

DOCUMENT RESUME

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Should Amtrak Develop High-Speed Corridor Service Outside the Northeast? CED-78-67; B-175155. April 5, 1978. 33 pp. (2 appendices) 5 pp.

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Railroad Revitalization and Regulatory Reform Act of 1976

(P.L. 94-210). Amtrak Improvement Act of 1974 (45 U.S.C. 644).

If Amtrak (the National Railroad Passenger Corporation) were to extend its Northeast corridor to 16 other corridors, the following would be anticipated: improved and more convenient services to the public through greater train speed and better on-time performance, lower deficits through increased ridership, improved energy conservation through the public's greater use of the energy-efficient train, lower air pollution as fewer people use their automobiles, employment resulting from the labor-intensive railroad operation, preservation of some railroad rights-of-way in and between urban areas, and maintenance of a mode of transportation that can be converted away from oil in a crisis. The Congress must decide whether these possible benefits justify the high cost associated with establishing and maintaining corridor rail service.

Findings/Conclusions: The anticipated benefits from developing high-speed corridors outside the Northeast may not be available or worth the cost. Greater speed and better on-time service could reasonably be expected to result, but increased ridership and lowered deficits probably would not result. Ridership on Amtrak has increased primarily because more trains were available, but load factors have not increased and losses continue. Amtrak cannot expect substantial increases in ridership in the proposed corridors unless one of the other transportation modes is disrupted. Amtrak officials believe that implementing the corridor concept outside the Northeast would be very costly. Amtrak's prospects for improving its finances by either increasing revenues or reducing costs are bleak. Only the Congress can make the judgments and tradeoffs necessary to determine the value of the benefits that would result from such

services and the proper level of the Federal subsidy.
Recommendations: The Congress can: stop providing capital or operating subsidies for Amtrak so that only those services that pay for themselves, or that local governments subsidize, would continue; provide subsidies to sustain existing services without further improvement; provide diminishing subsidies that require specific levels of contribution from riders through fares or from local governments; subsidize only particular routes that meet established criteria for patronage, population density, quantity of intercity travel, local interest, or other elements believed important; or provide additional subsidies so Amtrak can improve its services and expand its corridor route system.

(RRS)

5-978

BY THE COMPTROLLER GENERAL

Report To The Congress

OF THE UNITED STATES

Should Amtrak Develop High-Speed Corridor Service Outside The Northeast?

Amtrak's (National Railroad Passenger Corporation's) current extension plans focus on the Chicago-Detroit and Los Angeles-San Diego corridors. Its long-range goals provide for extending the Northeast development concept to 16 other potential corridors. Amtrak believes corridors provide greater speed, better on-time performance, lower air pollution, greater energy efficiency, more safety, and lower deficits because of increased ridership.

GAO concludes that the (1) benefits Amtrak anticipates may not be available or worth the cost and (2) substantial increases in ridership cannot be expected unless one of the other transportation modes is disrupted. The report lists a number of choices the Congress can make regarding Federal subsidy for Amtrak's corridor development plan.



GED-78-67
APRIL 5, 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 is our third annual report on Amtrak activities as required by the Amtrak Improvement Act of 1974 (45 U.S.C. 644 (supp. V 1975)). The report discusses Amtrak's operating results over routes that are among those identified as potential rail corridor routes.

Amtrak believes corridor routes can provide better transportation service to the public, including greater speed and better on-time performance, lower air pollution, greater energy efficiency, better safety, and lower deficits because of increased ridership. We conclude that these benefits may not be available or worth the cost and suggest a number of alternatives the Congress can choose from regarding Amtrak's corridor development plans.

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

A handwritten signature in black ink, reading "James A. Steeds".

Comptroller General
of the United States

COMPTROLLER GENERAL'S
REPORT TO THE CONGRESS

SHOULD AMTRAK DEVELOP
HIGH-SPEED CORRIDOR
SERVICE OUTSIDE THE
NORTHEAST?

D I G E S T

If Amtrak (National Railroad Passenger Corporation) were to extend its Northeast corridor to 16 other potential corridors, it anticipates

- improved and more convenient services to the public through greater train speed and better on-time performance,
- lower deficits through increased ridership,
- improved energy conservation through the public's greater use of the more energy-efficient train,
- lower air pollution in the highly populated corridors as fewer people use their automobiles,
- safer intercity travel because of the shift from automobiles to the train,
- employment resulting from the labor-intensive railroad operation,
- preservation of some railroad rights-of-way in and between urban areas (for the most part, Amtrak operates over freight railroads which would remain in place whether or not there is a passenger rail service), and
- maintenance of a mode of transportation that can be converted away from oil in a crisis.

The Congress must decide whether these possible benefits, which are difficult to accurately quantify, justify the high cost associated with establishing and maintaining corridor rail service.

SOME BENEFITS ARE QUESTIONABLE

GAO concludes that the anticipated benefits from

developing high-speed corridors outside the Northeast may not be available or worth the cost. Many of them depend on Amtrak's attracting substantial increases in ridership.

Greater speed and better on-time service could reasonably be expected to result from corridor development, but increased ridership and lowered deficits probably would not result. Since 1973 GAO has repeatedly suggested, and Amtrak has agreed, that cleaner, more reliable, more comfortable equipment; more congenial personal service; and better on-time performance are necessary to attract more passengers. (See p. 11.)

Amtrak has made many improvements and three routes included in this study, Chicago-Detroit, Chicago-Milwaukee, and Los Angeles-San Diego, are among their best. Ridership has increased mainly because more trains were available. Load factors (the percentage of available seats that are filled on each train) have not increased and losses continue. (See p. 14.) GAO believes Amtrak cannot expect substantial increases in ridership on the routes studied unless one of the other transportation modes is disrupted.

COSTS ARE CONSIDERABLE

Amtrak officials believe implementing the corridor concept outside the Northeast would be very costly.

GAO agrees and believes that Amtrak's prospects for improving its finances by either increasing its revenues or reducing its costs are bleak. (See p. 12.)

ALTERNATIVES AVAILABLE

Only the Congress can decide the (1) value of the benefits that would result from improved rail corridor passenger service and (2) proper level of Federal subsidy. It can

- stop providing capital or operating subsidies to Amtrak so that only those services that pay for themselves, or that local governments subsidize, would continue;

- provide subsidies to sustain existing services without further improvements;
- provide diminishing subsidies that require specific levels of contribution from riders through fares, or from local governments;
- subsidize only particular routes that meet established criteria for patronage, population density, quantity of intercity travel, local interest, and/or other elements believed important; or
- provide additional subsidies so Amtrak can improve its services and expand its corridor route system.

AMTRAK COMMENTS

Amtrak commented that GAO's report failed to place preliminary studies on corridor potential in context with alternative transportation strategies and judges the case on the basis of historical conditions which are not likely to be the same as future conditions. (See app. I.)

GAO believes it has shown how Amtrak's services and costs compare with other modes of transportation and bases its judgment on current conditions. GAO also believes its judgment will hold true unless disruption in one of the other modes changes conditions. It suggests that the Congress weigh that likelihood against the high cost projected to produce transportation that will be little used if disruptions do not occur.

