

GAO

Report to the Chairman, Subcommittee
on Surface Transportation and Merchant
Marine, Committee on Commerce,
Science, and Transportation, U.S. Senate

June 1996

NORTHEAST RAIL CORRIDOR

Information on Users, Funding Sources, and Expenditures



G A O
75 years
1921 - 1996



United States
General Accounting Office
Washington, D.C. 20548

Resources, Community, and
Economic Development Division

B-262227

June 27, 1996

The Honorable Trent Lott
Chairman
Subcommittee on Surface Transportation
and Merchant Marine
Committee on Commerce, Science,
and Transportation
United States Senate

Dear Mr. Chairman:

The Northeast Corridor—the 460-mile railroad track and facilities between Washington, D.C., and Boston, Massachusetts—serves over 100 million passengers per year and is critical to the transportation infrastructure for eight states and the District of Columbia. Most of the corridor is owned by the National Railroad Passenger Corporation (Amtrak). Amtrak, eight commuter railroads, and three freight railroads use the corridor on a daily basis.¹ From 1988 through 1993, Amtrak and other users spent a total of \$3 billion (in 1995 dollars) to operate, maintain, and upgrade the corridor's infrastructure.² These funds were used to maintain tracks, signal systems, electric traction structures and facilities, and stations; dispatch trains; and make capital improvements for commuter and high-speed operations. Despite these expenditures, the corridor's infrastructure has deteriorated, and Amtrak estimates that about \$2.7 billion is now needed to bring the corridor up to a state of good repair. Amtrak defines a state of good repair as a condition where only routine maintenance is required.

This report responds to your request for data on the users of the Northeast Corridor and the funding needed for its operations and maintenance. Specifically, as requested, we describe (1) the relative use of the corridor by Amtrak and the commuter and freight railroads, (2) the sources of funding for expenditures on the corridor, and (3) the annual funding required to operate and maintain the corridor's infrastructure in a state of good repair and continue capital improvements at their historical rate. This report does not include fuel and crew expenditures or the purchase or maintenance of rolling stock, since these expenditures do not pertain

¹For this report, we define the Northeast Corridor as the main-line track and facilities between Washington, D.C., and Boston, Mass. We do not include data on (1) expenditures for the corridor's spurs (e.g., Philadelphia-Harrisburg, Pa.); (2) operations of the Springfield Terminal Railway Company, a freight railroad that operates on a corridor spur; or (3) the Port Authority Trans Hudson Corporation, a commuter railroad that operates on the corridor only over one bridge.

²Unless otherwise specified, all dollar amounts are in 1995 dollars.

directly to operating and maintaining the corridor's infrastructure. Additionally, this report should not be used to determine whether the corridor's users are contributing their fair share of expenditures, since (1) we have included expenditures for infrastructure and facilities that benefit only commuter railroads and only Amtrak as well as expenditures for jointly used infrastructure and facilities and (2) we use very broad measures of the corridor's utilization that are not appropriate as the sole basis for allocating costs. Appendix III provides you with a detailed discussion of our scope and methodology.

Results in Brief

The Northeast Corridor is used daily by about 100 Amtrak trains, 1,100 commuter trains, and a few freight trains. The relative use of the corridor by Amtrak and other railroads varies significantly depending on the measurement factor used. For example, the commuter railroads accounted for about 41 percent of the train-miles (the product of the number of trains times the number of miles traveled) operated on the corridor in 1993 compared with about 56 percent for Amtrak. Three freight railroads accounted for about 3 percent of the total train-miles operated in 1993. Tallying the number of trains, in contrast, produces a different picture. According to Amtrak, about 91 percent of the trains using the corridor each day are commuter trains, while only about 9 percent are Amtrak trains.

From 1988 through 1993 (the most recent year for which Amtrak had data readily available), Amtrak and commuter and freight railroads funded expenditures for operating and maintaining the corridor and for capital improvements. Nearly half of the expenditures for the corridor's operations and maintenance (e.g., train dispatching and repairs to track and signal systems) came directly from Amtrak's revenues and operating subsidies. The remainder came from non-Amtrak sources, including commuter railroads' revenues and operating subsidies and freight railroads' revenues. Amtrak's capital subsidies, which vary from year to year on the basis of congressional appropriations, funded about 42 percent of the average annual capital expenditures on the corridor. Capital expenditures include those for major infrastructure projects, such as bridge replacements and station improvements. Capital grants from the Federal Transit Administration and state and local sources funded the balance of capital expenditures.

From 1988 through 1993, the percentage of funding from Amtrak and non-Amtrak sources on specific segments of the corridor varied widely.

For example, between Wilmington, Delaware, and Trenton, New Jersey, non-Amtrak sources funded about 32 percent of the average annual expenditures for operations and maintenance. In contrast, on the non-Amtrak-owned segment between New Rochelle, New York, and New Haven, Connecticut, non-Amtrak sources funded about 96 percent of the total expenditures. Similar variations in capital funding occur on specific segments.

From 1988 through 1993, Amtrak and other users spent an average of about \$497 million annually on the corridor's operations, maintenance, and capital improvements. Notwithstanding this expenditure, Amtrak states that the corridor was not maintained in a state of good repair. Amtrak estimates that an additional expenditure of \$2.7 billion, or \$180 million annually, will be needed over the next 15 years to bring the corridor's infrastructure to a state of good repair. Therefore, over the next 15 years, the corridor's total annual required expenditure from Amtrak and other users to operate and maintain the corridor's infrastructure in a state of good repair, while continuing capital improvement programs at their 1988-93 historical rate, is about \$677 million. According to Amtrak, the deterioration of the infrastructure has caused a decline in the quality of service—primarily in the form of train delays. Amtrak believes that if the quality of service continues to decline, Amtrak and commuter railroads could lose revenues as their passengers shift to other transportation modes, such as private automobiles or airlines.

Background

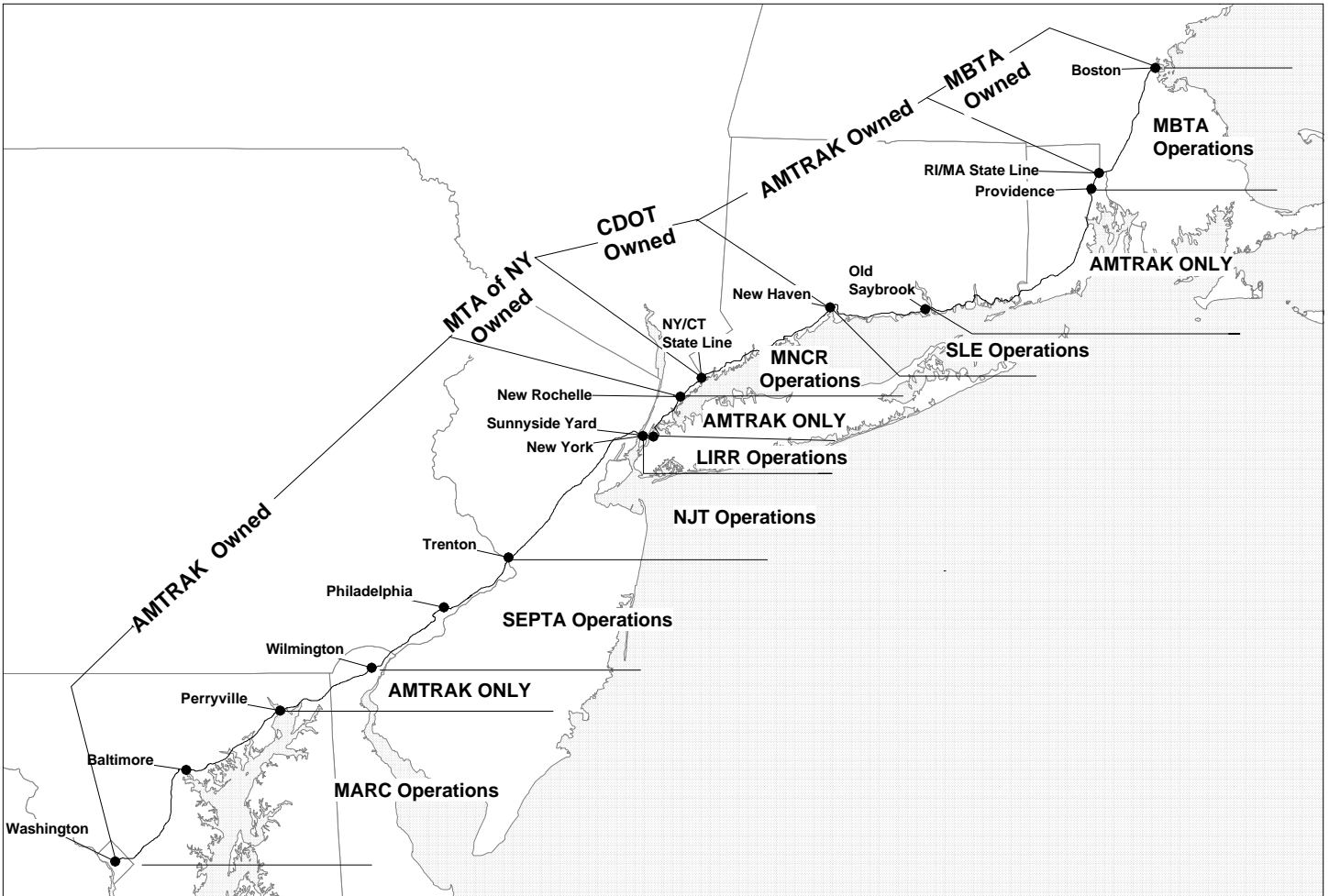
In 1970, the Congress passed the Rail Passenger Service Act,³ which created Amtrak to operate and revitalize intercity passenger rail service. Amtrak acquired ownership of most of the right-of-way along the Northeast Corridor from the bankrupt Penn Central Transportation Company through the Regional Rail Reorganization Act of 1973 and the Railroad Revitalization and Regulatory Reform Act of 1976. Amtrak did not acquire ownership of the 56-mile section between New Rochelle, New York, and New Haven, Connecticut. New York's Metropolitan Transportation Authority owns the New York portion of this segment, while the Connecticut Department of Transportation owns the Connecticut portion. Also, Amtrak did not obtain ownership of the 38-mile section within Massachusetts. This segment is owned by the Massachusetts Bay Transportation Authority.

