Annual Report on Funding Recommendations

Fiscal Year 1997

Report of the Secretary of Transportation
to the United States Congress
Pursuant to 49 U.S.C. 5309(m)(3)
(*Formerly Section 3(j) of the Federal Transit Act)*

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Preface

These new start project profiles provide background information supporting the Department of Transportation's new start funding recommendations for FY 1997. The Department's funding recommendations are being provided to the Congress pursuant to 49 U.S.C. 5309(m)(3) (*formerly Section 3(j) of the Federal Transit Act*) The funding recommendations are based in part on the decision criteria defined in 49 U.S.C. 5309(e) (*formerly Section 3(i)(1)*).

Under 49 U.S.C. 5309(e), discretionary capital grants and loans for the construction of a new fixed guideway system or the extension of an existing system may be made only if the Secretary determines that the proposed project is:

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

The 49 U.S.C. 5309(e) criteria provide a basis for selecting, from among the eligible projects, those which are the most worthy of Federal funds. To this end, the new start project profiles describe the fixed guideway projects that are most advanced, and evaluate them in terms of the 5309(e) criteria.

Profiles have been prepared for each project or study undergoing final design and preliminary engineering. In addition, profiles have been prepared for projects that are under construction if additional funds are needed in FY 1997 to fulfill full funding contract commitments. A number of system planning studies, particularly those where congressional interest has been demonstrated through prior year earmarks, are also covered.

In general, the profiles contain five sections:

1. **Description:** The description section briefly describes a project's physical characteristics and presents the latest estimates of cost and ridership. Unless otherwise noted, cost estimates are expressed in escalated (year of construction) dollars.
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 49 U.S.C. 5309(e). 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.

The profiles for projects covered by full funding grant agreements include the project description and status sections only, since a decision to fund the project has already been reached. Also, many of the profiles describing system planning studies do not cover project justification, local

financial commitment, or other factors because this information is still being developed as part of the local planning process. Once the planning process results in the selection of a particular project, FTA will include information on the chosen project in future reports.

How the Ratings were Developed

As part of the normal system planning and project development process, local agencies develop the information that FTA uses to assess projects in terms of project 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 new start criteria. Projects are to be evaluated based on a comprehensive review

that takes into account mobility improvements, cost effectiveness, environmental benefits, and operating efficiencies. This year's ratings address the full range of ISTEA criteria.

The project profiles address each project's impact on mobility in terms of such measures as travel time savings, increases in transit ridership, and reductions in highway congestion. The discussion attempts to briefly summarize the most significant transportation benefits expected to result from a proposed project, with an emphasis on total travel time savings for users and non users of the project. FTA has given a "high" rating 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.

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 1997 ratings, cost effectiveness was measured using the costper-addedtrip index which was introduced in FTA's 1984 Major Capital Investment Policy. To compute the new trip index, benefits are measured in terms of added 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 can also represent 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 an 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 costperaddedrider; the lower the index, the more costeffective the project.

This year's cost effectiveness indices are based on calculations that assume that travel time is worth 80% of the average metropolitan wage rate, or $11.70. This contrasts with the assumed value of time used in last year's report, which was $4.60 per hour for work trips and $2.30 for nonwork trips.

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
- Severe17 (17 years to attain and design value is based on 198688 data)
- Severe15 (15 years to attain)
- Serious
- Moderate
- Marginal
- SubMarginal

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. These data come 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 is measured in terms of systemwide operating costs per passenger. The project profiles present such data for the proposed project and two baseline alternatives, the TSM and No Build alternatives. 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.

Local Financial Commitment

FTA's evaluation of the local financial commitment to a proposed project focuses on 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 FY 1997 evaluations were supported by reviews conducted by two financial contractors, Booz Allen and Public Financial Management, Inc.

Local share refers to the percentage of capital costs to be met with nonFederal funding, and includes both the local match required by Federal law and any capital "overmatch." Overmatch is accounted for in the rating process because it reduces the required Federal commitment, thus leveraging limited Federal funds, and because it indicates a strong local commitment to the project. The use of flexible funds and innovative financing techniques is noted, where appropriate.

The evaluation of each project's proposed capital financing plan takes two principal forms. First, the plan is reviewed to determine the stability and reliability of each proposed source of local match. This includes a review of intergovernmental grants, tax sources, and debt obligations. Each revenue source is reviewed for availability within the project timetable. Second, the financing plan is evaluated to determine if adequate provisions have been made to cover unanticipated cost overruns. The strength of the capital finance plan is rated high, medium, or low. The indicators used to assign these ratings are further explained in Table A1.

The third component of the financial rating is an assessment of the ability of the local transit agency to fund operation of the system as planned once the guideway project is built. This rating focuses on the operating revenue base and its ability to expand to meet the incremental

operating costs associated with a new fixed guideway investment and any other new services and facilities.

The profiles also state the average age of the applicant's bus fleet. This information illustrates the extent to which the applicant has been reinvesting in its existing system. Again, projects are rated high, medium, or low (see Table A2).

Introduction

This is the annual report called for by 49 U.S.C. 5309(m)(3) (*formerly Section 3(j) of the Federal Transit Act [FT Act]*) which requires a "proposal on the allocation of amounts to be made available to finance grants and loans for capital projects for new fixed guideway systems and extensions to existing fixed guideway systems among applicants for those amounts."

The purpose of this report is to describe the Department's recommendations for allocating the funds for New Starts under §5309 (*Section 3*). 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 1997 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.

This report is now available on the Internet via the World Wide Web. The Universal Resource Locator (URL) address for the FTA home page is: http://www.fta.dot.gov. Multimedia and text--only options are available. For information on the availability of other alternative formats, please contact the FTA Office of Public Affairs.

FY 1997 Budget Proposal

While 49 U.S.C. 5301 *et seq.(FT Act)* authorizes funding for FTA programs, the annual appropriations process actually sets the amount of funds which can be obligated in any fiscal year. The President's budget for FY 1997 proposes $800.00 million for New Starts.

Executive Summary

This report provides the U.S. Department of Transportation's recommendations to Congress for allocation of funds to be made available under 49 U.S.C. 5309 (formerly *Section 3 of the Federal Transit Act [FT Act]*) for construction of new fixed guideway systems and extensions (New Starts) for Fiscal Year 1997. The report is required by 49 U.S.C. 5309(m)(3) (formerly *Section 3(j) of the FT Act*).

The Intermodal Surface Transportation Efficiency Act of 1991, as amended (ISTEA) identified over $6 billion in funding authorizations or earmarks for specific projects through FY 1997, the life of the authorization. However, it authorized a total of only $5 billion in 5309 (*Section 3*) funding for these projects. This means that during each year of the ISTEA authorization, some prioritization of the authorized projects has been and will continue to be necessary. However, at the end of FY 1997, an additional $2 billion in contingent commitment authority is calculated to be available from one-half of the uncommitted cash balance in the Mass Transit Account of the Highway Trust Fund, as provided for in ISTEA.

The President's budget for FY 1997 proposes that $800.00 million be made available for the 5309 (*Section 3*) New Starts program. After setting aside a percentage of these funds for oversight activities as specified in 5327 (*Section 23*), $794.06 million is available for project grants. This report recommends 17 projects for funding in FY 1997, all of which have existing Federal funding commitments in the form of Full Funding Grant Agreements (FFGA) or Letters of Intent (LOI) as of July 1996, or are expected to have such commitments during the course of calendar year 1996.

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

Any project recommended for new funding commitments should meet the project justification, finance, and process criteria established by 5309(e)(2)-(7) (*Section 3 (i)*) and be consistent with Executive Order 12893, "Principles for Federal Infrastructure Investments," issued January 26, 1994.

Existing or pending FFGA commitments should be honored before any additional commitments are made, to the extent that these projects are likely to be capable of obligating funds in the coming fiscal year.

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 by 5309 (*Section 3*). Instead, 5303 Planning (*Section 8*) or 5307 Formula Grants (*Section 9*) funds should be used.

Firm funding commitments, embodied in FFGAs, should not be made until preliminary engineering is substantially complete since costs, benefits, and impacts are not accurately known until this level of engineering approaches completion.

Letters of Intent (LOI) (ultimately anticipating FFGAs) authorized by 5309(g) (*Section 3(a)(4)*) should be issued only to worthy projects which have progressed to the point (generally through a Major Investment Study (MIS), at a minimum) that their justification and level of local financial commitment can be established with some certainty.

LOIs should be awarded to the best projects, in terms of financial commitment and other project justification criteria, in an order which is based on the degree to which each project meets these criteria.

Funding should be provided to the most worthy projects to allow them to proceed through the process on a reasonable schedule, to the extent such projects are likely to be capable of obligating funds in the upcoming fiscal year.

Based on the principles above, the following projects with existing or pending FFGA's should be funded within the $794.06 million in Capital Discretionary/Formula Program funds for New Starts recommended for FY 1997:

- $66.82 million (and $156.83 million in future funds) to the North Line Extension project in Atlanta, in accordance with the December 20, 1994 FFGA for this project;
- $10.26 million to complete the FFGA for the light rail extensions in Baltimore, issued on November 1, 1994;
- $53.72 million (and $164.60 million in future funds) to the South Boston Piers project, under the FFGA issued for this project on November 5, 1994;
- $8.00 million (and $112.00 million in future funds) to the Southwest Corridor project in Denver, under the May 9, 1996 FFGA;
- $40.59 million (and $172.39 million in future funds) to the Houston/Regional Bus plan, according to the FFGA issued on December 30, 1994;
- $158.86 million (and $816.92 million in future funds) to the Los Angeles/MOS-3 project, including the initial segment of the East Central extension, in accordance with the FFGA as amended on December 28, 1994;
- $50.00 million (and $31.48 million in future funds) to the MARC extension project to Frederick, Maryland, in accordance with the June 19, 1995 FFGA;
- $105.53 million (and $26.26 million in future funds) to the Secaucus Transfer element of the Urban Core program of projects in New Jersey, in accordance with the December 6, 1994 FFGA for this project;
- $35.02 million to complete the Queens Local/Express Connection in New York City and fulfill the February 10, 1994 FFGA for this project;
- $121.19 million (and $75.63 million in future funds) to the Westside light rail extension to Hillsboro in Portland, in accordance with the December 21, 1994 FFGA for this project;
- $35.00 million (and $170.36 million in future funds) to the South LRT extension in Salt Lake City, in accordance with the August 2, 1995 FFGA;
- $10.00 million (and $80.00 million in future funds) to the Tasman LRT project in the San Francisco Bay Area, under the existing Letter of Intent (LOI); and
- $10.00 million (and $290.00 million in future funds) to the San Juan Tren Urbano project, under the FFGA issued on March 13, 1996.

In addition, we intend to fund the following four projects which are expected to have Federal funding commitments in place during calendar year 1996, and which will be ready for construction in 1997, as follows (future funds are estimated until FFGA negotiations are complete):

- $10.00 million (and $505.00 million in future funds) to the Hudson-Bergen light rail element of the Urban Core program of projects in northern New Jersey;
- $8.00 million (and $92.00 million in future funds) to the Sacramento light rail extension;
- $51.07 million (and $633.55 million in future funds) to the extension of the BART system to San Francisco International Airport; and
- $20.00 million (and $216.00 million in future funds) to the St. Clair extension of the St. Louis light rail system.

Three additional projects with FFGA's are not included in these recommendations, either because the Federal commitment has been fulfilled (Dallas/South Oak Cliff and Pittsburgh/Airport Busway Phase 1) or the project has been terminated at the local level (Chicago/Central Area Circulator).

The following table summarizes the recommendations for projects to receive funding in FY 1997 (in millions of dollars):

Project	FY 1997 Funding ($millions)	Purpose
Atlanta/North Line	$66.82	**Construction**
Baltimore/LRT Extensions	$10.26	**Construction**
Boston/Piers Phase 1 (MOS-2)	$53.72	**Construction**
Denver/SW Corridor	$8.00	**Construction**
Houston/Regional Bus	$40.59	**Construction**
Los Angeles/MOS-3	$158.86	**Construction**
Maryland/MARC Ext. to Frederick	$50.00	**Construction**
New Jersey/Hudson-Bergen LRT	$10.00	**Construction**
New Jersey/Secaucus	$105.53	**Construction**
New York/Queens	$35.02	**Construction**
Portland/Westside	$121.19	**Construction**
Sacramento/LRT Extension	$8.00	**Construction**
St. Louis/St. Clair Extension	$20.00	**Construction**
Salt Lake City/South LRT	$35.00	**Construction**
San Francisco Area/Tasman	$10.00	**Construction**
SF Area/BART Airport Extension	$51.07	**Construction**
San Juan/Tren Urbano	$10.00	**Construction**
Total	**$794.06**	

These recommendations are intended to bring greater focus to and improve the management of the New Starts program. As the program becomes increasingly oversubscribed, the cost of completing all projects in the development process at any one time far exceeds the amount of Federal funds likely to be available. The New Starts caseload consists of 74 proposed projects seeking Federal discretionary funds.

The funding allocations recommended in this report provide, within the constraints imposed by the budget caps, for the timely and efficient completion of those projects that have progressed the furthest in the development process. A failure to focus funds in the recommended manner risks creating additional expectations that may be difficult to meet in the current budget environment.

Section 5309(g)(4) (*Section 3(a)(4)(E)*) limits the total amount of LOIs, FFGAs and contingent commitments which can be issued at any time to the remaining balance of the authorization, or one-half of the uncommitted cash balance in the Mass Transit Account of the Highway Trust Fund, whichever is greater. The maximum amount of New Starts funding authorized by ISTEA is about $4.968 billion for FY 1992 through 1997, of which $1.729 billion remains. At the end of 1997, when the ISTEA authorization expires, an additional $1.975 billion is calculated to be available for New Starts commitments from one-half of the uncommitted balance of the Mass

Transit Account. In addition, Section 3032 (g)(2) of ISTEA specifies that commitments to the San Francisco Bay Area rail extension program be made from the entire unobligated balance of the Mass Transit Account. This effectively provides an additional $775.00 million in New Starts funding authority, bringing the total remaining authority to $4.479 billion. The sum of the commitments which are proposed in this report ($4.337 billion), is within this amount. FTA intends to manage the New Starts caseload so that as individual projects in this group meet the necessary requirements in the development process, negotiations for FFGAs can proceed while keeping the total Federal commitments within both the available funding authority and the program level that can be accommodated within the budget caps.

Table 1 summarizes the recommendations for FY 1997 funding and overall funding commitments, and compares them to the funding authorizations contained in ISTEA. For each project in the New Starts process, the first column indicates the amount of funds which were provided to the project prior to ISTEA. The second column indicates the amount of funds provided since the enactment of ISTEA that have been obligated to each project, and the third column shows the amount of FY 1995 and prior year earmarked funds provided since the enactment of ISTEA which have not yet been obligated. The fourth column shows the amount of funds available as a result of the FY 1996 DOT Appropriations Act (adjusted to account for oversight activities). The fifth column summarizes the recommendations for funding in FY 1997, and the sixth column shows the maximum amount of 5309 (*Section 3*) outyear funding recommended to be committed to these projects. The seventh column in Table 1 sums the first six columns and shows the total amount which would be made available for each project from 5309 (*Section 3*) over the life of that project, and the final column shows the total discretionary program amount authorized in ISTEA for each project over the authorization period.

Table 1: FY 1997 Funding for New Start Projects

Table 1
FY 1997 Funding for New Start Projects
(Millions of Dollars)

ISTEA Earmarks
(FY 1992 through FY 1995)

City/Project	Pre-ISTEA Earmarks (FY 1991 and Prior Years)	Obligated (As of 3/31/96)	Unobligated (As of 3/31/96)	FY 1996 Earmarks	FY 1997 Recommended Funding	Maximum Outyear Funds	Total Recommended Funding	ISTEA Earmarks
Totals By Phase								
Full Funding Grant Agreements/ LOI's	$491.41	$1,737.04	$33.23	$627.99	$704.99	$2,096.47	$5,691.13	$3,931.61
FFGA's/LOI's Programmed for 1996	24.35	150.61	5.95	13.84	89.07	1,446.55	1,730.37	526.00
Final Design	0.00	34.50	20.34	27.88	0.00	0.00	82.72	20.00
Preliminary Engineering	6.95	53.79	12.00	13.83	0.00	0.00	86.57	685.78
Major Investment Studies/System Planning	5.13	41.29	65.76	16.94	0.00	0.00	129.12	696.52
Grand Total	**$527.84**	**$2,017.23**	**$137.28**	**$700.48**	**$794.06**	**$3,543.02**	**$7,719.91**	**$5,859.91**
Full Funding Grant Agreements/Letters of Intent								
Atlanta - North Line Extension	$10.00	$29.46	$0.00	$41.90	$66.82	$156.83	$305.01	$318.76
Baltimore - LRT Extensions	16.90	30.35	0.00	27.39 (1)	10.26	0.00	84.90	60.00
Boston -	0.00	92.46	0.00	19.95	53.72	164.60	330.73	278.00

South Boston Piers Phase 1				(2)				
Chicago - Central Area Circulator	16.91	65.01 (3)	0.00	0.00	0.00	0.00	81.92	260.00
Dallas - South Oak Cliff	19.90	123.16	0.00	16.94 (4)	0.00	0.00	160.00	160.00
Denver - SW Corridor	0.00	0.00	0.00	0.00	8.00	112.00	120.00	0.00
Houston - Regional Bus Plan	146.07	118.59	0.00	22.36	40.59	172.39	500.00	500.00
Los Angeles - MOS-3	0.00	356.73	0.00	83.98	158.86	816.92	1,416.49	1,230.00
Maryland - MARC Ext. to Frederick	0.00	47.15	0.00	9.88	50.00	31.48	138.51	160.00
New Jersey/Urban Core - Secaucus	0.00	233.18	0.00	79.29	105.53	26.26	444.26	0.00 (5)
New York - Queens Connection	0.00	145.88	0.00	125.20	35.02	0.00	306.10	306.10
Pittsburgh - Airport Busway Phase 1	0.00	75.90	0.00	45.10 (6)	0.00	0.00	121.00	0.00
Portland - Westside-Hillsboro	1.00	263.67	0.00	128.58	121.19	75.63	590.07	515.00
Salt Lake City - South LRT	8.92	13.48	0.00	9.64	35.00	170.36	237.40	131.00
San Francisco Area - Tasman	0.00	60.75	33.23	0.00	10.00	80.00	183.98	12.75
San Juan - Tren Urbano	0.00	4.96	0.00	7.41	10.00	290.00	312.37	0.00
St. Louis - Metrolink	271.71	76.31	0.00	10.37 (7)	0.00	0.00	358.39	0.00
Subtotal	**$491.41**	**$1,737.**	**$33.23**	**$627.99**	**704.99**	**$2,096.**	**$5,691.13**	**$3,931.**

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Full Funding Grant Agreements Planned for 1996								
New Jersey/Urban Core - Hudson-Bergen LRT	$19.90	$89.09	$0.00	$0.00	$10.00	$505.00	$623.99	$0.00 (5)
Sacramento - LRT Extension	0.00	1.98	0.00	1.98	8.00	92.00	103.96	26.00
SF Area - BART Airport Extension	0.00	55.50	0.00	9.88	51.07	633.55	750.00	500.00
St. Louis - St. Clair Extension	4.45	4.04	5.95	1.98 (7)	20.00	216.00	252.42	0.00
Subtotal	**$24.35**	**$150.61**	**$5.95**	**$13.84**	**$89.07**	**$1,446.55**	**$1,730.37**	**$526.00**
Final Design								
Fort Lauderdale - Tri-County Commuter Rail	$0.00	$24.50	$0.00	$9.88	$0.00	$0.00	$34.38	$0.00
Jacksonville - Flagler to duPont Place	0.00	0.00	0.00	9.60	0.00	0.00	9.60	0.00
Los Angeles/San Diego - LOSSAN CR	0.00	10.00	0.00	8.40	0.00	0.00	18.40	20.00
Orange Co - Transitway	0.00	0.00	20.34	0.00	0.00	0.00	20.34	0.00
Subtotal	**$0.00**	**$34.50**	**$20.34**	**$27.88**	**$0.00**	**$0.00**	**$82.72**	**$20.00**
Preliminary Engineering								
Boston - South Boston Piers Phase 2	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Dallas - North	0.00	1.20	1.28	2.96	0.00	0.00	5.44	0.00

Central Corridor								
Dallas-RAILTRAN CR	0.00	2.48	2.98	5.93	0.00	0.00	11.39	5.68
Kansas City - Southtown Corridor	0.00	1.04	0.00	0.00	0.00	0.00	1.04	5.90
Los Angeles - Eastside Corridor Extension	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maine - Boston/Portland CR	0.00	38.31	0.00	0.00	0.00	0.00	38.31	30.00
New Jersey/Urban Core - Overall	-	-	-	-	-	-	-	634.40 (5)
Newark-Elizabeth	6.95	5.00	0.00	0.00	0.00	0.00	11.95	- (5)
New Orleans - Canal Street Corridor	0.00	5.76	7.74	4.94	0.00	0.00	18.44	4.80
Oklahoma City - MAPS Link	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Portland - South/North Corridor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington - Largo Corridor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00
Subtotal	**$6.95**	**$53.79**	**$12.00**	**$13.83**	**$0.00**	**$0.00**	**$86.57**	**$685.78**
Major Investment Studies/System Planning								
Altoona - Pedestrian Crossover	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$3.20
Atlanta - Buckhead Poeple Mover	0.00	0.20	0.00	0.00	0.00	0.00	0.20	0.20

Atlanta - Greensboro Corridor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
Austin - Northwest/North Central Corridor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boston - New Bedford/Fall River	0.00	0.00	0.74	0.00	0.00	0.00	0.74	0.00
Boston - N. Station-S. Station Rail Link	0.00	0.25	0.00	0.00	0.00	0.00	0.25	0.25
Boston - Urban Ring Study	0.00	1.09	0.00	0.00	0.00	0.00	1.09	0.00
Charlotte - Priority Corridor	0.00	0.13	0.00	0.00	0.00	0.00	0.13	0.50
Cincinnati - Northeast Corridor	0.00	2.53	0.00	0.99	0.00	0.00	3.52	0.00
Cleveland - Dual Hub Corridor	4.73 (8)	0.00	3.28	0.00	0.00	0.00	8.01	5.00
Cleveland - Highland Hills Extension	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20
Cleveland - Northeast Ohio Corridor	0.00	1.79	0.00	4.20	0.00	0.00	5.99	1.60
Detroit - Woodward Corridor	0.00	0.00	5.11	0.00	0.00	0.00	5.11	20.00
Hartford - Griffin Line	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Los Angeles - Transit Parkway	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.00

Los Angeles - West Central	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maryland - Waldorf Corridor Study	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Memphis - Regional Rail Plan	0.00	0.50	0.00	1.23	0.00	0.00	1.73	0.00
Miami - East/West Corridor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Miami - North 27th Avenue Corridor	0.00	0.99	0.00	1.98	0.00	0.00	2.97	0.00
Milwaukee - East-West Corridor	0.00	0.00	3.00	0.00	0.00	0.00	3.00	200.00
Minneapolis-St. Paul - Central Corridor	0.00	2.78	4.96	0.00	0.00	0.00	7.74	0.00
New Jersey - Burlington-Gloucester	0.00	0.00	1.49	0.00	0.00	0.00	1.49	0.00
New Jersey - Hawthorne Warwick Corridor	0.00	8.17	21.56	0.00	0.00	0.00	29.73	46.87
New Jersey - Lakewood-Freehold-Matawan	0.00	7.76	0.00	0.00	0.00	0.00	7.76	7.80
New Jersey/New York - West Shore Corr.	0.00	3.97	0.00	0.00	0.00	0.00	3.97	0.00
New York - Midtown Ferry	0.00	0.25	0.38	0.00	0.00	0.00	0.63	12.00
New York - Whitehall	0.00	0.00	2.48	2.47	0.00	0.00	4.95	0.00

Ferry Terminal								
Norfolk - Virginia Beach Corridor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Philadelphia - Cross County Metro Corridor	0.00	0.00	0.49	0.00	0.00	0.00	0.49	2.40
Philadelphia - Northeast Corridor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Pittsburgh - Stage 2 Light Rail Rehab.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00
San Diego - Mid Coast Corridor	0.40	0.10	2.64	0.00	0.00	0.00	3.14	27.00
San Diego - Mission Valley East Corridor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seattle - Phase 1 System	0.00	0.00	0.00	0.00	0.00	0.00	0.00	300.00
Seattle - Seattle-Tacoma Commuter Rail	0.00	1.88	19.14	0.00	0.00	0.00	21.02	25.00
St. Louis - Cross-County Corridor	0.00	0.45	0.00	0.00	0.00	0.00	0.45	0.00
St. Louis - St. Charles Corridor	0.00	0.45	0.00	0.00	0.00	0.00	0.45	0.00
Tampa - Tampa-Lakeland Corridor	0.00	0.00	0.49	0.49	0.00	0.00	0.98	0.00
Vallejo - North Bay	0.00	8.00	0.00	0.00	0.00	0.00	8.00	17.00

Ferry Service								
Vermont - Burlington-Charlotte Corridor	0.00	0.00	0.00	5.58	0.00	0.00	5.58	0.00
Vermont - Burlington-Essex Corridor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Washington - Dulles Corridor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.00
Subtotal	**$5.13**	**$41.29**	**$65.76**	**$16.94**	**$0.00**	**$0.00**	**$129.12**	**$696.52**

(1) Includes FY 1996 earmark of $15.13 million, plus $12.26 million in discretionary funds deobligated from prior years.

(2) Includes FY 1996 earmark of $19.82 million, plus $132,750 in discretionary funds deobligated from prior years.

(3) $34.31 million in expired FY 1992 and 1993 funds deobligated.

(4) Includes FY 1996 earmark of $16.74 million, plus $203,311 in discretionary funds deobligated from prior years.

(5) Part of overall Urban Core Program of Projects as authorized by ISTEA.

(6) Includes FY 1996 earmark of $22.36 milion, plus $22.74 million in discretionary funds deobligated from prior years.

(7) Represents allocation of FY 1996 earmark of $12.35 million among the Metrolink and St. Clair projects.

(8) Includes $2.23 million in unobligated funds.

Principles for Allocation of Funds

This report recommends the allocation of these funds among the various New Starts projects that have been proposed. The recommendations are based on the following principles:

Any project recommended for new funding commitments should meet the project justification, finance, and process criteria established by §5309(e)(2)(7) (*Section 3(i)*) and be consistent with Executive Order 12893, "Principles for Federal Infrastructure Investments," issued January 26, 1994.

Existing or pending FFGA commitments should be honored before any additional commitments are made, to the extent that these projects are likely to be capable of obligating funds in the coming fiscal year.

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 by §5309 (*Section 3*). Instead, §5303 Planning (*Section 8*) or §5307 Formula Grants (*Section 9*) funds should be used.

Firm funding commitments, embodied in FFGAs, should not be made until preliminary engineering is substantially complete since costs, benefits, and impacts are not accurately known until this level of engineering approaches completion.

Letters of Intent (LOI) (ultimately anticipating FFGAs) authorized by §5309(g) (*Section 3(a)(4)*) should be issued only to worthy projects which have progressed to the point (generally through an MIS, at a minimum) that their justification and level of local financial commitment can be established with some certainty.

LOIs should be awarded to the best projects, in terms of financial commitment and other project justification criteria, in an order which is based on the degree to which each project meets these criteria.

Funding should be provided to the most worthy projects to allow them to proceed through the process on a reasonable schedule, to the extent such projects are likely to be capable of obligating funds in the upcoming fiscal year.

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

The steps in the process begin with the development of a long-range transportation plan, during which future needs and strategies for addressing those needs are identified. Where the need for a major transportation investment is identified as part of a region's long-range planning process, a major investment study is undertaken to evaluate the merits of alternative technologies and alignments. These planning 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.

As projects proceed through the stages of the planning and development process, they are evaluated against the full range of project justification criteria contained in §5309(e)(2)(7) (*Section 3(i)*) to determine whether consideration of a Federal funding commitment is warranted. Section 5309(e)(2)(7) (*Section 3(i)*) requires that projects be justified based on a comprehensive review of

mobility improvements, environmental benefits, cost-effectiveness, operating efficiencies, and other factors such as land use and economic development. In addition, stable and dependable local funding must be sufficient to assure that the project will be completed in a timely manner, that the project will be operated as planned, and that local financial resources are available to operate the proposed system. Consistent with Executive Order 12893, "Principles for Federal Infrastructure Investment," issued January 26, 1994, this analysis includes both quantifiable measures of benefits and costs as well as qualitative measures reflecting values that are not readily quantified.

The Section 5309(e)(2)(7) (*Section 3(i)*) justification criteria apply to projects at all stages of development. As a project progresses through these stages and becomes increasingly refined, a higher degree of accuracy and certainty is expected. Comparisons among the projects, based on the evaluation of these criteria for each, are used to determine the best candidates for consideration of Federal discretionary funding. Projects that are (or are expected to be) under construction or in final design by the upcoming fiscal year, and are capable of obligating Federal discretionary funds, are considered to be candidates for FFGAs. LOIs are recommended when a project is ready to proceed and is justified based on the criteria contained in §5309(e)(2)(7) (*Section 3(i)*), but outstanding issues remain. In such cases, FTA may acknowledge its commitment to a worthy project but require that outstanding issues be resolved before an FFGA is negotiated. (In certain cases, a project may require only minimal funding to complete the Federal commitment. When such funds can reasonably be provided in a single fiscal year, an FFGA is generally not considered to be necessary. A single grant would be issued instead.)

