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Although the National Railroad Passenger Corporation (Amtrak) was established to be a self-sustaining corporation, the 1977 5-year plan indicated that the Federal Government is now paying for Amtrak's capital expenses and about 60% of its operating expenses. Amtrak's 5-year plan was reviewed from two perspectives: the insight it provides into decisions that the Congress must make in deciding how to fund Amtrak in coming years; and its adequacy as an information source for congressional decisionmaking. **Findings/Conclusions:** In some respects, the 1977 plan is an improvement over past plans. However, the plan should have certain basic characteristics: it should compare actual experience with previous forecasts and should describe changes from the previous year, basic parts of the plan should be integrated with each other, and the plan should discuss alternatives or options if requested funding is not provided or if projections are wrong. Amtrak's current plan cannot be reconciled to prior plans; the revenues, expenses, and capital sections of the plan are not integrated; and the plan does not discuss options available if funding is not provided or projections are wrong. Alternative uses of the 5-year plan involve determining the amount of the Federal subsidy and evaluating Amtrak performance. (RRS)

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STUDY BY THE STAFF OF THE U.S.

# General Accounting Office

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## An Analysis Of Amtrak's Five Year Plan

Amtrak's 5-year plan requests that the Congress increase the Federal operating grant from the \$545 million requested in fiscal year 1978 to \$876 million in 1982, an increase of \$331 million.

This study describes assumptions about inflation and improved efficiency contained in the Amtrak plan. It shows how the Congress can use the plan for making funding decisions and evaluating Amtrak's performance, and suggests ways of improving future 5-year plans.



## PREFACE

Recently, GAO has been looking for new ways to assist congressional committees involved in the budget process by adding to existing sources of information about GAO's work. Our objective is to provide significant and timely information with insights unique to GAO's missions and perspective about matters of current interest and concern. This staff study on the Amtrak Five Year Plan is one product of that effort.

The operating subsidy for Amtrak included in the 1979 United States Budget is \$510 million. This amount is \$103 million less than the \$613 million Amtrak requested for 1979 for services on existing routes. The large gap between Amtrak's request and the budgeted amount makes it likely that the decision on Amtrak funding for 1979 will involve difficult judgments about how much the Federal Government can afford to give Amtrak and what services will be funded.

A major source of information available to the Congress about Amtrak is Amtrak's "Five Year Corporate Plan for Fiscal Years 1978-1982" (5-year plan). This document, submitted to the Congress in October 1977, contains the Corporation's request for funds for 1979. Whatever decisions the Congress makes this year about future Amtrak funding, future 5-year plans will continue to be important sources of information about Amtrak.

This staff study reviews Amtrak's 5-year plan from two perspectives:

- The insight it provides into decisions that the Congress must make in deciding how to fund Amtrak in the coming years.
- Its adequacy as an information source for congressional decisionmaking.

Where appropriate, we supplemented the plan with data provided by Amtrak or from other sources. Given the short time frame in which this analysis was developed, we have not been able to perform additional new research, evaluation, or audit work. We also have not verified information and analyses drawn from non-GAO sources. The contents of this report were discussed with Amtrak officials. Their comments are included where appropriate.

After a brief introduction, chapter 2 discusses the outlook for Amtrak finances contained in the 5-year plan. We believe that Amtrak's concept of a constant dollar Federal operating grant can be broken down into two parts: (1) inflation and (2) the relationship between increases in ridership and increases in expenses excluding inflation. Examples of problems with information in the current 5-year plan that limit its ability to serve congressional needs are discussed in chapter 3. The importance of improving the 5-year plan depends upon how the plan is to be used. Alternative ways of using the plan are discussed in chapter 4.

This staff study supplements work on Amtrak by GAO's Community and Economic Development Division. That Division's ongoing work and recent reports are described in chapter 1.

The problems associated with the revitalization of intercity railroad passenger service are complex. We emphasize that this staff study is not a formal GAO position statement. It reflects a variety of viewpoints and discusses issues for which there are no simple, straightforward answers. We hope that it will prove useful to the Congress in considering future legislation and making budget decisions. This study was prepared by our Transportation Analysis Group with the advice and support of our Program Information Group.

Any questions you may have regarding this study should be directed to Roger Sperry, Assistant Director, on (202) 275-1907, or to Stephen Swaim or Rodney Hobbs on (202) 275-1551. Questions regarding other GAO work about Amtrak should be directed to Herbert McLure at (202) 426-1735.

We appreciate the cooperation and assistance of all those persons and groups both inside and outside of GAO that made this study possible.



Harry S. Havens  
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## CHAPTER 1

### INTRODUCTION

#### WHAT THIS REPORT IS ABOUT

The Congress and others have expressed concern about the increasing financial deficits of the National Railroad Passenger Corporation (Amtrak). Although Amtrak was established to be a self-sustaining corporation, the 1977 5-year plan indicates that the Federal Government is now paying for Amtrak's capital expenses and about 60 percent of its operating expenses. The Federal Government will apparently continue to absorb Amtrak's deficits. The operating subsidy provided by the Congress for fiscal year 1978 and the supplemental appropriation have been matters of considerable concern and controversy.