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ABBREVIATIONS

Amtrak	National Railroad Passenger Corporation
Conrail	Consolidated Rail Corporation
GAO	General Accounting Office

CHAPTER 1

INTRODUCTION

The Rail Passenger Service Act of 1970 (Public Law 91-518), as amended, requires us to annually audit the performance of the National Railroad Passenger Corporation (Amtrak). This report, which assesses the potential of Amtrak's intercity corridor routes, is our third under the statutory requirement. 1/

This report is one of several we worked on concurrently. In a report being prepared in response to requests from the Subcommittee on Transportation and Commerce, House Committee on Interstate and Foreign Commerce, and the Subcommittee on Transportation, House Committee on Appropriations, we will discuss Amtrak's overall costs and ability to reduce costs while operating its present system. This report discusses some of Amtrak's best routes, those routes Amtrak believes have the greatest potential for increased ridership and social benefits. A third report will discuss what appears to be Amtrak's worst routes economically and what Amtrak's experience has been in trying to improve or eliminate them.

The Congress created Amtrak to prevent the further decline of intercity rail passenger service in the United States. With initial funding by the Government, Amtrak was designed to take over the operating management and revitalization of intercity rail passenger service, so the industry could continue as a workable transportation mode. The Congress originally provided Amtrak with a \$40 million infusion of Federal operating grants and \$100 million in guaranteed loans in order to develop a good, national rail passenger system which would operate profitably.

1/ The two previous audits are covered by reports to the Congress entitled "Quality of Amtrak Rail Passenger Service Still Hampered by Inadequate Maintenance of Equipment" (RED-76-113, June 8, 1976) and "Amtrak's Incentive Contracts with Railroads--Considerable Cost, Few Benefits" (CED-77-67, June 8, 1977).

In some respects, Amtrak has demonstrated significant progress during its 7 years' existence. It has strengthened contract arrangements with operating railroads and modernized passenger equipment, facilities, reservations, and ticketing. There can be no doubt that the decline of passenger rail service in the pre-Amtrak era has been halted and largely reversed.

On the other hand, Amtrak's projections for improved economic performance have not been met, and although some of its routes have recorded large ridership increases, most have not. The gap between Amtrak's operating revenues and expenses continues to widen, and Amtrak projects increasing deficits through fiscal year 1982.

	<u>Fiscal year</u>	<u>Operating revenues</u>	<u>Operating expenses</u>	<u>Deficits</u>
		(000 omitted)		
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	<u>311,272</u>	<u>832,850</u>	<u>521,578</u>
	Total	<u>\$1,495,664</u>	<u>\$3,351,825</u>	<u>\$1,856,161</u>
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	<u>578,274</u>	<u>1,432,340</u>	<u>854,066</u>
	Total	<u>\$2,285,033</u>	<u>\$5,914,111</u>	<u>\$3,629,078</u>
Total		<u>\$3,780,697</u>	<u>\$9,265,939</u>	<u>\$5,485,239</u>

a/ Amtrak estimates.

The Federal subsidy required to keep Amtrak operating is causing the Congress and the Administration increased concern about the future role for Amtrak and intercity rail passenger service in the Nation's transportation system. In its 5-year plan issued October 7, 1977, Amtrak proposed to undertake a comprehensive reexamination of Amtrak's route structure to develop an improved national railroad passenger system based on current and future market and population requirements. The conference report on the 1978 Supplemental Appropriation Act subsequently directed the Department of Transportation to make such a study.

Some of the major reasons Amtrak's operating costs and deficits have increased include

- routes and services added to Amtrak's original system,
- the need to improve old equipment and acquire new cars and locomotives, and
- inflation.

Amtrak has received Federal grants totaling \$2.05 billion to meet its operating expenses through fiscal year 1978. In addition, Amtrak received \$340 million in capital grants and \$120 million for the Northeast corridor and debt retirement costs, and the Secretary of Transportation has issued loan guarantees of \$900 million for capital acquisitions and improvements.

AMTRAK ROUTE STRUCTURE

Amtrak divides its routes into the following three groups.

- The Northeast corridor which covers Washington, Philadelphia, New York, Boston and includes metro-liner service.
- Short-haul routes, those less than 500 miles, for example, Chicago-St. Louis; Oakland-Bakersfield; Washington-Cincinnati.
- Long-haul routes, those more than 500 miles, for example, Chicago-Seattle; New Orleans-Los Angeles.

Amtrak's operating results to date have demonstrated that the national rail passenger service's current structure is not profitable. Since 1973 none of Amtrak's routes have been profitable. The following table shows the number of passengers carried and the loss for each route during fiscal year 1977.

Corridor	Revenues	Expenses	Operating loss	Percent of loss	Number of passengers	Loss per passenger
	----- (000 omitted) -----				(thousands)	
Northeast:						
Metroliner	\$ 36,861	\$ 49,768	\$ 12,907		2,000	\$ 6.45
Other routes	<u>54,873</u>	<u>134,814</u>	<u>79,941</u>		<u>9,939</u>	<u>8.94</u>
Total	<u>91,734</u>	<u>184,582</u>	<u>92,848</u>	20.0	<u>10,939</u>	<u>\$ 8.49</u>
Short haul:						
Chicago-Carbondale	1,893	3,887	1,994		143	13.94
Chicago-Detroit	4,335	11,203	6,948		425	16.35
Chicago-Dubuque	801	1,320	519		39	13.31
Chicago-Milwaukee	1,431	7,341	5,910		270	21.89
Chicago-Port Huron	1,981	4,924	2,943		93	31.65
Chicago-Quincy	1,650	2,532	882		86	10.26
Chicago-St. Louis	2,713	5,218	2,505		182	13.76
Los Angeles-San Diego	4,441	8,709	4,268		639	6.19
Minneapolis-Duluth	959	1,446	487		79	6.16
New York City-Buffalo/ Detroit	8,645	22,028	13,383		502	22.23
New York-Montreal	2,575	5,327	2,752		121	22.74
Oakland-Bakersfield	694	3,109	2,415		91	26.54
Seattle-Portland	1,018	3,752	2,734		141	19.39
Seattle-Vancouver	583	1,808	1,225		88	13.91
Washington-Cincinnati	620	3,173	2,553		a/265	14.06
Washington-Martinsburg	317	1,489	1,172			
Special trains	<u>837</u>	<u>837</u>	<u>0</u>		<u>42</u>	
Total	<u>35,493</u>	<u>88,183</u>	<u>52,690</u>	11.4	<u>3,356</u>	<u>15.70</u>
Long haul:						
Boston-Newport News	5,915	9,152	3,237		266	12.17
Chicago-Florida	5,795	21,671	15,876		147	108.00
Chicago-Houston	6,976	22,079	15,103		263	57.43
Chicago-Laredo	2,902	13,167	10,265		145	70.79
Chicago-Los Angeles	19,367	43,312	23,945		301	79.55
Chicago-New Orleans	5,208	11,544	6,336		192	33.00
Chicago-New York City/ Boston	7,412	20,774	13,362		289	46.24
Chicago-New York City/ Washington	10,195	25,597	15,402		274	63.12
Chicago-San Francisco	14,041	41,424	27,383		267	102.56
Chicago-Seattle(north route)	12,234	39,525	27,291		297	91.89
Chicago-Seattle(south route)	6,236	22,149	15,913		205	77.62
Chicago-Washington	3,286	13,743	10,457		183	57.14
Kansas City-New York City/ Washington	6,298	21,782	15,484		192	80.65
Los Angeles-New Orleans	5,708	15,569	9,861		107	92.16
Los Angeles-Seattle	13,065	33,024	19,959		474	42.11
New York-Florida	36,464	103,010	66,546		543	122.55
New York-Savannah	5,840	13,762	7,922		387	20.47
Seattle-Salt Lake City	1,311	2,792	1,481		57	25.98
Washington-Montreal	<u>5,298</u>	<u>17,444</u>	<u>12,146</u>		<u>350</u>	<u>34.70</u>
Total	<u>173,551</u>	<u>491,520</u>	<u>317,969</u>	68.6	<u>4,909</u>	<u>64.77</u>
Operating total	<u>300,778</u>	<u>764,285</u>	<u>463,507</u>	<u>100.0</u>	<u>19,204</u>	<u>24.14</u>
Other revenue	<u>5,908</u>		<u>5,908</u>			
Total	<u>306,686</u>	<u>764,285</u>	<u>457,599</u>			
Corporate expenses		<u>57,400</u>	<u>57,400</u>			
Total	<u>\$306,686</u>	<u>\$821,685</u>	<u>\$515,000</u>			

a/ Includes Washington-Martinsburg route.