ISTEA provided for exemptions from the project justification criteria under certain circumstances. Specifically, a project is exempt from the criteria if it is located in an extreme or severe nonattainment area for air quality standards and is part of a transportation control measure required under a State Implementation Plan, or requires less than one-third of the total project cost or less than $25,000,000 in funding from §5309 (*Section 3*). In addition, ISTEA contained specific exemptions for a number of individual projects. In these cases, FTA may still report ratings for such projects with respect to the §5309(e)(2)(7) (*Section 3(i)*) criteria, but cannot use these ratings as a basis for funding recommendations.

Table 2 provides a summary of the projects now in the New Starts "pipeline" and a summary evaluation of the projects in terms of project justification and local financial commitment. This table lists potential projects which are in final design, projects in preliminary engineering, and delected planning studies (those in alternatives analysis prior to October 1993 and those where Congressional interest has been demonstrated through ISTEA and/or appropriations earmarks). It does not list those projects for which FFGA's have already been negotiated, as the statutory determination of project justification has already been made. Appendix A provides a more detailed profile for each project, including the basis for the evaluation of the project (where available).

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 §5309(e)(2)(7) (*Section 3(i)*). The second column lists the cost-effectiveness of each project in terms of the expected cost to attract each incremental transit trip; an "incremental transit trip" is defined as the difference between total transit ridership in the region with the proposed major investment, and total transit ridership with only low capital transit improvements in place (the "Transportation Systems Management" or TSM alternative). 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; information on emissions reductions attributable to each project can be found in Appendix A. Operating efficiencies are rated in the fifth column, based on the potential of each project to reduce system-wide operating cost per passenger.

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

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

Table 2: Summary of FY 1997 New Starts Ratings

Phase and City (Project)	Capital Cost (million $) (a)	Project Justification				Local Financial Commitment (e)		Stability & Reliability of Operating Assistance
		Cost Effectiveness (Cost/New Trip)	Mobility Improvements (b)	EPA Classification (c)	Operating Efficiencies (d)	Section 5309 Share of Project Cost	Capital Financing Commitment	
Final Design								
Fort Lauderdale - Tri-County Commuter Rail	$428	Not Available (NA)	NA	Attain./NC	NA	44%	NA	NA
Jacksonville - Flagler to duPont Place	$31	NA	NA	Trans./Attain.	NA	80%	Medium	Medium
Los Angeles - LOSSAN	$22	NA	NA	Extreme/Serious	NA	62%	NA	NA
Orange County - Transitway	$409	$4	NA	Extreme/Serious	Medium	70%	Low/Medium	Low
San Jose - Tasman LRT	$325	$18	Medium	Attain./Mod.	Low	50%	Medium	Medium
Preliminary Engineering								
Boston - South Boston Piers Phase 2	$300	NA	Medium	Serious/Mod.	NA	80%	Medium	Medium
Dallas/Fort Worth - Railtran Phase 2	$129	$8	Medium	Mod./Attain.	NA	46%	Medium	Low/Medium
Dallas - North Central Corridor	$354	$9	Medium	Mod./Attain.	Medium	50%	High	Low/Medium
Denver - Southwest LRT	$177	$3	Medium	Trans./Mod.	NA	80%	High	Medium
Kansas City - Southtown Corridor	$450	$15	Medium	Attain./Attain.	Low	50%-80%	Low/Medium	Low/Medium
Los Angeles - Eastside Extension	$1,271	NA	Medium	Extreme/Serious	NA	50%	NA	NA
New Orleans - Canal Street	$93	$3	Medium	Maint./Attain.	High	80%	Low	Low
New Jersey - Hudson-Bergen Phase 1	$600	$11	High	Severe/Mod.	NA	100%	Low/Medium	Low/Medium
New Jersey - Newark/Elizabeth	$694	$17	Medium	Severe/Mod.	NA	100%	Low	Low
Oklahoma City - MAPS Link	$13	$5	NA	Attain./Attain.	NA	73%	NA	NA
Portland - South/North Corridor	$2,400	$5	NA	Marg./Mod.	NA	50%	NA	NA
Sacramento - South Corridor (Phase 1)	$220	$1	Medium	Severe/Mod.	Medium	44%	High	Medium/High
St. Louis - St. Clair Corridor	$296	$23	Medium	Mod./NC	NA	80%	Medium/High	Low/Medium
San Francisco - BART to Airport	$1,110	$20	Medium	Attain./Mod.	Low	75%	Medium	Medium
Washington - Metrorail to Largo Town Center	$350	$12	Medium	Serious/Mod.	NA	79%	Medium	Low/Medium
System Planning								
Altoona - Pedestrian	NA	NA	NA	Marg./Attain.	NA	NA	NA	NA

Crossing								
Atlanta - Buckhead People Mover	$20	NA	NA	Serious/Attain.	NA	NA	NA	NA
Atlanta - Greensboro Corridor	NA	NA	NA	Serious/Attain.	NA	%		
Austin - Northwest/North Central Corridor	NA	NA	NA	Attain./Attain.	NA	NA	NA	NA
Boston - North/South Sta. Rail Link	$2000-4000	NA	NA	Serious/Mod.	NA	NA	NA	NA
Boston - Urban Ring Corridor	$20-1400	NA	NA	Serious/Mod.	NA	NA	NA	NA
Charlotte - Priority Corridor	NA	NA	NA	Maint./NC	NA	NA	NA	NA
Cincinnati - Northeast Corridor	$800	NA	NA	Mod./Attain.	NA	NA	NA	NA
Cleveland - Highland Hills Corridor	NA	NA	NA	Mod./Attain.	NA	NA	NA	NA
Cleveland - NE Ohio Corridor	NA	NA	NA	Mod./Attain.	NA	NA	NA	NA
Cleveland - Dual Hub Corridor	$210	NA	NA	Mod./Attain.	NA	NA	NA	NA
Detroit - Woodward Corridor	$1,400	NA	NA	Attain./NC	NA	NA	NA	NA
Hartford - Griffin Line Corridor	$176 (94$)	$18	High	Serious/Mod.	NA	NA	NA	NA
Los Angeles - Santa Monica Blvd.	$69	NA	NA	Extreme/Serious	NA	NA	NA	NA
Los Angeles - West Central Corridor	$3,000	NA	NA	Extreme/Serious	NA	NA	NA	NA
Memphis - Regional Rail	NA	NA	NA	Attain./Attain.	NA	NA	NA	NA
Maryland - Waldorf Corridor	NA	NA	NA	Serious/Mod.	NA	NA	NA	NA
Miami - East/West Corridor	$4,400	$20	High	Attain./NC	Low	35%	NA	NA
Miami - North Corridor	$453-463 (94$)	$18	Medium	Attain./NC	Low	70%	NA	NA
Milwaukee - East/West Corridor	NA	NA	NA	Severe/Attain.	NA	NA	NA	NA
Minneapolis - Central Corridor	$581	$34	Medium	Attain./Mod.	Low	NA	NA	NA
New York - Staten Island/Midtown Ferry	$13	NA	NA	Severe/Mod.	NA	NA	NA	NA
New York - Whitehall Ferry Terminal	$80	NA	NA	Severe/Mod.	NA	NA	NA	NA
Norfolk - Virginia Beach Corridor	NA	NA	NA	Marg./Attain.	NA	NA	NA	NA
Northern New Jersey - Hawthorne/Warwick	NA	NA	NA	Severe/Mod.	NA	NA	NA	NA
Northern New Jersey - Lakewood/Freehold	NA	NA	NA	Severe/Mod.	NA	NA	NA	NA

New Jersey - West Shore Line	NA	NA	NA	Severe/Mod.	NA	NA	NA	NA
Philadelphia - Cross County Corridor	$250 (94$)	NA	NA	Severe/Mod.	NA	NA	NA	NA
Philadelphia - Northeast Corridor	NA	NA	NA	Severe/Mod.	NA	NA	NA	NA
Pittsburgh - LRT Rehabilitation	$414	NA	NA	Mod./NC	NA	80%	NA	NA
St. Louis - St. Charles Corridor	NA	NA	NA	Mod./NC	NA	NA	NA	NA
St. Louis - Cross County Corridor	$269-$307 (89$)	NA	NA	Mod./NC	NA	NA	NA	NA
San Diego - Mid Coast Corridor	$353 (92$)	$7	Medium	Serious/Mod.	Low	17%	Low	Low
San Diego - Mission Valley East Corridor	$332 (95$)	NA	NA	Serious/Mod.	NA	NA	NA	NA
Seattle-Core Rapid Transit	$6,700 (95$)	NA	NA	Marg./Mod.	NA	NA	NA	NA
Seattle-Tacoma Commuter Rail	$367 (95$)	NA	NA	Marg./Mod.	NA	NA	NA	NA
Southern New Jersey - Burlington/Gloucester	$1,400 (95$)	NA	NA	Severe/Mod.	NA	NA	NA	NA
Tampa - Lakeland Corridor	$30	NA	NA	Marg./Attain.	NA	NA	NA	NA
Vermont - Burlington to Charlotte Corridor	$8 (95$)	NA	NA	Attain./Attain.	NA	NA	NA	NA
Vermont - Burlington to Essex Corridor	$9 (95$)	NA	NA	Attain./Attain.	NA	NA	NA	NA
Washington - Dulles Corridor	$1,000	NA	NA	Serious/Mod.	NA	NA	NA	NA

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

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

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

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

(e) The local share and financial ratings shown in this table are based on the financial plans developed by the local project sponsors and financial reviews performed by FTA's financial consultants, Booz Allen and Public Financial Management, Inc. The criteria used to rate the local financial plans are described in Appendix A.

New Starts Allocations and Recommendations

As noted, the funding level proposed for FY 1997 for New Starts is $800.00 million. Once funding for FTA oversight activities is subtracted from this amount, as authorized by §5327 (*Section 23*), $794.06 million remains for projects. These funds will be allocated among those projects with existing Federal funding commitments and those for which funding commitments are expected within calendar year 1996. Complete descriptions of all projects in the New Starts pipeline can be found in Appendix A.

These funding allocations provide, within the constraints imposed by the budget caps, for the timely and efficient completion of those projects that have progressed the furthest in the development process. A failure to focus funds in the recommended manner risks creating additional expectations that may be difficult to meet in the current budget environment.

A. Projects With Existing Federal Funding Commitments

Seventeen projects have existing agreements that commit FTA to provide specified levels of Section 5309 (*Section 3*) funding. FFGA's have been issued to 16 of these projects, and one (the Tasman project in the San Francisco area) has been issued an LOI. Four projects are not included in the funding recommendations for FY 1997, either because the Federal commitment has been fulfilled (Dallas/South Oak Cliff, Pittsburgh/Airport Busway Phase 1, and St. Louis/Metrolink) or the project has been terminated at the local level. The status of these projects and the funding recommendations for FY 1997 are described below.

Atlanta/North Line Extension

The Metropolitan Atlanta Rapid Transit Authority (MARTA) is constructing a 1.9-mile, 2-station extension from the Dunwoody station to North Springs. This project is part of the larger North Line Extension to the MARTA heavy rail rapid transit system. The segment from Buckhead to Dunwoody opened in June 1996. The initial 5.7-mile segment, from Lenox Station to Buckhead, was constructed without FTA assistance. When the North Springs extension is completed, it will serve the rapidly-growing area north of Atlanta, which includes Perimeter Center and north Fulton County, and will connect this area with the rest of the region by providing better transit service for both commuters and inner-city residents traveling to expanding job opportunities.

An FFGA was issued for this project in December 1994, providing a total of $305.01 million in New Starts funding. This includes $29.46 million in FY 1995 and prior year ISTEA funds (plus $10.00 million in FY 1991 and prior year funds), all of which has been obligated. The FY 1996 budget provided an additional $41.90 million. This leaves $223.65 million required to complete this project. It is recommended that $66.82 million be provided to this project in FY 1997 under the FFGA, with the remaining $156.83 million provided in FY 1998-2001. This project is expected to be operational by December 2000.

Baltimore LRT Extensions

The Mass Transit Administration (MTA) of Maryland is building three extensions to the existing 22-mile Central Light Rail Transit (LRT) system that connects the Baltimore central business district (CBD) to Timonium in the north and Glen Burnie to the south. The existing system was constructed entirely with State and local funds. The extensions consist of a 5-mile, 5-station extension from Timonium to the growing employment center in Hunt Valley, and two intermodal connections: a 2-mile, 2-station branch off the main line directly into the BWI Airport terminal, and a quarter-mile spur to Penn Station that will connect passengers with commuter rail and Amtrak

service. The Federal share for the three extensions is 80 percent; if this investment is viewed in the context of the complete system, however, the overall Federal share is only 18 percent.

The FFGA for this project provides $84.90 million in total New Starts funding. This includes $30.35 million in FY 1995 and prior year ISTEA funds (plus $16.90 million in FY 1991 and prior year funds), all of which has been obligated. The FY 1996 budget provided an additional $15.13 million, to which was added $12.26 million in reallocated prior year discretionary funds, for a total funding level of $27.39 million in FY 1996. It is recommended that the remaining $10.26 million needed to complete this project be provided in FY 1997. This project is expected to be operational by May 1997.

Boston/South Boston Piers - Phase 1

The Massachusetts Bay Transportation Authority (MBTA) is developing an underground transitway to connect the existing transit system with the South Boston Piers area, located on the periphery of the central business district (CBD). This area is slated for future development, and is expected to more than double its existing commercial space by 2010. A 1.5-mile tunnel, to be constructed in two phases, will extend from the existing Boylston Station to the World Trade Center; five underground stations will provide connections to the MBTA's Red, Orange, and Green Lines. Electric trolleybuses or dual-mode vehicles will operate in the transitway tunnel and on surface routes in the eastern end of the Piers area.

Phase 1 of this project consists of a 1-mile bus tunnel with three stations located at South Station, Fan Pier, and the World Trade Center. Phase 2 will extend the tunnel to Boylston Station. Parts of Phase 1 are integrally related to construction of the Central Artery/Tunnel highway project now underway. Joint construction will help reduce transitway costs, environmental impacts and construction impacts. Section 3035(j) of ISTEA directs FTA to enter into an FFGA for this project.

An FFGA for this project was issued for Phase 1 in November 1994, in the amount of $330.73 million; this includes the $92.46 million provided in FY 1995 and prior years. The FY 1996 budget provided $19.82 million for this project to which was added $132,750 in reallocated prior year discretionary funds, for a total of $19.95 million. This leaves $218.32 million required to complete this project. It is recommended that funds in the amount of $53.72 million be provided in FY 1997, in accordance with the FFGA. The remaining $164.60 million would be provided over the course of FY 1998-2001. Phase 1 is expected to be in operation by 2000.

Chicago/Central Area Circulator

On December 15, 1994, FTA entered into an FFGA with the City of Chicago to fund construction of a multi-legged light rail transit system known as the Central Area Circulator. The system would operate within downtown Chicago (an area of approximately 6 square miles), the second largest central business district (CBD) in the nation, over a combination of reserved right-of-way on city streets and grade-separated or protected right-of-way adjacent to streets. The project would serve the more recently developed areas of the CBD, particularly to the northeast along Michigan Avenue, that are not well-served by the existing rapid transit system. Ridership was estimated at 103,400 trips per day.

The local financial commitment proposed for this project has been particularly strong, with the private sector bearing one-third of the capital costs through a special taxing district, which local businesses support. The State would contribute another third, and the Federal share would make up the remaining third. However, the Illinois General Assembly did not provide funding to continue this project in the 1996 State budget. Initially, Chicago officials indicated an intent to pursue a smaller project that might be built without State funds, but reconsidered when Congress did not appropriate Federal funds in the FY 1996 budget. On October 24, 1995, the Executive Board of the Central Area Circulator voted unanimously to recommend termination of this project

to the Mayor of Chicago and the City Council; on October 26, 1995, FTA was notified that the project had been terminated.

Section 3035(e) of ISTEA directed FTA to enter into a Full Funding Grant Agreement (FFGA) with the City of Chicago for $260.00 million to carry out the locally-preferred alternative. The December 15, 1994 FFGA provided a total of $258.37 million in New Starts funding (including funds already provided in past budgets). A total of $81.92 million in New Starts funding has been provided to this project in FY 1995 and prior years, including $16.91 million in pre-ISTEA earmarks. FTA recovered $34.31 million in unspent FY 1992 and 1993 funds that have exceeded their three-year availability to this project; the disposition of the remaining funds is under discussion. No funds were provided in the FY 1996 budget. Due to the decision by Chicago officials to terminate this project, no FY 1997 funding is recommended.

Dallas/South Oak Cliff

The South Oak Cliff light rail line is a 9.6-mile, 13-station segment of a 20-mile starter system being constructed by Dallas Area Rapid Transit (DART). Construction has been underway since February 1992, and the FFGA was issued in September 1993. The remaining 10.4 miles are being constructed without Federal assistance. The FY 1996 budget provided $16.94 million (including $203,311 in reallocated prior year discretionary funds) to complete the FFGA. Therefore, no funds are recommended for FY 1997. The South Oak Cliff line opened in June 1996.

Denver/Southwest Corridor

The Regional Transit District (RTD) in Denver is developing an 8.7-mile light rail extension from I-25 and Broadway in Denver to Mineral Avenue in Littleton. This double-track line will operate over an exclusive, grade-separated right-of-way and connect with the Central Corridor light rail in downtown Denver, which opened in October 1994. RTD estimates that it will carry 22,000 passengers per day by 2015.

Denver exhibits a strong local commitment to transit. The existing Central Corridor line was built entirely without Federal assistance, and RTD has $26.00 million for the Southwest Corridor in its capital reserve. The total Federal share for the entire system, including the locally-funded starter line, is less than 50 percent. This project will reduce transit travel time between Littleton and downtown Denver by 43 percent, and save 2,700 hours of daily travel time. Denver is a "transitional" nonattainment area for ozone pollution and a serious nonattainment area for carbon monoxide.

RTD is seeking a commitment of $120.00 million in §5309 (Section 3) funds to complete this project. Preliminary Engineering and environmental reviews have been completed. No prior year funds have been earmarked for this project, and no funds were provided in FY 1996. FTA issued an FFGA for this project on May 9, 1996, which will provide the required funding over the course of FY 1997-2001. It is recommended that $8.00 million be provided to this project in FY 1997 under the FFGA, with the remaining $112.00 million provided in FY 1998-2001.

Houston/Regional Bus Plan

The Regional Bus Plan developed by Houston Metro consists of a package of improvements to its existing bus system. It consists of service expansions in most of the region, new and extended HOV (High-Occupancy Vehicle, or "carpool") facilities and ramps, several transit centers and park-and-ride lots, and supporting facilities. The local share for this project is 50 percent.

Section 3035(uu) of ISTEA directs FTA to negotiate and sign an FFGA for $500.00 million for this project, provided that a locally-preferred alternative for the Priority Corridor project had been selected by March 1, 1992. This condition has been met, and the FFGA was issued on December

30, 1994, to provide a total of $500.00 million for this project. This includes the $118.59 million provided in FY 1995 and prior years under ISTEA, as well as the $146.07 million in pre-ISTEA earmarks. All of these funds have been obligated. The FY 1996 budget provided an additional $22.36 million. The FFGA for this project provides for $40.59 million in FY 1997 New Starts funds, with the remaining $172.39 million needed to complete the project provided in FY 1998-2000. The FY 1997 budget recommendation reflects the funding schedule specified in the FFGA.

Los Angeles/MOS-3

The Metro Rail Red Line Project in Los Angeles is being implemented in three phases, or "Minimum Operable Segments" (MOS). The first of these segments, MOS-1, opened for revenue service in January 1993; MOS-2 is under construction, and its FFGA has been fulfilled. In May 1993, an FFGA was issued to the Los Angeles County Metropolitan Transportation Authority (LACMTA) for the third segment, MOS-3.

ISTEA defined MOS-3 to include three smaller segments: the *North Hollywood* segment, a 6.3-mile, three-station subway extension north from the MOS-2 terminus at Vine Street to North Hollywood; the *Mid-City* segment, a 2.3-mile, two-station subway extension west of the MOS-2 terminus at Western Avenue; and an undefined segment of the *East Central* project, to the east from the eastern terminus of MOS-2 at Union Station. Construction on the North Hollywood segment is now underway.

In December 1994, the FFGA for MOS-3 was amended to specify the segment of the East Central project to be included. This segment ("Phase 1") consists of a 3.7-mile, four-station extension from the eastern terminus of MOS-1 at Union Station, across the Los Angeles River to First and Lorena in East Los Angeles. This brings the total amount committed under the FFGA to $1,416.49 million, including the $356.73 million provided in FY 1995 and prior years under ISTEA. The entire MOS-3 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 and an aggressive travel demand management program.

The FY 1996 budget provided $83.98 million for MOS-3. It is recommended that $158.86 million in New Starts funds be provided in FY 1997, with the remaining $816.92 million needed to complete the project provided in FY 1998-2002.

Maryland/MARC Extension to Frederick

The Mass Transit Administration of Maryland is extending the Maryland Commuter Rail (MARC) system from Point of Rocks to Frederick, Maryland. This extension will provide service from suburban Montgomery and Frederick counties to Baltimore, Maryland and Washington, D.C. The project involves track, signal, and station improvements along an existing freight line. In addition, MARC has undertaken a major program to purchase 50 bi-level coaches and six locomotives to ease crowding on existing lines and provide service on the Frederick extension. The environmental assessment of the Frederick extension has been completed, station sites have been selected, and final design is underway. MARC expects to initiate service on this extension in 1998.

ISTEA authorized funds in the amount of $160.00 million for this project. An FFGA was issued on June 19, 1995, to provide a total of $105.25 million to complete the project. This includes $13.90 million provided in FY 1995; an additional $33.25 million was appropriated in prior years, all of which has been obligated. The FY 1996 budget provided $9.88 million for this project, leaving $81.48 million needed to complete the FFGA. It is recommended that $50.00 million be provided in FY 1997, with the remaining $31.48 million provided in FY 1998.

New Jersey Urban Core/Secaucus Transfer

As part of its Urban Core program of interrelated projects, New Jersey Transit is constructing a major commuter rail transfer station in Secaucus, at the point where its Main and Bergen Lines intersect with the Northeast Corridor Line. The project consists of a new, three-level transfer station; track expansions; track, signal and bridge upgrades; and construction of a new platform and elevated walkway. It will allow commuters on the Main Line, Bergen County Line, Pascack Valley Line, and Port Jervis Line to transfer to Northeast Corridor commuter trains destined to Penn Station in midtown Manhattan or Penn Station in Newark. Located in the Meadowlands, this project is part of a potential public/private partnership which could include a major commercial center.

Section 3031 of ISTEA identifies the Secaucus Transfer Station as an element of the New Jersey Urban Core program of projects, and requires FTA to enter into a Full Funding Grant Agreement (FFGA) for elements that can be fully funded in FY 1992 through FY 1997. In addition, ISTEA earmarked $634.40 million for the entire Urban Core program of projects. Section 3031(c) specifically exempts these projects from the project justification requirements of §5309(e)(2)-(7) (*Section 3(i)*) and from FTA's major capital investment policy. An FFGA was issued for the Secaucus Transfer project in December 1994 to provide a total of $444.26 million through FY 1998, including $233.18 million funds already provided in prior year budgets (all of which has been obligated). This project is expected to be operational by 2002.

The FY 1996 budget provided $79.29 million to the Secaucus Transfer project, leaving $131.79 million needed to complete the FFGA. It is recommended that $105.53 million be provided in FY 1997, with the remaining $26.26 million provided in FY 1998.

New York/Queens Connection

The New York Metropolitan Transportation Authority (MTA) is constructing a connection from the existing 53rd Street tunnel to the Queens Boulevard subway lines, through a new 63rd Street tunnel. The Queens Boulevard Connection consists of approximately 1/3-mile of new tunnel, with corresponding track, signal work, and real estate acquisition. This project will relieve severe overcrowding on the Queens Boulevard subway lines by diverting service from the existing bottleneck at the 53rd Street tunnel, allowing the operation of an additional 15 trains per hour between Manhattan and Queens. Approximately 1/3 of the 60,000 peak hour passengers currently traveling through the 53rd Street tunnel are expected to use the new 63rd Street tunnel.

An FFGA was issued for this project in February 1994 in the amount of $306.10 million. A total of $145.88 million in FY 1995 and prior year funds has been obligated for this project, and the FY 1996 budget provided an additional $125.20 million. This leaves $35.02 million required to fulfill the FFGA. It is recommended that the remaining $35.02 million be provided in FY 1997 to complete the Federal commitment to this project.

Pittsburgh/Airport Busway Phase 1

The Port Authority of Allegheny County (PATransit) is constructing a busway and HOV (High-Occupancy Vehicle, or "carpool") facility along a 20-mile corridor between downtown Pittsburgh and the Greater Pittsburgh International Airport. Phase 1 of this project consists of a 7-mile dedicated busway extending from Carnegie (along existing railroad right-of-way), and a 1.1-mile HOV segment connecting to the downtown area through a rehabilitated Wabash Tunnel and across a new bridge spanning the Monongahela River. For the remaining 12 miles of the corridor, buses will operate on I-279. State funding for the local share of capital costs is in place, and a series of small taxes dedicated to transit for asset replacement and routine capital replacement needs has been approved. This project is expected to open for revenue service in 1998.

Section 1108(b) of the highway portion of ISTEA provides $9.8 million in contract authority for this project. Section 1069(e) authorizes an additional $39.50 million in general funds, of which

Congress appropriated $15.82 million in FY 1995. An additional $76.50 million in flexible ISTEA funds has been committed to this project.

An FFGA was issued for this project on November 10, 1994, providing a total commitment of $121.00 million in §5309 (*Section 3*) New Starts funding. This includes $75.90 million provided in FY 1995 and prior years. The FY 1996 budget provided an additional $22.36 million, to which was added $22.74 million in reallocated prior year discretionary funds, for a total funding level of $45.10 million. This funding is sufficient to fulfill the Federal commitment to this project. Thus, no FY 1997 funding is required.

Portland/Westside-Hillsboro

The Tri-County Metropolitan Transportation District (Tri-Met) is constructing an extension of the existing Banfield LRT line ("MAX") from its downtown Portland terminus west to downtown Hillsboro. In September 1992, FTA issued an FFGA for a segment to S.W. 185th Avenue in Washington County. This FFGA was amended on December 13, 1994 to include the remaining segment to Hillsboro. The project consists of a 17.7-mile, double-track fixed guideway with 20 stations and nine park-and-ride lots. The route includes a 3-mile twin-tube tunnel under the West Hills along the Sunset Highway. The FFGA for this project was issued in September 1992. Also included are 36 low-floor light rail vehicles, the first to be placed in service in the United States.

This project is part of a program of interrelated projects planned for the region. Tri-Met has committed funds for this project from the Surface Transportation Program (STP) and §5307 (*Section 9*). In addition, $30 million of a 1992 local bond issue is also available. Local governments have entered into a regional compact which establishes the framework for their contributions, and legislation enacted in 1991 put the State funding in place. This project is expected to carry over 27,000 weekday passengers.

The Westside/Hillsboro FFGA commits a total of $590.07 million in §5309 (*Section 3*) New Starts funding to this project. Of this, $264.67 million has been provided in FY 1995 and prior years (including $1.00 million in pre-ISTEA earmarks). The FY 1996 budget provided an additional $128.58 million, leaving $196.82 million required to complete this project. It is recommended that $121.19 million be provided to this project in FY 1997, with the remaining $75.63 million required to complete the Federal commitment to this project provided in FY 1998. This project is expected to be operational in September 1998.

Salt Lake City/South LRT

The Utah Transit Authority (UTA) is implementing a 15-mile at-grade light rail transit (LRT) line from downtown Salt Lake City to the southern suburbs. The line would operate on city streets downtown and then follow a lightly-used railroad alignment owned by UTA. This project is part of the Interstate 15 corridor improvement initiative, which includes reconstruction of a parallel segment of I-15. Ridership is estimated at 23,000 daily passengers. Salt Lake City has been selected as the site for the 2002 Winter Olympic Games.

Section 3035(f) of ISTEA directs FTA to enter into a multiyear grant agreement with UTA, which includes $131.00 million for construction of the initial segment of the locally-preferred alternative. On August 2, 1995, FTA issued an FFGA for this project that provides $215.00 million through FY 2000. This does not include $13.48 million provided in between FY 1992 and FY 1995 under ISTEA (all of which has been obligated), or the $8.92 million provided in FY 1991 and prior years. This project is now undergoing Final Design.

The FY 1996 budget provided $9.64 million for this project, leaving $205.36 million to be fulfilled under the FFGA. It is recommended that $35.00 million be provided in FY 1997, with the remaining $170.36 million provided over the course of FY 1998-2000. This project will be operational in 2000.

San Francisco Area/Tasman

The Santa Clara County Transit District (SCCTD) is constructing a 12.4-mile light-rail system from northeast San José to downtown Mountain View, connecting with both the Guadalupe LRT in northern Santa Clara County and the Caltrain commuter rail system. Construction will proceed in two phases. The Phase 1 West Extension will connect the northern terminus of the Guadalupe Light Rail System in Santa Clara with the CalTrain Commuter Rail station in downtown Mountain View, a distance of 7.6 miles. The Phase 2 East Extension will complete the project.

Section 5328(c)(1)(B) (*Section 3(a)(8)(C)(ii) of the FT Act*) defines the Tasman Corridor project as one element of a Program of Interrelated Projects to be considered together for the purposes of Federal requirements, along with the BART extensions to Colma and the San Francisco Airport. In addition, Section 3032(c) of ISTEA directs the Secretary to approve the construction of these projects, and Section 3032(e) authorizes $568.50 million in New Starts funds (this includes $68.50 million in FY 1990 and 1991 funds). An additional $12.75 million was authorized specifically for the Tasman project by ISTEA Section 3032(b)(2).

