	NA	Severe/Attain.	NA	33%	Yes	Medium	Low-Medium
Honolulu	$2,300	$9(91$)	High	Attain./Attain.	High	50%	No	Low	Low
Houston-Regional Bus	$1,250	$4(88$)	Medium	Severe/Attain.	Medium	50%	No	Medium	Medium
Orange County-Transitway	$424	$4(89$)	Medium	Extreme/Serious	Medium	75%	No	Medium	Medium-High
Pittsburgh-Airport	$250	$5	Medium	Mod./NC	Medium	50%	No	High	Medium
Pittsburgh-East Busway Extension	$40	$5	Medium	Mod./NC	Medium	50%	No	High	Medium
Salt Lake City-South LRT	$230	$7(92$)	Medium	Mod./NC	High	50%	No	Low	Low
San Francisco-Airport	$960	$27(91$)	Medium	Mod./Mod.	Low	75%	Yes	Low	Medium
San Jose-Tasman	$480	$40(93$)	NA	Mod./Mod.	Low	50%	No	Low	Low
Alternatives Analysis									
Austin-North Central	$200	NA	NA	Attain./Attain.	NA	50%	No	High	High
Boston-Piers	$350-$700	$14-$20(91$)	NA	Serious/Mod.	Low	80%	No	Medium	Medium
Cleveland-Dual Hub	$300-$800	NA	NA	Mod./Mod.	NA	50%	No	Medium	Medium
Dallas-North Central	$200	$7(e)	NA	Mod./Attain.	NA	80%	Yes	Medium	High
Denver-Southwest	$200(88$)	NA	NA	Trans./Mod.	NA	80%	No	Low	Medium
Kansas City-South LRT	$300	$50-$89(e)	NA	Attain./Attain.	NA	80%	No	Low	Low-Medium
Los Angeles-East Central	$1800(90$)	NA(b)	NA	Extreme/Serious	NA	50%	Yes	NA	NA
Los Angeles-West Central	$2,800	NA	NA	Extreme/Serious	NA	50%	Yes	NA	NA
Maine/Boston-Portland CR	$50(91$)	NA	NA	Serious/Mod.	NA	NA	No	Low-Medium	Low-Medium
Milwaukee-East/West	$332(90$)	NA	NA	Severe/Attain.	NA	NA	No	Medium	Medium
Minneapolis-Central	$600	NA	NA	Attain./Mod.	NA	NA	No	Medium	Medium
New Jersey-Waterfront	$524-$1130(90$)	$3-$27(90$)(b)	NA	Severe/Mod.	NA	100%	No	NP(l)	Medium
New Orleans-Canal Street	$90	NA	NA	Trans./Attain.	NA	80%	No	High	Medium
Orlando-OSCAR	$50	$6-$96	NA	Attain./Attain.	Low	50%	NA	Medium	Medium
Portland-Hillsboro	$200	$25-$75(d)	Medium	Marg./Mod.	Low/NA(d)	65%/33%(d)	No	High	Medium-High
Sacramento-South	$200	NA	NA	Serious/Mod.	NA	NA	No	Medium	Medium
St. Louis-St. Clair	$300	NA	NA	Mod./NC	NA	80%	No	Low	Low
San Diego-Mid Coast	$350	$11-$14(e)	NA	Serious/Mod.	NA	80%	Yes	Medium	Medium

Table 2 (continued)
Summary of FY 1994 New Start Ratings

		Project Justification				Local Financial Commitment			
	Capital Cost (a) (million $)	Cost-Effectivenes (Cost/New Trip)	Mobility Improvements (i)	EPA Classification (j)	Operating Efficiencies (k)	Section 3 Share of Project Cos	Overmatch City (c) (yes/no)	Capital Financing Commitment	Stability & Reliability of Operating Assistance
System Planning									
Altoona-Pedestrian Crossing	NA	NA	NA	Marg./NC	NA	NA	No	NA	NA
Atlanta-Buckhead People Mover	NA	NA	NA	Serious/Attain.	NA	NA	No	NA	NA
Atlanta-Commuter Rail	NA	NA	NA	Serious/Attain.	NA	NA	No	NA	NA
Boston - North-South Link	NA	NA	NA	Serious/Mod.	NA	NA	No	NA	NA
Charlotte-Priority Corridor	NA	NA	NA	Mod./NC	NA	NA	No	NA	NA
Chattanooga-Trolley	$17	NA	NA	Attain./Attain.	NA	70%	No	NA	NA
Cleveland-Commuter Rail	NA	NA	NA	Mod./Mod.	NA	NA	No	NA	NA
Cleveland-Highland Hills	NA	NA	NA	Mod./Mod.	NA	NA	No	NA	NA
Dallas-Railtran	$120	NA	NA	Mod./Attain.	NA	NA	Yes	NA	NA
Detroit-Woodward LRT	NA	NA	NA	Mod./NC	NA	NA	No	NA	NA
Long Beach-MetroLink	NA	NA	NA	Extreme/Serious	NA	NA	No	NA	NA
Los Angeles-Metro Link	NA	NA	NA	Extreme/Serious	NA	NA	Yes	NA	NA
Los Angeles-Multimodal Parkway	$30	NA	NA	Extreme/Serious	NA	50%	Yes	NA	NA
Maryland-MARC Extensions	NA	NA	NA	Serious/Mod.	NA	NA	No	NA	NA
New Jersey-Secaucus	$420	NA(b)	NA	Severe/Mod.	NA	100%	No	NP(l)	Medium
New Jersey - Lakewood-Freehold	NA	NA	NA	Severe/Mod.	NA	100%	No	NP(l)	NA
New Jersey - Hawthorne-Warwick	NA	NA	NA	Severe/Mod.	NA	100%	No	NP(l)	NA
New Jersey - Newark-Elizabeth	$600-$1000	NA(b)	NA	Severe/Mod.	NA	100%	No	NP(l)	Medium
New York-Midtown Ferry	NA	NA	NA	Severe/Mod.	NA	NA	No	NA	NA
Philadelphia-Cross County	$100	NA	NA	Severe/Mod.	NA	NA	No	NA	NA
Philadelphia-Northeast	NA	NA	NA	Severe/Mod.	NA	NA	No	NA	NA
Pittsburgh-LRT Rehabilitation	NA	NA	NA	Mod./NC	NA	NA	No	NA	NA
Seattle - Core Rapid Transit	NA	NA	NA	Marg./Mod.	NA	33%	No	Medium	Medium
Seattle-Tacoma Commuter Rail	$200	NA	NA	Marg./Mod.	NA	12%	No	Medium	Medium
Vallejo-North Bay Ferry	NA	NA	NA	Mod./Mod.	NA	NA	NA	High	NA
Washington-Dulles	$1,000	$25(e)	NA	Serious/Mod.	NA	NA	No	NA	NA
Washington-Largo	$250-$400	NA	NA	Serious/Mod.	NA	NA	No	NA	NA

NA = Not Available

(a) Unless otherwise noted, costs are shown in escalated (year of construction) dollars and are based on most recent cost estimates. For projects in Alternatives Analysis and the early stages of Preliminary Engineering, the estimate is likely to change as more detailed engineering is performed. For projects in System Planning, cost estimates may change significantly.

(b) 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 meet the New Start criteria to be eligible for section 3 funding.

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

(d) The Hillsboro project and the Westside to 185th project together constitute a Program of Interrelated Projects as defined in Section 3(a)(8) of the Federal TransitAct. For such programs, the Secretary is required to consider an assessment of all program elements to the extent that such consideration expedites project implementation. The cost-effectiveness index for the Portland/Westside program is $25 per new trip. For the Hillsboro extension alone it is $75 per new trip. The section 3 share for the Portland/Westside program is 65%; for the Hillsboro extension alone it is 33%. The operating efficiency of the Hillsboro extension alone is not known, but the overall Westside program would lead to a slight increase in the operating cost per passenger.

(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 analysis.

(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-effectivenedd index for the 18-mile Metrorail line was computed as $1.46 per new rider. While the cost of the project has escalated 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 plan 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 plan are described in Appendix B.

(I) A "high" rating has been assigned to projects that would save 10,000 or more hours of travel time per day, compared with the TSM alternative. "Medium" was given to projects that would save zero to 10,000 hours. "Low" indicates projects that would increase travel time.

(j) EPA classifications for ozone and carbon monoxide are shown to illustrate the severity of the region's air quality problem. In order of severity, the ozone classifications are: extreme, severe, serious, moderatemarginal, sub-marginal, transitional, and attainment. Carbon monoxide classifications are: serious, moderate, not classified, and attainment. The Project Profiles in Appendix B present data (where available) on each project's impact on emissions.

(k) A "high" rating has been given to projects that would reduce the systemwide operating cost per passenger by 5 percent or more, compared with the TSM alternative. "Medium" was given to projects that would reduce operating cost per passenger by zero to 5 percent. "Low" indicates projects that would increase operating costs per passenger.

(l) "NP" indicates that a capital finance rating is not pertinent to this project. A local share of zero percent is authorized under Sections 1044 and 3031 of ISTEA.

A. Existing Full Funding Grant Agreements

Four projects -- Los Angeles/MOS-2, Miami, Portland, and St. Louis -- have existing FFGAs which commit FTA to provide specified levels of Federal funding. The section 3(j) report for FY 1993 ("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), recommended that sufficient Section 3 New Start funds for FY 1993 be allocated to three of these projects -- St. Louis, Miami, and Los Angeles/MOS-2 -- to allow them to be completed. The FTA commitment for the Miami project will be completed in FY 1993. Los Angeles/MOS-2 still requires $69.27 million for completion, and the project in St. Louis needs $15.20 million; both are under construction, and these amounts will complete the funding commitments for these projects. In addition, Portland has received a full funding agreement in the amount of $501.70 million for the Westside to 185th project, to be distributed in FY 1994 through FY 1997. The Portland FFGA calls for $104.00 million in FY 1994. It is recommended that the projects in Los Angeles, St. Louis, and Portland be fully funded in FY 1994. The allocations to these projects would leave $463.80 million of the $652.27 million available for other projects.

The following table summarizes the FY 1994 recommendations for projects under existing FFGAs and the maximum amount of outyear funds committed (in millions of dollars):

	Commitment Instrument	FY 1994 Funding	Maximum Outyear Funds
Los Angeles/MOS-2	FFGA	$ 69.27	$ 0.00
St. Louis/Airport LRT	FFGA	15.20	0.00
Portland/Westside LRT	FFGA	104.00	333.51
TOTAL		$188.47	$333.51

B. Projects Under Construction without FFGAs

Construction is underway on two projects for which FFGAs have not been negotiated. These projects are Dallas/South Oak Cliff and San Francisco/Colma.

The following table summarizes the recommendations for FFGAs to be negotiated for projects under construction, including FY 1994 funds and the maximum amount of outyear funds to be committed (in millions of dollars):

	Commitment Instrument	FY 1994 Funding	Maximum Outyear Funds
Dallas/South Oak Cliff	FFGA	$ 38.72	$ 38.72
San Francisco/Colma	FFGA	0.00*	0.00*
TOTAL		$ 38.72	$ 38.72

*Sufficient funds earmarked

1. Dallas/South Oak Cliff

Dallas is constructing a 20-mile, $841 million light rail starter system. The 9.6-mile, 13-station South Oak Cliff line is now under construction, although a full funding agreement has not yet been executed. The expected cost of this segment is $360 million, of which Dallas Area Rapid Transit (DART) is requesting $160 million from section 3. While this represents a Federal share of 44 percent for the South Oak Cliff line, it is only 20 percent of the cost of the total 20-mile starter system. This project is therefore exempt from the New Start criteria.

Section 3035(i) of ISTEA requires the Department to issue a multiyear grant agreement in the amount of $160 million; of this amount Dallas has already received $82.56 million in FY 1993 and prior year earmarks, leaving $77.44 million needed for completion. 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 ISTEA, the Department is negotiating a FFGA that would distribute the remaining $77.44 million evenly over FY 1994 and FY 1995. Funding in the amount of $38.72 million is therefore recommended in FY 1994 to permit this project to proceed without delay.

2. San Francisco/Colma

San Mateo County is sponsoring the construction of a $171 million Bay Area Rapid Transit (BART) station and 1,400-space parking structure approximately 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. The project is now under construction; bids have been higher than expected, resulting in a $26 million increase in capital cost. The increase in costs has been budgeted. This project has $27.10 million available in unobligated earmarks from FY 1992 and prior years. FTA is negotiating a FFGA in this amount.

Congress has already earmarked sufficient New Start funds to the San Francisco region to construct this project. Therefore, no additional funds are recommended at this time.

C. Projects in Final Design Without FFGAs

The next category of projects to be considered for funding consists of those which have completed preliminary engineering and are now in the final design process, but which do not have FFGAs. This category includes the Atlanta/North Line Extension, New York/Queens, Los Angeles/MOS-3, and the Jacksonville/South ASE Extension.

It is recommended that a total of $290.85 million in FY 1994 be allocated to three of these projects ($163.05 million for Los Angeles/MOS-3, $73.80 million for New York/Queens, and $54.00 million for Atlanta/North). FFGAs would be negotiated for each. The rationale for these recommendations is provided below.

The following table summarizes the recommendations for projects in Final Design, including FY 1994 funds and the maximum amount of outyear funds to be committed by FFGA (in millions of dollars):

	Commitment Instrument	FY 1994 Funding	Maximum Outyear Funds
Atlanta/North Line Ext.	FFGA	$ 54.00	$208.80
Jacksonville/South ASE Ext.	None	0.00	0.00
Los Angeles/MOS-3	FFGA	163.05	492.25
New York/Queens Connection	FFGA	73.80	221.52
TOTAL		$290.85	$922.57

1. Atlanta/North Line Extension

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is designing a 9-mile, five-station extension to its heavy rail rapid transit system. The initial 5.7-mile North Line segment will be built by MARTA without FTA assistance. MARTA is seeking

FTA funding for a 3.1-mile, three-station extension of the North Line, from Medical Center to North Springs. Final Design of the Atlanta/North Line Extension project is underway with grant assistance from FTA.

The cost of this extension is estimated at $485 million; MARTA is proposing a Federal share of 80 percent, or $384.82 million. FTA has made a $92 million grant for final design and construction of the first segment from Medical Center to Dunwoody, and MARTA is seeking an additional $6.4 million to fully fund this segment. Section 3035(tt) of ISTEA requires the Department to negotiate and sign a multiyear grant agreement for the North Line Extension project. The Department intends to abide by this requirement through issuance of a FFGA for this project, subject to resolution of certain funding issues. A total of $54.00 million in FY 1994 is recommended for this project.

2. Jacksonville/South ASE Extension

In FY 1991 and prior years, Congress earmarked a total of $29.0 million in section 3 funds for extensions of the Automated Skyway Express (ASE) system and directed FTA to sign a FFGA after Jacksonville's completion of a financing plan for the project. This was sufficient funding to permit Jacksonville to proceed with a 0.6 mile northern extension of the existing system. In compliance with congressional direction, the Department negotiated a FFGA for the North Extension.

Section 3035(vv) of ISTEA authorizes a total of $71.2 million for completion of the ASE system, including the 1.2 mile South Extension, over the six-year authorization period. Of this amount, $15.04 million has been provided through earmarks in FY 1993 and prior years. The proposed State and local share is only 20 percent, the statutory minimum. Costs have increased to the point that the ISTEA authorized funding is no longer sufficient to complete the system. In addition, the existing $37 million, 0.7 mile ASE system serves less than 500 paying customers per day out of 1,500 total passengers; the South Extension is also likely to have limited use for the magnitude of the investment. Because of these concerns, no FY 1994 funding is recommended for this project.

3. Los Angeles/MOS-3

The 22-mile, $5.3 billion Metro Rail Red Line project in Los Angeles has been divided into "minimum operable segments" (MOSs) for funding purposes. The 4.4-mile, 5-station MOS-1 segment in downtown Los Angeles opened for revenue service in January 1993; MOS-2 is under construction through an FFGA between

FTA and the Los Angeles County Transportation Commission (LACTC). Collectively, the North Hollywood segment, the Mid City segment, and part of the East Side Metro Rail extension make up MOS-3.

Section 3034 of ISTEA directs FTA to amend the FFGA for MOS-2 to provide $695 million for construction of MOS-3. In addition, section 3034(b)(5) provides $535 million in advance construction authority for this project, which ISTEA authorizes to be liquidated through grants in fiscal years 1998, 1999, and 2000.

The North Hollywood segment is now in Final Design, and major construction is scheduled to begin in 1994. It is 6.3 miles long with three stations, all in subway. The cost is estimated at $1.31 billion. The overall Metro Rail project is justified and is being constructed with a local share in excess of the statutory minimum; for North Hollywood, LACTC is seeking a section 3 share of 52 percent. The local financial plan is strong, relying heavily on stable sources of local funding. 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.

The Mid City segment of the Red Line extends the Wilshire boulevard branch to the west beyond the MOS-2 terminus at Western Avenue. It adds 2.6 miles and two stations, all in subway, to the line. The estimated cost of this segment is $491 million. A Federal share of 49 percent, or $243 million, is proposed from section 3; LACTC intends to fund an additional 11 percent of the project, or $55 million, from the flexible Surface Transportation Program (STP).

MOS-3 also includes the East Central Corridor extension of the Metro Rail System. The corridor extends approximately six miles from the eastern terminus of the Red Line at Union Station to Los Angeles and Whittier Boulevards in East Los Angeles. The cost is estimated at $1.8 billion, and six separate alignments are being considered. This project is currently in the very early stages of Alternatives Analysis.

FTA is negotiating a single FFGA for MOS-3. At the present time, the FFGA would include only North Hollywood and Mid City, as it would be premature to provide funding for the East Central segment at this time. Of the total Federal share of $695 million for these two segments, $39.70 million has already been earmarked; of the remaining $655.30 million in ISTEA-period funds, it is recommended that $163.05 million be provided in FY 1994. LACTC officials would determine how to best allocate these funds between the two projects.

4. New York/Queens Connection

New York is proposing a connection from the recently opened 63rd Street tunnel 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 of time savings, and would relieve severe overcrowding on the Queens Boulevard lines and improve access to Manhattan.

The final environmental impact statement and preliminary engineering were completed in mid-1992. The real estate acquisition process has begun, a final design contract has been signed, and construction is scheduled to commence in mid-1994.

The New York Metropolitan Transit Authority (MTA) has a long history of overmatching Federal transit funds, primarily for rail modernization. It is expected that MTA would provide at least 50 percent of the funding, leaving a required Federal share of $322.10 million. Funds in the amount of $11.00 million in FY 1992 and prior year earmarks has been obligated; an additional $15.78 million was earmarked in FY 1993, leaving a balance of $295.32 million. It is recommended that a FFGA be negotiated that would provide $73.80 million in FY 1994, with the remainder provided over subsequent years of the authorization period.

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 1994. 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 the Baltimore/LRT Extensions, Chicago/Central Area Circulator, Honolulu/Rapid Transit, Houston/Regional Bus, Orange County/Transitway, Pittsburgh/Busway Extensions, Salt Lake City/South LRT, and the Airport and Tasman projects in the San Francisco Bay area.

Six of these projects are recommended for funding in FY 1994, totaling $79.23 million. Together with the projects now under construction ($123.19 million) and in Final Design ($394.85 million), this would commit $597.27 million of the $652.27 million proposed to be available for New Starts in FY 1994.

Four of these projects (Baltimore/LRT Extensions, Houston/Regional Bus, Pittsburgh/Busway Extensions, and San Francisco Area/Airport & Tasman) are candidates for pledges of funding through Letters of Intent (LOI) or FFGAs. Sufficient funding should be provided in FY 1994 to permit these projects to progress without delay. In addition, project grants are recommended for the Orange County/Transitway and Chicago/Central Area Circulator projects so that development may continue.

The two other projects (Honolulu/Rapid Transit and Salt Lake City/South LRT) have not reached a stage of readiness sufficient to warrant funding in FY 1994. Thus, no funding is recommended.

The following table summarizes the recommendations for FY 1994 and outyear funds for projects in Preliminary Engineering (in millions of dollars):

	Commitment Instrument	FY 1994 Funding	Maximum Outyear Funds
Baltimore/LRT Extensions	Grant	$18.15	$0.00
Chicago/Central	Grant	5.00	0.00
Honolulu/Rapid Transit	None	0.00	0.00
Houston/Regional Bus	LOI	5.00	424.90
Orange County/Transitway	Grant	10.00	0.00
Pittsburgh/Busway Ext.	LOI	12.88	38.62
Salt Lake City/South LRT	None	0.00	0.00
San Francisco Area	Grant	28.20	0.00
TOTAL		$79.23	$463.52

1. Baltimore/LRT Extensions

Using State and local funds, the Maryland Mass Transit Administration (MTA) is constructing a 22-mile light rail line from Timonium in the north, through the Baltimore Central Business District to Glen Burnie in the south. MTA has proposed three federally funded extensions of this line: a 5-mile extension northward from Timonium to Hunt Valley; a 2-mile branch off the mainline to Baltimore-Washington International Airport (BWI); and a 0.5-mile spur to Penn Station in downtown Baltimore. The entire LRT system has an estimated cost of $450 million. The Federal share of the three extensions would total $80.00 million.

Section 3035(nn) of ISTEA directs FTA to enter into an FFGA with MTA to provide $60 million in New Start funds for these three extensions. Prior to ISTEA enactment $18.87 million had already

been earmarked for this purpose, of which $2 million has already been obligated for preliminary engineering and environmental work. The total section 3 share sought for these projects exceeds the $77 million earmarked by approximately $3.0 million; if additional funds are not readily available, MTA will initially construct only a portion of the Penn Station segment. Through FY 1993, $43.68 million in New Start funds have been reserved for the Baltimore extensions.

All three extensions have nearly completed preliminary engineering and are ready to be funded. 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 18 percent. Thus, the project is exempt from the requirements of section 3(i). Accordingly, this project is a candidate for a Letter of Intent; funds in the amount of $18.15 million are recommended for this undertaking in FY 1994.

2. Chicago/Central Area Circulator

The Chicago Central Area Circulator would be a multilegged transit system within the Chicago Central Business District (CBD), connecting the commuter rail stations and other locations within the CBD with the loop and two subway lines. The project will serve the more recently developed areas of the CBD, particularly to the northeast along Michigan Avenue, which are not well-served by the current rapid transit system. The locally-preferred alternative is a trolley system operating in reserved lanes on city streets. The potential for traffic and pedestrian conflicts with this type of system, particularly at intersections, presents operating difficulties that could compromise its safety, speed, reliability, and cost-effectiveness. The highest priority for FY 1994 and prior year funding should be to address these difficulties.

This project has an especially strong commitment to its capital costs. The Federal share of the project cost would be only one-third, with the remainder coming from the State and the private sector in the form of a special tax on commercial property in the service area.

Section 3035(e) of ISTEA provides authorizations of $260 million to carry out construction of the locally-preferred alternative. Preliminary engineering for this project is expected to be completed by October 1993. In order that development of this project may continue, funding in the amount of $5.00 million is recommended in FY 1994. Any future funding commitments will be

evaluated once the operational difficulties mentioned above have been addressed to the satisfaction of FTA.

3. Honolulu/Rapid Transit

The City and County of Honolulu is proposing a 15.9-mile fixed guideway system from Waiawa through downtown to the University of Hawaii, with a total estimated cost of $2.3 billion. Preliminary engineering was completed for the Honolulu project in September 1992, at which time the City Council declined to enact the proposed local funding source. While final decisions on funding this project should await completion of the local funding plan, this project appears to have significant potential for success. The topography of Honolulu, its development patterns, and the large transit patronage already present in the corridor are ideal for developing a fixed guideway system. Section 3035(ww) of ISTEA directs the Department to enter into a multiyear grant agreement totaling $618 million over the six-year authorization period.

Two major concerns present themselves at this time. The first is the need to secure a local funding source for $37 million in annual operating and maintenance costs of the proposed system. This added burden may be difficult for the transit system to absorb without a new source of revenue. FTA is concerned about the size of the added burden that the combined rail and bus system would put on existing revenue sources, as well as the lack of a local decision on a funding source.

The other, more significant concern is the vote by the City Council in September 1992 against a proposed increase in the excise tax. This tax increase would have provided 70 percent of the project's capital costs. The city is now exploring alternative local funding sources and has initiated discussions with FTA on the possibility of higher Federal matching funds and a shorter initial project segment. Decisions concerning alignments, termini, and the feasibility of a downtown tunnel are also being reexamined. At this time, it appears doubtful that this project will be ready to utilize more funds in FY 1994 than those that have already been appropriated; it is, therefore, recommended that no funding be provided until these issues are resolved.

4. Houston/Regional Bus

Houston Metro has changed its locally-preferred alternative from a monorail project to major improvements in the bus system, known as the Regional Bus Plan. The cost of these improvements is estimated at $1.25 billion, and includes major service expansion

in most of the region, several short HOV facilities and ramps, several transit centers, and supporting facilities.

Section 3035(uu) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement for $500 million, provided that a locally-preferred alternative for the Priority Corridor project had been selected by March 1, 1992. This condition has been met, and FTA will issue a Letter of Intent and subsequently negotiate an FFGA for the Regional Bus Plan. Houston received New Start earmarks in FY 1989, 1990, 1991, 1992, and 1993 totaling $195.17 million; of this amount, $188.77 million has not yet been obligated. Given the substantial amount of unobligated funds, the immediate need for additional section 3 funding for this project is likely to be small. It is therefore recommended that funds in the amount of $5.00 million be provided in FY 1994, with the expectation that a LOI will be offered once the scope of the project is more clearly developed.

5. Orange County/Transitway

The Orange County Transportation Agency (OCTA) is proposing a transitway project which has a total estimated cost of about $424 million, although the components of the program are still being developed. OCTA is evaluating 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. A Federal share of 75 percent is being sought. If the project is viewed as part of the 20-year local/State effort to construct HOV lanes and transitways on Orange County freeways, the Federal share is only 39 percent. Federal funding for this project would amount to $318 million. OCTA is performing alternatives analysis and preliminary engineering for this project simultaneously.

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 future funding commitment. In FY 1994, it is recommended that $10.0 million be provided to Orange County to permit this project to complete final design of the transitway ramps. Actual construction funding can be made available in subsequent years once the project is developed further.

6. Pittsburgh/Busway Extensions

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 less than $25 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-mile busway, with a preliminary cost estimate of $224 million, is being considered for the area in which congestion is worst. Section 3 funding in the amount of $24.7 million is being sought for this extension. Both extensions are now in the preliminary engineering stage of development.

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 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.

Preliminary estimates indicate that these projects would be extremely well justified. It is recommended that a LOI be issued to provide $12.88 million in FY 1994 to allow project development to continue.

7. Salt Lake City/South LRT

The Utah Transit Authority (UTA) is proposing a 15- to 17-mile at-grade light rail transit (LRT) line from downtown Salt Lake City to the southern suburbs. The line would follow a lightly-used Union Pacific Railroad alignment. The cost of this project is estimated at $230.0 million.

Section 3035(f) of ISTEA directs FTA to enter into a multiyear grant agreement with UTA, which includes $131.0 million for construction of the initial segment of the locally-preferred alternative. Congress has appropriated $21.1 million for advanced right-of-way acquisition, engineering, and design work associated with an at-grade LRT project.

In November 1992, voters defeated the sales tax referendum which was necessary to fund the local share of the project as originally defined. UTA is contemplating another vote and may undertake significant changes to the project and/or funding plan. These modifications may involve both physical and operational changes from the original plan, and the requested Federal share of construction costs may increase. Because a decision on the future of this project has not been made at this time, FY 1994 funding is not recommended.

8. San Francisco Area/Airport & Tasman

Section 3(a)(8)(C)(ii) of the FT Act defines the BART extensions to San Francisco Airport (through Colma) and the Tasman Corridor project in San Jose as elements of a Program of Interrelated Projects to be considered together for the purposes of Federal requirements. In addition, section 3032(c) of ISTEA directs the Secretary to approve the construction of these two projects, while section 3032(e) authorizes $500 million in FY 1992-97 for the federally funded elements of this program (the Colma, Airport, and Tasman extensions). Between FY 1991 and 1993, $225.9 million has been appropriated for the three projects, but none has been obligated for the Airport extension.

The Airport project will extend the BART rapid-rail system to the San Francisco International Airport, significantly improving access to a critical intermodal facility of national scope. The Tasman project is a relatively low-speed light-rail system that would serve an area of low employment and residential density. The BART Airport extension is the more cost effective of the two.

The local financial commitment to both projects is large. A regional financing agreement ties the Airport project to other fixed guideway projects in the Bay Area. The plan calls for 100 percent local funding of BART extensions in the East Bay. The result is that the section 3 share of the total BART extension program is about 28 percent. Additionally, in November 1992 voters in Santa Clara County approved a doubling of the existing 1/2-cent sales tax dedicated largely to transit to pay for the Tasman project and other increases in service; the proposed local share is 50 percent.

In accordance with ISTEA, local officials may opt to use section 3 funds provided to the Bay area for either the Airport extension or the Tasman project. In order to permit these projects to proceed on a reasonable schedule, it is recommended that $28.20 million be provided in FY 1994; Bay area officials would determine how to best allocate these funds between the Airport and Tasman projects.

E. Projects in Alternatives Analysis

Eighteen corridors are currently in the Alternatives Analysis phase of the project development process. During this phase, a range of alternatives is evaluated, the locally preferred alternative is selected, and a draft environmental impact statement is completed.

The 18 corridors undergoing Alternatives Analysis are listed below:

Austin/North Central
Boston/Piers
Cleveland/Dual Hub
Dallas/North Central
Denver/Southwest
Kansas City/South
Los Angeles/East Central
Los Angeles/West Central
Maine/Boston-Portland Commuter Rail
Milwaukee/East-West
Minneapolis/Central
New Jersey/Waterfront
New Orleans/Canal St.
Orlando/OSCAR
Portland/Hillsboro
Sacramento/South
St. Louis/St. Clair
San Diego/Mid Coast

Two of these projects, New Jersey/Urban Core and Maine/Boston-Portland Commuter Rail, are expected to be ready for funding in FY 1994. This would require a total of $45.00 million in FY 1994 New Starts funding.

The following table summarizes the funding recommendations for projects in Alternatives Analysis for FY 1994 and outyear funds (in millions of dollars):

	Commitment Instrument	FY 1994 Funding	Maximum Outyear Funds
New Jersey/Urban Core	LOI	40.00	433.57
Maine/Boston-Portland CR	Grant	5.00	0.00
TOTAL		$45.00	$433.57

1. New Jersey/Urban Core

Section 3(a)(8)(C)(i) of the FT Act provides that the New Jersey Urban Core Project be considered as a Program of Interrelated Projects for the purposes of Federal requirements. Section 3031(d) of ISTEA defines this program to include the Secaucus Transfer Station, the Kearny connection, the Waterfront

connection, the Northeast Corridor signal system improvements, the Hudson River Waterfront transportation system, the Newark-Elizabeth Transit Link, a Newark Penn Station-Broad Street Station rail connection, and the New York Penn Station Concourse.

ISTEA requires FTA to enter into a FFGA for those elements of the Urban Core project that can be fully funded in FY 1992 through FY 1997. Two of these, the Secaucus Transfer and the Hudson River Waterfront project, are expected to be ready for funding in FY 1994. The Secaucus project consists of a transfer station and signal expansions and upgrades that would connect three high-ridership commuter rail lines. This project would improve access to midtown Manhattan on two of these lines, and vastly improve transit connections totally within New Jersey. The Waterfront project would be a light rail transit line serving the planned redevelopment along the Hudson River waterfront across from Manhattan and providing service to local residents travelling to Manhattan.

The total amount of section 3 funds authorized by ISTEA is $634.40 million; through FY 1993, $160.83 million has been appropriated for the eight elements of the Urban Core. Section 3031(c) of ISTEA exempts these projects from the New Start requirements of ISTEA and FTA's major transit investment policy, except that an alternatives analysis was required for the Hudson River Waterfront Transportation System. Such an analysis has recently concluded, and a light rail line selected for further development. The Waterfront and Secaucus projects are described in this section of this report because other elements of the Urban Core program are as yet undefined.

FTA recommends that continued project development funds be provided in FY 1994 and a LOI be issued for the remaining $473.57 million needed for this project, in anticipation of a future FFGA once the eight Urban Core projects are prioritized by New Jersey Transit officials. Funding in the amount of $40.00 million would be provided in FY 1994; this should permit program development to proceed on a reasonable schedule.

2. Maine/Boston-Portland Commuter Rail

This project would initiate commuter rail service over existing track between Boston, Massachusetts and Portland, Maine. Plans are being developed jointly by State and local officials along this corridor. It would involve track and signal improvements and the acquisition of rolling stock at a total cost of $50 million. Section 3035(pp) of the ISTEA provides $30 million for this project; $5.00 million is still required for completion. Given the relatively small scale of the project, it is

recommended that a project grant be issued in the amount of $5.00 million in FY 1994. This will complete the Federal commitment to this project.

F. Projects in System Planning and Other Initial Phases

Sections 3031 and 3035 of ISTEA contain additional earmarks for several projects that are currently in the System Planning stage of development. The most significant of these are: New Jersey/Urban Core, section 3031; Maryland/MARC Extensions, section 3035(nn)(2); Seattle-Tacoma Commuter Rail, section 3035(ccc); and the Seattle Core Rapid Transit project, section 3035(bbb). Twenty-seven projects currently in Systems Planning are listed in Appendix B.

FTA traditionally has not recommended projects not yet in Alternatives Analysis for Section 3 New Start funding. Projects in these preliminary stages of development typically have not reached a level of readiness sufficient to obligate funds.

Maryland/MARC Extensions

The Maryland/MARC Extensions represent an exception to this. The Mass Transit Administration (MTA) of Maryland is considering extensions of the Maryland Commuter Rail (MARC) system to provide service to Washington, D.C. from both Waldorf and Frederick, Maryland. The MARC system presently consists of two lines between Washington and Baltimore, and a third line between Washington and Martinsburg, West Virginia.

Section 3035(nn)(2) of ISTEA directs FTA to enter into a FFGA with MTA totaling $160.00 million to carry out MARC service extensions and other improvements, including the purchase of rolling stock and station improvements. Congress appropriated $10 million for this project in FY 1993.

The details of the extensions are not yet known, as the project is still early in the development process. However, the existing system is efficiently run, well utilized, and ridership is growing. Additional equipment could be put to use on the existing lines. FTA therefore recommends a project grant in the amount of $10.00 million for FY 1994. These funds would be used for the purchase of rolling stock that can be used on existing lines and which could be available for service on planned extensions.

The following table summarizes the recommendations for FY 1994 and outyear funds for projects in system planning and other initial phases (in millions of dollars):

	Commitment Instrument	FY 1994 Funding	Maximum Outyear Funds
Maryland/MARC Extensions	Grant	$10.00	$0.00
TOTAL		$10.00	$0.00

This would allocate all of the $652.27 million proposed to be available for New Starts in FY 1994.

G. Summary of Funding Allocations By Project Phase

The following table shows how much is recommended to be allocated in FY 1994 to projects in each phase of the project development process:

Existing FFGAs	$188.47 million
Under Construction w/o FFGAs	38.72 million
Final Design w/o FFGAs	290.85 million
Preliminary Engineering	79.23 million
Alternatives Analysis	45.00 million
Systems Planning	10.00 million
TOTAL	$652.27 million

H. Summary of Recommended FFGAs, LOIs, and Project Grants

The following chart indicates the FY 1994 and potential outyear implications of the FFGAs recommended above (in millions of dollars):

	FY 1994 Funds	Phase[1]	Maximum Outyear Funds FY 1995-97	Total Funding FY 1994-97
Existing Full Funding Grant Agreements				
Los Angeles/MOS-2	$ 69.27	UC	$ 0.00	$ 69.27
St. Louis/Metrolink	15.20	UC	0.00	15.20
Portland/Westside LRT	104.00	FD	333.51	437.51
Subtotal	**$188.47**		**$333.51**	**$521.98**
Proposed Full Funding Grant Agreements[2]				
Dallas/South Oak Cliff	$ 38.72	UC	$ 38.72	$ 77.44
New York/Queens	73.80	FD	221.52	295.32
L.A./MOS-3	163.05	FD	492.25	655.30
Atlanta/North Line Ext.	54.00	FD	208.80	262.80
Subtotal	**$329.57**		**$961.29**	**$1,290.86**
Proposed Letters of Intent[2]				
Pittsburgh/Busway Ext.	$ 12.88	PE	$ 38.62	$ 51.50
Houston/Regional Bus	5.00	PE	424.90	429.90
New Jersey/Urban Core	40.00	AA	433.57	473.57
Subtotal	**$57.88**		**$897.09**	**$954.97**
Proposed Project Grants				
Baltimore/LRT Ext.	$18.15	PE	$ 0.00	$18.15
Chicago/Central	5.00	PE	0.00	5.00
Orange County/Transitway	10.00	PE	0.00	10.00
San Francisco Area	28.20	PE	0.00	28.20
Maine/Boston-Portland CR	5.00	AA	0.00	5.00
Maryland/MARC Extensions	10.00	SP	0.00	10.00
Subtotal	**$76.35**		**$0.00**	**$76.35**
TOTALS	**$652.27**		**$2,191.89**	**$2,844.16**

1) Phases of project development are abbreviated as follows:
- UC = Under Construction
- FD = Final Design
- PE = Preliminary Engineering
- AA = Alternatives Analysis
- SP = System Planning

2) Projects are prioritized within these categories.

The potential maximum amount of New Start funding which was made available by ISTEA is about $3.62 billion for FY 1994 through 1997. Section 3(a)(4)(E) limits the total amount of Letters of Intent and FFGAs which can be issued at any time to the remaining balance of the authorization, or one-half of the uncommitted cash balance in the Mass Transit Account of the Highway Trust Fund. The sum of commitments which are proposed in this report ($2,844.16 million) is within the total amount authorized.

IV. CONCLUSION

The $652.27 million available for FY 1994 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:

- Provide $69.27 million for the Los Angeles/MOS-2 project and $15.20 million for St. Louis/Metrolink to complete funding of these projects;

- Provide $104.00 million in FY 1994 (and $333.51 million in future years) to Portland/Westside LRT under the existing Full-Funding Grant Agreement for this project;

- Negotiate Full-Funding Grant Agreements for two projects already under construction: Dallas/South Oak Cliff ($38.72 million in FY 1994 and $38.72 million in future funds) and San Francisco/Colma (using already-earmarked funds);

- Negotiate Full-Funding Grant Agreements for three projects in the Final Design stage of development: Los Angeles/MOS-3 ($163.05 million in FY 1994 and $492.25 million in future funds), New York/Queens Connection ($73.80 million in FY 1994 and $221.52 million in future funds), and Atlanta/North Line Extension ($54.00 million in FY 1994 and $208.80 million in future funds, assuming the resolution of certain funding issues);

- Provide funding in FY 1994 and, if appropriate, issue Letters of Intent and negotiate Full Funding Grant Agreements for the following projects:

  - Baltimore/LRT Extensions ($18.15 million in FY 1994);
  - Houston/Regional Bus ($5.00 million in FY 1994 and $424.90 million in future funds);

- New Jersey/Urban Core ($40.00 million in FY 1994 and $433.57 million in future funds);
- Pittsburgh/Busway Extensions ($12.88 million in FY 1994 and $38.62 million in future funds);
- San Francisco Area/Airport & Tasman ($28.20 million in FY 1994);

o Provide funding in FY 1994 for the Chicago/Central Area Circulator ($5.00 million), Maine/Boston-Portland Commuter Rail ($5.00 million), Maryland/MARC Extensions ($10.00 million), and Orange County/Transitway ($10.00 million).

APPENDIX A.

REQUIREMENTS OF SECTION 3(i) OF THE FT ACT

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

"(i) New 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 proposed project plan provides for the availability of contingency funds that the Secretary determines to be reasonable to cover unanticipated cost overruns;
(ii) each proposed local source of capital and operating funding is stable, reliable, and available within the proposed project timetable; and
(iii) local resources are available to operate the overall proposed transit system (including essential feeder bus and other services necessary to achieve the projected ridership levels) without requiring a reduction in existing transit services in order to operate the proposed project.

(D) STABILITY ASSESSMENT.-- In assessing the stability, reliability, and availability of proposed sources of local funding, the Secretary shall consider--

(i) existing grant commitments;
(ii) the degree to which funding sources are dedicated to the purposes proposed; and
(iii) any debt obligations which exist or are proposed by the recipient for the proposed project or other transit purposes.

"(4) PROJECT ADVANCEMENT.-- No project shall be advanced from alternatives analysis to preliminary engineering unless the Secretary finds that the proposed project meets the requirements of this section and there is a reasonable chance that the project will continue to

meet these requirements at the conclusion of preliminary engineering.

"(5) EXCEPTIONS.--

(A) IN GENERAL.-- A new fixed guideway system or extension shall not be subject to the requirements of this subsection and the simultaneous evaluation of such projects in more than one corridor in a metropolitan area shall not be limited if

(i) the project is located within an extreme or severe nonattainment area and is a transportation control measure, as defined by the Clean Air Act, that is required to carry out an approved State Implementation Plan, or

(ii) assistance provided under this section accounts for less than $25,000,000 or less than 1/3 of the total cost of the project or an appropriate program of projects as determined by the Secretary.

(B) EXPEDITED PROCEDURES.-- In the case of a project that is

(i) located within a nonattainment area that is not an extreme or severe nonattainment area,

(ii) a transportation control measure, as defined in the Clean Air Act, and

(iii) required to carry out an approved State Implementation Plan,

the simultaneous evaluation of projects in more than one corridor in a metropolitan area shall not be limited and the Secretary shall make determinations under this subsection with expedited procedures that will promote timely implementation of the State Implementation Plan.

(C) EXCLUSION FOR CERTAIN PROJECTS.--That portion of a project (including any commuter rail service project on an existing right-of-way) financed entirely with highway funds made available under the Federal-Aid Highway Act of 1991 shall not be subject to the requirements of this subsection.

"(6) PROJECT IMPLEMENTATION.--A project funded pursuant to this subsection shall be implemented by means of a full funding grant agreement."

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

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

In summary, ISTEA made a number of significant changes to section 3(i). It modified the determinations under section 3(i)(1) to broaden the second criteria from "cost-effective" to include a much wider range of project justification criteria. It added the five following new subsections which provide more details on the application of these criteria. The first new subsection (section 3(i)(2)) provides details on the considerations which must be accounted for in evaluating project justification. The second (section 3(i)(3)) requires guidelines to be published and includes details on how the local financial commitment is to be evaluated. Section 3(i)(4) requires projects to meet the criteria at the end of alternatives analysis and be likely to continue to meet the criteria at the end of preliminary engineering before a project can advance to that phase.

Section 3(i)(5) exempts projects which are in State Implementation Plans in extreme or severe nonattainment areas, or which are relatively small, have a low Federal share, or which are funded with FHWA funds. Finally, section 3(i)(6) requires FFGAs for New 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.

- 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.

- 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.

- 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.

- If a project appears to be worthy of a Federal investment at the completion of alternatives analysis, FTA may, after notifying Congress of its plans, issue a Letter of Intent to pledge section 3 funding for the project.

- 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 FFGA is normally executed. Such an agreement obligates initial construction funding and a firm Federal commitment of future funding.

APPENDIX B.

NEW START PROJECT PROFILES

as of

January 1993

Office of Grants Management

Federal Transit Administration

U.S. Department of Transportation

NEW START PROJECT PROFILES
(January 1993)

TABLE OF CONTENTS

PREFACE

These new start project profiles provide background information supporting the Department of Transportation's new start funding recommendations for FY 1994. 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)(1) of the Federal Transit Act.

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

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

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

Profiles have been prepared for each project or study undergoing final design, preliminary engineering, and alternatives analysis. In addition, profiles have been prepared for projects that are under construction if additional funds are needed in FY 1994 to fulfill full funding contract commitments. A number of system planning studies, particularly those where congressional interest has been demonstrated, are also covered.

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

Each profile contains five sections:

(1) Description. The description section briefly describes a project's physical characteristics and provides the latest estimates of cost and ridership.

(2) Status. This section identifies where the project is in the major investment planning and project development process. It indicates, for example, whether alternatives analysis and preliminary engineering have been completed. If not, it indicates when current studies are expected to be completed. This section also cites relevant statutory requirements.

(3) Justification. This section presents an evaluation of the project's merit based on the criteria cited in Section 3(i)(1)(B) of the Federal Transit Act, as amended. The evaluation process is further described below.

(4) Local Financial Commitment. This section notes the size of the local match and/or overmatch, and provides FTA's rating on the soundness of the capital finance plan and the stability and reliability of local operating revenues. The financial ratings process is further described below.

(5) Other Factors. Other rating factors which may be useful in identifying the most meritorious projects are described in this section. The section highlights projects where local officials have demonstrated community support for transit by means of commitments to supportive land use and transportation policies.

How the Ratings were Developed.

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

Project Justification

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

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

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

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

For the purpose of the FY 1994 ratings, cost effectiveness was measured using the cost-per-new-trip index which was introduced in FTA's 1984 Major Capital Investment Policy. To compute the new trip index, benefits are measured in terms of new riders, travel time savings for existing riders, and operating cost savings. Additional ridership is a measure of how well a transit facility improves transit service, and is also a useful proxy for many of transit's potential secondary benefits, such as the structuring of urban development patterns and reductions in congestion, pollutant emissions, and energy consumption. The travel time savings measure reflects improved travel conditions for existing transit users, and is a good indicator of improved mobility for the transit dependent. Changes in operating and maintenance costs are included to reflect the potential for improvements in efficiency introduced by new transit facilities. The index takes the form of cost-per-added-rider; the lower the index, the more cost-effective the project.