The controversy over Amtrak subsidies is likely to continue. Because Amtrak did not receive all of its 1978 budget request, it may seek a second 1978 supplemental appropriation to avoid eliminating current routes or service levels. In addition, the \$510 million included in the President's budget for fiscal year 1979 is much less than the \$613 million the Corporation's recently submitted 5-year plan said would be needed. According to this 5-year plan, the Congress can expect Amtrak's appropriation requests for operating expenses to increase each year to \$875.8 million in fiscal year 1982.

Federal support for Amtrak operating costs is also increasing on a per-passenger basis. The \$25.14 operating subsidy per passenger in 1977 was an increase of about \$6 (or 32 percent) from the prior year (primarily because of the Northeast Corridor takeover) and more than double the 1973 subsidy.

Faced with rising Amtrak deficits and appropriation requests, and the Administration's desire to hold the line on Federal support for operating expenses, the Congress faces a dilemma it must address in this year's budget process.

This report presents alternative uses for the 5-year plan, including its potential use for controlling Amtrak's costs. It is based on an analysis of information about Amtrak's financial outlook contained in the Amtrak 5-year plan submitted to the Congress in October 1977. Although Amtrak authorizations and budget requests tend to focus most directly on the coming year or two, the outlook through 1982 contained

in the plan can be helpful for evaluating future appropriation requests.

### SCOPE OF REVIEW

This report presents the results of a special analysis of several aspects of Amtrak financing that was performed over a 3-month period. We primarily used Amtrak's 1977 "Five Year Corporate Plan For Fiscal Years 1978-1982" for our analysis and compared it to prior Amtrak 5-year plans. In addition, we analyzed Amtrak's annual financial reports, the Interstate Commerce Commission's report on the effectiveness of the Rail Passenger Service Act of 1970, the Federal Railroad Administration's report on Amtrak's 1976 5-year plan, various congressional documents pertaining to Amtrak, and several GAO reports on Amtrak.

We reviewed Amtrak's 5-year plan from two perspectives:

1. The insight it provides into decisions that the Congress must make in deciding how to fund Amtrak in the coming years.
2. Its adequacy as an information source for congressional decisionmaking.

Our analysis concentrated on the relationship between total revenues, expenses, and passengers as presented in the plan. We did not make any assessment of individual routes.

### RELATIONSHIP OF THIS REPORT TO OTHER GAO WORK

This report can be viewed in part as an updating of the previous GAO report, "How Much Federal Subsidy Will Amtrak Need?" (RED-76-97, Apr. 21, 1976), which was based on an analysis of the 1975 Amtrak 5-year plan. We have also undertaken work not covered in this report that goes more thoroughly into selected areas of Amtrak's operations than both this and the previous report on the 5-year plan. In response to two congressional requests, work is underway to examine Amtrak's cost allocation system, which is the basis of Amtrak's estimates of avoidable and unavoidable costs.

Two previously issued reports that discuss major areas of Amtrak expenses are:

- "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).



## CHAPTER 2

### OUTLOOK FOR THE AMTRAK SUBSIDY

#### IN THE 5-YEAR PLAN

The Amtrak 5-year plan assumes that the entire \$545 million authorized for fiscal year 1978 will eventually be appropriated. That figure is \$39 million more than the amount which the Congress has thus far appropriated for that year. The 5-year plan then anticipates that the annual Federal operating subsidy will increase to \$875.8 million in 1982. This 4-year, 61-percent increase of \$330.8 million represents an average annual rate of growth in the Federal subsidy of more than 12 percent. This chapter analyzes three interrelated concepts that help to explain the outlook for the Federal subsidy in the 5-year plan. They are:

- Amtrak's concept of a constant dollar Federal operating grant.
- Inflation.
- Change in the relationship between increases in ridership and increases in expenses.

#### AMTRAK'S CONCEPT OF A CONSTANT DOLLAR FEDERAL OPERATING GRANT

Amtrak correctly describes inflation as a major factor leading to continual increases in the projected annual Federal operating grants. We believe, however, that Amtrak's use of the term "constant dollar Federal operating grant" is subject to misinterpretation and tends to overstate the amount of increase in Federal subsidy attributable to inflation alone. In normal usage, a "constant dollar Federal operating grant" would mean a funding level adjusted annually by some index of inflation, such as the Consumer Price Index. Amtrak uses the term in quite a different sense.

Amtrak uses the term to mean a grant (or subsidy) covering the gap between revenues and expenses. The difference of \$330.8 million is attributed by Amtrak in the plan to inflation. It includes, however, significantly different rates of inflation applied to revenues and expenses, and a significant increase in expenses exclusive of

inflation is also included in the expenses financed by the Federal operating grant. This increase in expenses is for new and improved services not attributable to inflation, and represents a 20-percent (\$182.5 million) increase over the 1978 cost base of \$897.9 million. Table 2-2 on page 7 shows how this increase is derived.

