DOCUMENT RESUME

07018 - [B2267296]

Amtrak's Subsidy Needs Cannot Be Reduced without Reducing Service. CED-78-86; B-175155. May 11, 1978. 55 pp. + 5 appendices (11 pp.).

Report to the Congress; by Elmer B. Staats, Comptroller General.

Issue Area: Transportation Systems and Policies: Intercity Rail Passenger Service (2412).
Contact: Community and Economic Development Div.
Budget Function: Commerce and Transportation: Ground Transportation (404).
Organization Concerned: Department of Commerce; Department of the Treasury; National Railroad Passenger Corp.
Congressional Relevance: House Committee on Interstate and Foreign Commerce; Senate Committee on Commerce, Science, and Transportation; Congress.
Authority: Rail Passenger Service Act of 1970 (45 U.S.C. 501). Federal Employer's Liability Act (45 U.S.C. 51).

Amtrak's operating costs have outstripped its revenues, and increasing Federal subsidies are required for continued operations. Amtrak planned service reductions because it had received less money from the Congress than it had requested in 1977. The Congress provided some additional funding, but Amtrak stated that it was still not adequate and that substantial service curtailments will be needed if additional funding is not approved. Findings/Conclusions: Amtrak can improve its operating efficiency but this would not substantially reduce its subsidy need. The following areas require attention: direct labor costs are high because of certain union work rules; maintenance costs are the largest single area of expense and could be better controlled; and losses on food and beverage service are substantial. Amtrak's route profitability system (RPS) provides reasonable estimates of its route-by-route revenue and costs, but it could be further improved. Amtrak's classification of its costs as "avoidable" or "unavoidable" is reasonable. Its 1977 5-year plan contained improved estimates, but the improved methods were not explained. Amtrak's ridership and revenues have not kept pace with its growth. It has not been permitted to exercise the route and service criteria the Congress approved as a method of evaluating and eliminating routes if necessary. Since Amtrak cannot operate its present route system for much less than it has requested, the Congress can give Amtrak what it has asked and allow it to continue the present system, give it less than it asked for and allow the system to be reduced, or give it more money to allow expanded service. Recommendations: The Congress should: require Amtrak to provide information that better explains its operating and capital plans for improving the quality of dining services and for bringing its cost and revenues closer together; consider a more rapid debt retirement program or relieve Amtrak of the debt

entirely; and require that 5-year plans Amtrak submits annually be comparable from year to year or provide sufficient information to illustrate changes. Amtrak should further improve its route profitability system by: adding data on ridership and train miles operated for each route to operational results reports, add comparisons with past performance to the current performance data, inform recipients of RPS reports of changes in allocating methods, and allocate all corporate overhead if a reasonable technique can be established. (BTW)

7296

BY THE COMPTROLLER GENERAL

Report To The Congress

OF THE UNITED STATES

Amtrak's Subsidy Needs Cannot Be Reduced Without Reducing Service

Although Amtrak can eventually improve its operating efficiency, it cannot substantially reduce its operating costs without reducing the size of its system. GAO lists areas that Amtrak management should give attention to in order to become more efficient, but believes the efficiencies available will not substantially reduce Amtrak's subsidy need.

CED-78-86

MAY 11, 1978

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-175155

To the President of the Senate and the
Speaker of the House of Representatives

This report describes Amtrak's costs and prospects that it can reduce its Federal subsidy by operating more efficiently. We are providing it to the Congress for use in considering the levels of subsidy to be provided for rail passenger service in the United States.

We made our review pursuant to our authority under the Amtrak Improvement Act of 1974 (45 U.S.C. 644 (supp. V 1975)). The review was requested by the House Committee on Appropriations, Subcommittee on Transportation, and the House Committee on Interstate and Foreign Commerce, Subcommittee on Transportation and Commerce. We did not obtain Amtrak's formal comments on our findings because of the limited time we had available for our audit.

We are sending copies of this report to the Director, Office of Management and Budget; the Secretary of Transportation; the Chairman, Interstate Commerce Commission; the President of Amtrak; and various congressional committees concerned with railroad matters.

Comptroller General
of the United States

COMPTROLLER GENERAL'S
REPORT TO THE CONGRESS

AMTRAK'S SUBSIDY NEEDS CANNOT BE REDUCED WITHOUT REDUCING SERVICE

D I G E S T

Amtrak has not become a profit-making enterprise as planned by its authorizing legislation. Its operating costs have outstripped its revenues, and increasing Federal subsidies are required for continued operations. Its operating deficit grew from $153 million in fiscal year 1972 to over $521 million in fiscal year 1977. It lost $9 per passenger in 1972 and over $27 per passenger in fiscal year 1977. (See pp. 1 and 2.)

Amtrak requested more money from the Congress in 1977 than the Congress appropriated. As a result, Amtrak planned service reductions. It believed such reductions were the only source for substantial cost savings which would permit Amtrak to operate within available funds.

In the face of the planned service reductions, the Congress provided some additional funding and the conference committee report directed Amtrak to sustain its existing service levels while the Department of Transportation studied the route system to determine what service levels were needed.

Amtrak has stated that the additional funding is still not adequate and that substantial service curtailments will be needed later this year if additional funding is not approved. In addition, Amtrak has requested operating subsidies of $613 million for fiscal year 1979, while the administration has budgeted only $510 million. Amtrak insists it cannot operate within the lower figure without substantial service reductions.

GAO reviewed Amtrak's costs and operations and concludes that, although there are ways Amtrak can eventually improve its operating efficiency, Amtrak cannot substantially reduce its operating costs without reducing the size of its route system. Efficiencies available will not substantially reduce Amtrak's subsidy need.

CED-78-86

Amtrak's management should give continued attention to the following areas that could lead to better efficiency:

--Direct labor costs for operating locomotives and trains are high because of union work rules that often result in less than a day's work for a day's pay. Although Amtrak seems to be able to do little about these work rules, it should continue to work for a more rational approach.

--Maintenance costs are Amtrak's largest single area of expense. (See p. 13.) Two years ago GAO recommended that Amtrak develop productivity standards for these activities so management could better control costs. Amtrak still needs to do so.

--Amtrak's losses on food and beverage service are substantial, and sanitary conditions are not always maintained. Management should work to reduce losses and provide exemplary service that meets all sanitary and safety standards. (See p. 19.)

Amtrak's route profitability system provides reasonable estimates of its route-by-route revenue and costs and can be used as a reliable guide to the individual segment operating results for the present system. (See pp. 31 through 38.)

GAO believes Amtrak can improve its route profitability system by:

--Adding data on ridership and train miles operated for each route to the operational results reports produced by the route profitability system. Such data would enhance the usefulness of the economic performance data produced.

--Adding to the current performance data, comparisons with past performance. Such measurements should enhance management's ability to spot and analyze significant trends.

--Informing the recipients of route profitability system reports of changes in allocating methods so that current reports can be compared with past reports.

--Allocating all corporate overhead if a reasonable allocating technique can be established.

Amtrak's classification of its costs as "avoidable" or "unavoidable" is also reasonable, and the estimates presented in the 1977 5-year plan are an improvement over Amtrak's estimates in fiscal year 1976. (See pp. 39 through 45.) However, Amtrak did not explain its improved method of estimating, making it difficult for third parties to use the figures presented. GAO recommends that Amtrak provide the Congress with information to explain changes in its plans from year to year.

GAO compared Amtrak's present operations with its operations as originally authorized by the Congress and found that Amtrak has grown considerably, but that ridership and revenues have not kept pace. (See p. 49.) Amtrak would have to reduce its route system to reduce its subsidy need, but has not been permitted to exercise the route and service criteria the Congress approved as a method of evaluating and eliminating routes if necessary.

The route and service criteria require consideration of all the economic, social, and environmental factors that bear on a route's merit, and these criteria should be used to bring about changes in the route system if the Congress determines changes are needed. (See pp. 50 and 51.)

Finally, GAO concludes that, faced with the fact that Amtrak cannot operate its present route system for much less than it has requested in its budget, the Congress' choices are limited.

Congress can (1) give Amtrak what it has asked for and allow it to continue the present route system, (2) give Amtrak less than it asked for and allow the route system to be reduced, or (3) give Amtrak more money to allow expanded service. There are, of course, many variations of these basic choices.

GAO did not obtain Amtrak's formal comments on the report because of the limited time available for the audit. The report's content was discussed with Amtrak officials, however, and their views are discussed in the report.

Contents

APPENDIX

ABBREVIATIONS

Amtrak	National Railroad Passenger Corporation
CMS	Cost Management System
Conrail	Consolidated Rail Corporation
DOT	Department of Transportation
GAO	General Accounting Office
ICC	Interstate Commerce Commission
NEC	Northeast Corridor
NECIP	Northeast Corridor Improvement Project
RPS	Route Profitability System

CHAPTER 1

INTRODUCTION

The Congress enacted the Rail Passenger Service Act (45 U.S.C. 501) in October 1970 to revive the failing intercity passenger train industry and retain for the Nation a realistic network of high-quality rail passenger service. The act called for the Secretary of Transportation to designate a national network of passenger service and the creation of a National Railroad Passenger Corporation (Amtrak) to take over its management and development. Amtrak was incorporated on March 30, 1971, and began operations on May 1, 1971.

Amtrak service started with trains connecting 21 city pairs, designated by the Secretary of Transportation, and has since been expanded to over 40 city-pair routes. Even so, the current route structure represents a large reduction in the amount of passenger service offered compared to what had been available before Amtrak.

Amtrak has not become a profit-making enterprise as planned by its authorizing legislation. Its operating costs have outstripped its revenues, and increasing Federal subsidies are required for continued operations. Amtrak's operating deficit grew from $153 million in fiscal year 1972 to over $521 million in fiscal year 1977. It lost $9 per passenger in 1972 and over $27 per passenger in fiscal year 1977. Its operating revenues, expenses and deficits are shown below.

	Fiscal year	Operating revenues	Operating expenses	Deficits
		(thousands)		
Past:	1971	$ 22,645	$ 45,301	$ 22,656
	1972	152,709	306,179	153,470
	1973	177,303	319,151	141,848
	1974	240,071	437,932	197,861
	1975	246,459	559,807	313,348
	1976	268,038	674,307	406,269
	Transition quarter	77,167	176,298	99,131
	1977	311,272	832,850	521,578
Total		$1,495,664	$3,351,825	$1,856,161
Projected: (note a)				
	1978	$ 352,866	$ 943,366	$ 590,500
	1979	403,254	1,072,325	669,071
	1980	444,987	1,172,140	727,153
	1981	505,652	1,293,940	788,288
	1982	578,274	1,432,340	854,066
Total		$2,285,033	$5,914,111	$3,629,078
Total		$3,780,697	$9,265,936	$5,485,239

a/ Amtrak estimates.

The Congress is becoming increasingly concerned about the continued decline in Amtrak's economic performance. It is providing $506.5 million as an operating subsidy in fiscal year 1978, $29.5 million less than Amtrak is requesting. The conference report on the 1978 Supplemental Appropriations Act also directed the Department of Transportation (DOT) to study Amtrak's route structure and ruled against certain service cuts Amtrak planned to implement last fall as economy measures. Amtrak has stressed that if the required savings cannot be programed in time, it will face a severe funding crisis in July or August 1978, and will have to shut down the entire system.

In view of the uncertainty concerning Amtrak's costs and levels of service in fiscal year 1978 and because its fiscal year 1979 needs must be considered, the House Committee on Appropriations, Subcommittee on Transportation; and House Committee on Interstate and Foreign Commerce, Subcommittee on Transportation and Commerce asked us to

--analyze and explain how and why Amtrak incurs its costs and determine whether costs could be reduced through more efficient operations;

--analyze Amtrak's route profitability system to determine the methods used to allocate recorded costs to the various routes in the system and whether the allocations provide reasonable estimates of the costs of operating the routes;

--determine how Amtrak classifies costs as being avoidable or unavoidable and whether the classification is reasonable; and

--analyze Amtrak-generated data to compute funding requirements for various alternative route systems, and show the cumulative effect of route system and other changes made since Amtrak was formed.

We concurrently worked on several reports concerning Amtrak. In this report we discuss Amtrak's overall costs and its ability to reduce them while operating its present system. A second report 1/ discusses Amtrak's corridor routes outside the northeast corridor (NEC). Amtrak

1/ "Should Amtrak Develop High-Speed Corridor Service Outside The Northeast?" (CED-78-67, April 5, 1978.)

believes these are some of its best routes with the greatest potential for increased ridership and social benefits. A third report will discuss what appear to be Amtrak's worst routes economically, and Amtrak's experience in trying to improve or eliminate them.

SCOPE OF REVIEW

In this review we analyzed Amtrak's cost elements and accounting methods, and traced and verified the accuracy and need for expenditures. We examined accounts maintained and reports produced by Amtrak's cost management system and selectively reviewed contracts, procurement documents, and other supporting material for the costs incurred. We interviewed Amtrak's key financial and program managers regarding their areas of management responsibility. We also reviewed and analyzed Amtrak's methods for allocating costs to trains to estimate profit or loss and avoidable costs and the underlying documents that support these computations.