The Department issued an LOI for this project in April 1994, with the intent to issue an FFGA upon the resolution of several financial concerns associated with a challenge to the tax initiative intended to finance this project. Phase 1 is expected to require $90.00 million in §5309 (*Section 3*) funds in FY 1997 and future years. This does not include the $93.97 million provided in FY 1995 and prior years, $33.23 million of which remains unobligated. No funds were provided for this project in the FY 1996 budget. It is recommended that $10.00 million be provided in the FY 1997 budget under the existing LOI, with the remaining $80.00 million provided in FY 1998 through FY 2000.

San Juan/Tren Urbano

The Puerto Rico Department of Transportation and Public Works (DTPW) is planning a 10.4-mile, 14-station rail line connecting the major activity centers in the San Juan region. The system is planned as a double-track line operating over an at-grade and elevated right-of-way, with a short below-grade segment. The project includes a maintenance facility and provisions for two additional stations, if necessary. This project has been selected as one of FTA's turnkey demonstration projects. The design , build and operate contract for systems work and test track was awarded in July 1996. Three other contracts for civil work will be awarded later.

The number of automobiles per capita in Puerto Rico is comparable to the mainland; however, highway lane-miles are far below mainland levels. This results in extreme traffic congestion, particularly in San Juan. This project is expected to save over 10,000 daily hours of travel time, with 114,000 new daily transit riders using the system. At $1.00 per new rider, it is one of the most cost-effective projects currently in the Federal New Starts caseload. The financing strategy calls for a Federal share of less than one-third in §5309 (*Section 3*) funds, which would exempt this project from the project justification requirements of §5309(e)(2)-(7) (*Section 3(i)*).

A total of $4.96 million in FY 1995 and prior year funds have been allocated to the Tren Urbano project, all of which has been obligated. The FY 1996 budget provided $7.41 million. The Department issued an FFGA in March 1996 that commits these funds plus an additional $300.00 million in FY 1997 and future funds needed for its completion. It is recommended that $10.00 million be provided to this project in FY 1997 as specified in the FFGA, with the remaining $290.00 million provided in FY 1998-2001.

B. Additional Federal Funding Commitments Expected in 1996

In addition to the 16 projects with existing funding commitments, there are four projects for which FFGAs are expected to be issued during the 1996 calendar year. Funding recommendations and

the status of each project are described below (future funds are estimated until negotiations are complete).

New Jersey Urban Core/Hudson-Bergen LRT

The New Jersey Transit Corporation (NJ Transit) is proposing a 20.5-mile, 33-station light rail transit (LRT) line along the Hudson River Waterfront in Hudson County. The line would extend from the Vince Lombardi park-and-ride lot in Bergen County to Bayonne, passing through Port Imperial in Weehauken, Hoboken, and Jersey City. The core of the system would serve the high-density commercial centers in Jersey City and Hoboken, and provide connections with NJ Transit commuter rail service, PATH trains to Newark and Manhattan, and the Port Imperial ferry from Weehauken to Manhattan.

This project is a major component of the Urban Core program of interrelated projects defined in ISTEA, designed to significantly enhance mobility in the Northeastern New Jersey area. ISTEA specifically exempted these projects from the FTA New Starts evaluation criteria.

NJ Transit is seeking a total of $623.99 million in §5309 (*Section 3*) funding to complete a 10-mile "First Construction Stage" from Hoboken Terminal to 34th Street in Bayonne and Westside Avenue in Jersey City. This initial stage will be implemented under a turnkey contract to design, build, operate, and maintain the system, which was advertised in November 1995. Preliminary engineering is underway, and a record of decision is expected for the environmental impact statement by mid-1996. The turnkey contract will be awarded by the end of July 1996.

Northern New Jersey is a severe nonattainment area for ozone and a moderate nonattainment area for carbon monoxide. The First Construction Stage would reduce emissions by 0.3 percent, carry 31,275 daily passengers, and save 22,000 hours of travel time per day. Construction is expected to begin in late 1997, with revenue service to commence in late 1999.

A total of $108.99 million in FY 1995 and prior year funds have been allocated to the Hudson-Bergen LRT, including $19.90 million in pre-ISTEA earmarks, all of which has been obligated. The Department expects to issue an FFGA in 1996 that will commit an additional $515.00 million to complete the First Construction Stage. No funding was provided in the FY 1996 budget. It is recommended that $10.00 million be provided to this project in FY 1997 in anticipation of the FFGA, with the remaining $505.00 million provided in FY 1998-2002.

Sacramento/LRT Extension

The Sacramento Regional Transit District (RT) is developing an 11.3-mile light rail transit (LRT) project in the South Sacramento Corridor. The system will follow existing Union Pacific right-of-way from downtown Sacramento to Calvine/Auberry. To maximize the use of available State and local capital funds, RT will implement this project is several phases. The first phase, a 6.3-mile "Interim Operable Segment" (IOS), would operate between downtown Sacramento and Meadowview Road. Population and employment in this corridor are expected to grow at rates faster than the regional average, resulting in severe congestion on the two major highways now in service. Phase 1 is expected to reduce automobile use by 3,779 daily trips and save 2,688 daily hours of travel time. Sacramento is a severe nonattainment area for ground-level ozone pollution. RT is requesting 50 percent of the construction costs of this project from §5309 (*Section 3*) funds.

A total of $1.98 million in FY 1995 and prior year funds have been allocated to the Sacramento LRT Extension, all of which has been obligated. The FY 1996 budget provided an additional $1.98 million. The Department expects to issue an FFGA in 1996 that will commit $100.00 million in FY 1997 and future funds to complete Phase 1. It is recommended that $8.00 million be provided to this project in FY 1997 in anticipation of the FFGA, with the remaining $92.00 million

provided in FY 1998-2001. Construction is expected to begin in spring 1997, with revenue service to commence in July 1999.

San Francisco/Airport

Local officials in the San Francisco area have proposed a four station, 7.5-mile extension of the Bay Area Rapid Transit (BART) system from Colma to an intermodal station serving San Francisco International Airport. The route will serve the cities of South San Francisco and San Bruno, connect with the airport, and continue to Millbrae. The majority of the route will follow a combination of existing and abandoned railroad rights-of-way.

ISTEA defined this project as part of a Program of Interrelated Projects to be considered together for the purposes of Federal requirements, along with the BART extensions to Colma and the Tasman project in San José. The Federal commitment to the Colma project has been fulfilled, and an LOI has been issued for the Tasman project.

The BART Airport extension is part of the Federally-assisted portion of a much larger regional program of transit expansion, including significant BART extensions in the East Bay area (to Pittsburg and Pleasanton) and relocation of the Caltrain terminal in downtown San Francisco. The regional plan calls for 100 percent non-Federal funding of the East Bay extensions and no use of New Starts funds for the Caltrain terminal relocation. Thus, the Federal share in New Starts funding for the region's entire program of fixed guideway extensions is only 27 percent. This is a significant indication of local financial support for transit in a very transit-intensive region and is a major reason for the Department's support of this project. Projects requiring a Federal share of less than 33 percent in §5309 (*Section 3*) funds are exempt from the project justification requirements of §5309(e)(2)-(7) (*Section 3(i)*).

This project is expected to reduce automobile use by 485,000 daily vehicle miles of travel, and reduce carbon monoxide by 1,235 tons per year; nitrogen dioxides by 185 tons annually; volatile organic compounds by 82 tons per year; and particulate matter by 9 tons per year. Regional transit ridership is expected to increase by 23,200 daily passengers and save 6,900 hours of daily travel time. This project will improve transit access to downtown San Francisco from community around the peninsula, improve access to the airport from communities in the East Bay, and provide high-quality transit to the fourth-busiest airport in the U.S.

The Department expects to issue an FFGA in 1996 to provide $684.62 million in §5309 (*Section 3*) funds to complete this project. This does not include $55.50 million in FY 1995 and prior year earmarks, all of which has been obligated, nor the $9.88 million provided in the FY 1996 appropriation. It is recommended that $51.07 million be provided to this project in FY 1997 in anticipation of the FFGA, with the remaining $633.55 million provided in FY 1998 and future year funds. Construction is expected to begin in early 1997, with revenue service to begin in late 2001.

St. Louis/St. Clair Extension

The Bi-State Development Agency (Bi-State) is proposing a 27-mile light rail line between downtown East St. Louis and the vicinity of Scott Air Force Base, connecting with the Metrolink light rail line which opened in July 1993. An Initial Construction Segment will extend from the current Metrolink terminal in downtown East St. Louis to Belleville Area College, a distance of 17.5 miles. This segment consists of 13 stations and makes extensive use of abandoned railroad rights-of-way.

Bi-State estimates that the project will increase transit ridership by 3,885 trips per day, and will save 700-800 hours of travel time per day in 2010. It is expected to reduce automobile use by 374 trips per day. Preliminary engineering and the environmental review process are expected to be completed by the end of FY 1996; construction will commence in August 1998, and revenue service will begin in May 2001.

A total of $14.44 million in FY 1995 and prior year funds have been allocated to the St. Clair Extension, $5.95 million of which remains unobligated. The FY 1996 appropriation was allocated to both this project and the Metrolink project, with the St. Clair project receiving $1.98 million. The Department expects to issue an FFGA in 1996 that will commit an additional $236.00 million to complete the Initial Construction Segment. It is recommended that $20.00 million be provided to this project in FY 1997 in anticipation of the FFGA, with the remaining $216.00 million provided in FY 1998 and future funds.

Remaining ISTEA Commitment Capacity

Section 5309(g)(4) (*Section 3(a)(4)(E)*) limits the total amount of LOIs, FFGAs and contingent commitments which can be issued at any time to the remaining balance of the authorization, or one-half of the uncommitted cash balance in the Mass Transit Account of the Highway Trust Fund, whichever is greater. The maximum amount of New Starts funding authorized by ISTEA is about $4.968 billion for FY 1992 through 1997, of which $1.729 billion remains. At the end of 1997, when the ISTEA authorization expires, an additional $1.975 billion is calculated to be available for New Starts commitments from one-half of the uncommitted balance of the Mass Transit Account. In addition, Section 3032(g)(2) specifies that commitments to the San Francisco Bay Area rail extension program be made from the entire unobligated balance of the Mass Transit Account. This effectively provides an additional $775.00 million in New Starts funding authority. The sum of the commitments which are proposed in this report, including contingent commitments, totals $4.337 billion. As Table 3 shows, this is within the remaining commitment authority. FTA intends to manage this caseload so that as individual projects in this group meet the necessary requirements in the development process, negotiations for FFGAs would proceed while keeping the total Federal commitments within both the available funding authority and the program level that can be accommodated within the budget caps.

Long Term Management of New Starts Program

The recommendations contained in this Report are intended to bring greater focus to and improve the management of the New Starts program. As the program becomes increasingly oversubscribed, the cost of completing all projects in the development process at any one time far exceeds the amount of Federal funds likely to be available. The New Starts caseload consists of 74 proposed projects seeking Federal discretionary funds.

FTA will allocate funds according to the following strategy: First, existing or pending funding commitments would be honored before any additional commitments are made, to the extent that these projects are capable of obligating funds. Next, statutory authorizations (earmarks) in ISTEA would be considered, again to the extent that the projects are ready for funding. Finally, other worthy projects may be considered for funding provided they are capable of obligating funds.

Projects with existing commitments will be funded first, with funding levels adjusted as necessary to compensate for appropriations shortfalls or unforeseen circumstances that affect their ability to obligate funds as scheduled. Projects expected to receive Federal funding commitments over the next year will be funded based on their ability to obligate funds on a timely basis. Finally, single-year grants will be allocated to projects requiring minimal Federal funding to complete, again based on their ability to obligate funds in a timely manner.

Funding commitments for these projects will necessarily reach beyond the current authorization. In the short term, this will be accommodated through the contingent commitment device. Over the long term, these commitments will be fulfilled as part of a reauthorized program. Sufficient contingent commitment authority exists to issue new FFGA's during 1996. The sequencing of these approvals will be dependent on which projects complete the necessary steps in the process during 1996. As additional projects in the new starts caseload mature, they will be funded as the program allows.

Table 3: Remaining Commitment Capacity Under ISTEA

	Fiscal Year 1997	Maximum Outyear Funding 1998-	Total ISTEA Funding Fiscal Year 1997-	Available ISTEA Funding
ISTEA New Starts Authorization (Fiscal Year 1992-1997)				**$4,968.90**
Less:				
Budget Authority Available Fiscal Year 1992-1996				**-$3,239.30**
Plus:				
Anticipated Additional Contingent Commitment Authority for New Starts from 50% Uncommitted Cash Balance of Mass Transit Account (End of Fiscal Year 1997)				**$1,975.10**
Additional Mass Transit Account funds authorized by ISTEA for San Francisco Bay Area Rail Extension Program				**$775.00**
Total Commitment Capacity (Fiscal Year 1997 & Outyears)				**$4,479.70**
Less:				
Existing FFGAs/LOIs				
Atlanta - North Line Extension	$66.82	$156.83	$223.65	
Baltimore - LRT Extensions	$10.26	$0.00	$10.26	
Boston - South Boston Piers Phase 1	$53.72	$164.60	$218.32	
Denver - SW Corridor	$8.00	$112.00	$120.00	
Houston - Regional Bus Plan	$40.59	$172.39	$212.98	
Los Angeles - MOS-3	$158.86	$816.92	$975.78	
Maryland - MARC Extension to Frederick	$50.00	$31.48	$81.48	

New Jersey/Urban Core - Secaucus	$105.53	$26.26	$131.79	
New York - Queens Connection	$35.02	$0.00	$0.00	
Pittsburgh - Airport Busway Phase 1	$0.00	$0.00	$0.00	
Portland - Westside-Hillsboro	$121.19	$75.63	$196.82	
Salt Lake City - South LRT	$35.00	$170.36	$205.36	
San Francisco Area - Tasman	$10.00	$80.00	$90.00	
San Juan - Tren Urbano	*$10.00*	*$290.00*	*$300.00*	
Subtotal	**$704.99**	**$2,096.47**	**$2,801.46**	**$-2,801.46**
Anticipated FFGAs/LOIs				
New Jersey/Urban Core - Hudson-Bergen LRT	$10.00	$505.00	$515.00	
Sacramento - LRT Extension	$8.00	$92.00	$100.00	
SF Area - BART Airport Extension	$51.07	$633.55	$684.62	
St. Louis - St. Clair Extension	*$20.00*	*$216.00*	*$236.00*	
Subtotal	**$89.07**	**$1,446.55**	**$1,535.62**	***-$1,535.62***
Total Remaining Commitment Capacity (Fiscal Year 1997-)				**$142.62**

Conclusion

The $794.06 million available for FY 1997 is sufficient to honor all New Starts projects that have existing Federal funding commitments, as well as additional projects for which Federal commitments are expected during calendar year 1996. Specifically, we intend to provide funding to projects with existing commitments as follows:

- Provide $66.82 million (and $156.83 million in future funds) to the North Line Extension project in Atlanta, in accordance with the December 20, 1994 FFGA for this project;
- Provide $10.26 million to fulfill the November 1, 1994 FFGA for the light rail extensions in Baltimore;
- Provide $53.72 million (and $164.60 million in future funds) to the South Boston Piers project, under the FFGA issued for this project on November 5, 1994;
- Provide $8.00 million (and $112.00 million in future funds) to the Southwest Corridor project in Denver, under the May 9, 1996 FFGA;
- Provide $40.59 million (and $172.39 million in future funds) to the Houston/Regional Bus plan, according to the FFGA issued on December 30, 1994;
- Provide $158.86 million (and $816.92 million in future funds) to the Los Angeles/MOS3 project, including the initial segment of the East Central extension, in accordance with the FFGA as amended on December 28, 1994;
- Provide $50.00 million (and $31.48 million in future funds) to the MARC extension project to Frederick, Maryland, in accordance with the June 19, 1995 FFGA;
- Provide $105.53 million (and $26.26 million in future funds) to the Secaucus Transfer element of the Urban Core program of projects in New Jersey, in accordance with the December 6, 1994 FFGA for this project;
- Provide $35.02 million to complete the Queens Local/Express Connection in New York City and fulfill the February 10, 1994 FFGA for this project;
- Provide $121.19 million (and $75.63 million in future funds) to the Westside light rail extension to Hillsboro in Portland, in accordance with the December 21, 1994 FFGA for this project;
- Provide $35.00 million (and $170.36 million in future funds) to the South LRT extension in Salt Lake City in accordance with the August 2, 1995 FFGA;
- Provide $10.00 million (and $80.00 million in future funds) to the Tasman LRT project in the San Francisco Bay Area, under the existing Letter of Intent (LOI); and
- Provide $10.00 million (and $290.00 million in future funds) to the San Juan Tren Urbano project, under the FFGA issued on March 13, 1996.

In addition, we intend to fund the following four projects which are expected to have Federal funding commitments in place during calendar year 1996, as follows (future funds are estimated until negotiations are complete):

- Provide $10.00 million (and $505.00 million in future funds) to the HudsonBergen light rail element of the Urban Core program of projects in northern New Jersey;
- Provide $8.00 million (and $92.00 million in future funds) to the Sacramento light rail extension;
- Provide $51.07 million (and $633.55 million in future funds) to the extension of the BART system to San Francisco International Airport; and

- Provide $20.00 million (and $216.00 million in future funds) to the St. Clair extension of the St. Louis light rail system.

Table A-1: Financial Ratings: Capital Financing Commitments

Final Design	Medium	FTA considers the applicant to be in reasonably sound financial condition based upon the reviews outlined in FTA's Financial Capacity Circular.
		The applicant has committed or dedicated sufficient funds to cover the entire non-Federal share of the overall undertaking, including provision for contingent cost overruns.
	Low	FTA does not consider the applicant to be in reasonably sound financial condition.
		The applicant has not yet committed or dedicated sufficient funds to cover the entire non-Federal share of the overall undertaking, including provision forcontingent 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 adequatelocal 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.
System Planning and	High	FTA considers the implementing agency to be in reasonably sound financial and Other condition based upon the reviews outlined in

Other		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 stragey 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's capital finance plan or preliminary funding strategy that would be adequate to sucessfully undertake a major investment alternative. If a plan or strategy exists, a "low" rating may also be given where the region has previously demostrated an unwillingness to adopt new transit funding sources with the capacity that would be required to implement a new start.

Table A-2: Financial Ratings: Stable and Reliable Operating Revenue

Final Design	Medium	Dedicated transit funding sources are in place, or there has been a clear pattern of general appropriations from State or local governments, which regularly provide a balanced budget for the existing system.
		Existing transit facilities have been adequately maintained and replaced through continuing reinvestment in the system.
		Financial projections show that the applicant currently has adequate financial capacity to operate and maintain the locally preferred alternative, supporting feeder systems, other programmed projects, and other elements of its transit system under reasonably conservative assumptions.
	Low	Sources of local transit funding have not kept pace with costs. Financial conditions have led to a pattern of service level cuts to reduce operating costs.
		The applicant has a history of deferring capital replacement and/or routine maintenance.
		Financial projections show that the applicant does not currently have the financial capacity to operate the proposed project, supporting feeder system, 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.
System Planning and Other	High	Dedicated transit funding sources are in place, or there has been a clear pattern of general appropriations from State or local governments, which regularly provide a balanced budget for the existing system.
		Existing transit facilities have been adequately maintained and improved through continuing reinvestment in the system. Available evidence indicates that the applicant will be able to continue its maintenance and replacement program upon implementation of a major investment.
		Financial projections show that the applicant currently has ample financial capacity to operate a major new transit investment, including supporting feeder systems, as well as other programmed projects, and other elements of its transit system under reasonably conservative ridership and other assumptions.
	Medium	Dedicated transit funding sources are in place, or there has been a clear pattern of general appropriations from State or local governments, which regularly provide a balanced budget for the existing system.
		Existing transit facilities have been adequately maintained and replaced through continuing reinvestment in the system. Available evidence indicates that the applicant will be able to continue its maintenance and replacement program upon implementation of a major investment.

		The applicant is considered by FTA to have a realistic chance of adopting and implementing a financing plan which would provide adequate financial capacity to operate and maintain a fixed guideway alternative, including supporting feeder systems, other programmed projects, and other elements of its transit system under reasonably conservative ridership and other assumptions.
	Low	Sources of local transit funding have not kept pace with costs. Financial conditions have led to a pattern of service level cuts to reduce operating costs.
		The applicant has a history of deferring capital replacement and/or routine maintenance, or available evidence suggests that a major investment could lead to financial strains that could adversely impact maintenance and replacement programs.
		The region has demonstrated an unwillingness to adopt new transit funding sources with the capacity that would be required to operate and maintain a fixed guideway alternative, including supporting feeder systems, other programmed transit projects, and other elements of its transit system under reasonably conservative ridership and other assumptions.

Appendix A Listing 1

Greensboro Corridor

Atlanta, Georgia

(November 1, 1995)

Description	The Atlanta Regional Commission (ARC) is studying the feasibility of commuter rail between Greensboro and Atlanta. The corridor under study extends about 70 miles from Greensboro, Georgia to downtown Atlanta.
Status	Section 3035(rr) of ISTEA directed FTA to enter into a multiyear grant with the ARC for this study. To date, no funds have been appropriated for this study. In late 1995, the Georgia Department of Transportation completed a study of 12 potential commuter rail corridors around Atlanta. The study concluded that the Atlanta-Greensboro corridor was feasible for commuter rail service as far as Madison, Georgia, but that other lines were more attractive and should be advanced as part of the first phase of a two-phase implementation program. The Atlanta-Madison corridor is included in Phase 2.

Pedestrian Crossover

Altoona, Pennsylvania

(November 1, 1995)

Description	This proposed project is a pedestrian crossover at 14th Street in Altoona, Pennsylvania.
Status	Section 3035(ddd) of ISTEA directed 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 for this proposed project. The Pennsylvania Department of Transportation has committed to funding this project with highway funds. Design work is expected to commence by the end of 1995.

North Line Extension

Atlanta, Georgia

(November 1, 1995)

Description	The Metropolitan Atlanta Rapid Transit Authority (MARTA) is constructing a 1.9-mile, two-station extension of the North Line from just north of the Dunwoody Station to North Springs. The extension will connect with the North Line segment from Buckhead to Dunwoody, which is scheduled to open in June, 1996. The extension will serve the rapidly growing area north of Atlanta, including Perimeter Center and north Fulton County. The 1.9-mile extension and 28 rail vehicles are estimated to cost $381.3 million. Daily ridership on the rail extension in the year 2005 is estimated at 33,000 riders, including 11,000 new riders.
Status	Section 3035 (tt) of ISTEA directed FTA to negotiate and sign a multi-year grant agreement for North Line extension from Medical Center to North Springs. FTA awarded $92.17 million for final design and construction of the segment from Medical Center through the Dunwoody Station in FY1991 and 1992. An additional $317,600 was awarded in FY 1995. For the Dunwoody to North Springs segment, FTA awarded a grant for the final design and real estate acquisition in 1993. In December 1994, MARTA and FTA entered into a full funding grant agreement. Through fiscal year 1996, Congress has appropriated $81.36 million toward the $305.01 million Section 5309 share, which includes reobligations of $10.0 million from pre-ISTEA projects.

Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start FFGA Amount	$305.01	$81.36 million appropriated through FY 1996
Local: Regional Sales Tax	$76.30	N/A
TOTAL	**$381.31**	

Buckhead People Mover

Atlanta, Georgia

(November 1, 1995)

Description	The Atlanta Regional Commission (ARC), together with other interested parties, has studied the feasibility of constructing a people mover or similar circulator system in the Buckhead area of Atlanta, Georgia.
Status	Section 3035(s) of ISTEA directed FTA to enter into a multiyear grant agreement with ARC for $200,000 to complete a conceptual engineering study of the proposed system. The study was completed in 1994. The study recommended initial development of a bus circulator on a combination of surface streets and dedicated busway in the Buckhead area. The project would be designed so that it could be converted to a higher volume, fixed guideway people mover system in the future, should demand grow sufficiently. A further recommendation of the study was the enactment of a special taxing district in the service area in order to share capital and operating costs of the system. To date, no action has been taken by the public or private sectors to implement the study's recommendations. Capital costs for the bus circulator system were estimated at $20.4 million (1993). Operating and maintenance costs were estimated at $6.7 million per year (1993). Average daily ridership was estimated at 13,000.

Austin - Northwest/North Central Corridor

Austin, Texas

(November 1, 1995)

Description	Capital Metro has been studying bus and rail transit alternatives in the Northwest/North Central Corridor of Austin.
Status	During 1995, the Northwest/North Central Corridor study was incorporated into a new regional planning study. The study includes the northwest/northcentral area, access to the new Austin-Bergstrom International Airport, currently being constructed by the City of Austin with the assistance of the Federal Aviation Administration, and connections to employment and activity centers throughout the metropolitan area. The study area also includes central, east and south Austin, the University of Texas main campus, the State Capitol complex, and downtown.

	FTA is working with Capital Metro to prepare timeframes for completion of federal planning and project development requirements. Congress has not authorized or appropriated any funds for this new regional plan.

Baltimore Central LRT Extensions

Baltimore, Maryland

(November 1, 1995)

Description	The Mass Transit Administration (MTA) of Maryland is building three extensions of the central light rail transit (LRT) system in metropolitan Baltimore with FTA support. The extensions are: a 2-mile, 2-station branch off the LRT main line in Lithicum directly into the Baltimore-Washington International (BWI) Airport terminal; a 5-mile, 5-station extension from Timonium to Hunt Valley; and a quarter-mile, one-station spur off the main line into Pennsylvania Station where Amtrak northeast corridor trains and MARC commuter trains stop. The project is estimated to cost about $106.3 million (escalated dollars).
Status	ISTEA directed FTA to enter into a full funding grant agreement (FFGA) with MTA for the three LRT extensions, and MTA and FTA signed a FFGA in November 1994. The FFGA requires that, contingent upon appropriations, FTA provide MTA with $22.6 million in FY 1996 and $15.1 million in FY 1997 New Start funds. A total of $15.2M was appropriated in FY 1996, to which was added an additional $12.3 million in prior year funds reallocated from other New Starts. The project is being implemented using the design-build method, and is one of the projects participating in the FTA Turnkey Demonstration Program. ISTEA initiated this program to determine if the turnkey (design/build) approach will reduce implementation time and cost. All three extensions are under construction at varying stages. Construction is expected to be complete by February 1997 on all three extensions. Revenue operation for all three extensions is scheduled for May 1997.

Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start FFGA Amount	$84.90	$74.64 million provided through FY 1996
Local:	$21.44	N/A

TOTAL	**$106.34**

South Boston Piers Transitway - Phase II

Boston, Massachusetts

(November 1, 1995)

Description	The Massachusetts Bay Transportation Authority (MBTA) is building Phase I of an underground transitway connecting the MBTA's existing transit system with the South Boston Piers area, located on the fringe of downtown. Electric powered trackless trolleys will operate in the transitway tunnel and on limited surface routes in the eastern end of the Piers area. Phase I will connect South Station -- which is the terminus of the MBTA's south side commuter rail operations, the terminus of Amtrak's Northeast Corridor service, a major bus station, and a station on the MBTA's Red Line -- to the World Trade Center in the Piers area (see separate profile). Phase II would extend the transitway from South Station to Boylston Station on the Green Line, a distance of approximately one-half mile. Phase II is estimated to cost $300 million (escalated dollars).
Status	Section 3035(j) of ISTEA directed FTA to enter into a multiyear grant agreement with the MBTA for $278 million to carry out construction of the South Station to the World Trade Center segment of the transitway. In February 1993, the MBTA completed alternatives analysis and selected a 1.5-mile underground transit tunnel from Boylston Station to the World Trade Center combined with surface bus operations as the locally preferred alternative. The final environmental impact statement was completed in December 1993. In 1994, FTA signed a full funding grant agreement for $330.73 million (includes a contingent commitment for $53 million) with the MBTA for Phase I. Congress has not authorized or appropriated funds for Phase II. It is not expected that the State would proceed with Phase II construction until at least the year 2000, when Phase I opens for service. Phase II is scheduled to open in 2008.
Justification	**Mobility Improvements -** The MBTA analyzed two growth and development scenarios. The high growth scenario is based on development projections prepared for the Central Artery/Tunnel Project for the year 2010, while the

	lower growth scenario assumes that development projected for the year 2000 will not occur until 2010. In the lower growth scenario, Phase II is expected to save 2643 hours of travel time per day in 2010. The savings are projected to be 3734 hours per day in the high growth scenario. **Cost Effectiveness -** The cost effectiveness index for the Full-Build alternative (Phases I and II combined) is $10 in the lower growth scenario and $7 in the high growth scenario (1993 dollars, 2010 ridership). Information on Phase II alone is not available. **Environmental Benefits -** Metropolitan Boston is a "moderate" nonattainment area for carbon monoxide and a "serious" nonattainment area for ozone. Phase II is expected to reduce regional vehicle miles traveled by 25,000 per day in the lower growth scenario and 31,390 per day in the high growth scenario when compared to the No-Build alternative. **Operating Efficiencies -** The systemwide operating cost per passenger for the Full-Build alternative is $2.56 for the low growth scenario and $2.31 for the high growth scenario.
Local Financial Commitment	The MBTA is proposing a Section 5309 New Start funding share of 80 percent, with the local share to come from State bonds. The capital financing plan is rated "medium". The bonding mechanism is in place and the 20 percent local share is relatively small compared with the available bonding capacity. The MBTA has obtained the state funding needed for Phase I and it may be assumed that the financing for Phase II will be forthcoming. The stability and reliability of MBTA operating funds are also rated "medium". 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 1995, the average age of the MBTA's bus fleet is 11 years, substantially above the national average. The average age of the rail transit fleet is 14 years, and commuter rail equipment averages 8.2 years of age.
Other Factors	**Parking Policy -** Boston has established a cap on the number of parking spaces to be provided in downtown and the South Boston Piers area to reduce air pollution. The cap will promote transit ridership through more effective

	pricing of parking in the metropolitan area.

Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start FFGA Amount	$240.00	$0.0 million appropriated through FY 1996
Local:	$0.00	N/A
State:	$60.00	N/A
TOTAL	**$300.00**	

South Boston Piers Transitway - Phase I

Boston, Massachusetts

(November 1, 1995)

Description	The Massachusetts Bay Transportation Authority (MBTA) is developing an underground transitway connecting the MBTA's existing transit system with the South Boston Piers area. The Piers area, which is connected to Boston's central business district (CBD) by three local bridges, is slated for future development. Electric powered trackless trolleys or duel-mode vehicles will operate on the transitway and on limited surface routes in the eastern end of the Piers area. Phase I of the project, connecting South Station to the World Trade Center which is a distance of approximately one mile, is estimated to cost $413.4 million (escalated dollars). Daily transit trips to the Piers area is estimated to be 22,000 trips in the low growth scenario and 34,100 trips in the high growth scenario.
Status	Section 3035(j) of ISTEA directed FTA to enter into a multiyear grant agreement with the MBTA for $278 million. The MBTA completed alternatives analysis and selected a locally preferred alternative in February 1993. The final EIS was published in December 1993. The project has commenced with final design and construction activities. In November 1994, the FTA signed a full funding grant agreement with the MBTA for $330.73 million, which includes a contingent commitment for $53 million. The agreement covers final design and construction of Phase I. The project is expected to open for revenue service in December, 2000.

Source of Funds	Total Funding ($million)	Description
Federal:	$330.73	$112.41 million appropriated through FY 1996

Section 5309 New Start FFGA Amount		
Local:	$0.00	N/A
State: Bond Funds	$82.68	N/A
TOTAL	**$413.41**	

North Station - South Station Rail Link

Boston, Massachusetts

(November 1, 1995)

Description	The Massachusetts Bay Transportation Authority (MBTA) is studying transit options in the corridor between North Station and South Station in downtown Boston. The alternatives include various configurations of a rail tunnel which would permit through commuter rail trains to serve both downtown stations. (Current MBTA commuter rail service is split into two completely separate services, one serving North Station and one serving South Station.) A rail tunnel would also permit Amtrak to provide through-service to communities north of Boston. The rail tunnel, electrification, and rolling stock are estimated to cost $2 to $4 billion (escalated dollars).
Status	Section 3035(ii) of ISTEA directed FTA to conduct a feasibility study of a proposed rail link between North Station and South Station in Boston. Two alignments were studied: a Congress Street alignment and an alignment following the Central Artery. The FTA completed the study in early 1995. In FY 1992, $250,000 New Start funds were used to underwrite the study. The study assessed the costs and benefits of both tunnel alternatives. In 1993, the Central Artery Rail Link Task Force, under Massachusetts' Executive Office of Transportation and Construction (EOTC), studied a rail link in the Central Artery alignment and concluded that it would be feasible. The Task Force proposed that the Central Artery design be modified to create a "box" which would allow for the construction of a rail link at a later date when funding is available. These initial modifications are estimated to cost $100 million. Based on this study, Congress appropriated $4 million (in the FY 1993 Amtrak supplemental) to begin engineering. The MBTA is presently conducting a Major Investment Study (MIS), and a draft environmental impact statement (DEIS) is being prepared. The current study indicates that barrel tunnels along the Central Artery alignment would be a more cost effective design. This approach would

	reportedly reduce the needed design modification to the Central Artery highway project. The conceptual design and the Draft EIR/EIS/MIS are expected to be completed by the Summer of 1996.

Urban Ring

Boston, Massachusetts

(November 1, 1995)

Description	The Massachusetts Bay Transportation Authority (MBTA) is planning to conduct a Major Investment Study (MIS) of transit options for a circumferential corridor located just beyond the Boston central core. These alternatives would connect with existing commuter rail and transit lines and would generally follow the alignment of what had previously been a proposed inner belt highway. The alternatives being considered include rail service to new station stops on the existing radial system and enhanced local bus service. Initial cost estimates range from $20 million for the bus alternative to $1.4 billion (escalated dollars) for the full build alternative.
Status	An MIS will begin in the Winter of 1995/1996 and is expected to be completed early in 1998. The study will lead to the selection of a preferred alternative and a financing plan, and should produce the information FTA needs to evaluate the project as a potential candidate for discretionary funds. A local decision has been made to complete the MIS report, and at a later date complete the required environmental analysis. Several meetings of the MIS Working Group have been held. Feasibility studies were conducted in 1989 and 1993 and will serve as the basis for the MIS. A key element of this study will be land use and development planning in the circumferential corridor. Through FY 1995, Congress has appropriated $1.09 million for this study. A scoping meeting is scheduled for the first quarter of FY 1996 with consultant selection to be made during the second quarter.

Burlington to Charlotte Corridor

Burlington, Vermont

(November 1, 1995)

Description	The Vermont Agency on Transportation (VAOT) is considering transportation improvements in the 12-mile corridor between Burlington and Charlotte. Options considered include: do nothing, widening Shelburne Road (U.S. 7) to 4 lanes with the addition of a turning lane for 3.7 miles between Shelburne and South Burlington, hourly commuter rail service on the Vermont Railway right-of-way, express bus service serving the same stations/park and ride locations and an enhanced bus option. The commuter rail improvements in this corridor will require upgrades to the Vermont Railway including track, signal, at grade crossing and drainage improvements. The terminus in Charlotte will be located near Ferry Road. In Burlington, the terminus would be the newly developed Main Street Landing/Union Station site. The project will include the construction of three stations, in addition to Union Station, with park-and-ride lots and integrated feeder bus service. The VAOT estimates the cost of the commuter rail alternative to be $7.7 million (in 1995 dollars).
Status	A Major Investment Study (MIS) has been completed and a public hearing on the preferred alternative has been held. The preferred alternative is a combination of highway improvements, passenger rail and enhanced bus service. The study includes a financing plan which identifies a capital local match and funding for ongoing passenger operations. The MIS identifies the total cost per passenger for the commuter rail component as $7.77 relative to the TSM option. The Environmental Assessment is currently being finalized. Discretionary funds have been allocated in the amount of $5.58 million for rail improvements in this corridor in FY 1996 and the State of Vermont has committed the local match and STP transfer funds to make up the balance for the $7.7 million project.

Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start FFGA Amount	$5.58	$5.58 million appropriated through FY 1996
Flexible Funds	$0.70	N/A
Local:	$0.00	N/A
State: Bond Funds	$1.40	N/A

TOTAL	**$7.68**

Burlington to Essex Corridor

Burlington, Vermont

(November 1, 1995)

Description	The Vermont Agency on Transportation (VAOT) is considering transportation improvements in the 8-mile corridor between Burlington and Essex. The commuter rail improvements in this corridor would include track, tunnel, signal, at grade crossing and drainage improvements. In Burlington, the terminus would be the newly developed Main Street Landing/Union Station site. Hourly commuter rail service would be provided on the New England Central Railway right-of-way. The project would include the construction of two stations, in addition to the renovation of the current Amtrak station in Essex Junction, with park-and-ride lots and integrated feeder bus service. The VAOT estimates the cost of commuter rail in the Essex-Burlington corridor to be $9 million (1995 dollars).
Status	A preliminary analysis of the Essex-Burlington corridor was included in the "Vermont Rail Feasibility Study" undertaken in 1993. Presently the State of Vermont, in conjunction with the Chittenden County MPO, intends to undertake an Environmental Assessment and detailed feasibility study, including operations planning, financial planning, detailed ridership projections, track and tunnel engineering and relate work. Results of these detailed analyses are expected in the spring and summer of 1996, at which time a go/no-go decision is expected.

Charlotte Priority Corridor

Charlotte, North Carolina

(November 1, 1995)

Description	The City of Charlotte is considering high-capacity rail and other transit alternatives in several corridors.
Status	Section 3035(r) of ISTEA directed 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 completed a system planning study which examined alternative bus and rail technologies for each of eight different corridors in a radial pattern from the Charlotte central business district. The study recommends proceeding with more detailed planning analysis in the Airport, Pineville, and Matthews corridors. The next planning step would be a Major Investment Study (MIS) in one or more corridors to evaluate alternatives for addressing current and future transportation problems. No action has been taken to date by the city to initiate a MIS effort in the corridors.

Central Area Circulator

Chicago, Illinois

(November 1, 1995)

Description	The Chicago Central Area Circulator (CAC) project was planned as a multi-legged light rail transit system within downtown Chicago. The cost of constructing the entire light rail project was estimated to be $775 million (escalated dollars). Ridership was projected to be about 103,400 trips per day.
Status	Section 3035(e) of the ISTEA directed FTA to enter into a multiyear grant agreement with the City of Chicago for $260 million to carry out construction of the locally preferred alternative. Through FY 1996, Congress appropriated $116.23 million for preliminary engineering, final design, and construction. One third the capital cost of the system was proposed to come from the Section 5309 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. However, the Illinois General Assembly and the Congress did not provide continued funding for the project in FY 1996. On October 24, 1995, the Executive Board of the CAC voted unanimously to recommend to the mayor and the city council the termination of the project. On October 26, 1995, city staff notified FTA that the project had been terminated. A letter confirming this decision will be sent by the city. FTA will be working with

	the city to close out the project.

Cincinnati Northeast Corridor

Cincinnati, Ohio

(November 1, 1995)

Description	The corridor extends from the Cincinnati/Northern Kentucky International Airport through downtown Cincinnati to Paramount's Kings Island Amusement Park in Warren County, Ohio. This 33-mile corridor paralleling I-71 generally runs in a northeasterly direction, and so is referred to as the Northeast Corridor. Alternatives being considered include No Build, TSM, light rail, busway, HOV lanes, and a highway alternative. The capital cost of the rail alternative, based on earlier system level planning, is $800 million.
Status	The Ohio-Kentucky-Indiana Regional Council of Governments (the MPO) is conducting a Major Investment Study (MIS) for this corridor. The first phase of the public involvement and scoping process is complete and the range of alternatives has been reduced. A second round of public involvement and scoping meetings are getting underway. This phase of the study is expected to be completed in June 1997. For FY 1994 through 1996, Congress appropriated $3.5 million for the corridor.

Red Line Relocation, Dual Hub Corridor

Cleveland, Ohio

(November 1, 1995)

Description	The Dual Hub corridor connects two major employment centers, downtown Cleveland and University Circle, which are about 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 of downtown. 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. A locally preferred alternative is expected to be selected by the end of 1995.
Status	Section 3035(t) of ISTEA directed FTA to negotiate and sign a multiyear grant agreement with Greater Cleveland Regional Transit Authority (GCRTA) to complete the alternatives analysis. Through FY 1996, Congress has appropriated $8.7 million in New Start funds for the project. In July 1995, Congress rescinded $3.2 million reducing the total amount of funds available to $5.5 million. GCRTA is using a tiered approach to project decision making. A draft environmental impact statement (EIS) was prepared to help narrow the large number of rail alignment alternatives. In the second phase of the alternatives analysis, GCRTA has improved its travel demand models, ridership estimates, and cost estimates. This new information has been documented and made public in a report evaluating the No-Build, the best TSM alternative, and the rail alternatives surviving the evaluation of the original draft EIS. GCRTA and the Northeast Ohio Areawide Coordinating Agency (the MPO) are expected to select a locally preferred alternative prior to the end of 1995.

Highland Hills Corridor

Cleveland, Ohio

(November 1, 1995)

Description	The corridor extends from the terminus of Cleveland's Blue line (at the intersection of Van Aken Boulevard and Warrensville Center Road in Shaker Heights) to Highland Hills.
Status	Section 3035(zz) of ISTEA directed 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. Possible transportation improvements for the corridor are being considered in the system planning phase. One alternative is the extension of the Blue Line.

Northeast Ohio Commuter Rail Feasibility Study

Cleveland, Ohio

(November 1, 1995)

Description	This proposal involves commuter rail service to connect urban and suburban areas of northeastern Ohio.
Status	Section 3035(w) of ISTEA directed FTA to sign a multiyear grant agreement with the Northeast Ohio Areawide Coordinating Agency (NOACA) in the amount of $1.6 million for a commuter rail feasibility study. The Northeast Ohio Areawide Coordinating Agency has received a grant for $800,000 and has begun work on Phase I of the study. In this phase, NOACA is looking at existing and proposed land use patterns and impacts, preliminary ridership estimates, preliminary cost estimates, and will select potential commuter rail corridors in the Cleveland, Ohio area for further study. The first phase of study is expected to be completed in mid-1996. Phase II, if funds are made available, will complete the analysis by assessing economic and environmental implications of a commuter rail system, as well as other transportation modes available to meet anticipated travel demand. Phase II would also include preliminary design, cost and integration with existing transit services.

North Central Corridor

Dallas, Texas

(November 1, 1995)

Description	Dallas Area Rapid Transit (DART) plans to build a North Central Corridor LRT extension beyond the Park Lane Station of their starter system, which is currently under construction. The project is 11.4 miles long with 6 stations, terminating in Plano. The southern 6.8 miles, from Park Lane to the Richardson Transit Center, would be double tracked. The northern 5.5 miles would be single tracked with limited station development. DART estimates that over 11,000 daily riders will use this extension in 2010. The project is estimated to cost $354.3 million (escalated dollars).
Status	DART completed a Major Investment Study and selected a preferred alternative in 1994. The project is included in the regionally adopted metropolitan transportation plan and transportation improvement program which are in conformance with the state implementation plan for air quality. The project is now in the preliminary engineering phase. A draft EIS should be ready for circulation in the Summer of 1996.

	There is no ISTEA authorization for this project. Through FY 1996, Congress has appropriated $5.4 million.
Justification	**Mobility Improvements -** The LRT extension is estimated to save 3,619 hours of travel time daily (compared with a TSM alternative). Approximately 3,800 new daily riders are expected to be attracted by the line. **Cost Effectiveness -** The cost effectiveness index is $9 per new trip. **Environmental Benefits -** Dallas/Ft. Worth is classified as a "moderate" nonattainment area for ozone. It is estimated that the project would reduce regional pollution emissions by 0.7 tons per day. **Operating Efficiencies -** Systemwide operating cost per passenger for the no-build alternative is $2.88, for the TSM alternative is $2.99, and for the LPA alternative is $2.89.
Local Financial Commitment	DART is requesting a 50 percent Federal share for the project, or $177.2 million. The local share would come from an existing 1 percent sales tax dedicated to DART. The agency is authorized to issue short-term notes of 5 years or less. The North Central project is part of a 20-year, $5.6 billion transit capital program adopted in 1989. For the total program, DART plans to seek $1.05 billion in Federal funds from the Section 5309, Section 5307, and CMAQ programs. The capital finance plan is rated "high". Overall, DART presents a sound financial plan for supporting its capital expansion program. Projected growth in sales tax proceeds appears reasonable, if slightly above recent trends. With DART's decrease in total debt issuance and overall financial stability, the debt financing component of the financial plan appears sound. The stability and reliability of operating funds are rated "low-medium". Projected increases in operating costs are consistent with the planned system expansion. The sales tax is projected to provide 74 percent of capital and operating revenues. The assumed growth in sales tax receipts slightly exceeds recent trends but appears reasonable. DART's financial capability is highly dependent on the growth in sales tax receipts, and the agency could experience financial difficulty if the assumed growth rates are not achieved. Farebox and other operating revenues are projected to grow more rapidly than operating costs, and much more rapidly than recent trends. In 1995, DART's bus fleet averaged 9.5 years old, which is slightly higher than the national average.

Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start FFGA Amount	$177.20	$5.44 million appropriated through FY 1996
Local:	$177.20	N/A
TOTAL	**$354.40**	

Woodward Corridor

Detroit, Michigan

(November 1, 1995)

Description	The Woodward Corridor extends for a distance of about 14 miles northwest from the Detroit CBD. Portions of the corridor are within the Federally designated Empowerment Zone. The area has been advanced as a possible light rail corridor with the possibility of a busway as an interim alternative. There is no current cost estimate or ridership forecast. In the early 1980's, when planning for this proposal was suspended, a LRT project for the corridor had a construction cost estimate of $1.4 billion.
Status	Section 3035(m) of ISTEA directed 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 (PE) for LRT in the Woodward Corridor. The project became inactive in 1985 due to a lack of funding. In June 1995, the metropolitan Detroit tri-counties of Wayne, Oakland and Macomb passed the first county-wide dedicated funding initiative to support suburban transit services. The City of Detroit continues to subsidize public transit through its General Fund contributions averaging approximately $27 million in recent years. Detroit has applied for a grant to review the previous alternatives analysis and PE and to prepare a work scope for necessary updates. Local reviews of literature focusing on busways has resulted in the consideration of busways as an interim transit mode due to cost and flexibility. Additional analysis of capital and operating perspectives will be conducted. The City of Detroit has recently received favorable funding action by the State

	of Michigan in support of a new sports/entertainment stadium complex in the Woodward corridor. The City of Detroit and private sector representatives have announced agreement to construct the new sports/entertainment complex. The development of this project and the continued growth of the adjacent theatre district and housing is expected to generate significant job growth, economic development and transportation needs for the near future. As a result of these new conditions much of the information developed in the earlier studies will need to be modified to include busway analysis as an alternative interim proposal when project planning is resumed.

RAILTRAN Phase 2

Dallas-Ft. Worth, Texas

(November 1, 1995)

Description	The RAILTRAN project will provide commuter rail service between Dallas and Fort Worth. Phase 1 will provide 10 miles of service between Dallas and South Irving. Phase 2, the subject of this profile, would provide an additional 25 miles of service between South Irving and Fort Worth. Phase 2 also includes the Fort Worth Intermodal Transportation Center. Phase 2 is estimated to carry about 10,200 riders a day and to cost $129.01 million. Phase 3 would ultimately extend service to Dallas-Fort Worth International Airport.
Status	In 1984, the RAILTRAN right-of-way between Dallas and Fort Worth was purchased with FTA assistance as directed by Congress. Since then the Union Pacific and Burlington Northern have been operating freight service on the tracks. Section 3035(x) of ISTEA directed FTA to negotiate and sign a multiyear grant agreement with the cities of Dallas and Fort Worth in the amount of $5.7 million for preliminary engineering and construction of improvements to the Dallas/Fort Worth RAILTRAN System. In FYs 1992 through 1996, Congress appropriated $11.4 million for this project. FTA has obligated $2.5 million of the earmarked funds for preliminary engineering. The Fort Worth Transportation Authority (FWTA) and Dallas Area Rapid Transit (DART) have signed an agreement on the construction, operation and financing of the RAILTRAN service. Phase 1 is expected to open in the Fall of 1996. Phase 2 is scheduled to open in July 1999.

	Final design and land acquisition for the Intermodal Transportation Center were approved September 1995. The project is included in the MPO's adopted metropolitan transportation plan and transportation improvement program, both of which are in conformance with the state implementation plan for air quality.
Justification	**Mobility Improvements -** RAILTRAN project would provide commuter rail service to the downtowns of Dallas and Fort Worth and the cities in between. Phase 2 is expected to save approximately 730 hours of travel time per day compared with the TSM alternative. **Cost Effectiveness -** The cost effectiveness index is $8 per new rider (1995 dollars, year 2010 riders). **Environmental Benefits -** Dallas/Fort Worth is a "moderate" non-attainment area for ozone and an attainment area for carbon monoxide. It is estimated that the project would reduce regional pollution emissions by 136 tons per year for carbon monoxide, 30 tons per year for hydrocarbons, and 38 tons per year for nitrogen oxide. **Operating Efficiencies -**. In the Dallas-Fort Worth corridor alone, the operating costs per passenger are estimated to be $3.24 for the TSM alternative and $2.93 for the commuter rail alternative. FTA has no information on the systemwide operating efficiencies that would result from this project.
Local Financial Commitment	Phase 1 of the project was fully funded with local, Section 5307 and CMAQ funds. No Section 5309 New Start funds were involved. The capital funding plan for Phase 2 assumes a 46 percent Section 5309 New Start share. Other Federal funds would come from the Section 5307, CMAQ, Highway Demonstration, and STP Enhancement programs. Funds from a dedicated sales tax and other local revenues constitute 23 percent of the financial plan. The capital finance plan is rated "medium". The local sales tax funds and other local revenues are already dedicated to the project. Cash reserves are available to fund the local match. The stability and reliability of the operating plan is rated "low-medium". The

	plan assumes that operating and maintenance costs will grow more slowly than past trends at a time when new service is being introduced. The projected farebox recovery ratio of 50 percent seems high compared with other U.S. commuter rail operations. In 1994, the average age of the FWTA's bus fleet was 9.5, which is sligthly above the national average.

Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start FFGA Amount	$58.80	$11.39 million appropriated through FY 1996
Flexible Funds	$18.80	N/A
Local:	$30.30	N/A
State: Bond Funds	$21.10	N/A
TOTAL	**$129.00**	

Southwest LRT

Denver, Colorado

(April 1, 1996)

Description	The Regional Transportation District (RTD) is developing an 8.7-mile light rail transit (LRT) extension from the I-25/Broadway interchange in Denver to Mineral Avenue in Littleton. The double-track system will operate over an exclusive, grade-separated right-of-way and connect with the existing 5.3-mile Central Corridor light rail line, which was constructed entirely with local funds and opened in October 1994. The capital cost for the project is $177.4 million (escalated dollars). This estimate includes local costs already incurred by RTD for right-of-way acquisition, a portion of an existing LRT maintenance and storage facility, Southwest transit improvements, and preliminary engineering, as well as new costs for final design, construction, and the acquisition of rolling stock. RTD estimates that the proposed line will carry 8,400 passengers per day in the year 2000 (opening year) and 22,000 passengers per day in 2015.
Status	RTD has completed preliminary engineering. The draft EIS was circulated during 1995 and the final EIS was approved in February, 1996. The Record of Decision (ROD) was issued in March, 1996. The project is included in the MPO's transportation plan and transportation improvement program.

	The RTD Board recently authorized approximately $3 million in local and $900,000 in Section 5307 funds to conduct final design of the project. Congress has not authorized or appropriated any funds for this project.
Justification	**Mobility Improvements -** The project will reduce transit travel time between Littleton and downtown Denver from 44 minutes to 25 minutes in the year 2015, a savings of 43 percent. The total travel time savings will be 2,700 hours per day in 2015. **Cost Effectiveness -** The cost effectiveness index is $3.00 per new rider (1995 dollars, 2015 ridership). **Environmental Benefits -** Denver is classified as a "transitional" nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. The project would reduce vehicle miles traveled by 33,300 per day, compared with the no build alternative. **Operating Efficiencies -** For the Southwest Corridor alone, the operating and maintenance cost is estimated to be $0.70 per passenger with LRT, $1.40 per passenger for the TSM alternative, and $1.20 per passenger for the no build alternative. Comparable values for the entire RTD system are not currently available.
Local Financial Commitment	RTD is considering four funding scenarios. One scenario involves an 80 percent Section 5309 New Start share. Under another scenario, the Section 5309 New Start share would be reduced and replaced with flexible STP/CMAQ funds. In either case, much of the local share would be derived from RTD's 0.6 percent dedicated sales and use tax. RTD also will seek credit for the costs it has already incurred to purchase the right-of-way, construct part of the existing LRT maintenance facility, preserve a transit envelope along Southwest corridor, and final engineer for the project. It is noteworthy that the existing 5.3-mile Central Corridor was all locally funded. If the existing segment were included in the financial analysis, the federal share of the entire line would be 46 percent. RTD's capital financing plan is rated "high". The agency has $26 million set aside for the project in its fixed guideway capital reserve, and the value of RTD's in-kind contributions approaches $20 million. Thus, the entire local share is currently in place. RTD also has significant debt capacity and debt service coverage that could be tapped if necessary.

	The stability and reliability of RTD's operating funds are rated "medium". Projections of sales tax revenue growth are consistent with trend data. It is anticipated that RTD will be able to operate a major investment and continue operating its existing system. In 1994, the average age of RTD's bus fleet was 7.1 years old, which is lower than the national average. LRT vehicles currently used in the Central Corridor line are 1 year old.

Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start FFGA Amount	$120.00	$0.0 million appropriated through FY 1996
Section 5307	$0.90	N/A
Local: RTD Sales and Use Tax and in-kind contributions	$56.50	N/A
TOTAL	**$177.40**	

Dulles Corridor

Washington, D.C. Metropolitan Area

(November 1, 1995)

Description	The Virginia Department of Rail and Public Transportation (VDRPT) is studying several transportation options in the Dulles corridor. The corridor extends from the West Falls Church Metrorail Station to Dulles International Airport and continuing into Loudoun County. Currently, shuttle bus service is provided from this station to the airport on an exclusive airport access highway at a fare of $7.00 one way. There is also a significant level of local and express bus service in the corridor. The alternatives being considered include various rail technologies and alignments, a no-build alternative, and a TSM alternative. A rail alternative to the airport is estimated to have a capital cost of more than $1 billion.
Status	Section 3035(aaa) of ISTEA directed 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. FTA provided a grant for $500,000 in February 1995. An additional $500,000 was appropriated for this work in FY 1996. VDRPT is conducting a Major Investment Study (MIS). The MIS will generate

	information on the mobility improvements, cost effectiveness, environmental benefits, and operating efficiencies associated with each alternative. The study is expected to be completed in March 1996, at which time a preferred alternative and funding plan will be selected. Studies of transit alternatives have previously been performed with FTA sponsorship. Based on these studies, Fairfax County is implementing a bus system consisting of park-and-ride lots, bus stations, and express bus routes on planned, but not yet implemented, HOV lanes. These improvements, coupled with increased bus service if sufficient operating funds can be found, would help develop a transit market in the corridor. In addition, the park-and-ride lots would preserve critical rights-of-way for stations on any eventual rail line in the corridor. Through FY 1995, Congress has appropriated $16 million in discretionary bus funds for the Dulles corridor bus program and Herndon area park and ride lots. This supplements $18.4 million, which was granted in FY 1991.

Appendix A Listing 2

South Corridor

Sacramento, California

(April 1, 1996)

Description	The Sacramento Regional Transit District (RT) is developing an 11.3-mile light rail project on the Union Pacific right-of-way in the South Sacramento Corridor. RT has elected to phase the project to maximize the use of available state and local capital funds and to correspond with available operating funds. Phase 1, known as the Interim Operable Segment (IOS), consists of a 6.3-mile segment of the full project. The segment would operate between downtown Sacramento and Meadowview Road and has been forecast to carry 25,000 passengers per day in the year 2015. The estimated capital cost of the IOS is $220.3 million (escalated dollars). Phase 2 is estimated to cost an additional $222 million (1995 dollars).
Status	Section 3035(xx) of ISTEA directed FTA to enter into a multiyear grant agreement with RT for $26 million to provide for the completion of alternatives analysis, preliminary engineering, and final design. Of that amount, $3.96 million was appropriated through fiscal year 1996. The Major Investment Study/Alternatives Analysis/Draft EIS was completed in September 1994. RT selected its preferred alternative in January 1995. Phase 1 was defined in August 1995, and RT expects to complete preliminary engineering and a final EIS on Phase 1 in Spring 1996. RT is currently funding preliminary engineering and the final EIS with $3.8 million in local dollars.The full project is shown in the most recent Sacramento Area of Council of Governments (SACOG) Long Range 20 Year Plan. RT expects to begin preliminary engineering for Phase 2 as soon as additional operating funds can be secured. A one cent state gas tax is to be voted on in 1998.
Justification	**Mobility Improvements -** Population, employment and person trips in the Sacramento area are expected to increase significantly in the next twenty years, with the South corridor expected to grow at rates higher than the regional averages. This is projected to result in substantial deterioration in the levels of service on the two north-south freeways in the corridor, I-5 and State Highway 99. Phase 1 of the project is forecast to attract as many as 4,585 new daily riders to transit, and save 2,688 daily hours of transit travel time over the

	TSM alternative. **Cost Effectiveness -** The cost-effectiveness index for the full project is $1 per new rider. The cost-effectiveness index for Phase 1 is $6 per new rider. **Environmental Benefits -** Sacramento has recently changed from a "serious" to a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. The IOS would reduce daily automobile trips by 3,779 and the full build would reduce auto trips by 6,651 per day (compared with the TSM alternative). **Operating Efficiencies -** The IOS will improve the operating cost per passenger from $1.86 to $1.80, compared to the TSM alternative.
Local Financial Commitment	For Phase 1, RT intends to request 44 percent funding from the Section 5309 New Start program. State sources, derived from Proposition 108 and 116 bond funds, would contribute 39 percent. Measure A sales tax revenues, Local Transportation Fund proceeds, developer fees and other revenues would cover 17 percent. While RT does not propose to use STP or CMAQ funds for this project, it does plan to use $127 million in flexible funds for other transit needs. The capital finance plan for Phase 1 is rated "high". The Proposition 108 and 116 state funds appear secure as a funding program and, in particular, as a funding source to this project. The funding risk appears low. The Measure A local sales tax is in place. The plan appears to be able to cover lower than expected growth rates as demonstrated in sensitivity analyses for each of the major funding sources. The stability and reliability of operating support are rated "medium-high". Funding sources to operate the system are in place through 2008. Operating cost and revenue projections seem reasonable in comparison with trends. Overall, the plan appears to be able to cover unanticipated revenue shortfalls. In 1994, the average age of RT's bus fleet was 4.7 years old, which is better than the national average.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$104.00	$3.96 million appropriated through FY 1996

State/Local:	$116.30	N/A
TOTAL	**$220.30**	

Other Factors - Adjacent to the City College station, a specific land use plan is being developed for the City College and Union Pacific Railyards. If the Union Pacific ceases operation at these rail yards, they plan to build a pedestrian and transit oriented mixed used development. Additional developments are to take place at the Franklin Boulevard and the Broadway Stations. RT is currently working with local developers on a joint development project at the Power Inn Station on the existing Folsom Line.