³P.L. 91-518, 84 Stat. 1327 (1970).

As figure 1 shows, Amtrak shares most of the main line's right-of-way (the route between Washington, D.C., and Boston, Mass., excluding spur lines) with commuter railroads. On three segments—namely, between Perryville, Maryland, and Wilmington, Delaware; between Sunnyside Yard (N.Y.) and New Rochelle, New York; and between Old Saybrook, Connecticut, and Providence, Rhode Island—Amtrak did not share the track with commuter railroads from 1988 through 1993.⁴ Although not shown in figure 1, the Virginia Railway Express uses Union Station in Washington, D.C., as the terminus of its commuter operations from Fredericksburg and Manassas, Virginia. Also not shown in figure 1 are the three freight railroads that operate on the corridor. Appendix I provides you with background information on the commuter and freight railroads that operate on the Northeast Corridor main line.

⁴The Shore Line East Commuter Railroad extended its service to New London, Conn., in February 1996. Prior to 1993, its service extended only to Old Saybrook.

Figure 1: Ownership of and Operations on the Northeast Corridor



Amtrak's operations

Amtrak operates trains from Washington, D.C., to Boston, Mass.

Mileage on the corridor

460

Commuter railroads' operations

Maryland Rail Commuter Service (MARC)
 Southeastern Pennsylvania Transportation Authority (SEPTA)
 New Jersey Transit (NJT)
 Long Island Rail Road (LIRR)
 Metro-North Commuter Railroad (MNCR)
 Shore Line East (SLE)
 Massachusetts Bay Transportation Authority (MBTA)

77
 58
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Amtrak owns and maintains about 365 miles of the corridor's main line. On these sections, Amtrak provides dispatching services for all trains and maintains and upgrades the track, bridges, signals, fencing, and electric traction system (between Washington, D.C., and New Rochelle, N.Y.) that make up the right-of-way. The Metropolitan Transportation Authority of New York and the Connecticut Department of Transportation, through the Metro-North Commuter Railroad, provide for these services on their respective portions of the corridor between New Rochelle, New York, and New Haven, Connecticut. On the Massachusetts segment, Amtrak provides maintenance and dispatching services for all trains under contract with the Massachusetts Bay Transportation Authority.

Commuter and freight railroads that operate over the Amtrak-owned portion of the corridor pay access fees to Amtrak for the use of its tracks. Between New Rochelle, New York, and New Haven, Connecticut, Amtrak pays access fees to Metro-North for the use of its tracks, and Amtrak allocates some capital subsidies to support major projects on this segment. Between Providence, Rhode Island, and Boston, Massachusetts, access fees are incorporated into the contract between Amtrak and the Massachusetts Bay Transportation Authority. The Consolidated Rail Corporation (Conrail), a freight railroad, pays access fees to the Massachusetts Bay Transportation Authority for its operations on the corridor in Massachusetts.⁵

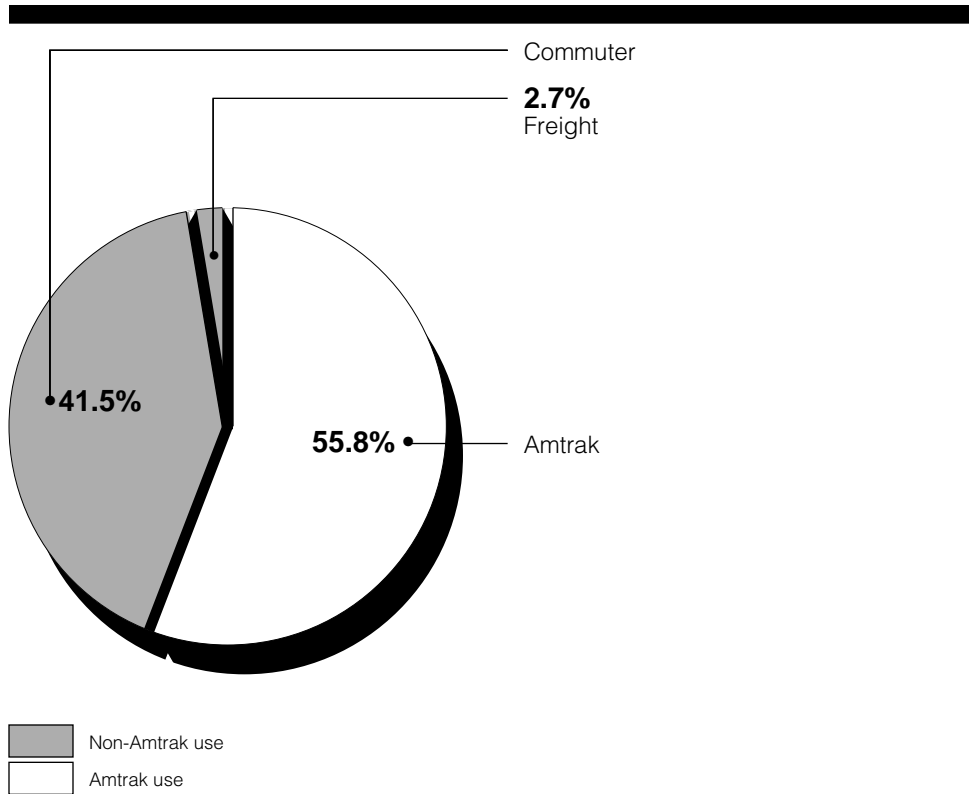
The Northeast Corridor Is a Key Transportation Asset Used by Daily Commuters and Intercity Travelers

The Northeast Corridor is used not only by Amtrak's intercity trains, but also by commuter trains that carry commuters to and from work each day. Commuter railroads account for about 91 percent of the passenger train movements on the corridor. Commuter railroads also carry far more passengers annually than Amtrak does. For example, Metro-North carried 26 million passengers in 1994 on its 56-mile segment between New Rochelle, New York, and New Haven, Connecticut. Similarly, in 1995, New Jersey Transit carried over 19 million passengers on the 58-mile segment between Trenton, New Jersey, and New York City. In contrast, Amtrak's annual ridership over the entire length of the corridor averages about 11 million.

⁵Conrail pays access fees to Metro-North only when Conrail's operations between New Rochelle, N.Y., and New Haven, Conn., exceed a certain threshold. According to Conrail, this threshold was not exceeded from 1988 through 1993.

Train-miles—the product of the number of trains times the number of miles traveled—is another measure of the corridor’s utilization.⁶ Amtrak operates fewer trains than the commuter railroads do, but its trains generally travel farther. Conversely, commuter railroads operate many trains over limited distances on the corridor. Figure 2 shows the percentage of train-miles that Amtrak, commuter railroads, and freight railroads operated on the corridor in 1993.

Figure 2: Percentage of Amtrak’s, Commuter Railroads’, and Freight Railroads’ Train-Miles Traveled on the Northeast Corridor, 1993

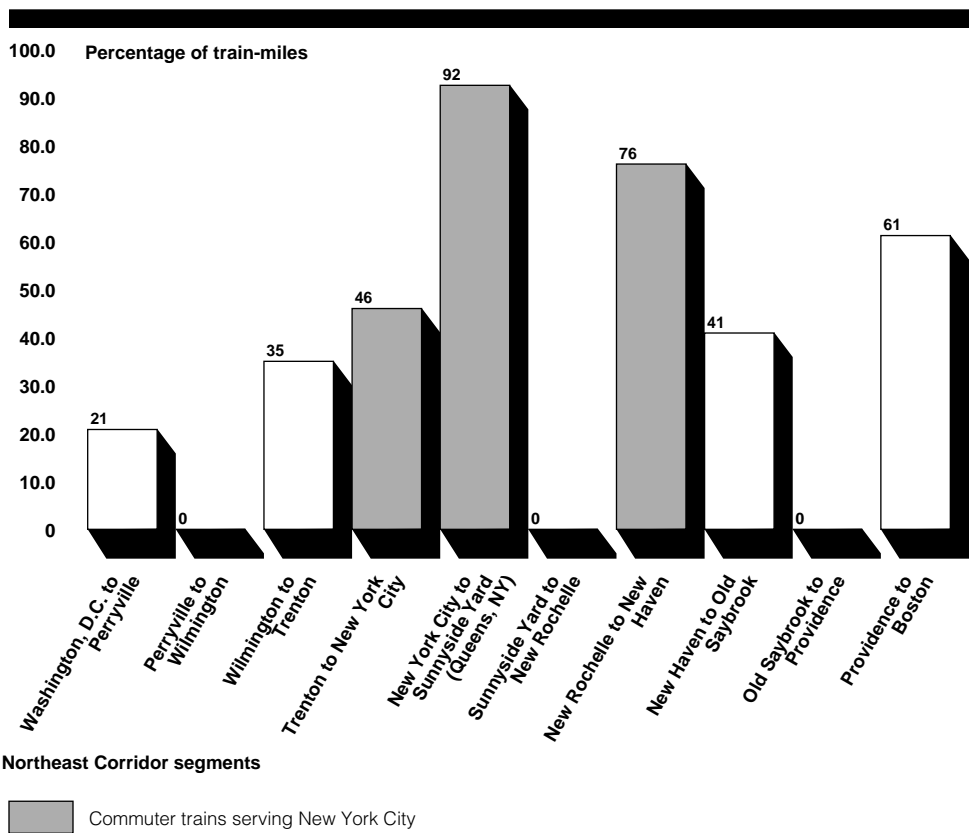


Although the percentage of train-miles operated by freight railroads on the corridor is relatively small, Amtrak officials stressed that because freight trains are typically longer and heavier than passenger trains, they cause a larger share of wear and tear on the infrastructure.