We made this review at Amtrak's headquarters in Washington, D.C., during the period from November 1977 through February 1978. We did not follow our usual practice of obtaining Amtrak's formal commments on the report because of the limited time available for our audit. However, we did discuss the contents of the report with Amtrak officials and their views are discussed in various sections of the report.

CHAPTER 2

DESCRIPTION OF AMTRAK'S OPERATING COSTS

The Congress has been involved in determining how much operating subsidy and capital grants Amtrak needs and the level of rail passenger service Amtrak maintains. After 7 years of increasing subsidy requirements, Amtrak has stated that its fares cannot be increased enough to cover inflation and still keep intercity rail passenger service marketable, and that operation of the existing national system cannot be continued if the corporation is required to absorb substantial deficit increases.

Our findings in this and other audits of Amtrak's operations (see app. II) generally show that Amtrak is right. Amtrak has proposed that Federal funds to cover its operating subsidy be raised from $506.5 million to $536 million in fiscal year 1978, to $613 million in fiscal year 1979, and steadily increased to about $875.8 million in fiscal year 1982.

Amtrak states that withholding operating subsidy increases would represent a major policy direction suggesting the need for an immediate and urgent consideration of the role and scope of rail passenger service in the United States. The Congress' predicament is that a higher subsidy level or the alternative of reduced service seem to be about equally undesirable. To help the Congress in its consideration of this matter, we have examined Amtrak's operations for possible cost savings.

Our review showed that some cost savings may be possible through more efficient operations but that passenger rail operations are very costly, and that savings substantial enough to materially reduce the Federal subsidy requirements are not readily available.

AMTRAK'S EXPENSES IN FISCAL YEAR 1977

According to Amtrak's preliminary (unaudited) statement of operating loss in fiscal year 1977, it incurred total operating and corporate expenses of $832.85 million. Amtrak's costs were almost 2.7 times its revenues in fiscal year 1977--up from 1.8 times in fiscal year 1973 and 2.3 times in fiscal year 1975. The major reasons for the decline in Amtrak's economic performance are

--added rail routes and services,

--continual upgrading of existing equipment and acquisition of additional cars and locomotives,

--Amtrak's takeover of facilities for maintenance of equipment, and

--the overall inflationary spiral causing increases in all costs.

Amtrak's expenses in fiscal year 1977 are listed below.

			Percent
Direct expenses:			
Train and engine crews	$ 74,212,658		8.9
Train fuel and power	42,999,810		5.2
On board service-labor	54,091,999		6.5
On board service-supplies	20,992,849		2.5
Other direct expenses	778,624		0.1
Total		$193,075,940	23.2
Common expenses (note a):			
Station services	$ 48,571,212		5.8
Transportation	17,362,426		2.1
Locomotive maintenance	48,321,401		5.8
Car maintenance	147,981,020		17.8
Metroliner maintenance	10,468,049		1.3
Track related maintenance	18,120,202		2.2
Facility related maintenance	12,143,453		1.4
Common facilities overhead	60,233,196		7.2
Other common expenses	97,308,173		11.7
Total		$460,509,212	55.3
Other railroad:		15,807,593	1.9
Operating support:		55,402,914	6.7
Depreciation, taxes, and insurance:			
Depreciation	$ 32,344,502		3.9
Taxes	9,706,315		1.2
Insurance (note b)	9,163,337		1.1
Total		51,214,154	6.2
Corporate general and administrative expenses:		22,942,032	2.7
Interest expenses:		33,897,803	4.0
Total expenses fiscal year 1977 (note c):		$832,849,648	100.0

a/ Expenses at facilities serving more than one train.

b/ Amtrak is primarily self insured except for certain automobile and catastrophic insurance coverage.

c/ Amtrak's audited statement of operating loss, released February 15, 1978, shows total expenses at $842,353,000 for fiscal year 1977.

Amtrak expects its expenses to be about $901.1 million in fiscal year 1978 and almost $1.1 billion in fiscal year 1979. This excludes capital costs and nonoperating expenses incurred for other parties, such as other corporations and various local governments for which reimbursement is received by Amtrak. Amtrak's operating costs in fiscal year 1977 were also classified by the following elements:

	(millions)
Corporate costs:	
National Operations	$193.2
Northeast Corridor	175.0
Operations Support	84.8
Government Affairs/Public Relations	1.3
Office of the President/Executive Planning	2.3
General Counsel	4.4
Personnel and Administration	7.4
Labor Relations	1.8
Finance	66.1
Computer Systems Services	23.7
Marketing	45.8
a/Corporate Common (Net)	-43.1
Total	$562.7
Operating railroads performing services for Amtrak:	
Northeast Corridor	$ 81.2
Outside Northeast Corridor	188.9
Total	$270.1
Total	$832.8

a/Unallocated employee benefits	$ 1.7	
Depreciation	32.3	
Less: Reimbursements to Amtrak for nonoperating expenditures	77.1	
Net corporate common costs		-$43.1

The four major elements (national operations, NEC, operations support, and the operating railroads performing services for Amtrak) are mainly responsible for the physical operation of the railroad, including all the activities necessary to provide rail transportation to people and things. These activities include operating the trains, the yards that service them, commissaries, stations, and heavy maintenance facilities.

The other organizational elements listed cover Amtrak's activities that are less directly related to physical train operations. These activities include advertising, computer services. lobbying, planning, labor relations, and financial and general administration.

NATIONAL OPERATIONS

Amtrak's national operations department has a headquarters staff devoted to policy and procedural matters, planning, contracts with operating railroads, budget and cost control, and liaison with other departments and operating railroads and terminal companies. Day-to-day operations are delegated to three regions, Eastern, Central, and Western, with regional headquarters at Arlington, Virginia, Chicago, and San Francisco. Each region is divided into districts. Amtrak restructured its 13 districts into 7, effective December 1, 1977. According to Amtrak, the restructuring will bring about improved relationships between regional and district offices in areas of maintenance and onboard services.

The department conducts contract negotiations with railroads, implements contracts, and monitors both Amtrak and railroad performance. Within each region and district, it is responsible for transportation and running maintenance functions; stations and ticket offices; and onboard Amtrak crew functions, including provisioning trains with onboard service supplies, scheduling and supervising onboard crews.

Operating expenses for the national operations department in fiscal year 1977 are summarized below.

Headquarters:		
Vice President & General Manager	$ 353,760	
Running Maintenance	560,704	
Administration	1,279,557	
Operations	5,934,183	
Total		$ 8,128,204
Eastern Region:	$ 66,270.541	
Central Region:	78,900,122	
Western Region:	39,889,606	
Total		185,060,269
Total National Operations Department		$193,188,473

During the development of Amtrak's fiscal year 1978 budget, the national operations department request was up to $204.1 million, but a substantial cost reduction program was started to achieve savings of about $17.8 million. Much of the planned savings related to proposed route changes and frequency reductions that were not implemented. Other savings related to reducing administrative and line staff; reducing station staffing; and substituting certain snack service for dining car service, which should have some impact on Amtrak's costs in fiscal year 1978. According to Amtrak, the savings that did result are reflected in its current budgets and estimated Federal subsidy requirements.

Recommendation to the Congress

We recommend that Congress require Amtrak to fully explain changes in national operations costs in connection with any request for additional funds.

NEC

Amtrak acquired NEC from the Consolidated Rail Corporation (Conrail) on April 1, 1976, and established a separate headquarters in Philadelphia to manage it. The acquired property included a total of 621 route miles--456 miles from Boston to Washington, 62 miles from New Haven to Springfield, and 103 miles from Philadelphia to Harrisburg. As a result of owning the tracks and right-of-way, Amtrak also assumed responsibility for maintaining the property and became the direct employer of 1,700 maintenance-of-way and signal employees.

Amtrak's statement of NEC financial operations for fiscal year 1977 is included as appendix III.

NEC Improvement Project

The NEC Improvement Project (NECIP) is a $1.82 billion program, mandated by the Railroad Revitalization and Regulatory Reform Act of 1976, and devoted to improving tracks and facilities from Washington through New York to Boston. It is to be completed by February 1981 to improve the reliability and speed of Amtrak's service in the corridor. Amtrak's NECIP department incurred

costs of $3,452,675 in fiscal year 1977; $3,431,789 were recorded as capital expenditures; and $20,886, as operating expenses. Of the capital expenditures, $1,874,252 were for professional fees and services, including engineering and systems consultants.

Under NECIP, Federal funds are available to improve the operationally essential parts of the primary intercity passenger stations between Boston and Washington. This will include structural work; new or lengthened high-level platforms; and utilities necessary for passenger safety, train operations, and train information systems. As each segment of NECIP is completed, Amtrak will assume full responsibility for maintenance of the improved right-of-way and facilities.

CONTRACTS WITH RAILROADS

Amtrak owns its own locomotives and cars; but, except in NEC, it operates over privately owned railroads. Amtrak's original legislation gives it the right to use railroad rights-of-way and other services as long as it reimburses the railroads for their costs. Amtrak negotiates with the railroads individually to establish the contracts under which it obtains the railroad services, and the Interstate Commerce Commission acts as arbitrator in situations where Amtrak and a railroad cannot agree on terms.

Over the years, the process of negotiation has led to several different classes of contracts. These contracts and their provisions for cost reimbursements and services are explained more fully in an earlier report. 1/ We concluded in that report that contract amendments had significantly improved many of the relationships between Amtrak and the railroads, but that the incentive provisions had little effect on performance.

1/ "Amtrak's Incentive Contracts With Railroads--Considerable Cost, Few Benefits". (CED-77-67, June 8, 1977).

Amtrak's cost management system shows that it paid railroads for the following services in fiscal year 1977:

	Cost	Percent
Railroad train enginemen	$ 35,058,234	13.0
Railroad trainmen	36,613,933	13.6
Railroad station employees	14,621,716	5.4
Railroad pensions	605,797	0.2
Health and welfare benefits	8,702,623	3.2
Train fuel and power	26,686,704	9.9
Maintenance & servicing - rolling stock	46,792,037	17.3
Railroad administration	19,248 969	7.1
Railroad track & roadway maintenance	5,379,170	2.0
Railroad facility & other maintenance	1,201,677	0.4
Maintenance & repair-other equipment	1,072,455	0.4
Yard and terminal rent	673,401	0.2
Locomotive rent	756,439	0.3
Maintenance joint tracks/yards/ facilities	971,710	0.4
Building material, maintenance, servicing	4,315,988	1.6
Utilities	4,524,205	1.7
Yard operations	11,826,480	4.4
Railroad tax accruals	25,106,843	9.3
Incentives	10,636,499	3.9
Misc. transportation/ operations	5,373,416	2.0
Audit recoveries	2,060,000	0.8
Avoidable payments (note a)	6,754,884	2.5
Other expenses	1,075,233	0.4
Total	$270,058,413	100.0

a/ Five percent of the costs were paid to railroads for estimated additional administrative costs incurred for Amtrak operations.

As the list shows, Amtrak's largest payments to railroads are for train and engine crews (26.6 percent of the total) and equipment maintenance and servicing (17.3 percent). Railroad agreements provide that engineers, trainmen, brakemen, and conductors be employed by the railroad over which Amtrak runs, while all other onboard employees are now Amtrak employees. Amtrak has little control over train and engine crew costs; work rules are specified by union contracts which are negotiated nationally. Amtrak feels it has little influence in these negotiations because of its relatively small size.

Train and engine crew costs are high because of work rules which often result in employees being paid for a full day or even several full days when they have worked less than 8 hours. Four to six engine crew employees receive a full day's pay to operate an Amtrak train between Detroit and Chicago, a trip which takes about six hours. A single driver would normally operate a bus between Detroit and Chicago. It appears that Amtrak can do little to improve its situation under current circumstances but it should continue to work for a more rational approach.

We analyzed Amtrak's payments to railroads by category of costs and by railroad, but found no significant trends or identifiable problems to suggest that substantial savings are possible. Amtrak paid the following operating expenses to railroads in fiscal year 1977.

Fiscal Year 1977 Railroad Operating Expenses

	Flat rated costs	Variable costs	Incentive costs	Total
		(millions)		
Original agreement railroads:				
Atchison, Topeka & Santa Fe	$ -	$ 24.52	$ -	$ 24.52
Chessie System	-	6.36	-	6.36
Illinois Central Gulf	-	8.81	-	8.81
Missouri Pacific	-	2.23	-	2.23
Union Pacific	-	3.26	-	3.26
Conrail	66.85	44.57	-	111.42
Total	66.85	89.75	-	156.60
First amendment agreement railroads:				
Delaware & Hudson	1.16	0.79	0.03	1.98
Norfolk & Western	1.06	0.40	0.13	1.59
Total	2.22	1.19	0.16	3.57
Second amendment agreement railroads:				
Burlington Northern	17.52	14.70	4.53	36.75
Grand Trunk Western	0.44	0.06	0.06	0.56
Louisville & Nashville	1.23	1.02	-0.01	2.24
Milwaukee Road	4.80	3.55	0.53	8.88
Richmond, Fredericksburg, and Potomac	2.69	3.13	0.44	6.26
Seaboard Coast Line	12.27	15.97	3.70	31.94
Southern Pacific	11.43	5.40	1.17	18.00
Total	50.38	43.83	10.42	104.63
Nonmember railroads (note a):				
Canadian National	2.22	0.25	-	2.47
Central of Vermont	0.97	-	-	0.97
Missouri-Kansas-Texas	0.12	-	-	0.12
Texas & Pacific	-	1.05	-	1.05
Boston & Maine	0.53	0.06	0.05	0.64
Total	3.84	1.36	0.05	5.25
Total	$123.29	$136.13	$10.63	$270.05

a/ Railroads which did not enter into original agreements in 1971, but which now have contractual arrangements with Amtrak.