In acting on Amtrak funding requests, the Congress needs to know why more funds are needed. We think the Congress could more easily examine its alternatives if the 5-year plan first showed revenues, expenses, and subsidy projections on the assumption that there would be no increase in the level of constant dollar expenses above that available for 1978. This presentation would enable the Congress to focus separately on the factors critical to Amtrak finances that are now intermingled in the Amtrak presentation.

Although the rationale for the Federal operating grant can be described in different ways, in practice the grant (or subsidy) is the difference between revenues and expenses. In table 2-1 we have arranged information from the 5-year plan to show inflation, increased services, and changes to operating costs on the current system, which account for increases in operating expenses. Offset against expenses are increases in revenues caused by new passengers and fare increases. The difference is the Federal subsidy. In table 2-2, we show the annual increases and the total increases over the 1978 base year.

### INFLATION

If Amtrak presented its 5-year plan by demonstrating the revenue, expense, and subsidy increases over the 1978 base, the impact of inflation on the Amtrak budget would be clearer. As shown in tables 2-1 and 2-2, inflation in the 5-year plan is actually composed of three elements:

	(millions)
Wage and price increases on 1978 base	\$334.4
Wage and price increases for additional expenses on the current system	22.8
Interest and taxes (considered to be inflation by Amtrak for its computations)	<u>16.5</u>
	<u>\$373.7</u>

If Amtrak ridership as well as constant dollar expenses remain at the 1978 level, the assumptions in the plan result

Table 2-1

Annual Increases in Amtrak Expenses, Revenues, and  
Federal Subsidy Forecast in 5-Year Plan, 1978-82

<u>Expenses</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
	----- (millions) -----				
1978 Base	\$897.9	\$897.9	\$897.9	\$897.9	\$897.9
Items not requiring appropriation (note a)	45.5	56.0	69.0	85.0	103.0
Wage and price increases and net changes due to taxes and interest (current system)(note b)	-	86.1	167.2	263.9	373.7
Increase in other expenses for current system	-	32.3	38.0	47.1	57.7
Net deficit for service change	---	---	<u>20.1</u>	<u>61.8</u>	<u>124.8</u>
Total expenses	943.4	1,072.3	1,192.2	1,355.7	1,557.1
Deduct items not requiring appropriation	<u>45.5</u>	<u>56.0</u>	<u>69.0</u>	<u>85.0</u>	<u>103.0</u>
Total expenses requiring outlays	<u>897.9</u>	<u>1,016.3</u>	<u>1,123.2</u>	<u>1,270.7</u>	<u>1,454.1</u>
<u>Revenues</u>					
1978 Base	352.9	352.9	352.9	352.9	352.9
Increases due to fare increases	-	18.1	38.6	64.4	95.4
Increases due to new passengers on current system	---	<u>32.3</u>	<u>53.5</u>	<u>88.4</u>	<u>130.0</u>
Total revenues	<u>352.9</u>	<u>403.3</u>	<u>445.0</u>	<u>505.7</u>	<u>578.3</u>
Difference between expenses and revenues is operating subsidy	<u>\$545.0</u>	<u>\$613.0</u>	<u>\$678.2</u>	<u>\$765.0</u>	<u>\$875.8</u>
a/Represents depreciation primarily.					
b/Composed of the following elements:					
Wage and price increases on 1978 base		\$71.1	\$144.7	\$233.5	\$334.4
Interest and taxes		12.2	15.9	17.3	16.5
Wage and price increase for expense increases on current system		<u>2.8</u>	<u>6.6</u>	<u>13.1</u>	<u>22.8</u>
Total		<u>\$86.1</u>	<u>\$167.2</u>	<u>\$263.9</u>	<u>\$373.7</u>

**Table 2-2**  
**Annual Increases in Amtrak Expenses, Revenues, and**  
**Federal Subsidy Forecast in 5-Year Plan, 1978-82**

	Increase in 1979 over 1978	Increase in 1980 over 1979	Increase in 1981 over 1980	Increase in 1982 over 1981	Total increases over 1978
<b>Expenses</b>					
Increase in expenses for current system, excluding depreciation and inflation	\$ 32.3	\$ 5.7	\$ 9.1	\$ 10.6	\$ 57.7
Wage and price increases, and net change due to taxes and interest (note a)	86.1	81.1	96.7	109.8	373.7
Net deficit for service change	-	20.1	41.7	63.0	124.8
<b>Total expenses</b>	<b>118.4</b>	<b>106.9</b>	<b>147.5</b>	<b>183.4</b>	<b>b/556.2</b>
<b>Revenues</b>					
Increases due to fare increases, 1978 base	18.1	20.5	25.8	31.0	95.4
Increases due to new passengers on current system	32.3	21.2	34.9	41.6	130.0
<b>Total revenues</b>	<b>50.4</b>	<b>41.7</b>	<b>60.7</b>	<b>72.6</b>	<b>225.4</b>
Federal subsidy, total (note c)	\$ 68.0	\$ 65.2	\$ 86.8	\$ 110.8	\$ 330.8
<b>a/Composed of the following elements:</b>					
Wage and price increase over 1978 base	\$71.1	\$73.6	\$88.8	\$100.9	\$334.4
Interest and taxes	12.2	3.7	1.4	-.8	16.5
Wage and price increase for expense increases on current system	2.8	3.8	6.5	9.7	22.8
<b>Total</b>	<b>86.1</b>	<b>81.1</b>	<b>96.7</b>	<b>109.8</b>	<b>373.7</b>

**b/**Total increases in expenses, excluding inflation, are \$182.5 million. Increases on the current system total \$57.7 million, and \$124.8 million has been projected as the net deficit from new services which may be added.