⁶Many more specific criteria, such as train-hours, gross tons (for freight operations), and car-miles, may be more appropriate for other purposes, such as allocating shared-use costs.

Along various segments of the corridor, the percentage of train-miles operated by commuter railroads differs, as figure 3 shows. Because we did not collect the amount of freight railroads' train-miles on a segment-by-segment basis, figure 3 shows only the commuter railroads' percentage of total passenger train-miles (i.e., the total of Amtrak's and commuter railroads' train-miles) operated on the corridor.

Figure 3: Commuter Railroads' Percentage of Total Passenger Train-Miles Traveled on the Northeast Corridor, 1993



The shaded bars in figure 3 reveal that some of the heaviest use by commuter railroads on the corridor is in the vicinity of New York City. New Jersey Transit and the Long Island Rail Road use the corridor's main line to directly access Penn Station in New York City. Although the Long Island Rail Road uses the corridor for only 4 miles—mostly in the East River tunnels—the railroad operates the highest percentage of total

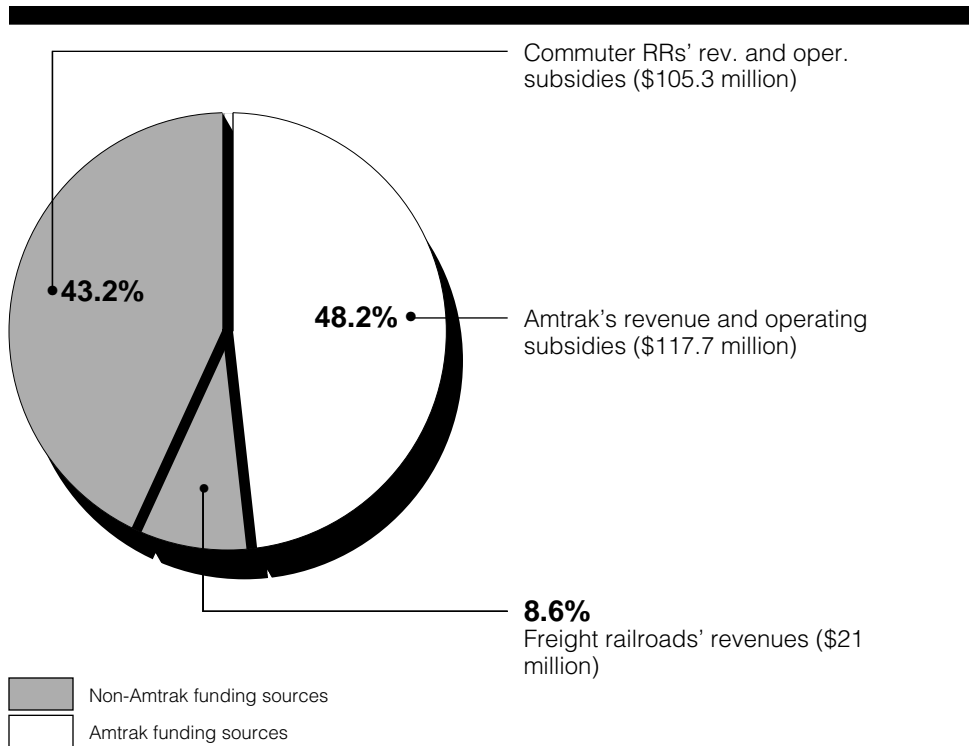
commuter train-miles on any segment of the corridor. Metro-North also serves New York City, operating trains between New Haven, Connecticut, and New Rochelle, New York, on the corridor's main line. Metro-North uses its own right-of-way from New Rochelle to New York City's Grand Central Terminal. Appendix II shows commuter and freight railroads' train-miles for each year, from 1988 through 1993.

About Half of the Northeast Corridor's Funding for Operations and Maintenance Comes Through Non-Amtrak Sources

As figure 4 shows, non-Amtrak sources provided, in total, about \$126.3 million (52 percent) annually for operations on and maintenance of the corridor. From 1988 through 1993, commuter railroads used an annual average of \$105.3 million in revenues and operating subsidies to pay for operating and maintenance expenditures on the corridor.⁷ Commuter railroads operating on Amtrak-owned segments used these funds for the operation and maintenance of stations and for access fees to Amtrak. Freight railroads also paid Amtrak and the Massachusetts Bay Transportation Authority an average annual total of \$21 million in access fees. Amtrak used commuter and freight railroads' access fee revenues to help fund its operating and maintenance expenditures. On segments not owned by Amtrak, commuter railroads or their parent agencies used revenues and operating subsidies to pay for the major portion of infrastructure operations and maintenance.

⁷Includes federal and state operating subsidies.

Figure 4: Expenditures and Sources of Funding for Operations and Maintenance Expenditures on the Northeast Corridor, Based on Averages for 1988-93



Legend
 oper. = operating
 rev. = revenue
 RR = railroad

From 1988 through 1993, Amtrak provided, in total, for about \$117.7 million (48 percent) of the Northeast Corridor's average annual expenditures for operations and maintenance.⁸ Amtrak pays for operating and maintenance expenditures on the portions of the corridor that it owns and pays access fees to Metro-North for the segment between New Rochelle, New York, and New Haven, Connecticut. From 1988 through 1993, Metro-North provided for an annual average of \$57.3 million in

⁸This total does not include expenditures for capital improvements or for train operations, such as the purchase and maintenance of rolling stock and the provision of train crews or fuel. The total includes operational expenditures for train dispatching, the operations and maintenance of stations, and the maintenance of the tracks, signals, and electrification system.

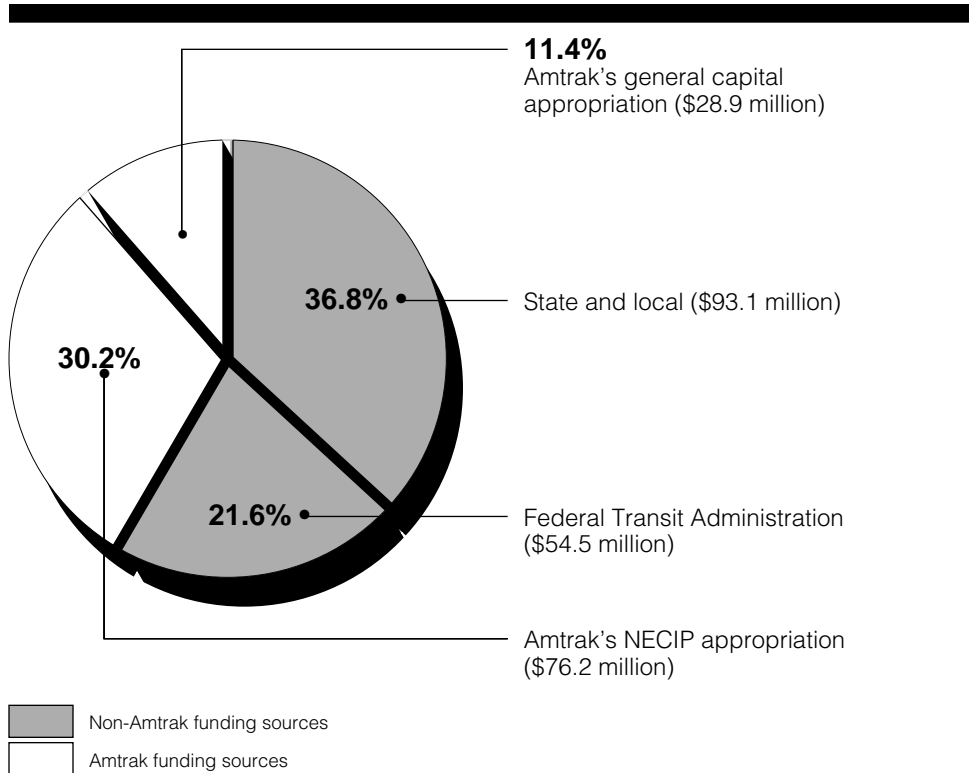
operations and maintenance expenditures on this segment on behalf of the Metropolitan Transportation Authority of New York and the Connecticut Department of Transportation, the owners of the right-of-way. Together, Amtrak and Metro-North funded 72 percent of the total average annual expenditures for operations on and maintenance of the corridor. On the segment owned by the Massachusetts Bay Transportation Authority, Amtrak performs operations and maintenance under its commuter operator contract.

Figure 5 shows the funding sources for capital projects on the corridor, on the basis of average expenditures from 1988 through 1993. Amtrak provided for about 42 percent of the average annual capital expenditure during this time period, using funds from its Northeast Corridor Improvement Program (NECIP) and general capital subsidies.⁹ From 1988 through 1993, Amtrak spent an average of \$76.2 million of NECIP funds and \$28.9 million of general capital funds on the corridor annually. Capital expenditures were for major upgrades and the maintenance of track, stations, signal systems, and high-speed rail improvements.

Figure 5 includes Amtrak's and commuter railroads' expenditures that are directed at achieving each entity's specific objectives. For example, figure 5 includes Amtrak's expenditures to support high-speed inter-city service, as well as commuter railroads' expenditures for their stations and parking facilities. The degree to which Amtrak and the commuter railroads receive mutual benefits from these expenditures varies.