BART to San Francisco International Airport

San Francisco, California

(April 1, 1995)

Description	The Bay Area Rapid Transit (BART), in conjunction with the San Mateo County Transit District (SamTrans), plans to build a 7.5-mile, 4-station BART extension from Colma Station to Millbrae with an aerial station at the planned International Terminal at San Francisco International Airport. The LPA is estimated to cost $1.110 million (escalated dollars). Ridership is projected to be 69,000 trips per day by 2010.
Status	Section 3032(c) of ISTEA directed FTA to approve the construction of the locally preferred alternative for the BART San Francisco Airport Extension, including Phase 1a to Colma and Phase 1b to San Francisco International Airport. Section 3032(c)(2) mandated the execution of a multiyear grant agreement with BART to permit expenditure of funds for the construction of the BART-SFO Extension. An Alternatives Analysis/Draft EIS/EIR was completed in 1992, resulting in a locally preferred alternative. New alignments were later evaluated and, in April 1995, BART and SamTrans revised the preferred alternative. Due to MTC and congressional direction to evaluate lower cost options, an aerial design option to the tunnel alignment into the Airport was evaluated in a Focused Recirculated DEIR/Supplemental #2 DEIS. The final EIS is scheduled for completion in May/June 1996, and a ROD could be issued by July 1996. The BART-SFO project is one of the projects participating in the FTA Turnkey Demonstration Program. ISTEA initiated this program to determine if the turnkey (design/build) approach will reduce implementation time and cost.

	Through FY 1996, $215.3 million of the $512.8 million of Section 5309 New Start funds (authorized by ISTEA FY 1992-97) has been appropriated for the San Francisco Bay Area and allocated by the MTC among the Colma BART extension, the BART-SFO project, and the Tasman LRT project. In accordance with the regional Memorandum of Understanding executed in December 1993, the affected agencies are currently working with MTC to determine future allocations. The Colma BART extension opened for revenue service in February 1996, and the Bay Area authorities hope to obtain a contingent commitment that would allow both the Airport and Tasman projects to proceed in late 1996.
Justification	The BART-SFO Extension is exempt from the Section 5309(e) new start criteria because the Section 5309 New Start share of the regional rail program is less than 33 percent. **Mobility Improvements -** The BART extension to the Airport would improve transit access from San Francisco and the East Bay to the Airport and would also improve transit service along the Peninsula to San Francisco. The project would increase transit ridership on BART and CalTrain and increase regional transit ridership by 23,300 over the No-Build in 2010 and 13,600 over the TSM. Daily travel time savings would be 6,900 hours over the TSM. **Cost Effectiveness -** The cost effectiveness index is $20 new transit rider. **Environmental Benefits -** The Bay Area has been redesignated as an attainment area for ozone. The project would reduce daily vehicle miles traveled (VMT) by 485,000 in year 2010 versus the No-Build Alternative. Carbon monoxide emissions would be reduced by 1,235 tons per year. The project would remove 10.5 acres of wetlands and upland habitat of threatened and endangered species. Mitigation measures are being developed in coordination with Federal and state resource agencies. **Operating Efficiencies -** The systemwide operating cost per passenger is estimated to be $2.51 for the No-Build, $2.52 for the TSM and $2.56 for the BART Extension in 2010.
Local Financial Commitment	A regional financing agreement has tied this project to other fixed guideway projects in the Bay Area. The plan calls for 100 percent local funding of East

	Bay projects and 75 percent Section 5309 funding for this project, resulting in a 27 percent Section 5309 funding share of the region's fixed guideway extension program. The non-Federal funding would come from the local and state sources noted below. Although state bonding referendums failed in 1992 and 1994, the BART extension money included in the referendums has been replaced by other state funds. The capital finance plan is rated "medium". More than half of the non-Federal funds are in place and the remaining sources have been identified. SamTrans has committed $99 million pursuant to a 1990 agreement with BART. There is $98 million in state gasoline sales tax funds committed to the project. An additional $10 million in state rail transit bond revenues was approved for the project in 1990. Pursuant to a 1989 toll increase on Bay Area bridges, the MTC has $10 million available for the project. The Mayor of San Francisco has directed the San Francisco Airports Commission to define mechanisms by which the Airport could financially participate. The project funding plan assumes that the Airports Commission will contribute up to $200 million. The final financial plan will be included in the final EIR/EIS. The stability and reliability of operating assistance are rated "medium." BART and SamTrans derive operating revenues from a 0.5 percent dedicated transaction and use tax and from fare revenue. BART also has a dedicated property tax. SamTrans and BART appear to have the ability to fund system operations under expanding economic conditions. BART's projections of sales tax revenue growth seem conservative in comparison with trend data. The financial plan assumes substantial fare increases in 1996 and 1997. In 1994, the average age of SamTrans bus fleet was 4 years, which is better than the national average of 8.3 years. BART's rail vehicles averaged 16.7 years old.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$750.00	$65.38 million appropriated through FY 1996
Airport Commission	$200.00	up to $200.00 million
State/Local:	$160.00	N/A
TOTAL	**$1110.00**	

Note: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

South LRT

Salt Lake City, Utah

(November 1, 1995)

Description	The Utah Transit Authority (UTA) is implementing a 15-mile light rail transit (LRT) line from downtown Salt Lake City parallel to I-15 and State Street to suburban areas to the south. The LRT line will operate at-grade on city streets in downtown Salt Lake City (two miles) and in a railroad right-of-way (13 miles) owned by UTA to the suburban community of Sandy. The total cost of this project, including a maintenance facility, vehicles, stations, park-and-ride centers, and finance costs is estimated at $312.50 million. The LRT project is part of Interstate 15 corridor improvements which include reconstruction of a parallel segment of I-15. The project is estimated to carry 14,000 passengers per day in the year 2000 (opening year) and 23,000 passengers per day in 2010.
Status	Section 3035(f) of ISTEA directed FTA to enter into a multiyear grant agreement with UTA which provides $131 million in New Start funds to carry out the construction of the project. Through FY 1996, Congress has appropriated $38.60 million (including $15.52 million in funds from fiscal years prior to ISTEA) for right-of-way acquisition, engineering, design and construction. Preliminary engineering has been completed. FTA issued the final Environmental Impact Statement in September 1994 and signed the record of decision in November 1994. UTA and FTA entered into a full funding grant agreement (FFGA) in August 1995. The FFGA calls for $35.00 million in Section 5309 new start funds in FY 1997. Final design is currently underway with an estimated completion date of January 1997.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$237.40	$32.04 million appropriated through FY 1996
Section 5309 Bus	$4.00	N/A
Local:	$71.10	N/A
TOTAL	**$312.50**	

Santa Monica Boulevard Transit Parkway

Los Angeles, California

(November 1, 1995)

Description	The Los Angeles County Metropolitan Transportation Authority (MTA) is studying a section of Santa Monica Boulevard (SR-2) between the San Diego Freeway (I-405) and Moreno Drive, the boundary line between the cities of Los Angeles and Beverly Hills. The purpose of the study is to develop a multi-modal corridor, including improved operational efficiency of the roadway, priority treatments to improve bus transit flow, improved aesthetics, a bikeway and parkway, increased safety, and the preservation of the right-of-way for future rail improvements in the Santa Monica Boulevard corridor. The MTA has developed a project alternative with an estimated cost of $69.1 million.
Status	Section 3035 (eee) of ISTEA directed FTA to enter into a multiyear grant agreement with MTA for $15 million. The agreement would cover the construction of the initial 2.2-mile segment. These funds have not yet been appropriated. An additional $8.9 million was authorized in Section 1108 of ISTEA. In April 1994, the MTA analyzed conceptual alternatives for transportation improvements in the larger Santa Monica Boulevard Corridor, between the 405 and 101 freeways. The Corridor Study recommended the Santa Monica Boulevard Transit Parkway as a near-term improvement. The MTA subsequently prepared a Project Study Report (PSR) for the project, which was approved by Caltrans in October 1994. The PSR outlined a 10-lane, one-way couplet project concept, which included dedicated bus transit lanes and a landscaped bikeway. The creation of a grand boulevard composed of two one-way roadways, incorporating neighborhood protections, neighborhood access, on-street parking, and possibly a frontage road, would resolve the queuing limitations, improve safety of the two roadways, and provide a more efficient facility. In June 1995, the Major Investment Study (MIS) Review Committee determined that an MIS is required for this project area. The MTA is currently in the consultant selection process to perform an MIS. As requested by the MIS Review Committee, the MIS will study additional alternatives, including alternatives with fewer lanes, different frontage road configurations, and with and without bus-only or HOV lanes. Upon completion of the MIS, the MTA will prepare a Caltrans Project Report.

Tren Urbano

San Juan, Puerto Rico

(April 1, 1995)

Description	The Puerto Rico Department of Transportation and Public Works (DTPW), through its Highway and Transportation Authority (HTA), will build a 10.4-mile (17.3-km) double-track guideway between Bayamon Centro and the Sagrado Corazon area of Santurce in San Juan. Approximately 40 percent of the alignment is at or near grade. The remainder, aside from a short below-grade section in the Centro Medico area and underground through Rio Piedras, is generally elevated above roadway rights-of way. The project includes 14 stations and a vehicle and trackway maintenance/storage facility. The alignment allows for the future addition of two stations if deemed necessary, one in Rio Piedras and one in Hato Rey. The project is estimated to cost $1.11 billion (year of expenditure dollars) and is expected to carry 114,000 riders per day in 2010.
Description	In 1993, FTA selected Tren Urbano as one of four turnkey demonstration projects. The Tren Urbano project will be constructed and operated under a turnkey procurement policy in order to expedite the implementation of the project and to develop the necessary institutional capability to operate Tren Urbano. ISTEA initiated this program to determine if the turnkey (design/build) approach will reduce implementation time and cost. The project is in the preliminary engineering phase of development. The final environmental impact statement was completed in October 1995, and a Record of Decision (ROD) was issued in December, 1995. A Full Funding Grant Agreement (FFGA) for the project was signed on March 13, 1996. The project was not authorized in ISTEA. Through FY 1996, Congress has appropriated $12.4 million for the project.
Justification	Under the current financing strategy, the project would be exempt from the New Start criteria because the Section 5309 share would be less than one-third of the capital cost. **Mobility Improvements -** The number of cars per capita in Puerto Rico has grown to levels comparable to the mainland, but highway lane miles per automobile are far below mainland levels, resulting in extreme highway

	congestion, especially in San Juan. Travel time savings of over 10,000 hours daily are projected for the Tren Urbano project. **Cost Effectiveness -** The cost effectiveness index is $1 per new rider (1994 dollars, 2010 ridership). **Environmental Benefits -** San Juan is an attainment area for ozone and carbon monoxide. Compared with the No Build alternative, the project is expected to reduce regional carbon monoxide emissions by 26 percent, hydrocarbon emissions by 25 percent, and oxides of nitrogen emissions by 7 percent. **Operating Efficiencies -** Information on the operating and maintenance cost per passenger is not available.
Local Financial Commitment	DTPW is seeking $300.1 million, or 23 percent of project costs, from the Section 5309 New Start program. The remaining funding would be provided by local revenues from the Puerto Rico Highway and Transportation Authority (PRHTA) and flexible funds. All operating costs, as well as debt service on PRHTA bonds, would be paid as part of the PRHTA annual budget, established in accordance with standard PRHTA budget procedures. The capital financing plan is rated "high". PRHTA generates revenues from gasoline taxes, oil and diesel oil taxes, motor vehicle registration fees, and investment income. The Authority will collect approximately $3.0 billion over the horizon of the cash flow summary. These internally generated funds will be used during FY 1996 and 1997 to meet Tren Urbano obligations. The PRHTA has authority to issue revenue bonds to finance transportation system improvements which alleviate traffic congestion. The PRHTA intends to exercise this authority and issue senior and subordinated Highway Revenue Bonds in amounts sufficient to meet its capital construction needs. The bonds will be supported by PRHTA revenues and flexible funds. The stability and reliability of operating funds are rated "high". The turnkey procurement will guarantee Tren Urbano operations for at least 5 years. Operating deficits would be covered by the PRHTA revenue sources noted above. Funds to operate the existing bus system come from appropriations by the Commonwealth and have been adequate in the past. In 1992 the average age of the Metropolitan Bus Authority's bus fleet was 7.3 years, which is better than the national average.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$312.40	$12.40 million appropriated through FY 1996
COPs backed by CMAQ and STP funds	$300.00	N/A
State:	$509.50	N/A
TOTAL	**$1121.90**	

St. Charles, Missouri Corridor

St. Louis, Missouri Metropolitan Area

(November 1, 1995)

Description	The East West Gateway Coordinating Council (EWGCC) is studying transit alternatives for a 15-mile corridor between Lambert Airport and the City of St. Peters in St. Charles County, Missouri. Alternative modes being considered include light rail, busway, TSM, and No Build. One busway and three LRT alignments have been proposed for study.
Status	FTA approved initiation of alternatives analysis in February 1993. The study will produce information on the mobility improvements, cost effectiveness, environmental benefits, and operating efficiencies associated with each alternative. The study is expected to be completed in 1996, when a preferred alternative and financing plan will be adopted. Through FY 1996, Congress has appropriated $0.5 million for the alternatives analysis.

St. Clair County, Illinois Corridor

St. Louis, Missouri Metropolitan Area

(April 1, 1996)

Description	The Bi-State Development Agency (Bi-State) is proposing a 27-mile light rail line between downtown East St. Louis, Illinois, and the Mid America Airport in St. Clair County. The project would extend the MetroLink light rail project which opened in July 1993. The adopted alignment generally follows the former CSXT railroad right-of-way from East St. Louis to Belleville, IL and

	serves the Belleville Area College and Scott Air Force Base. A 17-mile "first construction phase" would terminate at Belleville Area College. The full project is estimated to cost $431.5 million (escalated dollars) and is projected to carry 10,000 to 15,000 riders per day in the year 2010. The "first construction phase" is estimated to cost $295.0 million.
Status	The East-West Gateway Coordinating Council (the MPO) completed a Major Investment Study and draft EIS in 1995. The study examined transit technology and alignment alternatives, and led to selection of the CSXT LRT as the preferred alternative. The project is included in the MPO's adopted transportation plan. The preliminary engineering (PE) phase of project development was initiated in 1995. As part of PE, Bi-State has modified the alignment to serve the Belleville Area College and has relocated many of the proposed stations. The cost and ridership estimates are also being refined. Due to the changes in the project, and to provide more detail on environmental impacts, a supplemental draft EIS is being developed. Bi-State hopes to complete PE and the EIS process by September, 1996. The project was not authorized in ISTEA. Through FY 1996, Congress has appropriated $16.42 million for the project.
Justification	**Mobility Improvements -** In the Major Investment Study (MIS), EWGCC estimated that the project would increase transit ridership (bus and rail) by 3885 trips per day in 2010, compared with the no build alternative, and would save 700 to 800 hours of travel time per day in 2010. These forecasts are being revised as part of the PE phase. The latest ridership forecasts are significantly higher than those developed in the MIS. **Cost Effectiveness -** The latest cost effectiveness index for the 27-mile project is $23 per new rider. This index corresponds to the revised alignment serving Belleville Area College but does not fully reflect the higher ridership forecasts that have been produced in PE. The index is not directly comparable to the index for other projects because it is based on the no build option. **Environmental Benefits -** St. Louis, including St. Clair County, is

	a"moderate" nonattainment area for ozone and a "not classified" nonattainment area for carbon monoxide. According to the MIS, the project would reduce auto passenger trips by 374 per day. This estimate does not reflect the higher ridership forecasts that have been produced in PE. **Operating Efficiencies -** Based on 2010 projected ridership and operating costs from the MIS, the systemwide operating cost would be $2.72 per passenger for the No Build alternative and $2.94 per passenger with the LRT project. This estimate does not reflect the higher ridership forecasts that have been produced in PE.
Local Financial Commitment	Bi State is seeking an 80 percent share from the Section 5309 New Start program. Half of the non-Federal share would be generated from a 3/4-cent transit district sales tax, increased by 1/2 percent to the current level by referendum in 1993. The remaining non-Federal share would be provided by the State of Illinois. If the state share is not forthcoming, the full 20 percent non-Federal share would be derived from the local sales tax. The capital finance plan for the 27-mile project is rated "medium-high". A dedicated local revenue source is in place and sufficient non-Federal funds are projected to be available under carefully controlled circumstances. The sales tax is robust enough to raise the 20 percent share for a $400 million project if necessary. State of Illinois funds have not yet been committed to project construction. The finance plan will need to be updated to reflect any changes in the project and its cost estimate that result from PE. For the 27-mile project, the stability and reliability of operating assistance are rated "low-medium". If local sales tax revenues must be used for the full 20 percent non-Federal share, Bi-State is projected to deplete its reserves within 4 years of LRT opening, leaving an unfunded deficit. With a 10 percent state share, the unfunded deficit occurs 12 years after opening. The "first construction phase" would have lower capital and operating costs, enhancing the stability and reliability of operating assistance. In 1994, Bi-State's bus fleet averaged 9.4 years old, which is comparable to the national average.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$236.00	$16.42 million appropriated through FY 1996
State:	$29.50	N/A

Long-term general obligation bonds		
Local: ¾% sales tax	$29.50	N/A
TOTAL	**$295.00**	

Note: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Cross-County Corridor

St. Louis, Missouri Metropolitan Area

(November 1, 1995)

Description	The East West Gateway Coordinating Council (EWGCC) and the Missouri Highway and Transportation Department are jointly studying alternatives for an 18-mile north-south corridor from the vicinity of I-270/I-170 near Lambert Airport south to Mehlville in the vicinity of I-270/I-55 in southeast St. Louis County. The study is also considering an east-west connection through Clayton, Missouri to the existing MetroLink system. The Cross-County corridor traverses four other corridors in the St. Louis metropolitan area and is designed to facilitate north-south movements through the central portion of St. Louis County. This study will evaluate light rail, busway, highway, TSM, and No Build alternatives. Preliminary cost estimates developed during system planning determined capital costs to be in the range of $269-$307 million (1989 dollars) for LRT.
Status	FTA approved initiation of Alternatives Analysis/Major Investment Study (MIS) in September 1993. The study will produce information on the mobility improvements, cost effectiveness, environmental benefits, and operating efficiencies associated with each alternative. The MIS phase is expected to be completed in the Summer of 1997, when a preferred alternative and financing plan will be adopted. Through FY 1996, Congress has appropriated $0.5 million for alternatives analysis.

Tampa to Lakeland Corridor

Tampa, Florida

(November 1, 1995)

Description	The Hillsborough Area Transit Authority (HART) is undertaking a study of transportation alternatives in the 32-mile corridor between Tampa and Lakeland, Florida. One alternative to be considered is a commuter rail line on existing CSX tracks that parallel I-4. The commuter rail alternative is estimated to cost approximately $30 million and to attract 1,200 riders per day in the opening year.
Status	A number of studies have indicated that transit improvements might relieve traffic on I-4 between Lakeland and Tampa. Two rail studies have recently been completed -- a feasibility study looking at system design, operational characteristics and costs, and a study identifying public support for such a system. In October 1995, the HART Board adopted a goal of developing a comprehensive 75 mile rail system in Hillsborough County, tied to complementary high speed rail service and the HARTRail extension eastward in Polk County. HART is about to undertake a major investment study (MIS) that will consider alternatives for addressing transportation problems in the I-4 corridor. The study will generate information the FTA could use to evaluate any resulting transit project for possible Section 5309 New Start funding. In FY 1996, Congress appropriated $500,000 for the corridor.

Tasman LRT

San Jose, California

(November 1, 1995)

Description	The Santa Clara County Transit District (SCCTD) is developing a 12.4-mile light rail project between Capitol/Hosletter and downtown Mountain View. The project includes 19 stations and 35 light rail vehicles. The invalidation of the Measure A sales tax (see below) caused the development of new financing alternatives and the separation of the project into two phases, Phase I (West Extension) and Phase 2 (East Extension). The West Extension consists of 7.6 miles of surface LRT from the northern

	terminus of the Guadalupe LRT in Santa Clara, west through Sunnyvale, to the CalTrain commuter rail station in Mountain View. The project will include 11 stations and will be double tracked except for partial single tracking between the Mountain View and Lockheed stations. The West Extension is estimated to cost $325.4 million. Ridership on the West Extension is projected to be 7,500 per day or 2.3 million per year by 2005, increasing total LRT system ridership to 10.7 million per year.
Status	Section 3032 of ISTEA directed FTA to approve the construction of the locally preferred alternative not later than 90 days after the completion of preliminary engineering, and to enter into a multiyear grant agreement for 50 percent of the project's cost unless this percentage is changed by the Metropolitan Transportation Commission (MTC). Preliminary engineering was completed in August 1992, and final design is virtually complete. FTA has issued a Letter of Intent to fund 50 percent of the cost of the 12.4-mile project. On September 28, 1995, the California Supreme Court overturned the Measure A one-half cent local sales tax, thus eliminating the major source of local funds to construct and operate the 12.4-mile project. The SCCTD has rescoped the project to reduce cost. Full funding grant agreement (FFGA) negotiations are continuing with the focus on the West Extension. The East Extension is being deferred until additional funding is identified and secured, possibly in the 2005-2010 time frame. MTC and the affected operators have agreed on the future allocation of Section 5309 New Starts program funds between Tasman and the BART SFO Extension Project. The Bay Area hopes to obtain a contingent commitment that would allow the Tasman West and BART SFO projects to be built simultaneously.
Justification	The Tasman LRT project is exempt from the Section 5309(e) New Start criteria because the Section 5309 share of the regional program is less than 33 percent. **Mobility Improvements -** The 12.4-mile Tasman project serves the work trip market from southern Alameda County, northeastern San Jose, and Milpitas to the high tech employment centers located in north San Jose, Sunnyvale and Mountain View. It is estimated that the full project would result in a total

	weekday travel time savings of 3,300 hours. The West Extension would improve service to the work trip market between residential areas of southern and central San Jose and the Silicon Valley employment centers in northern Santa Clara County. The linkage to CalTrain in Mountain View will serve work trips to and from San Francisco and San Mateo counties. It is estimated that the West Extension would save of 2,568 hours of travel time per day. **Cost Effectiveness -** The cost effectiveness index for the West Extension is $18 per new rider (2005 riders, 1994 dollars). **Environmental Benefits -** The San Jose Area along with the entire Bay Region has been redesignated by EPA as a "maintenance" area for ozone. Compared with the no build alternative, the West Extension project would reduce VMT in the study area by less than 1 percent. Compared with a TSM alternative, VMT would be reduced by approximately 0.2 percent. **Operating Efficiencies -** The systemwide operating cost per passenger is estimated to be $2.99 for the No-Build alternative, $2.94 for the TSM alternative, and $3.82 for the Tasman West Extension.
Local Financial Commitment	SCCTD is seeking Section 5309 New Start funds for 50 percent of the cost of the West Extension. The plan anticipates $122 million in Section 5309 New Start funds, in addition to $60.75 million previously granted. The remaining 50 percent will be obtained from Federal and state flexible funds, including CMAQ, Flexible Congestion Relief (FCR), State Rail Bond funds and local sources including $15 million from the City of Mountain View. FCR is a state-administered flexible funding program which combines state gas tax funds with NHS and state STP funds. SCCTD is also using flexible funds for other elements of its capital program. The capital finance plan for the West Extension is rated "medium". The state TIP includes $79.7 million in FCR funds for the project. An agreement has been reached to reprogram $15 million in CMAQ funds to the project. Most of the remaining state and local funds have yet to be committed, but state support is documented and the funds appear secure. The City of Mountain View has pledged its $15 million contribution.

	The stability and reliability of operating funds are rated "medium". SCCTD operations are supported by a 1/2 cent local dedicated sales tax and other state and local programs. Sales tax revenues are again growing as Santa Clara County's high tech manufacturing industries experience strong worldwide demand for their products. SCCTD has reduced operating costs in each of the last three fiscal years. In October 1995, SCCTD restored 10 minute LRT headways, thus reversing a January 1993 service reduction. LRT ridership has risen 11 percent since October 1994. SCCTD's operating cost and revenue projections are reasonably consistent with recent trends and demonstrate a continuing ability to fund the bus and rail system. In 1994, the average age of the SCCTD bus fleet was 6.5 years, which is better than the national average.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$182.50	$93.98 million appropriated through FY 1996
CMAQ	$15.00	N/A
State: (includes state STP)	$102.10	$10.20 million appropriated through FY 1996
Local:	$25.80	N/A
TOTAL	**$325.40**	

Tri-County Commuter Rail

Ft. Lauderdale, West Palm Beach and Miami, Florida

(November 1, 1995)

Description	The Tri-County Commuter Rail Authority (Tri-Rail) operates a 67-mile commuter rail system connecting Dade, Broward, and Palm Beach Counties in Florida. Tri-Rail has been adding service and new stations to meet increasing demand for the service. The line is carrying about 8,000 riders per day. Tri-Rail's 5-year capital improvement program (1996-2000) includes the addition of a second track on part of the line, rehabilitation of the signal system, station improvements and parking expansion. The capital program is estimated to cost $428.3 million.
Status	The construction of Phase I of the double tracking/signal rehabilitation project began in the Spring of 1995 and has an estimated completion date of April 1997. Phases II and III, each of which include two stations, are currently in design. Environmental requirements have been satisfied with categorical

	exclusions. There is no ISTEA authorization for Tri-Rail improvements. In fiscal years 1993 through 1996, Congress has appropriated $34.38 million in Section 5309 New Start funds for Tri-Rail improvements. These funds are being used for station improvements, bridge rehabilitation, and double tracking.
Justification	**Mobility Improvements -** Double tracking and signal rehabilitation will enable the establishment of 30-minute commuter rail headways, compared with one hour headways today, and will enhance the safety of the rail operation. Originally designed for the exclusive use of freight operations, the signaling system along the CSX corridor was installed more than 50 years ago and has long been outdated, particularly in light of increased traffic and the diversified nature of the rail corridor usage today. As a result of the antiquated signaling system, Tri-Rail is required to reduce its speed at some meets from 70 mph to 20 mph. This affects the overall running time, and is a safety concern with the increased rail traffic along this busy corridor. Service reliability would improve dramatically with the installation of modern signal equipment. **Cost Effectiveness -** A cost effectiveness index is not available. **Environmental Benefits -** Miami, Fort Lauderdale, and West Palm Beach have been redesignated as an attainment/maintenance area. **Operating Efficiencies -** Information on the operating cost per passenger is not available.
Local Financial Commitment	Tri-Rail is proposing a Section 5309 New Start funding share of $189.5 million or 44 percent. The remaining funds would be derived from the Section 5307 formula program and the State of Florida. FTA has not seen a detailed financing plan, and thus has not evaluated the capital finance plan or the stability and reliability of operating assistance.

Tri-Rail Five Year Program

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$189.50	$34.38 million appropriated through FY 1996

Section 5307	$56.39	N/A
State:	$182.40	N/A
TOTAL	**$428.29**	

Note: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

MARC Frederick Extension & Rolling Stock Procurement

Maryland

(November 1, 1995)

Description	The Mass Transit Administration (MTA) of Maryland is extending the Maryland Commuter Rail (MARC) system to provide service from Point of Rocks to Frederick, Maryland. The MARC system presently consists of two lines between Washington, D. C., and Baltimore, Maryland, and a third line between Washington, D. C., and Martinsburg, West Virginia. In addition, MTA is embarking on a major procurement of additional commuter rail coaches and locomotives for MARC to meet anticipated system-wide demand. The estimated cost of these projects is $131.6 million. Ridership forecast for the year 2010 is 1,600 daily passengers on this extension.
Status	Section 3035(nn)(2) of ISTEA directed 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 fiscal years 1993 through 1996, Congress appropriated $57.1 million for the MARC service extensions and other improvements. The Frederick extension will involve track, signal, and station improvements on an existing freight line. An environmental assessment has been completed, which resulted in a Finding of No Significant Impact. Two station sites have been selected and final design is underway. MTA expects to begin MARC commuter rail service on this extension in 1998. In December 1994, the MTA began steps to purchase 50 bi-level commuter rail cars and six electric locomotives for systemwide capacity improvements throughout the MARC commuter rail system. This purchase is to be made, in part, with $66.5 million of New Start funds authorized in ISTEA. Final design of the coaches is completed and the manufacture of the coaches is underway. The MTA also plans to conduct some bridge clearance work near Union Station to

	accommodate the bi-level cars. That work is not part of the full funding grant agreement. MTA anticipates that the procurement of the locomotives will be done as a joint procurement with another entity.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start (FFGA Amount)	$105.25	$23.78 million appropriated through FY 1996
Local:	$26.31	N/A
TOTAL	**$131.56**	

Largo Corridor

Washington, D.C., Metropolitan Area

(April 1, 1996)

Description	The Maryland Mass Transit Administration (MTA) is planning a 2.9-mile extension of the Washington Metrorail Blue Line from Addison Road to Largo. This addition would add two stations -- one at Ritchie Road and the other at Largo Town Center. Parking capacity would increase by 2,300. The proposed extension is beyond the 103-mile Metrorail system authorized by the National Capital Transportation Act of 1969, as amended. The Largo extension is expected to cost $350 million (escalated dollars). Total daily transit ridership is estimated to be 27,170.
Status	Section 3035(nn)(3) of ISTEA directed 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. Congress has not appropriated any funds for this study. System planning requirements have been fulfilled. FTA approved the initiation of preliminary engineering on February 1, 1996. The Addison Road to Largo Metrorail Extension project is included in the National Capital Region's Constrained Long Range Plan. It is also programmed in the State of Maryland's Statewide Transportation Improvement Program.