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

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

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

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

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

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

Local Financial Commitment

FTA's evaluation of the local financial commitment to a proposed project focuses on three principal elements: the proposed local share of project costs, the strength of the proposed capital financing plan, and the stability and reliability of sources of operating deficit funding. The assessment of operating deficit funding takes into account the cost of the supporting bus service assumed in determining cost effectiveness. 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 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 indicators used to assign these ratings are further explained in Table B-1.

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

PROJECTS UNDER CONSTRUCTION

South Oak Cliff Corridor
Dallas, Texas
(January 1993)

Description

The South Oak Cliff light rail line is part of a 20-mile, $841 million light rail starter system which is being constructed by the Dallas Area Rapid Transit (DART). Other elements of the system include a branch to West Oak Cliff and a North Central line, both of which are under construction. The 9.6-mile, 13 station South Oak Cliff line extends from downtown Dallas to Ledbetter Drive in the South Oak Cliff area of Dallas. It is estimated to cost $360 million, of which DART is requesting $160 million from Section 3. This line is expected to carry 20,000 riders daily in 2005. DART will build the other two lines without Federal funding assistance.

Status

All of the environmental, alternatives analysis, and preliminary engineering requirements have been completed and construction is underway. A full funding grant agreement between DART and FTA is being negotiated.

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

Justification

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

Cost Effectiveness. The project has a cost effectiveness index of about $9 per new trip, reflecting the relatively low capital cost of the proposed at-grade rail line and modest benefits (2005 ridership, 1989 dollars).

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

Operating Efficiencies. The systemwide operating cost per transit rider is forecast to be about $2.84 for the DART system with the South Oak Cliff Line, $2.85 for the TSM alternative, and $2.73 for No-Build in year 2005.

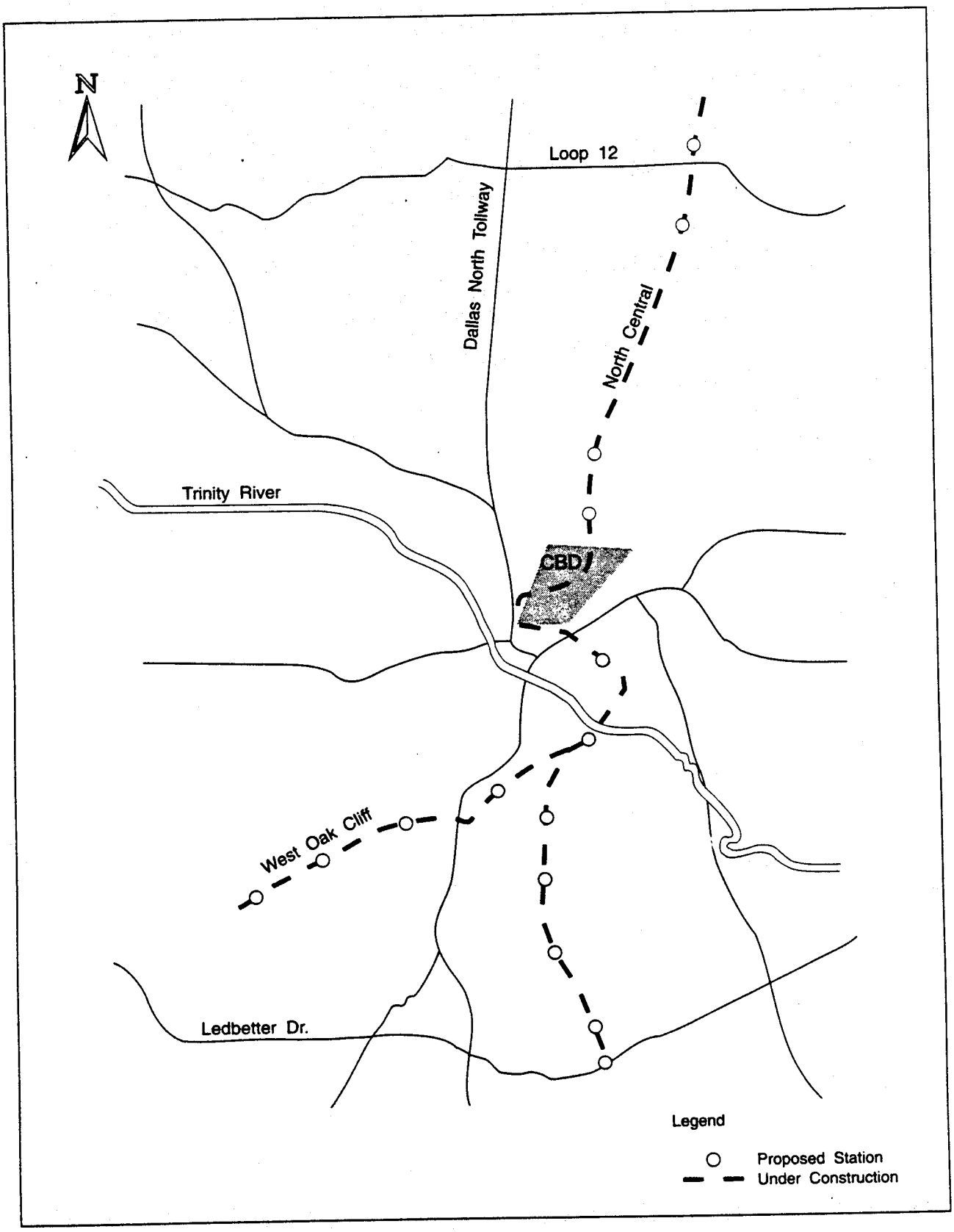
Local Financial Commitment

DART is seeking FTA funding for 20 percent of the cost of the 20-mile starter system. This funding would represent 44 percent of the cost of the South Oak Cliff line.

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."

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." In 1991 DART's bus fleet averaged 6.8 years old which is better than the national average.

Dallas:
South Oak Cliff Corridor



MOS-2 Segment of the Red Line
Los Angeles, California
(January 1993)

Description

The 22-mile, $5.3-billion Metro Rail Red Line Project in Los Angeles has been broken into "minimum operable segments" (MOSs) for funding purposes. The 4.4-mile, 5-station segment in downtown Los Angeles known as MOS-1 opened for revenue service in January 1993. The second minimum operable segment, or MOS-2, consists of 6.7 miles of heavy rail with eight stations, all in subway. 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 continues west beneath Wilshire to Western Avenue; the other branch goes north beneath Vermont to Hollywood Boulevard and then west beneath Hollywood Boulevard to Vine Street in Hollywood. MOS-2 is part of the original 20-mile Red Line for which planning and environmental work has been completed.

The estimated cost of MOS-2 is $1.45 billion (escalated dollars).

The original 20-mile Red Line is expected to attract 164,000 daily riders by 2010. A forecast for MOS-2 by itself is not available.

Status

In 1990 FTA signed a full funding grant agreement (FFGA) with the Los Angeles County Transportation Commission (LACTC) for construction of MOS-2. The FFGA commits $667 million in Section 3 New Start funds to MOS-2. Through FY 1993, a total of $598 million has been appropriated for MOS-2, leaving a balance due of $69 million.

MOS-2 is under construction. The Wilshire Boulevard branch is scheduled to open in 1996 and the Hollywood branch in 1998.

Justification

The original 20-mile Red Line, including MOS-2, was excluded from the new start criteria by the STURA Act of 1987.

Mobility Improvements. Los Angeles has the third highest transit ridership of any system in the country and notoriously congested freeways. The Wilshire Boulevard corridor carries the city's busiest bus lines. There are no inexpensive ways to improve bus service in the MOS-2 service areas. The 20-mile Red Line will reduce the travel time for typical transit trips to downtown Los Angeles by 30 to 35 minutes compared to the Null (All Bus) Alternative. Transit trips originating on the east side destined to west side attractions such as the Los Angeles County Art Museum and Los Angeles City College will save an average of 15 minutes compared to the Null Alternative. Transit trips to Universal City and other destinations north of the Santa Monica

mountains will save 30 to 60 minutes compared with the Null Alternative. A total of 50,000 person hours of transit travel time will be saved each day with the 20-mile Red Line in operation.

Cost-effectiveness. A cost effectiveness index for MOS-2 is not available. In 1984, a cost effectiveness index of $1.46 per new rider was computed for an 18-mile Metrorail line serving this corridor. While the cost of the project has escalated since 1984, and ridership forecasts have been reduced, FTA still considers the project to be a cost effective investment.

Environmental Benefits. Los Angeles' air quality problems are unique. EPA has classified it as the only "extreme" nonattainment area for ozone and as the only "serious" nonattainment area for carbon monoxide (CO). It is unlikely that MOS-2 will have a noticeable effect on pollution levels in Los Angeles at the regional scale. However, the Red Line is part of a larger commitment to meeting the goals of the South Coast Air Quality Management Plan through a Regional Mobility Plan which includes an extensive network of rail lines, electric bus lines, high-occupancy vehicle (HOV) facilities, and an aggressive travel demand management program. In addition, MOS-2 should reduce localized CO concentrations in the Wilshire corridor and in Hollywood by eliminating buses from the traffic stream. The major adverse impact of MOS-2 is the temporary traffic disruption during construction and the temporary use of parks. Most of MacArthur Park including the lake is temporarily not available to the public during MOS-2 construction, but it will be fully restored after construction. A portion of Barnsdall Park is also being used for construction, but activities at the park will not be disrupted, and it too will be restored.

Operating Efficiencies. In 2005 the operating and maintenance cost of the regional bus and the 20-mile Red Line, which includes MOS-2, is expected to be $1.70 per transit trip compared to a cost of $2.10 per transit trip for the Null Alternative.

Local Financial Commitment

The Section 3 New Start share for MOS-1 and MOS-2 together is 50 percent. In addition, LACTC and the other local and State funding partners are financing in excess of $2 billion worth of major transit projects without any Federal assistance. These projects include: the Green Line now under construction from Norwalk to El Segundo; a 200-mile regional commuter rail system called Metrolink, of which three lines opened in October 1992; a planned Blue Line

Extension to Pasadena; and a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester.

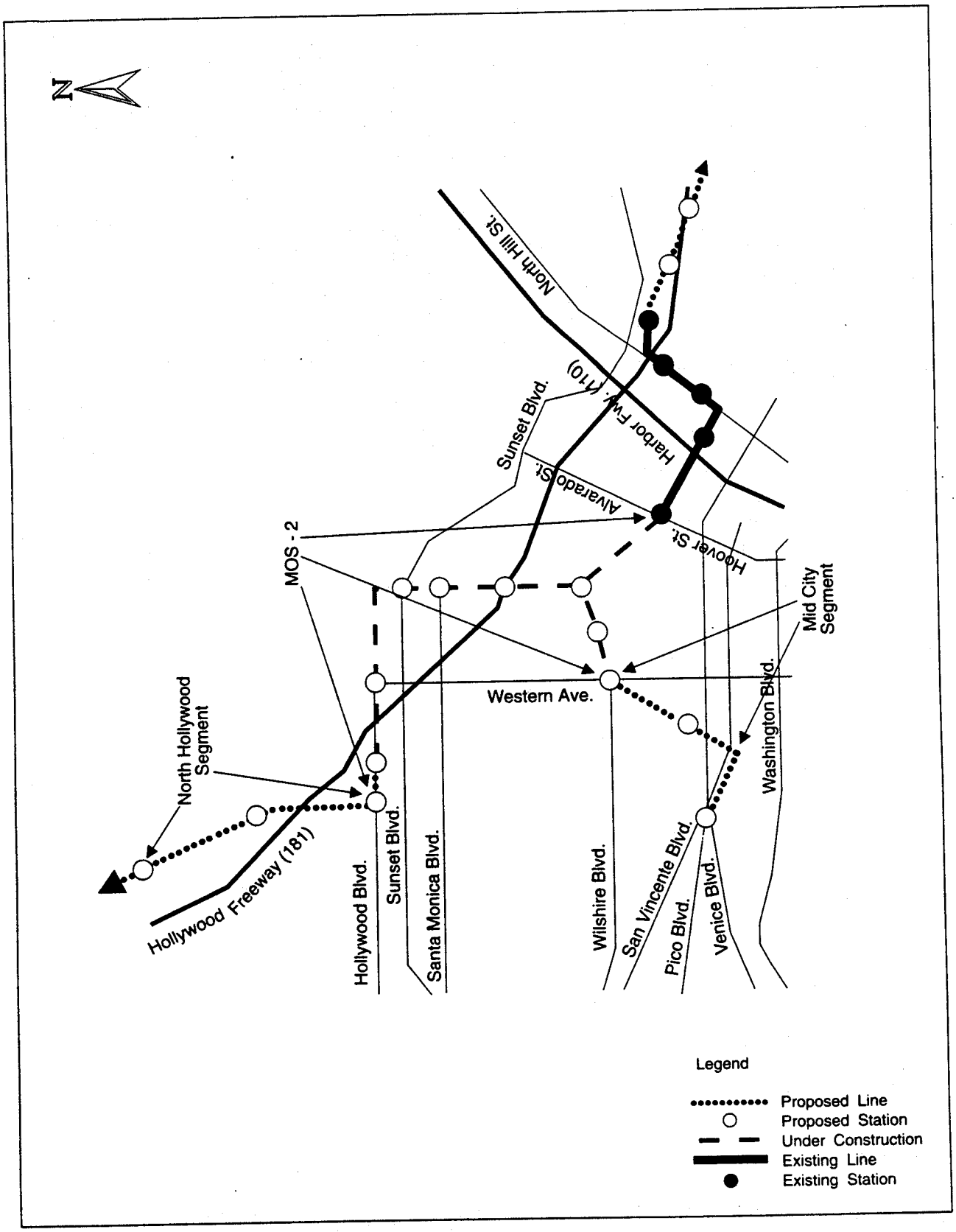
The primary local resource dedicated to transit is a 0.5 percent countywide sales tax which was adopted in 1980. Of this tax, 35 percent or about $130 million annually is dedicated to the construction of a countywide rail system. An additional 0.5 percent sales tax dedicated to transit and transit-related highway improvements was enacted in 1990.

Revenues of the State of California dedicated to transit are derived from: Proposition 111 which, beginning in 1991, gradually increases 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; and issuance of general obligation bonds authorized by Propositions 108 and 116. In November 1992, however, voters turned down a $1 billion bond issue authorized by Proposition 108 and forced the State to reestablish priorities and schedules for rail projects throughout the State. State officials hope to recover the lost bonding authority in 1994 by seeking $2 billion rather than the previously scheduled $1 billion in the 1994 referendum.

FTA has rated LACTC's capital and operating financing plan as "acceptable." The revenue from State and local resources are adequate to finance construction of all segments of the 20-mile Red Line and the operating deficits of the bus system and the Red and Blue Lines. However, additional elements of the countywide rail system currently being planned may require additional resources to construct, operate, and maintain.

In 1991 Los Angeles' bus fleet averaged 7.6 years old, which is comparable to the national average. Rail vehicles averaged 1.2 years old.

Los Angeles:
MOS - 2



"Metro Link" LRT to Airport
St. Louis, MO.
(January 1993)

Description

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

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

The latest ridership forecast for the line is 17,000 for the opening year (1993) and 31,000 by the year 2010.

Status

The project is currently under construction. Service on the line is expected to begin in July 1993.

Congress has appropriated $326.9 million for the project, leaving $11.7 million needed to fulfill the FFGA commitment. Bi-State is seeking an additional $7.9 million in New Start funds to cover extraordinary costs. In the past, FTA has approved a majority of Bi-State's extraordinary cost claims, but has previously denied $2.9 million of the $7.9 million now being requested.

Justification

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

Cost Effectiveness. The project had a cost-effectiveness index of $9 (year 2000 ridership, 1986 dollars) at the end of preliminary engineering. Since then, capital costs have increased 17 percent for a variety of reasons, and indications are that ridership for year 2000 will be less than forecast.

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

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

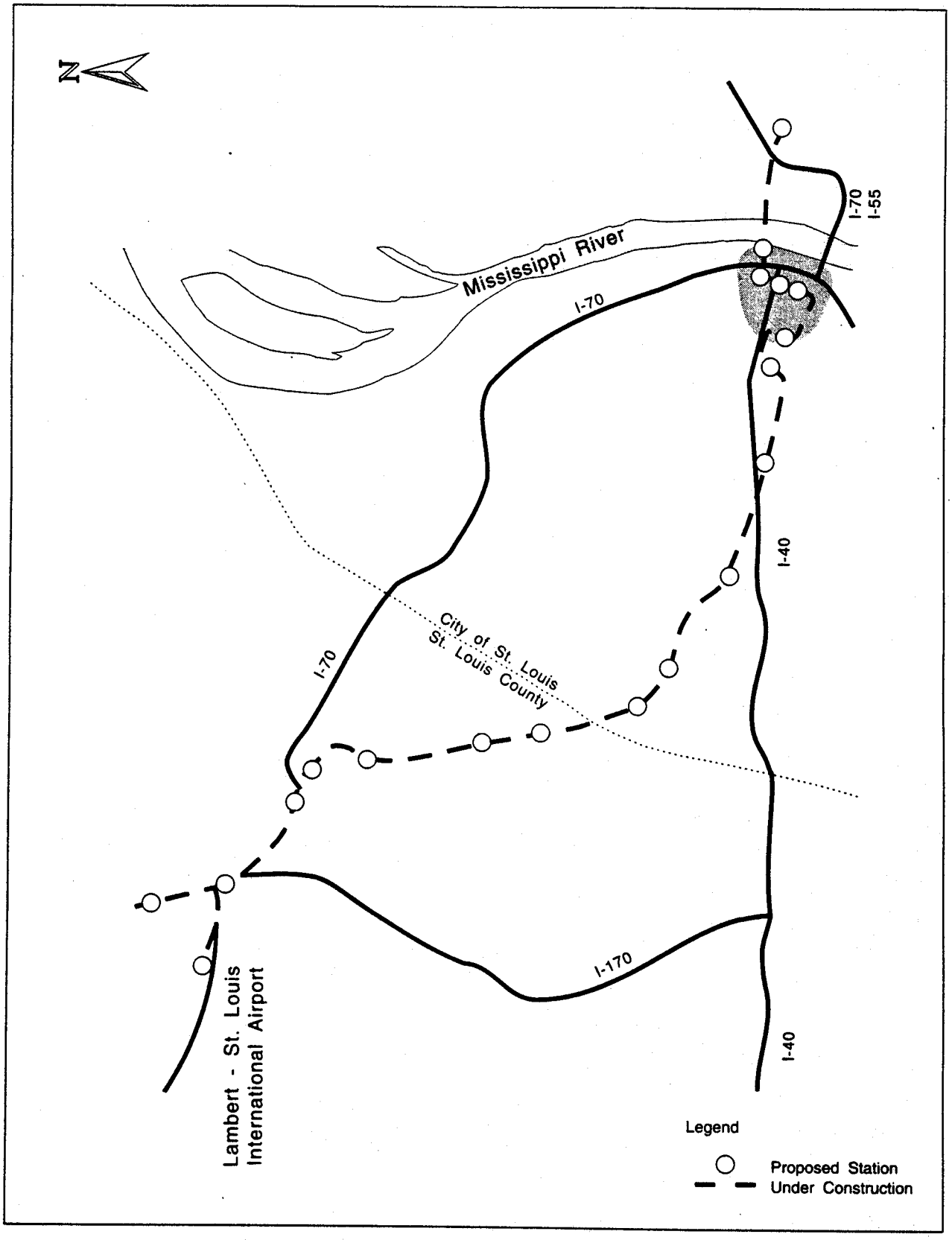
Local Financial Commitment

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

Operations and routine capital purchases are supported by a 0.5 percent Mass Transportation Sales Tax collected in St. Louis City and St. Louis County. Missouri officials are considering possible State legislation in 1993 which would augment the existing Mass Transportation Sales Tax, and reenforce revenues to operate both the rail line and the proposed level of bus service.

In 1991 Bi-State's bus fleet averaged 8.7 years old, which is slightly above the national average.

St. Louis:
Metro Link to Airport



Colma Station
San Francisco, California
(January 1993)

Description San Mateo County is sponsoring the construction of a $171 million 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.

Status The final EIS was completed in December 1990, and the project is now under construction. Construction bids were higher than expected resulting in a $26 million increase in the projected capital cost. The increase in costs has been budgeted. FTA is negotiating a full funding grant agreement for the project.

Congress has appropriated sufficient New Start funds to the San Francisco region to construct this project. However, per congressional direction, the Metropolitan Transportation Commission must allocate the earmarked funds between Colma, BART to the Airport and the Tasman project. These allocations have not yet been made.

To date FTA has obligated $81.7 million in Section 3 New Start funds and $3.6 million in Section 9 funds toward the project. FTA has also approved a letter of no prejudice for an additional $34.4 million.

Justification Mobility Improvements. The Colma project is expected to eliminate 2,350 auto trips coming north to the San Francisco CBD and to relieve parking congestion at the Daly City station by eliminating 1,800 auto trips to Daly City. Over one million hours of travel time will be saved in the year 2005 with this project.

Cost Effectiveness. The cost effectiveness index for the Colma project is about $6 per new transit trip.

Environmental Benefits. The San Francisco Bay Area is a "moderate" nonattainment area for ozone and a "moderate <= 12.7" nonattainment area for carbon monoxide. The 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.

Operating Efficiencies. FTA has no information on how this project would affect the operating cost per rider. However, the increase in fare revenue from new passengers is expected to be greater than the increase in operating costs.

Colma Station — San Francisco, California

Local Financial Commitment

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 and state 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.

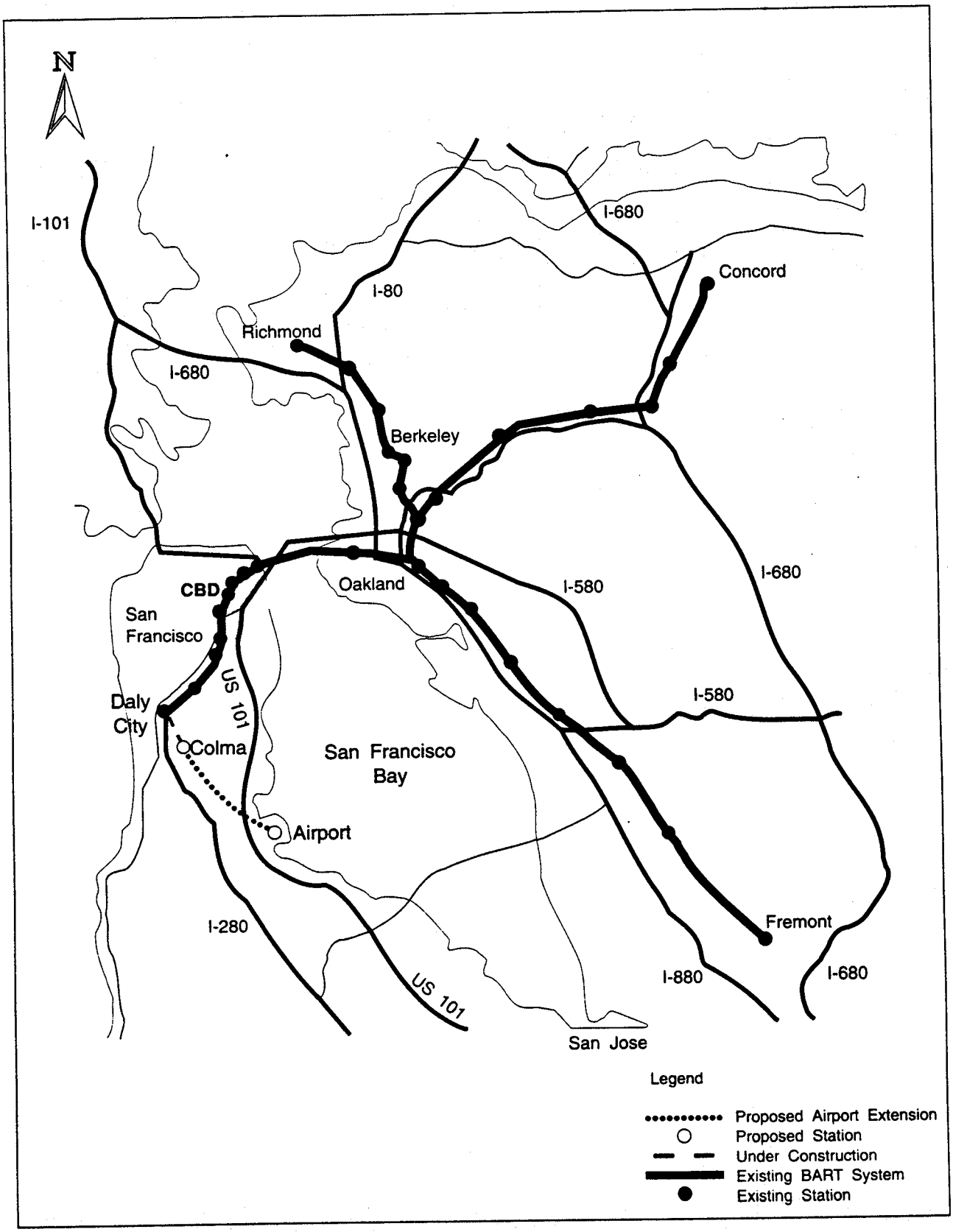
Local funding for the Colma project has been assured by a regional rail capital program agreement and voter approval of all local tax increases needed to implement the financing plan. The plan calls for San Mateo County to pay $200 million to East Bay Counties to buy into BART and partially fund BART extensions in those counties in exchange for San Mateo County's fixed guideway projects getting local priority in the competition for Section 3 New Start funding. Half of the $200 million payment to BART was made when construction began on Colma Station and the other half will be paid in installments tied to the Airport extension construction.

A financing plan has been developed to cover the $26 million in additional construction costs. 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.

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."

In 1991 the average age of SamTrans bus fleet was 7.1 years, which is better than the national average. BART's rail vehicles averaged 13.7 years old.

San Francisco:
Colma and Airport Extensions



PROJECTS IN FINAL DESIGN

North Line Extension
Atlanta, Georgia
(January 1993)

Description

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

The 3.1-mile extension is estimated to cost $485 million (escalated dollars). MARTA seeks an 80 percent Federal share of $387 million.

Daily ridership on the rail extension in the year 2005 is estimated at 33,000 riders including 11,000 new riders. The ridership projection assumes that substantial new development will occur in the service area.

Status

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

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

FTA has made a $92 million grant for final design and construction of a segment of the extension connecting the Medical Center and Dunwoody. An additional $6.4 million is being sought to fully fund this segment. MARTA intends to seek construction funds for the Dunwoody to North Springs segment and associated vehicles in FY 1994 thru FY 1999.

Justification

Mobility Improvements. The North Atlanta Corridor is the fastest growing portion of the Atlanta area. The North Line and its extension will connect this area with the rest of the region and thereby provide better transit service for inner city residents travelling to expanding job opportunities in the suburbs as well as the traditional radial service from the North Atlanta Corridor to downtown.

Cost Effectiveness. The project has a cost effectiveness index of $9 per new transit rider (2005 ridership, 1990 dollars).

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

Operating Efficiencies. FTA does not have the information to determine the operating cost per passenger for the Atlanta North Line Extension.

Local Financial Commitment

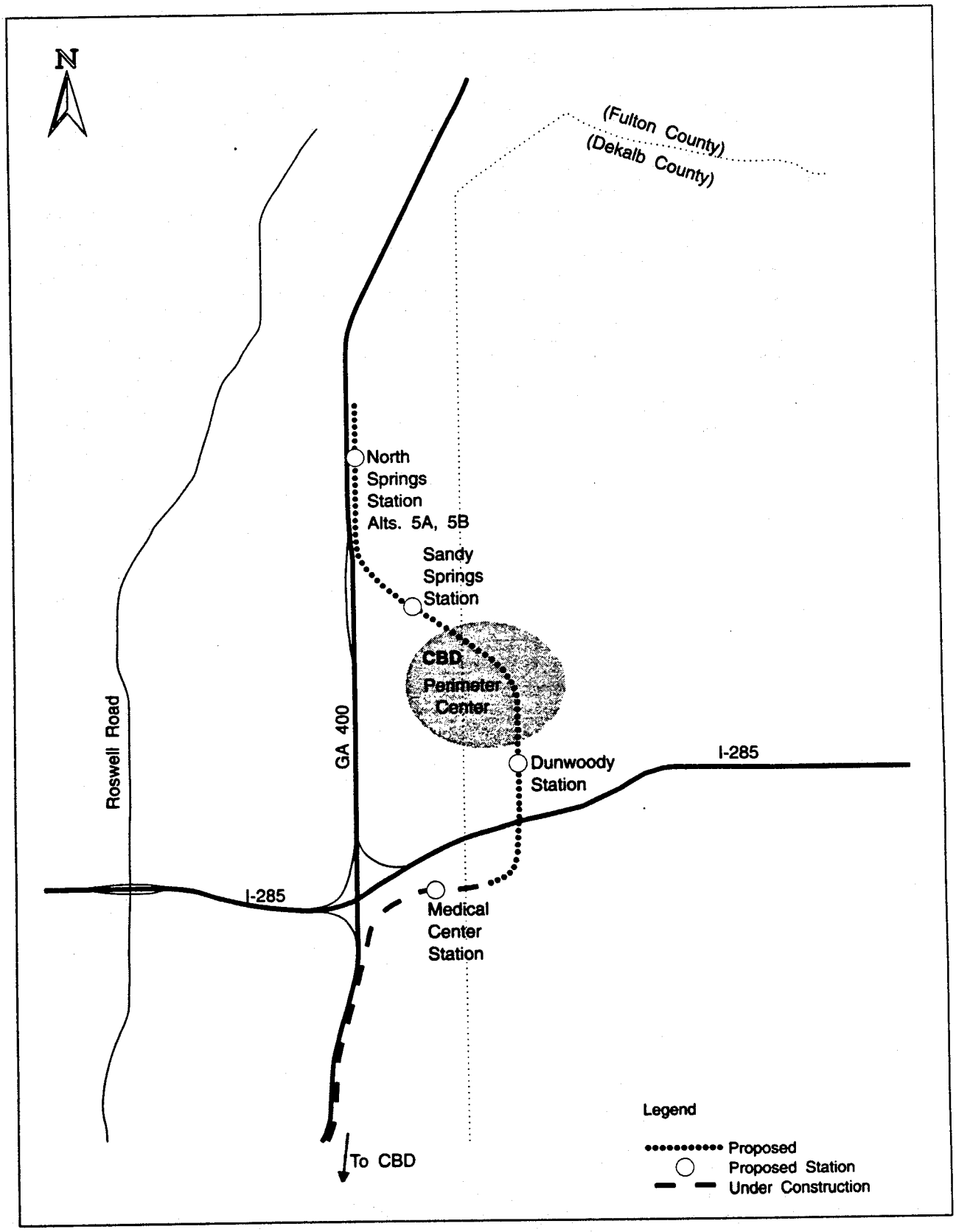
MARTA's financial plan calls for a Federal share of 80 percent for the capital cost of the project. The FTA share of the entire MARTA rail construction program thus far has been 53 percent.

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 two rail extensions now under construction and one in final design. When these segments, totalling 9 miles, are completed, MARTA will increase its operating rail system to 44 miles with a commensurate increase in operating subsidy. As a result, MARTA's working capital will continue to decrease. MARTA is approaching its legal debt capacity.

The stability and reliability of MARTA's operating assistance plan is rated as "acceptable," but it, too, should be carefully monitored. The financial plan assumes a significant increase in average fares (from $0.89 to $1.47 over a 15-year period) and a resulting increase in "operating ratio," the percent of operating costs covered by fares. The FY 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.

In 1991 MARTA's bus fleet averaged 5.6 years old, which is better than the national average. Rail vehicles averaged 7.9 years old.

Atlanta:
North Line Extension



South Extension of the Automated Skyway Express (ASE)
Jacksonville, Florida
(January 1993)

Description

The project is a 1.2-mile extension of the Automated Skyway Express (ASE) south of downtown Jacksonville. The extension would consist of an elevated, double track guideway running across the St. Johns River and 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 of this extension is $133.7 million (escalated dollars).

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

Status

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

In September 1991, at congressional direction, FTA and JTA entered into a full funding grant agreement for a 0.6-mile extension of the starter line. This project will extend the starter line north through downtown to Florida Community College. The $29 million Federal share for this project has already been appropriated and construction has begun. Initial bids on the systems (cars, train control, communications, etc.) portion of the project exceeded the budget, causing JTA to consider alternative technologies for the entire system.

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.

Section 3035(vv) of ISTEA directs FTA to enter into a multiyear grant agreement for $71.2 million to complete the 2.5-mile ASE system. In addition to the $29 million appropriated for the north extension, Congress has appropriated $15 million for the south extension. The environmental process is complete, and the south extension is in final design.

Justification

Mobility Improvements. In 1988 JTA estimated that 38,000 riders per day would use the 2.5-mile system in 2005. This is more conservative than the JTA's earlier estimate of 42,000 riders by 1995. The latest estimate assumed significant new development along the alignment. In recent years growth and development in

downtown Jacksonville has slowed considerably. In view of this fact, the low ridership on the starter line, and the low ridership on Miami's Metro Mover (11,000 actual vs. 40,000 projected daily trips) and Detroit's DPM (13,000 actual vs. 70,000 projected), JTA's estimate is thought to be optimistic. FTA has no information on the travel time impacts of the project.

Cost Effectiveness. The project predates FTA's issuance of its Major Capital Investment Policy. Cost effectiveness indices have not been computed for this proposal.

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

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

Local Financial Commitment

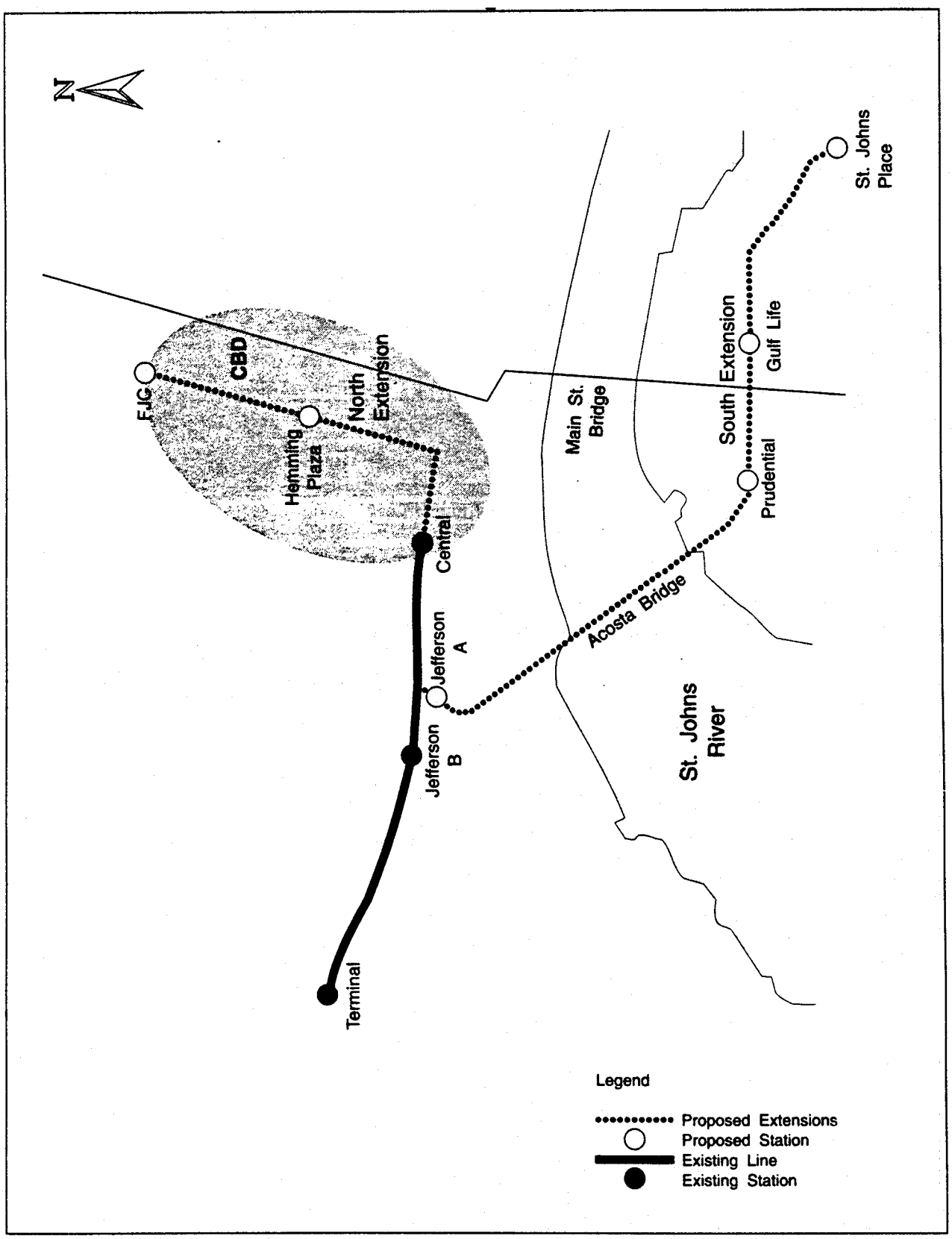
JTA is proposing the maximum Federal share resulting in a Section 3 cost of $107 million.

JTA has prepared a capital financing plan which FTA found to be acceptable. State funding has been provided for the complete project and the City Council has agreed to provide the remaining local funds by a resolution. JTA does not have an ongoing dedicated funding source to support its transit capital program. JTA's 0.5 percent sales tax, which went into effect in 1989, is primarily dedicated to retiring existing highway toll bonds. JTA has no revenue base or taxing power dedicated to transit capital.

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 percent. The JTA's financial plan conservatively assumed a 35 percent recovery ratio in 1991. JTA expects this ratio to increase to a break even basis (100 percent) by the year 2000. While the magnitude of the operating subsidy is relatively small, FTA considers 100 percent cost recovery to be unrealistic.

In 1991 the average age of the JTA bus fleet was 7.3 years old, which is comparable to the national average.

Jacksonville:
Automated Skyway Express



Mid-City Segment of the Red Line
Los Angeles, California
(January 1993)

Description

The 22-mile, $5.3-billion Metro Rail Red Line Project in Los Angeles has been broken into "minimum operable segments" (MOSs) for funding purposes. The 4.4-mile segment called MOS-1 opened for revenue service in January 1993. MOS-2 is under construction through a full funding grant agreement (FFGA) between FTA and the Los Angeles County Transportation Commission (LACTC). ISTEA defined MOS-3 to include three segments: the Mid-City (Pico/San Vicente) segment, the North Hollywood segment, and part of the proposed East Side extension. The Mid-City and North Hollywood segments are part of the original 20-mile Red Line for which planning and environmental work has been completed. The other MOS-3 segment, the proposed East Side extension, is still under development and environmental review.

The Mid-City segment of the Red Line extends the Wilshire Boulevard branch generally to the west beyond the MOS-2 terminus at Western Avenue. It adds 2.3 miles and two stations, all in subway, to the line. It avoids the risk zone of naturally occurring methane gas identified along Wilshire Boulevard by swinging southwest beneath Crenshaw Boulevard and then west beneath Pico Boulevard to a terminal at Pico and San Vicente Boulevards.

The estimated cost of the Mid-City segment is $491 million (escalated dollars).

The original 20-mile Red Line, which includes the Mid-City segment, is expected to attract 164,000 daily riders in 2010. A ridership forecast for the Mid-City segment by itself is not available.

Status

The Los Angeles County Transportation Commission (LACTC) adopted the Mid-City segment into the locally preferred alternative in March 1992. FTA issued a final EIS on the segment in September 1992 and a record of decision in November 1992.

Section 3034 of ISTEA directs FTA to amend the FFGA for MOS-2 to provide LACTC with $695 million in Section 3 New Start funds for construction of MOS-3 and advance construction authority for $535 million. Through FY 1993, $20 million in New Start funds have been appropriated for the Mid-City segment. FTA and LACTC have been actively negotiating a FFGA for MOS-3.

Justification

The original 20-mile Red Line, including the Mid-City segment, was excluded from the new start criteria by the STURA Act of 1987.

Mobility Improvements. Los Angeles has the third highest transit ridership of any system in the country and notoriously congested freeways. The Wilshire Boulevard corridor carries the city's busiest bus lines. There are no inexpensive ways to improve bus service in the corridor served by this segment. The 20-mile Red Line will reduce the travel time for typical transit trips to downtown Los Angeles by 30 to 35 minutes compared to the Null (All Bus) Alternative. Transit trips originating on the east side destined to west side attractions such as the Los Angeles County Art Museum and Los Angeles City College will save an average of 15 minutes compared to the Null Alternative. Transit trips to Universal City and other destinations north of the Santa Monica mountains will save 30 to 60 minutes compared with the Null Alternative. A total of 50,000 person hours of transit travel time will be saved each day with the 20-mile Red Line in operation.

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

Environmental Benefits. Los Angeles' air quality problems are unique. EPA has classified it as the only "extreme" nonattainment area for ozone and as the only "serious" nonattainment area for carbon monoxide (CO). It is unlikely that the Mid-City segment will have a noticeable effect on pollution levels in Los Angeles at the regional scale. However, the Red Line is part of a larger commitment to meeting the goals of the South Coast Air Quality Management Plan through a Regional Mobility Plan which includes an extensive network of rail lines, electric bus lines, high-occupancy vehicle (HOV) facilities, and an aggressive travel demand management program. In addition, the Mid-City segment should reduce localized CO concentrations in the Wilshire corridor by eliminating buses from the traffic stream. The future Pico/San Vicente station adjoins a block which was destroyed in the 1992 riots, and LACTC is pursuing joint development of the area.

Operating Efficiencies. In 2005 the operating and maintenance cost of the regional bus and 20-mile Red Line, which includes the Mid-City segment, is expected to be $1.70 per transit trip compared to a cost of $2.10 per transit trip for the Null Alternative.

Local Financial Commitment

LACTC seeks a Section 3 New Start share for the Mid-City segment of 49 percent, or $243 million. LACTC intends to fund an additional 11 percent of the project, or $55 million, from the flexible Surface Transportation Program (STP). The New Start share of MOS-1 and MOS-2 taken together has been 50 percent, and the proposed New Start share of the North

Hollywood segment is 52 percent. In addition, LACTC and the other local and State funding partners are financing in excess of $2 billion worth of major transit projects without any Federal assistance. These projects include: the Green Line now under construction from Norwalk to El Segundo; a 200-mile regional commuter rail system called Metrolink, of which 3 lines opened in October 1992; a planned Blue Line Extension to Pasadena; and a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester.

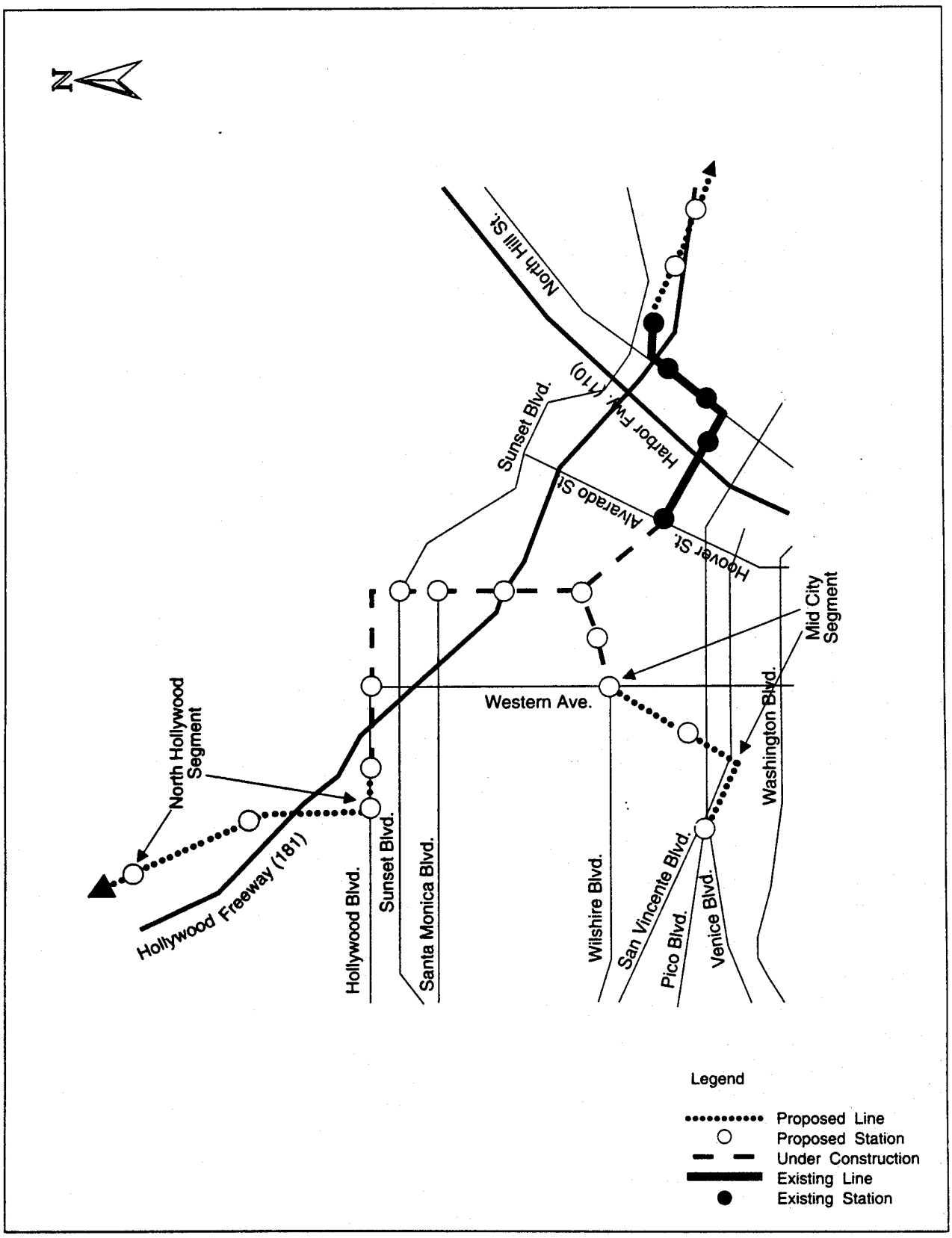
The primary local resource dedicated to transit is a 0.5 percent countywide sales tax adopted in 1980. Of this sales tax, 35 percent or about $130 million annually is dedicated to the construction of a countywide rail system. An additional 0.5 percent sales tax dedicated to transit and transit-related highway improvements was enacted in 1990.