As the table shows, Amtrak's long-haul routes are its biggest losers. A U.S. Department of Transportation study 1/ suggested that the long-haul market was analogous to the leisure travel, cruise ship market and that Amtrak should, if possible, increase fares to cover its costs.

Amtrak's board of directors has taken the position that the law requires a national rail system to cover all parts of the country, coast to coast, but have supported, in the most recent 5-year plan, a study which would re-structure the route system. According to Amtrak's president, long-haul trains are actually a series of short-haul operations since few people go the entire route. The public benefits of some of Amtrak's routes have been under review recently in accordance with congressionally approved route and service criteria, but none have been discontinued.

Impetus for corridor development occurred with the passage of the Regional Rail Reorganization Act of 1973 (Public Law 93-236). This act required the United States Railway Association 2/ to identify all short-to-medium distance corridors in densely populated Northeast and Midwest areas in which major upgrading on rail lines would return substantial public benefits.

In its February 1975 Preliminary System Plan, the Association identified only the Northeast corridor as having an existing heavy demand for rail passenger service, with potential for major benefits from service improvements. In its Final System Plan, the Association endorsed service improvements for the Northeast corridor to provide an average speed of 80 miles an hour, with a maximum speed of 150 miles an hour, and departures every 30 minutes during heavily traveled hours.

The Association identified 16 other potential corridors and suggested different levels of service improvements designed to assess public interest.

1/ "National Transportation Trends and Choices," January 12, 1977.

2/ A Government corporation created to develop and implement a plan to reorganize bankrupt railroads in the Northeast and Midwest.

According to the Association, moderate service improvements would (1) offer to a broad cross section of the public an opportunity to demonstrate the extent to which passenger service really is desired and (2) minimize the risk that large amounts of money would be spent on services for which demand may never develop.

In short, the Association recommended that:

- Expenditures of the magnitude required for high-speed Northeast corridor-type service be made only where clearly justified by potential public benefits.
- Amtrak conduct considerable planning and marketing studies before implementing improved services on potential corridors.

Developmental efforts on
the Northeast corridor

On the basis of the Association's recommendations and the requirements of the Railroad Revitalization and Regulatory Reform Act of 1976 (Public Law 94-210), Amtrak acquired the Northeast corridor from the Consolidated Rail Corporation (Conrail) in April 1976 at a cost of about \$120 million. The corridor property comprised 621 route-miles, including 456 miles from Boston to Washington, D.C.; 62 miles from New Haven, Connecticut, to Springfield, Massachusetts; and 103 miles from Philadelphia to Harrisburg, Pennsylvania. In addition to purchasing track, Amtrak purchased 128 railroad stations, including commuter stations, and several maintenance shops and yards at key points along the route.

The Department of Transportation is directing the Northeast corridor improvement project, and Amtrak initially planned for service improvements on the corridor to be completed in 1981 at a cost of about \$1.82 billion. These improvements include, among others, track renovation; new track circuitry; and controls.

ImprovementsEstimated costs

(millions)

Route realignments	\$ 151.2
Track structures	448.2
Bridges	242.5
Electrification	234.8
Signaling and traffic control	163.3
Communications	24.7
Fencing and barriers	48.5
Grade crossing elimination	4.0
Stations	222.2
Service facilities	103.8
Tunnels	18.4
Program management	106.9
System engineering	<u>51.5</u>
Total	<u>\$1,820.0</u>

Amtrak expects these improvements to provide passengers a smoother ride in trains operating at speeds up to 120 miles an hour. Legislation calls for Amtrak to operate a 2-hour, 40-minute schedule between Washington, D.C., and New York City (24 minutes less than the present metroliner service) and a 3-hour, 40-minute schedule between New York and Boston (a reduction of 50 minutes over the fastest train currently scheduled).

Other potential corridors identified by Amtrak

Amtrak, in its corporate plan for fiscal years 1978-82, identified the following 18 short-distance routes which appear to have the required population density and moderate intercity distances to merit an evaluation for the development of high-speed rail services.

- Los-Angeles-San Francisco
- Los Angeles-San Diego
- San Francisco-Sacramento
- Seattle-Eugene
- Dallas-San Antonio
- Dallas-Houston
- Chicago-Detroit
- Chicago-Milwaukee
- Chicago-Madison
- Chicago-St. Louis

- Chicago-Cleveland
- New York-Springfield
- Buffalo-New York
- Pittsburgh-Cleveland
- Pittsburgh-Detroit
- Pittsburgh-Philadelphia
- Newport News/Norfolk-Washington, D.C.
- Cleveland-Cincinnati

Amtrak has classified these markets as potential corridors and suggested that the Northeast corridor improvement concept may be appropriate for some of these markets in the future. Current plans focus on the Chicago-Detroit and Los Angeles-San Diego corridors where Amtrak has improved frequencies and scheduling of its conventional service. Amtrak anticipates that capital expenditures of \$63.2 million and \$13.1 million, respectively, would be required to upgrade track and related facilities to permit higher speeds but has not fully assessed the costs and benefits of such changes.

Amtrak officials told us that the future corridor development would depend on Congress providing the necessary funds in response to a number of environmental and social considerations, and that Amtrak had not requested funding for corridor development in the next 5 years.

SCOPE OF REVIEW

We selected Amtrak's potential corridor activities for review because decisions regarding corridor development will influence, in large part, whether Amtrak can stabilize its need for Federal subsidy or whether continued massive development efforts might drive the requirement for Federal subsidy even higher. Also many people feel that Amtrak's only hope is to concentrate on corridors and forget the other route segments.

We reviewed Amtrak's current activities and processes for development of potential corridors, including a detailed examination of the Chicago-Detroit and Los Angeles-San Diego corridors, because Amtrak has classified them as two of the most promising routes for development. We also selected the Chicago-Milwaukee corridor because of its high population density, relatively short-route distance, and service

that competes very favorably in both time and fares with competing transportation modes. We reviewed various Amtrak management and financial plans and other available transportation studies.

In developing revenue and cost information for each corridor, we used, and accepted without verification, Amtrak's computer generated accounting information.

We also discussed corridor development activities with Amtrak officials at their Washington headquarters and regional offices in Chicago and San Francisco and with State Transportation officials in Michigan and California. We interviewed representatives of selected businesses and travel agents in Chicago, Detroit, Milwaukee, Los Angeles, and San Diego to determine their views on the quality of Amtrak passenger services and the extent to which their organizations used Amtrak.

We rode selected trains on each of the routes to observe the quality of on-board services and station facilities.

CHAPTER 2

AMTRAK EXPERIENCE--ACCELERATING

LOSSES WITH NO PROSPECTS FOR PROFITS

Why can't Amtrak make a profit? Mainly because of its high operating costs and inability to raise fares because of the risk of losing passengers and revenue.