Justification	**Mobility Improvements -** According to the system planning study, the Largo extension would save 1100 hours of travel time per day (compared with a TSM alternative). **Cost Effectiveness -** The cost effectiveness index is $12 per new rider. **Environmental Benefits -** The Washington Metropolitan area is classified as a serious ozone nonattainment area and a moderate carbon monoxide nonattainment area. The planning study found that the proposed project would reduce vehicle miles travelled (VMT) on the highway system by 43,000 per day (compared with a TSM alternative). **Operating Efficiencies -** The project's impact on the systemwide operating cost per passenger is not known.
Local Financial Commitment	MTA is proposing that 79 percent of the capital cost be derived from the Section 5309 New Start program. The remaining 21 percent would be derived from state's Transportation Trust Fund which is supported by several existing taxes and fees (motor vehicle fuel taxes, vehicle titling taxes, vehicle licensing and registration fees, and corporate income taxes). The capital finance plan is rated "medium". While FTA has not seen a specific finance plan for the Largo extension, the state's Transportation Trust Fund is in place and has sufficient funds to supply the non-Federal share. Governor Glendenning has indicated that the Largo extension is a priority of his administration. The stability and reliability of operating assistance are rated "low-medium". The funding arrangements and sources for operating and maintenance costs have not been identified. MTA projections assume Federal operating assistance will remain at present levels. In 1994, the average age of MTA's regional bus fleet was 12.7 years old, which is substantially above the national average.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$276.50	$0.0 million appropriated through FY 1996
State:	$73.50	N/A

TOTAL	**$350.00**

Note: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Waldorf Corridor

Southern Maryland

(November 1, 1995)

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 Waldorf, 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 has provided 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. Other alternatives under consideration include LRT, a busway, and HOV lanes. The Southern Maryland Mass Transportation Alternatives Study now underway is expected to be completed by early 1996. At that time, local and State officials will make a decision on how to proceed. Section 3035(nn)(2) of ISTEA directed 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 statewide, including the purchase of rolling stock and station improvements and expansions. The Waldorf Corridor was specifically mentioned, but a subsequent technical amendment allows consideration of other options (e.g. , HOV, LRT) in the current corridor planning study. In fiscal years 1993 through 1996, Congress appropriated a total of $67.5 million for statewide MARC service extensions and other improvements.

Phase I System Plan

Central Puget Sound (Seattle), Washington

(November 1, 1995)

Description	The three-county Central Puget Sound Regional Transit Authority (RTA) Board adopted a long range master plan for transit in the Seattle metropolitan area on October 29, 1994. Phase I of the plan (as defined for a March 1995 election) included a 71-mile LRT system from Tacoma north through Seattle to 164th Street (Lynnwood) and from Seattle east to Overlake via I-90 and Bellevue, 80-miles of commuter rail service from Lakewood north through Seattle to Everett (see Seattle-Tacoma Commuter Rail profile), and eight regional bus routes. It also included a technology study for the I-405 Corridor, a Transit Development Fund to support the regional system and facilities and a single regional fare structure. Phase I of the regional rail and bus plan was projected to cost $6.7 billion (1995 dollars) and take 16 years to implement.
Status	Section 3035(bbb) of ISTEA directed FTA to enter into a multiyear grant agreement with the Municipality of Metropolitan Seattle (predecessor to Metropolitan King County) in the amount of $300 million for the Puget Sound Rapid Transportation Project. No funds have been appropriated for this project. An election on the financing plan for the proposed Phase I transit improvements was held on March 14, 1995. The RTA's proposal was defeated at the polls with a 47 percent "yes" and a 53 percent "no" vote. The ballot proposal called for 60 percent of the project cost to be funded from increases in motor vehicle excise and sales taxes. The financing plan called for $125 million annually from State and Federal sources during the 16 year implementation schedule. The RTA has recently adopted a work program geared toward adopting a new ballot proposal by the spring of 1996 to be taken to the voters as early as September 1996. The RTA Board recently adopted guiding principles to assist in the development of a new proposal. In addition, the Board has established a panel of regional civic leaders to advise the Board on the best package of transportation improvements to propose in the new plan. The RTA has also engaged in a new round of public involvement activities to insure as broad a range of input as possible into the components of the new plan. The revised Phase I will be developed through the major investment study (MIS) process.

Seattle-Tacoma Commuter Rail

Central Puget Sound (Seattle), Washington

(November 1, 1995)

Description	The three county Central Puget Sound Regional Transit Authority (RTA) Board adopted a long range master plan for transit in the Seattle metropolitan area on October 29,1994. The plan consists of a regional, comprehensive system of services, including commuter rail service between Seattle and Tacoma, additional commuter rail service, LRT service and regional bus service. The Seattle-Tacoma Commuter Rail service is proposed to operate along approximately 40 miles of track between the two cities and includes stations in Tukwila, Kent, Auburn, Sumner, Puyallup and possibly Renton. The total capital cost of the project is estimated at $367 million (1995 dollars), including track up-grade, stations, parking facilities and rolling stock.
Status	Section 3035(ccc) of ISTEA directed FTA to negotiate and sign a $25 million, multiyear grant agreement with the Municipality of Metropolitan Seattle (predecessor to Metropolitan King County) for the Seattle-Tacoma Commuter Rail Project. In FYs 1992, 1993, and 1995, a total of $22.6 million was appropriated for the project. Of this amount $1.9 million was obligated for an environmental assessment and the RTA received a Letter of No Prejudice for a $1 million service demonstration in the corridor as well as service north to Everett. On March 14, 1995 the Phase I transit plan, including the commuter rail segment, was put before the public in a funding referendum and was defeated with a 47 percent "yes" 53 percent "no" vote. Much of the residual unobligated funding was rescinded by the Congress during FY 1995. The RTA has recently adopted a work program geared toward adopting a new ballot proposal by the spring of 1996 to be taken to the voters as early as September 1996. The RTA Board recently adopted guiding principles to assist in the development of a new proposal. In addition, the Board has established a panel of regional civic leaders to advise the Board on the best package of transportation improvements to propose in the new plan. The RTA has also engaged in a new round of public involvement activities to insure as broad a range of input as possible into the components of the new plan. The revised Phase I plan will be developed through the major investment study (MIS) process. Commuter rail between Tacoma and Seattle is currently envisioned to be a component of the new Phase I plan. An initial draft of an environmental assessment of the Seattle-Tacoma Commuter Rail project has not been formally issued awaiting completion of the revised Phase I plan.

	The Seattle Metropolitan area has programmed $1 million of flexible (STP) funding assistance to be utilized in order to assist with completion of this planning.

Appendix A Listing 3

Griffin Line Corridor

Hartford, Connecticut

(November 1, 1995)

Description	The Greater Hartford Transit District (GHTD) is proposing a 9.2-mile light rail line from Union Station in Hartford to Griffin Center Office Park in Bloomfield. The project is estimated to cost $176 million (1994 dollars).
Status	A Major Investment Study (MIS) is nearing completion. The study has considered a busway, a bus bypass roadway, light rail transit (LRT), a no build alternative, and a TSM alternative. In July 1995, the Capital Region Council of Governments (CRCOG) and the Hartford Metropolitan Planning Organization (MPO) selected light rail as the preferred alternative, and directed the GHTD to develop a detailed financing and implementation plan. GHTD and CRCOG are working with Federal, State, regional, local and private sector officials to complete a financing and implementation plan for light rail which will complete the MIS process. The target completion date for the MIS is October 1996. Congress has not authorized or appropriated any funds for the Griffin Line Corridor.
Justification	**Mobility Improvements -** The GHTD estimates the LRT would increase daily transit trips in year 2010 ranging from 75,900 for the baseline alternative to 78,500 under the optimal operating plan, compared with 73,500 for the TSM alternative and 71,900 for the No-Build alternative. The project is expected to save 1750 hours of travel time per day (compared with a TSM alternative). **Cost Effectiveness -** The cost-effectiveness index ranges from $13 per new rider under the optimal operating plan to $18 per new rider for the baseline alternative. **Environmental Benefits -** The Capital Region is classified as a "serious" non-attainment area for ozone and as a "moderate" non-attainment area for carbon monoxide. The air quality analysis for the MIS found that the LRT alternative would produce the greatest air quality benefits for all alternatives, reducing regional emissions by less than 1 percent.

	Operating Efficiencies - The systemwide operating cost per passenger in year 2010 (1994 dollars) is estimated to be $1.32 for the No-Build alternative, $1.39 for the TSM alternative, and $1.46 for the light rail alternative which is the range from the optimal operating plan to the baseline LPA alternative.
Local Financial Commitment	The GHTD is completing the Griffin Line Financing and Implementation Plan that involves and is following the policy guidance of a Task Force including Federal, State, regional, local, and private sector officials. It is anticipated that the plan will include a package of traditional Federal and State transportation funding sources, non-traditional and non-transportation public sector funding sources, as well as private institutional financing mechanisms.
Other Factors	The MIS has included coordinated transit, land use, and economic development activities. A possible extension of service in downtown Hartford and to the city's enterprise zone is being considered.

Regional Bus Plan

Houston, Texas

(November 1, 1995)

Description	Houston Metro's Regional Bus Plan (RBP) is a package of improvements to the bus system. The $625 million project includes new and extended HOV facilities and ramps, several transit centers and park & ride lots, bus acquisitions, bus service expansion, and supporting facilities.
Status	Section 3035(uu) of ISTEA directed FTA to negotiate and sign a multiyear grant agreement for $500 million. In December 1994, FTA and Houston Metro signed a full funding grant agreement (FFGA) for a total of $625 million . The FFGA calls for FTA to contribute $500 million (80 percent). In addition to the $125 million (20 percent) for projects in the FFGA, Houston Metro intends to fund projects costing $375 million entirely with local funds. The RBP is included in the Houston area's adopted metropolitan transportation plan and Transportation Improvement Plan (TIP) which are in conformance with the State Implementation Plan for air quality. Houston received Section 5309 New Start appropriations and obligations between FY 1989 and 1996 totaling $287.02 million. Houston is currently in the construction phase of the Regional Bus Plan.

Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start FFGA Amount	$500.00	$287.02 million appropriated through FY 1996
Local:	$125.00	N/A
TOTAL	**$625.00**	

ASE Extension: Flagler to duPont Place

Jacksonville, Florida

(November 1, 1995)

Description	The Jacksonville Transportation Authority (JTA) is developing a 0.3-mile extension of the Automated Skyway Express (ASE) south of downtown Jacksonville, plus completion of a maintenance facility. The extension consists of an elevated, double track guideway running from the San Marco to Flagler Station segment, now under construction, through the South Bank business district to the duPont Station (formerly St. Johns Place). This final segment will complete the 2.5-mile ASE system. The 0.3-mile segment and completion of maintenance facility are estimated to cost $31.4 million. JTA estimates that 38,000 to 51,000 riders will use the 2.5-mile ASE system in 2005, depending on development and parking assumptions. JTA has assumed 38,000 in its planning estimate.
Status	An 0.7-mile Phase 1-A segment or "starter line" opened for revenue service in June 1989. The line is averaging about 1,600 riders per day. In September 1991, at congressional direction, FTA and JTA entered into a full funding grant agreement (FFGA) for a 0.6-mile north extension of the starter line. This project was to extend the ASE through downtown to Florida Community College. Civil construction is now complete for this section. Service is awaiting completion of systems and vehicle procurement. Section 3035(vv) of ISTEA directed FTA to enter into a multiyear grant agreement for $71.2 million to complete the 2.5-mile ASE system. In 1994, JTA and FTA amended the 1991 FFGA. The revised FFGA expanded the funded part of the system to the San Marco station south of downtown. Construction of the river crossing segment is currently underway with work on

	schedule and within budget. No additional Federal funds are needed to fulfill the FFGA commitment. The JTA has requested a change in the current FFGA to provide for construction of the Flagler Station with no increase in Federal funding. The south extension covered in this profile would add to the system funded in the 1994 FFGA. The 0.3-mile extension is in final design. In FY 1996, Congress appropriated $9.6 million for this segment.
Justification	The ASE project is exempt from the New Start criteria because it was in preliminary engineering before 1987.
Local Financial Commitment	JTA is seeking an 80 percent Section 5309 New Start share, or $25 million, for the final segment and completion of the maintenance facility. Local funds would be supplied by the state and locally provided right-of-way. The $108.4 million extension covered in the 1994 FFGA has a local share of 60 percent. The capital finance plan is rated "medium". JTA does not have an ongoing dedicated funding source to support its transit capital program. The agency has been successful in obtaining state and local funds for other elements of the ASE system. The stability and reliability of JTA's operating revenues are rated "medium". JTA expects to cover operating expenses from the system's operating revenue stream. The starter line, with only half the planned parking available, achieved a first year operating revenue recovery ratio of 55 percent. JTA expects this ratio to increase to a break even basis (100 percent) by 2000. In 1994, the average age of the JTA bus fleet was 7.5 years old, which is better than the national average.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$25.00	$9.60 million appropriated through FY 1996
Local: Right of Way	$6.40	N/A
TOTAL	**$31.40**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Southtown Corridor

Kansas City, Missouri

(November 1, 1995)

Description	The Kansas City Area Transportation Authority (KCATA) is proposing a 15.2-mile LRT project in the Southtown Corridor. The project would extend from the riverfront and downtown Kansas City south to the Country Club Plaza and to 85th Street and Holmes Road. The project also includes an eastern line from the Country Club Plaza to Watkins Drive and south to 75th Street. KCATA proposes to build the project in phases. The starter project is 5.6 miles in length and runs from the River Market to 51st Street at the southern edge of the Plaza. It is estimated to cost $200 million (1994 dollars) and would carry 10,800 riders per day in 2010. The full 15.2-mile system is estimated to cost $450 million (1994 dollars) and would carry 16,800 riders per day in 2010.
Status	Section 3035(k) of ISTEA directed FTA to enter into a multiyear grant agreement in the amount of $5.9 million with KCATA to provide for the completion of alternatives analysis and preliminary engineering. Through FY 1996, Congress has appropriated $1.5 million (of which $0.5 million was rescinded in FY 1995). In December 1994, the KCATA Board of Commissioners selected the locally preferred alternative described above. The Alternatives Analysis/Major Investment Study (MIS) was completed during 1995. The project is included in the Mid-America Regional Council of Governments (the MPO) adopted long range transportation plan. In October 1995, FTA approved the initiation of preliminary engineering. Draft and final EISs will be produced during preliminary engineering, and the financial plan will be refined.
Justification	**Mobility Improvements -** KCATA estimates that the 15.2-mile route will increase total transit trips (bus and rail) by 8,100 per day. The preferred alternative is projected to save 420 hours of travel time per day in year 2010. **Cost Effectiveness -** The cost effectiveness index for the 15.2-mile system is $15 per new rider. For the starter project, the index is $12 per new rider. **Environmental Benefits -** Kansas City is a "maintenance" area for ozone and carbon monoxide. The project is expected to have some modest, positive

	impact on emissions. **Operating Efficiencies -** Based on 20-year projected ridership and operating costs, the systemwide operating cost for the TSM alternative would be $2.37 per passenger; for the preferred LRT alternative, it would be $2.54 per passenger; for the starter project, it would be $2.92 per passenger.
Local Financial Commitment	KCATA considered several financing scenarios in the MIS, ranging from a 50 to 80 percent Section 5309 New Start share. The remaining funds would be derived through a new, yet to be determined local or statewide funding source. KCATA has been working with the Missouri Legislature and the Missouri Highway and Transportation Department in an attempt to develop a state-supported permanent funding source for transit capital and operating costs. An increase in the state sales tax is one proposal. The capital finance plan is rated "low-medium". While KCATA has a general financing strategy, a specific funding source has not yet been identified. The financial feasibility of the project depends on the creation of a new funding source that is adequate to meet capital funding needs. A state program along the lines of those being pursued could be sufficient to fund the $200 million phase 1 project even with a 50 percent Federal share. The stability and reliability of operating assistance are rated "low-medium". One-half cent of the general sales tax in the City of Kansas City, Missouri is reserved for transportation and currently represents the largest source of funding assistance to KCATA. This source is keeping pace with inflation, but KCATA has found it necessary to reduce service levels. Additional funding sources not yet identified or in place will be needed to support the expanded operations associated with the LRT line. In 1994, KCATA's bus fleet averaged 7.5 years old, which is better than the national average.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$360.00	$1.0 million appropriated through FY 1996
State:	$90.00	N/A
TOTAL	**$450.00**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Eastside Corridor Extension

Los Angeles, California

(November 1, 1995)

Description	The Los Angeles County Metropolitan Transportation Authority (LACMTA) is proposing to extend the Metro Rail Red Line from its current eastern terminus at Union Station. The first 3.7-mile segment, from Union Station to First and Lorena, is covered in the full funding grant agreement (FFGA) for MOS-3 (see MOS-3 profile). The second segment, from First and Lorena to Atlantic and Whittier Boulevards in East Los Angeles, constitutes the Eastside Corridor Extension discussed here. The Eastside Corridor Extension is 3.1 miles in length with three stations, all in subway. The project is estimated to cost $1,271 million (escalated dollars).
Status	The preliminary engineering phase of project development was initiated in 1993, and the final environmental impact statement (EIS) for the entire Eastside project was completed in September 1994. The project is included in the MPO's financially constrained plan. LACMTA expects to begin construction in 2008. Accordingly, the project is not yet in the TIP. Congress has not authorized or appropriated funds for the Eastside Extension beyond the first 3.7 miles, which are included in MOS-3.
Justification	**Mobility Improvements -** LACMTA predicts that the project would increase transit ridership by 4,000 trips per day. **Cost Effectiveness -** Not available. **Environmental Benefits -** The project is located in the South Coast Air Basin which is a "serious" nonattainment area for carbon monoxide and an "extreme" nonattainment area for ozone. The extension would reduce vehicle miles traveled and regional emissions by .03 percent. **Operating Efficiencies -** Not available.

Local Financial Commitment	In its Long Range Plan, LACMTA has indicated that the project can be funded and constructed within the next 20 years. The financial plan assumes $635.5 million (50 percent) Section 5309 New Start funding, $90 million (7 percent) in STP and CMAQ flexible funds, $470 million (37 percent) from bonds secured by local sales tax revenues, and other state and local funds making up the balance. The Section 5309 share of LACMTA's total 20-year rail construction program is 21 percent. FTA's financial contractor reports that LACMTA presents a balanced financial plan that appears able to support construction and operation of the segment. However, since the East Side Extension is not scheduled for construction until 2008, the capital finance plan and the stability and reliability of operating assistance have not been rated. In 1994, the Los Angeles County bus fleet averaged 8.2 years old, which is better than the national average. Rail vehicles averaged 3 years old.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$635.50	$0.00 million appropriated through FY 1996
Flexible Funds	$90.00	N/A
State/Local:	$545.50	N/A
TOTAL	**$1271.00**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

MOS-3 Extensions of Metro Rail

Los Angeles, California

(November 1, 1995)

Description	The 23-mile, $5.7 billion Metro Rail Red Line Project in Los Angeles is planned as "minimum operable segments" (MOSs) for funding purposes. The 4.4-mile, 5-station segment called MOS-1 opened for revenue service in January 1993. The 7-mile, 8-station segments known as MOS-2 are under construction, and New Start funds sufficiently to fulfill the FTA financial commitment to MOS-2, as set forth in the Full Funding Grant Agreement (FFGA) of April 1990 between FTA and the Los Angeles County Metropolitan Transportation Authority (LACMTA), have already been appropriated.

	ISTEA defined MOS-3 to include three Metro Rail extensions: 1. The North Hollywood Extension is 6.3 miles in length with three stations, all in subway. It extends the Hollywood branch of MOS-2 generally to the north through the Santa Monica mountains into North Hollywood in the San Fernando Valley. The estimated cost is $1.31 billion (escallated dollars). 2. The East Side Extension 3.7 miles in length with four stations, all in subway. It extends MOS-1 into neighborhoods east of downtown. The estimated cost is $980 million (escalated dollars). 3. The Mid-City Extension 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 to the system. At present, the estimated cost is $491 million. Ridership is estimated at 37,000 daily boardings.
Status	Section 3034 of ISTEA directed FTA to amend the FFGA for MOS-2 to include the construction of MOS-3. LACMTA and FTA signed a FFGA for MOS-3 in May 1993 which provided $1.230 billion (plus interest and extraordinary costs) in New Start funds and advance construction authority for the three extensions of MOS-3. Subsequently, the FFGA was amended to provide an additional $187 million for a total of $1.417 billion in New Start funding. The Amended New Start share of MOS-3 is about 51 percent. LACMTA intends to fund an additional 6 percent or more of MOS-3, that is, at least $166 million, from the Surface Transportation Program of Title 23 (Highways), United States Code. Through 1996, Congress has appropriated $440.70 million in New Start funds for MOS-3. The North Hollywood Extension is under construction and the East Side Extension is undergoing final design. Tunnel construction along Hollywood Boulevard, which was suspended for several months in 1994 when significant surface damage occurred, was resumed in December 1994 with FTA approval. The Mid-City Extension was originally planned to be primarily in tunneled subway. However, after the FFGA for MOS-3 was signed, core sampling found such high levels of naturally occurring, toxic hydrogen sulfide gas at the planned depth of the tunnel that LACMTA has abandoned its original plan. LACMTA has reopened the public environmental review of the Mid-City Extension to consider alternative vertical alignments, including more extensive cut-and-cover tunnel construction closer to the surface and possible aerial segments. Costs for the new vertical alternatives will be developed as part of the environmental process. LACMTA is also studying major reconfigurations of the surface facilities associated with two stations and a vent shaft along the North Hollywood Extension due to land use changes in the area since the original plans

	were presented in 1983 and 1989.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$1416.49	$440.71 million appropriated through FY 1996
Flexible Funds	$377.15	N/A
Local:	$987.45	N/A
TOTAL	**$2781.09**	

West Central Corridor

Los Angeles, California

(November 1, 1995)

Description	The West Central Corridor extends from the proposed Pico/San Vicente station on the Metro Rail Red Line to Westwood near the University of California at Los Angeles campus, a distance of about 7 miles. One alternative that has been proposed for study is an extension of the Los Angeles Metro Rail system. This alternative is currently assumed to be entirely in subway and is estimated to cost about $3.0 billion (escalated dollars).
Status	FTA approved the Los Angeles County Metropolitan Transportation Authority's (LACMTA) request to initiate alternatives analysis in July 1991. The study is currently on hold until the alignment of the Mid City segment of the Red Line is determined (see MOS-3 profile). The alternatives analysis (now called Major Investment Study) will further explore the Metro Rail extension alternative and other alternatives. Congress has not authorized or appropriated any funds for this corridor.

LOSSAN Rail Corridor Improvement Project

Los Angeles, Orange, and San Diego Counties, California

(November 1, 1995)

Description	The LOSSAN improvements are part of a long-range plan to increase speed, safety and capacity for rail service in the Los Angeles-San Diego Rail Corridor. The project consists of three grade separation projects along the corridor including one in the City of Commerce (Los Angeles County), the City of Fullerton (Orange County) and the City of Solana Beach (San Diego

	County).
Status	Section 3035(g) of ISTEA directed 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 5309 New Start funds for the project of which $18.4 million has been appropriated through FY 1996. The Fullerton project has received $6.7 million of the appropriated funds and is under way. The City of Commerce received $3.3 million of the initial appropriation and will receive a share of the $8.4 million FY 1996 appropriation. Its project is at 50 percent design. The Solana Beach project received none of the initial appropriation but will receive a significant share of the 1996 appropriation. It is at 95 percent design and will be ready for construction as soon as all funding sources are in place. All environmental work has been completed.
Justification	The project is exempt from the new start criteria because the Section 5309 share is less than $25 million. **Mobility Improvements -** The current LOSSAN trip is 2 hours and 50 minutes between San Diego and Los Angeles. The goal of the improvements being undertaken in the LOSSAN Corridor is to reduce the travel time to 2 hours and 15 minutes. The grade separation projects will improve travel time by allowing speed restrictions to be lifted at these hazardous grade crossings. **Cost Effectiveness -** This project does not provide for new or improved service. No new riders are anticipated. **Environmental Benefits -** There is presently heavy auto and truck traffic congestion at the Telegraph Road Grade separation due to lane imbalances which will be resolved with completion of the project. Lomas Santa Fe Drive-Lomas Santa Fe Drive is the only east-west arterial access across the railroad tracks within the City of Solana Beach. Volume exceeds 45,000 ADT and the closing of the road for at grade crossing of multiple commuter, intercity and freight trains causes congestion and resultant emissions at the grade crossing. The projects, as part of a larger effort to develop a high-speed rail corridor, are

	expected to absorb large measures of the growth of the regions freeways and airports. The reduction in congestion will be evident not by an actual reduction in the number of vehicles, but in maintaining the existing air and vehicular traffic levels. The estimated 2 million trips annually that are diverted from the freeway to rail in Southern California alone represent a significant portion of the expected traffic growth along the I-5 corridor. **Operating Efficiencies -** Impact of three grade separations or operating cost per passenger is minimal.
Local Financial Commitment	The local financial commitment of $8.5 million equals 38 percent of the total project cost. This amount is apart from the total capital improvements completed in the corridor with State and local funds in excess of $200 million.
Other Factors	In 1992, the U.S. Department of Transportation designated five corridors nationwide to be developed into high-speed rail corridors. One is the San Diego-Sacramento route, of which the Los Angeles-San Diego (LOSSAN) corridor is the southernmost segment.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$18.40	$18.40 million appropriated through FY 1996
State/Local:	$11.28	N/A
TOTAL	**$29.68**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Memphis Regional Rail

Memphis, Tennessee

(November 1, 1995)

Description	The Memphis Area Transit Authority (MATA) is studying transit options in the corridor between downtown Memphis and the Medical Center. The Medical Center Corridor connects the two largest employment centers in the region. Currently, employment in the corridor is over 80,000. In addition, there are growing residential concentrations downtown and in the Medical Center, generating a demand for home-based trips between the two areas, in addition to midday trips between non-residential locations.

	One alternative being studied is an expansion of the 2.2-mile vintage rail trolley that MATA currently operates in downtown Memphis. For this alternative, the estimated cost for planning/design, construction and vehicle acquisition is $25 million.
Status	Through FY 1996, Congress has appropriated $1.7 million for a Regional Transit/Rail Plan. As one of the tasks in the study, alternative alignments, ridership projections and cost estimates are being developed for the corridor. Also included in the Regional Transit/Rail Plan is an analysis of regional corridors warranting a major investment. One of these corridors is the Poplar Corridor, of which the Medical Center Corridor is a part. Final results of the study are expected in March 1996.

East-West Corridor/Miami Intermodal Center

Miami, Florida

(November 1, 1995)

Description	The Florida Department of Transportation (FDOT) is studying a variety of transportation alternatives for linking the suburban area west of Miami, Florida International University (FIU), the Miami International Airport, downtown Miami, the seaport, and Miami Beach. Proposed facilities include a Metrorail line from FIU to the seaport, a Miami Intermodal Center (MIC) adjacent to the airport, a circulator system connecting the MIC to the airport terminal, a light rail line from downtown Miami to Miami Beach, and improvements to State Route 836 and LeJeune Road, including HOV lanes. Various alignment options are also being considered for the Metrorail line. Preliminary capital cost estimates for the total program approach $4.4 billion (escalated dollars). The Metrorail and light rail transit elements, totaling 24.3 to 25.8 miles in length, are estimated to cost $1.8 to 2.0 billion and to carry 69,000 to 82,000 riders per day in 2020. A 13.9- to 18.7-mile Minimum Operable Segment of rail is estimated to cost $1.0 to $1.2 billion and to carry 20,000 to 33,000 riders per day in 2020.
Status	A Major Investment Study (MIS) is nearing completion with the FHWA as lead federal agency. The Federal Transit Administration, Federal Aviation Administration, Federal Railroad Administration, Maritime Administration, and the Coast Guard are cooperating agencies pursuant to a 1993 Memorandum of Understanding. Two draft environmental impact statements (EIS) were circulated for public and agency review in October 1995. The final EIS's are scheduled for completion in September 1996.

	Congress has not authorized or appropriated funds for the corridor. Florida DOT and FHWA have contributed $8.5 million.
Justification	**Mobility Improvements -** The build alternatives that include the 24.3- to 25.8-mile rail systems are expected to result in 23,800 to 27,700 new transit riders in 2020. They would save approximately 26,000 person-hours of travel time per day. The minimum operable segments of rail are expected to attract 4400 to 11,400 new daily transit riders and to save 20,300 to 22,000 person-hours of travel time per day. **Cost Effectiveness -** The cost effectiveness indices range between $18 and $20 for the full-length fixed guideway alternatives. The MOS's have cost effectiveness indices of $17 to $23 per new transit rider. **Environmental Benefits -** The southeast Florida area is an attainment area for carbon monoxide and was recently redesignated as a maintenance area for ozone. At the corridor level, the full-length fixed guideway with roadway alternatives are projected to reduce carbon monoxide emissions by 7.6 percent, nitrous oxide emissions by 1.9 percent, and hydrocarbon emissions by 7.1 percent. The alternatives are projected to reduce vehicle miles traveled in the region by 0.3 percent to 0.5 percent. **Operating Efficiencies -** The operating and maintenance cost per passenger is estimated to be $2.25 for the No-Build alternative, $2.27 for the TSM alternative, $2.45 to $2.49 for the full-length fixed guideway alternatives, and $2.39 to $2.42 for the MOS alternatives.
Local Financial Commitment	According to FDOT's financial analysis, the $1.2 billion MOS alternative is financially feasible by 2010. A preliminary financial plan assumes the 35 percent of the cost of the transit elements would be derived from the Section 5309 program. Other proposed funding includes set-asides from existing federal, state and local sources; new state and local sources such as toll surcharges, taxing districts, cruise ship transfer fees, right-of-way and economic development bond programs; and self-financing revenues such as concession leasing, privately funded operations and joint development proceeds. FTA has not rated the capital finance plan or the stability and reliability of operating funds.