**c/**Federal subsidy represents the difference between expenses and revenues.

in a tendency for inflation alone to increase the Federal operating subsidy by about 10 percent annually. 1/ This occurs because:

--Labor and other expenses essential to providing rail passenger service are projected in the plan to increase by about 8.7 percent per year, a rate almost 3 percent higher than the rate of inflation for the economy as a whole.

--Revenues, which offset only about 37 percent of total expenses, increase by about 5.9 percent per year. 2/

If the Amtrak system is to remain at its present size, the options available to limit the increases in subsidy due to inflation are to (1) assure that fares are raised as much as possible (but this affects ridership), (2) limit wage and salary increases (now largely out of Amtrak's control, since most labor contracts are the result of negotiations involving the entire railroad industry), or (3) seek gains in efficiency (discussed in the following sections). If these measures for attempting to control inflation are not successful, however, the Congress will have to decide every year between appropriating larger amounts, agreeing to reduced services, or both.

Reducing the size of the Amtrak system will reduce the amount of Federal subsidy needed in the future. However, reducing the size of the system will not change the tendency for that portion of the Amtrak subsidy attributable to inflation to increase each year faster than the Consumer Price Index. This is because of wage and price agreements, and because fare increases are held at competitive levels. Even with a smaller system, efforts to control costs and improve efficiency will be needed to control increases in the deficit.

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1/This percentage was calculated by deducting increases due to fare increases from the 1978 wage and price base, and dividing by the assumed appropriation of \$545 million for 1978.

2/The plan assumes fares will rise at about the same rate as the Consumer Price Index.

CHANGE IN THE RELATIONSHIP  
BETWEEN INCREASES IN RIDERSHIP  
AND INCREASES IN EXPENSES

The Amtrak 5-year plan states that "a key element of the financial plan is the financing of new programs and service improvements through additional revenues generated by increased ridership." Although the plan notes that "quantum improvements [in efficiency] are difficult to achieve," the change in the relationship between increases in ridership and increases in expenses (excluding expenses associated with inflation) that the plan forecasts appears to represent a significant change from Amtrak experience.

To illustrate the extent to which the 5-year plan suggests that efficiency gains (the relationship between expenses and revenues) in the future will be different from the past, we have compared Amtrak's actual experience from 1973 to 1977 with the plan forecast for 1977 to 1982. To facilitate these comparisons, we have estimated expenses for 1973 to 1977 in the approximate 1978 constant dollars used in the 1977 plan. (See app. I for a summary of statistics on passengers, revenues, and expenses.) The change between the relationship of ridership to total costs is shown in the table below.

Table 2-3

Five-Year Plan Projections of Expenses and Ridership  
on the Current System Compared to Actual Experience

From 1973 to 1977

	<u>Percentage change in ridership</u>	<u>Percentage change in constant dollar expenses</u>
	<u>Actual change per year</u>	
1973-74	18.6	25.7
1974-75	-6.4	12.1
1975-76	11.8	10.2
1976-77	6.7	9.2
Total change for the 4-year period 1973-77	32	70
	<u>Projected change per year</u>	
1977-78	6.8	6.1
1978-79	3.9	5.8
1979-80	3.8	2.2
1980-81	9.5	2.6
1981-82	9.1	2.6
Total change for the 5-year period 1977-82	38	21

The 38-percent increase in passengers from 1977 to 1982 now forecast by Amtrak is a rate slightly above that which actually occurred between 1973 and 1977. On the other hand, the percentage increase in constant dollar expenses is projected to be only about half the percentage increase in riders. In the past, however, the percentage increase in expenses was over twice as much as the percentage increase in riders. This indicates a forthcoming change in the expense and ridership relationship.

The change in the relationship could simply reflect a tendency to overestimate revenues and underestimate costs in a 5-year plan. On the other hand, there are legitimate reasons why Amtrak cost characteristics could achieve the goals indicated. If investments in equipment, track, and stations are now about complete, it would be possible to begin experiencing efficiency gains (slower cost growth).

Amtrak officials believe the forecast change in the relationship between ridership and expenses is reasonable. They point out that the large increases in the past were necessary to build up to the current route and service system. In the next 5 years, the forecast expenses will be incurred because of the takeover of the Northeast Corridor; right-of-way maintenance; and increases in depreciation, taxes, and insurance.

Amtrak officials also point out that their system of forecasting expenses and ridership has improved, and they believe their ridership projections are now on the conservative side. For example, they note that actual ridership in 1977 was higher than they projected a year earlier.