Conrail is Amtrak's largest single contractor. Amtrak's contract with Conrail calls for reimbursement of all reasonable and necessary costs solely related to Amtrak services, plus 5 percent to cover other avoidable costs. Amtrak's purchase of NEC has necessitated some revisions in its contractual arrangements with Conrail which are still under negotiation. About 40 percent of Amtrak's total train miles are operated by Conrail crews. Conrail train and engine crews operate passenger trains over NEC trackage owned by Amtrak, which accounts for about 27 percent of Amtrak's total train miles.

The railroads bill Amtrak monthly for services performed, and supply Amtrak with documentation supporting the charges. Amtrak's Office of Contract and Joint Facilities Audits examines all bills received and periodically conducts onsite audits to ensure that the railroads are properly billing Amtrak for services actually performed. These audits examine railroad operations for contract compliance and often result in recommendations for cost savings and recoveries. We reviewed the audit programs and procedures and found them adequate. Since Amtrak commenced operations it has recovered about $60 million, including $3.8 million in fiscal year 1977, in erroneous charges. Amtrak's onsite audits average approximately 18 months behind the railroad's billings.

EQUIPMENT MAINTENANCE

Amtrak spent almost $206.8 million for maintenance of passenger cars and locomotives in fiscal year 1977, including $46.8 million for maintenance done by railroads under contracts. (See p. 10.) Amtrak's objective is to maximize the reliability of equipment and the number of cars available for service. Running maintenance is periodic preventive maintenance, including monthly, quarterly, and annual inspections with associated repairs required by law. Heavy overhaul is the complete disassembly, renovation, and repair of cars and locomotives, or major repairs of damaged equipment. Amtrak's latest 5-year plan shows that it expects to increase its maintenance program by $7.1 million in fiscal year 1978 and by another $5.5 million in fiscal year 1979.

Status of the Amtrak fleet

New passenger cars and locomotives have resulted in a younger Amtrak fleet. The average age of locomotives and passenger cars has decreased 4.5 years and 4.3 years respectively during the period January 1, 1975, through September 30, 1977, as shown below.

Type of equipment	Average age during CY 75	Average age during FY 77
Locomotives	14.4	9.9
Cars	24.7	20.4

At June 30, 1975, Amtrak owned 2,033 locomotives and cars and was leasing 424 others. By September 30, 1977, Amtrak owned 2,378 locomotives and cars and leased only 15 others, as shown in the following table.

	Amtrak owned	Leased
June 30, 1975:		
Locomotives	189	183
Cars	1,844	241
Total	2,033	424
September 30, 1977:		
Locomotives	330	-
Cars	a/2,048	15
Total	2,378	15

a/ Contains 239 cars which are part of the fleet but are not being used.

Types of maintenance facilities

Overhaul

Heavy overhaul facilities are needed to disassemble, renovate, and repair passenger cars and locomotives. In fiscal year 1977 Amtrak did 53 percent of its passenger car overhauls at its own facility (Beech Grove). The balance of the passenger car overhauls and all locomotive overhauls were done by other companies under contract.

Running maintenance

These facilities provide periodic maintenance inspections and required maintenance to hold warranties in force and can provide turnaround service, fueling, and cleaning. As of March 1, 1978, Amtrak used 15 car and 13 locomotive maintenance facilities as shown below.

Type of facility	Amtrak operated	Contractor operated	Total
Car	10	5	15
Locomotive	7	6	13

Turnaround

Turnaround maintenance facilities are needed in some areas to fuel, service and water locomotives and cars at the end of a run as necessary for the return trip. Amtrak operates 35 turnaround facilities (15 for locomotives and 20 for passenger cars) and uses 48 others under contract.

Enroute

This type of facility is equipped to replenish fuel and water, remove trash, and perform federally mandated inspections. In September 1977 there were 98 enroute facilities.

According to Amtrak, requirements for the number, capability, and location for each type of facility are based on fleet inventory, frequency of heavy repair needed for each type of equipment, and route structure.

Equipment maintenance costs

According to Amtrak's route profitability system, during fiscal year 1977 Amtrak spent $160,600,638 for running maintenance, servicing and inspections of equipment, including $97,406,766 for passenger cars, $42,194,483 for locomotives (diesel and electric), $10,111,324 for Metroliners, and $10,888,065 for turboliners. Such equipment upkeep is necessary on all cars, old or new, so that Amtrak's capital expenditures for new equipment have little effect on the level of these expenses.

During fiscal year 1977 Amtrak spent $45,332,803 on heavy maintenance. This cost can be broken down as maintenance for:

--Passenger cars	$37,840,660
--Locomotives	6,110,946
--Metoliner	194,497
--Turboliner	1,186,700

In addition, Amtrak spent $857,109 in fiscal year 1977 for repair of damaged equipment and other miscellaneous repairs.

In fiscal year 1976 Amtrak overhauled 540 conventional cars at $86,087 per car. In fiscal year 1977, 369 conventional cars were overhauled at $89,165 per car, an increase of about 3-1/2 percent over 1976. Amtrak estimates that 299 cars will be overhauled in fiscal year 1978 at $97,308 per car, a 13-percent increase over fiscal year 1976.

Amtrak is overhauling fewer cars because of budget reductions, and also because of retirement of old cars due to Superliner implementation. Amtrak spent $54,004,000 in fiscal year 1976, $36,614,000 in fiscal year 1977 and has estimated that $31,000,000 will be spent in fiscal year 1978 for overhaul and other repair of conventional cars. On October 1, 1977, Amtrak had a 205-car backlog needing to be overhauled. Amtrak estimates that by September 30, 1978, this number will rise to 319. As shown in the table below, Amtrak's out-of-service ratio for passenger cars has increased from 15.6 percent in fiscal year 1976 to 17 percent in fiscal year 1977. This is a result of Amtrak's reduced overhaul budget, although other factors could also be responsible, such as adverse weather and more wrecks.

	Out of service ratio (daily average)	
Type of equipment	FY 76	FY 77
	(percent)	
Passenger cars	15.6	17.0
Locomotives	13.7	19.5
Turbo trains	8.3	10.8
Metroliners	27.6	28.4

An Amtrak official cited inflation as the cause of the increase in overhaul cost per car. However, the official stated that future costs will decrease because

--the new Amfleet and Superliner cars have simpler, more compatible parts which will make the overhaul process quicker and cheaper;

--with standardization, a smaller parts inventory will be needed;

--the power conversion program, which is designed to convert cars from steam to electric power, will increase the number of cars with standardized parts; and

--a modernization program at Beech Grove, Indiana, costing in excess of $29 million and to be completed by the end of fiscal year 1980, will enable Amtrak to perform quicker, cheaper maintenance.

Takeover and consolidation of facilities

Amtrak's objective is to operate a minimum number of each type of maintenance facility. The Congress has directed that Amtrak directly perform as much of its maintenance, rehabilitation, repair, and refurbishment of rail passenger equipment as practicable. Amtrak began taking over maintenance facilities in fiscal year 1976.

Amtrak has decided to do all its own heavy car overhauls at its Beech Grove, Indiana, facility. Heavy locomotive overhauls are being done by various outside contractors while running maintenance is done in part by Amtrak and in part by other railroads.

Running maintenance

During 1977 Amtrak took over maintenance functions at the Los Angeles and New Orleans facilities and eliminated seven other facilities by consolidating their activities. However, Amtrak does not intend to do all its own running maintenance because it has determined that acquiring facilities such as those in Seattle, Oakland, and St. Petersburg is uneconomical.

Overall, the portion of running maintenance done by contractors has decreased while Amtrak's share has increased.

In fiscal year 1976 Amtrak performed 31 percent of running maintenance while in fiscal year 1977 it performed 47 percent.

Heavy overhauls

In 1975 Amtrak acquired the Beech Grove, Indiana, heavy maintenance facility so it could perform all its own heavy car repair by fiscal year 1982. During fiscal year 1976 Amtrak performed heavy maintenance on 174 cars at Beech Grove at an average cost of $77,005 per car. Outside contractors overhauled 366 cars at an average cost of $90,404 per car. Amtrak-performed maintenance was $13,399 or about 15 percent lower per car. We were advised by an Amtrak official that lower average overhaul cost per car in fiscal year 1976 was caused in part by acquisition of spare parts at less than replacement cost, along with the Beech Grove, Indiana, facility. Its average cost per car in fiscal year 1977 rose to $91,703, compared to the average contract cost of $86,668 per car.

Problems identified and recommendations made in our earlier report

In our earlier report 1/, we noted certain deficiencies in Amtrak's management of equipment maintenance facilities and the monitoring of work performed at these facilities. We recommended that Amtrak

--develop specific inspection guidelines and staffing criteria for field inspectors; and

--include work productivity standards, after Amtrak develops them, in its contracts with the railroads.

Amtrak has issued guidelines for the inspection of equipment but none for the staffing of field inspectors.

An Amtrak official told us that Amtrak is currently developing productivity standards but that these standards have not been implemented. As a result, Amtrak does not

1/ "Quality of Amtrak Rail Passenger Service Still Hampered by Inadequate Maintenance of Equipment", (RED-76-113, dated June 8, 1976.)

know what opportunities for improvement exist.

Maintenance is Amtrak's largest single area of controllable costs. Almost two years ago, we recommended that Amtrak develop productivity standards for these activities so management could better control costs. We still believe Amtrak should develop and apply productivity standards for its maintenance operations.

DINING AND BUFFET SERVICE

Amtrak's dining and buffet service produced revenue of about $21.3 million in fiscal year 1977 but incurred operating expenses of about $63.8 million, for a cost to revenue ratio of about 3 to 1 and a $42.5 million loss. The costs are summarized below.

	(millions)
Dining car labor	$ 32.4
Food supplies	13.8
Liquor and tobacco supplies	1.7
Nonconsumable supplies	5.4
Commissary and crew base facilities	10.5
	$ 63.8

We discussed Amtrak's dining and buffet service with its Director of Onboard Service. He is relatively new in that position but has many years of experience in managing food services. He attributes a major part of the problem to the high fixed costs of the service and the fact that many of Amtrak's trains carry relatively few passengers.

Amtrak's latest 5-year plan shows that its total onboard services operating costs will increase $9.9 million in fiscal year 1978 and $2.5 million in fiscal year 1979. The plan does not indicate which cost increases are for dining and buffet service and which are for other onboard services, and does not show to what extent economic performance of the dining and buffet service is expected to improve.

Nevertheless, Amtrak's plan proposes capital improvements of $1.5 million in fiscal year 1978 and $5.2 million in fiscal year 1979 for onboard service support facilities, including commissary and crew bases. According to Amtrak, these improvements will better serve the newer types of passenger equipment, reduce its dependence on outside catering services, reduce waste and loss, and assure positive inventory control.

Amtrak's plans for improving its dining and buffet services change from one year to the next. For example, last year Amtrak described its 5-year improvement program of $7.8 million, including $1.2 million for 10 support facilities in fiscal year 1977 and $4.2 million for 10 facilities in fiscal year 1978. This year it described a 5-year improvement program of $7 million, including $1.5 million for 5 locations in fiscal year 1978, and $5.2 million for 4 locations in fiscal year 1979. Amtrak told us these things change from one year to the next because of budget changes and required shifts in priorities.

Amtrak's proposals for its Chicago facility illustrate how Amtrak's capital improvement program changes in its plan. Last year Amtrak discussed a 5-year phased program (FY 1977 through FY 1981) of $2.7 million for the Chicago facility as follows:

FY77	FY78	FY79	FY80	FY81
$254,000	$203,000	$231,000	$ 40,000	$2,000,000

Amtrak's current plan proposes $2.5 million for the Chicago facility:

FY78	FY79	FY80	FY81	FY82
-	$2,250,000	$123,000	$50,000	$45,000

Amtrak told us it changed its funding plan this year to begin construction and relocation of a new commissary facility in fiscal year 1979 instead of fiscal year 1981 to coincide with the Chicago 12th Street Coach Yard development.

There is little doubt that Amtrak's dining and buffet service and onboard service facilities need improvement. Numerous inspections by the Food and Drug Administration (FDA) through December 1977 disclosed significant repetitive insanitary and dangerous conditions in food service cars, railroad watering points, and food distribution centers. For example, food was found to be stored at elevated temperatures and food storage and preparation areas were dirty. According to the FDA, repeated letters to Amtrak officials have had little effect in improving overall conditions.