Even if Amtrak's objective of attracting substantially more passengers were met, only small reductions in its losses would result. Amtrak's president stated that the system would lose \$75 million to \$100 million a year even if Amtrak was in the impossible position of filling all of its trains to capacity. The conclusion is also supported by the experiences of rail passenger systems in other countries. Some of these systems have higher ridership and better passenger services than does Amtrak but still operate at a loss.

Three of Amtrak's most promising corridors--Chicago-Detroit, Chicago-Milwaukee, and Los Angeles-San Diego--show a dismal profit. Just to break even, trains on these routes would have to be filled beyond their capacity. For example, during February 1977 a train on the Milwaukee-Chicago route would have needed to carry 532 passengers per trip to break even at current fares and costs, even though its capacity was only 271 and actual daily ridership per train was only 76. This situation occurred because Amtrak's operating cost of \$39 a passenger was more than seven times greater than its revenue of \$5.55 a passenger.

WHY ARE PROFITS SO ELUSIVE?

Railroad passenger service is costly. The following table shows how much it costs Amtrak to operate the three routes and the number of passengers required to cover costs at current fares.

To reduce deficits, Amtrak must maximize revenue through fares and/or ridership increases or reduce operating costs.

INCREASING REVENUE IS DIFFICULT

Amtrak can increase its revenues by attracting more passengers and/or raising fares; but its ability to do either is questionable.

Competition limits fare increases

Amtrak's policy on fares is to get as much from the rider as it can. However, its ability to raise fares is limited because of strong competition from other transportation modes. Amtrak studies show that price is important to railroad passengers and that price increases relative to other modes would result in revenue losses because fewer people would use Amtrak. The following table shows the one-way fares, as of November 1, 1977, for the various travel modes in the three corridors. It also shows the fare Amtrak would have to charge to break even on selected trains.

	Amtrak fare necessary to break even	Amtrak	Bus	Air (note a)	Automobile	
					Full cost	Marginal cost
Chicago-Milwaukee	\$38.75	\$ 6.25	\$ 5.50	\$25.00	\$14.45	\$ 4.25
Chicago-Detroit	29.80	20.50	21.40	^{b/} 40.00	47.43	13.95
Los Angeles-San Diego	14.45	9.00	8.35	11.45	21.76	6.40

a/ Lowest existing day coach fare.

b/ Round-trip ticket reduces one-way cost by about 5 percent.

The table shows that Amtrak's fares are very close to its main competitors for available traffic and suggests that increasing fares close to break even levels would likely cause many travelers to shift to an alternate mode. The traffic available to Amtrak is limited because air travel is faster and more reliable for time-sensitive

travelers (note Amtrak's poor on-time performance statistics) and because the automobile is perceived as much cheaper and more convenient for most inter-city travelers.

The table shows two different levels of cost for automobile travel. The first level of cost is based on the mileage times \$0.17, an approximation of the full cost of owning a car, including depreciation, insurance, taxes, repairs, fuel, and all other costs. These costs would best reflect the situation where a person owns an automobile specifically for the purpose of intercity travel.

For most Americans, though, an automobile is a necessity they would own regardless whether they were taking an intercity trip, so that the choice of whether to go by automobile or some other mode is based only on the additional cost of driving (mainly fuel and oil), not the full cost. Thus, for the average person, a trip from Detroit to Chicago by car would be thought of as costing only about \$0.05 a mile, or \$13.95, compared to Amtrak's fare of \$20.50. For a family of four the contrast is much greater. The automobile cost would be about the same as for just one person, \$13.95, whereas the Amtrak fare, disregarding discounts, would be \$82. Although it requires more effort to drive an automobile than to ride Amtrak, drivers have much greater flexibility during the trip, have a convenient way to get around at the destination, and can begin and end the trip whenever they chose. Most people believe that the cost advantage and convenience of travel by automobile is clear. Amtrak cannot reasonably expect to attract large numbers of riders away from automobile travel unless the current circumstances change because of energy shortages, such as occurred in 1973, or other unforeseen disruptions.

Need to attract more passengers

Amtrak plans by 1982 to increase overall ridership 38 percent and total revenue by \$272 million. However, this increase is not adequate to keep up with costs, which Amtrak expects to increase about \$611 million by 1982, mainly due to inflation.

The same problem exists on the three routes we reviewed. As shown below, passenger increases will have to be much greater than 38 percent if they are to have any impact on Amtrak's deficit. The following table compares the percent of change in ridership, seats unfilled, and operating losses between fiscal years 1975 and 1977, a period when Amtrak improved its conventional service over the routes.

	<u>Percent of increase or decrease (-)</u>		
	<u>Passengers</u>	<u>Unfilled seats</u>	<u>Operating losses</u>
Chicago-Milwaukee	11	a/	84
Chicago-Detroit	54	19b/	30
Los Angeles-San Diego	93	7b/	-17

a/ Not available.

b/ Compares fiscal year 1975 with the period August 1976 through July 1977.

As noted in the table above, although the number of passengers increased, the number of unfilled seats also increased. One factor which may account for this situation is that Amtrak increased train service on both the Chicago-Detroit and the Los Angeles-San Diego routes from 1975 to 1977. Although the additional services attracted more passengers, the increase was not enough to offset the greater number of available seats and costs.

Some of the reasons Amtrak can not attract more passengers follow.

- Amtrak's inability to provide frequent on-time service.
- Amtrak's slow speed in comparison with other modes.
- Americans' attachment to the automobile.

To gain further insight into Amtrak's difficulty in attracting passengers, we contacted officials from selected travel agencies and business organizations. These officials generally support the above assessment of the problem.

The conceptual basis for corridor development is that frequent, fast, and on-time service will attract additional passengers and reduce the gap between revenue and cost while also relieving pressure on other transportation systems and providing other social benefits.

Service has improved

When Amtrak started in May 1971, it inherited a dying business. Passenger cars were old and in need of repair. Passenger stations and maintenance facilities were neglected, inefficient, and unsightly.

In the ensuing 7 years, there have been many service improvements. Amtrak has replaced old equipment on certain routes with new locomotives and passenger cars, rehabilitated old or constructed new passenger stations, and improved train frequencies on some routes.

There is no doubt that these actions have made Amtrak a much better choice for the traveler. Yet passengers still complain about the quality of service. Complaints include poor on-time performance (see our report "Amtrak's Incentive Contracts with Railroads--Considerable Cost, Few Benefits," June 8, 1977), insufficient train frequencies, disinterested and rude on-board service personnel, long waits in train dining facilities before being served, unavailability of menu items, and unclean or malfunctioning equipment (see our report "Quality of Amtrak Rail Passenger Service Still Hampered by Inadequate Maintenance of Equipment," June 8, 1976).

Deteriorating train speeds and on-time performance

According to Amtrak's 1977 5-year plan, Amtrak trains now average just over 45 miles an hour, compared to 51.5 in 1971. In fact, some Amtrak trains are slower than the privately operated trains running the same routes 30 years ago.

New and faster equipment has not been the answer. The French-built turboliners were designed for speeds in excess of 150 miles an hour but their introduction on the Milwaukee-Chicago route did not improve travel time because of speed restrictions due to poor track, local ordinances, grade crossings, and signal con-

straints on the privately owned properties Amtrak must use. Freight-oriented railroads will not upgrade their facilities solely for passenger requirements.

Although train speeds are not the only factor in attracting passengers, Amtrak believes its trains must at least be competitive with the 55-mile-an-hour automobile speed limit. Amtrak officials feel that, without track improvements, their goal of a 55-mile-an-hour average speed cannot be reached and that, as track continues to deteriorate, speeds will be even lower.