From our analysis of the 5-year plan, we were able to discuss the implications of assumptions about ridership and expenses. Our analysis did not, however, provide the basis for an independent evaluation of Amtrak's projections. As described in the next chapter, we believe that certain improvements to the 5-year plan would increase confidence in the reliability of Amtrak's forecasts.



## CHAPTER 3

### AMTRAK'S 1977 5-YEAR PLAN

Amtrak's 5-year plan is the only formal budgetary document prepared by the Corporation detailing its future course for operations and development. The plan is submitted by law directly to the Congress even though Amtrak funds are included in the budget of the Department of Transportation. 3/

In some respects, the 1977 plan is an improvement over past plans. For example, ridership projections are more realistic than the 1975 plan that we reviewed. There are, however, several major problems with the plan that we believe impair its usefulness as a decisionmaking document.

To provide evidence to support major assumptions that have been made about projections of Amtrak finances and the amount of the Federal subsidy, we believe Amtrak's 5-year plan should have certain basic characteristics:

- The plan should compare actual experience with previous forecasts and should describe changes from the previous year.
- Basic parts of the plan should be integrated with each other.
- The plan should discuss alternatives or options if requested funding is not provided or projections are wrong.

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3/As part of the overall budgeting process for executive agencies, the Congressional Budget Act of 1974 (Public Law 93-344, sec. 603) requires agencies to prepare long-range (usually 5-year) financial projections of their operations for the Office of Management and Budget. Because Federal assistance to Amtrak is channeled through the Department of Transportation, long-range financial projections are required of Amtrak. Normally, the long-range projections are not made part of the official budget submissions to the Congress. Section 601(b) of the Rail Passenger Service Act of 1970, as amended, requires, however, that Amtrak submit such long-range plans directly to the Congress at the same time they are submitted to the Department of Transportation and the Office of Management and Budget.

We believe these characteristics would enable the Congress to decide whether past subsidies are providing a reasonable return and whether requested funding levels should be provided. Unfortunately, our examination of the current 5-year plan indicated that it was deficient in these areas.

**AMTRAK'S CURRENT PLAN CANNOT  
BE RECONCILED TO PRIOR PLANS**

1. Amtrak's 5-year plan cannot be readily reconciled to prior plans. Each plan, including the current one, represents a new start which addresses the budget year and the next 4 years. The plan does not build from prior plans. Neither variances in projections and actual year-to-year data nor changes in underlying assumptions and strategies are explained. For example, Amtrak's 1976 and 1977 5-year plans made the following projections for total operating and corporate expenses.

	<u>1976 plan</u>	<u>1977 plan</u>	<u>Increase over prior plan</u>	<u>Increase in dollars</u>
	(millions)		(percent)	(millions)
1977	\$ 814.0	\$ 821.7	1	\$ 7.7
1978	906.6	943.4	4	36.8
1979	969.0	1,072.3	11	103.3
1980	1,030.1	1,172.1	14	142.0
1981	1,094.9	1,293.9	18	199.0
1982	-	1,432.3	-	-
<b>Total</b>				<b><u>\$488.8</u></b>

As shown above, the 5-year plan in 1977 leaves an unexplained \$488.8 million increase in projected costs from the 1976 to the 1977 plans. Both plans were forecast in current dollars; therefore, inflation is included in the projections. Amtrak's plan does not explain what has happened in 1 year's time to cause such a large increase in projected costs. This information would be useful to those who must make these comparisons from year to year for the appropriations process.

2. The route-by-route profit and loss tables have been re-configured with each plan. Early plans showed corridor, short

distance, long distance, international, and new routes in separate categories. Each subsequent plan has regrouped the routes, so a comparison of revenue and cost growth for the various route categories back to the original Amtrak system cannot be made. Thus, ascertaining the performance of various types of routes from the plan is difficult.

3. Commonly used transportation statistics, such as revenue passenger miles, and load factors for each route, were not provided in both the 1976 and 1977 plans. Amtrak collects revenue passenger mile data and is developing a method for forecasting load factor statistics. These statistical indicators would aid in analyzing the performance of individual routes.

4. The plan does not compare current constant dollar costs to earlier years, nor does it provide conversion factors or other data needed to analyze the effect of inflation on Amtrak. (See ch. 2.)

5. The 1976 plan projected productivity improvements of \$10 million per year from 1978 through 1981. The 1977 plan revised productivity improvement projections downward to \$7.1 million in 1979, \$7.2 million in 1980, \$7.3 million in 1981, and \$7.4 million in 1982; and did not address the 1976 goal of \$10 million from the 1976 plan. Why the projections have been revised downward for these years is not explained.

6. Amtrak's 5-year plans were described as being "fully integrated." Under this concept, marketing forecasts were used to determine the number of passengers for each fiscal year, the cost of operating the system for these passengers, and ultimately the number of train cars and locomotives necessary to carry these passengers. Since 1974, the projected passenger levels have become more conservative, as shown in the following table.

