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# GAO

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

Resources, Community, and Economic Development Division B-260800

April 13, 1995

The Honorable Mark O. Hatfield Chairman The Honorable Frank R. Lautenberg Ranking Minority Member Subcommittee on Transportation Committee on Appropriations United States Senate

This correspondence answers certain questions raised at the March 23, 1995, Senate appropriations hearing on the National Railroad Passenger Corporation (Amtrak). During the hearing, you asked us to provide you with data on the Northeast Corridor Improvement Project's (NECIP) funding and expenditures on Amtrak's rail right-of-way between Washington, D.C., and Boston, Massachusetts. In 1976, the Congress passed the Railroad Revitalization and Regulatory Reform Act, under which it created NECIP. The purpose of the project was to achieve regular high-speed passenger rail service on the corridor between Washington, D.C., and Boston, M. Massachusetts. The responsibility for implementing the NECIP program initially rested with the Federal Railroad Administration (FRA), but management responsibility was transferred to Amtrak in 1985.

We are providing the following requested information: (1) amounts appropriated for NECIP and obligated to date on the south end (Washington, D.C., to New York City) and the north end (New York City to Boston) of the corridor, (2) estimates of the amount needed to complete high-speed rail improvements on the north end between now and 2000, (3) the estimated amount of capital funds needed to restore the south end of the corridor to a "state of good repair," and (4) estimates of the amount needed to complete other improvements to track capacity and aging infrastructure on the north end between 2000 and 2010.

In summary, the federal government has appropriated and obligated about \$3.3 billion to provide high-speed passenger service throughout the corridor. Amtrak estimates that it needs about \$900 million from now through 1999 to complete improvements to initiate high-speed service on the north end. It also needs at least \$2.5 billion to

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rehabilitate the infrastructure on the south end of the corridor. An additional \$1.6 billion investment is needed beginning in 2000 and before 2010 to increase track capacity and improve aging infrastructure on the north end.

## Appropriations and Obligations for NECIP From 1976 Through 1995

The Congress has appropriated \$3.3 billion for NECIP since its creation. These funds have been obligated for improvements to the north and south ends of the corridor as shown in table 1.

## Table 1: Funds Obligated Under NECIP, Fiscal Years 1976-95

	Funds for		
Cost category	South end	North end	
Bridge repair/replacement	\$ 99,294	\$ 166,432	
Signal/traffic control	359,740	189,352	
Electrification	144,459	366,425	
(electric traction system)			
Track/track-related	651,496	575,153	
Tunnels	127,928	25,126	
Service facilities	171,177	59,668	
Stations	80,465	138,603	
Equipment/high-speed trainsets <sup>a</sup>	14,193	109,792	
Other	22,704	17,253	
Total	<u>\$ 1,671,456</u>	<u>\$ 1,647,804</u>	

Dollars in thousands

<sup>a</sup>High-speed trainsets will be used on both ends of the corridor.

All NECIP appropriations are obligated through grant agreements between FRA and Amtrak. As of April 3, 1995, \$177.1 million of the \$200 million fiscal year 1995 appropriation had been obligated, with the remaining \$22.9 million scheduled to be obligated as of June 1, 1995. Since 1991, Amtrak has allocated \$712 million in NECIP appropriations to high-speed improvements on the north end of the corridor. Of this amount, about \$158 million has not yet been committed to a specific project. However, Amtrak plans to spend these funds on its electrification construction project in fiscal year 1996.

# Funds Needed to Complete Improvements for High-Speed Service

Between now and 2000, Amtrak has estimated that it will need about \$900 million in additional funding to complete the improvements to the north end of the corridor to achieve the high-speed goals under NECIP. These improvements will allow Amtrak to initiate high-speed service between New York and Boston. According to Amtrak's schedule for completing NECIP, the funding will be needed in the years and categories as shown in table 2.

# Table 2: Funds Needed to Complete Improvements to the North End by the End of Fiscal Year 1999

# Dollars in thousands

	Fiscal year				
Category	1996	1997	1998	1999	<u> </u>
Electrification Track and facilities Trainsets and related facilities	\$ 75.7 75.9 <u>106.2</u>	\$ 27.7 107.3 <u>109.3</u>	\$ 15.3 89.0 <u>86.0</u>	\$ 14.5 39.9 <u>11.7</u>	\$ 133.2 312.1 <u>313.2</u>
Subtotal	<u>\$ 257.8</u>	<u>\$ 244.3</u>	<u>\$ 190.3</u>	<u>\$ 66.1</u>	\$ <u>758.5</u>
Additional amount needed for trainsets <sup>a</sup>					115.0
Total					\$ <u>873.5</u>

<sup>a</sup>The amounts shown for each year are based on cost estimates that Amtrak developed in November 1994. Amtrak recently revised the estimated total cost of the trainset purchase upward by \$115 million. This amount is not included in the yearly estimates, and Amtrak has not yet determined how these additional costs should be allocated by fiscal year. Also, while the total shown here is somewhat less than \$900 million, Amtrak officials believe the higher total should be used when generally discussing the additional funds needed to complete NECIP.