⁹P.L. 94-210, 90 Stat. 31, 119 (1976), created NECIP.

Figure 5: Expenditures and Sources of Funding for Capital Expenditures on the Northeast Corridor, Based on Averages for 1988-93



Amtrak officials stressed that their annual capital spending is constrained by the level of capital subsidies appropriated by the Congress. From 1985 through 1990, the Congress appropriated very few funds for NECIP, which affected Amtrak's average annual capital expenditures from 1988 through 1993. In contrast, commuter railroads benefited from an annual average of \$93.1 million from state and local sources, as well as \$54.5 million that was provided by the Federal Transit Administration for capital projects. State and local funding comprised over 63 percent of the average annual non-Amtrak capital funding from 1988 through 1993.

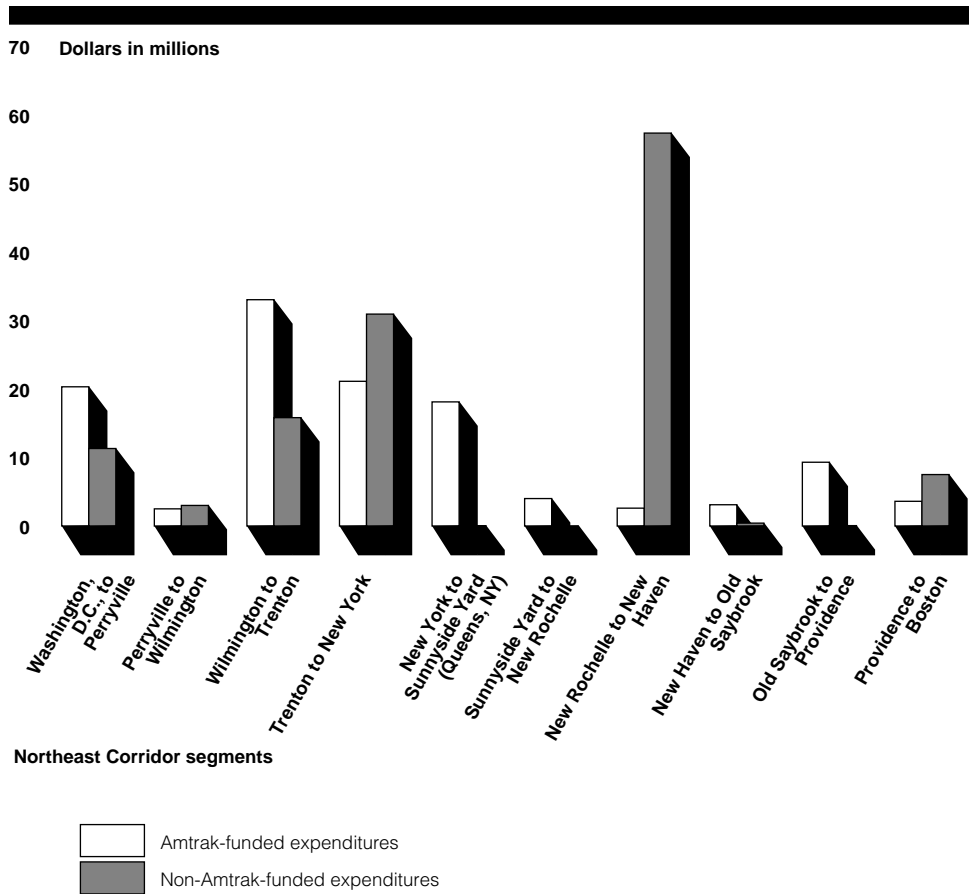
The Proportion of Amtrak and Non-Amtrak Funding Varies Widely on Various Segments of the Corridor

As figure 6 shows, the relative portion of average annual expenditures for the corridor's operations and maintenance from 1988 through 1993 funded by Amtrak and non-Amtrak sources varied substantially from segment to segment.¹⁰ The Southeastern Pennsylvania Transportation Authority received an annual average of \$630,045 from 1988 through 1993 from the Delaware Transit Corporation, an agency of the Delaware Department of Transportation, to support commuter services between Marcus Hook and Philadelphia, Pennsylvania. These expenditures are included in figure 6 in the non-Amtrak totals for the Wilmington-to-Trenton segment.

Between New Rochelle, New York, and New Haven, Connecticut, where Amtrak does not own the right-of-way, Amtrak-funded expenditures are only a small portion of the total. Metro-North's revenues and operating subsidies provided for the non-Amtrak expenditures. Major components of these expenditures include train dispatching; maintenance of the tracks, and signal and electrification systems; and station operations and maintenance. Amtrak's expenditures on this segment are mostly the access fees that Amtrak pays to Metro-North for use of its tracks.

¹⁰We allocated Conrail's access fee payments according to the route-miles over which it operates between Washington, D.C., and New York City. These access fees are included in the non-Amtrak-funded bars for the segments between Washington, D.C., and New York City.

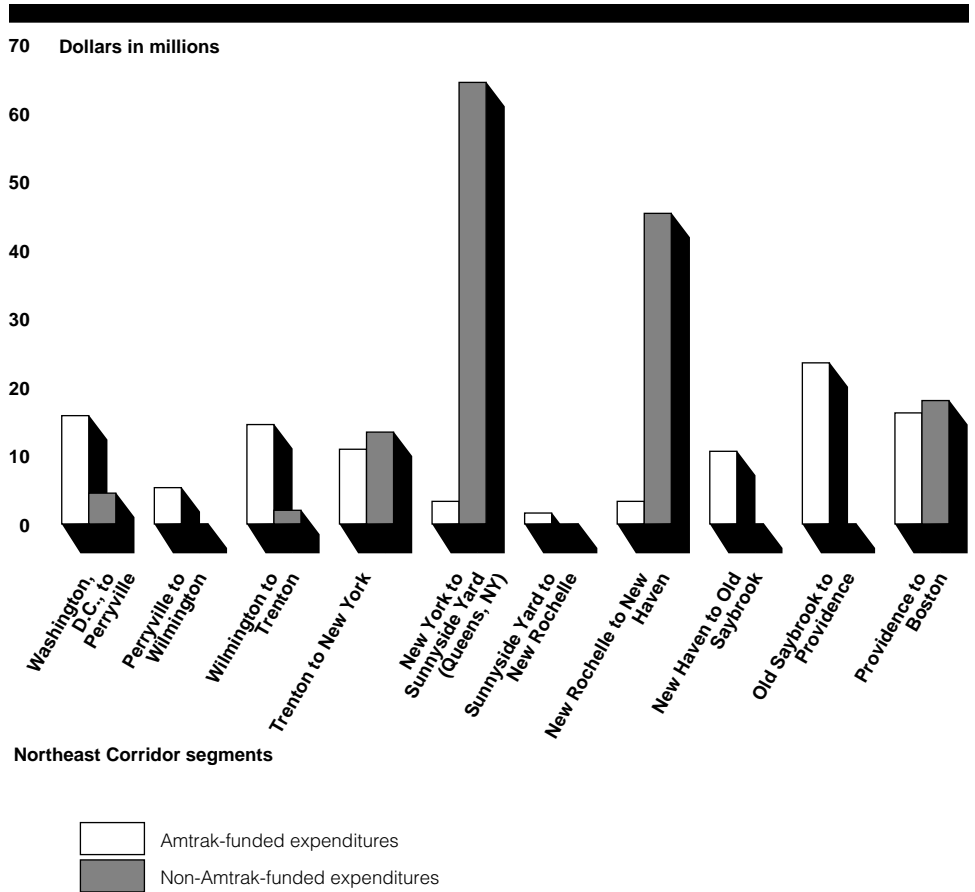
Figure 6: Expenditures and Sources of Funding for Operations and Maintenance Expenditures on Segments of the Northeast Corridor, Based on Averages for 1988-93



Capital expenditures also varied substantially from segment to segment, as figure 7 shows.¹¹ Between New York City’s Penn Station and Sunnyside Yard, in Queens, New York, the Long Island Rail Road invested relatively large sums of capital. State and local sources provided for most of this funding from 1988 through 1991 and about half of the funding in 1992 and 1993. According to a Long Island Rail Road official, the expenditures include those for improvements to Penn Station and for a lump-sum payment to Amtrak for a 99-year lease to use the station.

¹¹The non-Amtrak expenditures on the Wilmington-to-Trenton segment do not include a \$0.5 million Delaware Transit Corporation expenditure in 1990 for the Claymont, Del., station.

Figure 7: Expenditures and Sources of Capital Expenditures on Segments of the Northeast Corridor, Based on Averages for 1988-93



Between New Rochelle and New Haven, the Metropolitan Transportation Authority of New York and Connecticut Department of Transportation used Federal Transit Administration funding as well as state and local funding sources for capital projects. The Connecticut Department of Transportation’s expenditures paid for major projects such as the replacement of crossties, improvements to station platforms and maintenance-of-way facilities, and the replacement of the Peck drawbridge and approaches in Bridgeport, Connecticut.

The Virginia Railway Express uses Union Station in Washington, D.C., and stores its commuter trains during the day at Amtrak’s Ivy City Yard, just north of Union Station. The railway pays access fees to Amtrak for the use of Union Station and the Ivy City Yard and has spent some capital funds,

primarily on projects at the Ivy City Yard. These expenditures are included in the Washington-to-Perryville segment of figures 6 and 7. Not included in figure 7 is \$1.3 million that the Rhode Island Department of Transportation spent in 1992 and 1993 on station improvements and switching systems.