In our view, the Congress needs to be better informed about the development and status of Amtrak's dining and buffet service and the extent that Amtrak's activities can realisti-

cally be expected to improve cost effectiveness. On the basis of the current high losses associated with Amtrak's dining and buffet service, we believe that development of such information might indicate a need for the Congress and Amtrak to place a higher priority on improving effectiveness of Amtrak's dining and buffet service. We consider Amtrak the best source for such information, but its 5-year plans will have to be substantially improved or other means will have to be found for such reporting if the Congress is to have a solid foundation for its funding decisions.

Recommendation to the Congress

We recommend that for both operating and capital plans Congress require Amtrak to provide information that better explains Amtrak's plans for improving the quality of dining and buffet services, and for bringing its cost and revenues closer together. Amtrak should strive to provide exemplary service that meets all sanitary and safety standards.

LEGAL DEPARTMENT

Amtrak operates as a public service activity established under Federal government charter. It must comply with that charter and with policies and controls of the DOT and Interstate Commerce Commission, as well as agencies of the States in which it operates and various other government bodies. Amtrak is legally accountable for the actions of its employees and can be sued in appropriate legal jurisdictions.

In fiscal year 1977 Amtrak spent $4.4 million in legal fees and expenses. Of this amount, Amtrak spent $2.3 million protecting its corporate, Government relations, operating railroads, and claims service activities. According to Amtrak its outside expenses totaling $2.1 million were incurred to retain a law firm to manage Amtrak's large tort case load, to cover the cost of litigation, and the cost for special legal services.

In-house expenses

Amtrak corporate activities require legal services and representation. Amtrak needs legal advice when it acquires, uses, or disposes of owned or leased real properties. Labor

relations, equal opportunity employment, and Federal and State tax matters require legal oversight and are handled by in-house attorneys. Amtrak also has assigned attorneys to assist its Government Relations Office in dealings with DOT, the Interstate Commerce Commission, and other Government agencies.

Amtrak has contracted with other railroads to assist in the operation of its trains. Legal advice is needed to negotiate, draft and interpret these contracts. Disputes that arise incident to the contracts must be adjudicated by the Interstate Commerce Commission, the National Arbitration Panel, or the Federal Courts, and Amtrak's counsel services are needed to represent Amtrak before these bodies.

Outside legal fees and expenses

Amtrak employees and the general public have filed a large number of tort claims against Amtrak. Tort claims are wrongful acts, property damages, and personal injuries for which a civil suit can be brought. Amtak used an outside law firm to manage and supervise these claims. In fiscal year 1977 these services cost Amtrak about $700,000. Amtrak has decided to manage its own tort claims and expects to save about $500,000 in fiscal year 1978 by doing so.

Amtrak operates trains throughout the continental United States and therefore needs legal representation throughout the country. Some reasons for retaining outside attorneys rather than using Amtrak attorneys are:

--Local customs and practices in most courts allow only licensed individuals who have passed the State bar to represent the interest of others.

--Amtrak retains legal specialists in particular types of litigation when they are needed, such as railway labor law.

--State laws vary and it is beneficial to retain attorneys who are knowledgeable about the laws in a particular State.

Legal costs to rise

Amtrak records show that the number of suits and claims on record has increased substantially from fiscal year 1973 to fiscal year 1977. For example, the number of Federal Employer's Liability Act (45 U.S.C.A. 51 et seq.) cases has risen from 129 in fiscal year 1973 to 4,648 in fiscal year 1977, mainly because Amtrak now employs many more people than in earlier years. Grade crossing claims have increased from 207 to 302 during the same period. The cost to settle these cases has also risen sharply. The following chart shows the total number of claims and suits against Amtrak and the amounts to settle them.

Fiscal year	Type of claims and suits					Cost to settle (note a)
	Passengers	Federal Employer's Liability Act	Crossing accidents	Other	Total	
1973	1,787	129	207	63	2,186	$3,595,201
1974	2,288	811	244	70	3,413	$4,870,098
1975	2,466	1,735	263	76	4,540	$6,624,484
7/1/75-9/30/75	557	510	70	18	1,155	$1,737,360
10/1/75-9/30/76	2,465	3,403	303	115	6,286	$7,961,116
1977	1,868	4,648	302	224	7,042	$6,729,803

a/ These amounts are estimated by Amtrak as some litigation is still pending and the amount of settlement has not been established.

Amtrak officials told us they expect their legal costs to continue to increase because Amtrak is growing; and as the number of employees increases, so will the number of claims.

REIMBURSABLE BUSINESS EXPENSES

Amtrak's policy is to reimburse its personnel for incurring business-related expenses, including either in-town or out-of-town travel expenses and the hosting of business meals when warranted by ordinary business activity. Reimbursements to Amtrak personnel are based on expense reports and are recorded in Amtrak's cost management accounts as "travel-other." Amtrak's travel-other costs were $4.96

million in fiscal year 1977, and such costs were budgeted at $5.6 million in fiscal year 1978. Amtrak's top officials down through assistant vice presidents have unlimited expense authority, directors and district superintendents have a maximum limit of $500 per expense report, managers have a $100 limit per expense report, and any of these may be delegated to subordinates when warranted by special circumstances. These limits can be considered monthly limits because completed and approved expense reports are to be submitted at least monthly.

DOT audits of Amtrak in 1976 disclosed inadequate controls over payments for business meals and other entertainment. DOT found numerous instances in which Amtrak personnel were reimbursed for entertaining congressional staff members and DOT employees repetitively, although not all the expenses could be documented. In some instances Amtrak personnel had been reimbursed for entertaining other Amtrak personnel. Partly as a result of the DOT findings, Amtrak emphasized correct procedures to its employees in 1976 and issued revised procedures on July 1, 1977. In addition, its Accounts Payable section started a stepped-up effort to review expense reports before payment and to reject questionable and inadequately documented reports.

Our examination of expense reports indicated that the types of deficiencies noted by DOT in 1976 continued until at least mid-1977. We noted instances where Amtrak personnel entertained other Amtrak personnel and claimed business meals with congressional staff which could not be documented or verified. As a result of our work, Amtrak asked at least two of its top officials to repay amounts claimed for business meals that could not be documented or verified.

However, our findings related to a period before Amtrak's revised procedures. Statistics maintained by Amtrak's accounts payable section show that 85 expense reports (6 percent) were rejected in August 1977. Rejections increased steadily to 175 (15 percent) in November and declined somewhat in December. We believe Amtrak's improved policies and procedures should correct many of the problems noted in the past.

In our view, tightening controls in this area will not save Amtrak very much money in terms of its Federal subsidy but it is important from the standpoint of Amtrak's appearance as a Federally sponsored enterprise.

PROCUREMENT ACTIVITIES

Amtrak's operations support activities include procurement of materials and services necessary to support the entire Amtrak system, including NECIP. Amtrak's procurement activities are designed to

--establish procurement policy and ensure timely delivery of materials and services to Amtrak's departments,

--ensure accurate analysis of proposals for procurement for optimum cost effectiveness,

--ensure proper preparation and issuance of request for proposals,

--ensure that materials and services purchased are provided at the lowest possible cost consistent with Amtrak's quality control, and

--develop methods to identify and solicit minority business firms in keeping with Federal regulations and corporate affirmative action policies.

Amtrak's cost management reports show that it cost Amtrak about $2.5 million to manage procurement activities totaling about $337 million during fiscal year 1977. A breakdown of these operating costs is shown below.

Procurement Expenses

Managing Director procurement activities:			$ 270,265
Northeast Corridor:			
Director, Procurement-NEC	$250,128		
Manager, Procurement-NECIP (note a)	10,510		
Manager, Maintenance of Equipment-Philadelphia	496,825		
Manager, Maintenance of Way Philadelphia	185,155		
Total			942,618
Corporate procurement:			
Manager, Corporate Procurement-Washington, D.C.	$501,558		
Manager, Procurement-Central/Western Region	808,144		
Total		1,309,702	
Total		$2,522,585	

a/ Additional project procurement administration of $322,848 recorded as capital expenditures.

Amtrak officials advised us that the Armed Services Procurement Regulation is used as a guide for their activities. Under these regulations, competition is defined as when

--at least two responsible bidders submit offers,

--both bidders are capable of satisfying the purchaser's requirements,

--at least two bidders independently contend for a contract to be awarded to the responsive and responsible offeror submitting the lowest evaluated price, and

--both bidders submit priced offers responsive to the expressed requirement of the solicitation.

Amtrak provided data showing that about $196 million or 58 percent of the $337 million Amtrak awarded for procurement contracts in fiscal year 1977 (not including operating contracts with railroads) was awarded competitively. A limited analysis of the procurement activities indicated that Amtrak had correctly classified its contracts as competitive or non-competitive. Amtrak requires that all procurements of $25,000 or more be solicited through formal advertising. In NEC, Amtrak is the prime contractor to the Government for NECIP. Because of this, Amtrak procurement activities for materials, equipment and service used in the project are covered by Federal Procurement Regulations. A preliminary summary of Amtrak's total procurement activity in fiscal year 1977 is included as appendix IV.

Amtrak's Internal Audit Department recently completed a review to determine whether procurement activities for the Northeast Corridor Improvement Project were consistent with corporate procurement policy, Federal Procurement Regulations, and the contract between Amtrak and the Federal Railroad Administration. The internal auditors noted numerous deficiencies regarding the purchase of supplies and materials, leasing of equipment, and the procurement of consultant services. The internal auditors' opinion, in a report dated February 27, 1978, was that NECIP procurement activities have not been consistent with policies and procedures and have not provided adequate and effective management controls. Moreover, the review by Amtrak's internal auditors has been extended and is

currently considering possible irregular activities related to equipment leasing and other areas.

COMPUTER SYSTEM SERVICES

Amtrak's development, maintenance, and operation of computer-based information systems are assigned to the Computer Services Department. During fiscal year 1977 the department's costs were $23.7 million. In addition to department salaries and related expenses of about $5.2 million, consulting firms received $3.7 million for use of their programers and analysts for day-to-day activities in the computer department. An Amtrak official said that outside help was used at the time because it was easier to use them than to recruit personnel. The use of consulting firm personnel by Amtrak for day-to-day activities has been reduced substantially. For example, at the beginning of fiscal year 1977 the computer department had 120 consulting personnel; and at the end of fiscal year 1977, there were 80. As of January 1977 there were only 13 consulting personnel in the computer department.

The Computer department also incurred about $7.3 million in telephone expenses. Of this, about $4.3 million was attributed to the reservation and informational systems, and the other $3.0 million was for data transmission. The remaining $7.5 million of costs were for computer related services, such as maintenance, equipment rental, and data entry services.

The department leases two Control Data Corporation 3500 systems for Amtrak's nationwide reservation and ticketing services and owns one IBM 370 system model 158 for routine accounting and other basic operations. To increase its capacity, Amtrak has also leased an additional IBM 370. It costs Amtrak about $3.2 million to operate the leased IBM 370, including personnel costs. Amtrak officials stated that the additional system is needed to meet the increasing workload during fiscal year 1978 and beyond.

Amtrak is considering replacing part or all of the present computer systems with leased or purchased IBM 3033 systems. We estimate that if the present systems are replaced with the 3033 systems, the leasing cost alone would increase about $99,000 a month. Moreover, reprograming costs

will be substantial. An Amtrak official stated that plans to change the computer systems are tentative, and that the transition to newer equipment will depend largely on whether DOT recommends that the route structure be expanded, reduced, or remain the same. Although the IBM 3033 systems have been ordered for delivery starting in the third quarter of 1978, Amtrak's letter of intent states that no liability is attached to the order until it is confirmed by Amtrak.

JOINT SERVICES WITH STATES

One factor contributing to Amtrak's increased costs in the past has been the addition of trains or routes under cost-sharing arrangments with State, regional or local agencies, pursuant to section 403(b) of the Rail Passenger Service Act. Section 403(b) authorizes Amtrak to initiate additional service if the State, regional, or local agency agrees to reimburse Amtrak for 50 percent of solely related costs and associated capital costs, if the service can be provided with the resources available to Amtrak, and if certain other requirements are met. All or parts of 11 routes have been added to Amtrak's system under these provisions. Amtrak provided us the following fiscal year 1977 data regarding the 403(b) services on the 11 routes.