One of the most frequent passenger complaints involves the failure of Amtrak trains to meet scheduled departure and arrival times. In 1974 about 75 percent of Amtrak trains were on time, and in 1977, despite relaxation of criteria in determining on-time performance, about 62 percent were on time.

The routes we reviewed represent three of Amtrak's most promising and are operated with its newest and best equipment. Yet, despite the new equipment, the on-time performance of these routes has deteriorated since 1974. The Chicago-Detroit route is particularly bad; on-time performance has dropped to 34 percent.

The following table illustrates the on-time performance for the three routes included in our review.

	<u>Percentage of trains on-time</u>			
	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>
Chicago-Milwaukee	87.8	92.4	90.9	87.5
Chicago-Detroit	82.4	79.6	46.7	34.4
Los Angeles-San Diego	90.0	91.9	90.1	80.1

Amtrak officials attribute the timeliness problem mainly to bad track. In an effort to improve performance, Amtrak hopes to upgrade track and support facilities on the Chicago-Detroit and Los Angeles-San Diego routes.

Amtrak's fiscal year 1977 5-year plan suggests that, if the corridor concept is introduced, an expenditure of \$63.2 million for improvement of track and support facilities between Chicago and Detroit and \$13.1 million (including \$1.6 million from California) for track and grade crossing improvements between Los Angeles and San Diego would be required to:

- Increase the average train speed from 50.7 to 60.7 miles an hour between Chicago and Detroit and reduce travel time by 54 minutes (the fastest current train makes this run in 5 hours and 35 minutes).
- Increase train frequencies and average train speed from 51 to 55 miles an hour between Los Angeles and San Diego, reducing travel time by 18 minutes. (The fastest current train makes this run in 2 hours and 30 minutes.)

Amtrak believes these improvements would help increase annual ridership on the Chicago-Detroit route from 363,000 in 1977 to 968,000 by 1982 and from 674,000 to 1,622,000 on the Los Angeles-San Diego route.

Amtrak's past ridership projections were over optimistic ^{1/} but have been more reasonable in recent plans. Assuming that Amtrak can reach the projected passenger loads for these two routes, it will not materially improve an already bleak financial picture. In addition to the expenditure of \$76.3 million (\$63.2 million plus \$13.1 million) for improvements, Amtrak anticipates that conventional operations similar to those presently provided will result in deficit increases from

- \$6.9 million a year on the Chicago-Detroit route to \$13.9 million a year by 1982 and
- \$4.3 million a year on the Los Angeles-San Diego route to \$7.1 million a year by 1982.

^{1/} See our April 21, 1976, report entitled "How Much Federal Subsidy Will Amtrak Need?" (RED-76-97).

On-board service problems

Although Amtrak has improved on-board services, there are still many problems. Amtrak officials say the problems are caused by:

- Inadequate training of on-board personnel.
- Lack of sufficient inspectors to evaluate quality of service.
- Failure to provide enough on-board personnel.
- Long hours worked by dining car personnel, sometimes as much as 16 hours straight on long-haul trains.
- Low employee morale due to the substandard equipment and services.

Amtrak officials said that the lack of funds had restricted the level of employee training and hiring of personnel to inspect trains. On-board personnel only attend a 5-to 6-day training course and are not evaluated on the quality of their performance. Amtrak is short of inspectors, only 43, nationwide, to cover 223 daily train trips.

Marketing may need reassessment

Amtrak's marketing efforts may need to be reassessed if new corridor service is to be developed. Rather than tailor advertising campaigns to specific corridors and develop plans to attract certain segments of the population, Amtrak has primarily relied on regional and national advertising to acquaint the public with rail service. As a result, Amtrak has not been able to fully exploit the ridership potential in the corridors. Furthermore, Amtrak has not fully coordinated marketing efforts with improvements in passenger service. The lack of advertising when Amtrak offers new service minimizes the increases in ridership which the services might attract.

According to Amtrak's Director of Marketing Services, Amtrak's advertising budget (\$7 million for fiscal year 1978) is considerably below needs. Advertising is

directed primarily at the five hub markets of New York; Philadelphia; Washington, D.C.; Chicago; and Los Angeles which provide 50 percent of Amtrak's revenue. The limited marketing budget precludes extensive advertising of the corridors, which, according to the marketing services director, does not provide as much revenue for each advertising dollar as the hub markets.

We found one instance in which Amtrak did not coordinate its marketing efforts with service improvements and thus probably did not maximize ridership increases. On the Chicago-Milwaukee corridor, Amtrak added a lounge car with first class seating and attendant service on each turbotrain. Amtrak previously used these cars for coach service and had them refurbished at a cost of \$120,370. This new service which was instituted in October 1976 was never promoted and was canceled in September 1977 because it was a losing operation.

WHY DOES IT COST SO MUCH?

The Congress and the public have been told that rail travel is one of the most efficient means of moving people. Despite this claim, Amtrak's deficits have increased steadily. For example, during June 1977, it cost about \$30 for each passenger carried on a Detroit-Chicago train, whereas revenues from both fares and food service was only \$12 a passenger. To find out why Amtrak's costs per passenger are so high, we reviewed 1 month's operation of a single train on the Detroit-Chicago route.

Amtrak operates six daily trains between Detroit and Chicago, one of these trains, number 355, leaves Detroit at 5:35 p.m., with a scheduled arrival time in Chicago of 10:15 p.m. According to cost information provided by Amtrak, this train incurred or was allocated expenses totaling \$143,898 ^{1/} during June 1977. Selected individual cost items follow.

^{1/} We reviewed Amtrak's method for allocating costs to individual route segments and found it provides reasonable estimates.

<u>Cost</u>	<u>Amount for June 1977</u>
Direct labor	\$ 26,798
Maintenance of Equipment	20,381
Maintenance of Way	16,296
Station costs	9,355
Yard operations	6,620
Sales and marketing	5,937
Depreciation, taxes and insurance	5,908
Fuel	5,849
Reservations system	5,036

(See p. 11 for the average daily costs for this train.) The following sections expand on each of these cost categories and provide some insight into the cost of operating a passenger train.

Direct labor

In June 1977 train number 355 operated with an on-board crew of seven. The train and engine crews work for the operating railroad, in this case Conrail, while the on-board passenger service personnel are employed at Amtrak. Union contracts with Conrail set the following basis for crew pay.

<u>Employee titles</u>	<u>Basis for pay (excluding fringe benefits)</u>	<u>Monthly cost to train number 355</u>
Engine crew	Mileage traveled (100 miles traveled is the equivalent of a full days pay)	\$ 10,693
Train crew	Mileage traveled (150 miles traveled is the equivalent of a full days pay)	10,906
Service crew (note a)	Hourly rate	5,199
Total Monthly Cost		\$ <u>26,798</u>

a/ Pay shown is without fringe benefits. In addition to pay, the size of the Conrail crews (engine and train) is also stipulated by union contract.

Engine crew

On each trip from Detroit to Chicago, a distance of 279 miles, Amtrak uses two engine crews--an engineer and a fireman--as shown below.