Additional Annual Expenditures May Be Required to Maintain a State of Good Repair and Continue Improvements

Information provided by Amtrak and other corridor users indicates that about \$677 million will be needed annually over the next 15 years to operate and maintain the infrastructure of the corridor, return it to a state of good repair, and continue existing improvement programs. Because past expenditures did not keep pace with repair needs, a backlog of repairs exists, and service interruptions and delays are increasing. Amtrak believes that continued deterioration could result in reduced ridership and the loss of the associated revenue.

Total Expenditure Requirement Depends on Continuation of Improvement Programs

Amtrak estimates that about \$180 million in additional expenditures, or an additional 36 percent over actual 1988-93 average annual spending levels, will be needed each year for 15 years to return the corridor to a state of good repair while continuing to make capital improvements.¹² Adding the \$180 million to the \$497 million average annual expenditure for operations, maintenance, and capital improvements from 1988 through 1993 brings the total to \$677 million annually for the next 15 years.¹³

However, future expenditure requirements depend on improvement plans. A portion of the \$497 million in average annual expenditures for operations, maintenance, and capital was used for high-speed and capacity improvements. If the rate of improvement spending continues as it did from 1988 through 1993, then \$677 million, adjusted for future inflation, may be a good approximation of annual expenditure requirements. Expenditures for upgrades could decrease after speed and trip-time goals have been achieved. In such a case, the required annual expenditures in the future could be less than \$677 million.

¹²Amtrak's \$180 million state-of-good-repair estimate does not include the segment over which Metro-North operates between New Rochelle, N.Y., and New Haven, Conn. According to Metro-North and Long Island Rail Road officials, no significant state-of-good-repair backlogs exist on the Metro-North segment of the corridor or on the segment over which the Long Island Railroad operates, except for safety upgrades needed in the East River tunnels.

¹³Amtrak's estimate includes the cost of safety upgrades in stations and tunnels (\$500 million); replacement of electrification between Washington, D.C., and New Rochelle, N.Y. (\$600 million); and repairs needed on the segment in Massachusetts (\$55 million), which the Massachusetts Bay Transportation Authority owns and Amtrak maintains under contract. The estimated cost of upgrading tunnels and replacing electrification has recently been increased to \$600 million and \$700 million, respectively.

Amtrak and other users of the corridor plan to continue improving the corridor for the next several years. Amtrak plans to spend about \$1 billion over the next several years on high-speed rail service on the corridor. Most of this will be focused on establishing high-speed service between New York City and Boston, Massachusetts. The Maryland Rail Commuter Service plans over \$110 million in capital improvements at its stations and parking facilities on the corridor. New Jersey Transit has spent \$322.5 million since 1993 on its Secaucus Transfer project, and the agency's proposed capital program includes more than \$250 million over the next several years for a variety of capital projects to improve stations and connections between its off-corridor routes and the corridor. The Rhode Island Department of Transportation plans to spend over \$140 million by 2001 mostly to build a third track to facilitate freight railroad movements within the state.

The Corridor's Infrastructure Needs Repair

Amtrak has received about \$3.4 billion (in nominal dollars) in NECIP capital grants since 1976 specifically for improvements to the corridor. However, in accordance with NECIP's goals, Amtrak focused most of these funds on improving the infrastructure for high-speed rail rather than giving a high priority to other capital needs. Additionally, from 1985 through 1990, the Congress provided Amtrak with very little NECIP funding.

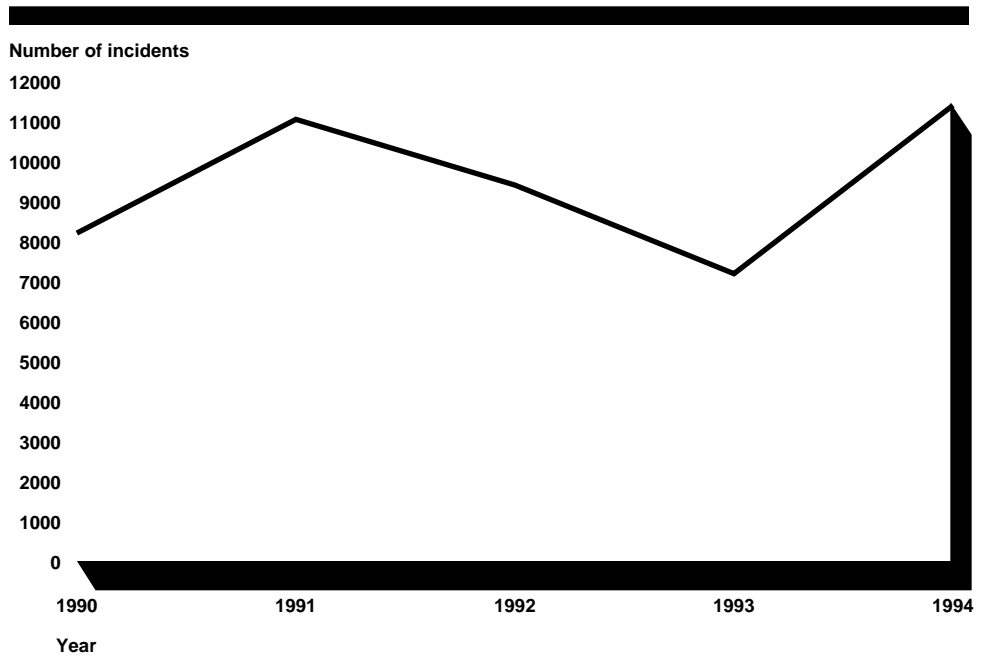
Consequently, the infrastructure has aged and now needs major renovation. For example, Amtrak officials have stated that the 1930s-era electrification system between Washington, D.C., and New Rochelle, New York, is badly deteriorated and needs replacing at a cost of nearly \$700 million. The loss of power at an electrical substation not only halts trains but restoring power by transferring the load to other equipment not affected by the failure results in overloads and accelerated equipment failure rates. Also, track switches are prone to failure, delaying all trains on the corridor until repairs are completed.

Deteriorated Infrastructure Has Caused Delays

Figure 8 shows the number of Amtrak train delays on the Northeast Corridor from 1990 through 1994 caused by infrastructure problems, such as signaling, broken track, and routine maintenance activities. Since 1990, Amtrak has encountered at least 7,000 such delays on the corridor each year. In 1994, the number of delays increased sharply. While a 1-year increase does not indicate a trend, Amtrak believes that delays will continue to increase if the corridor's repair needs are not addressed. Continued Amtrak and commuter service delays and interruptions could

affect federal, state, and local transportation funding in the northeast region and result in a shift of Amtrak and commuter railroad riders toward other modes of transportation.

Figure 8: Number of Infrastructure-Related Delays for Amtrak Trains on the Northeast Corridor, 1990-94



Amtrak Developed a Strategic Plan to Address Cuts in Federal Funding

The Congress has made substantial cuts in the federal operating subsidy for commuter railroads and has pressed Amtrak to develop a plan to end its dependence on operating subsidies. In response, Amtrak’s Board of Directors passed a resolution to develop a business strategy to eliminate or significantly reduce the federal operating subsidy by 2002. Shortly, we will report on Amtrak’s progress in implementing this plan.¹⁴ A key component of Amtrak’s long-term plan to operate free of federal operating subsidies is the anticipated increase in revenues resulting from high-speed improvements on the Northeast Corridor. Reduced revenues could jeopardize this plan. A second key component of Amtrak’s plan is having a continuing source of capital funds.

¹⁴Amtrak’s Strategic Business Plan: Progress to Date (GAO/RCED-96-187).

Scope and Methodology

To conduct our work, we visited officials at Amtrak's headquarters in Washington, D.C., and its Northeast Corridor Strategic Business Unit in Philadelphia, Pennsylvania; the Federal Railroad Administration in Washington, D.C.; and the eight commuter railroads and the state and local agencies responsible for their operations. At these locations, we also obtained and reviewed pertinent documents and discussed activities relating to all aspects of operations on and funding for the corridor's main line from Washington, D.C., to Boston, Massachusetts. We obtained similar information from the three freight railroads that operate on the Northeast Corridor's main line. We conducted our review from June 1995 through June 1996 in accordance with generally accepted government auditing standards.

Agency Comments and Our Evaluation

We provided the Department of Transportation, Amtrak, and the 11 other users of the corridor with a draft of our report for their review and comment. We discussed this report with officials at the Department of Transportation, Amtrak, and Conrail and with a member of the Northern Virginia Transportation Commission who serves on a board that oversees Virginia Railway Express' operations. The Metropolitan Transportation Authority of New York, New Jersey Transit, and the Massachusetts Bay Transportation Authority provided us with written comments which are included along with our response in appendixes IV, V, and VI. The Massachusetts Bay Transportation Authority took no exception with our report. The Southeastern Pennsylvania Transportation Authority did not provide us with written comments in time to be included in this report. The other four users did not provide us with comments.

A Senior Transportation Economist at the Department of Transportation, the Executive Director of New Jersey Transit, and the Director of Policy and Planning at the Metropolitan Transportation Authority of New York all commented that our report should present side-by-side comparisons of each railroad's usage and expenditures and address whether users of the corridor were contributing their fair share. We did not present such a comparison because the issue of equitable cost sharing is outside the scope of this report. However, we clarified the scope of our work by adding a statement to this effect at the beginning of the report.

Officials at the Metropolitan Transportation Authority of New York and Amtrak commented that our draft should more accurately describe Amtrak's \$180 million annual need to achieve a state of good repair. We clarified that Amtrak's state-of-good-repair estimate does not include the

segment between New Rochelle and New Haven and that no state-of-good-repair backlogs exist on this segment. On the basis of Amtrak's comments, we clarified the text to reflect that the \$180 million is the additional annual expenditure that will be needed over the next 15 years to achieve a state of good repair.