Route	Passenger revenue	State subsidy	Federal subsidy	Total
	($000 omitted)			
Phila.-Harrisburg	$ 305	$ 27	$ 581	$ 913
Chicago-Carbondale	336	395	495	1,226
Chicago-Detroit	126	227	288	641
Chicago-Dubuque	319	496	511	1,326
Chicago-Port Huron	1,078	715	3,554	5,347
Chicago-Quincy	938	772	934	2,644
Chicago-St. Louis	570	384	732	1,686
L.A.-San Diego	964	711	1,075	2,750
Minneapolis-Duluth	564	431	788	1,783
N.Y.-Buffalo/Detr.	1,390	834	1,870	4,094
N.Y.-Montreal	1,356	1,081	2,316	4,753
	$7,946	$6,073	$13,144	$27,163

Such system increases expand the scope of Amtrak's activities and require capital and operating funds. According to Amtrak's estimates in its current 5-year plan, the total costs for 403(b) services will increase to $30.5 million in fiscal year 1978 and more than double to $63.4 million in fiscal year 1982. The estimates in the plan are based on assumptions that one new 403(b) route will begin operating in fiscal year 1978 and that two additional 403(b) routes will be added each year beginning in fiscal year 1979 and continuing through fiscal year 1982

In addition to increased operating costs, Amtrak expects that conventional coach and snack coaches will have to be converted to electric power (they are now steam powered) and that additional locomotives will be required to operate added 403(b) services.

Even with State subsidies, Amtrak's deficit grows with any 403(b) services that are added.

INTEREST EXPENSE

Amtrak currently has guaranteed loan authority of $875 million, which accounted for 90 percent of Amtrak's interest expense in fiscal year 1977. Amtrak borrows all guaranteed loan funds from the Federal Financing Bank, a Government entity under the jurisdiction of the Treasury Department. The Federal Financing Bank obtains its funds by borrowing from the U.S. Treasury. The Congress' present policy is to provide $25 million annually to liquidate outstanding loans with a concurrent reduction in loan authority. At this rate of repayment, it would take 35 years to liquidate all guaranteed loans.

In its latest 5-year plan, Amtrak proposed a more rapid loan retirement program. As an example, Amtrak estimates that it would save $52.5 million in interest through fiscal year 1982, if a $100-million annual loan retirement program was initiated instead of the current $25-million program.

Recommendation to the Congress

The Congress should consider a more rapid debt retirement program as a means of reducing Amtrak's current operating costs, or could reduce Amtrak's annual operating cost by around $30 million by relieving it of the debt entirely.

CHAPTER 3

AMTRAK'S ACCOUNTING FOR TRAIN OPERATING RESULTS

Amtrak has developed a Route Profitability System (RPS) which it maintains to (1) account for revenues and costs for individual trains and (2) produce profit and loss reports for every train and route in its system.

OTHER AMTRAK ACCOUNTING SYSTEMS PROVIDE DATA INPUT TO RPS

RPS is a computerized accounting system that uses operating expenses, revenue, and train statistical data produced by other Amtrak accounting systems. The key systems and the data they produce are:

--All expense data used by RPS are gathered directly from Amtrak's Cost Management System (CMS). CMS is a computerized system which generates Amtrak's corporate profit and loss statement each month. The system identifies and reports costs at operating units known as cost centers. A cost center is the smallest operating unit for which costs can be identified; for example, the Chicago 12th Street Coach Yard, Washington Union Terminal, Minneapolis Station, and so on.

CMS reports expenses for approximately 970 cost centers. Each cost center classifies expenses in terms of functional activities, such as conventional car periodic maintenance and ticketing. About 175 types of functional activities are used in CMS. Also, each functional activity is broken down into its component costs, including labor, material, and other items. CMS uses almost 190 of these component costs, referred to as natural accounts.

--Transportation revenues reported in RPS are obtained from Amtrak's Train Earnings System. This computerized system accounts for all transportation revenues earned by each train in Amtrak's system. It gathers the revenue data from coded tickets issued through Amtrak's Automated Reservations and Ticketing System and from data tabulated manually for tickets not issued through the Ticketing System.

--All dining revenue and mail revenue data used in RPS are supplied by Amtrak's Revenue Accounting department, which tabulates data received on forms completed by Amtrak's onboard service personnel. Mail revenues are calculated on the basis of actual line haul and mail handling contracts in force between Amtrak and the U.S. Postal Service.

--Statistical data used in RPS for all trains operating over Amtrak or Conrail trackage is supplied by Amtrak's Passenger Statistical System. It computes train statistics on the basis of actual daily train movements and equipment configurations. Statistical data used in RPS for all trains operating over non-Amtrak or non-Conrail operated trackage is computed by the RPS staff on the basis of scheduled train movements and equipment configurations.

RPS TECHNIQUES FOR ALLOCATING AMTRAK'S EXPENSES TO TRAINS

After all the required revenue, expense, and statistical data has been fed into the RPS, the process of allocating expenses to trains begins. RPS first determines, on the basis of the nature of the expense and the needs of management, whether each expense item in CMS is to be allocated from the highest level of detail (cost center), middle level of detail (functional activity), or lowest level of detail (natural account). Costs are allocated at the natural account level primarily to provide detailed information on the amount of direct costs contributed by labor, fuel, and supplies and distinguish between certain payments to contract railroads.

Examples of costs allocated at function levels are locomotive running repairs and Metroliner heavy repairs. Costs allocated at the cost center level would include most marketing cost centers, and regional vice president cost centers.

The next step in the allocation process identifies the set of trains which should properly receive a share of each expense item. For example, expenses associated with a particular station are allocated to all trains which board or discharge passengers at the station. In another example, costs associated with a particular crew

base are allocated to all trains whose onboard service attendants are paid from that crew base.

The next step selects the most appropriate available operating statistic to use in calculating each train's proper share of an expense item. For example, to allocate costs at a particular station, Amtrak uses on/off passenger statistics for each train serving the station, so that the trains creating the most demand for service at the station are proportionately allocated the largest share of costs.

Allocations

The amount of an expense item to be allocated to each individual train is determined by totaling the selected statistic for all trains which are to be allocated a share of the expense, and determining the percentage of this total which is contributed by each train. This figure then determines the percentage of the expense item to be allocated to that train. These techniques can best be illustrated by a specific example.

Amtrak's station services' functions and their September 1977 costs for one station are shown below:

Function description	Amtrak's Sept. 1977 costs, station services, Minneapolis, Minn.
Ticketing	$ 13,494.98
Managerial/supervisory	6,031.70
Red caps/porters	3,346.25
Baggage handling	26,906.77
Station operations	3,365.31
Passenger inconvenience (note a)	1,553.40
	$ 54,698.41

a/ Charges for passenger inconvenience resulting from late or postponed trains, equipment failures, and so on. The costs can be for refunds, substitute transportation, meals, lodging, taxis and other miscellaneous expenses.

Because station services' expenses are directly related to the number of passengers using a station, these costs are allocated to all trains stopping in Minneapolis on the basis of passenger on/off counts for each train at that station.

Thus, if a particular train through the Minneapolis station accounted for one-tenth of the on/off passenger count for the month, that train would be allocated one-tenth of the ticketing costs for September, or $1,349; one-tenth of the managerial/supervisory costs, or $603; and so on until all the costs are allocated to all trains stopping at the Minneapolis station.

Examples of these and other types of costs and a description of the methods for allocating the costs to trains follows:

Type of cost	Allocated to trains on basis of:	Allocated to all trains:
Station services	On/offs at station	Stopping at each station
Train/engine crew	Train miles over railroad	On operating railroad
Train fuel and power	Consumption	Per type of equipment
Onboard service--labor	Crews assigned to train	Staffed by each crew base
Onboard service--supplies	Food and beverage revenue from each train	Supplied by each commissary
Metroliner maintenance	Metroliner car miles	With Metroliner equipment
Insurance	Car miles	Within system

We examined and verified revenue, costs, and train statistical data used in RPS. We are generally satisfied that RPS provides a reasonable estimate of the costs attributable to each train and route in Amtrak's system. All of Amtrak's costs, except interest, corporate general and administrative expenses, and minor expense adjustments, are allocated to trains. In fiscal year 1977 interest and general and administrative expense accounted for about 7 percent of operating costs. Amtrak's RPS allocated

all but 0.1 percent of the remaining costs to trains. Similarly all revenue related to train operations is assigned to trains. In fiscal year 1977 revenues from train operations accounted for about 94 percent of total revenue; while about 2 percent was derived from reimbursements for a portion of the operating losses on State subsidized routes; and according to Amtrak, the remaining 4 percent came from leases of real estate and other property, travel agents commissions, and miscellaneous sources. Expenses and revenue adjustments are not assigned to trains if they are related to operations in a prior fiscal year.

The Interstate Commerce Commission strongly recommended in its March 1977 report on Amtrak that route expenses be shown at the total expense level, including an allocation of all corporate overhead. An official of the Atchison, Topeka and Santa Fe Railroad Company also reviewed the RPS system for Amtrak. His report in May 1977 suggested that interest and general and administrative expenses could be allocated to trains in essentially the same manner as operating support expenses because all are administrative in nature.

Train operating results

The details of each cost item allocated to a train is recorded in a computerized history file. When the allocation process is completed, the history file data is used to prepare a profit/loss summary. This is illustrated by the summary of operating results on the New Orleans-Los Angeles route for September, 1977 and for fiscal year 1977. (See p. 36.)

According to Amtrak, its RPS became fully operational in December 1976. At that time a "catch up" effort was initiated to retroactively produce profit and loss reports for every train and route in its system beginning with July 1976. RPS is now current and produces route and train profitability reports approximately 40 days after the end of each month.

Amtrak stated that the profit and loss reports produced by RPS are used to

--prepare monthly train and route profit/loss reports to the Congress and to Government agencies as required by law,

Operational Results--The Sunset Limited
New Orleans--Los Angeles (Train #1)
Los Angeles--New Orleans (Train #2)

	Train #1		Train #2		Total for Route #33	
	Sept.1977	FY1977	Sept.1977	FY1977	Sept.1977	FY1977
REVENUE:						
Transportation	$ 172,639	$ 2,516,613	$ 164,033	$ 2,539,933	$ 336,672	$ 5,056,546
Food & beverage	17,687	259,702	20,113	257,887	37,800	517,589
Mail, express & other	2,687	28,924	2,687	28,900	5,374	57,824
Total	193,013	2,805,239	186,833	2,826,720	379,846	5,631,959
EXPENSES:						
Direct expenses:						
Train/engine crew	75,186	893,434	75,186	893,509	150,372	1,786,943
Train fuel & power	50,756	506,757	50,756	509,736	101,512	1,016,493
Onboard service--labor	84,887	913,997	84,867	914,029	169,754	1,828,026
Onboard service--supplies	20,189	200,201	22,524	201,288	42,713	401,489
Other Direct	596	6,315	586	6,335	1,182	12,650
Total	231,614	2,520,704	233,919	2,524,897	465,533	5,045,601
Common expenses:						
Station services	27,980	322,470	26,377	351,031	54,357	673,501
Transportation	5,887	38,057	5,803	37,978	11,695	76,035
Locomotive maintenance	79,625	584,925	79,625	584,943	159,250	1,169,868
Car maintenance	143,380	1,715,180	140,091	1,720,014	283,471	3,435,194
Track-related maintenance	13,788	131,815	13,524	131,769	27,312	263,584
Facility-related maintenance	-818	2,995	-801	3,000	-1,619	5,995
Common facilities overhead	29,566	486,627	29,611	489,432	59,177	976,059
Other common expenses	53,624	755,715	54,396	770,757	108,020	1,526,472
Total	353,032	4,037,784	348,631	4,088,924	701,663	8,126,708
Other railroad:						
Contract avoidable expense	859	-2,814	839	-2,859	1,698	-5,673
Assumption of liability	982	10,830	982	10,831	1,964	21,661
Allocated performance payments	50,702	185,191	1,146	138,364	51,848	323,555
Total	52,543	193,207	2,967	146,336	55,510	339,543
Operating support	40,118	409,312	38,563	413,371	78,681	822,683
Depreciation, taxes and insurance:						
Depreciation	36,135	361,282	35,542	361,960	71,677	723,242
Taxes	11,355	119,830	11,095	120,293	22,450	240,123
Insurance	12,357	112,094	12,074	112,422	24,431	224,516
Total	59,847	593,206	58,711	594,675	118,558	1,187,881
Total expenses	737,154	7,754,213	682,791	7,768,203	1,419,945	15,522,416
Profit/loss	$-554,141	$-4,948,974	$-495,958	$-4,941,483	$-1,040,099	$-9,890,457

--prepare profit/loss reports for NEC operations for quarterly submission to the Office of Management and Budget and the Federal Railroad Administration,

--determine the monthly billings to States for State-supported services,

--provide a data base for determining the financial impact of proposed route and service changes, and

--provide a data base for route and train avoidable cost analysis. (Avoidable cost determinations are described in the following chapter.)

PLANNED IMPROVEMENTS TO RPS

Amtrak plans to improve RPS in the future for the following uses:

--The production of performance measurement reports that can be used to gauge the efficiency of management policy and the relative costs associated with all types of service offered.

--The production of avoidable cost measurements so that management can respond more quickly and effectively to changing fiscal constraints.

--The addition of computerized control reports to replace controls currently performed manually to decrease manning levels and increase timeliness.

--The addition of more complex allocation methods that will provide better measures of route and train profitability.

The RPS system does not contain the following elements we believe would be helpful to its users.

--Data on ridership and train miles operated for each route. This data would allow users to compute useful economic performance indicators.