Revenues of the State of California dedicated to transit are derived from: Proposition 111 which, beginning in 1991, gradually increases 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; and issuance of general obligation bonds authorized by Propositions 108 and 116. In November 1992, however, voters turned down a $1 billion bond issue authorized by Proposition 108 and forced the State to reestablish priorities and schedules for rail projects throughout the State. State officials hope to recover the lost bonding authority in 1994 by seeking $2 billion rather than the previously scheduled $1 billion in the 1994 referendum.

FTA has rated LACTC's capital and operating financing plan as "acceptable." The revenue from State and local resources are adequate to finance construction of all segments of the 20-mile Red Line and the operating deficits of the bus system and Red and Blue Lines. However, additional elements of the countywide rail system currently being planned may require additional resources to construct, operate, and maintain.

In 1991 Los Angeles' bus fleet averaged 7.6 years old, which is comparable to the national average. Rail vehicles averaged 1.2 years old.

Los Angeles:
Mid-City Segment



North Hollywood Segment of the Red Line
Los Angeles, California
(January 1993)

Description

The 22-mile, $5.3-billion Metro Rail Red Line Project in Los Angeles has been broken into "minimum operable segments" (MOSs) for funding purposes. The 4.4-mile, 5-station segment in downtown Los Angeles known as MOS-1 opened for revenue service in January 1993. MOS-2 is under construction through a full funding grant agreement (FFGA) between FTA and the Los Angeles County Transportation Commission (LACTC). ISTEA defined MOS-3 to include three segments, the North Hollywood segment, the Mid-City (Pico/San Vicente) segment, and part of the proposed East Side extension. The Mid-City and North Hollywood segments are part of the original 20-mile Red Line for which planning and environmental work has been completed. The other MOS-3 segment, the proposed East Side extension, is still under development and environmental review.

The North Hollywood segment is 6.3 miles long with three stations, all in subway. It follows Hollywood Boulevard west from the MOS-2 terminus near Vine Street, then turns north through the Santa Monica mountains to North Hollywood where it follows Lankershim Boulevard to a terminus at Chandler Boulevard.

The estimated cost of the North Hollywood segment is $1.45 billion (escalated dollars).

The original 20-mile Red Line is expected to attract 164,000 daily riders in 2010. A forecast for the North Hollywood segment by itself is not available.

Status

Final design of the North Hollywood segment is underway, and major construction is scheduled to begin in 1993.

Section 3034 of ISTEA directs FTA to amend the FFGA for MOS-2 to provide LACTC with $695 million in Section 3 New Start funds for construction of MOS-3 and advance construction authority for $535 million. Through FY 1993, a total of $20 million has been appropriated for the North Hollywood segment. FTA and LACTC have been actively negotiating a FFGA for MOS-3.

Justification

The original 20-mile Red Line, which includes the North Hollywood segment, was excluded from the new start criteria by the STURA Act of 1987.

Mobility Improvements. Los Angeles has the third highest transit ridership of any system in the country and notoriously congested freeways. There are no inexpensive ways to improve bus service in Hollywood and North Hollywood. The 20-mile Red Line will reduce the travel time for typical

transit trips to downtown Los Angeles by 30 to 35 minutes compared to the Null (All Bus) Alternative. Transit trips originating on the east side destined to west side attractions such as the Los Angeles County Art Museum and Los Angeles City College will save an average of 15 minutes compared to the Null Alternative. Transit trips to Universal City and other destinations north of the Santa Monica mountains will save 30 to 60 minutes compared with the Null Alternative. A total of 50,000 person hours of transit travel time will be saved each day with the 20-mile Red Line in operation.

Cost-effectiveness. A cost-effectiveness index for the project is not available. In 1984, a cost effectiveness index of $1.46 per new rider was computed for an 18-mile Metrorail line serving this corridor. While the cost of the project has escalated since 1984, and ridership forecasts have been reduced, FTA still considers the project to be a cost effective investment.

Environmental Benefits. Los Angeles' air quality problems are unique. EPA has classified it as the only "extreme" nonattainment area for ozone and as the only "serious" nonattainment area for carbon monoxide (CO). It is unlikely that the North Hollywood segment will have a noticeable effect on pollution levels in Los Angeles at the regional scale. However, the Red Line is part of a larger commitment to meeting the goals of the South Coast Air Quality Management Plan through a Regional Mobility Plan which includes an extensive network of rail lines, electric bus lines, high-occupancy vehicle (HOV) facilities, and an aggressive travel demand management program. In addition, the North Hollywood segment should reduce localized CO concentrations in Hollywood and North Hollywood by eliminating buses from the traffic stream.

Operating Efficiencies. In 2005 the operating and maintenance cost of the regional bus and the 20-mile Red Line, which includes the North Hollywood segment, is expected to be $1.70 per transit trip compared to a cost of $2.10 per transit trip for the Null Alternative.

Local Financial Commitment

LACTC seeks a Section 3 New Start share for the North Hollywood segment of 52 percent or $681 million. The New Start share of MOS-1 and MOS-2 taken together has been 50 percent. In addition, LACTC and the other local and State funding partners are financing in excess of $2 billion worth of major transit projects without any Federal assistance. These projects include: the Green Line now under construction from Norwalk to El Segundo; a 200-mile regional commuter rail system called Metrolink, of which 3 lines

opened in October 1992; a planned Blue Line Extension to Pasadena; and a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester.

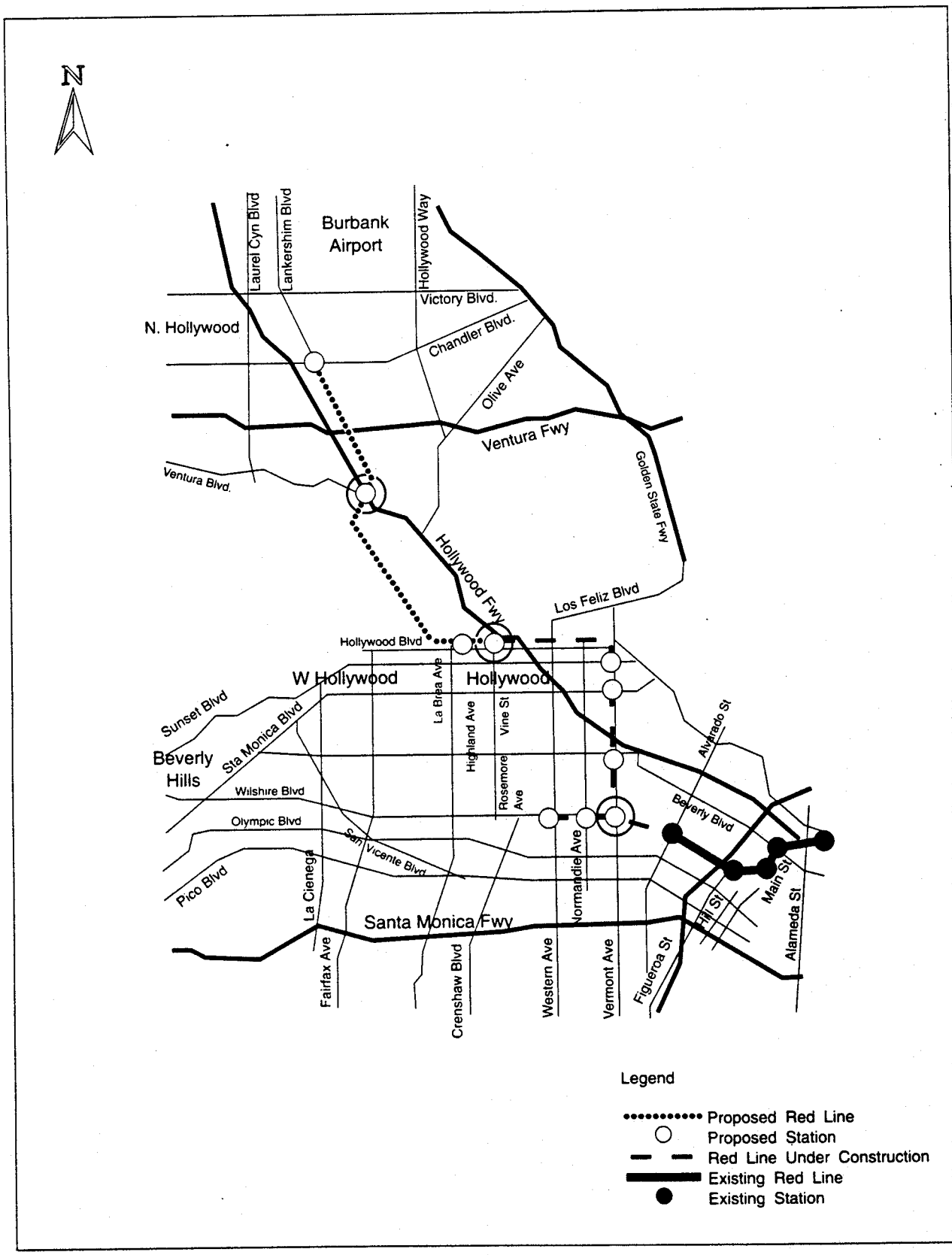
The primary local resource dedicated to transit is a 0.5 percent countywide sales tax adopted in 1980. Of this sales tax, 35 percent or about $130 million annually is dedicated to the construction of a countywide rail system. An additional 0.5 percent sales tax dedicated to transit and transit-related highway improvements was enacted in 1990.

Revenues of the State of California dedicated to transit are derived from: Proposition 111 which, beginning in 1991, gradually increases 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; and issuance of general obligation bonds authorized by Propositions 108 and 116. In November 1992, however, voters turned down a $1 billion bond issue authorized by Proposition 108 and forced the State to reestablish priorities and schedules for rail projects throughout the State. State officials hope to recover the lost bonding authority in 1994 by seeking $2 billion rather than the previously scheduled $1 billion in the 1994 referendum.

FTA has rated LACTC's capital and operating financing plan as "acceptable." The revenue from State and local resources are adequate to finance construction of all segments of the 20-mile Red Line and the operating deficits of the bus system and Red and Blue Lines. However, additional elements of the countywide rail system currently being planned may require additional resources to construct, operate, and maintain.

In 1991 Los Angeles' bus fleet averaged 7.6 years old, which is comparable to the national average. Rail vehicles averaged 1.2 years old.

Los Angeles:
North Hollywood Extension



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

Description

The Queens Local/Express Connection would relieve overcrowding on the Queens Boulevard subway lines by diverting service to the recently opened 63rd Street Tunnel from the 53rd Street Tunnel bottleneck. Construction would include about 1/3 mile of new tunnel, a significant amount of track, signal work, and real estate acquisition at a cost of $645 million (escalated dollars).

Status

The New York City Transit Authority (NYCTA) completed the final EIS and preliminary engineering in mid-1992. The real estate acquisition process has begun, a final design contract has been signed, and construction is scheduled to begin in mid-1994.

Section 3033 of ISTEA 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 FY 1992 through FY 1997.

Justification

Mobility Improvements. Passenger miles traveled under severely overcrowded conditions would be reduced by 300,000 each peak hour in 2005 with this project. Each existing passenger on the line affected would save about 3.4 minutes per trip. All passengers would save a total of 7.6 million hours per year.

Cost Effectiveness. The project would cost $5 per hour of user benefit (2005 ridership, 1991 dollars). The "cost per hour" index is an alternative to the "cost per new trip" index and is used for projects whose primary benefit is to existing riders. The value for this project is indicative of a highly cost effective project.

Environmental Benefits. The New York/New Jersey region is a "severe" nonattainment area for ozone and a "moderate >12.7" nonattainment area for carbon monoxide. The project, because it has few "new" riders, is expected to have an insignificant impact on regional air quality.

Operating Efficiencies. At the corridor level, the operating and maintenance cost per transit trip is forecast to be $3.97 for this project compared to $3.68 for the No Additional Construction alternative.

Local Financial Commitment

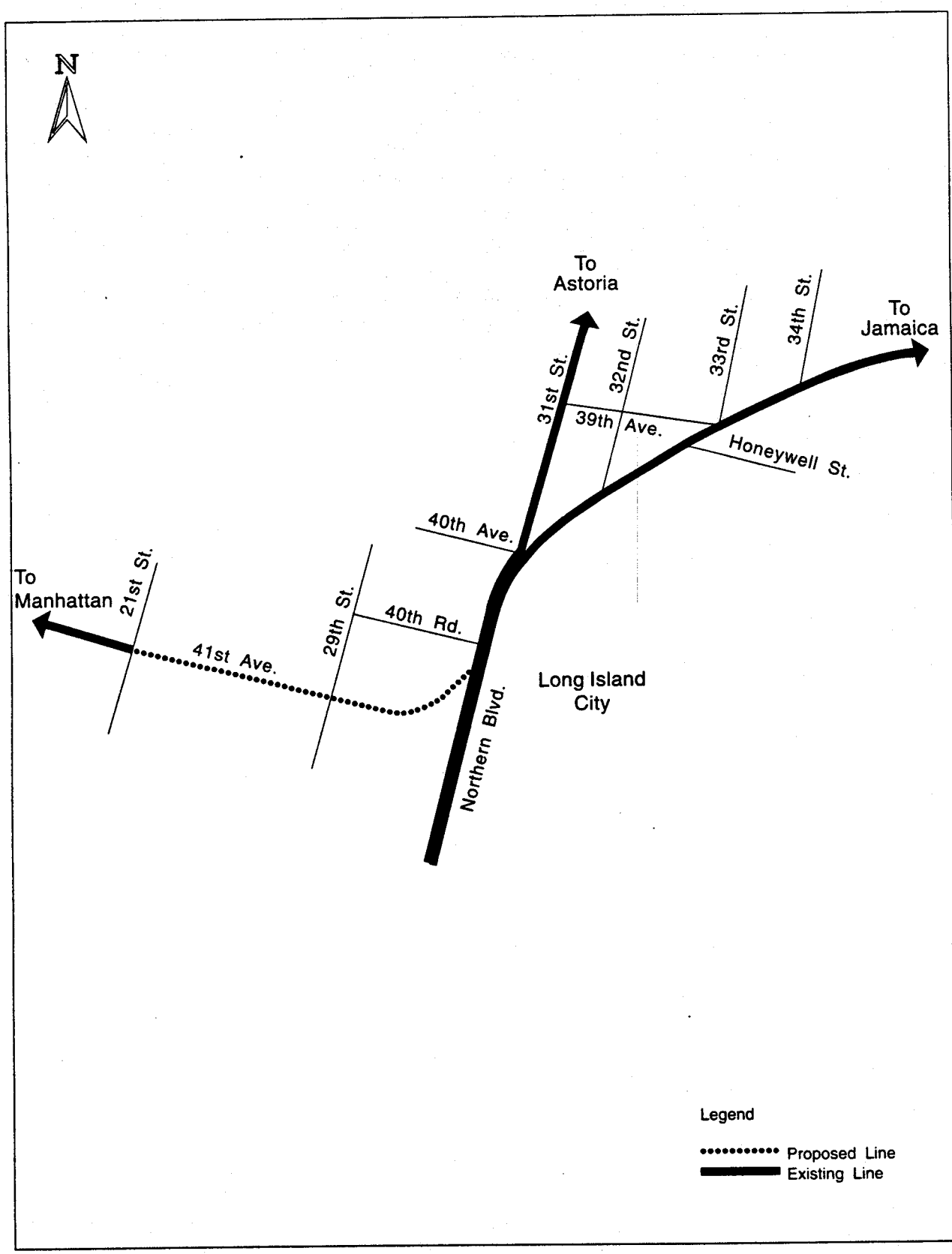
The Metropolitan Transit Authority (MTA) is expected to seek Section 3 New Start funding for less than 50 percent of the project's cost. It also has a very large locally funded capital program. The MTA plans to fund final design for the

Queens project ($33 million) without any Federal assistance. In 1991 the proposed capital plan for FY 1992-96, which included local money for 50 percent of the $612 million (escalated) cost of construction and property acquisition, was approved by the MTA Board but not by the Legislature. Neither a financing plan nor the funding mechanisms have been approved to date. A project in final design should have an approved capital financing plan and sources in place. Since the financing plan for this project has not yet been approved, the capital financing plan is rated "unacceptable" pending approval of the requisite financing.*

The city and State have an array of dedicated taxes supporting both an extensive capital program and operating deficits. This project will not have an appreciable impact on the MTA's operating budget. In 1991 the MTA's bus fleet averaged 8.0 years old, which is comparable to the national average Rail vehicles averaged 18.9 years old. The stability and reliability of operating assistance are rated "acceptable."

* UPDATE: On April 5, 1993, the State legislature approved a $9.6 billion, 5-year capital program for the MTA which included local funding for the construction of the Queens project. Based upon this action, the capital financing plan is rated as "acceptable."

New York:
Queens Local Connection



Westside Light Rail to 185th
Portland, Oregon
(January 1993)

Description

The Tri-County Metropolitan Transportation District (Tri-Met) is developing an 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.

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

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

Status

The project is in the final design phase of project development. FTA and Tri-Met entered into a full funding grant agreement in September 1992.

Section 3035(b) of ISTEA directs FTA to enter a multiyear grant agreement with Tri-Met in the amount of $515 million. Congress appropriated $81.8 million in FY 1991 through FY 1993.

Justification

Mobility Improvements. Metro'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.

Cost Effectiveness. The cost effectiveness index for the locally preferred LRT alternative is $19 per new rider (2005 ridership, 1990 dollars).

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

Operating Efficiencies. On a corridor-wide basis, the operating cost per passenger is estimated to be $2.01 (1989$)

with the project in place. This compares with $2.65 for the No Build alternative and $2.80 for the TSM alternative. FTA has no information on how the project will affect systemwide operating efficiencies.

Local Financial Commitment

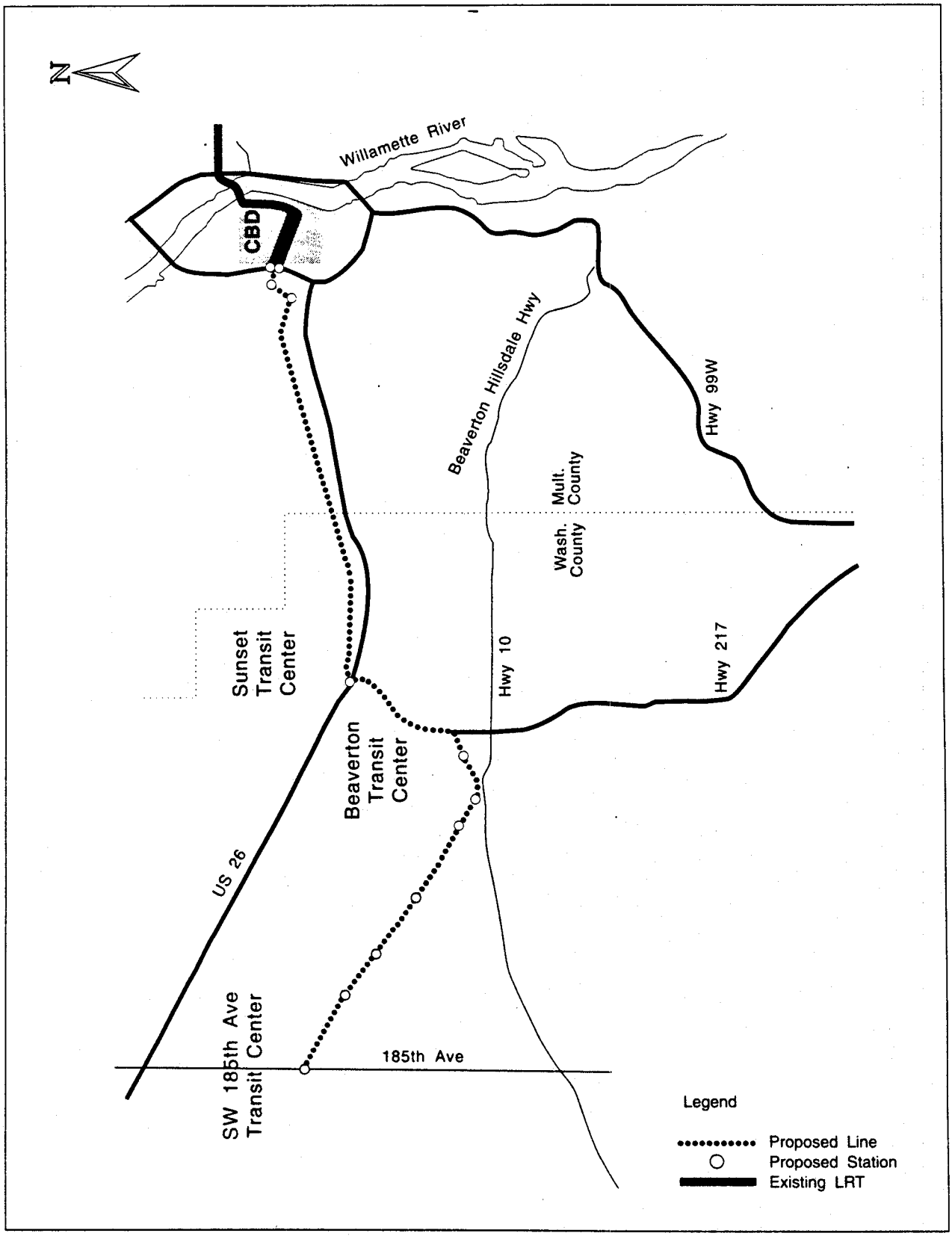
Tri-Met is seeking 75 percent of the project's capital cost from Section 3. Three sources will be used for the local share: Tri-Met bonds backed by local property taxes, contributions by affected local jurisdictions, and State bonds backed by the lottery. In 1990 Portland voters authorized Tri-Met to issue $125 million in bonds, $80 million of which is available for this project. 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.

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. Tri-Met's bus replacement program reduced the average age of the bus fleet from 11.5 years in 1989 to 8.3 years in 1991, making it comparable to the national average.

Other Factors

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.

Portland:
Westside Light Rail to 185th



PROJECTS IN PRELIMINARY ENGINEERING

BWI Airport LRT Extension
Baltimore, Maryland
(January 1993)

Description

The Mass Transit Administration (MTA) of Maryland has plans for a 28-mile light rail transit (LRT) system from Hunt Valley north of Baltimore, through downtown Baltimore to Glen Burnie and the Baltimore-Washington International (BWI) Airport south of Baltimore. The MTA is constructing the LRT main line, which runs 22 miles between Timonium and Glen Burnie, with non-Federal funds. About 18 miles of the LRT main line is already operating and carrying about 5,000 passengers per day. MTA is seeking Section 3 New Start assistance for three LRT extensions which, along with the remaining segment of the main line, would complete the 28-mile LRT system. One of the three extensions is this 2-mile, 2-station branch off the LRT main line directly into BWI Airport.

The LRT branch to BWI Airport is estimated to cost $35 million (escalated dollars).

The BWI branch is expected to carry about 2,500 daily trips including about 1,000 new transit riders per day in 2005.

Status

In January 1992, FTA approved the initiation of the preliminary engineering needed to prepare a final EIS on the locally preferred alternative. MTA is expected to complete the preliminary engineering phase in May 1993.

Section 3035(nn) of ISTEA directs FTA to enter into a full funding grant agreement with MTA to provide $60 million in New Start funds to construct the three Baltimore LRT extensions. Prior to ISTEA enactment, $17 million had already been appropriated, of which $2.0 million had been obligated for preliminary engineering and environmental work. Through FY 1993, $44 million in New Start funds have been appropriated for the three Baltimore LRT extensions.

In addition to the LRT system, MTA is constructing a 2-mile, two-station extension of the Baltimore Metrorail with Federal Interstate Transfer funds. The Metrorail extension, scheduled to open in 1995, will serve Johns Hopkins Hospital on the east side of downtown.

Justification

Mobility Improvements. The LRT extension to BWI Airport promotes the ISTEA policy of providing intermodal connections. However, the project does not provide a good connection between the Baltimore Metrorail and the Airport because a downtown connection of the LRT and Metrorail systems is lacking. In the downtown, the main line LRT misses the densest business area, and transfer to Metrorail

requires a 10-minute walk outside in the weather in an area where personal security is often a concern. In 2005, transit riders from Lexington Market in downtown to the Airport will save about 7 minutes of travel time with the LRT extension compared to the TSM (shuttle bus) alternative. Trips from most suburban areas to BWI Airport will not save any travel time with the LRT extension.

Cost effectiveness. The cost effectiveness of the LRT extension to BWI Airport is $16 per new rider.

Environmental Benefits. EPA has classified Baltimore as a "serious" nonattainment area for ozone and as a "moderate" nonattainment area for carbon monoxide (CO). The three LRT extensions are not expected to affect regional VMT or emissions of ozone precursors from transportation sources. Adverse impacts include the placement of catenary poles in the runway protection zone at BWI Airport and the visual and noise intrusion of operating through historic Linthicum.

Operating Efficiencies. The operating and maintenance cost of the regional bus and rail transit system is expected to be $1.65 per transit trip in 2005. The O&M cost per trip is not improved or worsened by the BWI extension.

Local Financial Commitment

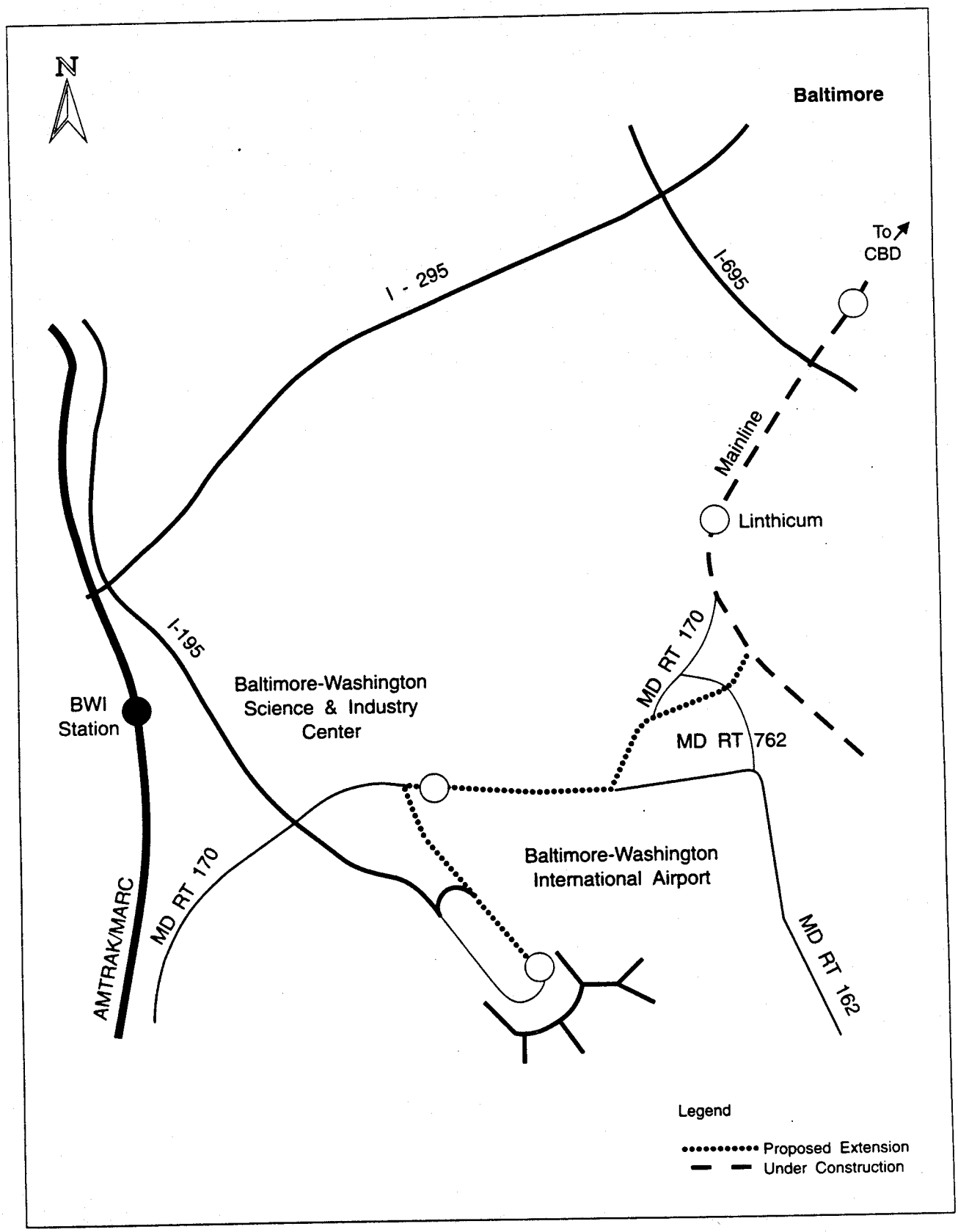
MTA seeks a Section 3 New Start share of 78 percent, or $27.5 million (escalated dollars) for the BWI Airport LRT extension. The proposed Federal cost of $77 million for the three Baltimore LRT extensions is only 17 percent of the $450 million cost of the entire 28-mile LRT system.

The capital financial plan is rated as "medium." The local share ($22 million) for the three LRT extensions will be provided from the State Transportation Trust (STT) Fund and has been included in the current six-year program. However, the delay in implementation of the three LRT extensions during 1992 was primarily due to declining State revenues.

The stability and reliability of MTA's operating assistance are rated as "medium." By State law, farebox revenues must cover 50 percent of the transit system's operating costs. MTA has a history of adequate funding of transit operations with contributions from the STT Fund. However, the STT Fund is under financial pressure and cannot support construction and operation of all projects in the current six-year state program. The new LRT service will place added operating cost burden on the STT Fund.

In 1991 MTA's bus fleet averaged 6.2 years old, which is better than the national average. Its heavy rail vehicles averaged 6.4 years old and its LRT vehicles are about one year old.

Baltimore:
BWI Light Rail Extension



Hunt Valley LRT Extension
Baltimore, Maryland
(January 1993)

Description

The Mass Transit Administration (MTA) of Maryland has plans for a 28-mile light rail transit (LRT) system from Hunt Valley north of Baltimore, through downtown Baltimore to Glen Burnie and the Baltimore-Washington International (BWI) Airport south of Baltimore. MTA is constructing the LRT main line, which runs 22 miles between Timonium and Glen Burnie, with non-Federal funds. About 18 miles of the LRT main line is already operating and carrying about 5,000 passengers per day. MTA is seeking Section 3 New Start assistance for three LRT extensions which, along with the remaining segment of the main line, would complete the 28-mile LRT system. One of the three projects is this 5-mile, 6-station extension from Timonium north to Hunt Valley.

The Hunt Valley LRT extension is estimated to cost $48.7 million (escalated dollars).

The Hunt Valley LRT extension is estimated to carry about 2,600 daily trips including about 1,500 new transit riders per day in 2005.

Status

In September 1991, FTA approved the initiation of preliminary engineering work needed to prepare a final EIS on the locally preferred alternative. MTA is expected to complete the preliminary engineering phase in May 1993.

Section 3035(nn) of ISTEA directs FTA to enter into a full funding grant agreement with MTA to provide $60 million in New Start funds to construct the three Baltimore LRT extensions. Prior to ISTEA enactment, $17 million had already been appropriated, of which $2.0 million had been obligated for project planning and environmental work. Through FY 1993, $44 million in New Start funds had been appropriated for the three Baltimore LRT extensions.

In addition to the LRT system, MTA is constructing a 2-mile, 2-station extension of the Baltimore Metrorail with Federal Interstate Transfer funds. The Metrorail extension, scheduled to open in 1995, will serve Johns Hopkins Hospital on the east side of downtown.

Justification

Mobility Improvements. The Hunt Valley extension serves an area whose land uses are light industrial, office, and commercial. The travel markets most likely to use an LRT extension into such an area are reverse commuters and shoppers. The extension would provide central city residents with improved access to suburban employment opportunities. Reverse commuters from MetroCenter in downtown Baltimore would save about 12 minutes with the LRT

extension compared to the TSM (shuttle bus) alternative. The potential to serve shopping trips is reduced by the configuration of the LRT main line south of Timonium. There the LRT main line is in a stream valley separated from half of the neighboring communities by a freeway and creek. In this area, the line has low visibility, and many potential riders are confronted with long walks to the stations and limited park-and-ride opportunities.

Cost effectiveness. The cost effectiveness of the Hunt Valley LRT extension is $11 per new rider.

Environmental Benefits. EPA has classified Baltimore as a "serious" nonattainment area for ozone and as a "moderate" nonattainment area for carbon monoxide (CO). The three LRT extensions are not expected to affect regional VMT or emissions of ozone precursors from transportation sources. Adverse impacts include the filling of 0.4 acre of wetlands and safety concerns in Padonia where residential properties abut the unprotected railroad alignment.

Operating Efficiencies. The operating and maintenance cost of the regional bus and rail transit system is expected to be $1.65 per transit trip in 2005. The operating cost per trip is not improved or worsened by the Hunt Valley extension.

Local Financial Commitment

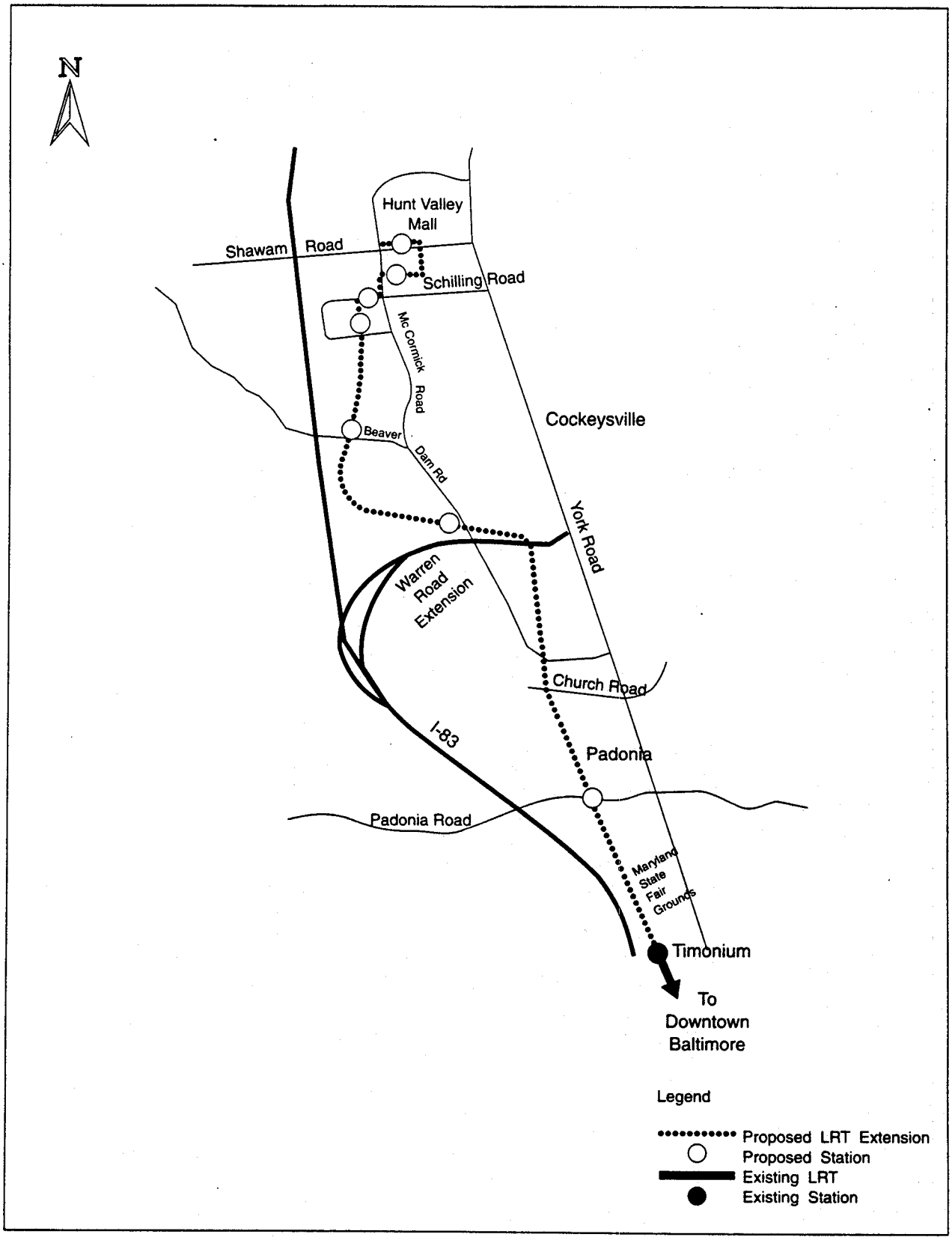
MTA seeks a Section 3 share of 78 percent, or $38 million (escalated dollars) for the Hunt Valley extension. The proposed Section 3 cost of $77 million for the three Baltimore LRT extensions is only 17 percent of the $450 million cost of the entire 28-mile LRT system.

The capital financial plan is rated as "medium." The local share ($22 million) for the three LRT extensions will be provided from the State Transportation Trust (STT) Fund and has been included in the current six-year program. However, the delay in implementation of the three LRT extensions during 1992 was primarily due to declining State revenues.

The stability and reliability of MTA's operating assistance are rated as "medium." By State law, farebox revenues must cover 50 percent of the transit system's operating costs. MTA has a history of adequate funding of transit operations with contributions from the STT Fund. However, the STT Fund is under financial pressure and cannot support construction and operation of all projects in the current six-year state program. The new LRT service will place added operating cost burden on the STT Fund.

In 1991 MTA's bus fleet averaged 6.2 years old, better than the national average. Its heavy rail vehicles averaged 6.4 years old and its LRT vehicles were about one year old.

Baltimore:
Hunt Valley Extension



Penn Station LRT Extension
Baltimore, Maryland
(January 1993)

Description

The Mass Transit Administration (MTA) of Maryland has plans for a 28-mile light rail transit (LRT) system from Hunt Valley north of Baltimore, through downtown Baltimore to Glen Burnie and the Baltimore-Washington International (BWI) Airport south of Baltimore. The MTA is constructing the LRT main line, which runs 22 miles between Timonium and Glen Burnie, with non-Federal funds. About 18 miles of the LRT main line is already operating and carrying about 5,000 passengers per day. MTA is seeking Section 3 New Start assistance for three LRT extensions which, along with the remaining segment of the main line, would complete the 28-mile LRT system. One of the three projects is this 0.5-mile, one-station spur off the LRT main line directly into Pennsylvania Station in downtown Baltimore where Amtrak and MARC trains also stop.

The preferred configuration of the Penn Station LRT spur, which would allow LRT service to both the north and south on the LRT main line, is estimated to cost $17.6 million (escalated dollars). MTA seeks a Section 3 New Start share of 78 percent, or $13.7 million. The Section 3 share of the three Baltimore LRT extensions exceeds the $77 million designated for the projects by ISTEA and previous earmarks by about $2.5 million. If the additional funds are not immediately available, MTA will initially construct the Penn Station spur such that service would be only to and from the south.

The Penn Station spur is expected to carry 800 daily trips including 300 new transit riders per day in 2005.

In addition to the LRT system, MTA is constructing a 2-mile, two-station extension of the Baltimore Metrorail with Federal Interstate Transfer funds. The Metrorail extension, scheduled to open in 1995, will serve Johns Hopkins Hospital on the east side of downtown.

Status

In December 1991, FTA approved the initiation of preliminary engineering work needed to complete an environmental assessment of the Penn Station LRT spur. MTA is expected to complete the preliminary engineering phase in March 1993.

Section 3035(nn) of ISTEA directs FTA to enter into a full funding grant agreement with MTA to provide $60 million in new start funds to construct the three Baltimore LRT extensions. Prior to ISTEA enactment, $17 million had already been appropriated, of which $2.0 million has been obligated for preliminary engineering and environmental work.

Through FY 1993, $44 million in new start funds have been appropriated for the three Baltimore LRT extensions.

Justification

Section 3010 of ISTEA excludes projects which cost less than $25 million in Section 3 funds, including the Penn Station LRT spur, from its New Start criteria.

Mobility Improvements. The LRT spur into Penn Station promotes the ISTEA policy of providing intermodal connections. However, the project does not provide a connection between the Baltimore Metrorail and Penn Station because a downtown connection of the LRT and Metrorail systems is lacking. In the downtown, the main line LRT misses the densest business area served by Metrorail, and transfer to Metrorail requires a 10-minute walk outside in the weather in an area where personal security is often a concern. The Penn Station Spur will save LRT riders to Penn Station about 10 minutes compared to the only reasonable transit alternative, which is walking to Penn Station from the existing Mt. Royal/University of Baltimore LRT station.

Cost-effectiveness. The cost-effectiveness index for the project is $17 per new rider.

Environmental Benefits. EPA has classified Baltimore as a "serious" nonattainment area for ozone and as a "moderate" nonattainment area for carbon monoxide. The three LRT extensions are not expected to affect regional VMT or emissions of ozone precursors from transportation sources. Adverse impacts include the demolition of a historic railroad watchtower and construction in the highly contaminated soil of the railyard.

Operating Efficiencies. The operating and maintenance (O&M) cost of the regional bus and rail transit system is expected to be $1.65 per transit trip in 2005. The O&M cost per trip is not improved or worsened by the Penn Station LRT spur.

Local Financial Commitment

MTA seeks a Section 3 new start share of 78 percent, or $13.7 million (escalated dollars) for the Penn Station LRT spur. No STP, CMAQ or other flexible funds have been dedicated to the project. The proposed Section 3 cost of $77 million for the three Baltimore LRT extensions is only 17 percent of the $450 million cost of the entire 28-mile LRT system.

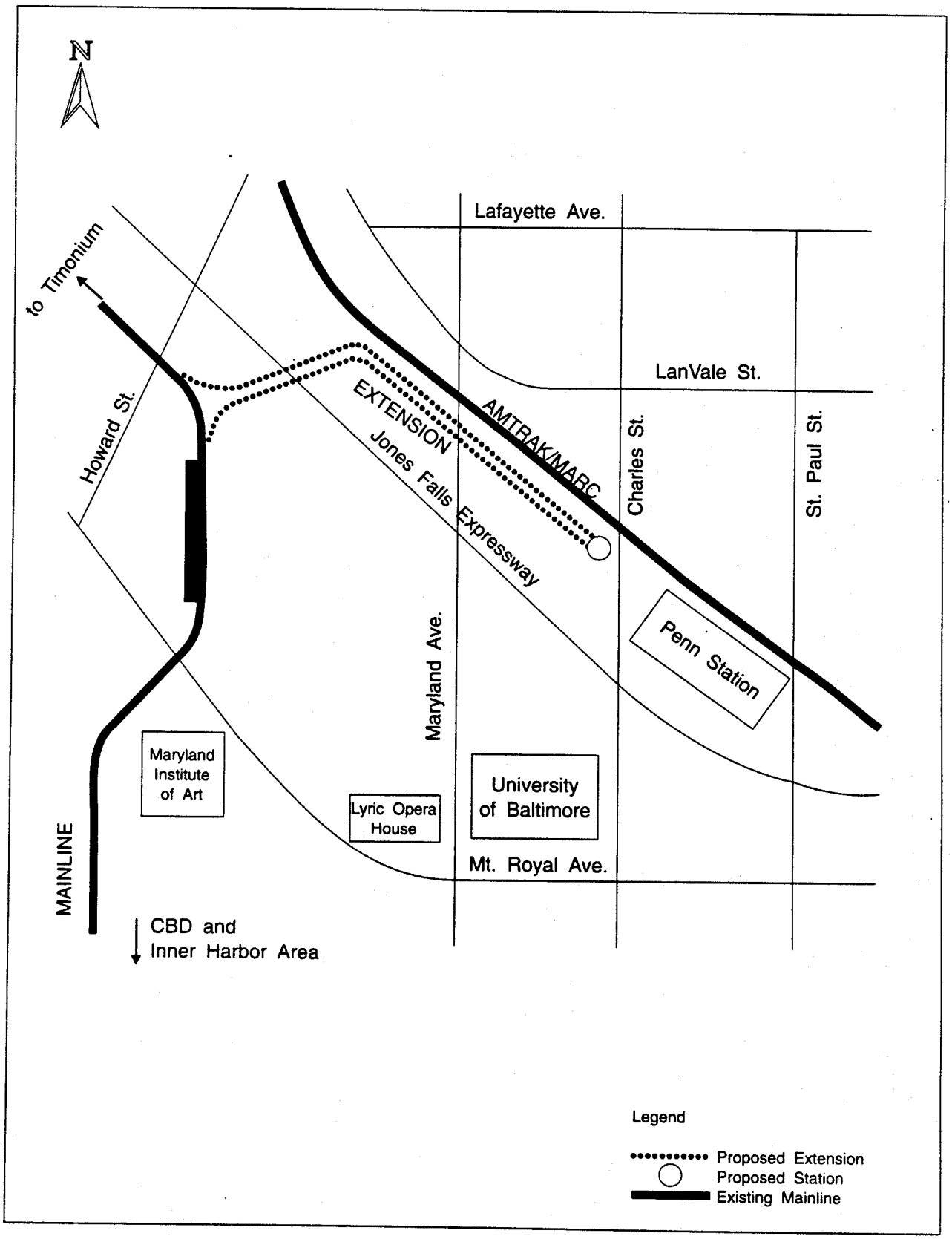
The capital financial plan is rated as "medium." The local share ($22 million) for the three LRT extensions will be provided from the State Transportation Trust (STT) Fund and has been included in the current six-year program. However,

the delay in implementation of the three LRT extensions during 1992 was primarily due to declining State revenues.