<u>Plan</u>	Projected passenger level for <u>1979</u>  (millions)
1974	37.0
1975	29.2
1976	20.6
1977	21.3

Although the projected passenger levels have become more conservative, equipment purchases and operating costs other than inflation have increased. It would appear that as the number of passengers decreases, the cost of transporting them would also decrease, and equipment orders would decrease because a smaller fleet would be needed. Because Amtrak does not reconcile information in the current plan to prior 5-year plans, it is difficult to ascertain just what has happened.

REVENUES, EXPENSES, AND CAPITAL SECTIONS  
OF THE PLAN ARE NOT INTEGRATED

Amtrak's 5-year plan for 1977 contains three key sections --revenues, costs, and capital programs--that are logically dependent upon each other in order to meet the "bottom-line" appropriation needs each year. The plan does not, however, clearly show how each section relates to the others. The following paragraphs illustrate the difficulty of comparing various sections of the plan.

1. It is difficult to reconcile several of the statements about Amtrak cost characteristics. For example, Amtrak forecasts a 14-percent reduction in employment (6 percent in 1978 and 2 percent for each of the following years). According to Amtrak's 1976 Annual Report, labor accounts for 60 percent of all costs. One would assume, therefore, that a reduction in employment would result in lower constant dollar costs. The plan is not clear as to where the reductions will occur, nor does it show the effect on total costs.

2. The effect of new equipment purchases on operating costs is not clearly explained in the plan. One of Amtrak's justifications in earlier 5-year plans for new equipment was the reduced maintenance costs. Rather than decreasing as more and more new equipment is delivered, the maintenance costs for equipment are increasing. Amtrak's current plan shows a \$1.3 million decrease in equipment maintenance costs--in 1980 only. In the other 4 years, the maintenance cost will increase a total of \$14.6 million over the 1977 level. Reasons for the increases are not given in the plan. Amtrak officials believe, however, that maintenance costs will decline once the older equipment is replaced.

3. Amtrak appears to be relying heavily on new equipment to realize projected ridership gains, but the current plan does not demonstrate the effect new equipment has had on ridership thus far. It does state that marketing research has indicated that new equipment can increase

ridership by 31 percent; however, the plan does not explain how or where this occurred or its potential impact on future ridership.

Amtrak has two routes that have had new equipment long enough for the impact on ridership to be adequately measured-- Chicago to Detroit and Chicago to St. Louis. Both the Federal Railroad Administration and GAO have analyzed these routes and concluded that new equipment has had little net effect on the routes. The Federal Railroad Administration made its analysis as part of a review of the 1976 5-year plan. 4/ We reviewed these routes in our analysis of the 1975 5-year plan. 5/

4. The Amtrak plan does not demonstrate to what extent increases in expenses (on a constant dollar basis) are necessary to obtain increases in ridership. Increases in population along Amtrak routes, which Amtrak says will increase ridership, have little if any relationship to improvements in Amtrak services. Increases in frequency of train service may, as the plan states, increase ridership. However, there will be an accompanying increase in operating costs, which is not specifically addressed in the plan.

THE PLAN DOES NOT DISCUSS OPTIONS  
AVAILABLE IF FUNDING IS NOT PROVIDED  
OR PROJECTIONS ARE WRONG

1. In a general way the current plan describes several alternative financing strategies that the Congress could adopt. The plan does not, however, specify which routes or services would be abandoned if the Congress failed to provide requested funding. Amtrak officials told us their route profitability system cannot identify routes which would have to be cut in the future, therefore they do not believe our suggestion is feasible.

2. Although the plan refers to a process of "trading up," whereby some existing services can be discontinued in favor of more profitable services, the proposed changes are not identified.

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4/Federal Railroad Administration letter to Amtrak Vice President for Executive Planning, November 1, 1976, regarding the 1976 5-year plan.

5/"How Much Federal Subsidy will Amtrak Need?" (RED-76-97, Apr. 21, 1976).

3. It is unrealistic to expect Amtrak projections to work out exactly. The plan does not, however, indicate the changes Amtrak would make if expenses turn out higher or revenues lower than forecast.

4. Amtrak's current plan indicates that new services will be possible in 1980, 1981, and 1982. A total of \$206.7 million <sup>6/</sup> has been identified in the plan as a "service change." Amtrak, however, has not discussed the components of this figure to identify specific routes or associated revenues and costs. Without this explanation, the \$206.7 million represents excess funds or a contingency for those years.

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Amtrak officials point out that their planning ability has improved with each plan. Because of improved methods of forecasting and internal support, the plans submitted in 1976 and 1977 are quite different in content and generally more conservative than those submitted in 1973, 1974, and 1975.

We believe the usefulness of future 5-year plans would be enhanced if they were changed to meet the criteria that we identified at the beginning of this chapter.

As discussed in the following chapter, however, the way in which the Congress intends to use the 5-year plan should also be an important factor to be considered in making changes to the plan.

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<sup>6/</sup>This represents the change in service line item shown in tables 2-1 and 2-2, specifically (in millions) \$20.1 in 1980, \$61.8 in 1981, and \$124.8 in 1982.