--Comparisons of past performance to current performance indicators. These comparisons would allow users to identify performance trends.

--Allocations of corporate overhead not presently allocated. As pointed out earlier in this chapter, this allocation would allow RPS to reflect Amtrak's full costs.

In addition, we noted that Amtrak changes its cost allocation methods from time to time as it develops what it considers better methods. Amtrak does not now explain these changes to all users of the system results (in particular, recipients of its 5-year plan and budget submission).

Conclusions

On the basis of our study of the system, we believe Amtrak's RPS provides reasonable estimates of individual train and route economic performance. RPS results are not exact, and route decisions should not be based on these estimates alone. However, RPS results can be relied upon as good indicators of a route's contribution to Amtrak's overall results.

RECOMMENDATIONS TO THE PRESIDENT OF AMTRAK

Amtrak and others believe the RPS system can be further refined to provide even better results. In its effort to improve the system, we believe Amtrak should:

--Add data on ridership and train miles operated for each route to the operational results reports produced by RPS.

--Add to the current performance data, comparisons with past performance.

--Inform the recipients of RPS reports to changes in allocating methods, so that current reports can be compared with past reports.

--Allocate all corporate overhead if a reasonable allocating technique can be established.

CHAPTER 4

DETERMINATIONS OF AVOIDABLE COSTS

As discussed in the previous chapter, Amtrak's RPS is a reasonable method to allocate costs to individual trains and produce estimates of overall profit or loss for each train and route in the system. However, it is not presently designed to estimate the costs that would be saved if a train or route were discontinued or their frequencies reduced. To determine these avoidable costs, Amtrak studies individual routes using RPS cost information as a data base.

Avoidable costs are generally defined as those expenses that would stop when a route is discontinued but the term may also be applied to savings realized when the frequency of service on a route is reduced. These expenses generally include fuel, crews, food supplies, maintenance-of-way and equipment, etc. All revenue associated with a service to be discontinued would also be lost. By matching estimated avoidable costs with estimated revenue losses, Amtrak can determine the financial impact of route or service decisions. Because of significant differences in the levels of costs that can be avoided, the effects of route discontinuations and service frequency reductions are estimated through separate procedures.

AVOIDABLE COSTS FOR ROUTE DISCONTINUATIONS

Amtrak recently described the revenue and cost changes produced by a route discontinuance as follows:

--Route revenue would be lost.

--Direct expenses of operating the trains, such as costs of crews, fuel, power, and food supplies, would be saved.

--Common expenses, those at facilities serving multiple routes, can be saved to the extent that the workload can be reduced at each affected facility. The amount of savings is a function of the type of work, the number of routes served, and the train schedules at the facility.

--A route discontinuance normally would not have a significant impact on general support costs, including regional and district supervision, computer services, marketing, sales, and advertising costs.

Avoidable factors

To estimate avoidable costs for discontinuations on all its routes, Amtrak has developed an avoidable factor for each cost category in RPS indicating which costs are fully avoidable, which are partially avoidable, and which are completely unavoidable. Amtrak's current avoidable factor table is shown below.

Avoidable Factors for Revenue/Cost Determination Applied Against Fully Allocated Costs

	Type of route		
	Corridor	Short haul	Long haul
REVENUE	1.00	1.00	1.00
DIRECT EXPENSES:			
Train & engine crews	1.00	1.00	1.00
Train fuel & power	1.00	1.00	1.00
Onboard service-labor	1.00	1.00	1.00
Onboard service-supplies	1.00	1.00	1.00
Other direct expenses	1.00	1.00	1.00
COMMON EXPENSES:			
Route stations	1.00	1.00	1.00
Shared stations	0.20	0.20	0.20
Transportation	0.00	0.50	0.50
Maintenance of equipment:			
Locomotive--heavy	0.00	0.00	0.00
--other	0.75	0.75	0.75
Car --heavy	0.00	0.00	0.00
--other	0.50	0.50	0.75
Metroliner--heavy	0.00	0.00	0.00
--other	0.50	0.00	0.00
Maintenance of way:			
Track --Amtrak	0.00	0.00	0.00
--railroad	0.00	1.00	1.00
Facilities--Amtrak	0.00	0.00	0.00
--railroad	0.50	0.50	0.50
Common Facilities Overhead:			
Maintenance of equipment	0.00	0.00	0.00
Maintenance of way	0.00	0.00	0.00
Station services	0.00	0.00	0.00
Transportation	0.00	0.00	0.00
Joint facilities	0.10	0.10	0.10
Reservations--Metroliners	1.35	-	-
--other	0.65	0.65	1.35
Marketing/sales	0.00	0.00	0.00
Commissary/crew base	0.50	0.50	0.50
Other common expenses--railroad	a/0.36 of T&E	a/0.36 of T&E	a/0.36 of T&E
Other railroad--performance	1.00	1.00	1.00
--liability	1.00	1.00	1.00
--avoidable	0.50	0.75	0.75
OPERATING SUPPORT	0.00	0.00	0.00
DEPRECIATION	0.00	0.00	0.00
TAX/INSURANCE	0.75	0.75	0.75

a/ Thirty-six percent of train and engine crew costs.

The effects of applying the avoidable factors can be illustrated by the New Orleans-Los Angeles route. Near the end of fiscal year 1977, Amtrak projected the following fully allocated financial data for the route.

Fiscal year	Revenues	Fully allocated costs	Fully allocated profit (loss)
	($000 omitted)		
1977	$ 5,708	$ 15,569	$ -9,861
1978	6,512	18,089	-11,577
1979	9,237	20,178	-10,941
1980	10,529	22,081	-11,552
1981	11,797	24,409	-12,612
1982	13,221	27,028	-13,807

These estimates mean, in effect, that if the route is continued, Amtrak expects the route's deficit to increase from almost $9.9 million in fiscal year 1977 to $13.8 million in fiscal year 1982.

However, Amtrak can use its avoidable cost factors to determine how much less Amtrak would lose if the route were discontinued.

Fiscal year	Revenues	Avoidable costs	Avoidable profit (loss)
	($000 omitted)		
1977	$ 5,708	$ 9,664	$ -3,956
1978	6,512	11,173	-4,661
1979	9,237	12,407	-3,170
1980	10,529	13,501	-2,972
1981	11,797	14,813	-3,016
1982	13,221	16,270	-3,049

The above data for the New Orleans-Los Angeles route, and similar data for all Amtrak routes, was prepared by Amtrak for inclusion in its 5-year corporate plan issued October 7, 1977. On the basis of the Amtrak data, the following table shows the percent of fully allocated costs considered to be avoidable for the New Orleans-Los Angeles route.

Fiscal year	Fully allocated costs	Avoidable costs	Percent avoidable
	($000 omitted)		
1977	$ 15,569	$ 9,664	62.1
1978	18,089	11,173	61.8
1979	20,178	12,407	61.5
1980	22,081	13,501	61.1
1981	24,409	14,813	60.7
1982	27,028	16,270	60.2

Amtrak revised its avoidable factors in fiscal year 1977

Amtrak estimated that avoidable costs in fiscal year 1976 would have been 70 percent of total costs. It estimated that avoidable costs for an average route in fiscal year 1977 would only have been 49 percent of total costs. The substantial change in estimated avoidable costs occurred primarily because Amtrak revised its avoidable cost factors and the assumptions upon which estimates of avoidable costs were based. In fiscal year 1976 the same factors were applied to all routes without regard to whether they were NEC, short-haul or long-haul routes. In fiscal year 1977 Amtrak developed and applied somewhat different factors to the three types of routes. (See p. 40.)

For example, in fiscal year 1976 maintenance-of-way (track) costs were considered completely avoidable for all routes. After Amtrak took control of the NEC it considered maintenance-of-way costs completely unavoidable for that route, but maintenance-of-way for railroad-owned short-haul and long-haul routes is still considered completely avoidable.

A number of individual factors were changed in fiscal year 1977 to more accurately reflect the degree of avoidability. For example, in fiscal year 1976 a factor of 0.65 was applied to all shared stations, which are stations serving two or more Amtrak routes. According to Amtrak, it found that shared station expenses are not significantly reduced by the discontinuance of any one route. Therefore, it reduced the factor to 0.20 for shared stations on all routes in fiscal year 1977.

We believe that Amtrak could have done a better job, either in explaining the revised avoidable factors to congressional subcommittees or in preparing its 5-year plan, to provide a basis for a reasonable comparison of avoidable costs between 1976 and 1977 Nevertheless, on the basis of our review and consideration of Amtrak's rationale for the avoidable factors, we believe the 1977 revisions are improvements and provide more accurate estimates. The actual avoidable costs for a route discontinuance may differ from the estimate in the 5-year plan, depending on the actual avoidable items for any particular route to be discontinued.

Improved estimates of avoidable costs for purposes of applying Route Criteria and Procedures

Amtrak has had congressionally approved route criteria and procedures since March 1976, but no route has actually been discontinued pursuant to that authority. Amtrak management decided in November 1977 to discontinue the Chicago-Florida route, on the basis of the route criteria process, but the conference report on the 1978 Supplemental Appropriation Act ruled against service cuts by Amtrak.

Amtrak's analysis of route performance under the route criteria starts with the avoidable revenue and cost data prepared for the 5-year plan. For example, the current plan shows avoidable loss for the Chicago-Florida route as $8.7 million in fiscal year 1977, almost $11 million in fiscal year 1978, and over $15 million in fiscal year 1982. Such data is considered for all routes in the route criteria process.

The data for each route is compared to standards for all routes and worst performers are then studied in more detail for social and environmental aspects and any potential improved performance. When a route fails to pass a substantial number of both current and future standards, as did the Chicago-Florida route, it is considered for discontinuance. Amtrak believed it could save about $6 million in fiscal year 1978, by discontinuing the route in January 1978.

Our review indicates Amtrak's route criteria and procedures studies result in better estimates of a route's current and future performance than the broadly defined indicators Amtrak uses to estimate avoidable costs for its 5-year plans. The route criteria entails comparison against standards, consideration of connecting revenue; any capital investments that might be required; potential labor protection liability; various social factors, such as population served and impacts on other modes of transportation and on personal safety; and certain environmental factors, such as energy consumption and land use.

We computed avoidable cost factors for the Chicago-Florida route from an Amtrak route criteria and procedures study and found that these factors, in most cases, were not significantly different from the avoidable cost factors used to compute avoidable costs in Amtrak's 1977 5-year plan, the exception being heavy overhaul expenses for locomotives and cars which Amtrak now believes are unavoidable upon discontinuance of any single route.

AVOIDABLE COSTS FOR FREQUENCY REDUCTIONS

Amtrak's estimates of avoidable costs and avoidable loss for entire routes cannot be used as a measure of potential deficit reduction from reducing a train's frequency. Reducing a train frequency from daily to tri-weekly or quad-weekly does not save as much as if the entire route were discontinued. For example, in frequency reductions crew scheduling sometimes becomes more difficult and costly, and stations that could be closed if the route were completely discontinued must remain open.

Amtrak's estimates for potential deficit reductions from frequency changes are prepared by Amtrak's Finance Department, on the basis of estimates of costs savings prepared by the National Operations Department or NEC group and estimates of revenue loss prepared by the Marketing Department.

For example, Amtrak recently considered reducing the Washington-Cincinnati route from daily to quad-weekly effective October 30, 1977. It estimated revenue loss of $113,000, cost savings of $845,000, and a net potential deficit reduction of $732,000 for the remaining 11 months of fiscal year 1978. Amtrak's estimated cost savings were largely railroad costs as shown below.

	Amount ($000 omitted)
Railroad Costs:	
Train & engine crews	$ 246
Train fuel	137
Car maintenance	67
Locomotive maintenance	141
Health & welfare	21
Tax accrual	94
Liability	5
Avoidable	35
Total	746
Corporate Costs:	
On Board--labor	50
--supplies	38
--other	3
Station --labor	8
Total	99
Total estimated cost reduction	$ 845

Such estimates of potential deficit reduction by Amtrak are probably understated because costs considered do not include support costs, such as marketing, computer services, and heavy overhaul of equipment.

Conclusions

Amtrak's process for estimating avoidable costs produces results that are generally reasonable for planning purposes, but which are unlikely to be accurate for any specific change in service. The estimates are produced by applying the same factors to multiple routes, a process that ignores characteristics that are specific to any particular route.

Even under specifically defined circumstances, however, such as the discontinuation of the Chicago-Florida route, it is unlikely that Amtrak can predict exactly what the financial impact of a service change will be because of the labor rules that must be applied. For example, Amtrak's original legislation required that certain employees who lose their jobs as a result of a route discontinuation must continue to be paid for a period lasting up to 6 years.

Union seniority rules determine which employees, if any, would eventually be displaced and because of the options available to individuals under those rules, Amtrak cannot know for sure what will happen in a discontinuation until it actually takes place. However, we believe Amtrak's estimating procedures for making specific route and service decisions provide better estimates than the more general methods used for planning.