The stability and reliability of MTA's operating assistance are rated as "medium." By State law, farebox revenues must cover 50 percent of the transit system's operating costs. MTA has a history of adequate funding of transit operations with contributions from the STT Fund. However, the STT Fund is under financial pressure and cannot support construction and operation of all projects in the current six-year State program. The new LRT service will place added operating cost burden on the STT Fund.

In 1991 MTA's bus fleet averaged 6.2 years old, which is better than the national average. Its heavy rail vehicles averaged 6.4 years old and its LRT vehicles were about one year old.

Baltimore:
Penn Station Extension



Central Area Circulator
Chicago, Illinois
(January 1993)

Description

The Chicago Central Area Circulator (CAC) project would be a multilegged light rail transit system within downtown Chicago, the second largest central business district (CBD) in the nation with 650,000+ jobs. Portions 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.

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

FTA approved initiation of preliminary engineering in April 1992. The City of Chicago expects to complete this phase in October 1993.

Section 3035(e) of the ISTEA 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. Congress has earmarked $57.5 million for preliminary engineering and design.

Justification

Mobility Improvements. The current rapid transit system, including both the "Loop" and two subways, does not directly connect the newly developing areas on the CBD's east side (e.g., in the northeast along North Michigan Avenue) with the rest of the CBD, particularly the commuter rail terminals which have an aggregate ridership of about 250,000 trips per day. The project would have little overall impact on transit travel times, although there would be some reduction between certain key origins and destinations. Because LRT would primarily operate at grade, traffic signal delays, pedestrian interference, and illegal parking blockages could impact the reliability and speed of the system. The City of Chicago is undertaking detailed studies of LRT operations and traffic management to address these potential problems.

Cost Effectiveness. The cost effectiveness index is $17 for the locally preferred alternative (LPA). 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.

Environmental Benefits. Chicago is a "severe" nonattainment area for ozone and an attainment area for carbon monoxide. 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 draft EIS predicted only marginal decreases in carbon monoxide and nitrogen oxide, again because of the minimal impact on auto usage.

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

Local Financial Commitment

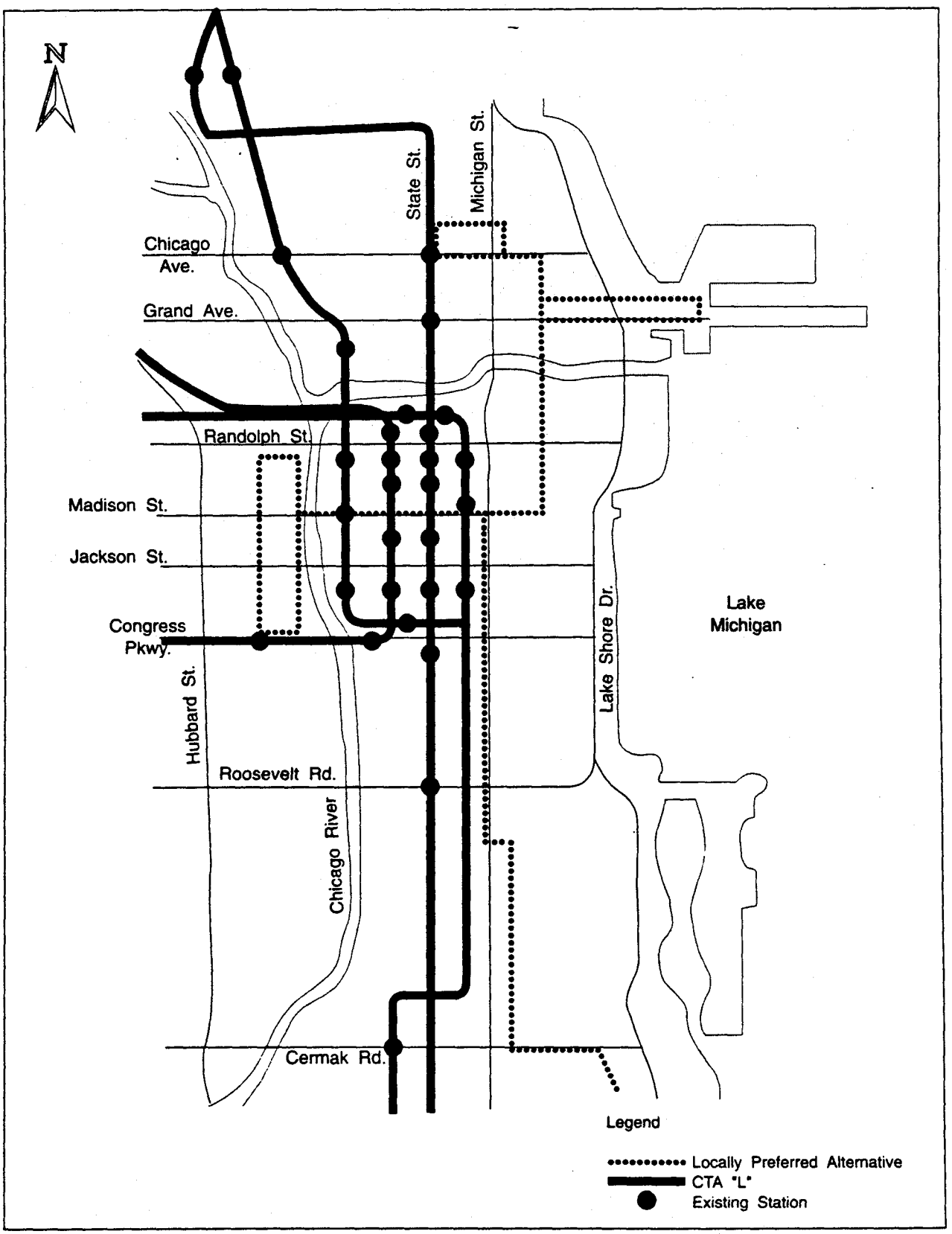
One-third of the capital cost of the system is proposed to come from the Section 3 New Start program, one-third from the State, and one-third from the private sector (and the city) by means of a tax on commercial property within a special service area taxing district.

The city's capital plan has been rated "medium." The city has established a Special Service Taxing District to fund this specific project, and the local business community strongly supports the district. To date, there have been tax levies totalling $28 million within 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.

The stability and reliability of local operating and maintenance funding is rated "low-medium". The CTA will balance its budget through fare increases and funding adjustments in assistance provided by the Regional Transportation Authority. Unless the CTA can locate a sizable new source of funding, the RTA will require a plan later this year that will outline how the agency can be downsized beginning in 1994. The deficit associated with the CAC project would be relatively small, both in dollar terms and as a percentage of the region's total transit deficit. The Circulator project would be funded from new sources not available to existing transit service. The Special Service Taxing District and an increase in the City's parking tax have been proposed. An operating plan will be developed during the preliminary engineering phase.

In 1991 CTA's bus fleet averaged 6.3 years old, which is better than the national average. Its rapid rail vehicles averaged 14.7 years old.

Chicago:
Central Area Circulator



Rapid Transit Project
Honolulu, Hawaii
(January 1993)

Description — The City and County of Honolulu is proposing a 15.9-mile fixed guideway system stretching from Waiawa 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 $2.3 billion (year of construction dollars), including $276 million for interest and other financing costs, and to carry 185,000 riders per day in 2005.

Status — Alternatives analysis was completed in 1990 with circulation of a draft EIS, selection of a locally preferred alternative, and adoption of a financing plan. A supplemental draft and final EIS were completed in 1992.

In September 1992, the City Council defeated an excise tax increase which would have funded 70 percent of the project's capital costs. The city is now exploring alternative local funding sources and has initiated discussions with FTA on the possibility of a 50 percent Federal matching share and a shorter initial segment. Additional planning and environmental work would be necessary if the city elects to build a shorter initial segment.

The city has selected a turnkey contractor to perform system design, construction, and operation.

Section 3035(ww) of ISTEA directs FTA to sign a multiyear grant agreement with Honolulu for $618 million. The agreement will cover construction of this project. Congress appropriated $112.3 million for the project in FY 1991 through FY 1993.

Justification — Mobility Improvements. Honolulu's topography, its development patterns, and the large transit patronage already present in the corridor are ideal for developing a fixed guideway system. In 2005, the locally preferred alternative is expected to save 33,000 hours of travel time per day (7.3 minutes per trip) compared with the TSM alternative. Because of this time savings, the project is expected to attract almost 50,000 new daily riders to transit compared with the TSM alternative.

Cost Effectiveness. The 15.9-mile project has a cost effectiveness index of $9 per new trip (1991 dollars, 2005 ridership).

Environmental Benefits. Honolulu is in attainment of the National Ambient Air Quality Standards. According to the analysis in the EIS, the project would reduce regional pollutant emissions by 1 to 2 percent.

Operating Efficiencies. The operating cost per passenger is estimated to be $1.51 for the locally preferred alternative, $1.84 for the TSM alternative, and $1.36 for the No Build alternative.

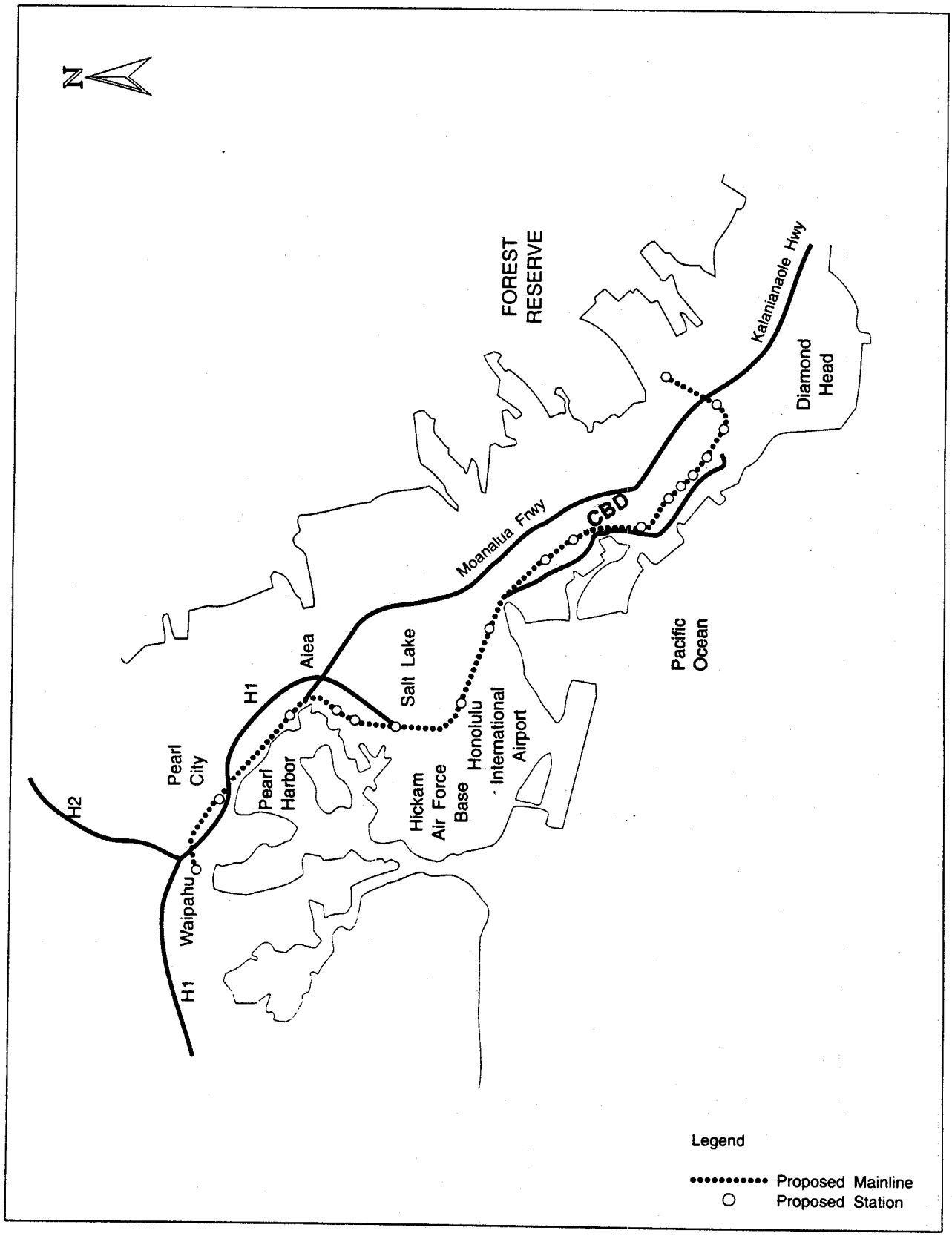
Local Financial Commitment

In September 1992, the City Council defeated a proposed excise tax which would have provided 70 percent of the project's capital cost. Alternative funding sources, including a 50 percent Section 3 share, are now being considered. Honolulu's capital financing plan has been given a "low" rating pending the adoption of a new financial plan.

In terms of the stability and reliability of operating assistance, Honolulu's bus system is supported through the city's general appropriations which have provided a stable and reliable source of operating assistance. The bus system is being adequately maintained and replaced through continuing reinvestment. In 1991 the average age of Honolulu's bus fleet was 7.6 years, which is comparable to the national average.

Implementation of rapid transit and related bus system improvements would lead to a $37 million (1991 dollars) or 54 percent increase in the transit system's annual operating deficit. 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 additional revenues by a variety of means, including an increase in property taxes. Three new sources of revenue 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.

Honolulu:
Rapid Transit Project



Regional Bus Plan
Houston, Texas
(January 1993)

Description — Houston Metro has changed its Locally Preferred Alternative from the monorail to major improvements to the bus system, known as the Regional Bus Plan. The $1.25 billion LPA includes major service expansions in most of the region, new and extended HOV facilities and ramps, several transit centers, as well as supporting facilities.

Status — In 1991 the draft EIS was published. The document included fixed guideway, Better Bus, TSM and No-Build alternatives. The Better Bus alternative has evolved into the Regional Bus Plan. Since the Regional Bus Plan consists of many relatively small elements with independent utility and minor environmental impacts, a final EIS will not be done, but additional environmental work will be done on each element of the plan as needed.

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

Houston received New Start earmarks between FY 1989 and 1993 totaling $195.2 million. Of this amount, $188.8 million has not yet been obligated.

Justification — Mobility Improvements. The Regional Bus Plan will significantly improve transit service by offering direct service to all major activity centers and one transfer service to almost everywhere else, resulting in a savings of about 5,300 hours of travel daily.

Cost Effectiveness. The cost effectiveness index is about $4 per new rider (year 2005 ridership, 1988 dollars), indicating that the Better Bus alternative is extremely cost-effective.

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

Operating Efficiencies. The operating and maintenance cost per passenger for the TSM and Better Bus alternatives are $2.72 and $2.63 respectively in year 2010 (1988 dollars).

Local Financial Commitment

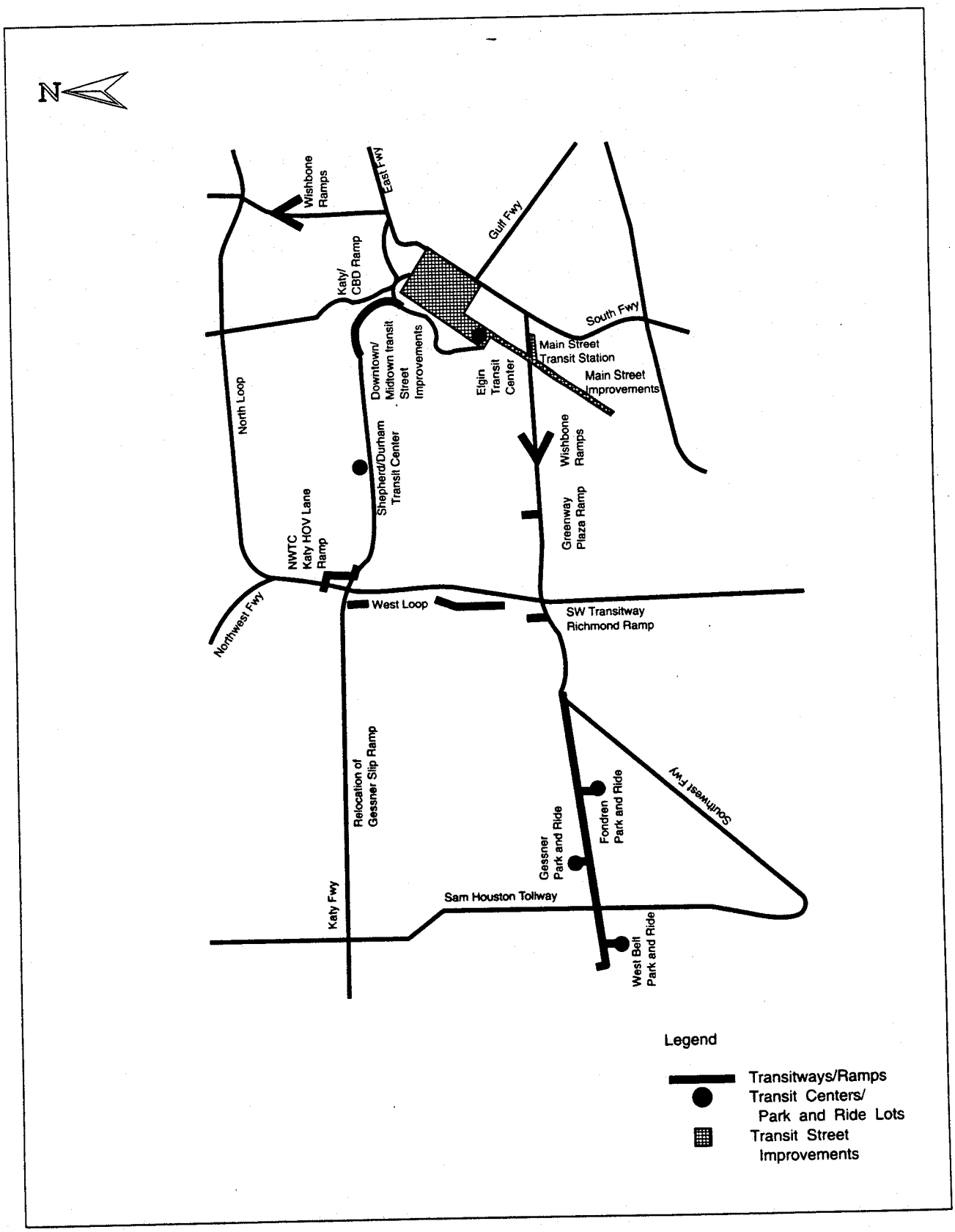
Houston Metro is supported by a 1 percent sales tax which generates substantial revenue above that required to operate the existing transit system and meet other capital obligations. Metro has proposed that FTA fund approximately 50 percent of the cost of the project.

Houston's capital financing commitment is rated "medium". Metro is being asked to pay for an increasing amount of non-transit tasks such as city police work and street construction. Nevertheless, Metro should be able to finance the project and its existing system.

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

In 1991 Metro's bus fleet averaged 6.2 years old, which is better than the national average.

Houston:
Regional Bus Plan



I-405/SR-55 Transitway and Direct Access HOV Ramps
Orange County, California
(January 1993)

Description

The Orange County Transportation Agency (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.

The capital cost of the transitway segments and direct access ramps is estimated to be $249.2 million (escalated dollars). The proposed project also includes park-and-ride lots ($59.3 million) and bus acquisition ($115.5 million). The total cost of the project is $424 million.

Status

OCTA is performing alternatives analysis and preliminary engineering simultaneously. The Environmental Assessment is nearly completed. OCTA's schedule anticipates the completion of alternatives analysis and preliminary engineering by early 1993, following which OCTD plans to submit a capital grant application for final design.

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

Justification

Mobility Improvements. The direct access ramps and exclusive HOV connections are designed to save travel time and increase safety for buses and other high-occupancy vehicles. Without the ramps, buses and other high occupancy vehicles must weave across the congested general traffic lanes to enter and exit the HOV lanes. OCTA estimates that, for an average trip, the direct access ramps would reduce HOV travel time by 4.2 minutes compared to the TSM alternative.

Cost Effectiveness. The project's cost effectiveness index is $4 per new trip, which makes the project one of the most cost effective in the new starts pipeline.

Environmental Benefits. Southern California is classified as an "extreme" nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. Implementation of this project is not likely to have a noticeable effect on pollution levels at the regional or local level because there will only be a very small change in regional vehicle miles traveled.

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

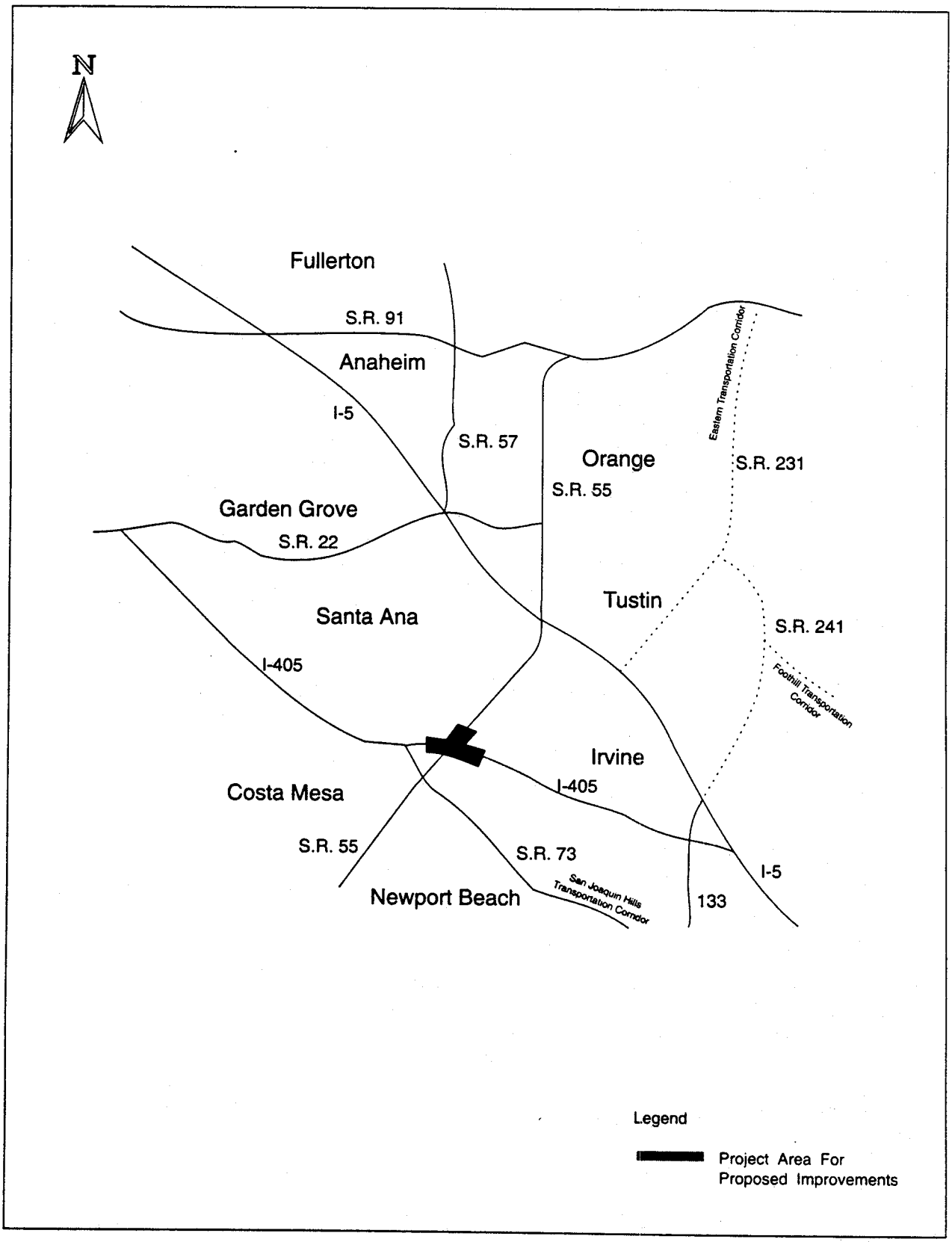
Local Financial Commitment

OCTA is proposing a 75 percent Section 3 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 Section 3 share is only 39 percent.

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.

In terms of the stability and reliability of operating revenues, a "medium to high" rating has been given. OCTD's operations are supported by general revenues, which are extremely stable and growing rapidly. The OCTD system is being adequately maintained and replaced through continuing reinvestment. In 1991 the average age of OCTD's bus fleet was 7 years, which is better than the national average. OCTA's assessment of financial feasibility found that revenues are sufficient to fund operating and maintenance costs, including the costs attendant to system expansion, through 2010.

Orange County, CA:
I-405 Transitway Interchange



Airport Corridor
Pittsburgh, Pennsylvania
(January 1993)

Description

The Airport corridor extends approximately 20 miles between downtown Pittsburgh and the Greater Pittsburgh International Airport. A busway is proposed for the first 7.0 miles where congestion is worst and ridership best. The proposed busway would follow an abandoned railroad right-of-way except for a section along the Ohio River where it would be adjacent to an active railroad. A new river crossing would be built into downtown. In the remaining 12.5 miles of the corridor, from Carnegie to the airport, buses would operate on the Parkway West. The project includes the 1.1 mile Wabash Tunnel and Bridge HOV facility.

The project is estimated to cost about $224 million (1992 dollars).

Status

The Port Authority of Allegheny County (PAT) entered into alternatives analysis in May 1991. The draft EIS was released for public comment in September 1992. In October 1992, the PAT board selected the Busway/Wabash HOV/New River Crossing to Market Street as the locally preferred alternative. On October 28, 1992, FTA approved the initiation of the preliminary engineering phase of project development.

Sections 1069(e) and 1108(b) of ISTEA authorize $71.0 million of highway funds for this project and the Martin Luther King extension. Congress has appropriated $24.6 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.

Justification

Mobility Improvements. Between Carnegie and downtown Pittsburgh, the busway alternative would reduce transit travel time by 27 minutes compared with the TSM alternative.

Cost Effectiveness. The cost-per-new transit trip would be approximately $5 for the locally preferred alternative (1992 dollars). Transit ridership is expected to increase by 11,000 daily riders compared to the TSM Alternative.

Environmental Benefits. EPA has classified the Pittsburgh region as a "moderate" nonattainment area for ozone. The region is not classified for carbon monoxide due to insufficient information. It is unlikely that any of the transit alternatives would have a noticeable effect on regional air quality. According to the draft EIS, the busway would lead to a 0.1 percent reduction in regional vehicle miles traveled.

Operating Efficiencies. The systemwide operating cost per passenger is projected to be $1.91 for the No-Build, $2.03 for the TSM alternative and $1.94 for the locally preferred alternative in the year 2005.

Local Financial Commitment

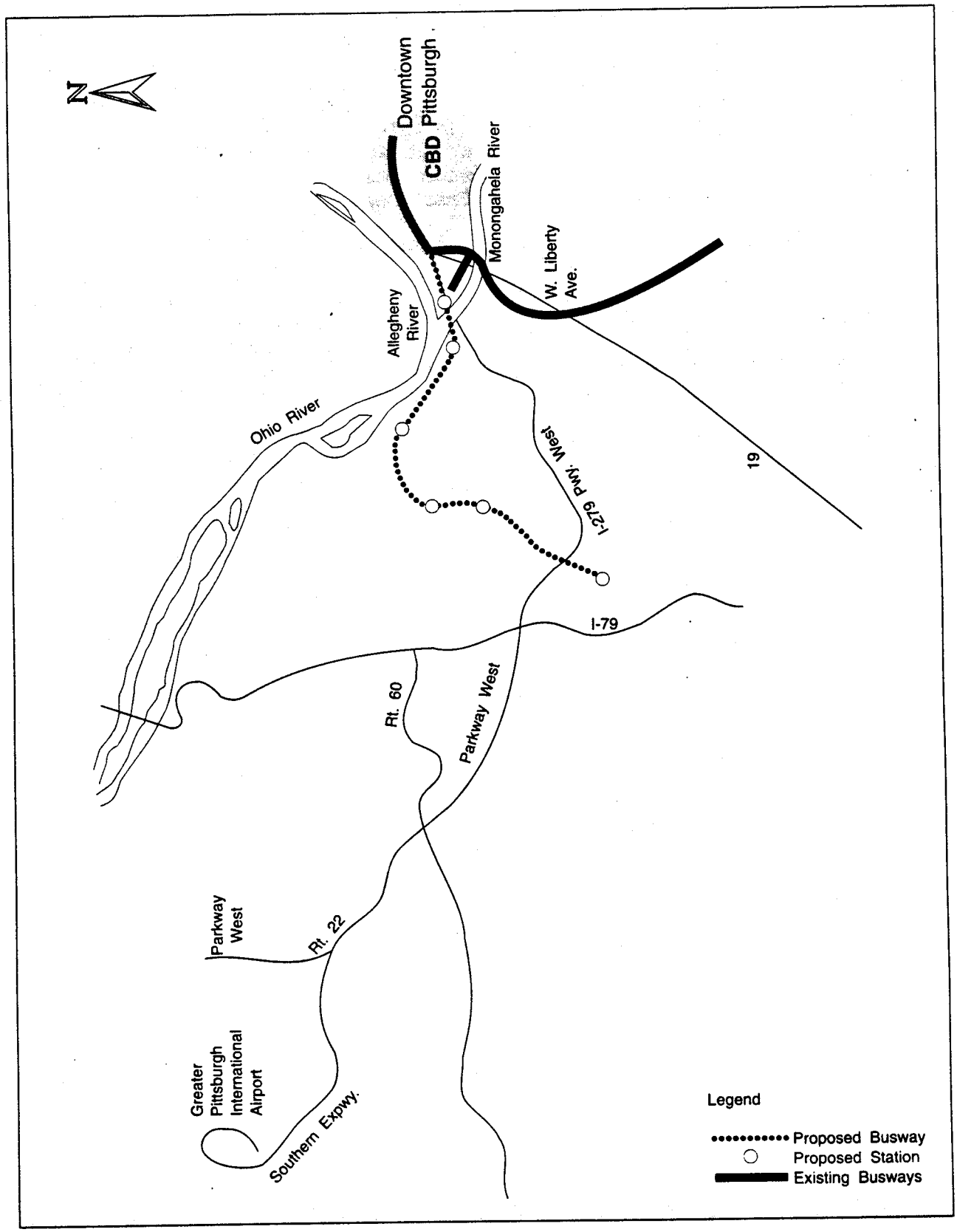
The proposed sources of funding are $24.7 million from Section 3 funds, $9.8 million from Section 1108 funding from the highway portion of ISTEA, $55 million in PennDOT Federal/State funds and a $22.4 million State bond authorization (match). In recent years, PAT has suffered from financial difficulties and has had to reduce service. The State legislature recently approved a series of small taxes which are dedicated to transit. Pittsburgh share of this is expected to be $39 million.

Funding for 50 percent of the capital cost has been included in the State capital budget. The capital financing plan is rated "high" since the local funding is already in place.

PAT's operating assistance plan is considered "medium." PAT has a good history of obtaining needed funds to operate new services and to operate and maintain its existing system without the need for major service cuts and fare increases.

In 1991 the average age of PAT's bus fleet was 8.4 years, which is comparable to the national average. Rail vehicles averaged 14.3 years old.

Pittsburgh:
Airport Corridor Phase 1



East Busway Extension
Pittsburgh, Pennsylvania
(January 1993)

Description

The first 6.8 miles of the Martin Luther King, Jr. East Busway was completed in 1983. It carries more than 30,000 riders each weekday from downtown Pittsburgh to Wilkinsburg, serving a corridor with the highest transit ridership in Allegheny County. Phase I of the proposed expansion of the East Busway is a 2.3-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.

PAT estimates put the cost of the project at about $40 million (1990 dollars).

Status

The Port Authority of Allegheny County (PAT) has submitted an Environmental Assessment for the East Busway extension to the FTA. This document is currently under review, and PAT expects to complete the environmental process by early 1993.

Sections 1069(e) and 1108(b) of ISTEA authorize $71.0 million of highway funds for this project and the Airport Busway project. Congress has appropriated $24.6 million in Section 3 New Start funds for Pittsburgh's busway program. PAT has not yet decided whether to seek additional New Start funds or to fund the project from the highway program.

Justification

Since the Section 3 share of the project's cost is less than $25 million, the project is exempt from the new start criteria.

Mobility Improvements. The 2.3 mile extension would reduce travel time by up to 17 minutes compared with the TSM alternative.

Cost Effectiveness. The proposed East Busway is very cost effective with a cost per new rider of about $5. This low index reflects the substantial increase in ridership, the reduction in travel times for a large number of existing riders, and the project's modest cost.

Environmental Benefits. Pittsburgh is a "moderate" nonattainment area for ozone and is not classified for carbon monoxide. The project's impact on air quality has yet to be determined, though it is likely to be small.

Operating Efficiencies. Systemwide operating cost per passenger is projected to be $2.08 for the No-Build, $2.08 for the TSM alternative and $2.07 for the busway alternative in 2005.

Local Financial Commitment

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. The State legislature recently approved a series of small taxes which are dedicated to transit. Pittsburgh share of this project is expected to be $39 million.

Funding 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.

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 1991 the average age of PAT's bus fleet was 8.4 years, which is comparable to the national average. Rail vehicles averaged 14.3 years old.

South LRT
Salt Lake City, Utah
(January 1993)

Description — The Utah Transit Authority (UTA) plans to construct a 15- to 17-mile at-grade light rail line from downtown Salt Lake City to suburban areas to the south. The line would follow a lightly used Union Pacific Railroad alignment. The project is currently estimated to cost $230 million (escalated dollars).

Status — FTA approved the initiation of preliminary engineering in February 1991. A supplemental draft EIS is being prepared. UTA had expected to finish the preliminary engineering phase by July 1993 but, in light of recent developments (see below), this date may no longer be valid.

UTA is now considering significant changes to the project in reaction to the November 1992 defeat of the sales tax referendum which was necessary to fund the local share of the project as originally defined. These modifications may include both physical and operational changes from the original plan. The requested federal share of the construction costs may increase. Because a decision on the future of this project has not been made at this time, the information presented here will describe the locally preferred alternative rather than a revised LRT plan.

Section 3035(f) of ISTEA directs FTA to enter into a multiyear grant agreement with the Utah Transit Authority which includes $131 million to carry out the construction of the initial segment of the locally preferred alternative. Congress has appropriated $21.1 million for advanced right-of-way acquisition, engineering, and design.

An agreement has been reached between the UTA and the Union Pacific Railroad for the purchase of right-of-way for the project. FTA has issued a Letter of No Prejudice for Federal participation in the acquisition. An application is pending which would obligate all of the FY 1993 and prior year appropriations.

Justification — Mobility Improvements. The preferred alternative would increase transit trips in year 2010 to 96,800, compared with 90,800 for the TSM alternative. The 1991 transit travel time between Sandy (the southern terminus of the proposed project) and Salt Lake City was 76 minutes. The LRT would reduce this travel time to 59 minutes in the year 2010. The projected difference in travel time in 2010 between the TSM and LPA alternatives is 6 minutes. However, these numbers represent

the average change in travel time. Some riders will have longer travel times -- for instance, those who must transfer may find that travel time increases as a result of constructing the LRT.

Cost Effectiveness. The locally preferred alternative has a cost effectiveness index of $7 per new transit trip (2005 ridership, 1992 dollars). The LRT cost estimate assumes a bare bones design with a projected cost-per-mile lower than the actual costs of any other LRT system already constructed in North America.

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

Operating Efficiencies. The systemwide operating cost per passenger in year 2010 (1992 dollars) is estimated to be $2.04 for the No Build alternative, $2.73 for the TSM alternative, and $2.36 for the locally preferred alternative. The current cost per passenger is $1.84.

Local Financial Commitment

The locally adopted finance plan anticipated a 50 percent non-Federal share. The plan, as designed, depended upon passage of a referendum to raise UTA's current 1/4 cent sales tax by 3/16 cent. The referendum was defeated in the November 1992 election. As described earlier, UTA is now considering significant physical and operational changes to the project. The agency may also seek a second vote on the sales tax. Until its Board makes a decision regarding the future of this project, the only information available is the original finance plan.

The original plan anticipates that Salt Lake City would receive 50 percent Section 3 funding for the rail project plus 50 percent Section 3 funding for bus replacement and bus fleet expansion after all Section 9 funds are used. Some funding for the requisite bus expansion was authorized out of New Start funds by ISTEA.

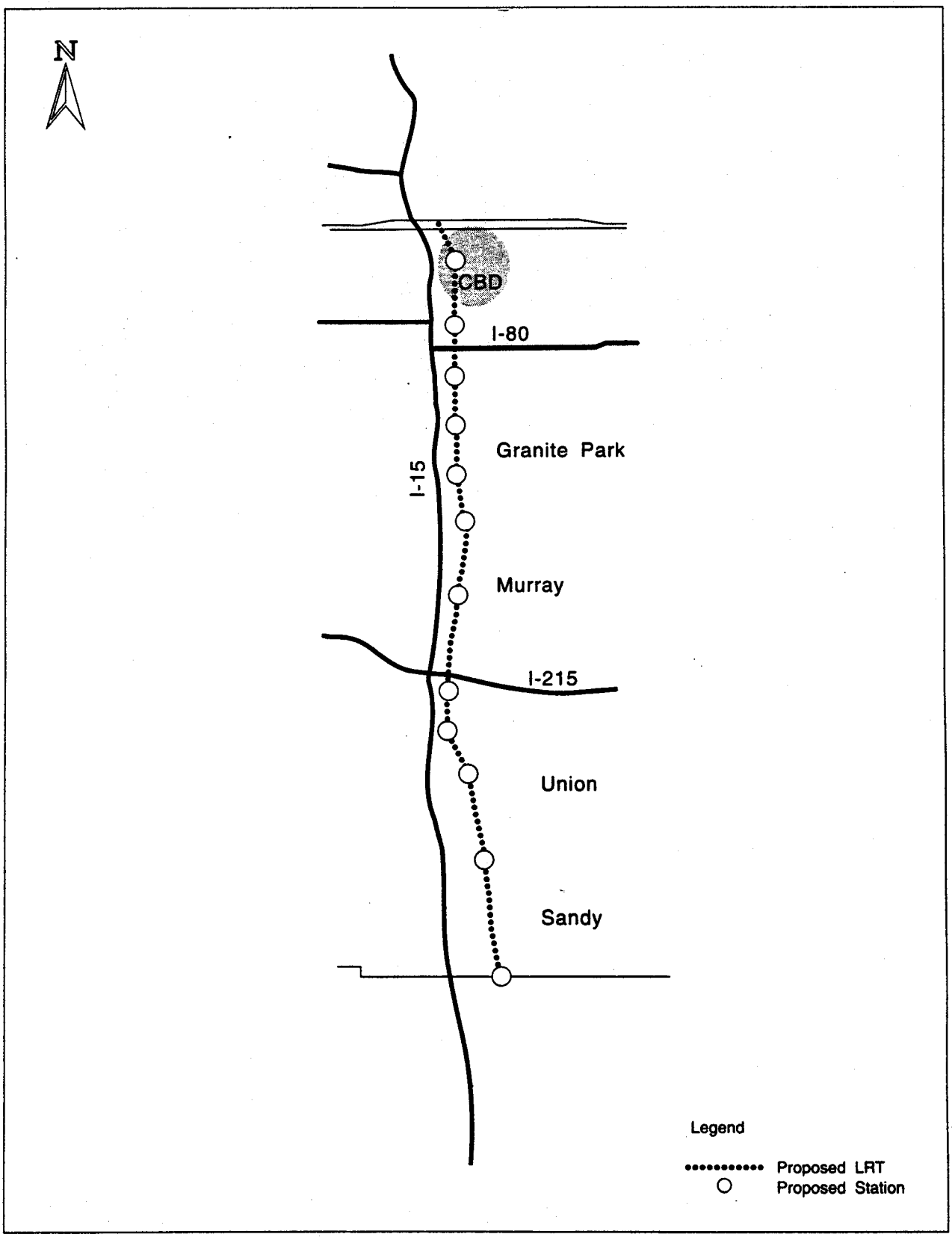
UTA's capital finance plan is vulnerable to increases in project cost and/or declines in projected rates of revenue growth. FTA's financial consultant considers the revenue forecasts optimistic. Moreover, the UTA may need to revise the project and/or the funding plan in response to the recent referendum defeat. Pending resolution of these concerns, the capital financing plan is rated "low."

South LRT — Salt Lake City, Utah

Salt Lake City receives a "low" rating for the stability and reliability of local operating funds. Without the additional revenue of the defeated increase in the sales tax, UTA may lack the resources to operate both a LRT line and its bus system. UTA will need to demonstrate that it has a stable and reliable revenue base to operate the overall proposed transit system.

In 1991 the average age of UTA's bus fleet was 8.1 years, which is comparable to the national average.

Salt Lake City:
South LRT



Airport Corridor
San Francisco, California
(January 1993)

Description — The Bay Area Rapid Transit (BART), San Mateo County (SamTrans), and the Metropolitan Transportation Commission (MTC) plan to build a 6.36-mile, three station BART extension from Colma to an external intermodal station at San Francisco International Airport. The project is estimated to cost $960 million (escalated dollars).

Status — The draft EIS was completed in 1992 and a locally preferred alternative was selected. Preliminary engineering and the completion of the environmental process is about to commence.

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

ISTEA authorized $500 million in fiscal years 1992 through 1997 for the Colma, Tasman and BART-Airport projects. The Metropolitan Transportation Commission must divide this money between the projects, which it has not yet done. Between FY 1991 and FY 1993, $225.9 million has been appropriated for the three projects.

Justification — Mobility Improvements. The BART extension to the Airport would improve transit access from San Francisco and the East Bay to the Airport and would also improve transit service along the Peninsula to San Francisco. The project would save 2.25 million hours of transit travel time over the TSM alternative in 2010.

Cost Effectiveness. The cost effectiveness index for this project is between $26 and $28 per new trip, depending upon whether the high or low capital cost estimate is used (1991 dollars, 2005 ridership).

Environmental Benefits. The San Francisco Bay Area is a "moderate" nonattainment area for ozone and a "moderate <= 12.7" nonattainment area for carbon monoxide. The Airport BART extension is forecast to reduce regional vehicle miles travelled by less than 1 percent over the No-Build alternative, and only 0.1 percent compared with the TSM

alternative. Thus it would have minimal impact on regional air quality. In addition, the project would have serious adverse impacts on wetlands and endangered and threatened species.

Operating Efficiencies. Compared with the TSM alternative, a BART-Airport extension would increase systemwide operating costs from $1.62 to $1.65 per rider (1991 dollars).