## CHAPTER 4

### ALTERNATIVE USES OF THE 5-YEAR PLAN

Amtrak's 5-year plan can be used simply to supplement other information (such as testimony at hearings) that the Congress receives about Amtrak. As discussed in this chapter, the plan can also be used for determining the amount of Federal subsidy needed and for evaluating Amtrak's performance.

#### DETERMINING THE AMOUNT OF THE FEDERAL SUBSIDY

The Congress could decide to use the current 5-year plan as the basis for determining the amount of Federal subsidy. If Amtrak is held accountable to the current plan, two funding levels for the current system are provided in the plan. One permits new services; the other does not. The Congress also could reduce subsidy levels below the amounts in the plan. Our analysis indicates this could result in greater appropriations to maintain the current system. The following sections discuss both alternatives.

#### Holding Amtrak accountable to its plan

Amtrak's current 5-year plan could be used as the basis for appropriations through 1982. In transmitting the 5-year plan to the President and the Congress, the President of Amtrak stated:

"Amtrak is confident that, given the market potential and the demonstrated effect of new equipment coupled with frequency and scheduling adjustments, it can operate during the next years within the constant-dollar FY 1978 appropriations level."

If the Congress accepts Amtrak's position and thereby limits future appropriations to the amounts set forth in the plan, the funding through 1982 would be as shown below. This funding level assumes that service improvements can be made within this funding level; however, specific improvements are not identified. If the Congress restricted Amtrak funding to service on the current system only, appropriations could be reduced, according to the plan, to the levels shown below.

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
	------(millions)-----				
Subsidy with allowance for service improvements	\$545.0	\$613.0	\$678.2	\$765.0	\$875.8
Subsidy for current system only	<u>545.0</u>	<u>613.0</u>	<u>658.1</u>	<u>703.2</u>	<u>751.0</u>
Difference	<u>0</u>	<u>0</u>	<u>\$ 20.1</u>	<u>\$ 61.8</u>	<u>\$124.8</u>

Holding Amtrak accountable for achieving the goals in the 5-year plan involves a firm congressional commitment to limit all future appropriations to the 1977 5-year plan estimates. An adjustment to fiscal year 1978 funding may be required because the Congress has not appropriated all of the \$545 million requested for this year. An authorization of \$613 million would be provided in 1979 and the amount would increase annually to \$875.8 million in 1982. Because inflation (as defined by Amtrak) is already included in the estimates, the appropriation for any year after 1978 would have to be increased only if the rate of inflation actually experienced in the economy exceeds the annual estimates in the current 5-year plan. This approach would make clear the congressional intent of holding Amtrak accountable for meeting its 1977 projections. 7/

A possible consequence of this approach would be cutting services or routes if the 1977 plan's cost and revenue projections are not met. As discussed in chapter 2, the plan forecasts a relatively large increase in ridership on the current system with relatively modest increases in expenses. If these efficiency gains are not fully realized, deficits on the current system will tend to be larger than projected. Cutbacks in service or deferral of service improvements would be needed to stay within the funding limitation.

As part of this approach, the Congress might consider establishing procedures in advance as to how it wants to participate in route and service realignment decisions,

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7/It should be noted that GAO is not necessarily advocating this approach.



if Amtrak does not meet its goals. The Congress might also want to specify procedures to be followed if Amtrak exceeds its goals.

If the Congress provides appropriations for the period covered by the plan in the amounts requested, Amtrak's future updates of the plan would have to be tied directly to the amounts and assumptions used in the 1977 plan. Any changes from the base plan should be clearly identified and justified in future 5-year plans.

### Reducing the Federal operating subsidy

The only alternatives for Federal funding of Amtrak presented in detail in the 5-year plan are the two described in our chart on the preceding page. Although the plan mentions two alternatives that would involve lower Federal operating subsidies through 1982, it makes no detailed analysis of the ridership and service implications of these alternatives. 8/ In future years, the Congress could improve the usefulness of the 5-year plan by specifying in advance the alternatives it would like discussed in the plan.

Although the 5-year plan does not fully analyze alternatives for reducing the Federal operating subsidy, it does contain information that is very significant if the Congress wants to retain existing routes while reducing subsidy levels below the amounts in the plan. According to the figures in the Amtrak plan, if the Congress wants to keep the current system, it would cost the Federal Government more to hold Amtrak to its 1978 level of expenses (in constant dollars) than to permit Amtrak to increase its expenses as set forth in the plan.

This apparent contradiction--that it would cost the Federal Government more to hold the line on expenses than to permit Amtrak to improve the current system--results from an Amtrak assumption in the plan that is implied but not discussed. Amtrak assumes that increases in ridership can be obtained only through increases in expenses.

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One alternative would provide for decreasing the operating subsidy requirement when revenue increases exceed cost increases on a constant dollar basis. The other alternative would require that wage and price increases be "absorbed" by increased revenues or reduced service (routes or frequencies).