In our opinion, the avoidable cost estimates Amtrak provided the Congress in its 1977 5-year plan are generally reasonable indicators of what would happen if service on a particular route was discontinued. These estimates, however, should not be used to calculate the effects of multiple route discontinuances because costs that are unavoidable for a single route discontinuance may become at least partly avoidable if several routes were being discontinued.

The 1977 5-year plan estimates of avoidable costs are not comparable to Amtrak's estimates of avoidable costs in fiscal year 1976 because factors were changed as Amtrak considered individual routes more carefully.

Recommendation to the Congress

Congress should require that the 5-year plans Amtrak submits annually should be comparable from year to year, or provide sufficient information to illustrate changes in assumptions or procedures. One possibility would be for Amtrak to show how previous plans would have been changed by using current planning methods.

CHAPTER 5

CONSIDERATION OF ALTERNATIVE ROUTE SYSTEMS

Time limitations did not permit us to make an in-depth review of the economics and national need for individual routes in Amtrak's system. Nevertheless, on the basis of previous studies and other historical information and certain data provided by Amtrak for our study, we obtained insights regarding Amtrak's route structure and funding requirements that should help in considering various alternatives for Amtrak's future.

INITIAL DESIGNATION OF AMTRAK'S BASIC SYSTEM

Pursuant to the Rail Passenger Service Act of 1970, DOT made a careful, comprehensive review of the Nation's rail passenger service. On the basis of numerous characteristics of short-haul and long-haul routes--demand and usage patterns, service features, costs, and competitiveness with other modes--and certain population characteristics, DOT designated 21 city pairs as the basic system of cities between which rail passenger service would be provided by Amtrak when it commenced operations on May 1, 1971.

In addition to designating the city end points to be served, DOT identified all the routes, railroads, and trains providing service between the points. The final choice of specific routes to serve the points was left to Amtrak's discretion in accordance with the intent of the act. Amtrak service between the designated city pairs was to afford a test of whether intercity rail passenger service has an essential part to play in the Nation's total transportation system.

Amtrak's selection of basic routes

From the 100-plus routes DOT identified, Amtrak selected those they thought would best serve the designated city pairs on the basis of population along the various routes, ridership and costs on each route, the physical characteristics of track and equipment, and the adequacy of other travel modes. In short, Amtrak originally selected the Nation's rail passenger routes with the highest potential for commercial success and permitted more than one-half of the Nation's most uneconomic and duplicated rail passenger service to be

discontinued. There were hopes that under centralized Amtrak management, and with reallocation of equipment, reduced losses, and greater revenue to come from improved service, rail passenger service could be profitable.

INDICATIONS OF NEED TO RESTUDY ROUTE STRUCTURE

Despite the experimental nature of Amtrak's original route structure and several years experience to distinguish the economics of operating short-haul and long-haul routes, Amtrak has made few route adjustments to improve its economic performance and/or reduce its requirement for Federal operating subsidy. Instead, Amtrak has added routes and service, all of which have increased Amtrak's need for Federal subsidy.

In its January 1977 document entitled "National Transportation: Trends and Choices", DOT questioned whether public policy should view Amtrak as a private corporation or as an institution with the form of a corporation but with a social interest. It said the former status argued for a limited Federal role, but that the latter status argued for a continued Federal role--that Amtrak has external benefits that do not accrue solely to system users and operators, but to the public as a whole. In that case, DOT noted that sound public policy would require that such benefits be large enough to justify the Federal cost.

Amtrak's 7-year history has proven that sufficient passenger demand for rail service does not exist under present circumstances to allow break-even operation of a nationwide passenger rail system. Even its best routes cannot pay for themselves and, given the current cost and demand relationships, never will. Thus, the argument for continuing Federal subsidy of Amtrak must rest on the social benefits that arise from its operation, such as safer intercity travel, improved and more convenient services to the public, lower fuel consumption, and lower air pollution in highly populated areas. In a prior report we concluded that these social benefits may not be available or worth the cost. In addition, DOT said that existing evidence did not appear to support the case for large enough social benefits to justify rising Amtrak subsidy costs. DOT concluded it was essential that the Amtrak experiment be restudied to ascertain the best use of the resources available and permit an evaluation and policy decision on the

future of rail passenger service. DOT did believe that rail service could compete with other transportation modes in short-haul markets of sufficient population density.

Amtrak viewed the DOT report as being deficient because it overlooked Amtrak's fundamental mandate of providing nationwide rail passenger service. Amtrak believes any policy which would reduce it to a local or regional operation would effectively terminate its nationwide political support and its mandate to bring rail passenger service to the whole country.

Thus, while the original plan for Amtrak was toward achieving a viable route structure with reduced losses, Amtrak's continued stand on the need for a nationwide system increases the pressure for higher Federal subsidies.

Indication of uneconomical train and route expansion

Amtrak points to its increase in passengers served, from 16.6 million in 1972 to 19.2 million in fiscal year 1977, as evidence that the system is turning the corner and that even larger demand is likely in the future. But available data suggests that Amtrak's increased passengers have not been won over to existing trains and routes. Instead, it appears that, on average, ridership increases have been largely induced by adding routes and services. Moreover, the costs of the additional services have not been met by additional ridership and revenue so that the additions have been uneconomical for Amtrak and have contributed to its need for additional Federal subsidy.

On May 1, 1971, the route system Amtrak chose to begin its operations included 1,247 trains per week, running 461,432 miles. In fiscal year 1977 its system had grown to 1,503 trains per week, running 636,328 miles. Trains per week increased more than 20 percent and train miles per week increased 38 percent, while the number of routes grew from 25 to 40. However, Amtrak carried only 15.6 percent more passengers in 1977 than 1972, its first full year of operation.

The Interstate Commerce Commission's annual reports on the effectiveness of the Rail Passenger Service Act also indicate that Amtrak's performance, as measured by revenue passenger miles per train mile, is declining. The Commission's March 15, 1976, report shows passenger miles per train mile at 126.81 for the total system during October 1974 through February 1975. ICC later reported that this statistic fell to 103.81 in fiscal year 1976 and 96.6 in fiscal year 1977.

Further analysis of Amtrak's results shows that during fiscal year 1977, Amtrak's original 25 routes produced 86 percent of its ridership, 85 percent of revenues, 80 percent of total train miles, and 83 percent of costs. Amtrak's best routes are in the NEC. In fiscal year 1977 those routes accounted for 57 percent of Amtrak's total ridership, 31 percent of Amtrak's revenues, and only 24 percent of costs. If NEC results are removed from Amtrak's overall results, the remaining original routes account for 29 percent of Amtrak's passengers, 54 percent of its revenues, and 59 percent of its costs; while the added routes account for 14 percent of passengers, 15 percent of revenues, and 17 percent of costs.

While the number of people Amtrak served in fiscal year 1977 was undeniably higher than the number served in 1972, Amtrak's route system was much larger and more costly in fiscal year 1977. In addition, service was generally better because of extensive capital expenditures on new and refurbished equipment. The small percentage increase in the number of people Amtrak serves does not seem to be proportional to the Nation's investment.

ROUTE CRITERIA AND PROCEDURES NOT EFFECTIVELY IMPLEMENTED

The development and congressional approval of Amtrak's route criteria and procedures was an effort to provide Amtrak with additional management flexibility to make meaningful route and service changes. These criteria require that three kinds of factors be considered in adding or dropping routes:

--Economic factors which measure the impact of a route or service on Amtrak's current and projected financial status.

--Social factors which measure the impact of a route or service on the population affected and actual ridership.

--Environmental factors which measure the impact of a route or service on energy consumption, air quality, and land use.

The route criteria and procedures have not been effectively implemented, however, because of the time-consuming processes involved and the political and public opposition to any hint that a particular route might be discontinued. The ineffectiveness of these procedures, combined with the continued operation of certain highly unprofitable routes, has contributed to mounting concern over Amtrak's operating costs.

Amtrak's 5-year corporate plan, issued October 7, 1977, indicates that Amtrak expects to make some changes in its route system and service frequencies. The plan said a comprehensive reexamination of Amtrak's route structure would be undertaken from a zero base for the purpose of providing an improved national railroad passenger system based on current and future market and population requirements and against which Amtrak's Board of Directors could exercise the route and service criteria prescribed by law. Subsequently, the conference report on the 1978 Supplemental Appropriation Act directed DOT to make such a zero base route study for submission to the Congress by March 1, 1978. (The submission date was later revised to May 1, 1978.) During our review Amtrak was cooperating in the DOT study by providing route performance data.

Such a zero base study will be helpful if it faces up to the distinction previously posed by DOT regarding the extent of social interest of Amtrak--whether more service is needed for a truly national system or whether system curtailments are needed to pattern the system toward higher population and ridership areas.

CONCLUSIONS

The economics and potential of the existing route structure are generally well known, based on 7 years of experience and on the route criteria and procedures studies completed to date. They indicate that continued service over Amtrak's system will necessitate increasing Federal subsidies into the foreseeable future. Amtrak operating costs can be contained by an effective effort to apply the criteria approved by the Congress, and discontinue the least used service. But Amtrak's experience has clearly shown that there is not sufficient passenger demand to permit break-even operation of any part of its system, and that system reductions can only reduce subsidy, not eliminate it.

Amtrak's growth since it was created has increased its losses. Rail passenger service cannot be justified in purely economic terms, and, if it is sustained, must be justified by potential social benefits. Such benefits are difficult to assess, but the route and service criteria previously approved by the Congress are designed to require consideration of all the factors that may come into play. If changes are to be made in Amtrak's route system, the route and service criteria should be used.

CHAPTER 6

OVERALL CONCLUSIONS AND ALTERNATIVES FOR THE CONGRESS

The Congress is providing $506.5 million for Amtrak operating subsidy for fiscal year 1978. Amtrak maintains that it will need up to $536 million to operate congressionally directed routes and frequencies for the entire fiscal year. Amtrak has placed its operating subsidy requirement at $613 million for fiscal year 1979, while the Administration has budgeted $510 million.

Congressional consideration of Amtrak's latest request is now beginning, and funding for Amtrak's operation for the remainder of fiscal year 1978 will be a crucial matter for consideration. Amtrak has said that if available funding is exhausted in fiscal year 1978 its only option will be to close down the entire system, a measure that seems drastic and inappropriate. Therefore, the alternatives for Amtrak's immediate and longer-term future should be considered and resolved.

Our review has not disclosed any areas of substantial mismanagement or inefficiency that would permit quick changes in Amtrak's funding requirements anywhere near the size necessitated by the budgetary differences cited above. We do not believe Amtrak can operate its present route system at a substantially lower cost.

Amtrak has been and remains on an expansionary course. It has developed major departments to handle all phases of corporate activity, including the direct operation or management responsibility for passenger trains and related facilities; and substantial support activities, such as engineering, procurement, planning, marketing, and financial and computer services. In addition to corporate expansion, Amtrak has added routes or trains in 34 States and extended service into Canadian provinces.

Such expanded day-to-day activities now cost Amtrak about $2.58 million per day. Income generated meets about one-third of these costs. Amtrak's capital investment needs are also substantial--the future amount depends on the rate at which old passenger car and motive power equipment is renewed or replaced and the rate of improvements to maintenance and station facilities and rights of way.

Amtrak believes its expansion and development is consistent with its legislative mandate to develop and operate a modern, relatively high-speed national rail passenger service. It believes that more trains, higher frequencies, and major capital improvements to facilities and tracks are needed to develop and support a properly operated national system. Amtrak knows it will not make a profit, but it believes intercity travelers will respond favorably to a properly operated system and its economic performance will gradually improve.

Amtrak's operations since 1971 have demonstrated that nationwide passenger rail service cannot be justified on economics alone, even though Amtrak's present system is mostly made up of the best routes available. Our review has shown that Amtrak may eventually be able to operate more efficiently in a number of ways, but that savings available from increased efficiency are not likely to amount to enough to make much of a difference in its subsidy need. Amtrak has already taken a number of actions to reduce its subsidy need but these measures inevitably lead to reduced services of one kind or another.

Amtrak's biggest problem is that there are not enough people who want to use the train for intercity travel. While Amtrak attracted about 3 million more passengers in fiscal year 1977 than it did in 1972, it did so by substantially increasing the number of trains available. The number of revenue passengers per train mile have decreased. As we have stated in recent congressional testimony 1/, the reasons why demand does not exist in spite of Amtrak's low fares (fare revenue averaged only about 35 percent of operating costs) are fairly straight-forward. Air travel is much quicker and more convenient for time-sensitive travelers, smoother and more comfortable (especially considering the comparatively short time the traveler must occupy the airplane), and, on longer trips, almost the same price as Amtrak. Busses go more places than Amtrak, usually at a lower cost to the travelers. Automobiles

1/ March 20, 1978, statement of Henry Eschwege, Director, Community and Economic Development Division, GAO, before the Subcommittee on Transportation and Commerce, House Committee on Interstate and Foreign Commerce, on Amtrak's Costs and Operating Results.

give travelers more control over where and when they go, are convenient to have at the destination, and, on the marginal basis most people use to make travel decisions, are perceived as being much cheaper than the train, particularly when more than one traveler is involved. Except in NEC; where the train offers comparatively high speed, competitive fares, and where the major cities along the route have public transportation minimizing the convenience value of the automobile; the train simply does not offer the intercity traveler a service that is as good as the alternatives available. Demand for rail passenger service is not likely to increase very much unless this situation changes.