Local Financial Commitment

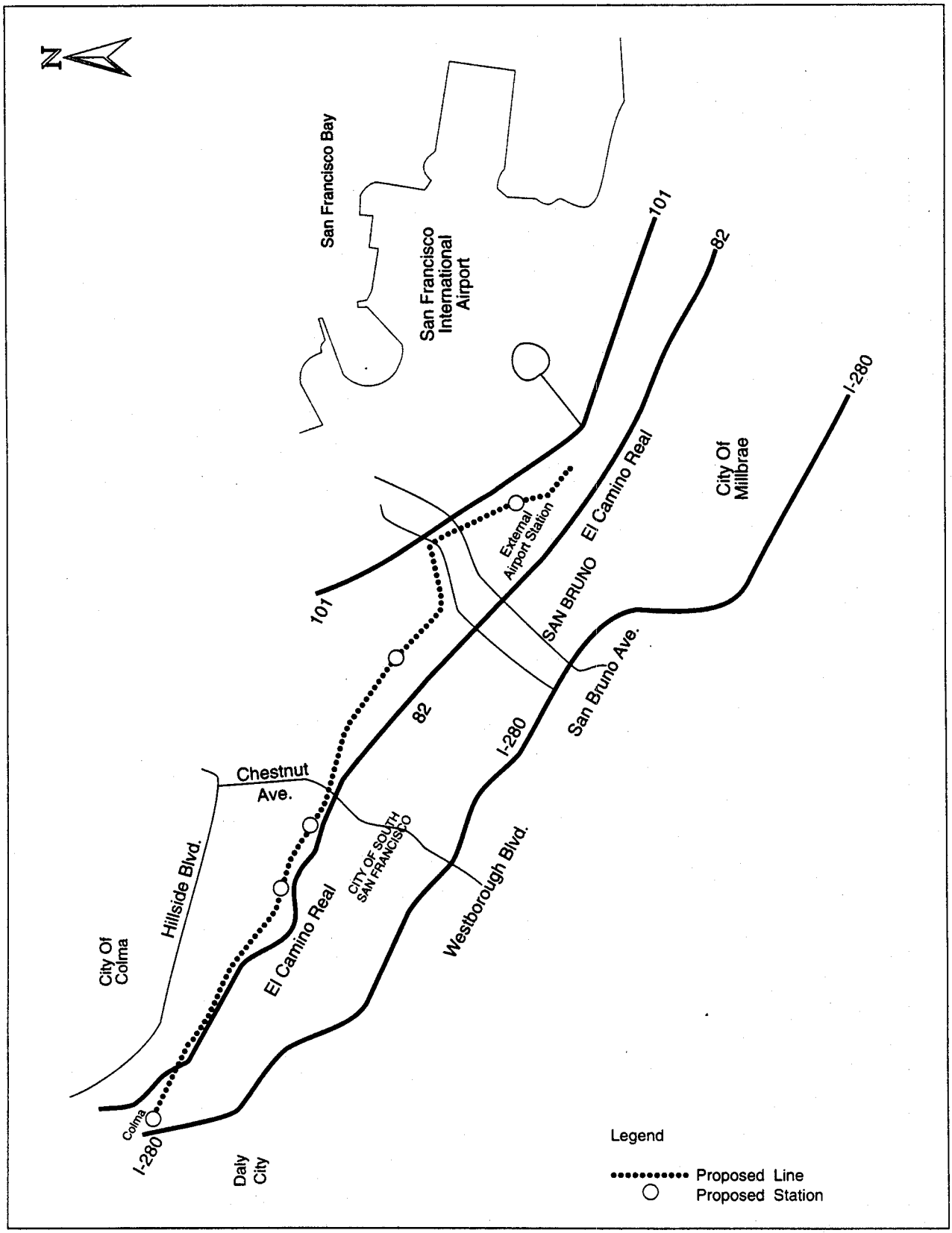
A regional financing agreement has tied this project to other fixed guideway projects in San Francisco, Alameda, and Contra Costa Counties. The regional plan calls for 100 percent local funding of East Bay projects and 75 percent FTA funding of this project, resulting in a 28 percent Section 3 funding share of the entire region's fixed guideway extension program of projects.

Many of the local and state funding mechanisms called for in the original regional capital financing plan are in place. However, Proposition 156 bonding authority failed in a November 1992 referendum, and no funding source has been identified for the $173 million cost of alignment modifications to the project requested by the cities of South San Francisco, San Bruno and Colma. Capital cost estimates for many of the other projects have escalated substantially, while expected State revenues have failed in referendum and additional local funding will be required. The Bay Area is currently revising the financing plan to address the shortfall. The capital financing plan is currently rated "low" pending completion of a new plan.

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

In 1991 the average age of SamTrans bus fleet was 7.1 years, which is better than the national average. BART's rail vehicles averaged 13.7 years old.

San Francisco:
Airport Extension



Tasman LRT
San Jose, California
(January 1993)

Description

Santa Clara County Transit District (SCCTD) plans to build 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. The project would also connect with the Caltrain commuter rail system.

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

Status

Preliminary engineering has essentially been completed. The final EIS was approved in December 1992.

Section 3032 of ISTEA directs FTA to approve the construction of the locally preferred alternative not later than 90 days after the completion of preliminary engineering, and to enter into a multiyear grant agreement for 50 percent of the project's cost.

Through FY 1993, $226 million of the $568.5 authorized by ISTEA in Section 3 New Start funds has been appropriated for metropolitan San Francisco with the provision that the Metropolitan Transportation Commission (MTC) allocate the funds among the Colma BART extension, the BART Airport project and the Tasman LRT project. MTC has not yet made this allocation.

Justification

Mobility Improvements. The proposed project serves the work trip market between southern Alameda County and Silicon Valley where high levels of freeway congestion currently exist. The project will not have a significant impact on this congestion, but some trips will experience significant time savings. FTA has no information on the total time savings that would result from the project.

Cost Effectiveness. The project has a cost per new trip of $40 (2005 riders, 1993 dollars). The index reflects a relatively low number of new riders. The new riders are low because of the land use characteristics of the corridor, which include free employee parking at numerous low density and dispersed employment locations along the transit line.

Environmental Benefits. San Jose is a "moderate" nonattainment area for ozone and a "moderate <= 12.7" nonattainment area for carbon monoxide. Compared with the No Build alternative, the Tasman project would reduce vehicle miles travelled in the study area by less than 1 percent. Compared with the TSM alternative, vehicle miles would be

reduced by 0.2 percent. Thus the project would have minimal impact on regional emissions.

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

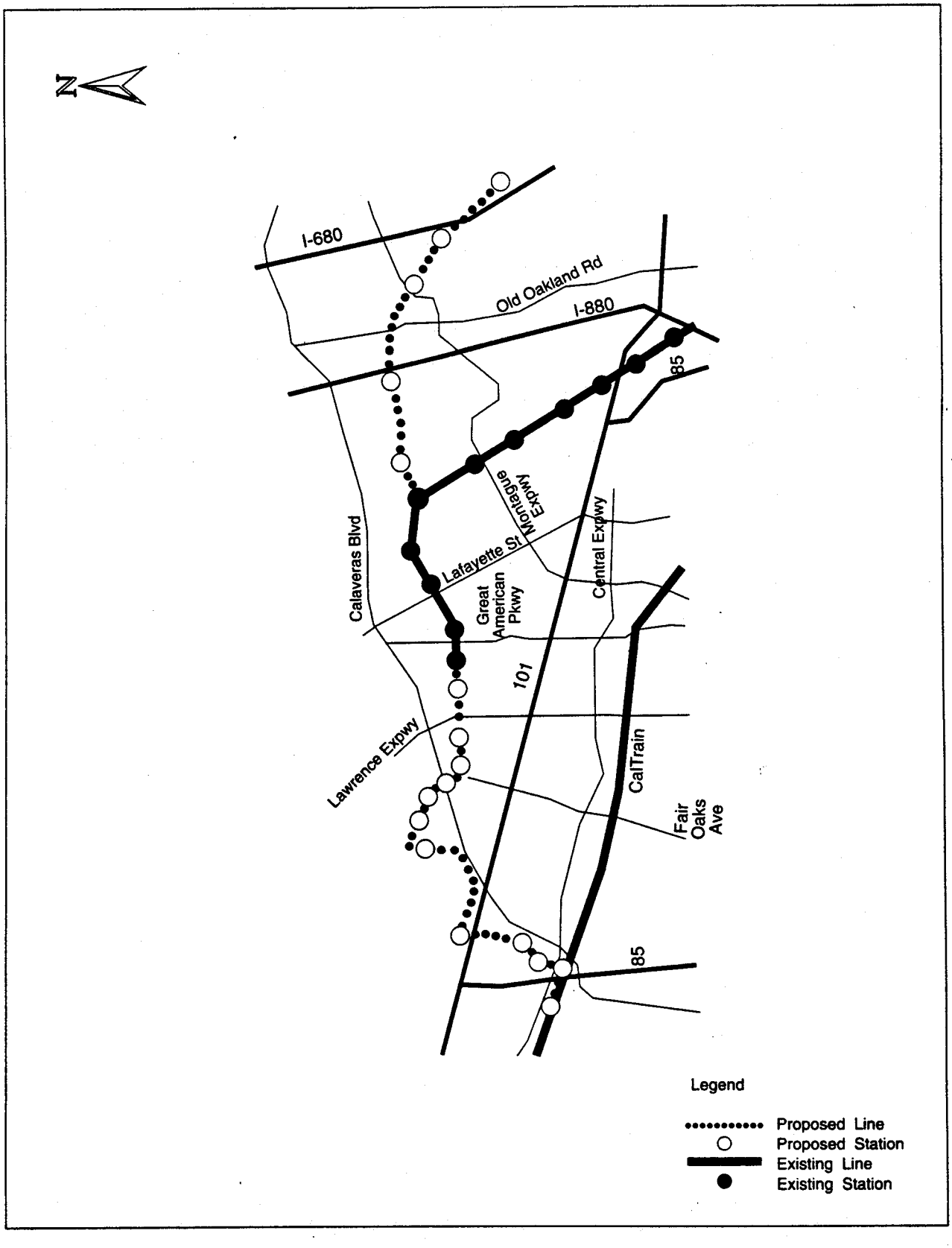
Local Financial Commitment

SCCTD is seeking Section 3 New Start funds for about 50 percent of the capital cost of the project. The County has an existing 1/2 cent sales tax for transit. With passage of Measure A in November 1992, another 1/2 cent sales tax will also be collected for rail transit projects beginning in 1995. The second half-cent tax will adequately fund the County's 25 percent share of the capital cost of the project. However, the failure of Proposition 156 in the November election has created a shortfall of $59.8 million in the State's contribution to the project. The capital finance plan has been rated "low" pending the development of a new financial plan or reprogramming of State funding to make up for the $59.8 million shortfall.

SCCTD currently covers less than 15 percent of its operating costs out of the farebox. Adding more light rail and buses will reduce the operating ratio further. The Measure A sales taxes are reserved for the operation of LRT expansions, including the Tasman project, and cannot be used to cover existing service. The existing 1/2 cent sales tax cannot cover existing service levels which must be cut by 10 percent this year (on top of a 5 percent cut last year). Further cuts in the existing service will be required unless sales tax revenues grow faster than operating costs, which is contrary to past trends. Therefore, the stability and reliability of operating assistance for the SCCTD has been rated as "low."

In 1991 SCCTD's bus fleet averaged 7.2 years old, which is better than the national average.

San Jose:
Tasman LRT



PROJECTS IN ALTERNATIVES ANALYSIS

Austin - Northwest/North Central Corridor
Austin, Texas
(January 1993)

Description Capital Metro has resumed its alternatives analysis to evaluate transit alternatives in the 14-mile Northwest/North Central Corridor. The light rail alternative would use an at-grade alignment that will make use of both street and railroad right-of-way. Alignment options exist in the downtown area, the State Hospital area, and various State office complexes. The total estimated cost of the light rail alternative is about $200 million (escalated dollars).

Status FTA approved the resumption of alternatives analysis in November 1992. Approval of a draft EIS is not expected before late 1993. Capital Metro has tentative plans to hold a bond referendum in November 1993.

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

Justification Mobility Improvements. The North Central/Northwest corridor has an exceptionally large number of jobs for a city the size of Austin. Information on the mobility improvements of the various alternatives will be developed during alternatives analysis.

Cost Effectiveness. In the prior alternatives analysis study, the most cost effective light rail alternative had an index of $15/new rider. However, the cost of the project has been scaled back considerably, from $240-$280 million to $200 million. Updated indices will be developed during alternatives analysis.

Environmental Benefits. Austin is in attainment of the National Ambient Air Quality Standards for ozone and carbon monoxide. FTA has no information about the reduction in emissions that would result from any of the alternatives.

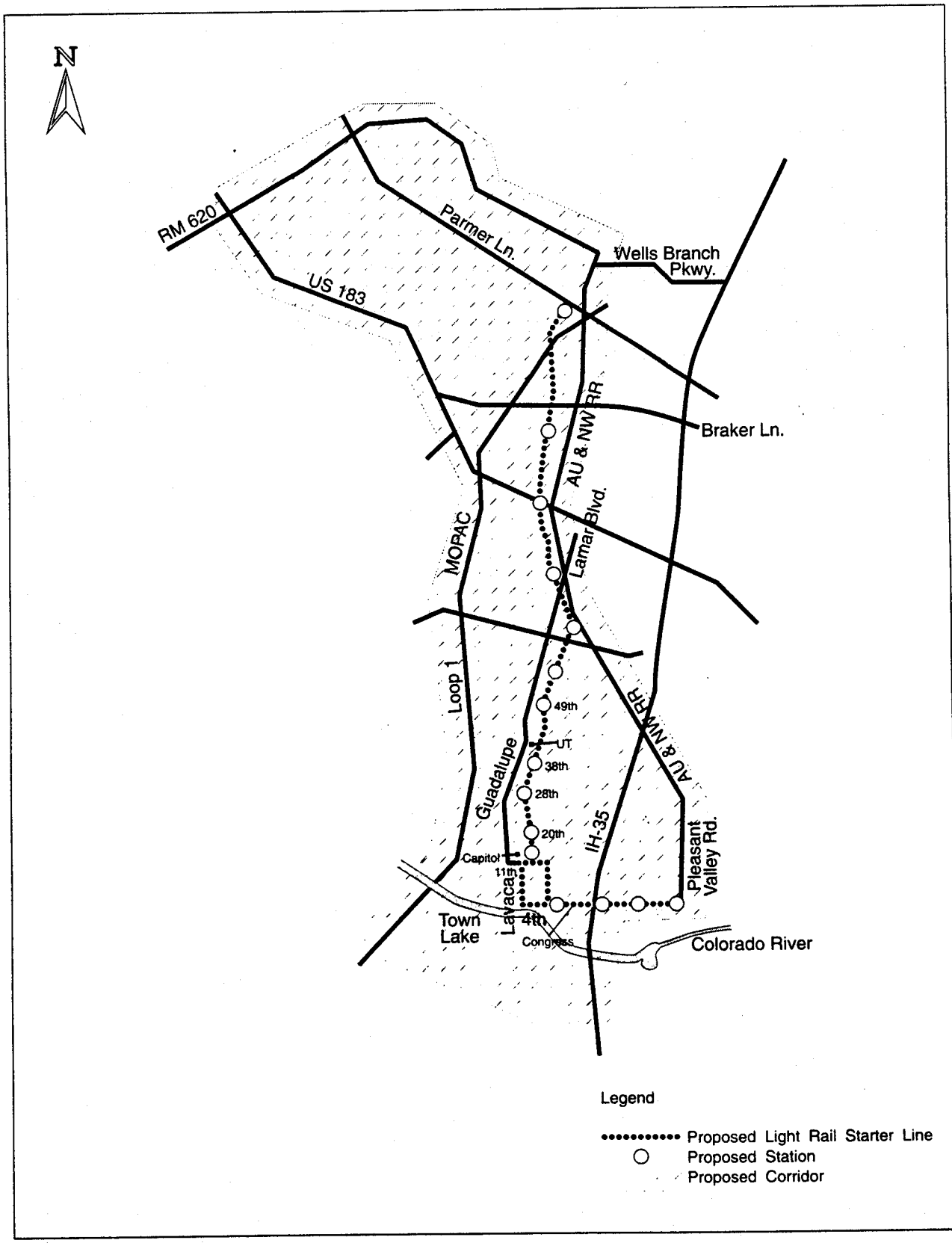
Operating Efficiencies. FTA has no information on the operating efficiencies that would result from the alternatives.

Local Financial Commitment Capital Metro is expected to seek Section 3 New Start funding for 50 percent of the cost of a 14-mile starter system. When Capital Metro was formed back in 1985, it was authorized to collect up to one cent in sales tax to support operations and capital programs. Presently, three quarters of one cent is being collected. Early projections indicate that a 50 percent local share of the capital investment could be generated without an increase in the 3/4 percent sales tax. A bond referendum is planned for the Fall of 1993.

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

The stability and reliability of Capital Metro's operating revenues are rated "high". Operating costs are covered by the 3/4 percent sales tax, farebox revenues, and Federal assistance. Capital Metro's system is being more than sufficiently maintained and replaced through continuing reinvestment. In 1991 the average age of Capital Metro's bus fleet was 5.2 years, which is better than the national average.

Austin:
Northwest/North Central Corridor



South Boston Piers
Boston, Massachusetts
(January 1993)

Description

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 is estimated to range between $350 million and $700 million (escalated dollars) depending upon the termini, alignment, and vehicle technology chosen.

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. The timing and intensity of development projected for this area is highly speculative.

Status

FTA approved the initiation of alternatives analysis in August 1990. This phase of the study is nearing completion. The draft EIS was made available to the public on November 20, 1992. The MBTA's schedule anticipates the selection of a locally preferred alternative by January 1993 and completion of the final EIS by May 1993.

Section 3035(j) of ISTEA 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 (MOS-2). Congress has appropriated $48.8 million for this project.

Justification

Mobility Improvements. The project would significantly reduce travel time to the Piers area from near-in areas without direct service to South Station. It would also reduce travel time from outlying areas to the north which are served by commuter rail service to North Station. Smaller travel time savings (under 5 percent) are projected from both near-in and distant areas that have service to South Station.

Cost Effectiveness. To address the uncertainties regarding the timing and intensity of future development, the draft EIS analyzed two growth scenarios. The cost effectiveness indices for the MOS-2 alternative is $20 in the lower growth scenario and $13 in the high growth scenario. Project justification is highly dependent on a resumption of growth and development. Vacancy rates are currently in the 20 to 25 percent range. The lower growth scenario may be optimistic.

Environmental Benefits. Metropolitan Boston is a "moderate" nonattainment area for carbon monoxide and a "serious" nonattainment area for ozone. Compared with the TSM alternative, the MOS-2 transitway alternative is expected to reduce the number of vehicle miles travelled by 55,100 in the high growth scenario and 35,400 in the lower growth scenario. However, it is highly unlikely that any of the alternatives would have a noticeable effect on pollution levels at the regional scale. There may be a small but positive effect on carbon monoxide in the central business district.

Operating Efficiencies. The systemwide cost per passenger is projected to be $2.29 for the No-Build alternative, $2.31 for the TSM alternative and $2.32 for MOS-2.

Local financial Commitment

The MBTA is proposing a Section 3 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.

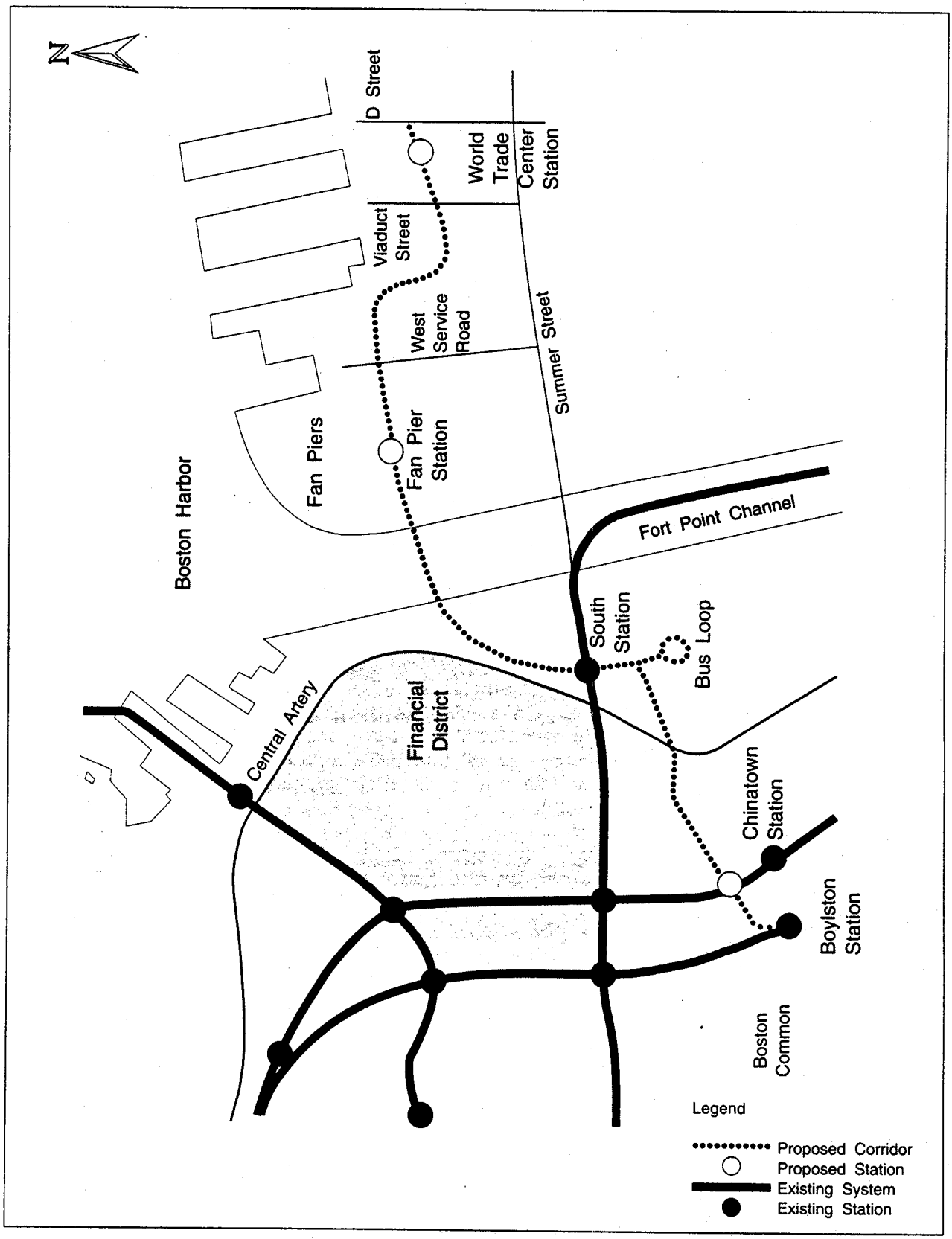
A "medium" rating for the capital financing commitment is appropriate. While the MBTA has adopted a financing plan, the State is currently facing a $3 billion shortfall for top priority transportation projects. Therefore, the availability of State funding for the transitway is uncertain. FTA suspects that the cost estimate may understate the actual cost of the project.

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 1991 the average age of the MBTA's bus fleet was 8.8 years, slightly above the national average, and its rail fleet averaged 11 years.

Other Factors

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

Boston:
South Boston Piers



Dual Hub Corridor
Cleveland, Ohio
(January 1993)

Description

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

The alternative considered most likely to be selected the locally preferred alternative follows Euclid Avenue. It would be in subway downtown and on the street outside of downtown. The latest capital cost estimate is $300 to $800 million (escalated dollars).

Status

The Greater Cleveland Regional Transit Authority (GCRTA) is using a tiered approach to project decision making. A draft EIS has been prepared to help narrow the large number of rail alignment alternatives. In a second phase of alternatives analysis, GCRTA will correct deficiencies in its traffic demand models, ridership estimates, cost effectiveness indices, and cost estimates, leading to a supplemental draft EIS evaluating the No-Build, TSM, and best rail alternatives. The estimated completion date of this phase is late 1993, after which GCRTA will proceed with preliminary engineering on a locally preferred alternative.

Section 3035(t) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with GCRTA to complete the alternatives analysis. Through FY 1993, Congress has appropriated $10.4 million in New Start funds for the project.

Justification

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

Cost Effectiveness. FTA does not have any information on the cost effectiveness of a major transit investment in the corridor. Such information will be developed in the second phase of alternatives analysis.

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

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

Local Financial Commitment

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

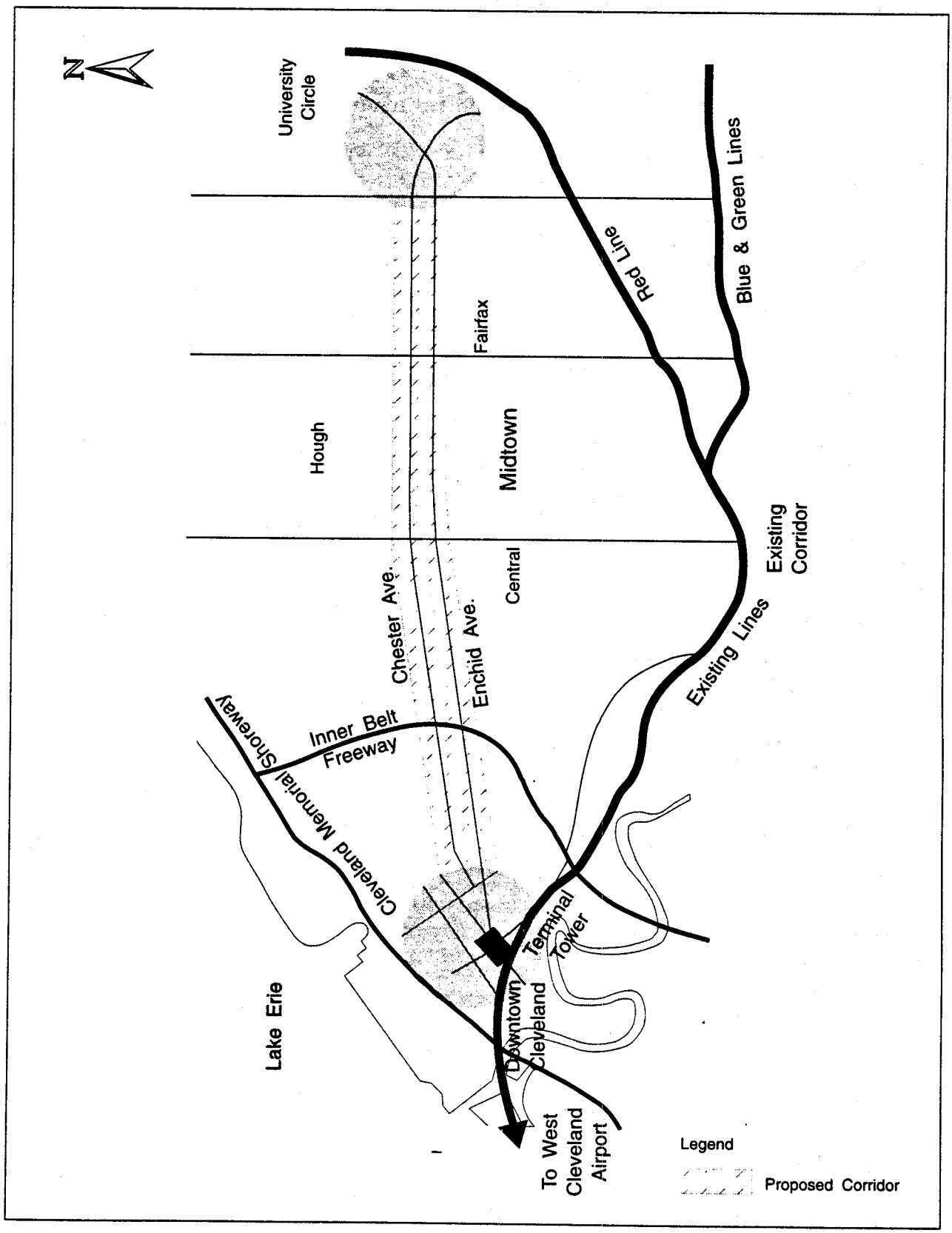
The capital financing plan for the project has been proposed but has not been adopted. The draft plan is rated "medium" for this stage in FTA's project development process. No commitments have been made by any funding partner, and State legislation to impose the special transit benefit tax assessments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

The stability and reliability of GCRTA's operating assistance are rated as "medium." The 1 percent sales tax revenue covers 64 percent of the operating expenses, and farebox

revenue covers another 25 percent. The remainder is provided by FTA (6 percent) and the State (5 percent). The recession has reduced sales tax revenues and GCRTA has had to reduce service 5 percent.

In 1991 GCRTA's existing bus fleet averaged 6.1 years old, which is better than the national average.

Cleveland:
Dual Hub Corridor



North Central Corridor
Dallas, Texas
(January 1993)

Description

Dallas Area Rapid Transit (DART) has initiated alternatives analysis to evaluate transit alternatives in the 11.2-mile North Central Corridor. The corridor, which extends beyond the terminus of the light rail line DART is presently building, includes portions of three cities: Dallas, Richardson, and Plano. Alternatives to be considered include a no build alternative; two transportation system management (TSM) alternatives with HOV elements, and two light rail transit alternatives. The estimated cost of the light rail alternative is $200 million (escalated dollars). DART estimates that ridership will be 24,300 in the corridor.

Status

FTA approved the initiation of alternatives analysis in August 1992. Approval of a draft EIS is not expected before Fall 1993.

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

Justification

Mobility Improvements. The North Central Corridor is the highest populated of any transportation corridor within the DART service area. Employment and population are expected to grow 34 percent and 11 percent respectively by the year 2010. It is not known whether the transit alternatives will save any travel time.

Cost Effectiveness. The preliminary cost effectiveness index is $7 per new trip.

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

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

Local Financial Commitment

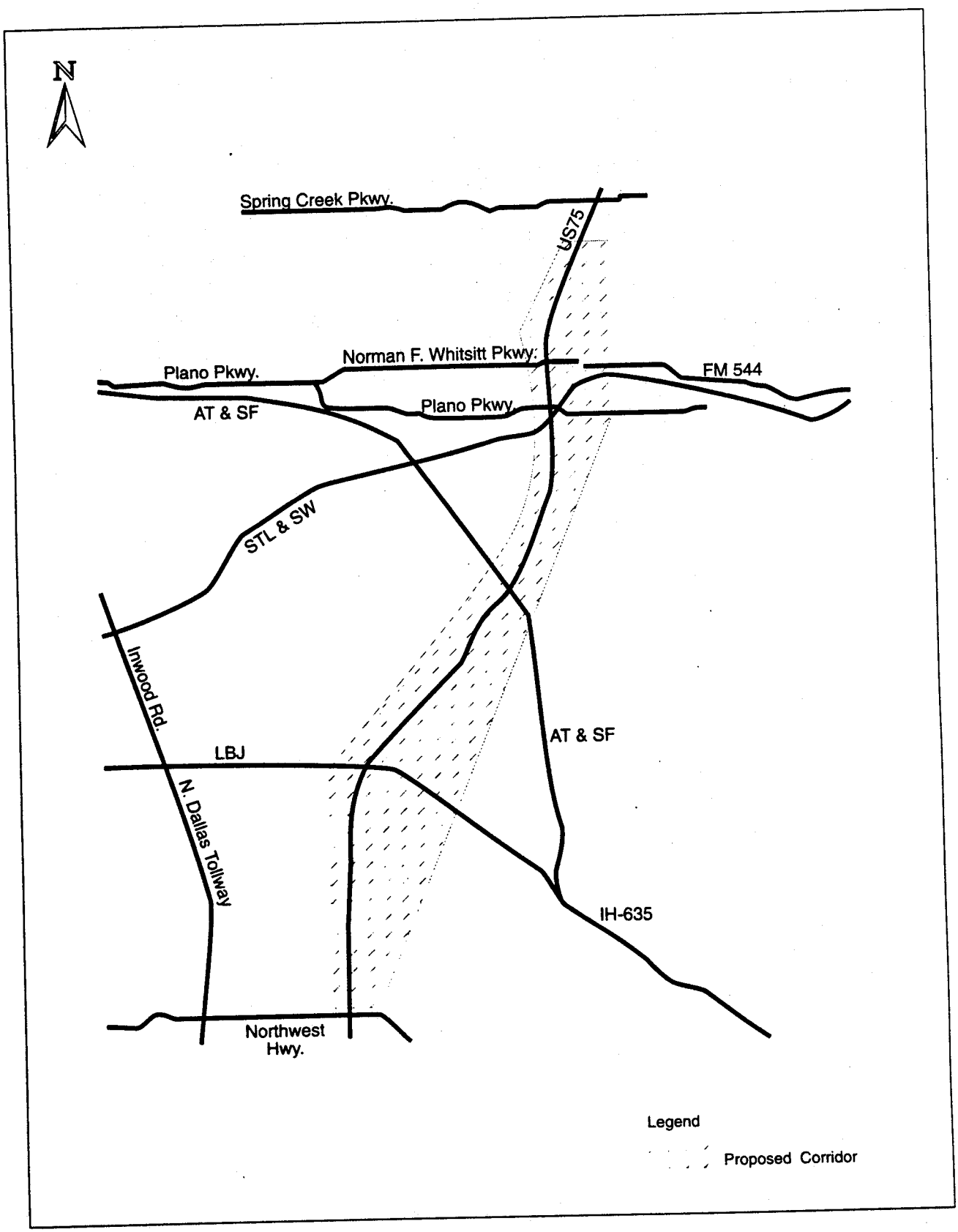
DART is seeking Section 3 New Start funding for 80 percent of the cost of whatever project results from the alternatives analysis.

With a 1 percent sales tax, DART is in very good financial condition and enjoys sufficient surplus to build the 20-mile system. The sales tax has consistently provided DART with a cash surplus after systemwide operating and capital expenses. DART has no long term debt. However, whether the 1 percent sales tax alone is sufficient to build the starter line as well as build future extensions without

Federal assistance and future cash infusions is something that should be seriously considered. FTA has rated DART's capital financing plan as "medium" given the preliminary stage of planning.

The stability and reliability of DART's operating revenues are rated "high" because of their continuous ability to operate the existing system and to replace capital equipment on a timely basis. In 1991 DART's bus fleet averaged 6.8 years old, which is better than the national average.

Dallas:
North Central Corridor



Southwest Corridor
Denver, Colorado
(January 1993)

Description

An ongoing alternatives analysis will evaluate light rail, busway, commuter rail, and TSM alternatives in the 14-mile corridor between the edge of downtown Denver and the Highlands Ranch community in northern Douglas County.

The capital cost of the busway option developed in system planning was $97 million (1988 dollars) and the capital cost of the LRT option was $200 million (1988 dollars). However, the Regional Transit District (RTD) recently decided to extend its Metro Area Connection (MAC) light rail system to the vicinity of the intersection of I-25 and Santa Fe Drive. This will reduce the cost of the alternatives to be studied in the alternatives analysis.

Status

The alternatives analysis is in the very early stages. Completion is not expected before August 1994.

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

Justification

Mobility Improvements. FTA has no quantitative information on the mobility benefits of a major transit investment in the corridor. The proposed fixed guideway would be parallel and adjacent to the HOV lanes being developed along South Santa Fe Drive. It is not clear what mobility benefits this guideway would provide.

Cost Effectiveness. In system planning, RTD calculated a preliminary cost-effectiveness index of $1 per new trip for the busway and $6 for LRT. FTA questioned a number of assumptions underlying this analysis. In addition, some of the benefits identified in system planning will be achieved by the MAC extension to I-25.

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

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

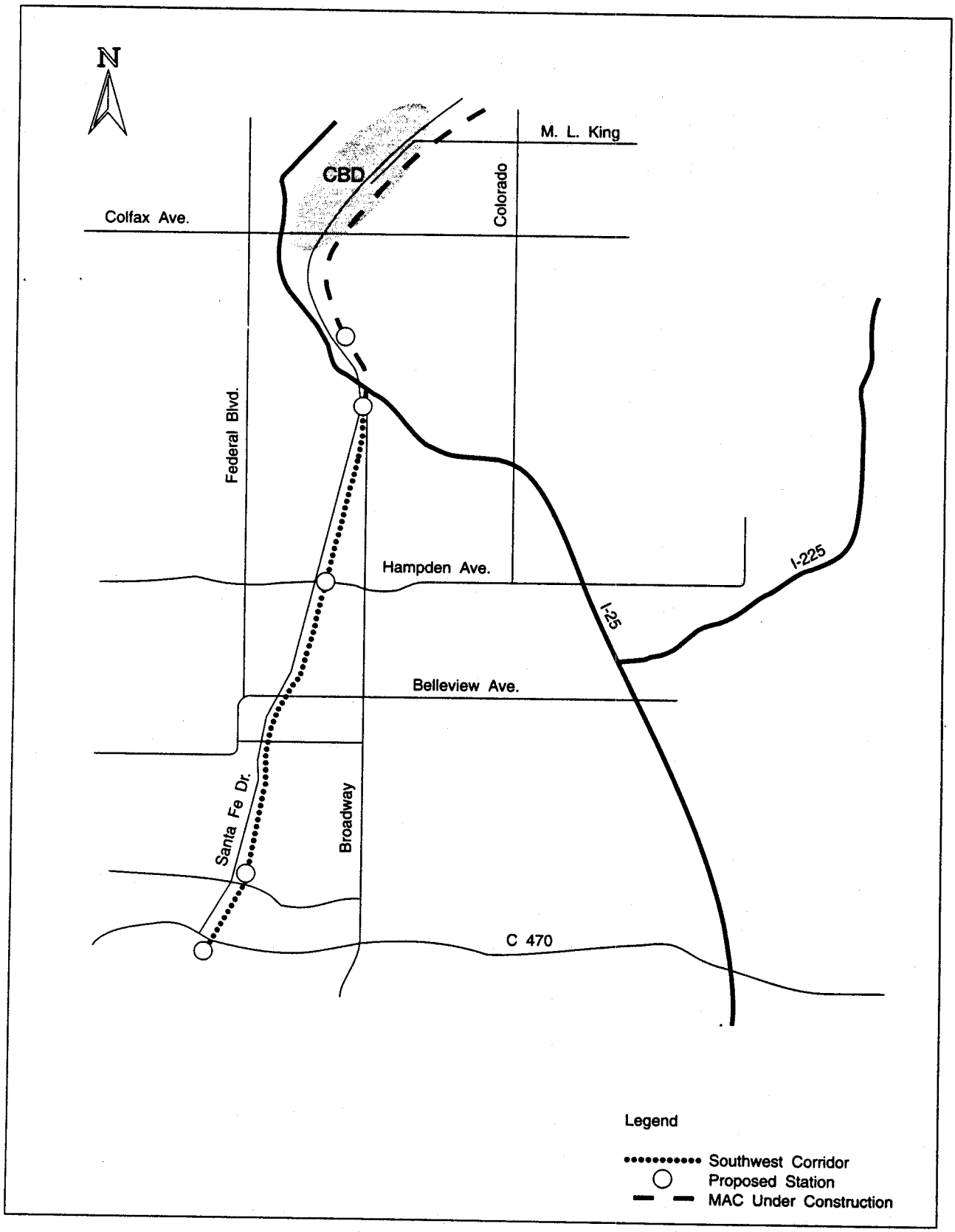
Local Financial Commitment

The Federal share of this project is assumed to be 80 percent. A financial plan will be developed during alternatives analysis.

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

The stability and reliability of its operating plan is rated as "medium". It is anticipated that RTD will be able to continue operating its existing fleet without service cutbacks. In 1991 the average age of RTD's bus fleet was 7.4 years old, which is better than the national average.

Denver:
Southwest Corridor



South Corridor
Kansas City, MO
(January 1993)

Description

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

KCATA's preliminary capital cost estimate for a 10- to-11-mile LRT alternative is $245 million (1990 dollars).

Status

This study is in the early stages. KCATA expects to select a locally preferred alternative in June 1993. FTA considers the schedule to be highly optimistic.

Section 3035(k) of ISTEA directs FTA to enter into a multiyear grant agreement in the amount of $5.9 million with the KCATA to provide for the completion of alternatives analysis and preliminary engineering. In 1993, Congress appropriated $1.1 million for the completion of alternatives analysis and preliminary engineering.

Justification

Mobility Improvements. According to KCATA's earlier system planning studies, few transportation problems solvable by LRT currently exist in the study area. Quantitative information on each alternative's mobility benefits will be developed in the current alternatives analysis study.

Cost Effectiveness. Earlier studies indicated 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. Preliminary cost-effectiveness indices were $50 to $89 per new trip for the two LRT alignments being studied. The indices for the busway/HOV alternatives for the same alignments were $1747 and $2261 per new trip.

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

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

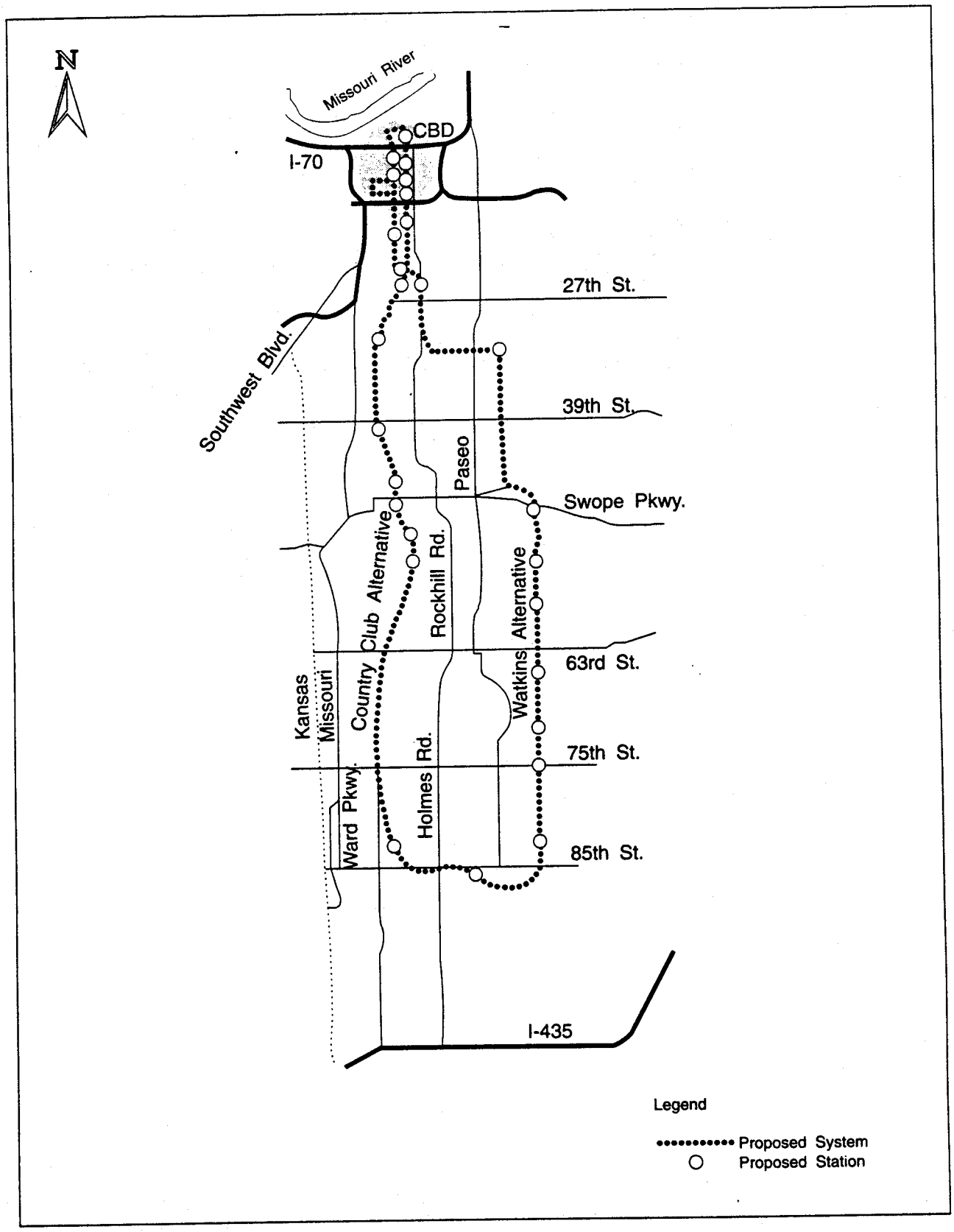
Local Financial Commitment

The Federal share of this project is assumed to be 80 percent. No source of local capital funding has yet been identified. The capital financing plan is rated as "low-medium" since KCATA does not yet have a financing strategy in mind.

The stability and reliability of the operating and maintenance plan is rated "low-medium." FTA considers the assumptions made in the KCATA's financial analysis in system planning to be highly questionable. Moreover, the analysis concluded that KCATA lacks the resources to build and operate a major transit project.

In 1991 the average age of KCATA's bus fleet was 7.6 years, which is comparable to the national average.

Kansas City:
South Corridor



East Central Corridor
Los Angeles, California
(January 1993)

Description

The East Central Corridor project is one of three proposed extensions to the Los Angeles Metro Rail System which together constitute MOS-3. 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 six miles. The project is estimated to cost about $1.8 billion (escalated dollars). Six separate alignments are being considered.

Status

FTA approved the Los Angeles County Transportation Commission's (LACTC) request to initiate alternatives analysis in July 1991. The study is currently in the very early stages.

Section 3034 of ISTEA directs FTA to amend the full funding contract for Metro Rail segment MOS-2 for $695 million for constructing the three segments of MOS-3. ISTEA also exempted MOS-3 from FTA's new start criteria and provided for advanced construction authority.

Through FY 1993, Congress has appropriated $60 million for MOS-3, including $20 million for the initial three miles of the East Side Extension.

Justification

Mobility Improvements. The project would connect the Red Line to the largely Hispanic East Side. Transit users would thereby avoid the congested surface streets which currently connect downtown to the East Side. Quantification of these benefits will be done in the ongoing alternatives analysis.

Cost Effectiveness. LACTC has calculated preliminary cost-effectiveness indices for the combined East and West Central Corridor project. 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.