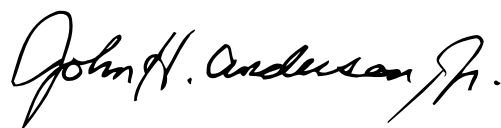
The Controller of the Northern Virginia Transportation Commission commented that Virginia Railway Express' capital expenditures on the corridor were mostly for projects at Amtrak's Ivy City Yard. We clarified this point in the text of our report.

Officials at the Metropolitan Transportation Authority of New York and Conrail commented that our draft did not accurately state to whom Conrail pays access fees. We clarified circumstances under which Conrail would pay access fees to Metro-North and stated that Conrail pays access fees to the Metropolitan Bay Transportation Authority for use of the corridor's track in the state of Massachusetts. In addition, users of the corridor provided us with additional clarifying comments, which we incorporated throughout this report where appropriate.

We are sending copies of this report to congressional committees and subcommittees interested in rail transportation matters; the Secretary of Transportation; the Administrator, Federal Railroad Administration; the Administrator, Federal Transit Administration; the President of Amtrak; the Director, Office of Management and Budget; and other interested parties. We will make copies available to others on request.

Please call me at (202) 512-2834 if you or your staff have any questions. Major contributors to this report are listed in appendix VII.

Sincerely yours,



John H. Anderson, Jr.
Director, Transportation and
Telecommunications Issues

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Abbreviations

GAO	General Accounting Office
LIRR	Long Island Rail Road
MARC	Maryland Rail Commuter Service
MBTA	Massachusetts Bay Transportation Authority
MTA	Metropolitan Transportation Authority of New York
MNCR	Metro-North Commuter Railroad
NECIP	Northeast Corridor Improvement Program
NJT	New Jersey Transit
SEPTA	Southeastern Pennsylvania Transportation Authority
SLE	Shore Line East
VRE	Virginia Railway Express

Information on Commuter and Freight Railroads That Operate on the Northeast Corridor

Virginia Railway Express

The Virginia Railway Express (VRE) initiated service in June 1992 under agreements with Amtrak, Norfolk Southern Railway, CSX Transportation, and Consolidated Rail Corporation (Conrail). VRE's two routes—the Manassas line and the Fredericksburg line—join in Alexandria, Virginia, to provide commuters with service to Union Station in Washington, D.C. VRE's routes cover 84 route-miles. The major stations served by VRE include Alexandria, Woodbridge, Fredericksburg, and Manassas in Virginia, and Washington, D.C.'s Union Station. In 1995, VRE carried 1.85 million passengers.

Maryland Rail Commuter Service

The Maryland Rail Commuter Service (MARC) descends from the former Baltimore & Ohio Railroad and the former Pennsylvania Railroad. In 1974, the Maryland Department of Transportation began subsidizing the Baltimore & Ohio's unprofitable passenger service. When Amtrak took over passenger service from Conrail, the Maryland Department of Transportation signed a new agreement to have Amtrak provide service for commuters along the Northeast Corridor between Washington, D.C., and Baltimore.

Today, what is called MARC train service includes the Penn line, operated by Amtrak, and the Camden and Brunswick lines, operated by CSX Transportation. The system serves Washington, D.C., and Baltimore, Maryland, and continues as far north as Perryville, Maryland, and as far west as Martinsburg, West Virginia. In fiscal year 1994, 5.05 million riders traveled over MARC's 187-mile route system, of which 77 miles are on the Northeast Corridor.

Southeastern Pennsylvania Transportation Authority

In 1983, the Southeastern Pennsylvania Transportation Authority's (SEPTA) railroad division took over the operation of commuter rail lines formerly operated by the Reading and Pennsylvania Railroads. SEPTA is an intermodal transit authority with responsibility for running local transportation, including commuter rail, and a variety of other urban and suburban transit systems. According to SEPTA, the authority is an instrumentality of the Commonwealth of Pennsylvania created by the state legislature, and oversight responsibility rests with the Pennsylvania Department of Transportation. SEPTA's board is appointed by various state and county authorities including the governor, the majority and minority parties in the state senate and state house of representatives, and the five counties served by SEPTA.

SEPTA's Regional Rail Division operates seven commuter rail routes arranged in a radial configuration with central Philadelphia at the locus. Since 1983, SEPTA has expanded commuter rail service westward along the Amtrak-owned Harrisburg line. The regional rail system operates 243 route-miles serving 152 stations in five counties. Two of SEPTA's routes, totaling 58 route-miles, lie on the Northeast Corridor's main line and provide riders with service from Wilmington, Delaware, to Trenton, New Jersey. In 1995, SEPTA's ridership was 25.2 million.

New Jersey Transit Corporation

The New Jersey Transit Corporation (NJT) commuter rail system descends from some of the country's oldest railroads, including the former Central Railroad of New Jersey; the former Pennsylvania Railroad; the former Erie Railroad; the Delaware, Lackawanna & Western Railroad; the former Lehigh Valley Railroad; and the Pennsylvania-Reading Seashore lines. The portion of NJT on the Northeast Corridor began as part of the extensive Pennsylvania Railroad System. NJT is a component unit of the state of New Jersey.

NJT operates 12 commuter rail lines covering 427 route-miles, 58 of which lie on the Northeast Corridor between Trenton, New Jersey, and New York City's Penn Station. The system serves 14 of New Jersey's 21 counties and includes New York City and Newark, Atlantic City, and Trenton in New Jersey. In 1995, NJT carried 45.4 million riders.

Long Island Rail Road

The Long Island Rail Road (LIRR), which was incorporated in 1834, is the oldest U.S. railroad still operating under its original name. In 1980, LIRR's Certificate of Incorporation was amended to convert it to a subsidiary public benefit corporation, and in 1982 LIRR embarked on a capital program to add new cars, improve switching and storage of rail cars, and extend electric service.

Today, LIRR is a subsidiary of the Metropolitan Transportation Authority (MTA) of New York. The railroad links New York City with 134 stations in Nassau and Suffolk Counties on Long Island. Although the system comprises 11 branches and 117 route-miles, only 4 route-miles lie on the Northeast Corridor. This segment passes through the East River tunnels, providing riders with access to New York's Penn Station. LIRR shares Penn Station with Amtrak and New Jersey Transit. In 1994, LIRR's ridership was 73.2 million.

Metro-North Commuter Railroad

The routes of the present-day Metro-North Commuter Railroad date from 1831 with the incorporation of the former New York and Harlem Railroad and the former Hudson River Railroad, which was incorporated in 1847. When the Congress decided that Conrail would no longer have to provide service for passengers, New York created Metro-North on January 1, 1983, to assume operation of the metropolitan commuter rail service.

Metro-North operates as a subsidiary of MTA. New York and Connecticut share oversight and financing responsibilities for the New Haven line pursuant to a 1985 contract. Connecticut administers its share of Metro-North's activities through its Department of Transportation. New York administers its share through MTA, a public authority with a statutory mission to provide the public with transit services in the New York City region.

Metro-North's total system encompasses 338 route-miles. The railroad's New Haven line operates on the Northeast Corridor's main line for 56 miles between New Rochelle, New York, and New Haven, Connecticut. At New Rochelle, the New Haven line diverts from the corridor and continues to New York's Grand Central Terminal. In Connecticut, three branch lines—from Waterbury, Danbury, and New Canaan—feed into the New Haven line. In New York, Metro-North also runs along the Hudson and Harlem lines east of the Hudson River and the Port Jervis and Pascack lines west of the Hudson. In 1994, Metro-North's ridership was 61.9 million.

Shore Line East Commuter Service

The Connecticut Department of Transportation began the Shore line East Commuter Service (SLE) on May 29, 1990. SLE operates solely as a commuter rail service, restricting operation to peak weekday hours. The Connecticut Department of Transportation administers and funds SLE and contracts with Amtrak for the daily operation of that service.

From 1990 through 1996, SLE operated 33 miles of commuter service between New Haven and Old Saybrook, Connecticut, making five intermediate stops. In February 1996, SLE extended its operations to New London, Connecticut, bringing its total route-miles to about 50, all of which are on the Northeast Corridor. In 1994, ridership was 282,687.

Massachusetts Bay Transportation Authority

In 1947, the state legislature created the Metropolitan Transit Authority, which was renamed the Massachusetts Bay Transportation Authority (MBTA) in 1964. MBTA is an independent state authority. The chairman of its board is the state's Secretary of Transportation. MBTA's commuter rail provides access to Boston for most of eastern Massachusetts via 11 separate lines. The system covers 226 route-miles, of which 44 lie on the Northeast Corridor between Providence, Rhode Island, and Boston, Massachusetts. MBTA's 1993 commuter-rail ridership was 21.6 million.

Conrail

Conrail began operations in April 1976 as a federal government-owned corporation, although its origins go back to the earliest days of railroading in North America. The oldest segment of what became Conrail was the Granite Railway Co., built in 1826 to carry granite blocks for the Bunker Hill Monument in Massachusetts. By the early 1970s, scores of railroads in the Northeast and Midwest had been acquired or merged into six different lines, and all were bankrupt. The federal government, recognizing the national economic importance of the six railroads, responded by creating Conrail and appropriating the funds needed to rebuild tracks, locomotives, and freight cars.

In 1981, Conrail no longer required federal investment and finished the year with its first profit. In 1987, the federal government sold its ownership interest in Conrail through what at the time was the largest initial public stock offering in the nation's history. In 1996, Conrail operated a railroad route network of about 11,000 miles with a fleet of about 2,100 locomotives and nearly 53,000 freight cars.