Accepting this assumption (which Amtrak officials believe is reasonable), the effect on the Federal operating subsidy levels discussed in the current 5-year plan would be as follows. If expenses (in constant dollars) are held to the 1978 level and projected revenues are adjusted to remove the effect of inflation (fare increases), the net result would be a Federal subsidy level of \$800.5 million <sup>9/</sup> in 1982, rather than the \$751 million shown in the plan for the current system. This represents a \$255.5 million increase over the 1978 base of \$545 million, rather than \$206 million as shown in the plan.

The implications of this calculation are clear, according to Amtrak officials: (1) The efficiency gains projected in the current plan will have to be achieved in order for revenues to grow faster than expenses (see table 2-3, p. 10), thus reversing the past trend, and (2) if the current 5-year plan is used as the basis for future appropriations, any attempts to reduce expenses on the current system will require greater appropriations. The only option for cutting expenses and appropriations would, therefore, be to eliminate entire routes.

#### EVALUATING AMTRAK PERFORMANCE

If Amtrak were a self-sustaining corporation not requiring annual Federal operating grants, Amtrak's need to finance expenses from revenues would probably be sufficient incentive to assure that Amtrak services were being provided as efficiently as possible. Since it now appears impossible that the current system can be operated anywhere near the break-even point, some method for regularly evaluating Amtrak performance would be desirable to assure that Federal funds are being used efficiently. The 5-year plan can be used by the Congress as a key element for evaluating Amtrak's performance.

Using the 5-year plan to help evaluate Amtrak's performance requires that passenger, revenue, and expense projections in the plan be used as the basis for comparing

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<sup>9/</sup>In tables 2-1 and 2-2, (pp. 6 and 7), inflation for the current system (including taxes and interest) totals \$350.9 million. When the effect of fare increases on revenues is removed (\$95.4 million), the net increase is \$255.5 million. If this is added to the \$545 million base, the subsidy becomes \$800.5 million to "hold the line" on the current system.

planned versus actual performance. For example, the current 5-year plan states that labor productivity will improve substantially. Between 1978 and 1982 employment is scheduled to decline but ridership is forecast to rise by 38 percent. Information included annually in the 5-year plan could show whether Amtrak has achieved its goals, such as for productivity, and could explain why experience varied from forecasts. By requiring that information be reported systematically, the Congress can establish a more solid basis for evaluating Amtrak performance than presently exists.

AMTRAK PROFILEAmtrak Operating Expenses

	<u>Actual current dollars (note a)</u>	<u>Constant 1978 dollars (note b)</u>
	(millions)	
1973	\$ 319.1	\$ 524.0
1974	438.0	658.6
1975	559.8	738.5
1976	<u>c/692.0</u>	814.1
1976 transition	-	-
1977	821.7	888.8
	<u>Projected in plan</u>	
1978	943.4	<u>d/943.4</u>
1979	1,072.3	998.4
1980	1,172.1	1,020.8
1981	1,293.9	1,047.3
1982	1,432.3	1,075.1

a/Operating expenses for 1973-77 are actual current dollars; 1978-82 are projected current dollars from Amtrak's 5-year plan and allow for inflation.

b/We estimated constant dollar cost figures for 1973-76 on the assumption that the rate of increase in Amtrak costs was 3 percent higher than the rate of increase in the Consumer Price Index for each of these years. We have applied to the past the approximate relationship between inflation and the Consumer Price Index that Amtrak forecasts for 1977-82.

c/Represents an average of fiscal year 1976 and the 1976 transition period.

d/The operating expenses for the period 1978-82 are the projections from Amtrak's 1977 5-year plan in constant 1978 dollars.

Operating Grants

	<u>Actual</u>	(millions)
1971		<u>a/\$</u> 40.0
1972		170.0
1973		9.1
1974		140.0
1975		276.0
1976		328.8
1976 transition		99.7
1977		482.6

Projected in plan

1978	545.0
1979	613.0
1980	678.2
1981	765.0
1982	875.8

a/\$197 million in railroad capital payments was also applied to operating expenses in fiscal years 1971-74.

RevenuesActual

(millions)

1972	a/\$152.7
1973	177.3
1974	240.1
1975	246.5
1976	268.0
1976 transition	77.5
1977	306.7

Projected in plan

1978	352.9
1979	403.3
1980	445.0
1981	505.7
1982	578.3

a/These figures were taken from Amtrak's financial statements and were not verified.

Capital Program

	<u>Guaranteed loan authority</u>	<u>Direct capital grants</u>
	(millions)	
	<u>Actual</u>	
1971 (initial funding)	\$100.0	\$ -
1972-73	100.0	-
1974	300.0	-
1975	400.0	-
1976	-	114.2
1976 transition	-	25.0
1977	-	93.1
	<u>Projected in plan</u>	
1978	-	134.8
1979	-	341.4
1980	-	293.4
1981	-	139.5
1982	-	144.4

PassengersActual

(millions)

1973	14.5
1974	17.2
1975	16.1
1976	18.0
1977	19.2

Projected in plan

1978	20.5
1979	21.3
1980	22.1
1981	24.2
1982	26.4