Environmental Benefits. Metropolitan Los Angeles is an "extreme" nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. It is unlikely that any of the alternatives would have a significant effect on pollution levels at the regional scale, because such a small percentage of regional auto trips would be diverted to transit. The project could have a small positive effect on carbon monoxide levels in the central area. 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.

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

Local Financial Commitment

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; a planned Blue Line Extension to Pasadena; the Green Line from Norwalk to El Segundo; a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester; and several commuter rail projects included in the region's Metrolink commuter rail service.

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

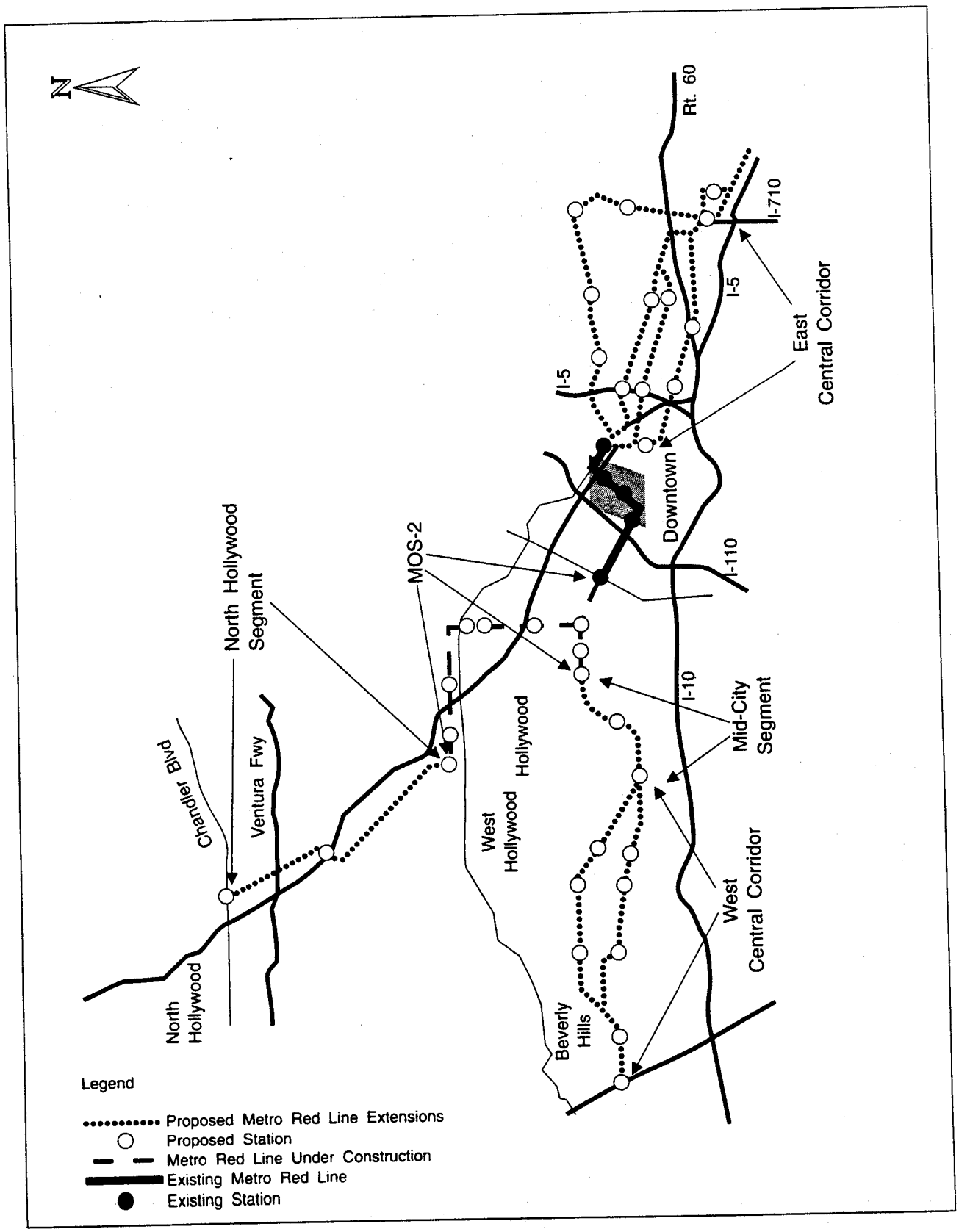
In June 1990, funding for public transit in California was enhanced by the passage of Propositions 111, 116 and 108. Proposition 111 increases the State's motor fuels tax by a total of 9 cents over 5 years, providing $18.5 billion for transportation projects over the next 10 years. Proposition 108 authorized $1 billion in general obligation bonds for rail transportation facilities and required referendums on additional $1 billion in bonds in both 1992 and 1994. Proposition 116 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. In November 1992, Proposition 156 which would have authorized another $1 billion in general obligation bonds failed. However, plans are being developed to seek an additional $2 billion in 1994 instead of the previously scheduled $1 billion.

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

construction, operation, and maintenance. Even before the failure of Proposition 156, county officials were facing a significant budget shortfall. Financial ratings for this project have not yet been established.

In 1991 the Los Angeles bus fleet averaged 7.6 years old, which is comparable to the national average. Rail vehicles averaged 2 years old.

Los Angeles:
East Central Corridor



West Central Corridor
Los Angeles, California
(January 1993)

Description

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

Status

FTA approved the Los Angeles County Transportation Commission's (LACTC) request to initiate alternatives analysis in July 1991. The study has not yet been initiated. LACTC has been awaiting the outcome of the EIS reevaluation on the Mid-City Extension before undertaking this alternatives analysis.

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

Justification

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

Cost Effectiveness. 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.

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

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

Local Financial Commitment

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; a planned Blue Line Extension to Pasadena; the Green Line from Norwalk to El Segundo; a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester; and several planned commuter rail projects for the region's Metrolink commuter rail service.

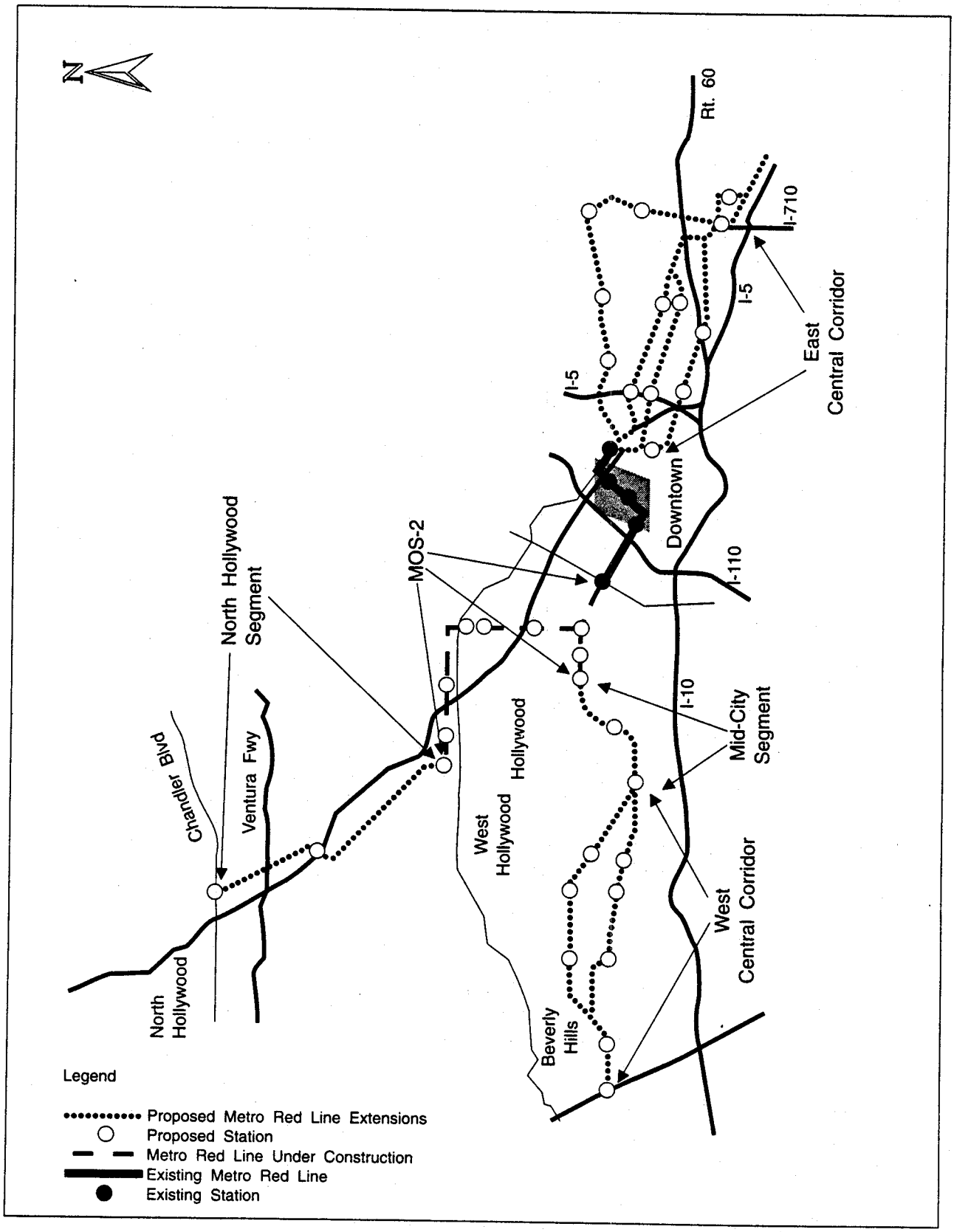
Los Angeles' transit programs benefit from several State and local dedicated revenue resources. The primary local resource is a 0.5 percent county wide sales tax, known as Proposition A, which was adopted in 1980. Thirty-five percent of this tax, about $130 million annually, is dedicated to the construction of a county wide rail system. An additional 0.5 percent sales tax dedicated to transit and transit-related highway improvements was enacted in November 1990 under Proposition C.

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 108 authorized $1 billion in general obligation bonds for rail transportation facilities and required referendums on additional $1 billion in bonds in both 1992 and 1994. Proposition 116 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. In November 1992, Proposition 156, which would have authorized the second billion in general obligation bonds, failed. However, plans are being developed to seek $2 billion in bonds in a 1994 referendum instead of the previously scheduled $1 billion.

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 construction, operation, and maintenance. Even before the failure of Proposition 156, county officials were facing a significant budget shortfall for the current fiscal year. Financial ratings for this project have not yet been established.

In 1991 Los Angeles' bus fleet averaged 7.6 years old, which is comparable to the national average. Rail vehicles averaged 2 years old.

Los Angeles:
West Central Corridor



Boston to Portland Commuter Rail
Maine, New Hampshire and Boston, Massachusetts
(January 1993)

Description

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 36 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 78 miles are owned by Guilford Transportation Industries (GTI) where a substantial amount of rail rehabilitation would be required.

Preliminary feasibility studies have 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

FTA has made a grant to the Maine Department of Transportation (MeDOT) for further planning, engineering and environmental impact assessment. The study will develop refined estimates of project costs and benefits and identify station locations. The study will satisfy requirements for alternatives analysis and preliminary engineering. Because of the relative simplicity of the project, MeDOT expects the alternatives analysis phase to be completed in early 1993.

Section 3035(pp) of ISTEA authorizes $30 million for the project. Congress appropriated $25.5 million in FY 1993.

Justification

Mobility Improvements. Commuter rail would reduce transit travel time from Southern Maine and Southern New Hampshire to downtown Boston. FTA has no quantitative information on the mobility benefits of the proposed project. Additional information will be developed in the current studies.

Cost Effectiveness. FTA has no information on the cost effectiveness of the proposed rail project. Cost effectiveness indices will be calculated in the current study.

Environmental Benefits. 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. In the short term, this type of project may result in very small decreases in the emission of air pollutants. In the

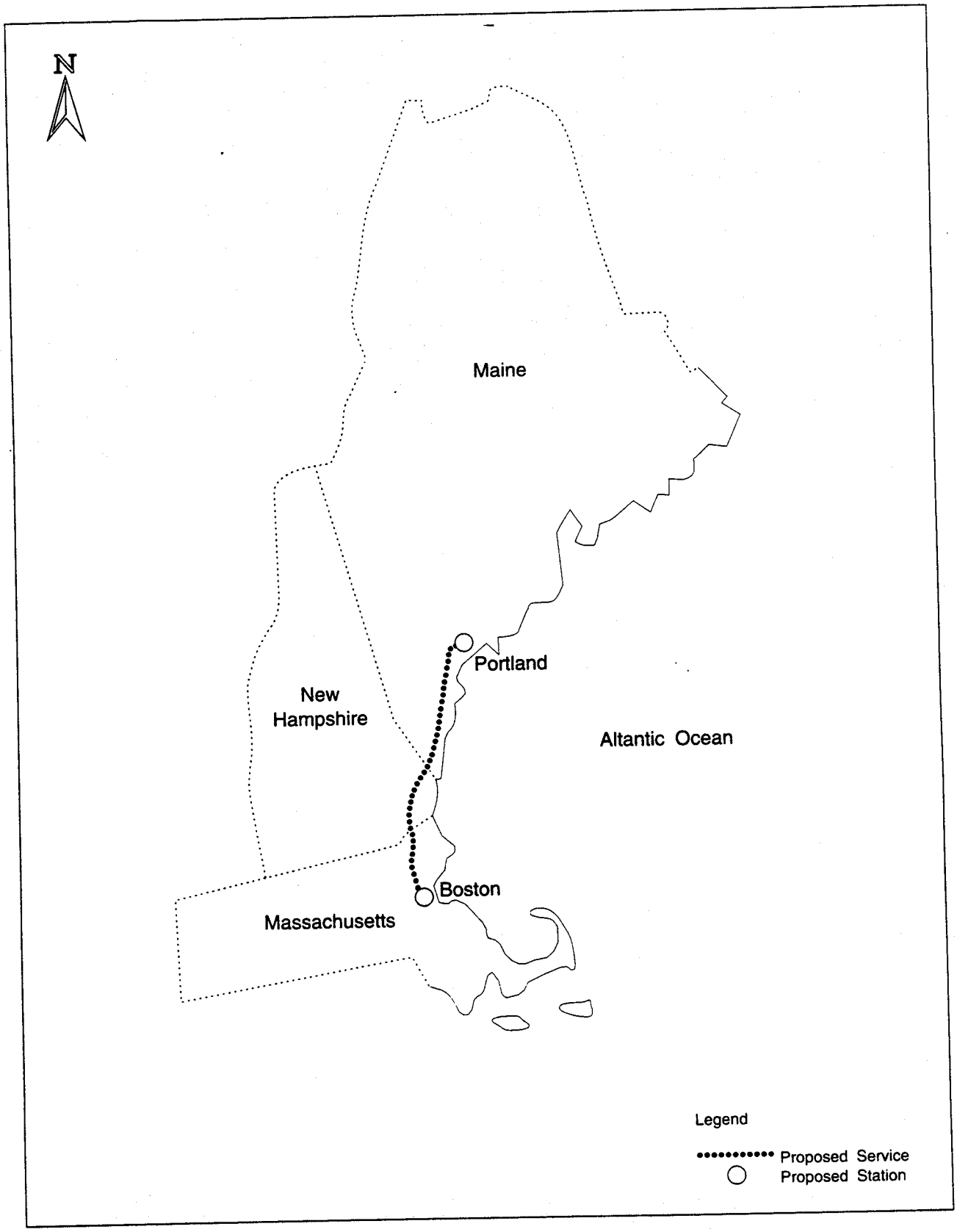
long term, however, a project of this length, which serves an area well beyond the existing suburbs, could contribute to urban sprawl and the increased pollutant emissions associated with very low density urbanization.

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

Local Financial Commitment

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. MeDOT is identifying potential funding sources as part of the current study. A "low-medium" rating has been assigned pending the adoption of a financing plan.

Boston - Portland
Commuter Rail



East-West Corridor
Milwaukee, Wisconsin
(January 1993)

Description

The Wisconsin Department of Transportation (WisDOT) is performing 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) could extend from the UW-M campus to the County Grounds/Zoo.

The alternatives analysis is evaluating various LRT alignments and termini, a busway alternative, as well as a TSM/HOV-lane and a No-Build alternative. At least one of the variations would extend west to the City of Waukesha.

The estimated construction cost of the MOS segment of LRT in the corridor is $332 million (1990 dollars).

Status

The East-West Corridor is in the alternatives analyis phase of study. Updated information on ridership and costs will be completed within the next few months, but was not available for this report. A locally preferred alternative is expected to be selected in November 1993.

Section 3035(oo) of ISTEA directs FTA to enter into a multiyear grant agreement with the State of Wisconsin for $200 million. The grant agreement would cover construction of an initial segment of the locally preferred alternative identified in the alternatives analysis.

Justification

Mobility Improvements. 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 major transit investment would reduce traffic congestion or provide travel time savings is unknown. Quantitative information is being developed in the current study.

Cost Effectiveness. In system planning, WisDOT computed a cost effectiveness index in the range of $8 to 11 (1990 dollars). FTA took issue with the method and assumptions WisDOT used to produce the index. The index could change significantly once alternatives analysis results are available.

Environmental Benefits. Milwaukee is a "severe" nonattainment area for ozone and an attainment area for carbon monoxide. It has yet to be determined whether a transit improvement would have a noticeable effect on pollutant emissions.

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

Local Financial Commitment

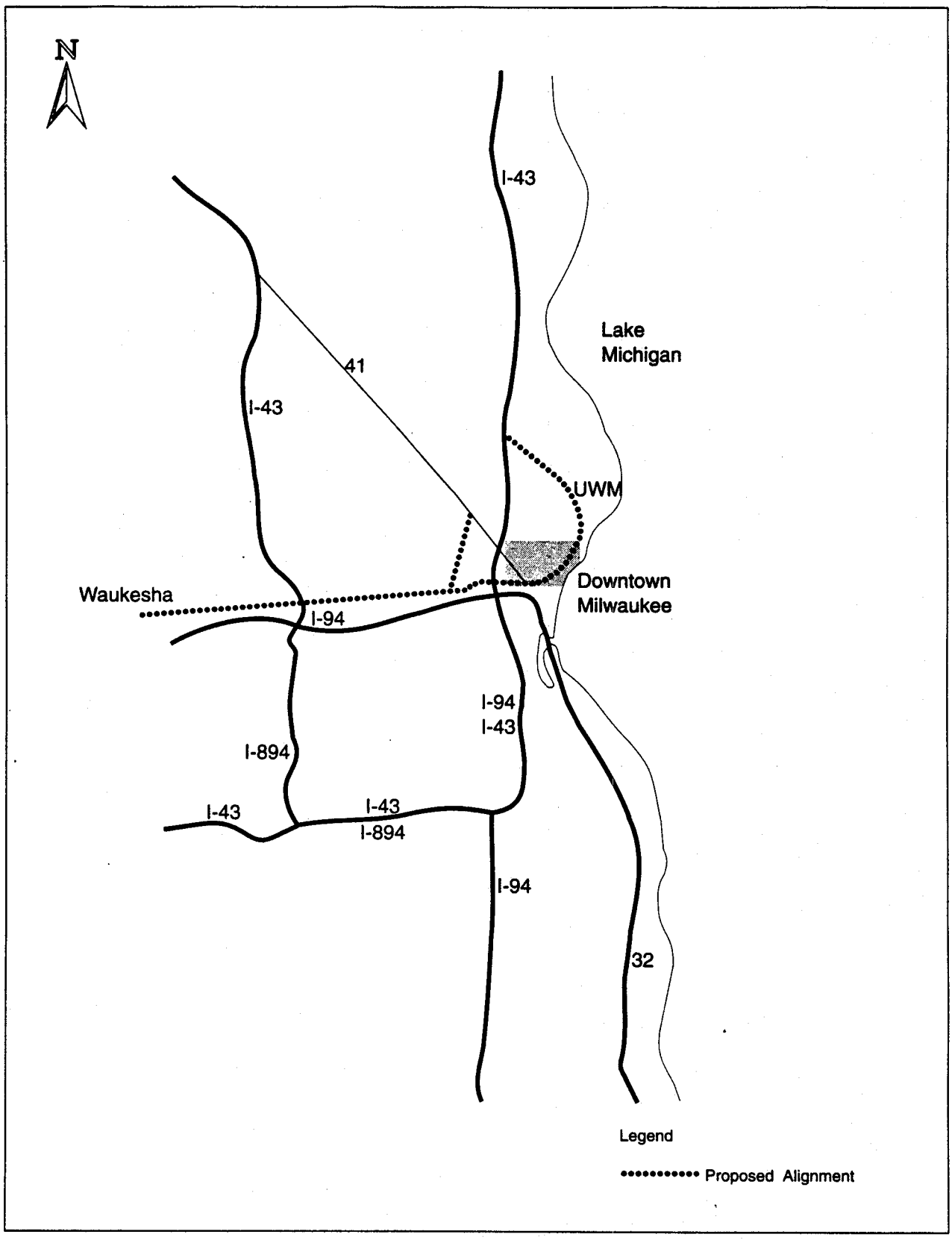
WisDOT's preliminary funding strategy assumes a $332 million project (i.e., the light rail MOS) to be funded by three sources: (a) $125 million of Interstate Cost Estimate (ICE) funding, (b) $141 million of Section 3 New Start funds, and (c) $66 million in State/local funds.

The capital financing plan is rated as "medium". The plan seems to be reasonable and adequate based on the information available at this time. When the project costs are finalized within the next few months, the financing plan (and FTA rating) may be revised.

The operating and maintenance funding is also rated "medium". Combined Federal and State operating subsidies are assumed to remain at a constant level. The State has a strong subsidy program. Although local funding sources are being still being investigated at this stage in the study, the existing transit system has been well maintained and it is anticipated that adequate funding will similarly be provided to the proposed expansion.

In 1991 the average age of the Milwaukee bus fleet was 9.1 years, which is slightly above the national average.

Milwaukee:
East-West Corridor



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

Description

The Minnesota Department of Transportation (MinnDOT) and the Railroad Authorities of Hennepin and Ramsey Counties are studying light rail and bus alternatives between Minneapolis and St. Paul. The light rail alternative would be largely within the right-of-way of I-94 and also serve the two downtowns and the University of Minnesota. A very preliminary cost estimate is $470 million (1992 dollars).

Status

Alternatives analysis is underway. Local agencies hope to complete a draft EIS and select a locally preferred alternative by Summer 1993.

Since FY 1991, when $2 million for planning was earmarked, Congress has not appropriated nor authorized any money for this project.

Justification

Mobility Improvements. The Central Corridor is one of the most densely developed and highest transit ridership corridors in the region. Information on mobility improvements is being developed in the alternatives analysis.

Cost Effectiveness. Information on the cost effectiveness of this major transit investment will be developed in the alternatives analysis.

Environmental Benefits. The Twin Cities are a "moderate" nonattainment area for carbon monoxide but an attainment area for ozone. Information on the impact of this proposed project on air quality is being developed in the alternatives analysis.

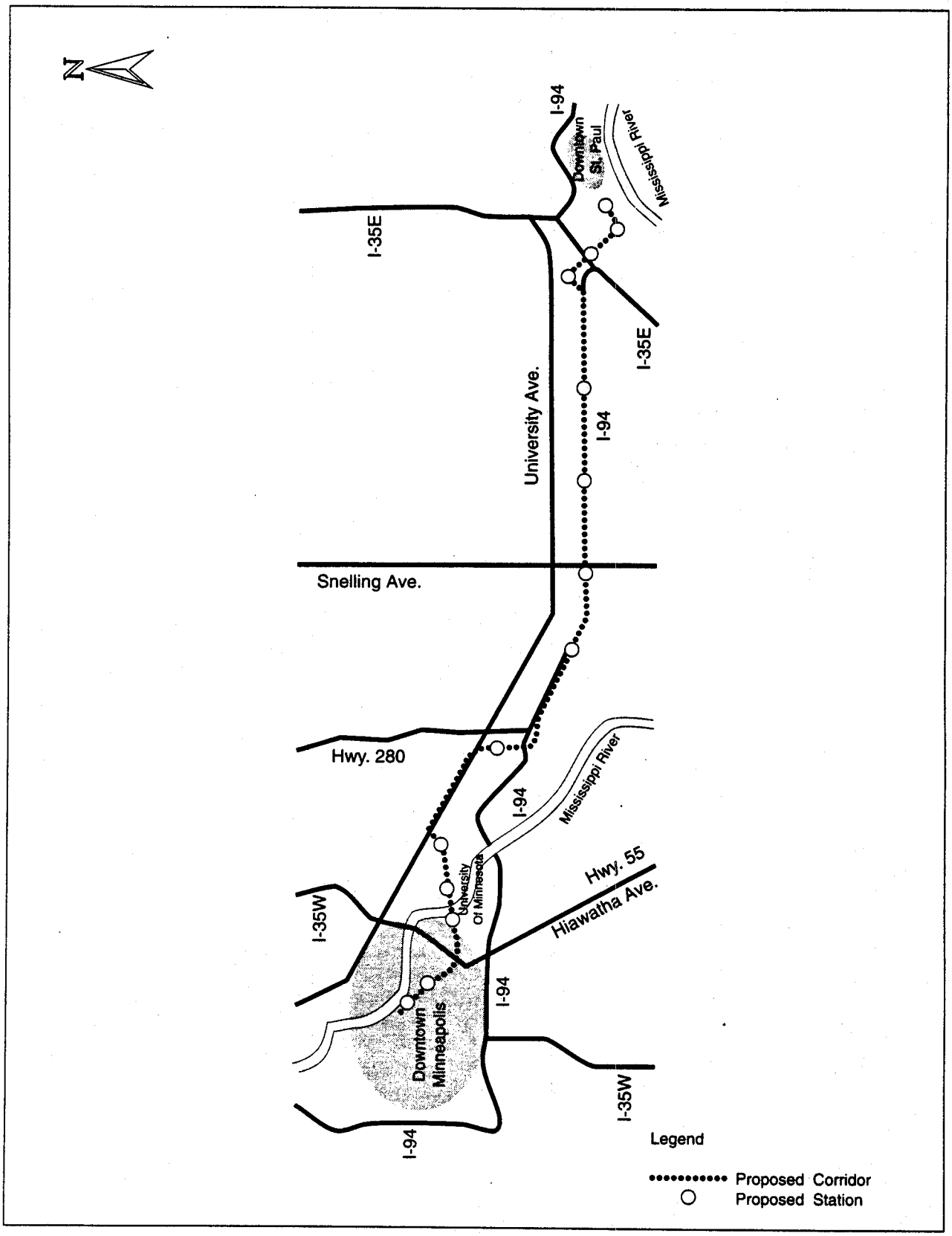
Operating Efficiencies. Information on the impact of this project on operating efficiencies will be developed in the alternatives analysis.

Local Financial Commitment

The Twin Cities are investigating several strategies for generating local funds for the capital costs of this project. The financing plan is rated as "medium" at this early planning stage.

The State and local governments have traditionally funded a good transit system in the Twin Cities area with a combination of dedicated taxes and general revenues. In 1991 the average age of the buses in the Twin Cities was only 3.6 years, far better than the national average. The stability and reliability of operating assistance is rated as "medium".

Minneapolis:
Central Corridor



Canal Street Corridor
New Orleans, Louisiana
(January 1993)

Description The Regional Transit Authority (RTA) has initiated alternatives analysis to evaluate transit alternatives on the 4.9-mile Canal Street Corridor. The light rail alternatives would follow the current Canal Cemetaries bus route from the Mississippi River to City Park Avenue. An additional leg of the route would connect Canal Street with the Union Passenger Terminal and the Armstrong Park/Municipal Auditorium complexes. A preliminary estimate of the capital cost is $90 million.

Status Alternatives analysis was initiated in September 1992. Completion of a draft EIS and selection of a locally preferred alternative is expected by December 1993.

Section 3035(fff) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with the City of New Orleans in the amount of $4.8 million for the completion of alternatives analysis, preliminary engineering, and an environmental impact statement for the proposed project. Congress has not yet appropriated any of these funds.

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

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

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

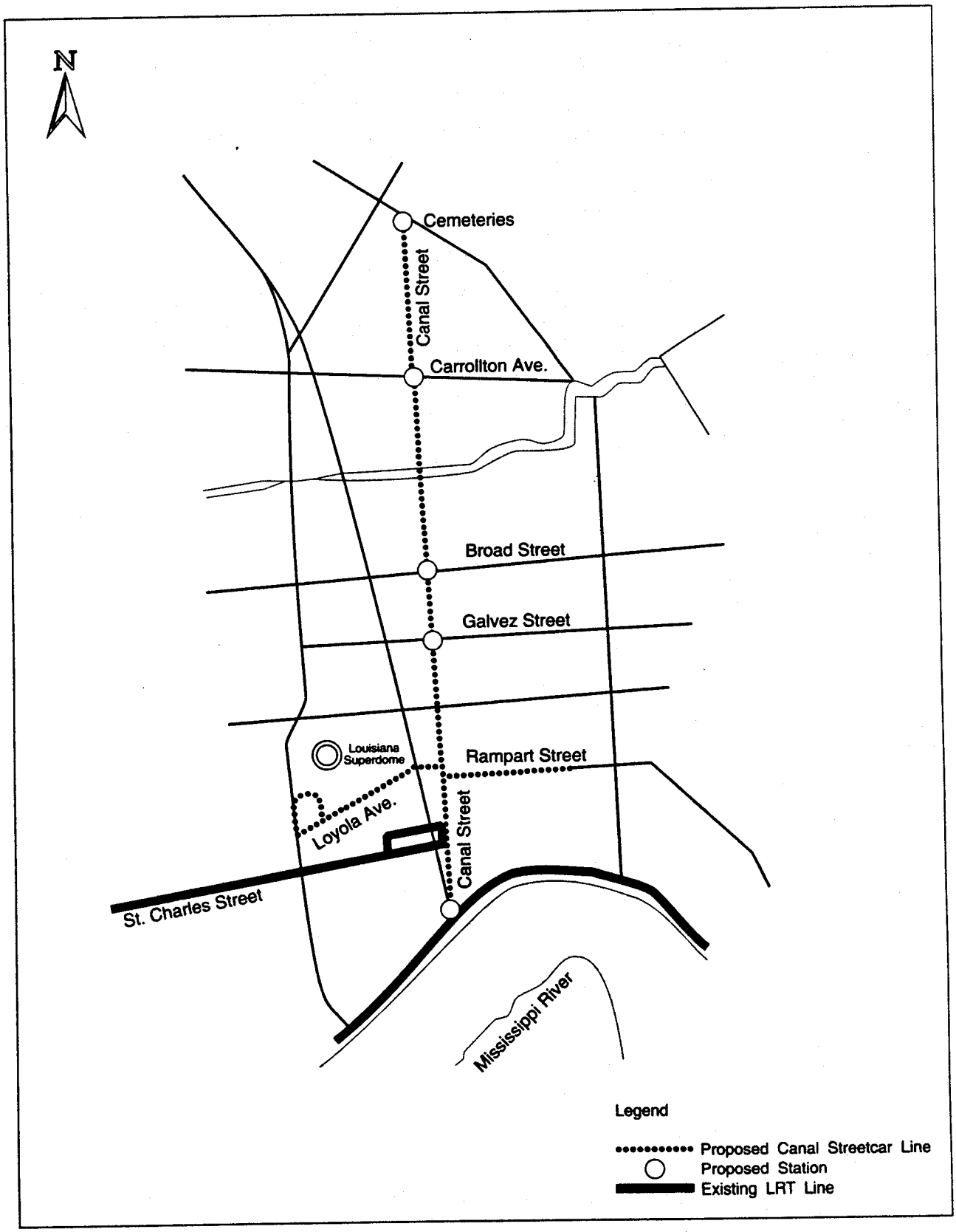
Operating efficiencies. FTA has no information on the operating efficiencies that would result from a major investment in the corridor.

Local Financial Commitment

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

In terms of stability and reliability of operating revenues a "medium" rating has been given. RTA's operating revenues are supported by a city sales tax, fare revenues, and a small portion of Federal and State assistance. In 1991 the average age of RTA's bus fleet was 8.4 years, which is comparable to the national average.

New Orleans:
Canal Street Corridor



Hudson River Waterfront
Northern New Jersey
(January 1993)

Description

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 5.5 miles of busway and 15.4 miles of LRT 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.

The capital costs of the alternatives range from $524.4 million to $1.13 billion (1990$).

Status

Alternatives analysis was initiated in November 1988. The draft EIS is now in circulation for public comment. The locally preferred alternative could be selected by February 1993.

Section 3031 of ISTEA requires FTA to negotiate and enter into a full funding grant agreement providing $634 million for those elements of the New Jersey Urban Core Project which can be fully funded in FY 1992 through FY 1993. The Waterfront Project is identified as one of seven elements which would be eligible for funding. ISTEA further states that the Urban Core project is not subject to the New Starts criteria.

Congress appropriated $160.8 million in FY 1992 and 1993 for the New Jersey Urban Core Project. The proportion of this funding to be allocated to the Hudson River Waterfront Project is unknown. FTA understands that the Secaucus Transfer Project is a higher local priority.

Justification

Mobility Improvements. 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. FTA has no information on the travel time benefits that would result from the alternatives.

Cost Effectiveness. 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 $7 per new trip.

Environmental Benefits. Northern New Jersey is a "severe" nonattainment area for ozone. The region is categorized as a "moderate > 12.7" nonattainment area for carbon monoxide.

According to the draft EIS, the alternatives would reduce carbon monoxide, hydrocarbon, and nitrogen oxide emissions in Hudson and Bergen Counties by 0.2 to 0.6 percent.

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

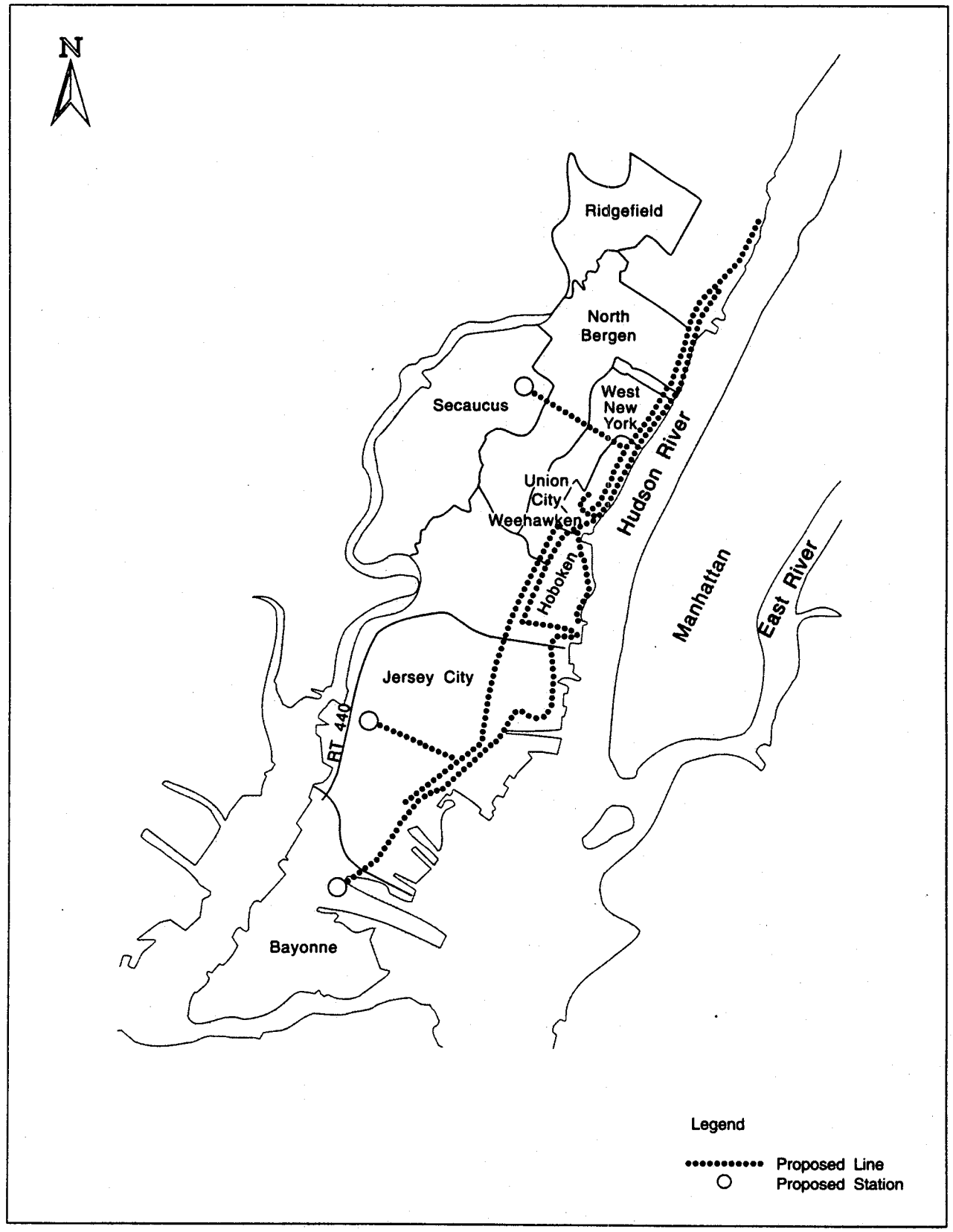
Local Financial Commitment

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.

NJ Transit hopes to use locally funded projects such as the Kearny, Waterfront Connections, and New Jersey Turnpike as local match for Secaucus Transfer, Waterfront and the Air Link projects, as authorized in ISTEA Section 1044 and 3031. It is expected that New Jersey Transit will seek FTA funding for 100 percent of this project's capital cost. A financing plan for the overall Urban Core Project identifying priorities has not yet been adopted.

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. In 1991 the average vehicle age of NJ Transit's bus fleet was 7.6 years, which is comparable to the national average.

Northern New Jersey:
Hudson River Waterfront



OSCAR
Orlando, Florida
(January 1993)

Description: The City of Orlando is seeking FTA funds for a proposed transit project which would serve downtown Orlando. The Orlando streetcar (OSCAR) project would consist of an electrified trolley system or busways separated from traffic. The 1.7- to 3-mile system would circulate passengers in the downtown and would connect to regional transit centers and parking facilities on the fringe of the downtown core.

Early capital cost estimates for the fixed guideway alternatives range from about $43 to $48 million (1991 dollars).

Ridership on OSCAR is projected to be in the range of 4800 to 8200 passengers daily in 2010, depending on the alternative. Free shuttle buses currently serve the same market, carrying about 1700 riders per day.

Status The City of Orlando is conducting an alternatives analysis and environmental assessment. Completion is expected in March 1993.

Section 3035(l) of ISTEA directs FTA to enter into a multiyear grant agreement with the City of Orlando in the amount of $5 million for alternatives analysis and preliminary engineering. Congress has appropriated $2.5 million, primarily for final design and engineering.

Justification Mobility Improvements. The proposed trolley system would increase transit speeds in the central business district by approximately 3 miles per hour. 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. FTA does not have any information on the travel time savings that would result from OSCAR.

Cost Effectiveness. In system planning, preliminary cost effectiveness indices ranged 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. The ridership projections assume a 250 percent increase in CBD employment during the period 1985 to 2010.

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

Operating Efficiencies. Within the downtown area, the operating cost per passenger is estimated to be $0.64 for the No Build alternative, $0.80 for the TSM alternative, and $1.06 for the most expensive Build alternative.

Local Financial Comitment

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. Additional information will become available when the financial plan is finalized later in the study. The capital financing plan is rated as "medium".

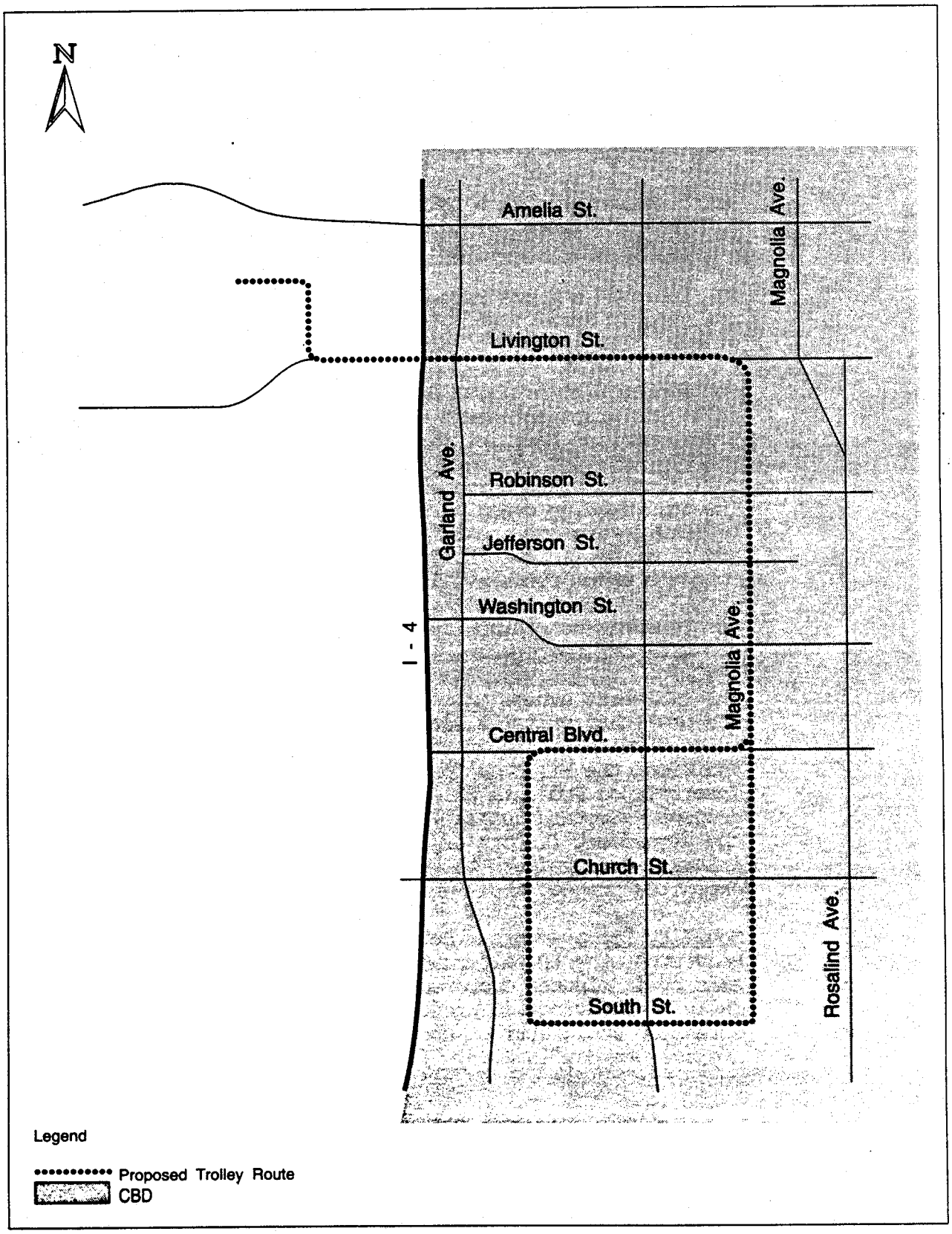
OSCAR would be free to riders, and therefore, operating costs must be financed from sources other than farebox revenue. Potential local sources of funding could include: (a) tax increment financing based on new development and increased property values in the downtown, (b) a parking enterprise fund supported by parking revenues, (c) a transportation utility fee, and (d) other conventional sources such as motor fuel taxes and ad valorem taxes. The operating plan is rated as "medium".

OSCAR is not expected to affect the city's appropriations to regional transit. The city plans to increase its overall financial support of regional mass transit. In 1991 the average age of Orlando's bus fleet was 5.2 years, which is better than the national average.

Other Factors

Parking Policy. A high number of parking spaces per employee exists in Orlando's CBD today. However, the city is imposing restrictions on the availablity of downtown parking and building parking facilities on the perimeter of the CBD.

Orlando:
OSCAR Project



Hillsboro Corridor
Portland, Oregon
(January 1993)

Description

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 downtown 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.

Metro estimates that a LRT extension to Hillsboro would cost $200 million (escalated dollars), assuming project completion in a 1998-1999 time frame.

Status

FTA approved Metro's request to undertake alternatives analysis in April 1990. The study is now in the final stages. FTA expects to approve the draft EIS in early 1993.

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

Congress has not authorized or appropriated any funds for the Hillsboro extension.

Justification

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

Mobility Improvements. Between downtown Hillsboro and Beaverton, the LRT alternative would reduce transit travel time by 11 minutes compared with the TSM alternative. Total daily time savings is projected to be 301 hours. A Hillsboro extension would attract about 1920 new transit trips on an average weekday in 2005. In total, the extension is projected to carry 4660 riders per day in 2005.

Cost Effectiveness. The cost effectiveness index is approximately $24 per new trip for the Westside and Hillsboro projects combined. For the Hillsboro extension alone it is $75 per new trip.

Environmental Benefits. EPA has classified the Portland region as a "marginal" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. The transit alternatives would have a very small effect on air quality. The LRT projects are expected to lead to a 0.4 percent change in regional vehicle miles traveled (9,500 daily VMT reduction).

Operating Efficiencies. For the Westside and Hillsboro corridors combined, the systemwide operating cost per passenger for the year 2010 is projected to be $2.04 for the No-Build alternative, $2.07 for the TSM alternative and $2.10 for the LRT alternative. FTA has no information on the operating efficiencies that would result from the Hillsboro project alone.