ALTERNATIVES FOR THE CONGRESS

Faced with the fact that Amtrak cannot operate its present route system for much less than it has requested in its budget submission, the Congress does not have too many choices. It can (1) give Amtrak what it has asked for and allow the present system to continue, (2) give Amtrak less than it asked for and allow the route system to be reduced or (3) give Amtrak more money and allow expanded service. There are, of course, many variations available within these basic choices. For example, if the Congress chooses to contain Amtrak's subsidy by reducing its route system, we believe the reductions should be accomplished by allowing Amtrak to apply the route criteria and procedures the Congress already approved. But there are many other ways Amtrak's system could be reduced. We believe that whatever choice the Congress makes, it should be with the clear understanding that Amtrak will never pay for itself and that Amtrak's subsidy will constantly increase because of inflation, even if the system remains static.

APPENDIX I

Congress of the United States
House of Representatives
Committee on Appropriations
Washington, D.C. 20515

October 4, 1977

Honorable Elmer B. Staats
Comptroller General of the United States
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Staats:

The National Railroad Passenger Corporation (Amtrak) has been developing and refining a route profitability system which accounts for revenues and costs by individual train route. Costs of individual train routes are classified as either avoidable or unavoidable depending on whether certain costs could be avoided if service over a particular route was discontinued. This system provides important information needed to evaluate the relative economic performance of various routes which is an important part of the criteria and procedures for making route and service decisions. This information is also useful to the Congress in evaluating Amtrak's performance.

It would be appreciated if the General Accounting Office would analyze Amtrak's route profitability system and determine whether this system is an appropriate information system for route and service decision making given the current state of the art in cost accounting and statistical methodology. The analysis should include a thorough examination of those costs classified as unavoidable, which currently account for approximately 50 percent of Amtrak's total costs, to determine why such a large portion of total costs are unavoidable, whether or not these costs are currently being administratively monitored and controlled properly, whether or not the current cost mix represents an efficient way of delivering rail passenger services and if not, what actions should be considered by Amtrak, the Department of Transportation and/or the Congress to improve Amtrak's control over these costs.

APPENDIX I

The analysis should also examine to what extent costs currently classified as unavoidable might be avoided if combinations of routes and/or services were reduced and/or eliminated.

Sincerely,

John J. McFall
Chairman
Subcommittee on Transportation
Appropriations

APPENDIX I

Congress of the United States
House of Representatives
Subcommittee on Transportation and Commerce
of the
Committee on Interstate and Foreign Commerce
Washington, D.C. 20515

October 13, 1977

The Honorable Elmer B. Staats
Comptroller General of the United States
GENERAL ACCOUNTING OFFICE
441 G Street
Washington, D. C. 20548

Dear Mr. Comptroller General:

As you know, our Committee has jurisdiction over the National Railroad Passenger Corporation. Since its creation in 1970, the National Railroad Passenger Corporation, commonly referred to as AMTRAK, has operated inter-city rail passenger service at a considerable cost to the United States government.

During that period of time, there has been no thorough and comprehensive management assessment or cost/benefit analysis of AMTRAK. We would appreciate meeting with you at your earliest convenience in order to determine the feasibility and nature of a GAO assessment of AMTRAK. We would want the results of any study available to the Committee not later than February 28, 1978.

Sincerely,

Fred B Rooney

Fred B Rooney, Chairman
Subcommittee on Transportation and Commerce

Edward R. Madigan

Edward R. Madigan
Member of Congress

APPENDIX I

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

CED8-10
B-175155

NOV 7 1977

The Honorable John J. McFall, Chairman
Subcommittee on Transportation
Appropriations
Committee on Appropriations
House of Representatives

Dear Mr. Chairman:

We have developed an approach to reviewing Amtrak's operations, pursuant to your request dated October 4, 1977, and a similar request dated October 13, 1977, from the Chairman, Subcommittee on Transportation and Commerce of the House Committee on Interstate and Foreign Commerce.

Our review objectives will be to:

--Analyze and explain how and why Amtrak incurs its costs and determine whether costs could be reduced through more efficient operations.

--Analyze Amtrak's route profitability system to determine the methods used to allocate recorded costs to the various routes in the system and whether the allocations provide reasonable estimates of the cost of operating the routes.

--Determine how Amtrak classifies costs as being avoidable or unavoidable and whether the classification is reasonable.

--Analyze Amtrak-generated data to compute funding requirements for various alternative route systems, and show the cumulative effect of route system and other changes made since Amtrak was formed.

The results of this study will be made available not later than February 28, 1978.

Sincerely yours,

R.F.KELLER

Deputy Comptroller General
of the United States

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

CED8-28
B-175155

NOV 7 1977

The Honorable Fred B. Rooney
Chairman, Subcommittee on Transportation
and Commerce
Committee on Interstate and Foreign Commerce
House of Representatives

Dear Mr. Chairman:

In accordance with our discussion with you on October 25, 1977, we have worked out an approach to reviewing Amtrak's operations, as you requested on October 13, 1977.

It was agreed that our review objectives will be to:

--Analyze and explain how and why Amtrak incurs its costs and determine whether costs could be reduced through more efficient operations.

--Analyze Amtrak's route profitability system to determine the methods used to allocate recorded costs to the various routes in the system and whether the allocations provide reasonable estimates of the cost of operating the routes.

--Determine how Amtrak classifies costs as being avoidable or unavoidable and whether the classification is reasonable.

--Analyze Amtrak-generated data to compute funding requirements for various alternative route systems, and show the cumulative effect of route system and other changes made since Amtrak was formed.

The results of this study will be made available not later than February 28, 1978.

Sincerely yours,

R.F. KELLER

Deputy Comptroller General
of the United States

APPENDIX I

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

CED8-28
B-175155

NOV 7 1977

The Honorable Edward R. Madigan
House of Representatives

Dear Mr. Madigan:

In accordance with our discussion with you on October 25, 1977, we have worked out an approach to reviewing Amtrak's operations, as you requested on October 13, 1977.

It was agreed that our review objectives will be to:

--Analyze and explain how and why Amtrak incurs its costs and determine whether costs could be reduced through more efficient operations.

--Analyze Amtrak's route profitability system to determine the methods used to allocate recorded costs to the various routes in the system and whether the allocations provide reasonable estimates of the cost of operating the routes.

--Determine how Amtrak classifies costs as being avoidable or unavoidable and whether the classification is reasonable.

--Analyze Amtrak-generated data to compute funding requirements for various alternative route systems, and show the cumulative effect of route system and other changes made since Amtrak was formed.

The results of this study will be made available not later than February 28, 1978.

Sincerely yours,

R.F. KELLER

Deputy Comptroller General
of the United States

APPENDIX I

COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

CED8-28
B-175155

NOV 7 1977

The Honorable Joe Skubitz
House of Representatives

Dear Mr. Skubitz:

In accordance with our discussion with you on October 25, 1977, we have worked out an approach to reviewing Amtrak's operations.

It was agreed that our review objectives will be to:

--Analyze and explain how and why Amtrak incurs its costs and determine whether costs could be reduced through more efficient operations.

--Analyze Amtrak's route profitability system to determine the methods used to allocate recorded costs to the various routes in the system and whether the allocations provide reasonable estimates of the cost of operating the routes.

--Determine how Amtrak classifies costs as being avoidable or unavoidable and whether the classification is reasonable.

--Analyze Amtrak-generated data to compute funding requirements for various alternative route systems, and show the cumulative effect of route system and other changes made since Amtrak was formed.

The results of this study will be made available not later than February 28, 1978.

Sincerely yours,

R.F.KELLER

Deputy Comptroller General
of the United States

APPENDIX II

LIST OF OUR PRIOR REPORTS ON THE NATIONAL RAILROAD PASSENGER CORPORATION (AMTRAK)

Amtrak Needs To Improve Train Conditions Through Better Repair And Maintenance, B-175155, June 21, 1973.

Railroad Reservation, Information And Ticketing Services Being Improved, B-175155, August 22, 1973.

Fewer and Fewer Amtrak Trains Arrive On Time--Causes Of Delays, B-175155, December 28, 1973.

Information On Loan Guarantee Programs Under The Rail Passenger Service Act And The Regional Rail Reorganization Act, RED-75-329, February 26, 1975.

How Much Federal Subsidy Will Amtrak Need?, RED-76-97, April 21, 1976.

Quality of Amtrak Rail Passenger Service Still Hampered By Inadequate Maintenance Of Equipment, RED-76-113, June 8, 1976.

Amtrak's Incentive Contracts With Railroads--Considerable Cost, Few Benefits, CED-77-67, June 8, 1977.

Should Amtrak Develop High-Speed Corridor Service Outside The Northeast?, CED-78-67, April 5, 1978.

STATEMENT OF NORTHEAST CORRIDOR FINANCIAL OPERATIONS

YEAR ENDED SEPTEMBER 30, 1977
(000 omitted)

	Total System	Total NEC (note a)	NEC Spine	N.E.C. spine segmentation			
				WAS-PHL	PHL-NYC	NYC-NHV	NHV-BOS
Revenue	$ 311,272	$ 110,329	$ 104,698	$ 38,459	$ 44,190	$ 8,722	$ 13,327
Operating expenses							
Train operations	213,720	54,675	48,974	18,860	18,025	4,638	7,451
Maintenance-of-equipment	232,705	58,261	54,480	18,134	19,875	6,076	10,395
Maintenance-of-way	42,358	31,377	28,761	10,210	11,735	2,652	4,164
Onboard service	89,106	11,790	11,283	4,804	3,423	1,414	1,642
Station services	57,247	21,730	19,687	7,029	7,813	1,843	3,002
Marketing and reservations	44,786	20,715	18,874	6,461	7,643	1,803	2,967
General support	53,109	20,022	18,060	5,882	7,637	1,721	2,820
Taxes and insurance	18,870	6,489	6,072	2,053	2,210	694	1,115
Depreciation	32,345	10,960	10,342	3,920	4,028	968	1,426
Total	$ 784,246	$ 236,019	$ 216,533	$ 77,353	$ 82,389	$ 21,809	$ 34,982
Corporate expenses							
General and administrative	22,942	6,852	6,285	2,247	2,393	632	1,013
Interest	33,898	13,388	12,279	4,390	4,675	1,234	1,980
Total	$ 56,840	$ 20,240	$ 18,564	$ 6,637	$ 7,068	$ 1,866	$ 2,993
Total expenses	$ 841,086	$ 256,259	$ 235,097	$ 83,990	$ 89,457	$ 23,675	$ 37,975
Net profit	$-529,814	$-145,930	$-130,399	$ -45,531	$ -45,267	$-14,953	$-24,648

a/ Philadelphia to Harrisburg and New Haven to Springfield spurs are included in Total NEC but not in the NEC spine.

APPENDIX III

PRELIMINARY LIST OF AMTRAK'S PROCUREMENTS IN FISCAL YEAR 1977

	Expense	Capitol	Inventory	Total
Corporate headquarters	$ 39,184,318	$ 45,332,109	$ 15,286,554	$ 99,802,981
Cars and locomotives	21,293,000	31,408,000	-0-	52,701,000
NEC--Philadelphia	24,186,375	8,454,622	32,925,566	65,566,563
NECIP	6,598,074	19,493,858	22,826,999	48,918,931
Maintenance facilities	8,962,014	1,867,955	31,114,738	41,944,707
Turbo facilities	1,870,206	52,788	3,141,226	5,064,220
Commissaries	5,625,389	368,927	16,836,389	22,830,705
Total	$107,719,376	$106,978,259	$122,131,472	$336,829,107

APPENDIX IV

APPENDIX V

Principal Officials of the National Railroad Passenger Corporation Responsible For Administering Activities Discussed in this Report

	Tenure of Office From	To
President:		
Paul H. Reistrup	Mar. 1975	Present
Roger Lewis	May 1971	Feb.1975
Executive Vice President and Chief Operating Officer		
Martin Garelick	Feb. 1978	Present
Vice President, Finance/ Treasurer		
Don R. Brazier	May 1975	Present
Robert C. Moot	Feb. 1973	Apr.1975
Vice President and General Manager, National Operations		
Robert A. Herman	Sept.1977	Present
David Watts	May 1975	Aug.1977
Executive Vice President		
J.R. Tomlinson	Jan. 1972	Aug.1974 (note a)
Vice President and General Manager, Northeast Corridor		
Albert M. Schofield	Nov. 1977	Present
Vice President, Operations Support		
James M. Cowell	Apr. 1976	Present
Vice President, Computer Systems Service		
Donald L. Larson	Feb. 1977	Present

a/Between August 1974 and May 1975 this position was vacant. In May 1975, Amtrak was reorganized and this position was changed to Vice President and General Manager, National Operations.

(34360)

GPO 927 834