<u>Engine crew</u>	<u>Travel between</u>	<u>Distance</u>	<u>Travel time</u>
Number 1	Detroit and Jackson	74 miles	80 minutes
Number 2	Jackson and Chicago	205 miles	260 minutes

The engine crews disembarking in Jackson catch train number 355 the following day to Chicago. Each of these crews is paid based on a rule in the union contracts which stipulates that a trip of 100 miles constitutes a full day's work. For comparison, an official of the National Association of Motor Bus Operators told us that bus drivers were limited to 10-hour shifts for safety reasons and that a single bus driver would normally drive a bus from Detroit to Chicago (a scheduled bus trip takes about 6 hours) and receive a single day's pay. Amtrak metroliners (Amtrak's fastest trains operating over some of the Nation's busiest track) are operated by a single engineer over the length of its trip. A single metroliner engineer typically operates a train in both directions, all in 1 day. However, the engineer receives 4.2 days' wages under the union agreement.

According to Amtrak officials, these crew assignments are determined on the basis of crew availability and other provisions of the union contracts. These provisions include the requirements that crews receive full pay while in transit to a new assignment and that Amtrak pay all crew lodging and meal allowance costs at turnaround cities. The average pay, including benefits, for engineers in 1976 was \$30,500 and for firemen, \$27,500.

Train crews

In contrast to the engine crews, the train crew (i.e., conductor and brakeman) remains with train number 355 for the entire trip to Chicago. The union contract provides that the train crew receive the equivalent of a full day's pay for 150 miles of travel. Miles traveled over 150 are paid at a lesser rate. The train crew earns just under 2 days' pay for the 6-hour trip from Detroit to Chicago. Average pay, including benefits, for conductors in 1976 was \$27,500 and for brakemen, \$26,500.

On-board service crew

The on-board service crew--the waiter in charge and two service attendants--also remain on board for the entire trip. The union contract with Amtrak provides for an hourly wage based on service time. The contract guarantees at least 180 hours of pay a month as long as each employee is available for work. (There are some exceptions to this rule.) If Amtrak fails to provide this amount of work, the employee still receives 180 hours of pay for the month.

Maintenance of equipment

Amtrak locomotives and cars require regularly scheduled maintenance to insure safety and to maintain car cleanliness and overall equipment condition. Some of this maintenance is required by law because regulatory agencies, such as the Federal Railroad Administration and the Interstate Commerce Commission, have set safety, cleanliness, and other standards with which Amtrak must comply. Amtrak's equipment maintenance includes the following levels of effort.

- Overhauls involving complete disassembly, renovation, and repair of cars and locomotives after several years' service or major repair of damaged equipment.
- Running preventive maintenance, such as monthly, quarterly, and annual inspections, with associated repairs required by Federal law; service required by manufacturers necessary to hold warranties in force; and Amtrak-specified extraordinary cleaning.
- Turnaround servicing to clean, supply, service, fuel, and water locomotives and cars at the end of each run as necessary for the return trip. This service can also include minor running repairs, for example, brake adjustments, air-conditioning servicing, and replacement of lights and fuses.
- Enroute servicing to replenish fuel and water, remove trash, and perform Federally mandated air brake inspections every 500 miles.

In past reports we have noted numerous problems with the quality and cost of Amtrak's maintenance program. (See our report "Quality of Amtrak Rail Passenger Service Still Hampered by Inadequate Maintenance of Equipment," June 8, 1976.) Amtrak is slowly taking over maintenance facilities to improve its repair and maintenance program and agreed that other actions, including (1) development of specific inspection guidelines, (2) development of automated maintenance system, and (3) development of work productivity standards, would be beneficial. However, these improvements have not yet been completed. Maintenance costs are still high but are comparable to other railroads that operate passenger service. Without productivity standards or other measures, it is difficult for us or Amtrak to estimate whether costs could be reduced. These operations, like engine crew and on-board service costs, are strongly affected by union agreements.

Other costs

In our opinion, considerable cost reductions are not likely in the following areas.

Maintenance of right-of-way

Amtrak owns and maintains about 80 miles of the right-of-way (between Kalamazoo, Michigan, and Michigan City, Indiana) over which train number 355 operates. The remaining right-of-way is owned and maintained by Conrail. Maintenance of right-of-way includes all Amtrak costs and railroad billings to Amtrak for labor, material, and other costs of regular maintenance of roadway, communication systems, signals, buildings, and equipment. These costs are allocated to train number 355 on the basis of usage.

Station services

Train number 355 stops at five cities en route to Chicago. These immediate stops include stations and related services maintained in Ann Arbor, Jackson, Battle Creek, Kalamazoo, and Niles, Michigan. For example, in Battle Creek 1/, Amtrak operates out of an

1/Amtrak service at this station was interrupted by a fire in January 1978.

88-year-old, 2-story brick building owned by Conrail and shared with the State of Michigan and Conrail personnel. The services provided include a 1,200 square-foot waiting room, ticket office, and limited baggage service. The station is open from 8:00 a.m. to 9:00 p.m. and is staffed by three Amtrak ticket clerks (at least one is on duty at all times). These clerks issue tickets through an on-line computer terminal and automatic ticket printer and handle baggage when time permits.

In fiscal year 1977 Amtrak incurred about \$65,000 in operating expenses which included salaries (an average of over \$14,000 a clerk), telephone and janitorial service, and other costs. These expenses do not include the cost of the computer equipment (which rents for \$300 a month) or building and utility costs.

When Chicago's Union Station and Detroit's Amtrak station are added, a total of seven stations serve train number 355, its passengers and crew. The costs of maintaining these stations are allocated to trains on the basis of the number of passengers getting on and off. Station operation and maintenance is regulated by the Interstate Commerce Commission, which has established standards for station hours and facilities.

Yard operations

Amtrak operates maintenance and servicing facilities in Chicago and Detroit. The Chicago facilities provide for both maintenance and turnaround servicing for locomotives and passenger cars, whereas the Detroit yard provides for only turnaround servicing. (See p. 22.) Yard operations expense, which is allocated to train number 355 on the basis of the number of trips through these yards, includes payroll and other costs related to directing the movement and switching of trains within these facilities. This cost includes the salaries of Yard Masters and their assistants and related clerical personnel.

Sales and marketing

Amtrak maintains both a regional and district sales office in Chicago. The payroll and other costs incurred by these offices, such as travel agent programs and agency commissions, are allocated to train number 355 on the basis of the number of passenger boardings.

Amtrak also conducts advertising and sales promotions nationwide. In fiscal year 1977 Amtrak spent about \$46 million on marketing. This cost, which includes the expense of media and telephone directory advertising, timetables, shows, exhibits, and other sales promotions, is allocated to trains on the basis of revenue.

Depreciation, taxes, and insurance

This category of expense includes train number 355's allocated share of depreciation of locomotives, passenger cars, roadways, and other properties; cost of insurance policies; self-insurance accruals; and Federal, State, and local taxes. During June 1977 Amtrak allocated the following amounts to train number 355.

<u>Expense</u>	<u>Amount</u>
Depreciation	\$ 2,208
Insurance	1,637
Taxes	<u>2,063</u>
Total	\$ <u><u>5,908</u></u>

Fuel

During June 1977 train number 355 used 15,633 gallons of diesel fuel at a cost of \$5,849 (\$0.37 a gallon). During the same month train number 355 carried a total of 4,833 passengers and traveled 3,370 miles. Using these figures, train number 355 averaged 54 miles a gallon, or 47 passenger-miles a gallon, of fuel consumed.

Reservations

Amtrak maintains five centralized reservation offices staffed 24 hours a day by personnel who take reservations and give schedule and fare information. The public can obtain this information using Amtrak's toll-free number listed in local directories. Reservations personnel in New York; Chicago; Los Angeles; Jacksonville, Florida; and Bensalem, Pennsylvania; use on-line computer terminals for information or available seats and current fares.