# Funding Needed to Return South End to "State of Good Repair"

Spending on the corridor from 1976 to the present has primarily focused on improvements needed to allow high-speed passenger service on the north and south ends. Amtrak now recognizes that the infrastructure on the south end of the corridor is deteriorating and that a substantial investment will be needed to correct the deterioration. Following formation of Amtrak's Northeast Corridor Strategic Business

Unit, Amtrak officials began collecting data on what projects and funding would be needed for this recapitalization.

Amtrak now has an engineering consultant, Parsons/Brinkerhoff, working to analyze Amtrak's "state-of-good-repair" needs for the south end. On the basis of the consultant's preliminary study, Amtrak officials estimated that at least \$2.5 billion is needed to return the south end to a state of good repair. These officials stated that while the repair needs are immediate, the work will have to be done over the next 15 years because of the complexity and large volume of work to be done.

The consultant's study is not yet complete, and we have therefore not reviewed the identified needs for their reasonableness. The Chief of FRA's Passenger Service Division stated that FRA may conduct a study of the consultant's findings to verify that the findings represent actual needs and that the estimated costs are reasonable.

Amtrak officials provided us with the following general categories of work needed to return the corridor's south end to a state of good repair:

- -- Replace the 60-year-old electric traction system.<sup>1</sup>
- -- Replace worn timber crossties with concrete ties.
- -- Rehabilitate/replace interlockings.<sup>2</sup>
- -- Rail work (e.g., replacement, surface alignment, and welding of rail joints).
- -- Replace maintenance-of-way equipment.
- -- Renovate/replace bridges.
- -- Improve the communications and signal system.

Amtrak has expressed concern that its deteriorating infrastructure will affect the ride quality and increase trip times for its trains. According to Amtrak officials, as

<sup>2</sup>Interlockings are complex track and signal junctions that prohibit route conflicts so that trains can safely pass from one track to another.

<sup>&</sup>lt;sup>1</sup>In his March 23 testimony before the Committee, Amtrak's president stated that replacing the electric traction system on the south end of the corridor would cost \$700 million to \$750 million.

deterioration continues, Amtrak trains will be forced to operate at slower speeds to ensure safety. They believe that this and the deteriorated ride quality will result in lost ridership and revenues from its most heavily used market. As part of our continuing work on Amtrak, we will analyze the potential effects of these deteriorated conditions on Amtrak's operations.

# Future North End Capacity and Capital Investment Funding Needs

In addition to the \$900 million needed to complete high-speed improvements for the north end, FRA estimates that nearly \$600 million will be needed to improve track capacity to accommodate Amtrak's anticipated 16 high-speed trains per day between New York and Boston as well as expansions in service that commuter railroads expect. Also, about \$1 billion will be needed to rehabilitate or replace aging bridges, tunnels, or other key facilities on the corridor's north end between 2000 and 2010, according to FRA. Table 3 shows the different categories of funding needs for both capacity and capital investment requirements.

# Table 3: FRA's Estimates for Additional Funding Needed on the North End of the Corridor Between 2000 and 2010

	Funds for			
Improvement category	<u>Capacity</u>	Capital investment		
Interlockings	\$ 187.9			
Bridges/tunnels		\$ 842.1		
Track work (including passing sidings)	191.1			
passing sidings)	191.1			
Maintenance facilities	78.7			
Stations and platforms	75.4			
Communications/signaling	46.5			
Electric traction		151.7		
Other (includes equip. testing)		21.3		
Total	\$ <u>579.6</u>	\$ <u>1015.1</u>		

Dollars in millions

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The financial and legislative information on the NECIP that is presented in this correspondence was provided by officials in Amtrak's Northeast Corridor Strategic Business Unit and FRA's Office of Railroad Development. We discussed this correspondence with the Chief Executive Officer, Vice President of Finance, and Chief Engineer of Amtrak's Northeast Corridor Strategic Business Unit and the Chief of FRA's Passenger Service Division. They agreed that the facts presented are correct. We performed our work from October 1994 through March 1995 in accordance with generally accepted government auditing standards.

We are sending copies of this correspondence to the President of Amtrak and the Administrator, FRA. We will make copies available to others on request. We appreciate the opportunity to assist the Committee in its review of Amtrak's funding needs. If you have any further questions, please contact me on (202) 512-2834.

Kenneth M. Mead Director, Transportation Issues

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