Providence and Worcester Railroad Company

The Providence and Worcester Railroad Company is an interstate freight carrier conducting railroad operations in Connecticut, Rhode Island, and Massachusetts. The railroad interchanges freight traffic with Conrail at Worcester, Massachusetts, and at New Haven, Connecticut; with the Springfield Terminal Railway Company (formerly the Boston and Maine Railroad) at Gardner, Massachusetts; and with the New England Central Railroad (formerly the Central Vermont Railway) at New London, Connecticut. In 1994, the railroad handled 28,404 carloads of freight and 45,405 containers.

The Providence and Worcester Railroad operates over 470 miles of track, approximately 170 miles of which it owns. On the Northeast Corridor, the

**Appendix I
Information on Commuter and Freight
Railroads That Operate on the Northeast
Corridor**

railroad operates between Providence, Rhode Island, and South Norwalk, Connecticut.

**Delaware & Hudson
Railway Company,
Inc.**

In 1991, the Delaware and Hudson Corporation was renamed the Delaware and Hudson Railway Company, Inc., when it was purchased by Canadian Pacific Rail Systems and integrated into one of the largest transportation organizations in North America. The railroad operates over 1,500 miles of track—600 miles of owned track and 900 miles of trackage rights over other railroads' tracks. On the Northeast Corridor, the railroad operates between Landover and Perryville, Maryland. In 1995, the railroad carried 7.3 billion ton-miles of freight.

Commuter and Freight Railroads' Train-Miles Operated on the Northeast Corridor, 1988-93

 Train-miles in thousands

	1988	1989	1990	1991	1992	1993
Commuter railroads						
MARC	139	252	361	456	560	556
SEPTA	953	979	1,000	976	1,128	972
NJT	1,693	1,684	1,679	1,650	1,693	1,691
Long Island Rail Road	777	777	777	777	777	777
Metro-North Commuter Railroad	1,708	1,841	1,807	1,851	1,902	1,916
SLE	N/A	N/A	66	215	175	235
MBTA	495	578	602	599	608	665
Freight railroads						
Conrail	830	620	476	424	408	368
Delaware & Hudson Railway Company, Inc.	N/A	N/A	N/A	N/A	N/A	34
Providence & Worcester Railroad	16	12	15	22	24	33

Legend

N/A = not applicable

Scope and Methodology

For purposes of this report, we limited our review to the main line of the Northeast Corridor, which lies between Washington, D.C., and Boston, Massachusetts. We held discussions with and obtained data on expenditures and train-miles operated on the corridor from officials of Amtrak, VRE, MARC, the Delaware Transit Corporation, SEPTA, NJT, LIRR, the Metropolitan Transportation Authority of New York, Metro-North Commuter Railroad, the Connecticut Department of Transportation, SLE, the Rhode Island Department of Transportation, MBTA, the Delaware and Hudson Railway, Conrail, and the Providence and Worcester Railroad.

We did not obtain data on expenditures from railroads that operate only on the Northeast Corridor's spurs—the tracks between Philadelphia and Harrisburg, Pennsylvania; 11 miles of the track on the line between New York City and Albany, New York; and the track between New Haven, Connecticut, and Springfield, Massachusetts—all of which are owned by Amtrak. We collected data only on the expenditures that go toward making the corridor available as a transportation facility for the trains operated by Amtrak and by commuter and freight railroads. We did not collect data on expenditures for train operations, such as fuel and crews' salary and purchases and maintenance of rolling stock.

To determine the relative usage of the corridor and the sources of funding among Amtrak and commuter and freight railroads, we requested train-mile, expenditure, and funding source data for 1988 through 1993. We chose this time period because (1) it provided several years of data for us to incorporate yearly funding variations and (2) a substantial portion of Amtrak's expenditure data was readily available only through 1993. To determine the sources of funding for the expenditures, we requested that Amtrak and each corridor user include the sources of funding in their data on expenditures.

To determine the annual expenditures required to operate, upgrade, and maintain the Northeast Corridor's infrastructure in a state of good repair, we collected data on expenditures from Amtrak and each user of the corridor for 1988 through 1993. We also asked Amtrak and the other right-of-way owners to estimate the amount of additional expenditures that are needed to bring the corridor to a state of good repair. The data in this report present an order-of-magnitude estimate of the annual expenditure required to operate the Northeast Corridor's infrastructure in a state of good repair, rather than an exact accounting. Each railroad provided us with data based on its own fiscal year, some of which begin in June, October, and January. Officials at some railroads told us that they

could not provide us with the data that we requested in a format that conformed to a different fiscal year. Table III.1 shows each railroad's fiscal year.

Table III.1: Span of Fiscal Year Used by Railroads Operating on the Main Line of the Northeast Corridor, 1988 Through 1993

Railroad	Fiscal year
Amtrak	October-September
Conrail	January-December
Delaware & Hudson Railway Company, Inc.	January-December
LIRR	January-December
MARC	July-June
MBTA	July-June
Metro-North Commuter Railroad	January-December
NJT	July-June
Providence & Worcester Railroad	January-December
SEPTA	July-June
SLE	July-June
VRE	July-June

In a number of cases, data were not available to allow for exact computations of expenditures and funding sources. In such instances, Amtrak and the commuter agencies developed estimates as follows:

- Amtrak could not readily break out the exact amount of general capital and some NECIP funds that it spent on specific segments of the corridor. Therefore, Amtrak allocated these expenditures evenly over the route-miles of the corridor that it owns. Because the corridor is not in a state of good repair and a repair backlog exists, actual expenditures could understate the true requirement to operate and maintain the corridor in a state of good repair. Therefore, we used Amtrak's estimate of the expenditures required over the next 15 years to bring the corridor to a state of good repair. We added this estimate to the actual average annual expenditure of all users of the corridor to arrive at the total annual expenditure to operate and maintain the corridor in a state of good repair while continuing capital improvements at their historical rate.
- Amtrak and at least one commuter railroad commingle their revenues with operating subsidies before allocating these funds to various expenditures. Therefore, we have combined these funding sources in this report.
- When NJT implemented a major upgrade of its automated financial system in 1993, data on expenditures for prior years were combined into totals for

major projects. Agency officials allocated expenditures to specific fiscal years on the basis of their best recollection of each project's spending.

- LIRR could not readily determine the exact amount that it spent for operations on and maintenance of its 4-mile segment of the corridor. The railroad arrived at its expenditures by prorating its systemwide expenditures over the 4-mile segment of the corridor over which it operates.

We attempted to portray the amount actually expended in each fiscal year. However, some railroads use an accrual basis for recording operating and maintenance costs, while others do not. Therefore, the expenditures for operations and maintenance shown in figure 4 contain some accrued expenses from the period after 1993 and exclude some 1988 expenditures. Because the beginning and ending accrued expenses may offset one another, the net effect could be minimal. Although Amtrak officials were unable to quantify the impact of including accrued expenses in our data, a senior Amtrak official stated that the impact of accruals could be insignificant.

We reviewed Amtrak's procedures to retrieve and compile the expenditure data used in this report. We also reviewed the procedures that each commuter railroad used to develop data on expenditures. However, we did not audit the data provided by Amtrak or the commuter and freight railroads. Each entity had the opportunity to review a draft of this report and provide us with comments.

Comments From the Metropolitan Transportation Authority

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



Metropolitan Transportation Authority

June 4, 1996

Mr. John H. Anderson, Jr.
Director
Transportation and Telecommunications Issues
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Anderson:

This is to provide you with the Metropolitan Transportation Authority's comments on the draft report entitled Northeast Rail Corridor: Information on Users, Funding Sources, and Expenditures (GAO/RCED 96-144). These comments consolidate the views of the Long Island Rail Road and the Metro-North Railroad.

The purpose of the GAO report, as we understand it, is to provide the Congress with information about the Northeast Corridor, including relative use by Amtrak, commuter and freight railroads as well as expenditures by source for operations, maintenance and capital investment. The MTA contributed to the report by providing you with data regarding Metro-North and LIRR operations and expenditures for the Northeast Corridor.

We have a number of major points we would like to make regarding the report. These are enumerated as follows:

1. Equity

Underlying all of the data in the report is the question of whether or not there is an equitable distribution of expenditures between Amtrak and the commuter railroads. The report cites a number of measures such as trains, train miles and NEC ownership, but, in effect, discredits them in a footnote (p. 8) that indicates that other measures not reported, such as train hours and car miles, may be more appropriate for comparative purposes. It leaves the issue very murky.

While the report does not appear to take a position on equity, the data presented could be used to draw almost any conclusion. Using train miles as the yardstick, for example, it appears that the commuter railroads

See comment 1.

**Appendix IV
Comments From the Metropolitan
Transportation Authority**

Mr. John H. Anderson, Jr.
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make capital and operating expenditures in close approximation of the share of service they provide, while Amtrak's expenditures fall below its share.

We believe that the GAO needs to be much clearer on the question of equity. The report should explain why some measures were selected and not others and it should give guidance to the reader regarding what conclusions can be drawn or not drawn from the data.

2. Data

a) The report should provide tables for O&M and Capital expenditures showing the full breakdown by year for Amtrak and the commuter railroads. We would appreciate receiving a copy of the GAO data, disaggregated by commuter railroad, so that we can verify that the statistical representations are accurate.

b) The report states that the lion's share of Northeast Corridor Improvement Program (NECIP) funding was used by Amtrak to improve the infrastructure for high-speed rail rather than for day-to-day NEC needs. Given that fact, we question the inclusion of Amtrak's NECIP appropriation in the computation of capital funding by source. It appears to greatly overstate Amtrak's investment for purposes of this report.

c) We are concerned about whether or not the exclusion of 1994 and 1995 data may unintentionally distort the data. It seems hard to believe that Amtrak would have data for 1988-93 but not for 1994-95. Can you clarify? We would also like the opportunity to calculate our expenditures in those two years to compare them with the averages for the 1988-93 period.

d) The report quotes Amtrak on the number of trains operating on the Corridor. That number should be verified and stated without attribution.