The cost of reservation services includes payroll and other expenses incurred in maintaining these facilities and is allocated to trains on the basis of passenger boardings. Standards for reservations services are promulgated by the Interstate Commerce Commission.

SOCIAL AND ENVIRONMENTAL BENEFITS

Amtrak officials feel that, although financial viability is critical, rail passenger service should also be judged on the social and environmental benefits gained by the Nation from such service.

One of Amtrak's major goals is to provide improved service for people, such as the elderly and handicapped, whose transportation alternatives are limited. Amtrak also believes its trains offer many communities their only means of public transportation--mostly small towns in the Northwest. (We found that, as of October 1976, 40 communities were served solely by Amtrak.)

Another benefit cited by Amtrak for rail passenger service is the contribution it can make to the Nation's energy conservation goals. Fully loaded trains are almost three times more energy efficient than a standard automobile. Amtrak claims that a shift of only 1 percent of intercity travel from the automobile to the train would provide net savings of 600,000 barrels of oil a year. An additional benefit would be the reduction in the number of deaths and accidents as the public substitutes the train for the automobile.

The following table illustrates the passenger miles per gallon of fuel and passenger fatalities per 10 billion passenger-miles for the various intercity transportation modes

	<u>Passenger miles/gallon fuel</u> (Note a)	<u>Fatalities per 10 billion miles</u> (Note b)
Bus	116	3
Amtrak	56	1
Automobile	40	140
Airlines	20	6

a/ 1976

b/ 3-year average (1974-76)

Lower air pollution is another possible benefit of increased rail passenger travel. Any major shift of travelers from automobiles to trains should help improve air quality. Air quality problems are particularly acute in many of the corridor cities since they are located in some of the Nation's most industrial areas.

CHAPTER 3

MATTERS FOR CONSIDERATION BY THE CONGRESS

SHOULD AMTRAK DEVELOP CORRIDORS?

Amtrak's long range goals provide for extension of the Northeast corridor development concept to selected emerging corridors. Amtrak anticipates that extension would result in

- improved and more convenient services to the public through greater train speed and better on-time performance,
- lower deficits through increased ridership,
- improved energy conservation through the public's greater use of the more energy-efficient train,
- lower air pollution in the highly populated corridors as fewer people use their automobiles,
- safer intercity travel because of the shift from automobiles to the train,
- employment resulting from the labor intensive railroad operation,
- preservation of some railroad rights-of-way in and between urban areas (for the most part, Amtrak operates over freight railroads which would remain in place whether or not there is a passenger rail service), and
- maintenance of a mode of transportation that can be converted away from oil in a crisis.

The Congress must decide whether these potential benefits, which are difficult to accurately quantify, justify the cost associated with establishing and maintaining corridor rail service.

Some benefits are questionable

The benefits Amtrak believes would result from corridor development are not necessarily available or worth the cost. Greater speed and improved on-time service could reasonably be expected, but increased ridership and lowered deficits would not necessarily result. As this analysis points out, ridership increases on corridor routes have usually resulted in increased deficits. Most of the other benefits Amtrak cites are dependent on substantial ridership increases.

Amtrak's operating losses are large, even on its best routes. To come closer to breaking even, Amtrak must either increase its revenues or reduce its costs. Studies show that Amtrak's low fares in comparison with other forms of transportation are an important reason passengers use Amtrak, and we believe Amtrak cannot increase its revenues on corridor routes much by increasing fares.

The other source of additional passenger revenue available to Amtrak is increased ridership. Since 1973 we have repeatedly suggested, and Amtrak has agreed, that improved service in terms of cleaner, more reliable, more comfortable equipment; more congenial personal service; and better on-time performance is necessary to attract more passengers. Amtrak has made many improvements, and the routes we studied in this review are among Amtrak's best. Ridership has gone up on two of the three routes, mainly because additional trains were added. Load factors (the percentage of available seats that are filled on each train) have not gone up, and losses continue. We believe Amtrak's experience has shown that it cannot expect substantial increases in ridership on these routes unless a disruption occurs in one of the other modes of transportation.

Amtrak could help the Nation achieve its goals of energy conservation and cleaner air by persuading travelers to switch from automobiles to the train, although a recent Department of Transportation study shows that buses are better in both characteristics. Similarly, train travel is safer than automobile travel, but other common carriers have comparable safety records. If Amtrak ran longer trains with more of its seats filled, it could undoubtedly do better in these

characteristics, but, as we have noted, the passenger demand that would be needed to permit such operations does not exist.

Although it is possible that Amtrak could shift away from oil-powered locomotives in a crisis, it would be extremely costly outside the Northeast corridor and would take a long time.

Costs are considerable

Implementing the corridor concept would require extensive and costly improvements in track and related facilities, including the cost of acquiring the track from operating railroads and the costs associated with modernizing stations, improving equipment, and so on.

Our analysis of operating costs on train number 355 from Detroit to Chicago shows that operating costs are high, compared to other modes, and that major cost reductions seem possible only in direct labor. Although reductions may be possible in other costs, they would not likely be large enough to make much difference in overall operating results.

Amtrak attempts to minimize its labor costs but is limited by union contracts. For example, unions usually require that two people be paid a full day's pay to operate a locomotive for every 100 miles the train travels. Amtrak has demonstrated that a single engineer can operate high-speed passenger service safely over considerable distances in the Northeast corridor, and bus companies use a single driver to operate an express bus over the route from Detroit to Chicago, a task at least as difficult as operating a train. Yet Amtrak pays a full day's wages to at least four people just to operate the locomotive on its 6-hour, Detroit-Chicago train.

Cost reductions available through more reasonable labor agreements would not, by themselves, allow Amtrak to break even, but would be a step in the right direction. However, these labor problems are common to most railroads and Amtrak believes it does not have enough influence to alter the union agreements. Union agreements with train and engine crews are negotiated by the National Railway Labor Conference. Amtrak is not a member of the conference but advises the conference of its position on the agreements and abides by the results.

Of Amtrak's 18,000 employees, 15,000 are union members, and 65 percent of Amtrak's costs are for labor and benefits.

In developing the passenger rail system, Amtrak has taken the position that the Congress has mandated a system that operates coast to coast on both short- and long-haul routes. Many people believe that, since the long-haul trains account for about 68 percent of Amtrak's deficit and only 20 percent of ridership, Amtrak's only hope is to abandon such routes and concentrate its resources on development of service in the short-haul corridors. However, corridor development will be costly and Amtrak is unlikely to ever be profitable under current circumstances, even if it limits its operations to corridors.

Alternatives available

We believe the prospects for profitable railroad passenger service in corridors outside the Northeast are bleak. However, there are many social and public benefits that may justify the cost of establishing and sustaining corridor service in some locations. Only the Congress can make the judgments and trade-offs necessary to determine the value of the benefits that would result from such services and the proper level of Federal subsidy. The Congress has a number of alternatives from which to choose. It can

- stop providing capital or operating subsidies to Amtrak so that only those services that pay for themselves, or that local governments subsidize, would continue;
- provide subsidies to sustain existing services without further improvements;
- provide diminishing subsidies that require specific levels of contribution from riders through fares or from local governments;
- subsidize only particular routes that meet established criteria for patronage, population density, quantity of intercity travel, local interest, and/or other elements believed important; or
- provide additional subsidies so Amtrak can improve its services and expand its corridor route system.