Local Financial Commitment

Tri-Met is expected to seek Section 3 New Start funds for 33 percent of the cost of a LRT extension. Other proposed sources of funding are $44 million in STP funds, $22 million in Section 9 funds, $67 million in local funding and $5 million in FTA research and development funding for low floor cars. 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. State legislation was enacted in 1991 which put the State funding in place. FTA has given the capital finance plan a "high" rating.

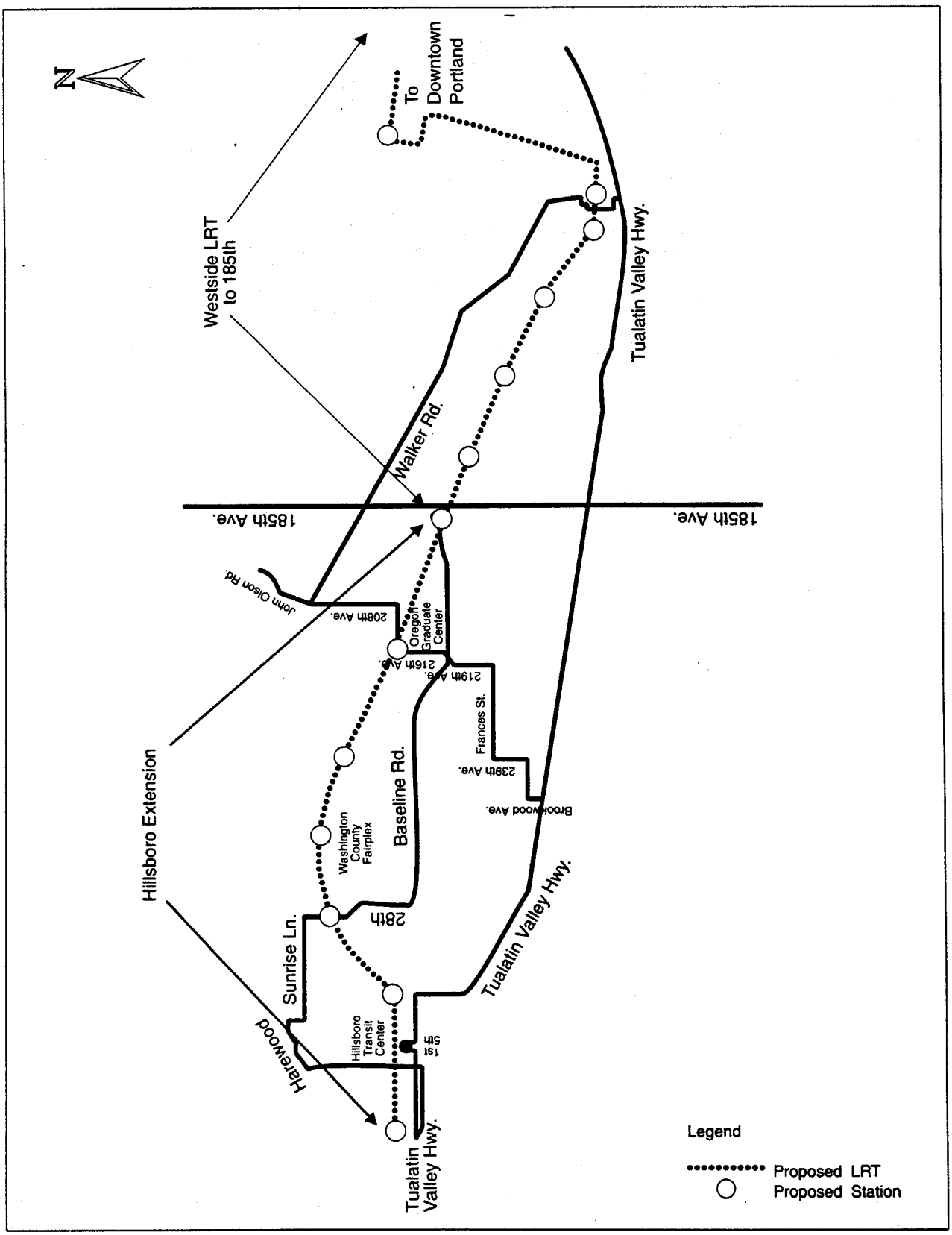
The stability and reliability of Tri-Met's operating revenues are rated "medium to high" since dedicated sources are in place and are sufficient to operate the project as planned. Tri-Met's analysis shows that a Westside LRT (downtown to 185th) could be operated without a new funding source, assuming 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.

In 1991 the average age of Tri-Met's bus fleet was 8.4 years, which is comparable to the national average. Tri-Met's rail fleet averaged 7 years old.

Other Factors

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.

Portland:
Hillsboro Corridor



South Corridor
Sacramento, California
(January 1993)

Description The Sacramento Regional Transit District (RT) is considering a major transit investment in the South Corridor. This corridor extends from downtown Sacramento to Elk Grove, a distance of about 13 miles. Alternatives being considered include light rail, high-occupancy vehicle lanes, TSM and No-Build. A preliminary capital cost estimate for the LRT option is $200 million (escalated dollars).

Status RT has initiated alternatives analysis and expects to complete a draft EIS in the spring of 1994.

Section 3035(xx) of ISTEA directs FTA to enter into a multiyear grant agreement with the Sacramento Regional Transit District for $26 million to provide for the completion of alternatives analysis, preliminary engineering, and final design. Of that amount, $1 million was appropriated in FY 1993.

Justification Mobility Improvements. The population of the Sacramento region is expected to grow by 51 percent by the year 2010. Employment is projected to increase regionally by 50 percent. Employment in the CBD is projected to increase by 24 percent. 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 99) are projected to reach or exceed capacity by 2010. Quantification of the mobility improvements will be done in the current study.

Cost Effectiveness. The preliminary cost-effectiveness index for the LRT option is $8 per new transit trip. This will be updated as new ridership and cost estimates are developed in the alternatives analysis.

Environmental Benefits. Sacramento is a "serious" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. The alternatives analysis will generate information on the extent to which the alternatives reduce emissions.

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

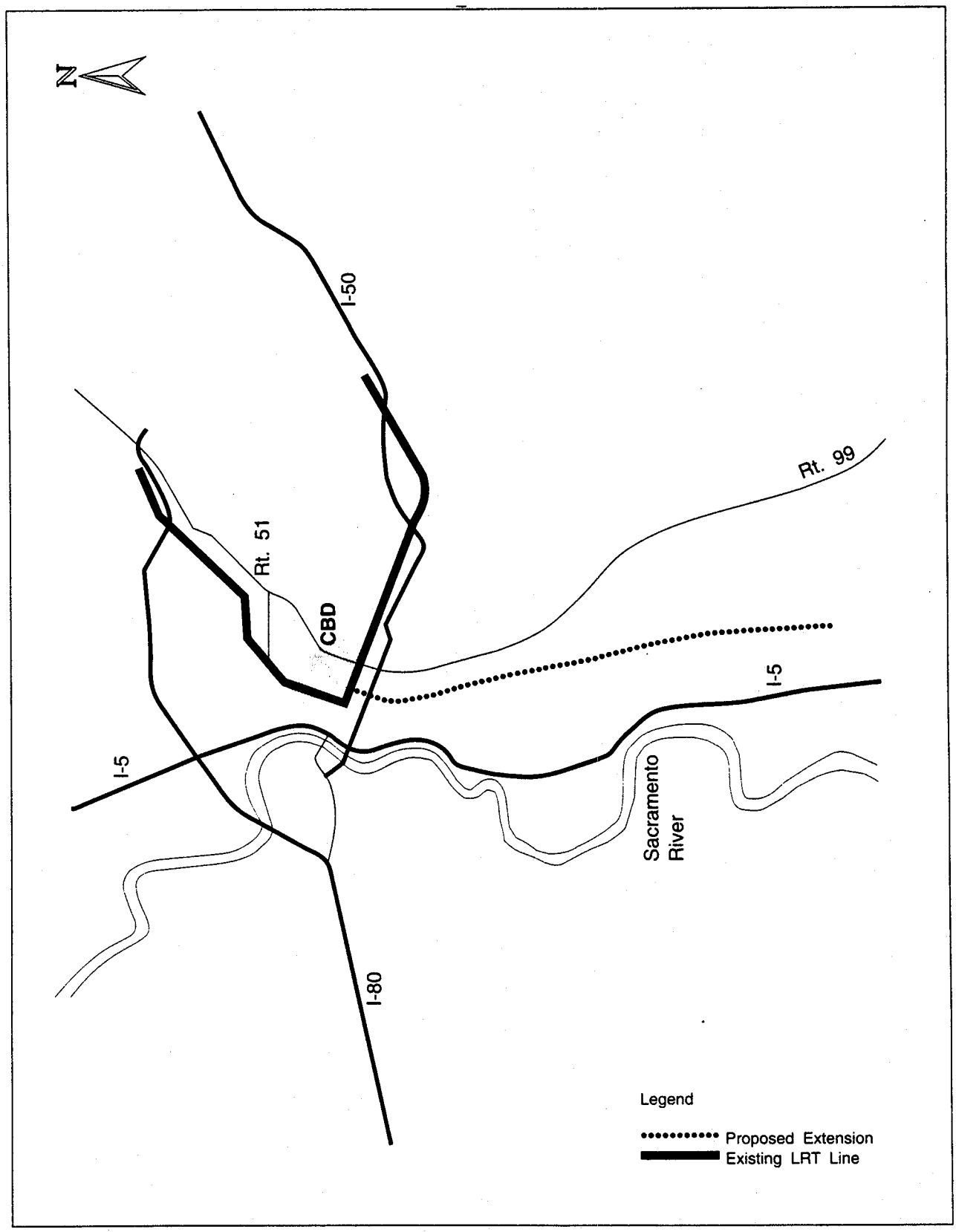
Local Financial Commitment The Federal share is assumed to be 50 percent. Proposed sources of local capital funds include: (a) formula funds for transit capital and operation which are allocated

based on sales tax dollars collected in a county, (b) a 1/2 cent sales tax increase for road, transit, and air quality improvements, and (c) Consolidated Roadway and Transit Development Fees, to be used for specified roadway and transit capital improvements. Five potential sources of State funds have been identified. Since RT has a financing strategy, FTA has assigned a "medium" rating to the capital finance plan at this early stage.

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. A "medium" rating has been assigned.

In 1991 the average age of the RT bus fleet was 11.7 years, which is substantially above the national average. The rail fleet averaged 3.9 years old. The advanced age of the bus fleet is a concern since it suggests that the transit agency is not reinvesting in its existing system.

Sacramento:
South Corridor



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

Description

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

EWGCC's preliminary cost estimate for the light rail alternative is $213 million (1989 dollars). Its preliminary ridership estimate is 13,100 trips in the year 2010.

Status

The alternatives analysis phase is expected to be completed in August 1993.

Congress has appropriated $8.1 million for preliminary engineering and final design.

Justification

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

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

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

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

Local Financial Commitment

The Federal share of the capital cost is assumed to be 80 percent. Possible sources of local funds include State of Illinois long-term general obligation bonds, a State of

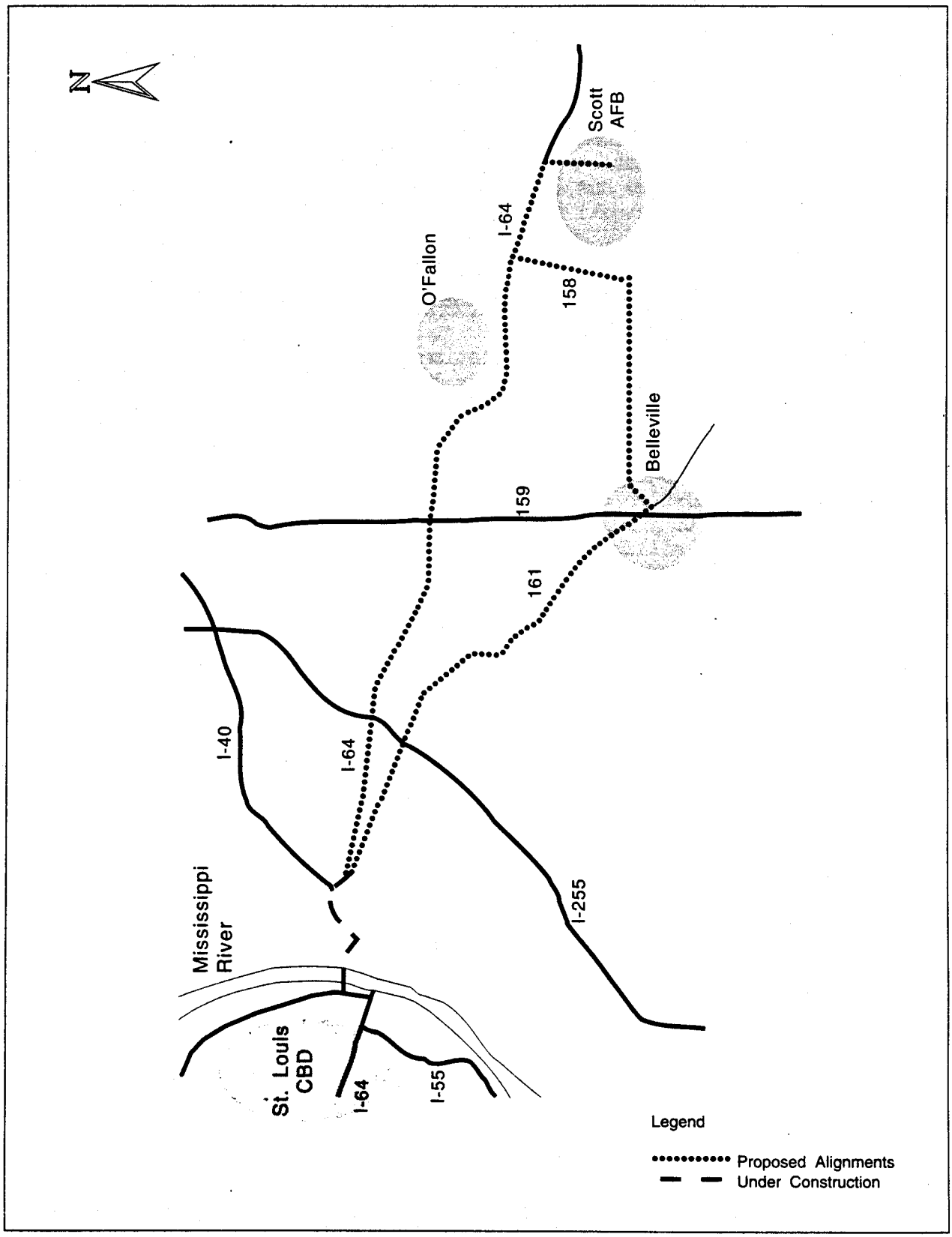
Missouri sales tax distributed by Bi-State for transit projects, and a dedicated sales tax at the county level for transit usage.

Preliminary analyses by EWGCC indicate 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. There is no long-term financing strategy for this and other proposed major transit investments in the region. The capital financing plan is rated "low."

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 1991 Bi-State's bus fleet averaged 8.7 years old, slightly above the national average.

St. Louis:
St. Clair Corridor



Mid-Coast Corridor
San Diego, California
(January 1993)

Description

The Mid-Coast Corridor extends about 10 miles along I-5 near the Pacific Ocean from I-8 near Old Town north to the vicinity of the University of California San Diego and the University Towne Centre shopping mall. The Metropolitan Transit Development Board (MTDB) is studying several alignments and termini within this corridor for a possible LRT extension. Three other possible build alternatives are a transportation system management (TSM) alternative consisting of express bus improvements, a high occupancy vehicle (HOV) lane alternative on I-5, and a commuter rail alternative.

The capital cost of the alternatives ranges from $60 million for the TSM alternative to about $350 million for the Genessee Avenue LRT alternative (escalated dollars).

Status

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 mid-1993.

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

Justification

Mobility Improvements. 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. MTDB estimates that, for an average transit trip, the LRT alternative would reduce travel time by 8 minutes (compared with an expanded bus alternative). Transit ridership is projected to increase by 9,550 trips per day in the I-5 LRT alternative.

Cost Effectiveness. Preliminary cost-effectiveness indices for the LRT alternatives range from $11 to $14 per new trip.

Environmental Benefits. The San Diego region is a "serious" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. It is unlikely that any of the transit alternatives would have a significant effect on air quality at the regional level. The air quality benefits of each alternative will be identified in the draft EIS.

Operating Efficiencies. San Diego's cost per passenger on a systemwide basis for the year 2005 is projected to be $3.00 for the No-Build alternative, $3.08 for the TSM, $3.10 for the HOV and $3.04 for the I-5 LRT alternative.

Local Financial Commitment

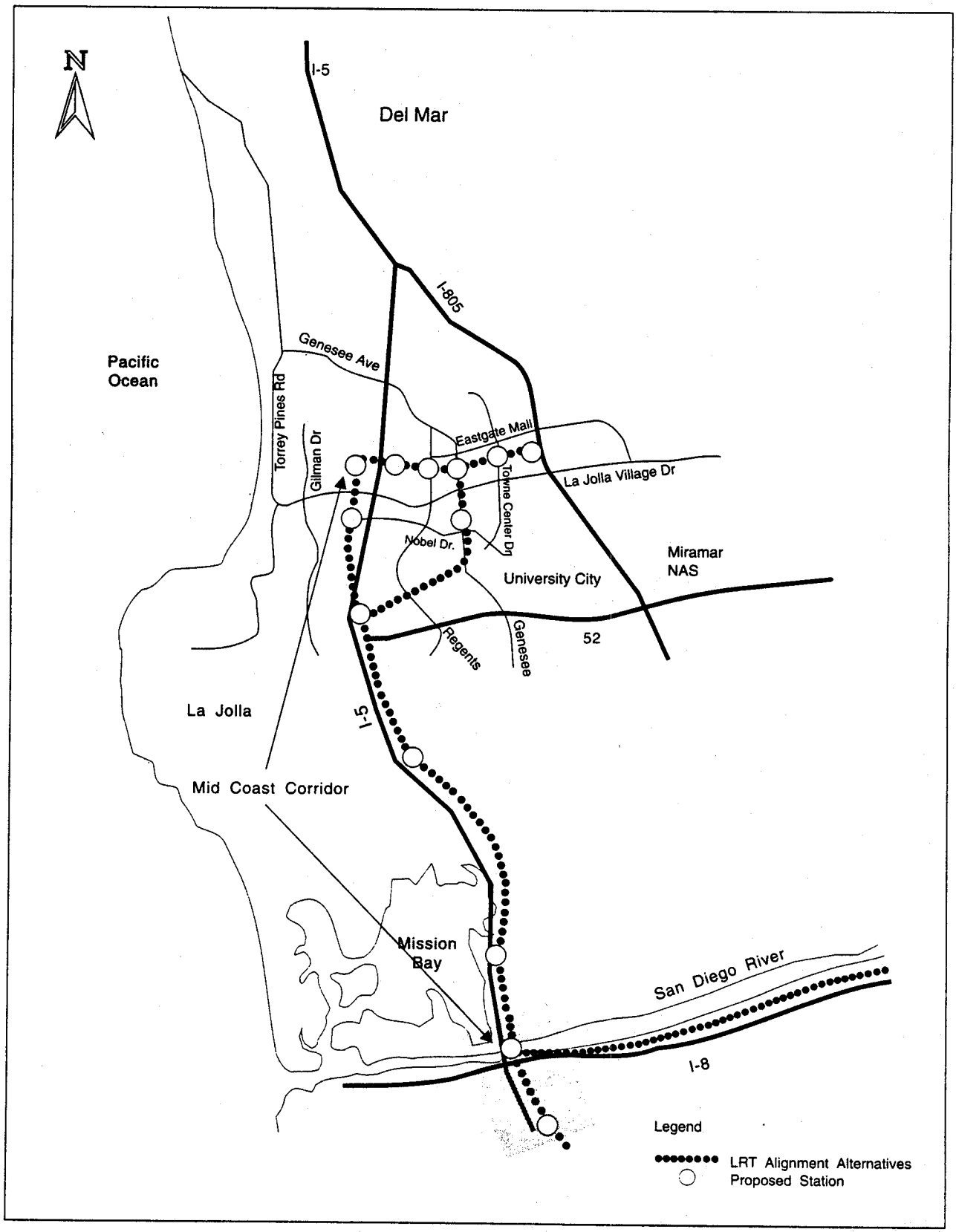
MTDB is expected to seek 80 percent Section 3 Federal funding for a Mid-Coast Corridor project. If the project is viewed as part of MTDB's overall fixed guideway construction program, the Federal share is expected to be less than one-half. The MTDB is advancing several LRT projects without Federal funding.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

MTDB's capital financing plan is rated "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, MTDB faces a $100 million capital funding deficit over the next 20 years -- primarily due to a lack of funds for capital replacement.

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

In 1991 San Diego Transit's bus fleet averaged 12.3 years old, which is substantially above the national average. The agency has recently purchased 130 buses which will help reduce the average fleet age.

San Diego:
Mid Coast Corridor



PROJECTS IN SYSTEM PLANNING

Pedestrian Crossover
Altoona, Pennsylvania
(January 1993)

Description	This proposed project is to construct a pedestrian crossover at 14th Street in Altoona, Pennsylvania.
Status	This proposal is currently considered to be in the system planning phase of development. Section 3035(ddd) directs FTA to sign a multiyear grant agreement for $3.2 million with the City of Altoona for construction of the pedestrian crossover. No funds have yet been appropriated.
Justification	Since the Section 3 share is less than $25 million, this project would be exempt from the new start criteria. Mobility Improvements. FTA does not have any information on the mobility benefits of this proposal. Cost Effectiveness. This proposal would not lead to an increase in transit ridership and thus would not be cost effective. Environmental Benefits. 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. Operational Efficiencies. This project would have no effect on the operating efficiency of the transit system.
Local Financial Commitment	The FTA does not have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. The average age of Altoona's bus fleet is 17.1 years, far above the national averages.

Buckhead People Mover
Atlanta, Georgia
(January 1993)

Description

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

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

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

Status

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

Section 3035(s) of ISTEA of 1991 requires that FTA enter into a multiyear grant agreement with ARC for $0.2 million to complete a conceptual engineering study of the proposed system. Congress has not appropriated funds for the study.

Justification

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

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

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

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

Local Financial Commitment

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

Buckhead People Mover — Atlanta, Georgia

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

In 1991 MARTA's bus fleet averaged 5.6 years old, which is better than the national average. Rail vehicles averaged 7.9 years old.

Greensboro Commuter Rail
Atlanta, Georgia
(January 1993)

Description

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.

FTA has no information on the cost of the project or ridership on the proposed line.

Status

Section 3035(rr) of ISTEA requires FTA to enter into a multiyear grant agreement with ARC for $0.1 million to study the feasibility of the proposed commuter rail line. No funds have been appropriated for the feasibility study.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of the proposed project.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of the proposed project.

Environmental Benefits. EPA has classified Atlanta as a "serious" nonattainment area for ozone and as attainment for carbon monoxide. The effects of the proposed commuter rail line on air quality have not been quantified. In the short term, this type of project may result in very small decreases in the emission of air pollutants. In the long term, however, a project of this length, serving an area well beyond the existing suburbs, could contribute to urban sprawl and the increased pollutant emissions associated with very low density urbanization.

Operating Efficiencies. FTA does not have any information on the operating efficiencies of the proposed project.

Local Financial Commitment

FTA does not have any information on the cost of the commuter line, the proposed Federal share, or the sources of non-Federal funding for capital and operations. It is presumed that preliminary information would be developed during the feasibility study called for in ISTEA.

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

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

In 1991 MARTA's bus fleet averaged 5.6 years old, better than the national average. Rail vehicles averaged 7.9 years old.

North Station - South Station Rail Link
Boston, Massachusetts
(January 1993)

Description This proposal involves a rail tunnel linking North Station and South Station in downtown Boston. The tunnel would permit commuter rail trains to serve both downtown stations and permit Amtrak service north of Boston. Several alignment alternatives are under consideration. A preliminary capital cost estimate is $600 million to $1.0 billion.

Status Section 3035(ii) of ISTEA directs FTA to conduct a feasibility study of a proposed rail link between North Station and South Station in Boston. A kick off meeting was held in July 1992 and contractor procurement has been completed. FTA expects to complete the study in September 1993. Congress has appropriated $250,000 for this study.

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

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

Environmental Benefits. The Boston area is a "moderate" nonattainment area for ozone and a "serious" nonattainment for carbon monoxide. Preliminary information on the proposal's air quality impacts will be developed in the current study.

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

Local Financial Commitment The FTA does not have any information on the proposed Federal share or the sources of State/local funding for for capital and operations. The FTA study will assess financing options. The State is currently facing a $3 billion shortfall for other transportation priorities, but has included the tunnel in its capital program.

Charlotte Priority Corridor
Charlotte, North Carolina
(January 1993)

Description

The City of Charlotte is studying the potential merits of light rail and other transit alternatives in several corridors. The study will lead to the selection of a priority corridor for more detailed study. A specific corridor or project has not yet been identified.

Status

This proposal is currently considered to be in the system planning phase of development.

Section 3035(r) of ISTEA directs FTA to sign a multiyear grant agreement with the City of Charlotte providing $0.5 million for the completion of system planning and alternatives analysis for a priority corridor. The City of Charlotte has begun work on the system planning study.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of a major transit investment. Preliminary information will be developed in the system planning study.

Cost Effectiveness. FTA does not have any information on the cost-effectiveness of major transit investment. Preliminary information will be developed in the system planning study.

Environmental Benefits. The Charlotte area is a "moderate" nonattainment area for ozone and is not classified for carbon monoxide. Preliminary information on the air quality impacts of a major transit investment will be developed in the current study.

Operating Efficiencies. FTA does not have any information on the operating efficiencies of a major transit investment in Charlotte. Preliminary information will be developed in the system planning study.

Local Financial Commitment

The FTA does not have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. A preliminary cost estimate and funding plan will be developed in the system planning study.

In 1991 the Charlotte CTS buses averaged 9.8 years old, which is slightly above the national average.

Downtown Trolley
Chattanooga, Tennessee
(January 1993)

Description — 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 — CARTA has submitted grant application for the $14 million in Section 3 bus funds appropriated for the trolley in 1993. Construction of the parking garages is expected to begin in late 1993.

Section 3035(v) of ISTEA directs FTA to sign a multiyear grant agreement with CARTA for $2 million to provide for the completion of alternatives analysis.

Justification — Mobility Improvements. FTA has no information on the mobility benefits of the project.

Cost Effectiveness. FTA has no information on the cost effectiveness of the project.

Environmental Benefits. The Chattanooga region is an attainment area for transportation pollutants.

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

Local Financial Commitment — CARTA is seeking 70 percent Federal funding under the Section 3 bus 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.

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.

In 1991 CARTA's bus fleet averaged 9.9 years old, which is slightly above the national average.

Highland Hills Extension
Cleveland, Ohio
(January 1993)

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

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

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

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

Cost Effectiveness. FTA does not have any information on the cost effectiveness of this proposal.

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

Operating Efficiencies. FTA does not have information on the operating efficiencies that would result from this proposal.

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

In 1991 GCRTA's existing bus fleet averaged 6.1 years old, which is better than the national average.

Northeast Ohio Commuter Rail
Cleveland, Ohio
(January 1993)

Description — This proposal involves commuter rail service to connect urban and suburban areas of northeastern Ohio.

Status — This proposal is currently considered to be in the system planning phase of development.

Section 3035(w) of ISTEA directs FTA to sign a multiyear grant agreement with the Northeast Ohio Areawide Coordinating Agency in the amount of $1.6 million for a feasibility study. The Northeast Ohio Areawide Coordinating Agency has received a grant and has begun work on the study.

Justification — Mobility Improvements. FTA does not have any information on the mobility benefits of a major transit investment in the corridor. Preliminary information will be developed in the feasibility study.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of a major transit investment in the corridor. Preliminary information will be developed in the feasibility study.

Environmental Benefits. The northeastern region of Ohio is a "moderate" nonattainment area for ozone and a "moderate" nonattainment for carbon monoxide.

Operating Efficiencies. FTA does not have any information on the operating efficiencies that would result from a major transit investment in the corridor. It is presumed that such information will be developed in the feasibility study.

Local Financial Commitment — FTA does not have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. A cost estimate and funding strategy will be developed in the feasibility study.

In 1991 GCRTA's existing bus fleet averaged 6.1 years old, which is better than the national average.

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

Description — The RAILTRAN project would initiate commuter rail service between Dallas and Fort Worth, with a spur serving the Dallas/Fort Worth (DFW) Airport. The plan calls for approximately 35 miles of service at a capital cost of about $120 million.

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

Implementation of commuter rail service is planned for three stages: 1) Dallas to South Irving, 2) South Irving to Fort Worth, and 3) service to DFW Airport. An environmental assessment (EA) has been done for first phase of service and an EA is underway for the second phase. Complete service is expected to be offered in 1998.

Section 3035(x) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with the cities of Dallas and Fort Worth in the amount of $5.7 million for preliminary engineering and construction of improvements to the Dallas/Fort Worth RAILTRAN System.

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 1993.

Justification — Mobility Improvements. RAILTRAN project would provide commuter rail service to the downtowns of Dallas and Fort Worth and the cities in between and eventually from DFW Airport. FTA has no information on the travel time savings that would result from this new service.

Cost Effectiveness. Newspaper reports indicate that commuter rail service is expected to carry about 8,000 riders a day in the corridor. FTA has no other information on the cost effectiveness of this proposed project.

Environmental Benefits. Dallas/Fort Worth is a "moderate" nonattainment area for ozone and an attainment area for carbon monoxide. 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.

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

Local Financial Commitment

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.

Woodward Corridor
Detroit, MI
(January 1993)

Description

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

Status

Section 3035(m) of ISTEA directs FTA to enter into a multiyear agreement with the City of Detroit in the amount of $20 million for the completion of alternatives analysis and preliminary engineering for a light rail project. This corridor has been identified by the City of Detroit to be the Woodward Corridor. Congress has appropriated $10 million for these studies.

In the 1970's and early 1980's, Detroit conducted alternatives analysis and nearly completed preliminary engineering for LRT in the Woodward Corridor. The project became inactive in 1985 due to a lack of funding.

Detroit and FTA have held initial discussions on a work scope for resuming this project. Much of the information developed in the earlier studies would need to be updated if project planning is resumed.

Justification

Mobility Improvements. FTA has no current information on the mobility benefits of a major investment in the Woodward Corridor. Such information would be developed in the alternatives analysis authorized in ISTEA.

Cost Effectiveness. FTA has no current information on the cost effectiveness of a major investment in the corridor. In 1984 and 1985, FTA rated the Woodward LRT project and concluded that it would not be competitive with other candidates for New Start funding.

Environmental Benefits. Detroit is a "moderate" nonattainment area for ozone and a "not classified" nonattainment area for carbon monoxide. Information on the air quality impacts of a major transit investment would be developed in the alternatives analysis.

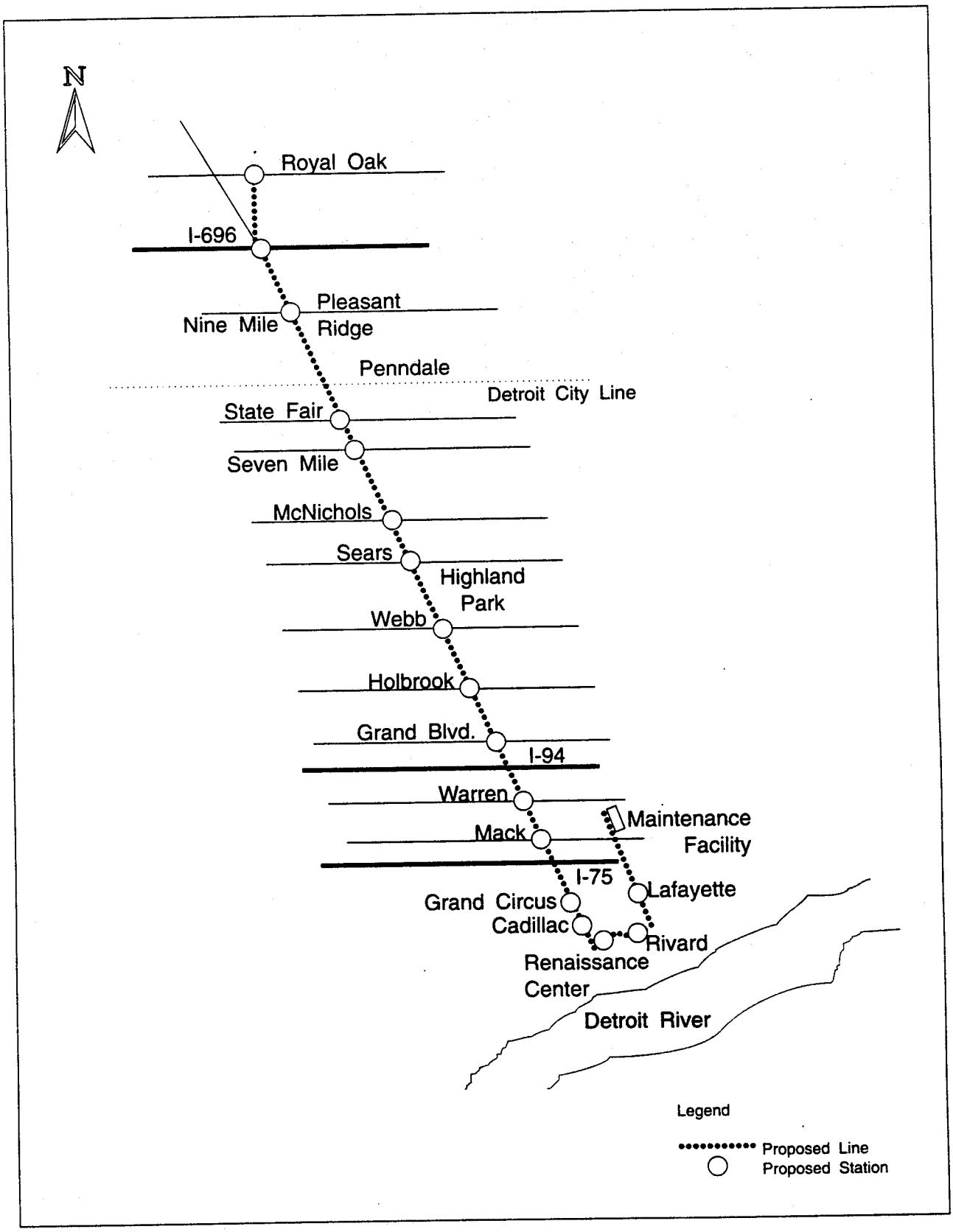
Operating Efficiencies. FTA has no information on the operating efficiencies that would result from a major investment in the corridor.

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

The Federal share of the project is assumed to be 80 percent. The city's ability to generate sufficient local funds is questionable.

In 1991 the City of Detroit's bus fleet averaged 9.8 years old, which is slightly above the national average.

Detroit:
Woodward Corridor



Metro Link
Long Beach, California
(January 1993)

Description — The project would connect the Blue Line with existing and planned activities near the Queen Mary in Long Beach, California. However, there are indications that the Queen Mary may be sold and an adjacent tourist attraction (the Spruce Goose) has been moved to another location.

Status — Section 3035(o) of ISTEA 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.

FTA has received a letter from the Los Angeles County Transportation Commission stating that they currently are not pursuing this project.

Multimodal Transit Parkway
Los Angeles, California
(January 1993)

Description

The Los Angeles County Transportation Commission (LACTC) is undertaking a study of highway and transit alternatives in the Santa Monica Boulevard corridor. The study will initially consider alternatives in the corridor between Santa Monica and West Hollywood, then focus on a 2.5-mile segment of the corridor between I-405 and Beverly Hills. One alternative to be considered will be the reconstruction of Santa Monica Boulevard to include a dedicated transit or high occupancy vehicle lane. The estimated cost of this initial segment is $30 million.

Status

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) issued a draft environmental impact statement (EIS) for corridor improvements in 1987. Caltrans' proposals generated controversy and a final EIS was never developed. 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.

FTA and FHWA have agreed that FHWA will be the lead agency on this project.

Section 3035(eee) of ISTEA 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. These funds have not yet been appropriated. An additional $8.9 million was authorized in Section 1108 of ISTEA.

Justification

As currently proposed, the initial segment would be exempt from the new start criteria because the Section 3 share is less than $25 million.

Mobility Improvements. The proposed project would connect several activity centers in the corridor. FTA has no information on how a transit investment in this corridor would improve mobility.

Cost Effectiveness. FTA has no information on the cost effectiveness of a transit investment in this corridor.

Environmental Benefits. Metropolitan Los Angeles is an "extreme" nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. It is unlikely that any of the alternatives would have a significant effect on pollution levels at the regional scale, because such a small percentage of regional auto trips would be diverted to transit.

Operating Efficiencies. FTA has no information on the impact of a transit investment on operating efficiencies.

Local Financial Commitment

LACTC is proposing a Section 3 share of 50 percent and a total 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; a planned Blue Line Extension to Pasadena; the Green Line from Norwalk to El Segundo; a planned Green Line Extension from El Segundo past the Los Angeles International Airport to Westchester; and several planned commuter rail projects for the region's Metrolink commuter rail service.

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. An additional 0.5 percent sales tax dedicated to transit and transit-related highway improvements was enacted in November 1990. In June 1990, funding for public transit in California was enhanced by the passage of Propositions 111, 116, and 108. In November 1992, Proposition 156 which would have authorized another $1 billion in general obligation bonds failed.

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 construction, operation, and maintenance. Even before the failure of Proposition 156, county officials are facing a significant budget shortfall. Financial ratings for this project have not yet been established.

In 1991 Los Angeles' bus fleet averaged 7.6 years old, which is comparable to the national average. The rail vehicle fleet averaged 2 years old.

LOSSAN Rail Corridor Improvement Project
Los Angeles, Orange, Riverside, and San Diego Counties, California
(January 1993)

Description The LOSSAN (or Metro Link) project will enhance commuter and intercity rail service throughout southern California. Local officials have identified the elements of the project for which they will seek Federal funds, including grade separations in Los Angeles, Orange and San Diego Counties.

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 three commuter round trips in the fall of 1993 and to nine in the fall of 1994. This initial project is fully funded with $121.8 million in State/local funds.

In addition, San Diego is in final design for upgrading commuter rail service between Oceanside and San Diego. This $70 million project is fully funded with non-Federal monies. Implementation is planned to occur two years after local agencies buy the Santa Fe right-of-way. The right-of-way between Fulerton and San Diego has been purchased and will be owned by Orange and San Diego Counties upon confirmation of the sales agreement in early 1993.

The elements of the project to be proposed for FTA funding are considered to be in the planning phase, as the FTA has not been involved and has not approved the initiation of more detailed planning or project development.

Section 3035(g) of ISTEA directs FTA to enter into a multiyear grant agreement with the Los Angeles-San Diego Rail Corridor Agency to provide for track and safety improvements to the corridor. ISTEA authorized $20 million in Section 3 new start funds for the project, and appropriated $10 million in FY 1992. No Section 3 money was appropriated in FY 1993.

Justification As currently proposed, the project would be exempt from the new start criteria because the Section 3 share is less than $25 million.

Mobility Enhancements. 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 has no information on the travel time savings which may result from this project.

Cost Effectiveness. FTA has no information on the cost effectiveness of the overall project or the elements proposed for New Start funding.

Environmental Benefits. 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 Federally funded improvements would have a significant effect on pollution levels at the regional scale.

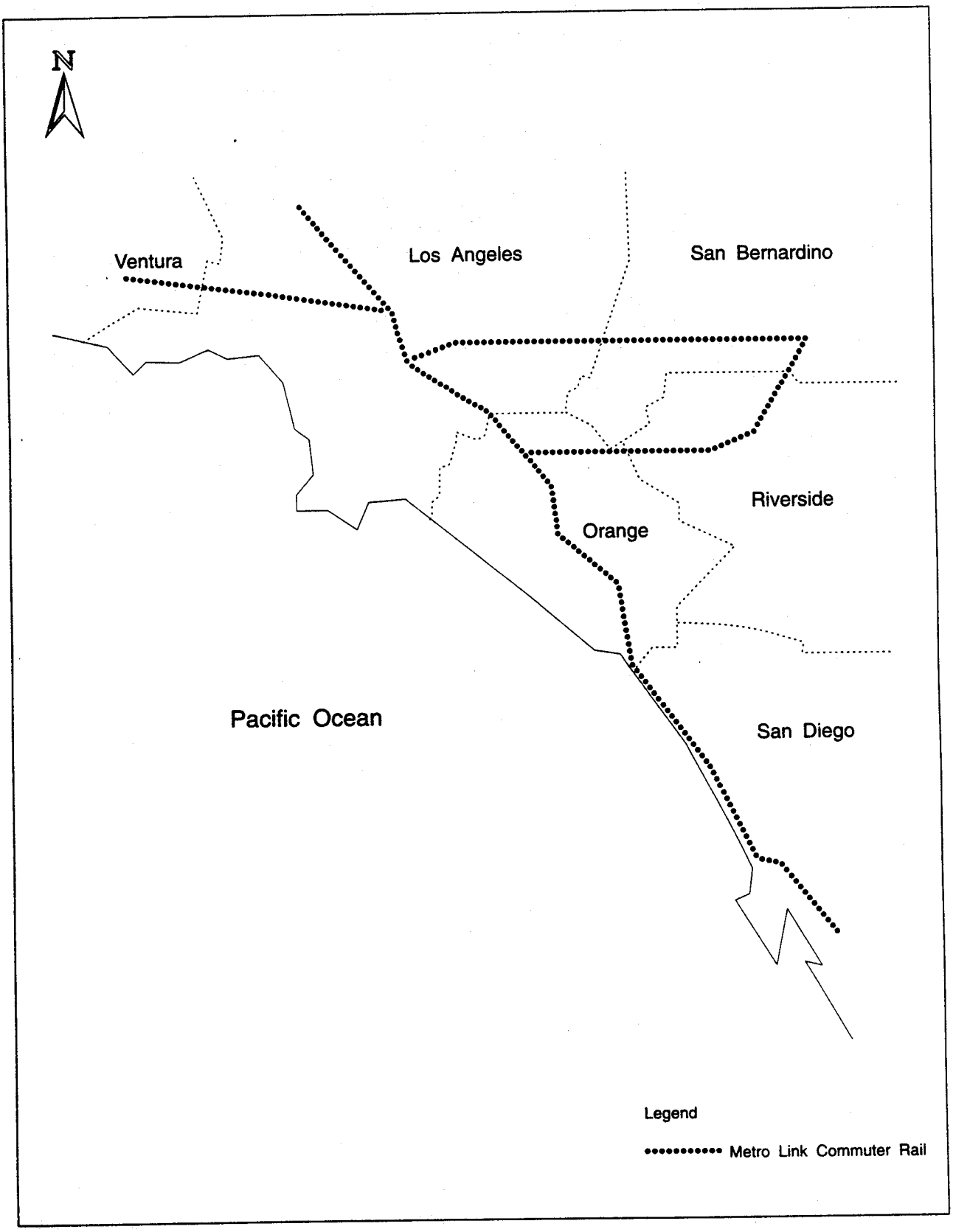
Operating Efficiencies. FTA has no information on how the proposed project would impact operating efficiencies.

Local Financial Commitment

Initial elements of this project are fully funded with State and local monies. The Los Angeles area has a wide variety of funding sources potentially available for the local share of future improvements.

FTA has no information on the stability and reliability of the operator of the commuter rail system and therefore has not established a rating.

Los Angeles:
Metro Link Project



MARC Extensions
Maryland
(January 1993)

Description

The Mass Transit Administration (MTA) of Maryland is considering extensions of the Maryland Commuter Rail (MARC) system to provide service to Washington, D.C. from both Waldorf and Frederick, Maryland. The MARC system presently consists of two lines between Washington and Baltimore and a third line between Washington and Martinsburg, West Virginia.

Status

FTA is providing planning funds to the Tri-County Council for Southern Maryland for a system planning study of transit alternatives. The corridor includes the Waldorf area, and commuter rail is one of the alternatives to be studied. The preparation of an EIS has not been initiated. Depending upon the amount of Section 3 New Start funds to be sought for a Waldorf project, alternatives analysis may also be required.

The Frederick extension, which would involve only track, signal, and station improvements on an existing freight line, would be exempt from the new starts criteria in Section 3(i) if the Section 3 share (currently estimated to be $18.6 million) remains below $25 million. Project development studies and an environmental assessment are now underway. MTA expects that these studies will be completed before the end of FY 1993.

Section 3035(nn)(2) of ISTEA directs FTA to enter into a full funding grant agreement with MTA totaling $160 million, including $60 million in fiscal year 1993 and $50 million in fiscal years 1994 and 1995, to carry out MARC service extensions and other improvements including the purchase of rolling stock and station improvements and expansions. In 1993 Congress appropriated $10 million for the MARC service extensions and other improvements.

Justification

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

Mobility Improvements. FTA does not have any information on the mobility benefits of the proposed MARC extensions.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of the proposed MARC extensions.