Proposed Source of Funds	**Total Funding ($million)**	**Description**

Federal: Section 5309 New Start	$424.20	$0.00 million appropriated through FY 1996
State/Local: (and other Federal)	$787.80	N/A
TOTAL	**$1212.00**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Miami North 27th Avenue Corridor

Miami, Florida

(November 1, 1995)

Description	The Metro-Dade Transit Agency (MDTA) is considering rail, busway, and bus options for improving transportation in the 9.5-mile N.W. 27th Avenue corridor. One alternative is an elevated heavy rail line which would operate in full integration with Stage I Metrorail, connect with major regional educational and sports facilities, and terminate at the Dade/Broward county line. The preliminary capital cost of the rail alternative is $453-$463 million (1994 dollars). This includes final design, right-of-way and rolling stock acquisition. MDTA estimates that 16,000 people would ride the line in 2015.
Status	A Major Investment Study (MIS) has been completed. The MPO is scheduled to select a preferred alternative in November and add the project to its Year 2015 Long Range Transportation Plan. There is no authorization for this project in ISTEA. Congress appropriated $1.9 million in FY 1996 which will be used to fund preliminary engineering and preparation of draft and final environmental impact statements.
Justification	**Mobility Improvements -** The rail alternative would improve transit trip times from the Dade/Broward county line to Stage 1 Metrorail by 19 minutes, which is 56 percent better than TSM conditions in 2015. It would save 516 to 540 person-hours of travel time per day. The rail alternative is expected to attract 9,600 new daily transit trips. **Cost Effectiveness -** The rail alternative has a cost effectiveness index of $18 per new rider.

	Environmental Benefits - The southeast Florida area was redesignated as a maintenance area for ozone and an attainment area for carbon monoxide. The rail alternative would divert an estimated 6,300-7,600 vehicle trips per day to transit in 2015, leading to 93,500 to 131,700 fewer vehicle miles traveled (VMT). **Operating Efficiencies -** For the TSM alternative, the operating and maintenance cost per transit rider is $1.43 for the bus system and $1.63 for the rail system. For the heavy rail alternative, comparable costs are $1.42 for bus and $1.79 for rail.
Local Financial Commitment	MDTA is expected to seek 70 percent funding from the Section 5309 New Start program. The remaining 30 percent would be divided between the state and local sources. Some contribution for right-of-way is anticipated for transit stations at Miami-Dade Community College and Joe Robbie Stadium. Of the non-federal share, the state's portion is expected to come from a special appropriation to fund transit projects of regional significance. Another option would be the capitalized proceeds from Dade County's annual allocation from the State Transportation Block Grant program. The local portion of the funds is capitalized proceeds from a five-cent Local Option Gas Tax implemented in 1994. FTA has not rated the capital finance plan. Annual operating and maintenance costs for the rail alternative are estimated to be $14.2 million, representing a 7 percent increase over current expenses. FTA has not rated the stability and reliability of operating assistance.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$317.10	$2.97 million appropriated through FY 1996
State	$67.90	N/A
Local: Option Gas Tax	$68.00	N/A
TOTAL	**$453.00**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Mid Coast Corridor

San Diego County, California

(November 1, 1995)

Description	The Metropolitan Transit Development Board (MTDB), the California Department of Transportation (Caltrans), and the San Diego Association of Governments are proposing commuter rail improvements, a light rail line, and high occupancy vehicle lanes in the Mid-Coast Corridor. The corridor extends about 12 miles along I-5 from I-8 near Old Town, north to the vicinity of the University of California, San Diego, University Towne Centre shopping mall, and Carmel Valley. The commuter rail improvements consist of a new station and parking expansion on the existing Coaster line. The project is estimated to cost $5.7 million (1992 dollars). The 10.3-mile Mid-Coast LRT project would extend from Old Town to North University City, and would include 9 stations. The line would connect with the Mission Valley and South LRT lines and the Coaster line at the Old Town Transit Center. An initial phase is proposed from Old Town to Balboa Avenue. The LRT line and supporting bus services are estimated to cost $353.3 million (1992 dollars). The line is forecast to attract 15,590 riders per day. The proposed HOV lanes would be built by Caltrans in the median of I-5 between Carmel Mountain Road and I-8. The 11.6-mile project would connect with HOV lanes being planned and designed north of this segment. The HOV lanes are expected to cost $148.7 million (1992 dollars).
Status	Section 3035(u) of ISTEA directed FTA to sign a multiyear grant agreement with MTDB providing $27 million for the completion of alternatives analysis and the final environmental impact statement (EIS) and to purchase right-of-way. Through FY 1996, Congress has appropriated $4.1 million, of which $1.0 million has been rescinded and $1.7 million reprogrammed to other projects. The Mid-Coast alternatives analysis began in 1990 and a draft EIS was circulated in March 1995. In October 1995, the MTD Board selected the Locally Preferred Alternative described above. The LRT project is included in the Regional Transportation Plan; the Coaster rail stations and HOV lane project will be added in the next update.

Justification	**Mobility Improvements -** Freeways and arterial streets in the corridor are congested due to rapid growth and the lack of alternative routes. Existing bus service must contend with the same highway congestion as the private auto. The LRT line is expected to reduce travel time by 3,260 hours, and the HOV lane would reduce travel time by 5,680 hours (compared with the TSM alternative). **Cost Effectiveness -** The cost effectiveness index for the LRT line is $7 per new trip (1992 dollars, 2005 ridership). The cost effectiveness index for the HOV project is $2 per new trip. **Environmental Benefits -** The San Diego region is a "serious" non-attainment area for ozone and a "moderate" non-attainment area for carbon monoxide. MTDB estimates that the preferred alternative would reduce regional vehicle miles traveled by almost 0.2 percent. **Operating Efficiencies -** In 2005, MTDB's systemwide operating cost per passenger is projected to be $3.00 for the No-Build alternative, $3.08 for the TSM, $3.10 with the HOV lane and $3.04 with LRT.
Local Financial Commitment	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. The proposed Section 5309 share for the commuter rail improvements is 17 percent, or $.97 million. The balance would be derived from state funds and local sales tax funds. No funding strategy has yet been put forth for the Mid Coast LRT line. According to the MTDB, the project "can not be implemented with existing or currently foreseen revenue." The capital finance plan is rated "low." It should be noted that the MTDB is advancing several LRT projects without Federal funding. These include an LRT line from downtown to Old Town, a West Mission Valley Line, and an extension of the East Line to Santee. The MTDB has designated the Mission Valley East corridor as first priority for any additional funds that may become available. A variety of potential sources have been considered for the Mid-Coast LRT

	line's operating expenses. MTDB reports that "There is considerable variation in the likelihood of these funding sources becoming available." The stability and reliability of operating assistance is rated "low" pending the development of a funding strategy. The HOV project is to be implemented by Caltrans using highway funds. However, funds are not available at this time to begin the project.
Other Factors	The City of San Diego and SANDAG have adopted policies and guidelines favoring transit oriented development (TOD). These policies and guidelines include focusing higher intensity or new employment and residential development in areas with good transit access, and will be directed towards stations on the Mid-Coast LRT Line. Joint development prospects are promising at two, and possibly other, station locations.

East-West Corridor

Milwaukee, Wisconsin

(November 1, 1995)

Description	The Wisconsin Department of Transportation (WisDOT) is evaluating alternatives in a corridor which extends from Glendale and the University of Wisconsin-Milwaukee (UW-M), southwest through the CBD and the near north side of Milwaukee, to the western suburbs and the city of Waukesha. A Major Investment Study (MIS) is evaluating various LRT alignments and termini, special lanes for carpools and buses, Interstate highway modernization, TSM, and a No Build alternative. Several combination alternatives employing different technologies in different parts of the corridor are also under consideration.
Status	Section 3035(oo) of ISTEA directed 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 transit alternative identified in the Major Investment Study. In FY 1994, Congress appropriated $3 million for this project. WisDOT began an alternatives analysis (AA) in the Central Milwaukee East-West Corridor in 1991. In 1994, the AA was converted to a MIS, which includes an analysis of both transit and highway elements. The technical work associated with the MIS is essentially complete. A preferred alternative will be chosen in

	1996. WisDOT's preliminary funding strategy assumes $289 million of Interstate Transfer funding in accordance with Section 1045 of ISTEA. It also assumes that Section 5309 New Start funding will be sought for 80 percent of the transit capital cost. Matching funds for the funds pursuant to Section 1045 and Section 5309 funds are to be split 50/50 between the State and local jurisdictions, but there are no specific financial plans at present.

Mission Valley East Corridor

San Diego Counties, California

(November 1, 1995)

Description	The Metropolitan Transit Development Board (MTDB) is considering transit improvement options in the Mission Valley East corridor. The corridor is approximately 5.5 miles long, following Interstate 8 from Interstate 15 to near Baltimore Drive in La Mesa. The alternatives under consideration are No-Build, "Best Bus", and Light Rail Transit (LRT). The LRT alternative would extend the locally funded six-mile Mission Valley West LRT Line (currently under construction between Old Town and Interstate 15) through the corridor to connect with the existing East Line LRT in La Mesa. Alignment variations are under consideration at San Diego State University. Depending on the route option selected at San Diego State University, the LRT alternative is estimated to cost up to $332 million (1995 dollars).
Status	FTA approved the initiation of alternatives analysis in April 1993. The study will meet the intent of the Major Investment Study (MIS) requirement. A draft environmental impact statement is scheduled to be circulated for public review in the summer/fall of 1996, and a preferred alternative is scheduled for selection in early 1997. Information on cost effectiveness, environmental benefits and operating efficiencies associated with each alternative is scheduled to be available by mid-1996. This project was not authorized in ISTEA. Congress has not authorized or appropriated any funds for the Mission Valley East Corridor.

Central Corridor

Minneapolis-St. Paul, Minnesota

(November 1, 1995)

Description	The Minnesota Department of Transportation (MnDOT) and the railroad authorities of Hennepin and Ramsey Counties, acting as the Joint Lead Agencies (JLA), are studying light rail and bus alternatives between Minneapolis and St. Paul. The alternatives would serve the two downtowns and the University of Minnesota, and would be located within downtown street, I-94 and railroad rights-of-way and along an existing busway. Preliminary cost estimates are $581 million for the LRT, $253 million for the busway, and $83 million for TSM (escalated dollars).
Status	The alternatives analysis/draft EIS was published in December 1993. Lack of state and local funding has impeded progress on the study and very little work is currently underway. If funding issues can be resolved, the JLA can then select a locally preferred alternative and begin the final environmental impact statement and preliminary engineering. Congress appropriated $2 million in Section 5303 money in FY 1991 for planning, $7.8 million in Section 5309 funds in FY 1994 and FY 1995. The project is not authorized in ISTEA.
Justification	**Mobility Improvements -** The Central Corridor is one of the most densely developed and highest transit ridership corridors in the region. Projected daily travel time saved are 4,300 hours for the busway alternative and 4,700 hours for the LRT alternative. **Cost Effectiveness -** The cost effectiveness indices are $29 and $34 for the busway and LRT alternatives respectively. **Environmental Benefits -** Although the Twin Cities was designated a "moderate" nonattainment area for carbon monoxide, the area achieved the air quality standards for this pollutant in 1992-1993. The region is an attainment area for ozone. Information on the impact of the alternatives on regional air quality has not yet been developed. However, the busway and LRT alternatives are estimated to reduce the number of vehicle miles traveled in the region by less than 0.1 per cent while the TSM alternative would result in a reduction of less than half that amount.

	Operating Efficiencies - Operating costs per transit rider for the No-Build, TSM, Busway and LRT alternatives are $2.06, $2.18, $2.29 and $2.27, respectively.
Local Financial Commitment	The Twin Cities are investigating several strategies and a package of funding sources for generating local funds for the capital costs of this project. The Twin Cities are assuming that between 50 percent and 80 percent of the capital cost of the project will come from Section 5309. FTA will await the selection of a preferred alternative and development of a financing plan before rating the Twin Cities' local financial commitment. In 1994, the average age of the buses in the Twin Cities was 5.8 years, which is better than the national average.

Canal Streetcar Spine

New Orleans, Louisiana

(November 1, 1995)

Description	The Regional Transit Authority (RTA) is developing a 4.4-mile streetcar project in downtown New Orleans. The Canal Streetcar Spine would extend along the median of Canal Street from the Canal Ferry at the Mississippi River in the Central Business District, through the Mid-City neighborhood, to two outer termini at N. Anthony and Delgado Community College/City Park. A future extension of the route is proposed as a central business district loop. The capital cost estimate is $92.6 million. Upon completion, the ridership is estimated to be 30,500 passengers per day in the horizon year (2015).
Status	Section 3035(fff) of ISTEA directed 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 FY 1994-96, Congress has appropriated $18.44 million. A major investment study/alternatives analysis was completed in March 1995 with the selection of the preferred alternative described above. FTA approved the initiation of preliminary engineering and the preparation of a draft environmental impact statement in September 1995. Preliminary engineering is scheduled to begin in late 1996. The project is included in the MPO's financially constrained and conforming Transportation Plan and Transportation Improvement Plan.

Justification	**Mobility Improvements -** The Canal Streetcar Spine is expected to save 433 hours of travel time hours per day in the horizon year 2015, compared with the TSM alternative. **Cost Effectiveness -** The cost effectiveness index is $3 per new transit rider. **Environmental Benefits -** The New Orleans metropolitan area is an attainment area for Carbon Monoxide and a maintenance area for ozone. Compared with the TSM alternative, the project is expected to reduce vehicle miles traveled by 6,800 per day in 2015. **Operating Efficiencies -** The systemwide operating cost per revenue passenger is $2.03 for the build alternative, $2.61 for the No Build alternative, and $2.45 for the TSM alternative.
Local Financial Commitment	RTA is expected to seek Section 5309 funding for 80 percent of the cost of the 4.4-mile light rail alternative, or $74.1 million. Most of the local share would be derived from state bonds. The City of New Orleans has committed $1.2 million for planning and engineering. RTA is also seeking to claim the value of the right of way as in-kind match. The capital finance plan is rated "low". The RTA has negative working capital and is experiencing severe financial difficulties (see below) which cast doubt on the fiscal solvency of the agency. The stability and reliability of operating revenues are also rated "low". The RTA levies a 1 percent sales and use tax dedicated to transit purposes, and the streetcar project will reduce operating costs. According to RTA's financial advisors, KPMG Peat Marwick, "certain of the RTA's operating costs are out of control with respect to revenues available. The agency misses 50 daily trips due to an inability to maintain its fleet, and has 135 inoperable buses" (Draft Performance Overview Board Report, October 1995). A rescue plan has not yet been put forward. In 1994, the average age of RTA's bus fleet was 9.8 years, which is slightly above the national average.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$74.10	$18.44 million appropriated through FY 1996

State:	$18.50	N/A
TOTAL	**$92.60**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Appendix A Listing 4

Burlington - Gloucester Corridor

Southern New Jersey

(November 1, 1995)

Description	New Jersey Transit, in cooperation with the Delaware River Port Authority and the Delaware Valley Regional Planning Commission, is studying several rail and bus alternatives in a 36-mile corridor. The corridor extends from Glassboro in Gloucester County to Mount Holly in Burlington County by way of Camden, where it would either cross or join the existing Lindenwold Line. Several alternative technologies are being considered ranging from at-grade light rail to grade-separated heavy rail compatible with the existing Lindenwold Line. The alternatives would operate within abandoned or existing rail rights-of-way or Interstate highway medians. Preliminary cost estimates indicate that capital costs for the longest heavy rail alternatives could be between $1.4 billion and $1.5 billion (1995 dollars). Preliminary cost estimates also indicate that capital costs for the longest light rail alternatives could be $1.4 billion (1995 dollars).
Status	In March 1994, NJ Transit received federal funds in the amount of $1,800,000 to conduct a Major Investment Study (MIS) for the Burlington and Gloucester Corridors. The study will generate information on the costs and benefits of the alternatives and will lead to the selection of a locally preferred alternative and a financing plan. It is anticipated that the study will be completed is early 1996. This project is not authorized in ISTEA. In FY 1995, $1.5 million was appropriated.

Hawthorne-Warwick Corridor

Northern New Jersey/New York

(November 1, 1995)

Description	The New Jersey Transit Corporation (NJ Transit) has proposed the restoration of commuter rail service on the New York, Susquehanna & Western (NYS&W) rail line, possibly as far as Warwick, N.Y. The service would connect to the New Jersey Transit's Main Line at Hawthorne, New Jersey, where trains would connect to Hoboken. The project would includes track and signal improvements, new stations and parking facilities, equipment acquisition and rehabilitation of the Patterson (N.J.) Station on the NJ Transit main Line.

Status	Section 3035(a) of ISTEA directed FTA to negotiate and sign a multiyear grant agreement with NJ Transit for $46.9 million. The agreement would cover the construction of this project. Through FY 1996, Congress appropriated $46.8 million in New Start funds, of which $17.1 million was rescinded in FY 1995. A $1.5 million planning study is underway which includes conceptual design of the NYS&W line, an environmental assessment, capital cost estimates and preliminary design and engineering of the Patterson station upgrade project. The study is expected to be completed in the spring of 1996. In September 1995, FTA awarded a $6.6 million grant amendment which brings the total Federal funding up to $8.2 million. These funds will support the continuation of the operation analysis and environmental assessment effort now in progress, the initiation of signal and communication system planning, a more extensive public outreach and community involvement program, and preliminary engineering and design for the Patterson station upgrade, which includes accessibility improvements associated with the Americans with Disabilities Act. Information on local financial commitment, mobility improvements, cost effectiveness, environmental benefits and operating efficiencies is being developed in the planning study.

Hudson-Bergen Waterfront Light Rail Transit System

Northern New Jersey

(April 1, 1996)

Description	The New Jersey Transit Corporation (NJ Transit) is proposing a light rail transit line along the Hudson River waterfront in Hudson County. The full project is a 20.5-mile, 33-station at-grade LRT line from the Vince Lombardi Park-and-Ride lot in Bergen County to Bayonne. The project passes through Port Imperial in Weehauken, Hoboken and Jersey City. The outer ends would provide 8,800 park-and-ride spaces. The core of the system would serve the high density commercial and residential centers in Jersey City and Hoboken and connect to ferries, PATH, and NJ Transit commuter rail lines. A 10-mile "initial operating segment" would connect the Hoboken Terminal to 34th Street Bayonne and Westside Avenue in Jersey City. The 20.5-mile system is expected to cost $1.3 billion (escalated dollars) and to

	carry 81,448 riders per day. The initial operating segment is expected to cost $623.9 million and to carry 31,275 riders per day.
Status	Section 3031 of ISTEA directed FTA to negotiate and enter into a full funding grant agreement providing no less than $634.4 million for those elements of the New Jersey Urban Core Project which can be fully funded in FY 1992 through FY 1997. The Hudson-Bergen LRT project is one of eight elements eligible for funding. In fiscal years 1992 through 1996, Congress appropriated $408.4 million for the Urban Core Project. In February 1993, NJ Transit selected, as its locally preferred alternative, a 15.3-mile, 26-station at-grade LRT line from the Vince Lombardi Park-and-Ride lot through Hoboken and Jersey City to Route 440 in Southwest Jersey City. Later in 1993, NJ Transit added a 5.2-mile, 7-station extension to southern Bayonne. In mid-1993 NJ Transit initiated preliminary engineering and completion of the environmental documentation process. A supplemental draft EIS for the downtown Jersey City section of the project has been distributed for comment. Review of the final EIS is expected to be completed in the summer of 1996 with a Record of Decision (ROD) anticipated by the Fall, 1996. NJ Transit is using a turnkey procurement to implement the project. A solicitation for proposals to design/build/operate/maintain was issued in November 1995. Possible opportunities for equity participation by the successful proposer will be identified during this process.
Justification	Section 3031(c) of ISTEA specifically exempted the Urban Core Project from the New Starts project justification criteria. **Mobility Improvements -** The project would provide fixed guideway transit service to existing and proposed new developments along the New Jersey waterfront. It would provide internal transit circulation along the waterfront, and would connect with NJ Transit Commuter Rail service at Hoboken, with PATH trains to Newark and Manhattan, and with the Port Imperial Ferry from Weehauken to Manhattan. Park and ride lots in Jersey City and Bayonne would intercept drivers bound for the new offices on the NJ side of the Hudson who are presently caught in tunnel traffic. The original project (without the Bayonne extension) was estimated to save

	almost 22,000 hours of travel time daily over the TSM alternative. **Cost Effectiveness -** The cost effectiveness index for the full build system is $11 per new rider. **Environmental Benefits -** Northern New Jersey is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. FTA does not have information specifically on the impact of the full 20.5-mile project on regional air quality. However, the initial operating segment is expected to reduce daily emissions by about 0.3 percent in the study area and the full project would reduce emissions by approximately double that amount. **Operating Efficiencies -** FTA does not have information on how the project would affect NJ Transit's operating cost per passenger. The LRT line would be a small fraction of the overall NJ Transit system and should have minimal impacts. Operation by a turnkey contractor may improve efficiency.
Local Financial Commitment	The Section 5309 New Start share is expected to be $623.9 million, or about 50 percent of the total project cost. The financial plan has not been finalized and depends on the outcome of the turnkey procurement process. The plan is expected to involve a combination of state and private capital and will reflect substantial input from the successful turnkey vendor. State funds would be derived from the State Transportation Trust Fund. As provided in Section 3031(b) of ISTEA, NJ Transit may use locally funded projects such as the Kearny and Waterfront Connections, and New Jersey Turnpike projects, as local match for the Hudson Bergen LRT and other Urban Core projects. The capital finance plan has been rated "low-medium", considering the number of uncertainties in the plan at this stage. NJ Transit's five year capital program (1996-2000) anticipates a total expenditure of $400 million ($80 million per year) on the Hudson-Bergen Line. The program anticipates Section 5309 New Start funding of $697.3 million for this and other capital projects, or close to $140 million per year, compared with actual New Start appropriations of $79.3 million in 1996 and $106.2 million in 1995. The fourth and fifth years are overprogrammed. Nevertheless, NJ Transit has given this particular project a high priority for available funds. The uncertainties in the project's finance plan are expected to be resolved as the turnkey procurement and preliminary engineering are concluded. The stability and reliability of operating revenues are rated "low- medium" due

	to the funding uncertainties for this project and the possibility of unfunded deficits for the system. The selected turnkey contractor will operate and maintain this project but the cost to NJ Transit is unknown at this time. NJ Transit's overall operating expenses are projected to increase by 10.7 percent by 1999 while revenues are projected to be essentially unchanged, leading to a deficit that could reach $79 million in 1999. In response, NJ Transit has undertaken a cost cutting program, utilizing innovative strategies such as cross-border leasing, that has led to an operating surplus. Transit service levels are being maintained. In 1994, the average vehicle age of NJ Transit's bus fleet was 9.8 years, which is slightly higher than the national average. The average age of the rail fleet is 15.8 years.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$623.90	$108.99 million appropriated through FY 1996
Section 5307 Formula	N/A	N/A
State:	N/A	N/A
Local:	N/A	N/A
TOTAL	**$1300.00**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Lakewood-Freehold-Matawan or Jamesburg Corridor

Northern New Jersey

(November 1, 1995)

Description	The New Jersey Transit Corporation (NJ Transit) is studying transit improvement options between Lakewood and Newark. The three counties traversed by the route are among the fastest growing in the State of New Jersey. Several alignment possibilities have been examined and the options have been narrowed to diesel powered commuter rail on two rail alignments and an enhanced bus system.
Status	Section 3035(p) of ISTEA directed 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. In FY 1992-1994, a total of $7.8 million was appropriated. In FY 1993, a $1.8 million grant was awarded to begin a Major Investment

	Study (MIS) and preparation of a draft EIS. A preferred alternative is expected to be selected by early 1996. In FY 1995, a $5.9 million grant was awarded to support the development of the draft EIS for the locally preferred alternative that is expected to result from the MIS. Information on the local financial commitment, mobility improvements, cost effectiveness, environmental benefits and operating efficiencies is being developed in the MIS.

Newark-Elizabeth Rail Link

Northern New Jersey

(November 1, 1995)

Description	The New Jersey Transit Corporation (NJ Transit) is proposing an 8.8 -mile, 15-station light rail transit line linking Newark, Elizabeth, and Newark International Airport. The capital cost of the project is estimated to be $694 million (1995 dollars). NJ Transit predicts that the line will carry 24,900 riders per day in 2015. A 2-mile "initial operating segment" (IOS) from Broad Street Station to Newark Penn Station is estimated to cost $141 million (1995 dollars), including associated stations, vehicles and yard. The IOS is predicted to carry 13,200 riders per day in 2015.
Status	Section 3031 of ISTEA directed FTA to negotiate and enter into a full funding grant agreement providing no less than $634.4 million for those elements of the New Jersey Urban Core Project which can be fully funded in FY 1992 through FY 1997. The Newark-Elizabeth project is one of eight elements eligible for funding. In fiscal years 1992 through 1996, Congress appropriated $408.4 million for the Urban Core Project. The Newark-Elizabeth Rail Link is in the preliminary engineering phase of project development. The final alignment is under evaluation as part of the preliminary engineering efforts. The project is being advanced in two parts with separate environmental documents: one part involves extending the existing freight railroad right- of-way to a new maintenance facility at the "uptown" end, the other is a new LRT line from downtown Newark to Elizabeth. Draft environmental documents are in preparation. Preliminary engineering and the environmental process could be completed by the end of

	1996.
Justification	**Mobility Improvements -** The project would improve access to the airport, transfers between commuter rail lines, access to existing and new development sites, and internal circulation in downtown Newark. Preliminary estimates indicate that the project would save over 1,300 hours of travel time daily. The initial operating segment is projected to save 800 hours daily. **Cost Effectiveness -** The cost effectiveness index for the IOS is $5 per new rider (1995 dollars, 2015 ridership). For the full project, the index is $17 per new rider (1995 dollars, 2015 ridership). **Environmental Benefits -** Northern New Jersey is a "severe" nonattainment area for ozone and a "moderate" nonattainment area for carbon monoxide. The impact of the proposed project on regional air quality has not yet been determined. **Operating Efficiencies -** FTA does not have information on how the project would affect NJ Transit's operating cost per passenger.
Local Financial Commitment	A financial plan has not been completed. The plan is expected to involve a combination of FTA and state funds, with the exact mix to be determined in the course of preliminary engineering. As provided in Section 3031(b) of ISTEA, NJ Transit may use locally funded projects such as the Kearny and Waterfront Connections, and New Jersey Turnpike projects as local match for the Newark Elizabeth Rail Link and other Urban Core projects. The capital finance plan is rated "low" due to the lack of a financial plan. NJ Transit's Five Year Capital Plan (1996-2000) does not anticipate any funding for the project during the program period. The Five Year Capital Plan anticipates Section 5309 New Start funding of $697.3 million, or close to $140 million per year on average, for other projects. This compares with actual appropriations of $79.3 million in 1996 and $106.2 million in 1995. The fourth and fifth years of the Plan have been overprogrammed by 30 percent, meaning that some of the programmed projects may not be fundable. The stability and reliability of operating assistance are rated "low" due to the lack of a finance plan for this project and the possibility of unfunded operating deficits for the system. NJ Transit's overall operating expenses are projected to increase by 10.7 percent by 1999 while revenues are projected to be essentially

	unchanged, leading to a deficit that could reach $79 million in 1999. In response, NJ Transit has undertaken a cost cutting program, utilizing innovative strategies such as cross-border leasing, that have led to an operating surplus. Transit service levels are being maintained. In 1994 the average vehicle age of NJ Transit's bus fleet was 9.8 years, which is slightly higher than the national average. The average age of the rail fleet is 15.8 years.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	N/A	$11.95 million appropriated through FY 1996
Section 5307 Formula	N/A	N/A
Flexible Funds	N/A	N/A
State:	N/A	N/A
Local:	N/A	N/A
TOTAL	**$694.00**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Secaucus Transfer Station

Northern New Jersey

(November 1, 1995)

Description	The New Jersey Transit Corporation (NJ Transit) is constructing a major commuter rail transfer station in Secaucus where its Main, Bergen and Pascack Valley Lines intersect the Northeast Corridor (NEC) Line. Passengers on the Main, Bergen, Pascack Valley and Port Jervis lines can transfer to the NEC for more direct rail service to Midtown Manhattan via Penn Station NY and southern New Jersey via Penn Station Newark. Located in the New Jersey Meadowlands, the project is being constructed as part of a potential public/private partnership which would include the development of a major commercial center. The Secaucus Transfer Station (STS) project includes construction of a three-level 200,000 square foot transfer station at the intersection of the NEC, Main and Bergen lines. The station foundations and structural system will support the commercial development over the station which may occur in the future. It also includes modification of 2 miles of the NEC from two to four tracks with improved signal, power and communication systems. Similar upgrading of tracks and bridges on the Bergen-Main Lines near the new station are also

	included. The STS is estimated to cost $444.26 million.
Status	Section 3031 of ISTEA directed FTA to consider non-Federal contributions to the capital cost of the NJ Urban Core Project made since 1987 as required local matching funds for the project. 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 local matching funds for any Federally assisted highway or transit project. Sufficient non-Federal funds to constitute local match for the STS, in accordance with Sections 1044 and 3031 of ISTEA, have already been expended. ISTEA identifies the STS as one element of the New Jersey Urban Core Project which includes seven other major elements, and requires FTA to enter into a full funding grant agreement (FFGA) for those elements which can be fully funded in FY 1992 through FY 1997. The total amount of New Start funds authorized by ISTEA for the NJ Urban Core Project is $634.40 million. FTA signed an FFGA with NJ Transit in December 1994 for construction of the STS. NJ Transit began construction immediately with revenue operations scheduled for 2002. The FFGA sets the New Start contribution to the STS at $444.26 million, which is 99 percent of its cost, and identifies the specific expenditures by NJ Transit that constitute local matching funds for the STS.