Amtrak comments

Amtrak's comments on this report are included as appendix I. Amtrak has stated that evidence shows new equipment, more frequency, and better ride quality in populated corridors results in increased ridership and that corridor development scenarios outside the Northeast, as presented in Amtrak's 5-year plan, represent a new and forward-looking concept with very little relationship to many of the broader, unrelated issues raised in this report. We agree that corridor service is a departure from the service Amtrak now provides throughout most of its system and that such service may produce different results in some places. However, we believe Amtrak's 7-year experience should be considered carefully as an important indicator of what will happen in the future, and we do not see much in that experience that would generate optimism about the public demand for additional passenger rail service. We do not consider Amtrak's operating results to be too broad or unrelated to use in considering Amtrak's future prospects.

Amtrak's comments also state that this report fails to properly show the effect of inflation on Amtrak's costs and provides little interpretation of changes that have contributed to Amtrak's funding history and projections. Our purpose in this report was not to examine Amtrak's systemwide costs or to explain in detail the reasons for Amtrak's overall cost and subsidy growth. We included a brief summary of Amtrak's funding history only as background material in our introductory chapter, and we think it speaks for itself. In our analysis of potential corridors, we explain in great detail what Amtrak's costs are for a particular route and why Amtrak has little control over some of its costs.

Amtrak outlined a few of the many considerations besides economic results which affect funding decisions for passenger rail service. We agree such considerations are important, and our report points out that the Congress must weigh them. We strongly believe, however, that any thoughts of passenger rail profitability on corridor service should be laid to rest once and for all and that future decisions should be made with the expectation that continued subsidy will be required. We have therefore emphasized Amtrak's poor economic results and prospects in this report.

Amtrak summarized its comments by saying that this report fails to place preliminary studies on corridor potential in context with alternative transportation strategies and judges the case on the basis of historical conditions which are not likely to be the same as future conditions. In Amtrak's judgment, our conclusions were drawn from an incomplete analysis resulting from too narrow a study.

We believe that we have shown how Amtrak's services and costs compare with other modes of transportation and that Amtrak does not provide a service that appeals to most travelers in current circumstances. Our judgment is based on current conditions, and we believe it will hold true unless conditions are changed by a disruption in one of the other transportation modes. Amtrak speculated that fuel shortages would necessitate greater use of rail passenger service. It may be right, and the Congress must weigh that likelihood against the high cost projected to produce transportation that will be little used if disruptions do not occur. Another possibility, of course, is that technological improvements will permit the country to continue to use the other transportation modes it clearly prefers. We did not study in detail the likelihood that there will be circumstances that cause considerable shifts in the way people travel between cities in the United States. Neither has Amtrak.

National Railroad Passenger Corporation, 955 L'Enfant Plaza North, S.W., Washington, D.C. 20024 Telephone (202) 484-7100



February 17, 1978

Mr. Henry Eschwege
Director
United States General Accounting Office
Community and Economic
Development Division
Washington, D.C. 20548

Dear Mr. Eschwege:

The GAO draft report "Should Amtrak Develop High Speed Corridor Service Outside the Northeast?" misses a number of points in relation to Amtrak's review of the concept of improving service in populated corridors with new equipment, more frequency, and better ride quality. The evidence is clear that when these conditions are developed, they do result in ridership increase. This evidence and projections derived from experiences to date form a rationale for the Congressional commitment of \$1.9 billion dollars to the Northeast Corridor Improvement Project. They are also one underlying assumption of the present Department of Transportation planning for the Northeast Corridor Improvement Project.

Corridor development scenarios outside the Northeast, as presented in Amtrak's Five Year Plan, represent a new and forward looking concept with very little relationship to many of the broader unrelated issues raised in the GAO report concerning funding and systems operation of Amtrak in the past. The Amtrak position is consistent with the Congressionally approved Criteria and Procedures for Route and Service Decisions. We have assessed the potential of populated corridors to improving service and market; we are taking small steps within resources and in concert with the States to improve service; we do in our studies project several

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possible sequential scenarios of corridor improvements and service for planning that could, with modest investment, induce relative ridership potential in the system. We do not debate with GAO the yet unanswered question of cost/benefit and we have not requested either capital or operating funds for extensive new corridor implementation programs in FY 79/82 plans.

We must note, however, that in recommending to the Congress that the Amtrak route structure be reexamined from a zero base, the Corporation believed that the corridors offer the most promising relative market potential. We feel certain the independent DOT route structure study directed by the Congress will bear this out.

The GAO report fails to comprehend important activity underway. For example, we have urged DOT to assure that the zero based route study also address overall funding formula and consider regional planning concepts including corridor considerations at zero base. Further, the Corporation is undertaking a study of foreign rail subsidy programs and incentive measures in order to be prepared to propose alternative funding options to the Congress in support of a restructured system so as to provide better visibility to the purposes and course of subsidy and the return thereon. We expect the Secretary will, in his deliberations and from public hearings, seek evidence to weigh social benefits and other aspects of the larger questions that relate to U.S. funding support of intermodal transportation generally and in corridors.

The GAO report also fails to properly depict the effect of inflation costs characteristic of all government and private activity these past years. No separation of these costs is made so as to reflect costs, revenue and service relationships over time and into the future. The GAO tends to lump all changes together and provide the most minimal interpretation thereof. For example, as regards the overall national system commentary of the report, no cost analysis of added functions such as the Northeast Corridor operations, maintenance facility acquisitions and growth in train miles has been highlighted in the report so as to help our lawmakers focus on change and growth of Amtrak in context

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with funding and revenue. In this sense, we find the report's analysis to be weak and incomplete, to be generalized, and the key point - scenario examination of Corridor potential - enveloped by unrelated digressions into the overall historical system issues out of context.

Amtrak welcomes a constructive GAO review of the corridor concept - a concept we must repeat is scenario only, provided for the purpose of deliberation, and which does not yet represent a firm transportation policy of Amtrak, the Administration or Congress.

Amtrak, in elaborating the scenarios, has been mindful of the extremely high probability, despite the present day oil glut, that energy shortages and costs within the next few years and their precipitously dangerous impact on a fragile economy in the United States, warrant new thinking in transportation planning to serve the American people. We believe planning must take place now in anticipation of major shifts in transportation dependencies which will take years to bring about. Intercity rail and commuter policy is central. We have expressed our views to the Secretary of Transportation, i.e., that intercity and commuter rail over the longer term from a national perspective will have to be integrated as a service and expanded to provide the American people a way to reach their jobs, to reach their communities, families and leisure time travel needs - and especially in corridors where the ridership densities can be attained which maximize the energy and environmental advantages of the rail mode.

In context with these objectives, the people of the Northeast Corridor - which produces a large part of the country's gross national product - will be provided sound and vastly expanded intercity rail commuter services. We believe the same criteria which prompted Congress to act on the Northeast will come to be applied elsewhere and that capital investment, incrementally applied, will offer the Congress a sound energy efficient alternative investment option.

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In summary, the GAO report fails to place preliminary studies on corridor potential in context with alternative transportation strategies and judges the case on the basis of historical conditions which are not likely to be the same as the future conditions which the Congress must address. GAO's conclusions must therefore be considered as stemming from an incomplete analysis as a result of defining the scope of study too narrowly.

We appreciate the opportunity to formally comment upon the report and the GAO practice of including our response within the printed report.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul", written over a circular scribble.

Paul H. Reistrup
President

PRINCIPAL OFFICIALS OF
THE NATIONAL RAILROAD PASSENGER CORPORATION
RESPONSIBLE FOR ADMINISTERING ACTIVITIES
DISCUSSED IN THIS REPORT

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
PRESIDENT:		
Paul H. Reistrup	Mar. 1975	Present
Rodger Lewis	May 1971	Feb. 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)

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.