Environmental Benefits. EPA has classified the Washington Metropolitan Area as a "serious" nonattainment area for ozone and as a "moderate" nonattainment area for carbon monoxide. Possible effects of the MARC extensions on air quality have not been quantified. In the short term, this type of project may result in very small decreases in the emission of air pollutants. In the long term, however, a project of this length, which serves an area well beyond the existing suburbs, could contribute to urban sprawl and the increased pollutant emissions associated with very low density urbanization.

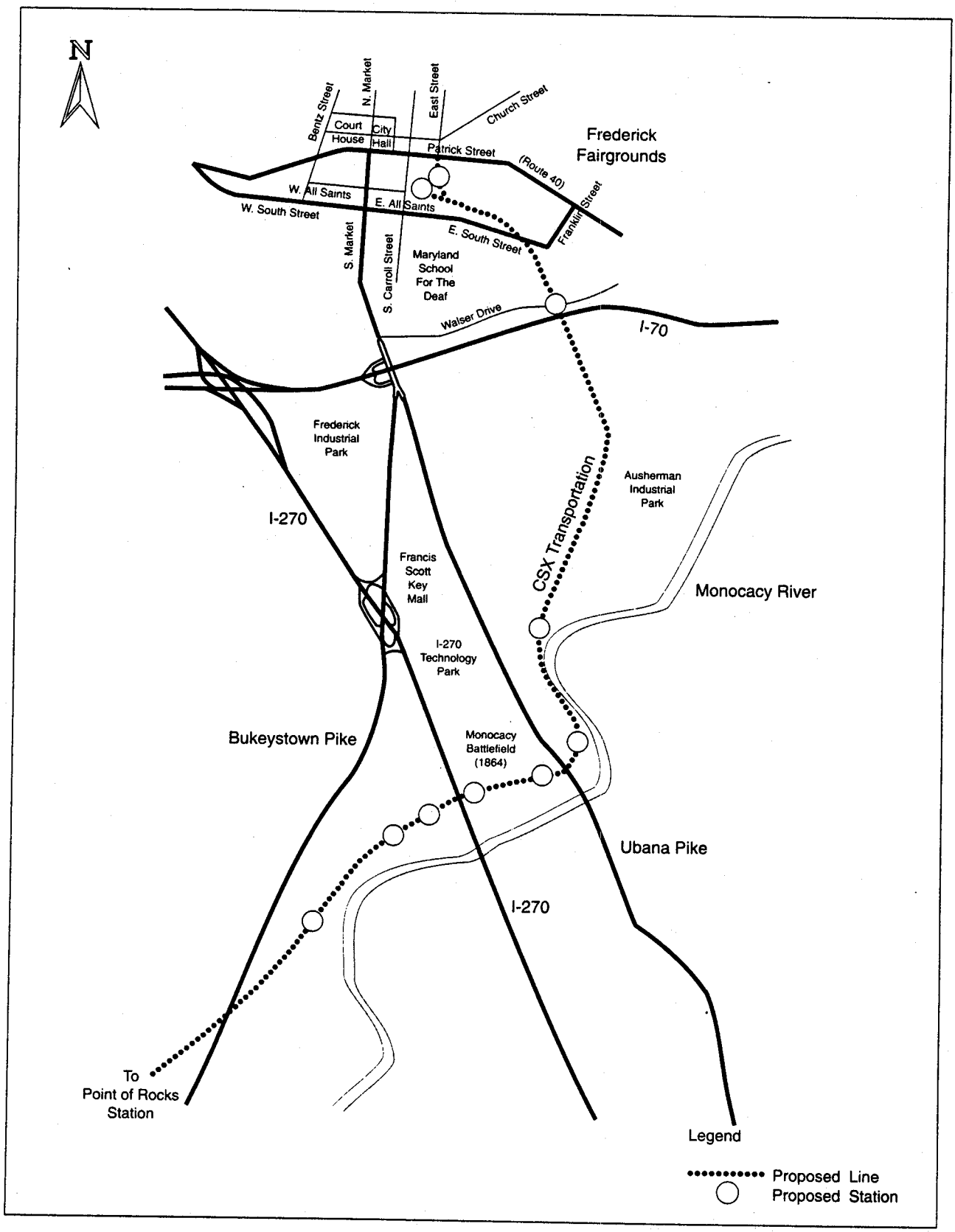
Operating Efficiencies. FTA has no information on the operating efficiencies of the proposed MARC extensions.

Local Financial Commitment

FTA has no information on the total cost of the MARC extensions, the proposed Federal share, or the sources of non-Federal funding for capital and operations.

The 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. Replacement and rehabilitation of the Metrorail system will require a growing commitment of regional resources.

Maryland:
MARC Extension
to Frederick



Staten Island-Midtown Manhattan Ferry Service
New York, New York
(January 1993)

Description

The New York City Department of Transportation (NYCDOT) has proposed initiating high speed ferry service between Staten Island and Midtown Manhattan. The service would be operated by a private company without public operating subsidies.

Status

Initial planning work has been completed on this project. NYCDOT and the New York State Urban Development Corporation issued a request for proposals in September 1992. Responses are under review.

Section 3035(d) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement for $12 million to carry out capital improvements for this proposed project. Congress appropriated $1 million in FY 1992.

Justification

Since the proposed Section 3 share is less than $25 million, this proposal is not subject to the new start criteria in Section 3(i) of the Federal Transit Act.

Mobility Improvements. Approximately 20,000 people commute daily from Staten Island to Midtown Manhattan. Of these, some 25 to 30 percent use the existing Staten Island Ferry in combination with the subway. About 12,000 commuters travel in buses and vans; 2000 commute in cars. Most of the bus, van, and auto commuters rely on the Gowanus Expressway in Brooklyn, which is highly congested and scheduled to undergo a 10-year period of reconstruction. The proposed project would provide an attractive alternative. FTA has no quantitative data on the travel time benefits of the project.

Cost Effectiveness. FTA has no information on the cost effectiveness of the proposed project.

Environmental Benefits. New York City is a "severe" nonattainment area for ozone. For carbon monoxide, the region is categorized as a "moderate > 12.7" nonattainment area.

Operating Efficiencies. FTA has no information on how this project would affect operating efficiencies.

Local Financial Commitment

FTA does not have any information on the sources of State/local funding for the capital expenses of the project. New York would need to demonstrate that it has sufficient financial capacity before a grant could be made. The project would have a very small impact on the city's overall budget, especially since the city expects all operating expenses to be covered by the future private operator.

Staten Island-Midtown Manhattan Ferry Service — New York, New York

In 1991 the average age of ferry boats operated by the New York City DOT was 15.4 years. Several of the older ferries are in need of replacement.

Hawthorne-Warwick Commuter Rail
Northern New Jersey/New York
(January 1993)

Description

New Jersey Transit (NJT) has proposed the restoration of commuter rail service to Warwick, New York, on the New York, Susquehanna & Western (NYS&W) rail line. The service would connect 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

NJT has applied for a $1.5 million grant for conceptual design of the NYS&W line, environmental assessment, and preliminary design and engineering of the Paterson station upgrade project.

Section 3035(a) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with NJT for $46.9 million. The agreement would cover the construction of this project. Through FY 1993, Congress has appropriated $40.2 million in New Start funds for the project.

Justification

Mobility Improvements. FTA has no information on the mobility benefits of this proposal.

Cost Effectiveness. FTA has no information on the cost effectiveness of this proposal.

Environmental Benefits. Northern New Jersey is a "severe" nonattainment area for ozone. The region is a "moderate >12.7" nonattainment area for carbon monoxide.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from this proposal.

Local Financial Commitment

FTA has no information on the cost of this proposal, the proposed Federal share, or the sources of funding for capital and operations. It is expected that NJT will seek to use toll revenue expenditures as a credit toward the non-Federal matching share, as permitted in Section 1044 of ISTEA.

In 1991 the average age of the different types of commuter rail vehicles operated by NJT ranged from 11.1 to 15.3 years.

Lakewood-Freehold-Matawan or Jamesburg Commuter Rail
Northern New Jersey
(January 1993)

Description

New Jersey has proposed initiating commuter rail service between Lakewood, Freehold, and Matawan or Jamesburg or South Amboy.

Status

The proposed project is in the system planning phase.

Section 3035(p) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement for $1.8 million in FY 1992 and $3 million in both FY 1993 and FY 1994 for alternatives analysis, preliminary engineering and the environmental impact statement for the proposed project. In FY 1993, $4.8 million was appropriated for this project.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of this proposal.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of this proposal.

Environmental Benefits. Northern New Jersey is a "severe" nonattainment area for ozone. The region is a "moderate > 12.7" nonattainment are for carbon monoxide. The impact of the proposed project on regional air quality is not known.

Operating Efficiencies. FTA does not have any information on the operating efficiencies that would result from this proposal.

Local Financial Commitment

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

In 1991 the average age of the various types of commuter rail vehicles operated by New Jersey Transit ranged from 11.1 to 15.3 years.

Newark-Elizabeth Rail Link
Northern New Jersey
(January 1993)

Description

The cities of Newark and Elizabeth have proposed an 8- to 9-mile fixed guideway system connecting the downtowns of those two cities by way of Newark International Airport. In addition to No-Build and TSM, five alternatives are being considered including light rail, heavy rail, automated guideway transit and/or commuter rail. Capital costs of the major investment alternatives range from $590 to $885 million (1992 dollars).

Status

In December 1989, FTA made a $2 million grant to support further planning. The first phase, which is nearly complete, consists of a detailed exploration of private sector financing possibilities and related planning and engineering.

In FY 1989 and FY 1990, Congress appropriated $12 million for the project. In addition, in 1992 and 1993, $135.4 million was appropriated for the "New Jersey Urban Core Project" which includes this and other projects. It appears that the Secaucus Transfer Project is the top local priority and can absorb a significant portion of the "Urban Core" funding.

The $5 million appropriation for preliminary engineering from FY 1990 is still available and a funding application has been submitted to FTA for the preparation of an EIS and initiation of preliminary engineering. In addition, NJ Transit has applied for an additional $3.28 million in Section 9 funding for this effort.

Section 3031 of ISTEA directs the FTA to negotiate and enter into a full funding agreement for those elements of the New Jersey Urban Core Project that can be fully funded in fiscal years 1992 through 1997. ISTEA also exempted the Urban Core Project from the New Start criteria.

Justification

Mobility Improvements. The alternatives would address the following problems: 1) access to the airport, 2) transfers between commuter rail lines, 3) access to new development sites, and 4) internal circulation in downtown Newark. Preliminary estimates indicate that the alternatives could save 26,000 to 369,000 hours of travel time annually.

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

Environmental Benefits. Northern New Jersey is a "severe" nonattainment area for ozone and a "moderate > 12.7" nonattainment area for carbon monoxide. The impact of the

proposed project on regional air quality is not likely to be significant.

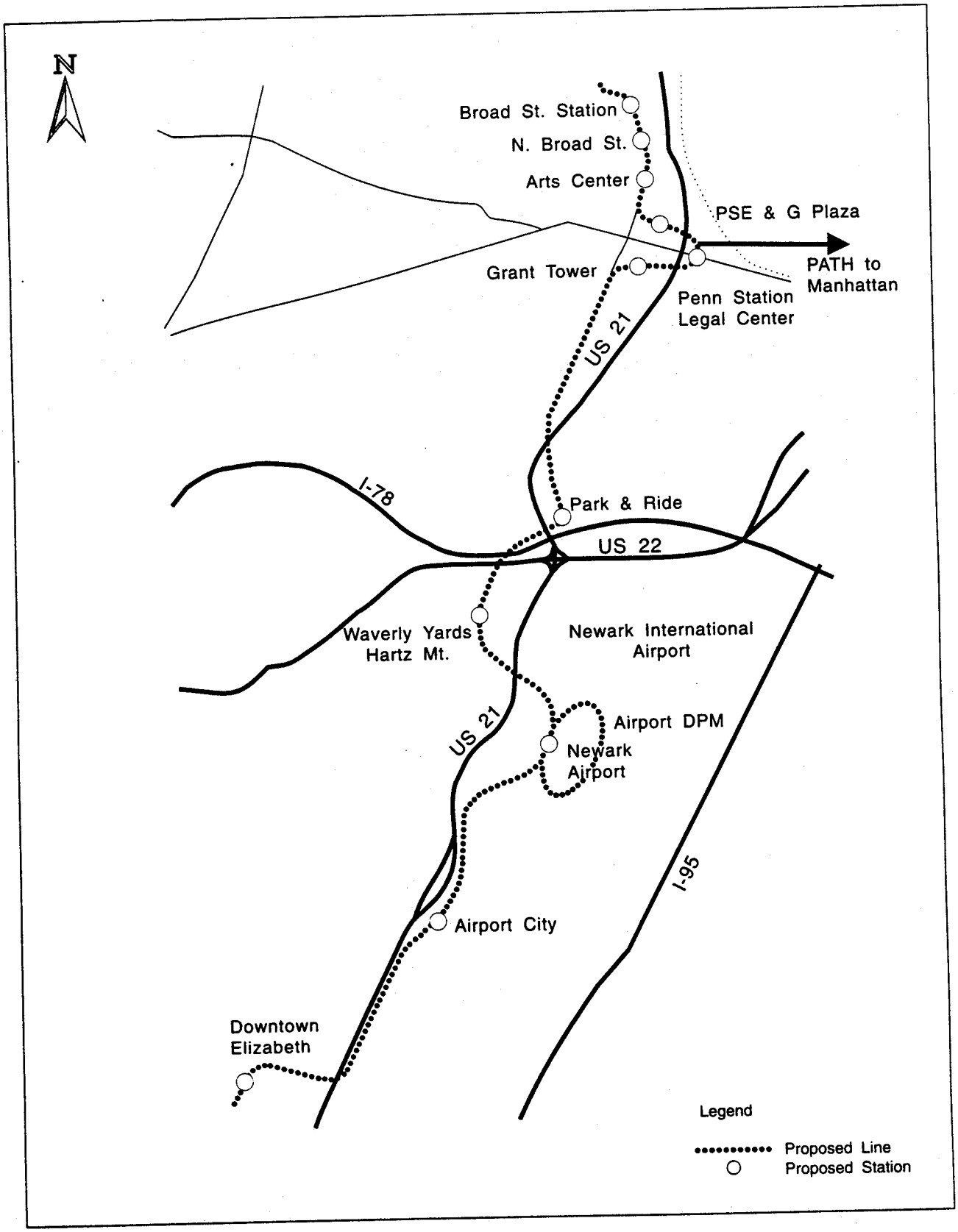
Operating Efficiencies. FTA does not have information on how the alternatives would affect NJ Transit's operating cost per passenger.

Local Financial Commitment

NJ Transit hopes to use locally funded projects such as the Kearny, Waterfront Connections, and New Jersey Turnpike as local match for Secaucus Transfer, Waterfront and the Air Link projects, as authorized in ISTEA Sections 1044 and 3031. It is expected that New Jersey Transit will seek FTA funding for 100 percent of this project's capital cost. A financing plan for the overall Urban Core Project identifying priorities has not yet been adopted. The capital financing plan is rated "medium".

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. In 1991 the average vehicle age of NJ Transit's bus fleet was 7.6 years, which is comparable to the national average.

Northern New Jersey:
Newark Elizabeth Transit Line



Secaucus Transfer Station
Northern New Jersey
(January 1993)

Description

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

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

The Secaucus Transfer Station is estimated to cost approximately $400 million (escalated dollars).

Status

NJ Transit originally proposed to construct the station simultaneously with major office and retail development of the area by the Allied Junction Corporation (AJC). AJC has promised about $100 million for the construction of certain components of the rail project. However, the AJC project has encountered problems. Although local businesses are advocates of the AJC development, it has generated some community opposition. A new NJ Turnpike interchange is needed to handle the traffic generated by the development but is opposed by some air quality interests. The NJ Turnpike Authority is conducting the environmental studies necessary for approval of the interchange.

Although the rail project is functionally independent of the AJC development project, NJ Transit's attempt to proceed on a separate track has been confounded by the cost-sharing arrangements with AJC and the need to use AJC property to mitigate the wetland impacts of the rail project. NJ Transit expects to hold public hearings during spring of 1993, in cooperation with the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency (EPA), and the Hackensack Meadowlands Development Commission, on the combined rail and development project.

Section 3031 of ISTEA identifies the Secaucus Transfer Station as an element of the New Jersey Urban Core Project, along with the Kearny connection, the Waterfront

connection, the NEC signal system, the Hudson River Waterfront transportation system, the Newark-Newark International Airport-Elizabeth Transit Link, the Newark Penn Station-Broad Street Station rail connection, and the Penn Station New York Concourse. ISTEA requires FTA to enter into a full funding grant agreement (FFGA) for those elements of the New Jersey Urban Core Project which can be fully funded in FY 1992 through FY 1997. The total amount of Section 3 funds authorized by ISTEA for the NJ Urban Core Project is $634.4 million. Through FY 1993, $161.3 million in New Start funds have been appropriated for the eight elements of the Urban Core Project.

Justification

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

Mobility Improvements. The Secaucus Transfer project would serve 26,700 daily trips. It would shorten the transit commuting time to midtown Manhattan from Bergen and Passaic counties by 10 to 15 minutes per day (5 to 8 minutes per trip). The Secaucus Transfer project has the potential of attracting additional commuter rail riders because of the improved accessibility from these areas to midtown Manhattan and downtown Newark. The project promotes the ISTEA policy of providing intermodal connections by improving access to Amtrak at Penn Station Newark and Penn Station New York. FTA has no information on the travel time benefits that would result from the project.

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

Environmental Benefits. EPA has classified the New York metropolitan area, including northern New Jersey, as a "severe" nonattainment area for ozone and as a "moderate" nonattainment area for carbon monoxide (CO). It is unlikely that the Secaucus Transfer project will have a noticeable effect on pollution levels in northern New Jersey at the regional scale. However, environmental organizations monitoring compliance with the Clean Air Act have targeted the New York metropolitan area and have issued notices of their intent to bring suit against the transportation agencies in that area. The Urban Core Project, which includes the Secaucus project, evidences a commitment to meeting the mobility needs of the region through massive investments in transit with minimal degradation of air quality.

The Secaucus Transfer project would destroy or seriously degrade about 11 acres of wetlands, but there is ample opportunity to mitigate this adverse effect by restoring nearby degraded wetlands.

Operating Efficiencies. The Secaucus Transfer project would not affect the operating and maintenance (O&M) cost per passenger of the NJ Transit bus and rail system in northern New Jersey.

Local Financial Commitment

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

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

In 1991 NJ Transit's bus fleet averaged 7.3 years old, which is comparable to the national average. Its commuter rail vehicles averaged 14.2 years old.

Cross County Metro Corridor
Philadelphia, Pennsylvania
(January 1993)

Description

The Cross County Corridor extends approximately 53 miles from Downingtown to Morrisville. In 1990 a proposal 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). The Southeastern Pennsylvania Transportation Authority (SEPTA) has developed a very preliminary cost estimate of $100 million in its 12-year capital program for a Cross County Metro service without specifying a mode.

Status

The FY 1991 Appropriations Conference Report directed FTA to provide $200,000 of planning funds for a feasibility study of the proposal. The study is being undertaken by a consultant team under contract to SEPTA.

Section 3035(yy) of ISTEA directs FTA to enter into a multiyear grant agreement with SEPTA in the amount of $2.4 million for the completion of alternatives analysis and preliminary engineering for this proposal. To date, Congress has appropriated $1.2 million for preliminary engineering and design.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of this proposal. It is presumed that preliminary information will be developed as part of the system planning study.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of this proposal. It is presumed that preliminary information will be developed as part of the system planning study.

Environmental Benefits. The Philadelphia area is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. Information on the project's air quality impacts will be developed in the feasibility study and any subsequent alternatives analysis.

Operating Efficiencies. FTA does not have any information on the operating efficiencies of this proposal. It is presumed that preliminary information will be developed as part of the system planning study.

Local Financial Commitment

Potential local funding options for the capital and operating expenses associated with this proposal have not yet been explored. A cost estimate and funding strategy will be developed as part of the system planning study.

The State legislature has approved a series of taxes dedicated to transit. SEPTA expects to receive $87+ million per year for capital and asset maintenance expenses from these dedicated taxes.

In 1991 the average age of the SEPTA bus fleet was 6.8 years, which is better then the national average.

Northeast Philadelphia Commuter Rail
Philadelphia, Pennsylvania
(January 1993)

Description

This study proposal appears in Section 3035(qq) of ISTEA. According to the Southeastern Pennsylvania Transportation Authority (SEPTA), this proposal could relate to the consideration of new transit service parallel to I-95 and SEPTA's existing R-3 and R-7 regional rail lines. The Pennsylvania Department of Transportation has proposed a major reconstruction and intermodal project for I-95.

Status

The proposal is currently considered to be in the system planning phase of development. A draft scope of work has been prepared.

Section 3035(qq) of ISTEA directs FTA to enter into a multiyear grant agreement with SEPTA for $0.4 million to provide for a study of the feasibility of instituting commuter rail service in the corridor. Congress has not appropriated funds for the proposed study.

Justification

Mobility Improvements. FTA does not have any information on the mobility benefits of this proposal. It is presumed that such information would be developed in the feasibility study called for in ISTEA.

Cost Effectiveness. FTA does not have any information on the cost effectiveness of this proposal. It is presumed that such information would be developed in the feasibility study called for in ISTEA.

Environmental Benefits. The Philadelphia area is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. Information on the project's air quality impacts will be developed in the feasibility study and any subsequent alternatives analysis.

Operating Efficiencies. FTA does not have any information on the operating efficiencies of this proposal. It is presumed that such information would be developed in the feasibility study called for ISTEA.

Local Financial Commitment

The FTA does not have any information on the cost of this proposal, the proposed Federal share, or the sources of State/local funding for capital and operations. A financing strategy would be developed as part of the feasibility study.

The State legislature has approved a series of taxes dedicated to transit. SEPTA expects to receive $87+ million per year for capital and asset maintenance expenses from these dedicated taxes.

In 1991 the average age of SEPTA's bus fleet was 6.8 years, which is better then the national average.

Light Rail Rehabilitation
Pittsburgh, Pennsylvania
(January 1993)

Description — 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 — This proposal is currently considered to be in the system planning phase.

Section 3035(ss) of ISTEA directs FTA to sign a multiyear grant agreement with the Port Authority of Allegheny County for $5.0 million to complete preliminary engineering for Stage II of the light rail rehabilitation project in Allegheny County, Pennsylvania. Congress has not appropriated any funds for this project.

Justification — Mobility Improvements. FTA has no information on the mobility benefits of this proposal.

Cost Effectiveness. FTA has no information on the cost effectiveness of this proposal.

Environmental Benefits. The Pittsburgh area is classified as a "moderate" nonattainment area for ozone, and has not been classified for carbon monoxide. 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.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from this proposal.

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

In 1991 the average age of PAT's bus fleet was 8.4 years, which is comparable to the national average. Rail vehicles averaged 14.3 years old.

Core Rapid Transit
Seattle, Washington
(January 1993)

Description — The Municipality of Metropolitan Seattle (Metro) is studying an 86-mile, three-corridor, $6.2 or more billion (1990$) fixed guideway system in the Seattle area focused on downtown Seattle. The project is known locally as the Regional Transit Project (RTP). The three corridors would converge on the CBD Bus Tunnel from Northgate, Bellevue and SeaTac Airport. Metro proposes to pay 66 percent of the capital costs with non-Federal funds.

Status — The proposed system is considered to be in the system planning phase. 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 system planning has been performed.

FTA and Metro have agreed that alternatives analysis can be performed in one corridor. FTA is awaiting a local decision on the priority corridor.

Section 3035(bbb) of ISTEA directs FTA to enter into a multiyear grant agreement with Metro in the amount of $300 million for this project. No funds have yet been appropriated.

Justification — Mobility Improvements. FTA has no information on the mobility benefits that would result from a major investment in one or more of the corridors.

Cost Effectiveness. FTA has no reliable information on the cost effectiveness of a major investment in one or more corridors.

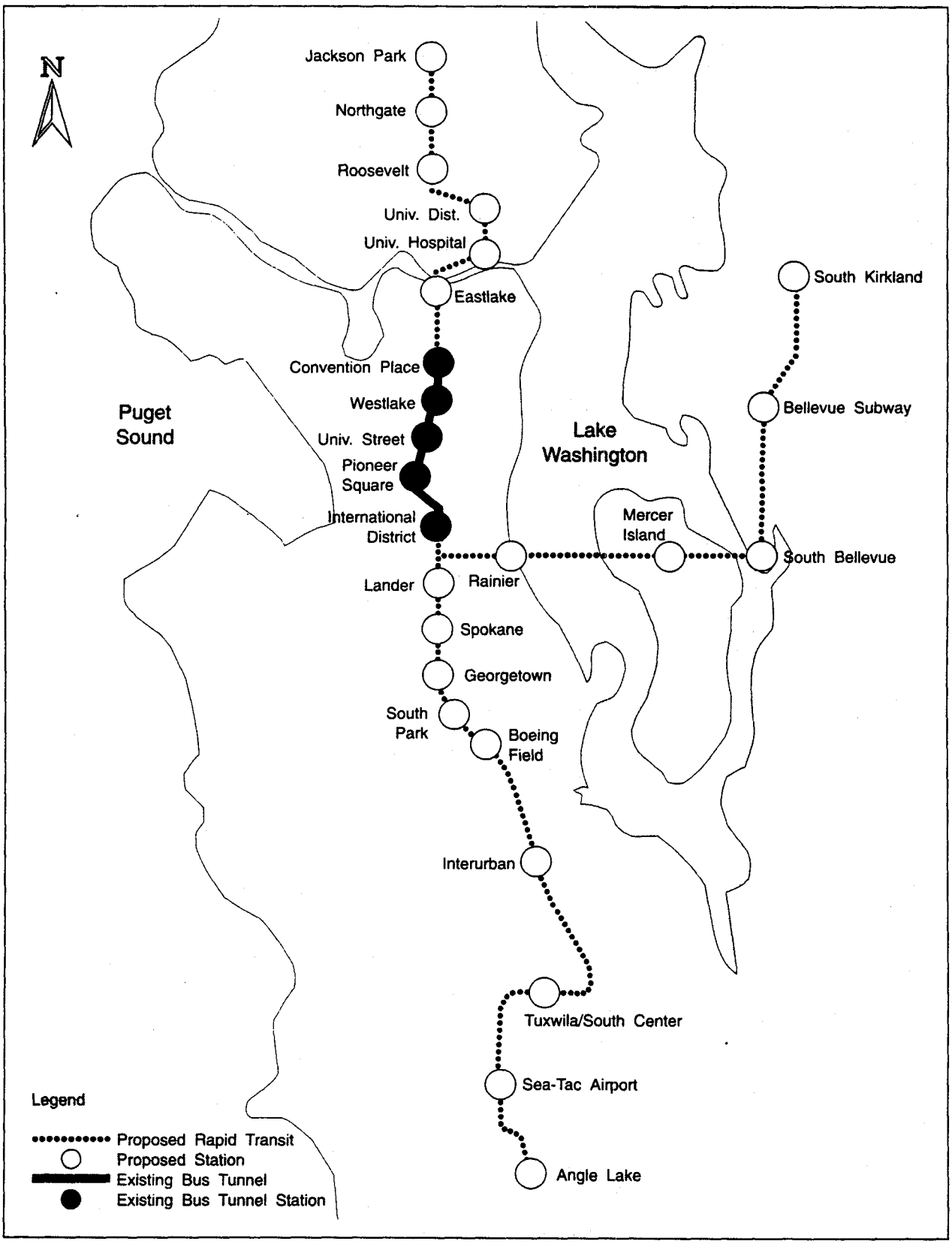
Environmental Benefits. Seattle is a "marginal" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. FTA has no information on how a major transit investment would affect emissions.

Operating Efficiencies. FTA has no information on how a major investment would affect transit operating efficiencies in Seattle.

Local Financial Commitment — Although Metro does not have voter approval for any of the new taxes needed to construct the rapid transit system, it does have legislative authority to go to the voters and also has a strategy for financing the system. The capital financing commitment is rated as "medium" at this early stage in the project development process.

Metro has adequate funding resources to operate its existing system and probably an expanded system. This has resulted in a rating at this time of "medium" for the stability and reliability of operating assistance. However, in 1991 Metro's bus fleet averaged 10.8 years old, which is substantially above the national average. The advanced age of the bus fleet is a concern since it suggests that the transit agency is not reinvesting in its existing system.

Seattle:
Core Rapid Transit



Seattle-Tacoma Commuter Rail
Seattle, Washington
(January 1993)

Description

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 40 miles of track between the two cities. 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

The project is currently in the system planning phase. Washington State law allows several local option taxes for the construction of fixed guideway transit facilities. These funding sources can be voted on only after system planning has been performed.

Section 3035(ccc) of ISTEA directs FTA to negotiate and sign a $25 million, multiyear grant agreement with the Municipality of Metropolitan Seattle for the Seattle-Tacoma Commuter Rail Project. In FY 1992 and FY 1993, $20.3 million was appropriated for the project.

Justification

So long as the Section 3 New Start share remains below $25 million, the new start criteria in Section 3(i) will not apply.

Mobility Improvements. FTA has no quantitative information on the potential mobility benefits of this proposal. Washington State DOT is developing HOV lanes along I-5 in the Seattle region. This would allow for relatively fast express bus service in the corridor. A regional rail system (see the Profile for the Core Rapid Transit Project) may also serve the corridor. Adding a commuter rail line parallel to the HOV lanes and rail system may not provide travel time advantages or attract substantial new ridership.

Cost Effectiveness. FTA has no additional information on the cost effectiveness of this proposal.

Environmental Benefits. Seattle is a "marginal" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. The effects of the proposed commuter rail line on air quality have not been quantified. 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.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from this proposal.

Local Financial Commitment

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 strategy 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.

Metro has adequate funding resources to support its existing system and probably an expanded system. This has resulted in a rating at this time of "medium" for stability and reliability of operating assistance. However, in 1991 Metro's bus fleet averaged 10.8 years old, which is substantially above the national average. The advanced age of the bus fleet is a concern since it suggests that the transit agency is not reinvesting in its existing system.

North Bay Ferry Service
Vallejo, California
(January 1993)

Description

The City of Vallejo has proposed a demonstration program of capital improvements to the ferry service between Vallejo and San Francisco. The project would involve purchase of two high speed ferries to replace conventional vessels for the service.

Status

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 currently faces a legal challenge from a local group which may modify the schedule and/or location of the terminal.

Section 3035(c) of ISTEA directs FTA to negotiate and sign a multiyear grant agreement with the City of Vallejo for $8 million in FY 1992 and $9 million in FY 1993 for capital improvements to the ferry system. In FY 1992, $8 million was appropriated, but no funds were appropriated in 1993.

Justification

The project is not subject to the new starts criteria in Section 3(i) because the Section 3 share is less than $25 million.

Mobility Improvements. Preliminary analysis indicates that the increase in speed which can be achieved from high speed ferries result in a significant increase in patronage at relatively low cost. However, FTA has no quantitative information on the mobility benefits of the proposal.

Cost Effectiveness. FTA has no information on the cost effectiveness of this proposal.

Environmental Benefits. The San Francisco metropolitan area is a "moderate" nonattainment area for ozone and a "moderate <= 12.7" nonattainment area for carbon monoxide. While the impact of this proposed project on air quality is not known at this time, it is likely to be very small considering the small percentage of trips that would be diverted from autos.

Operating Efficiencies. FTA has no information on the operating efficiencies that would result from this proposal.

Local Financial Commitment

The FTA does not currently have any information on the sources of State/local funding for operations.

Local share for the capital is provided from Proposition 116 funds. Therefore the capital finance plan is rated "high."

Dulles Corridor
Washington, D.C. Metropolitan Area
(January 1993)

Description — 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 — 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 routes. These improvements would help develop a transit market in the corridor. In addition, the park-and-ride lots would serve as stations in the event that a rail line is built in the corridor. However, recently the Airport Authority reported that no additional buses will be permitted to operate on the Dulles Access Road. Since the recently constructed HOV lanes on the Dulles Toll Road have been converted to general purpose lanes, this raises serious questions about the operation of an express bus system in the Dulles Corridor.

Section 3035(aaa) of ISTEA directs FTA to enter into a multiyear grant agreement with the State of Virginia in the amount of $6 million for completion of alternatives analysis and preliminary engineering. No funds have yet been apropriated for this study.

In FY 1993, Congress appropriated $7.6 million for the Dulles corridor bus program. This supplements $18.4 million which was already granted in FY 1991.

Justification — Mobility Improvements. The rail alternative would offer few transportation benefits beyond those achievable with express buses operating in the access road.

Cost Effectiveness. A 1989 study conducted by Fairfax County computed a preliminary cost effectiveness index of approximately $25 per new trip for a rail alternative. This information would be updated in the alternatives analysis called for in ISTEA.

Environmental Benefits. The Washington Metropolitan area is a "serious" nonattainment area for ozone and a "moderate" nonattainment for carbon monoxide. Information on air quality impacts would be developed in the alternatives analysis authorized in ISTEA.

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

Local Financial Commitment

One potential source of funding may be surplus toll revenues from the Dulles Toll Road. However, there has been no funding strategy yet developed for the project.

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

In 1991 the average age of the Washington Metropolitan Area Transit Authority's bus fleet was 13.9 years old, which is substantially above the national average. The advanced age of the bus fleet is a concern since it suggests that the transit agency is not reinvesting in its existing system.

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

Description

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

Preliminary estimates put the capital cost of a Metrorail extension between $250 and $400 million (1991 dollars), depending on the length of the extension and the number of stations. FTA has no estimate of ridership.

Status

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.

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

Justification

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

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

Cost Effectiveness. FTA does not have any information on the cost effectiveness of a major transit investment in this corridor. It is presumed that such information would be developed during the alternatives analysis called for in ISTEA.

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

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

Local Financial Commitment

A preliminary financial analysis is being conducted as part 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.

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

In 1991 WMATA's bus fleet averaged 13.9 years, which is substantially above the national average. The advanced age of the bus fleet is a concern since it suggests that the transit agency is not adequately reinvesting in its existing system.

TABLE B-1: FINANCIAL RATINGS: CAPITAL FINANCING COMMITMENTS

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

	Low	* FTA does not consider the applicant to be in reasonably sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular. * The applicant has not adopted a capital finance plan, or FTA considers the adopted finance plan to be inadequate or infeasible. The plan may be so vulnerable to economic downturns and other funding uncertainties that implementation of the project would put capital programs and operations at significant risk.
Alternatives Analysis and System Planning	High	* FTA considers the implementing agency to be in reasonably sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular. * The applicant has adopted a realistic capital finance plan that adequately covers projected non-Federal capital costs. The plan is based on reasonably conservative assumptions and provides for contingent cost overruns.
	Medium	* FTA considers the implementing agency to be in reasonably sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular. * The applicant's capital finance plan or preliminary funding strategy is considered by FTA to be adequate to successfully undertake one or more of the proposed major transit investment alternatives. Uncertainties may exist in the agency's ability to implement new funding sources as well as cash flow implications and the plan's sensitivity to risk and uncertainty.
	Low	* FTA does not consider the proposed implementing agency to be in reasonably sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular, * The applicant lacks a preliminary funding strategy that would be adequate to successfully undertake a major investment alternative. If a plan or strategy exists, a "low" rating may also be given where the region has previously demonstrated an unwillingness to adopt new transit funding sources with the capacity that would be required to implement a new start.

TABLE B-2: FINANCIAL RATINGS: STABLE AND RELIABLE OPERATING REVENUE

Final Design	Acceptable	* 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	* Sources of local transit funding have not kept pace with costs. Financial conditions have led to a pattern of service level cuts to reduce operating costs. * The applicant has a history of deferring capital replacement and/or routine maintenance. * Financial projections show that the applicant does not currently have the financial capacity to operate the proposed project, supporting feeder systems, other programmed projects, and other elements of its transit system under reasonably conservative assumptions.
Preliminary Engineering	High	* Ample dedicated funding sources are in place, or there has been a clear pattern of general appropriations from State or local governments, which regularly provide a balanced budget for the existing system. * Existing transit facilities have been well maintained and improved through continuing reinvestment in the system. * Financial projections show that the applicant currently has ample financial capacity to operate and maintain the locally preferred alternative, supporting feeder systems, other programmed projects, and other elements of its transit system under reasonably conservative assumptions.

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

* Existing transit facilities have been adequately maintained and improved through continuing reinvestment in the system. Available evidence indicates that the applicant will be able to continue its maintanance and replacement program upon implementation of a major investment.

* Financial projections show that the applicant currently has ample financial capacity to operate a major new transit investment, including supporting feeder systems, as well as other programmed projects, and other elements of its transit system under reasonably conservative ridership and other assumptions.

Medium

* Dedicated transit funding sources are in place, or there has been a clear pattern of general appropriations from State or local governments, which regularly provide a balanced budget for the existing system.

* Existing transit facilities have been adequately maintained and replaced through continuing reinvestment in the system. Available evidence indicates that the applicant will be able to continue its maintanance and replacement program upon implementation of a major investment.

* The applicant is considered by FTA to have a realistic chance of adopting and implementing a financing plan which would provide adequate financial capacity to operate and maintain a fixed guideway alternative, including supporting feeder systems, other programmed projects, and other elements of its transit system under reasonably conservative ridership and other assumptions.

Low

* Sources of local transit funding have not kept pace with costs. Financial conditions have led to a pattern of service level cuts to reduce operating costs.

* The applicant has a history of deferring capital replacement and/or routine maintenance, or available evidence suggests that a major investment could lead to financial strains that could adversely impact maintenance and replacement programs.

* The region has demonstrated an unwillingness to adopt new transit funding sources with the capacity that would be required to operate and maintain a fixed guideway alternative, including supporting feeder systems, other programmed transit projects, and other elements of its transit system under reasonably conservative ridership and other assumptions.

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

2/1/93
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 (12-31-92)	FY 1993 & PRIOR YEAR UNOBLIGTED EARMARKS	SEC 3 COST TO COMPLETE	ESTIMATED COMPLETION DATE (THIS PHASE)
UNDER CONSTRUCTION	1	ATLANTA-East RRT Ext.	$5	$170	$128	$0	$42	$128.0		$0.0	7/93
	2	ATLANTA-Northeast RRT Ext.	$6	$118	$81	$8	$29	$81.0		$0.0	OPEN
	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	4/93
	5	DALLAS-South Oak Cliff LRT	$9	$360	$160	$0	$200	$0.0	$82.6	$77.4	1994
	6	DENVER-North I-25 HOV*	$4	$230	$70	$64	$96	$70.0		$0.0	9/95
	7	HOUSTON-Eastex HOV	NA	$79	$0	$29	$50	$0.0		$0.0	9/96
	8	HOUSTON-North I-45 HOV*	$5	$62	$47	$0	$15	$47.0		$0.0	12/96
	9	HOUSTON-Southwest HOV*	$5	$98	$62	$0	$36	$62.0		$0.0	OPEN
	10	JACKSONVILLE-Nrth DPM Ext*	NA	$38	$29	$0	$11	$28.8		$0.0	1996
	11	LOS ANGELES - MOS-1 RRT*	$6	$1,450	$605	$91	$754	$605.0		$0.0	OPEN
	12	LOS ANGELES - MOS-2 RRT*	NA	$1,446	$667	$0	$779	$548.1	$49.6	$69.3	1998
	13	MIAMI-DPM Extensions*	$15	$248	$186	$0	$62	$135.6	$50.7	$0.0	9/93
	14	MEMPHIS-Trolley	$8	$33	$0	$25	$8	$0.0		$0.0	3/93
	15	ST. LOUIS-Airport LRT*	$9	$451	$339	$2	$111	$326.9		$11.7	7/93
	16	SAN FRANCISCO-Colma	$6	$171	$109	$0	$62	$81.7	$27.1	$0.0	9/95
		SUBTOTAL		$5,687	$2,482	$842	$2,364	$2,114.1	$210.0	$158.4	
FINAL DESIGN	1	ATLANTA-Dunwoody	$9	$125	$99	$0	$26	$92.2	$6.4	$0.0	3/93
	2	ATLANTA-North Springs	$9	$358	$286	$0	$72	$0.0	$23.4	$262.8	1996
	3	JACKSONVILLE-South DPM Ext	NA	$134	$107	$0	$27	$0.0	$15.0	$92.0	1994
	4	LOS ANGELES-Mid City	NA	$491	$243	$55	$193	$0.0	$19.9	$223.1	1994
	5	LOS ANGELES-No. Hollywood	NA	$1,450	$695	$0	$755	$0.0	$19.9	$675.1	1994
	6	NEW YORK-Queens	$5U	$645	$322	$0	$323	$11.0	$15.8	$295.2	1994
	7	PORTLAND-Westside LRT*	$19	$688	$516	$0	$171	$14.3	$67.5	$434.2	6/93
		SUBTOTAL		$3,891	$2,268	$55	$1,567	$117.5	$167.9	$1,982.4	
PRELIMINARY ENGINEERING	1	BALTIMORE-Hunt Valley	$11	$49	$38	$0	$11	$2.0	$36.0	$0.0	5/93
	2	BALTIMORE-Airport	$16	$35	$28	$0	$7	$0.0	$5.7	$22.3	5/93
	3	BALTIMORE-Penn Station	$17	$18	$14	$0	$4	$0.0		$14.0	3/93
	4	CHICAGO-Central	$17	$750	$250	$0	$500	$17.1	$40.3	$192.6	10/93
	5	HONOLULU	$9	$2,300	$618	$0	$1,682	$36.4	$75.9	$505.7	9/93
	6	HOUSTON-Regional Bus	$4	$1,250	$625	$0	$625	$6.4	$188.7	$429.9	2/93
	7	ORANGE CO.(CA)-Transitway	$4	$424	$318	$0	$106	$0.0		$318.0	4/93
	8	PITTSBURGH-Airport Phase 1	$5	$250	$76	$124	$50	$13.2	$11.3	$51.5	12/93
	9	PITTSBURGH-East Busway Ext	$5	$40	$0	$32	$8	$0.0		$0.0	5/93
	10	SALT LAKE CITY-South LRT	$7	$230	$131	$0	$99	$6.6	$14.5	$109.9	7/93
	11	SAN FRANCISCO-Airport	$27	$960	$591	$0	$369	$0.0		$591.0	1994
	12	SAN JOSE-Tasman	$40	$480	$240	$0	$240	$12.8	$104.0	$123.2	DONE
		SUBTOTAL		$6,786	$2,929	$156	$3,701	$94.5	$476.4	$2,358.1	

*** MORE ***

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 (12-31-92)	FY 1993 & PRIOR YEAR UNOBLIGTED EARMARKS	SEC 3 COST TO COMPLETE	ESTIMATED COMPLETION DATE (THIS PHASE)
ALTERNATIVES ANALYSIS/ DRAFT EIS	1	AUSTIN-North Central/NW	NA	$200	$100	$0	$100	$0.0		$100.0	1994
	2	BOSTON-Piers	$14-20	$700	$560	$0	$140	$10.8	$38.0	$511.2	2/93
	3	CLEVELAND-Dual Hub	NA	$600	$300	$0	$300	$0.0	$10.5	$289.5	1994
	4	DALLAS-North Central	$7	$200	$160	$0	$40	$0.0		$160.0	10/93
	5	DENVER-Southwest	NA	$200	$160	$0	$40	$0.0		$160.0	1994
	6	KANSAS CITY-South	$50+	$250	$200	$0	$50	$0.4	$1.1	$198.5	6/93
	7	LOS ANGELES-East Central	NA	$1,800	$900	$0	$900	$0.0	$19.9	$880.1	7/93
	8	LOS ANGELES-West Central	NA	$2,800	$1,400	$0	$1,000	$0.0		$1,400.0	1994
	9	MAINE-Portland to Boston	NA	$50	$30	$0	$20	$0.0	$25.3	$4.7	6/93
	10	MILWAUKEE-East/West	NA	$350	$150	$125	$75	$0.0		$150.0	11/93
	11	MINNEAPOLIS-Central	NA	$600	$300	$0	$300	$0.0		$300.0	6/93
	12	NEW JERSEY-Waterfront	$3-27	$1,130	$1,130	$0	$0	$12.6		$1,117.4	2/93
	13	NEW ORLEANS-Canal St.	NA	$90	$72	$0	$18	$0.0		$72.0	12/93
	14	ORLANDO-OSCAR	$6-16	$50	$25	$0	$25	$0.0	$2.5	$22.5	3/93
	15	PORTLAND-Hillsboro	$25-75	$204	$66	$71	$67	$0.0		$66.0	4/93
	16	SACRAMENTO-South	NA	$200	$100	$0	$100	$0.0	$1.0	$99.0	1994
	17	ST. LOUIS-St. Clair	NA	$300	$240	$0	$60	$0.5	$8.1	$231.4	8/93
	18	SAN DIEGO-Mid Coast	$11-14	$350	$280	$0	$70	$0.0	$4.1	$275.9	6/93
	19	SAN JUAN-Tren Urbano Ph.1	NA	$770	$0	$240	$530	$0.0		$0.0	6/93
	20	SAN JOSE-Vasona	NA	$225	$0	$113	$113	$0.0		$0.0	1995
		SUBTOTAL		$11,069	$6,173	$549	$3,948	$24.3	$110.5	$6,038.2	
		TOTAL: FOUR PHASES		$27,433	$13,853	$1,602	$11,579	$2,350.4	$964.8	$10,537.1	

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

*U.S. G.P.O.:1993-343-273:80005