3. Needs

a) It was our understanding that the major purpose of the GAO study was to examine actual NEC expenditures over a historic time period. We were therefore surprised to see the inclusion of outstanding state of good repair needs. The report quotes Amtrak that state of good repair was

See comment 2.

See comment 3.

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underfunded by \$180 million per year during the 1988-93 study period. We do not recall being asked to make such an assessment. From an MTA point of view, we consider our portion of the corridor to essentially be in a state of good repair and do not wish to be associated with the "dire consequences" predictions attributed to Amtrak in the report. On the other hand, other portions used by commuter rail operations may not be in a state of good repair and should be included as well. Some backup for the \$180 million figure should be included. We feel this whole section of the report needs further clarification.

b) The report references \$600 million of need to properly electrify the NEC between Washington and New York. Is that included in Amtrak's \$180 million/year figure? Also why is there no mention made of the fire, life, safety needs in the East River tunnels, which also total about \$600 million?

4. Other

a) Figure 1 and notes reference ownership and commuter railroad operations on the NEC: Do notes reference ownership mileage or operations mileage on the corridor? Amtrak and total mileage on corridor should be referenced in the note.

b) Reference to payment by freight railroads to Metro-North is inaccurate (p. 7)

c) What is the purpose of comparing passenger totals for Metro-North and New Jersey Transit with Amtrak? (p. 8). The report uses a total ridership figure for Amtrak but provides no comparable figure for commuter railroads.

d) Footnote on p. 8 suggests that other criteria such as train hours or car miles not cited in the report may be more appropriate for comparison. Why not include them then?

e) Discussion of state and local funding and Amtrak's average annual expenditures for capital, operations and maintenance combined (p. 14) seem to be isolated facts without a clear point or context.

See comment 4.

**Appendix IV
Comments From the Metropolitan
Transportation Authority**

Mr. John H. Anderson, Jr.
June 4, 1996
Page 4

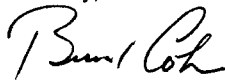
f) The chart on p.16 seems to belong with the text on p.12.

g) The correct names and spelling are Metropolitan Transportation (not Transit) Authority and the Long Island Rail Road. Both are misidentified in the report.

Although this letter consolidates the main points of concern for LIRR and Metro-North, I am also attaching a separate Metro-North memorandum that covers some additional specific changes.

We appreciate the opportunity to comment on the draft report and look forward to your response.

Sincerely,



Bernard Cohen
Director
Policy & Planning

cc: M. Shaw
C. Boylan
D. Nelson
T. Pendergast

Attachment

The following are GAO's comments on the Metropolitan Transportation Authority's letter dated June 4, 1996.

GAO's Comments

1. The issue of equity is outside the scope of this report.

2(a). Because equity of each railroad's contribution is outside the scope of this report, we did not list each railroad's specific contribution. We stated Metro-North's expenditures for operations and maintenance because of the corridor's 12 users (Amtrak, eight commuter railroads, and three freight railroads); the combined Metro-North and Amtrak expenditures provided for 72 percent of the total expenditures for operations and maintenance.

2(b). We did not attempt to determine which portion of improvements was for maintaining the basic railroad and which was for upgrades. We have clearly stated that the expenditures include those for upgrades as well as for regular maintenance.

2(c). Amtrak told us that a major portion of its data, which were organized by corridor segment, was available only through 1993. We requested expenditure data for a 6-year period prior to 1993 to account for variations in annual spending on the corridor.

2(d). We did not independently verify the number of trains operating on the corridor. We attributed this statement, which was made by the Corporation's President in testimony before the Congress, to Amtrak.

3(a). Our objective was to determine the funding required to operate the corridor in a state of good repair. Past expenditures did not keep pace with repair needs. Therefore, we added Amtrak's state-of-good-repair estimate to the average annual expenditure of all corridor users from 1988 through 1993. In response to this comment and a similar comment by Amtrak officials, we clarified the basis of Amtrak's state-of-good-repair estimate.

In a meeting at the offices of the Metropolitan Transportation Authority of New York on January 18, 1996, attended by representatives of the Authority, Metro-North, and LIRR, we asked whether Metro-North or LIRR had any unmet state-of-good-repair needs. Officials responded that, with the exception of tunnel upgrades, there were no unmet needs. We have clarified this point in the text of our report.

3(b). We have included a statement that Amtrak's state of good repair estimate includes the estimated cost of electrification replacement between Washington, D.C., and New Rochelle, New York, and the needed tunnel upgrades.

4(a). We have modified figure 1 and the accompanying note to more clearly show Amtrak's and commuter railroads' operations and associated mileage.

4(b). We have corrected the reference to Conrail's access fee payments.

4(c). The point of the paragraph is to show that commuter railroads carry far more passengers on the corridor than does Amtrak. The discussion shows that two commuter railroads—NJT and Metro-North—each carry more passengers over their respective segments than Amtrak carries over the entire corridor.

4(d). We did not collect data on train-hours, car-miles, or other data needed to allocate costs for a joint-use facility such as the Northeast Corridor because the issue of equity of expenditures versus usage is beyond our scope.

4(e). We have deleted this sentence from the report.

4(f). The text on page 12 of the draft accompanied figure 4, both of which deal with contributions for the entire corridor. The text on page 16 of the draft accompanied figure 6, both of which deal with contributions on a segment-by-segment basis.

4(g). The names of the Metropolitan Transportation Authority and LIRR have been corrected throughout the report.

The Authority's letter included a Metro-North memorandum that provided us with separate comments as an attachment. Many of the comments in that memorandum mirrored those in the Metropolitan Transportation Authority's letter or addressed points of clarification that we have considered and incorporated in the text as appropriate.

Comments From New Jersey Transit

Note: GAO comments supplementing those in the report text appear at the end of this appendix.



Shirley A. DeLibero
Executive Director

June 4, 1996

Mr. John H. Anderson, Jr.
Director, Transportation and
Telecommunications Issues
United States General Accounting Office
Resources, Community and
Economic Development Division
Washington, DC 20548

Dear Mr. Anderson:

Thank you for the opportunity to comment on the draft report entitled Northeast Rail Corridor: Information on Users, Funding Sources, and Expenditures. NJ TRANSIT has the following comments:

See comment 1.

1. The introductory paragraph to the "Results in Brief" section beginning on page 2 mentions both number of trains and train-miles as available measurements of usage. NJ TRANSIT strongly believes that train-miles is the more appropriate measurement to use when attempting to assess a fair comparison to operating and maintenance costs. NJ TRANSIT suggests that the reference to number of trains be deleted since it is not relevant to these costs.
2. The report notes in this section that commuter railroads account for only 41 percent of train-miles compared to 56 percent for Amtrak. The middle paragraph on page 3 states that Amtrak paid only about half of the expenditures for operations and maintenance, but does not specify commuter railroads' share. It also notes that Amtrak paid only about 42 percent of the average annual capital expenditures on the corridor.

See comment 2.

NJ TRANSIT suggests that the "Results in Brief" section more explicitly note the existing imbalance between expenditure and use of the corridor. Using the statistics presented later in the report, we would like to see the "Results in Brief" section make a statement like, "Commuter railroads operate 41 percent of the train-miles, yet they cover 43 percent of operating and maintenance costs and 58 percent of the average capital expenditures. Amtrak, in contrast, operates 56 percent of the train-miles and covers only 48 percent of operating and maintenance costs and 42 percent of average annual capital expenditures."

See comment 3.

3. There appears to be a gap between the 1988-1993 data that you have analyzed, and the anecdotal information about "future plans." The NJ TRANSIT capital program that you refer to on

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Appendix V
Comments From New Jersey Transit

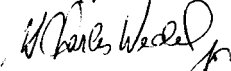
See comment 4.

page 19 covers the five years starting in 1997. Among other investments during the time period from 1994-1996, construction began on NJ TRANSIT's Secaucus Transfer project, which will be a \$448 million project when it is complete.

4. On page 28, there is a sentence stating that in 1993, NJ TRANSIT carried 41.6 million riders. The most recent figure available is 45.4 million in 1995.

I hope it is possible for our comments to be reflected in the report. If you need any further information, please let me know or call Marianne Stock of my staff at 201-491-7102.

Sincerely,



Shirley A. DeLibero
Executive Director

The following are GAO's comments on New Jersey Transit's letter dated June 4, 1996.

GAO's Comments

1. While the number of trains may not directly affect costs, the number of trains does affect the corridor's capacity. Since cost allocation is not the focus of this report, we believe the number of trains presents a broad picture of the corridor's utilization.
2. Any comparison of usage versus expenditures is outside the scope of this report.
3. After obtaining further clarification from NJT, we included the 1994-96 expenditures for the Secaucus Transfer project in our report.
4. We updated the ridership figure as suggested.

Comments From the Massachusetts Bay Transportation Authority



Massachusetts Bay Transportation Authority

William F. Weld
Governor

Argeo Paul Cellucci
Lieutenant Governor

James J. Kerasiotes
Secretary and MBTA Chairman

Patrick J. Moynihan
General Manager

May 30, 1996

Mr. John H. Anderson, Jr.
Director, Transportation and
Telecommunications Issues
United States
General Accounting Office
Washington, D.C. 20548

Dear Mr. Anderson:

We have reviewed the GAO draft report entitled "Northeast Rail Corridor Information on Users, Funding Sources and Expenditures (GAO/RCED 96-144)" and take no exception.

Please furnish this office with six (6) copies of the final report.

Sincerely,

John J. Brennan, III
Director of Railroad Operations

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¹These staff performed the initial work for this report prior to the closing of the New York Regional Office in November, 1995.

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