Proposed Source of Funds	**Total Funding ($million)**	**Description**
Federal: Section 5309 New Start FFGA Amount	$444.26	$312.47 million appropriated through FY 1996
Local:	$0.00	N/A
TOTAL	**$444.26**	

West Shore Corridor

Northern New Jersey/New York

(November 1, 1995)

Description	The New Jersey Transit Corporation (NJ Transit) is conducting a planning study for the West Shore Corridor between Hoboken, New Jersey and either West Nyack, New York or West Haverstraw, New York. The corridor includes the former West Shore rail line (now known as Conrail's River Line) and is 29 to 38 miles in length.
Status	A 1993 planning study proposed commuter rail service from Hoboken and the Secaucus Transfer station to West Nyack, NY. Rockland County, NY officials suggested that the line be extended farther north to West Haverstraw. In June 1995, FTA awarded $4.0 million for a Major Investment Study and a draft EIS for the West Shore Rail Corridor. The purpose of the MIS is to look at commuter rail, light rail, highway, and transportation systems management alternatives for improving mobility for commuters in the corridor. This MIS will result in the selection of a preferred alternative and a financing plan. The study will also produce information FTA can use to evaluate the resulting project. Through FY 1996, Congress has appropriated $4.0 million to support this project.

Norfolk-Virginia Beach Corridor

Norfolk, Virginia

(November 1, 1995)

Description	Tidewater Regional Transit (TRT) is evaluating transit/transportation improvements in the 30-mile corridor extending from downtown Norfolk and the Norfolk Naval Base to Virginia Beach. Alternatives being considered include No Build, Congestion Management System, Enhanced Bus, and Light Rail Transit. Potential economic development opportunities along the alignment and mobility for transit dependent populations are important issues in the corridor.
Status	TRT is conducting a Major Investment Study (MIS) of the Norfolk - Virginia Beach Corridor. The next phase of the MIS is to perform detailed analysis and evaluation of the four alternatives in terms of ridership, mobility improvements, cost effectiveness, environmental benefits, etc. The evaluation of the alternatives is expected to be completed in February 1996, followed by the selection of a preferred alternative by June 1996.

	Congress has not authorized or appropriated funds for this corridor.

Queens Connector

New York, New York

(November 1, 1995)

Description	The Queens Boulevard Connection will relieve severe overcrowding on the Queens Boulevard subway line's existing 53rd Street Tunnel bottleneck by providing service through the 63rd Street Tunnel. This will allow an additional 15 trains per hour to be run between Manhattan and Queens. Approximately 1/3 of the 60,000 peak hour passengers currently using the 53rd St Tunnel are expected to transfer to this new route. Construction will include about 1/3 mile of new tunnel, a significant amount of track and signal work, real estate acquisition and design at a total cost of $645 million.
Status	Section 3033 of ISTEA directed FTA to negotiate and enter into a full funding grant agreement (FFGA) in the amount of $306.1 million for the elements of the Queens Boulevard Connection which can be fully funded in FY 1992 through FY 1996. Through FY 1996, $271.08 million in Section 5309 funds have been appropriated by Congress. The New York City Transit Authority (NYCTA) completed the final EIS and preliminary engineering in mid-1992 and an FFGA has been signed. Construction began in July 1994, and is expected to be completed in 2001.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$306.10	$271.08 million appropriated through FY 1996
Flexible Funds	$22.68	N/A
Local:	$316.22	N/A
TOTAL	**$645.00**	

Staten Island-Midtown Manhattan Ferry Service

New York, New York

(November 1, 1995)

Description	The New York City Department of Transportation (NYCDOT) has proposed construction of terminals and initiating high speed ferry service between Staten Island and Midtown Manhattan. The service would be provided by privately owned and operated ferries without public operating subsidies. The estimated cost of this project is $12.6 million. The estimated ridership is 4,800 per day.
Status	Section 3035(d) of ISTEA directed 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, of which $375,000 was rescinded in FY 1995. During FY 1995, FTA approved a grant in the amount of $250,000 for design and engineering activities only. Upon substantial completion of design and engineering, construction funding will be provided based upon availability. NYCDOT has selected an operator of this service. The operator has agreed to procure all vessels at its own expense and to provide the ferry service without operating subsidies. NYCDOT will provide a landing facility at the St. George Ferry Terminal on Staten Island by upgrading an unused slip using FTA funds. NYCDOT and the Port Authority of New York and New Jersey have initiated the process of hiring a design consultant for this work. Ferry service is scheduled to begin in the summer of 1996 using existing terminals on an interim basis until upgraded slips are available in December of 1996.
Justification	Since the proposed Section 5309 share is less than $25 million, this proposal is not subject to the new start criteria in 49 U.S.C. Section 5309(e) (2)-(7).
Local Financial Commitment	The project, especially its initial $1 million modification of an existing Staten Island ferry slip, 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. At the present time NYCDOT has not established a capital financing plan for this project. The private operator is paying for the purchase of three catamarans and the operating costs. The balance of the $11 million would pay for new landing facility in Manhattan. In 1995, the average age of ferry boats operated by the New York City DOT

	was 19.4 years. Three of the older ferries are in need of replacement.

Whitehall Ferry Terminal

New York, New York

(November 1, 1995)

Description	The New York City Department of Transportation and the New York City Economic Development Corporation have proposed the redesign and reconstruction of the Staten Island Ferry's Whitehall terminal in downtown Manhattan. The terminal was largely destroyed by fire in 1991 and ferry service has been operating out of interim facilities since then. The preliminary estimate of the cost of reconstruction is approximately $80 million. Currently, 60,000 people use this terminal a day.
Status	Preliminary design will begin in March 1996. Final design is expected to begin in June 1996 and be completed by February 1998. Construction is programmed to begin in late 1998 and will take 3 years to complete. Through FY 1996, Congress has appropriated $5.0 million.

Northeast Ohio Commuter Rail Feasibility Study

Cleveland, Ohio

(November 1, 1995)

Description	This proposal involves commuter rail service to connect urban and suburban areas of northeastern Ohio.
Status	Section 3035(w) of ISTEA directed FTA to sign a multiyear grant agreement with the Northeast Ohio Areawide Coordinating Agency (NOACA) in the amount of $1.6 million for a commuter rail feasibility study. The Northeast Ohio Areawide Coordinating Agency has received a grant for $800,000 and has begun work on Phase I of the study. In this phase, NOACA is looking at existing and proposed land use patterns and impacts, preliminary ridership estimates, preliminary cost estimates, and will select potential commuter rail corridors in the Cleveland, Ohio area for further study. The first phase of study is expected to be completed in mid-1996. Phase II, if funds are made available, will complete the analysis by assessing

	economic and environmental implications of a commuter rail system, as well as other transportation modes available to meet anticipated travel demand. Phase II would also include preliminary design, cost and integration with existing transit services.

Park Avenue Rail Loop

Oklahoma City, Oklahoma

(November 1, 1995)

Description	The Central Oklahoma Transportation and Parking Authority (COTPA) is proposing a 1.74-mile, $12.5 million vintage rail trolley circulator in downtown Oklahoma City. The project is known as the Park Avenue Rail Loop and the MAPS (Metropolitan Area Projects) Link. COTPA estimates that 630 daily riders will use this route in the year 2015.
Status	COTPA completed a major investment study for a 15-mile corridor that connects the hotel district along Meridian Avenue in southwest Oklahoma City with the downtown and the area around Remington Park Racetrack in the northeast. The preferred alternative includes the vintage trolley project in downtown, and was selected in September 1995. The trolley project is included in the regionally adopted metropolitan transportation plan and transportation improvement program. COTPA will be using Section 5307 formula funds for preliminary engineering. Congress has not authorized or appropriated any funds for this project.
Justification	This project is exempt from the New Starts criteria since the anticipated Section 5309 federal share is less than $25 million. **Mobility Improvements -** The MAPS Link is not expected to reduce travel time since it is not a peak period system. However, the project will serve the largest concentrations of office and commercial development, existing parking resources, and MAPS facilities downtown. Approximately 630 daily riders are expected to be attracted to the route. **Cost Effectiveness -** The cost effectiveness index is $5 per new trip. **Environmental Benefits -** Oklahoma City is classified as an attainment area for air quality. A preliminary evaluation of environmental factors indicated no

	negative environmental impacts. **Operating Efficiencies -** The project's impact on systemwide operating cost per passenger has not been computed, but is likely to be insignificant. A cost of $1.88 per passenger trip is anticipated for the LPA.
Local Financial Commitment	COTPA is expected to seek a Section 5309 New Start share of $9.2 million, or 73 percent of the project's estimated capital cost. Other Federal funds would be obtained from the Section 5307 and Community Development Block Grant programs. The 20 percent local share would be derived from a voter approved, 5-year 1 percent sales tax. FTA has not rated the capital financing plan or the stability and reliability of operating revenues.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$9.20	$0.00 million appropriated through FY 1996
Section 5307	$0.08	N/A
Community Development Block Grant	$0.72	N/A
Local:	$2.50	N/A
TOTAL	**$12.50**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

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

Orange County, California

(November 1, 1995)

Description	The Orange County Transportation Agency (OCTA) and the California Department of Transportation (Caltrans) have recently constructed HOV lanes on three Orange County freeways including I-405, SR-55, and SR-57. Construction of a joint HOV/Transitway facilities is currently taking place on I-5 and SR-91 and is scheduled to be completed by 2000. Upon completion, the 100-mile transitway/HOV network will encompass all of Orange County's major freeways, with the exception of SR-22. As originally envisioned, the I-405/SR55 Transitway and Direct Access

	Ramps project consisted of the HOV/transitway connector ramps between the I-405 and SR-55 freeways, 7759 park-n ride spaces, and 361 express buses to serve six activity centers. The HOV/Transitway connectors were to include three direct off ramps between the exclusive HOV/Transit lanes to the immediate vicinity of the activity centers. The ramps would enable express buses coming from the outer sections of the county to exit directly from the freeways without weaving across the mixed mode lanes. The project was estimated to cost $528.9 million. The original project has been scaled back. OCTA now envisions 6,735 park and ride spaces and 50 new express buses through the year 2010. Additional bus purchases are planned after 2010. The Sunflower ramp to Costa Mesa has been deleted. The scaled-back project is estimated to cost $409 million (escalated dollars).
Status	The environmental process has been completed on the original project concept. On July 16, 1994, FTA issued a Finding of No Significant Impact (FONSI). On September 6, 1994, a Letter of no Prejudice was issued allowing the transit agency to incur costs for design and right-of-way activities. Final design on the South Braid Ramps will be finished in 1998 and on the North Braid about the year 2000. Construction on the South Braid may start in 1998 and North Braid in 2001. Full completion is anticipated in 2004. The project was not authorized in ISTEA. Through FY 1996, Congress has appropriated $20.3 million.
Justification	**Mobility Improvements -** For the original project concept, OCTA estimated that the direct access ramps would reduce HOV travel time by approximately 4 minutes compared to the TSM alternative for an average trip. However, reduction of bus acquisitions and deletion of the Sunflower Avenue ramp reduces the transit benefits of the project. No systemwide travel time savings have been calculated for the original project concept or the scaled back project. **Cost Effectiveness** - The cost effectiveness index for the original project was $4 per new trip (1989 dollars, 2010 ridership). OCTA has not recalculated the index to reflect the scaled back project, increases in construction costs since 1989, or increases in the value of time. **Environmental Benefits -** Southern California is classified as an "extreme"

	nonattainment area for ozone and a "serious" nonattainment area for carbon monoxide. The original project concept was expected to remove 13,600 vehicles per day from the mixed flow lanes. **Operating Efficiencies -** Based on the original project concept, the systemwide operating cost per transit passenger was projected to be $1.68 for the No-Build alternative, $2.14 for the TSM alternative, and $2.10 for Build alternative.
Local Financial Commitment	Orange County is requesting a Section 5309 New Start funding share of $288 million, or 70 percent of project costs. Over half of the non-Federal share would be provided from Measure M county sales tax. The finance plan also includes $26 million of developer, special district and general revenue funds from local jurisdictions. The capital finance plan is rated "low-medium". A detailed plan is not currently in place, due to ongoing negotiations with other funding agencies and private sources. The Measure M sales tax, passed in 1990, set aside $125 million for transitways with an unspecified portion for this project. Funding projections for Measure M appear reasonable. The stability and reliability of operating revenues are rated "low". This is due in part to the lack of clarity and commitment in the finance plan. Also, state law addressing the County's bankruptcy requires that OCTD provide $38 million Transportation Development Act (TDA) funds each year to the County of Orange for 15 years beginning July 1, 1996. In turn, $23 million of county gas tax funds would be returned to OCTD as back fill, leaving a gap of $15 million each year for the transit agency for the second to the 15th year. OCTD will loose the full $38 million the first year. Thirty-one of 73 bus routes, representing 21 percent of the bus service including express service, may need to be eliminated, unless OCTD can obtain additional funding. The agency reports some success in doing this. An updated financial plan is due in early 1996. In 1994, the average age of OCTD's bus fleet was 9.5 years which is comparable to the national average.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$288.30	$20.34 million appropriated through FY 1996
State/Local:	$120.80	N/A
TOTAL	**$409.10**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Cross County Metro Corridor

Philadelphia, Pennsylvania

(November 1, 1995)

Description	The Southeastern Pennsylvania Transportation Authority (SEPTA) is initiating a $1.5 million Major Investment Study/Draft Environmental Impact Statement (MIS/DEIS) for the Cross County Metro Study Corridor. The core study extends approximately 48 miles from Glenloch, Chester County, to Morrisville, Bucks County, along CONRAIL's existing "Trenton Cutoff" freight rail line. Possible extensions to Trenton, New Jersey and Parkesburg, Chester County, comprise the secondary study corridor.
Status	Section 3035(yy) of ISTEA directed 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 the proposed Cross County Metro. To date, Congress has appropriated $1.2 million for preliminary engineering and design. In 1994, SEPTA completed a $250,000 federally-funded feasibility study which examined potential ridership, alternative modes, preliminary station locations and capital and operating costs for a potential Cross County Metro service. The light rail alternative proved to be the most cost effective, with more than 9,100 new transit trips, 18 stations and an estimated cost of $250 million. Use of transit based fares increased forecasted light rail ridership to more than 11,700 trips. An enhanced land use scenario resulted in an additional 19 percent increase in ridership to approximately 14,000 trips for the light rail alternative. In 1994, SEPTA applied for and received all of the appropriated funds to undertake a Major Investment Study and preparation of a draft EIS. A key issue in the MIS/DEIS will be intermodalism, since access to proposed stations, development of park and ride lots and operation of shuttle bus service to nearby industrial, office and retail concentrations will be essential to attract ridership in the study corridor. Related issues are municipal land use and zoning policies, as well as community attitudes concerning the introduction of new transit service in an auto-oriented suburban environment.

	The MIS/DEIS will also examine funding options for the capital and operating expenses associated with the proposed alternatives. The MIS/EIS is intended to result in a locally preferred alternative and sufficient information for FTA to evaluate the proposed project as a candidate for New Start funding.

Northeast Philadelphia Corridor

Philadelphia, Pennsylvania

(November 1, 1995)

Description	The City of Philadelphia and the Southeastern Pennsylvania Transportation Authority (SEPTA) are considering new, fixed route transit services for the Northeast section of Philadelphia parallel to I-95 and Route 1 (Roosevelt Boulevard). At the same time, the Pennsylvania Department of Transportation is advancing a major reconstruction and intermodal project for I-95, and has been working with the City of Philadelphia, SEPTA, and Bucks County on various rail, transit, and park and ride components of the overall project. The SEPTA and City service proposals are intended to supplement the existing R3 line and R7 line Regional Rail Service, which traverses Northeast Philadelphia, and are separate from the rail and transit components of the pending I-95 reconstruction project.
Status	Section 3035(gg) of ISTEA directed FTA to enter into a multiyear grant agreement with SEPTA for $0.4 million to provide for a study of the feasibility of instituting additional commuter rail service in the corridor. To date, Congress has not appropriated funds for the proposed study. A draft scope of work was prepared by SEPTA in 1992 with the goal of combining the proposed ISTEA study and a previously awarded City of Philadelphia technical study into a single study of Northeast Philadelphia public transportation needs and options. The lack of a congressional appropriation resulted in abandonment of this approach and the initiation of the city's separate study in 1993. In 1995, the Philadelphia City Planning Commission completed the Northeast Philadelphia Rapid Transit Extension Study, which analyzed alternative alignments, potential ridership, costs and impacts of light rail and subway/elevated rapid transit to serve Northeast Philadelphia. The study focused on extensions of SEPTA's Broad Street subway and the Market Frankford Subway Elevated line, as well as possible light rail service. SEPTA's proposed Northeast Metro, which includes conversion of the R8 Fox Chase line to light rail service, use of CONRAIL's New York Short Line and local street running to the new Philadelphia Convention Center, were added to the Planning Commission's study at SEPTA's request. The study recommends advancement of the proposed subway and rapid transit extensions to a Major Investment Study

	(MIS). The Northeast Metro was not recommended for advancement due to the Planning Commission's belief that it did not serve the primary ridership market in the Northeast and local business concerns, along the American Street corridor, who objected to the proposed on-street, light rail service. SEPTA disagrees with the conclusions and recommendations of the technical study and believes the Northeast Metro concept warrants further analysis through a separate MIS process. Congress has not appropriated any funds for this project.

Phase I Airport Busway/Wabash HOV Facility

Pittsburgh, Pennsylvania

(November 1, 1995)

Description	The Port Authority of Allegheny County (PATransit) is constructing a 7-mile busway and an HOV facility. The busway, extending from Carnegie to downtown Pittsburgh, will follow sections of active and abandoned railroad right of way from Carnegie to Station Square, which is across the Monongahela River from downtown Pittsburgh. At Station Square the exclusive busway will intersect a 1.1 mile HOV facility comprised of a rehabilitated Wabash Tunnel and new bridge across the Monongahela River, which would complete the connection into downtown Pittsburgh. In the remaining 12 miles of the corridor, from Carnegie to the airport, buses will operate in mixed traffic on the relatively uncongested Parkway West (I-279). There will be a direct ramp connection in Carnegie between the busway and the Parkway West. The project is estimated to cost $326.80 million (escalated dollars). New daily transit and carpool trips is estimated to be 17,930.
Status	In 1992, the PATransit Board completed alternatives analysis and selected the Busway/Wabash HOV/New River Crossing to Market Street as the locally preferred alternative. The final EIS was approved in June 1994. A construction groundbreaking ceremony was held on October 27, 1994 when the full funding grant agreement (FFGA) was signed. The FFGA calls for $121.00 million in Section 5309 new start funds. The remainder of the project budget will be funded through a combination of Section 5309 bus funds, CMAQ funds, intermodal funds pursuant to ISTEA Sections 1108 and 1069, and funds from the Commonwealth of Pennsylvania. Through FY96, Congress has appropriated $98.40 million in Section 5309 New Start funds, $19 million in Section 5309 bus funds, $15.80 million in ISTEA Section 1069 funds, and $8.00 million in Section 1108 funds. An additional $22.74 million in reallocated New

	Starts funds were also provided in FY 1996, bringing the total Section 5309 New Start funding to $121.0 million. The project is expected to open for revenue service in 1998.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$121.00	$121.00 million appropriated through FY 1996
Section 5309 Bus	$10.00	N/A
CMAQ	$76.50	N/A
Section 1108	$9.80	N/A
Section 1069	$39.50	N/A
State: State Bond Funds	$70.00	N/A
TOTAL	**$326.80**	

Stage II Light Rail Transit Reconstruction Project

Pittsburgh, Pennsylvania

(November 1, 1995)

Description	During the 1980s, 13 miles of the 25-mile rail system in Pittsburgh were reconstructed to light rail standards under the Stage I Light Rail Transit (LRT) project. The Stage II system consists of the Overbrook, Library and Drake trolley lines, which comprise the remaining 12 miles. The Stage II project would reconstruct these three lines to LRT standards, double-track the single-track segments, replace antiquated trolleys with new light rail vehicles, and add over 2,000 park and ride spaces. The estimated cost for this project is $414 million (escalated dollars). In 2005, the estimated daily ridership for Stage II is expected to be 25,157 with over 49,000 riders for the entire light rail system.
Status	Section 3035(ss) of ISTEA directed FTA to sign a multiyear grant agreement with the Port Authority of Allegheny County for $5 million to complete preliminary engineering for the Stage II project. The Port Authority of Allegheny County has submitted an Environmental Assessment for the Stage

	II LRT system and expects to complete the environmental process in late 1995. The Port Authority will begin preliminary engineering in early 1996. The project is included in a financially constrained long range plan that was adopted by the MPO. The Port Authority of Allegheny County (PATransit, or "PAT") is developing a financial plan to undertake reconstruction, and is assuming that $65 million in Section 5309 Fixed Guideway Modernization (formula) funding will be available for the Stage II improvement through 1997. The remainder of the estimated project cost will be funded by a program that is anticipated to include 80 percent Federal funding from Section 5309 New Start Funds, Section 5309 Fixed Guideway Modernization Funds and ISTEA Flexible Funds (including CMAQ Funds) matched by Commonwealth of Pennsylvania and Allegheny County funding. Congress has appropriated $35 million for this project through Section 5309 Fixed Guideway Modernization.
Justification	**Mobility Improvements -** LRT construction would increase operating speeds on all three lines. The greatest increase would occur between Castle Shannon and South Hills Junction on the Overbrook Line where travel times would be reduced by 9 minutes. Many LRT riders who currently use the Beechview Line would be expected to switch to the faster Overbrook Line. **Cost Effectiveness -** FTA has no information on the cost effectiveness of this proposal. **Environmental Benefits -** The Pittsburgh area is classified as a "moderate" nonattainment area for ozone and has not been classified for carbon monoxide. According to the draft Environmental Assessment, the Stage II reconstruction would remove about 2,000 average daily automobile trips from South Hills roads compared with the TSM alternative. **Operating Efficiencies -** Replacement of all three lines with buses operating on local streets would yield operating costs in the South Hills corridor of $1.65 per passenger. Operating costs in the corridor with the Stage II improvement in place would be $1.58 per passenger.
Local Financial	PAT anticipates 80 percent Federal funding for this project. Pennsylvania has traditionally provided for 16 2/3 percent of PAT's capital costs with the

Commitment	remaining 3 1/3 percent coming from Allegheny County. PAT's plan for financing this project assumes State and local participation at the same rates. In 1991, the Pennsylvania legislature approved a series of small taxes which are dedicated to transit. PAT's share of this is approximately $40 million per year. These funds are exclusively used for asset maintenance and routine capital replacement needs. In 1995, the average age of PAT's bus fleet is 5.8 years, which is better than the national average. Rail vehicles average age is approximately 16 years old.
Other Factors	The Overbrook Line was closed in 1993 because of the deteriorated condition of old bridges. Reconstruction would bring this line back into service. The Drake and Library lines also would eventually need to be closed permanently if the Stage II project is not implemented.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$80.00	$0.00 million appropriated through FY 1996
Section 5309 Fixed Guideway	$152.00	N/A
ISTEA Flexible Funds	$99.20	N/A
State:	$69.00	N/A
Local:	$13.80	N/A
TOTAL	**$414.00**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

South/North Corridor

Portland, Oregon - Vancouver, Washington

(April 1, 1996)

Description	The South/North Corridor project is a bi-state light rail line between the Clackamas Regional Center, Oregon and Vancouver, Washington. The LRT line would be approximately 20 miles long and would connect the Clackamas Regional Center, Milwaukie, OR, Portland, OR and Vancouver, WA. Capital costs for the South/North LRT project are estimated to be $1.4 billion in 1994 dollars ($2.4 billion in escalated dollars). The project is proposed to be

	constructed in two segments over two authorization periods. Metro estimates the LRT line would carry about 68,000 daily riders in the year 2015.
Status	Metro has completed the South/North Corridor Major Investment Study which evaluated a range of mode and alignment options for the corridor. In December 1994, the Metro Council and C-TRAN Board of Directors selected light rail as the locally preferred alternative. The project is included in the Metropolitan Transportation Plan for both Portland and Vancouver. FTA approved the initiation of preliminary engineering on April 1, 1996, and Metro expects to complete the final environmental impact statement by June 1997.
Justification	**Mobility Improvements -** The South/North LRT would serve the congested I-5 and McLoughlin Boulevard travel markets, improving traffic service levels and providing mobility benefits to major concentrations of transportation disadvantaged persons. Transit travel times would be approximately 33 percent quicker between the Portland CBD and the major activity centers located within the corridor as compared to an all-bus system. For example, the transit travel time between the Milwaukie CBD and the Portland CBD would be 28 minutes with an all-bus network and 18 minutes with South/North LRT. South/North LRT would attract over 30,000 new riders and would result in over $2 million in annual travel time savings to existing transit riders compared to an all-bus network in the corridor. **Cost Effectiveness -** The cost effectiveness index is $5 per new rider. **Environmental Benefits -** The Portland/Vancouver Metropolitan region is currently in non-attainment for both ozone and carbon monoxide. South/North LRT and related land use densities are a major component of the region=s air quality maintenance plan. **Operating Efficiencies -** Systemwide operating costs would drop from $1.51 per passenger with an all-bus network in the South/North Corridor to $1.48 with South/North LRT.
Local Financial Commitment	Tri-Met will be seeking a 50 percent Section 5309 New Start share for this project. To date, a total of $850 million of local funds have been secured for construction of the project. In November 1994, Portland region voters approved a $475 million General Obligation bond for the project. In August 1995, the Oregon legislature approved $375 million for the project. The

	Vancouver area is currently reevaluating its financing strategy.
Other Factors	**Land Use -** Transit supportive land use controls, including growth boundaries to constrain sprawl, are in place in both Oregon and Washington portions of the Corridor. There are enforceable transit-supportive plans in all jurisdictions along the Corridor; parking controls in Portland; and station area planning activities focusing on the entire Corridor.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$1200.00	$0.00 million appropriated through FY 1996
State/Local:	$1200.00	N/A
TOTAL	**$2400.00**	

NOTE: Funding proposal reflects assumptions made by project sponsors, and are not DOT or FTA assumptions.

Westside Corridor

Portland, Oregon

(November 1, 1995)

Description	The Westside-Hillsboro Light Rail Project extends the existing MAX system from the terminus in downtown Portland to downtown Hillsboro. The route includes a three mile twin tube tunnel under the West Hills. The project is 17.7 miles long with 20 stations, 9 park and ride lots, and parking spaces for approximately 3,700 automobiles. The project will include 36 low-floor light rail vehicles. These will be the first low-floor light rail vehicles in service in the United States. The project is expected to carry 27,100 passengers on an average weekday in 2005. In August 1995, construction of the Westside-Hillsboro Project was estimated to cost $935.00 million (year of expenditure dollars). Construction is approximately 40 percent complete.
Status	Section 3035(b) of the Intermodal Surface Transportation Efficiency Act (ISTEA) directs the Federal Transit Administration (FTA) to enter into a multiyear grant agreement with the Tri-County Metropolitan Transportation District of Oregon (Tri- Met) in the amount of $515.00 million for the segment from downtown Portland to 185th Avenue. In September 1992, FTA and Tri-Met entered into a $688.00 million full funding

	grant agreement (FFGA) for the segment from downtown Portland to 185th Avenue. The Section 5309 New Start share for this segment is $516.00 million, including $1 million previously authorized funds. Final design and construction for the Hillsboro extension commenced under a Letter of No Prejudice issued by FTA in August 1994. Consistent with the Department of Transportation and Related Agencies Appropriations Act (P.L. 102-143), the two extensions were combined into a single $910 million project in December 1994. Tri-Met entered into a $910 million FFGA with FTA in December 1994. The 1994 FFGA for the Westside-Hillsboro project provides a contingent commitment of Section 5309 New Start funds of $74 million to fund one-third of the Hillsboro extension cost. Construction is underway along the entire alignment with approximately $619 million committed and $382 million spent through September 1995. Overall the project is approximately 40 percent complete. With the exception of the tunnel, all contracts are proceeding generally within the schedule and budget. The projected revenue operation date is September 1998. The critical path for the project is set by the tunnel construction. The tunnel is nearly 60 percent complete with two of three 150 foot shafts, and one tunnel bore excavated. Unexpected soil conditions have resulted in significant delays and an estimated $25 million cost increase to the project. There has been a total of $467.24 million in Federal funds made available to the project through Federal fiscal year 1996, including $393.25 million in Section 5309 New Start funds.

Proposed Source of Funds	Total Funding ($million)	Description
Federal: Section 5309 New Start	$590.05	$393.25 million appropriated through FY 1996
Section 5307	$30.00	N/A
Flexible Funds	$44.00	N/A
Local:	$246.13	N/A
TOTAL	**$910.18**	