Summary Report

on the Independent Assessment of Amtrak’s Financial Needs through Fiscal Year 2002

Office of Inspector General

U.S. Department of Transportation

Report No. TR-1999-027
November 23, 1998
November 23, 1998

The Honorable Rodney E. Slater
Secretary of Transportation
Washington, DC 20590

Dear Mr. Secretary:

Please find enclosed the Summary Report of the Independent Assessment of Amtrak’s Financial Needs through Fiscal Year 2002. The Summary Report includes the Executive Summary and the Summary and Conclusions with the detailed analyses to follow in a separate volume.

The Summary Report will be available to the public on December 1, 1998. By December 7, you will receive the detailed analyses underlying the Summary Report. Because this supporting document contains information that is business sensitive and proprietary to Amtrak, it will have limited distribution: to you; the Amtrak Reform Council; the Senate Committee on Commerce, Science, and Transportation; the Senate Committee on Appropriations; the House Committee on Transportation and Infrastructure; the House Committee on Appropriations; Amtrak Management; and the Amtrak Reform Board.

The assessment reviewed the plans and actions identified in Amtrak’s March 1998 Strategic Business Plan and has not incorporated any changes subsequently approved by the new Amtrak Board of Directors.

The week of November 16, we briefed the Amtrak Board of Directors, representatives of the Amtrak Reform Council, and congressional staff on the results of the assessment. The Board indicated that actions already taken will eliminate at least $390 million of the $823 million of at-risk revenues and cost reductions cited in this report. The Board also expressed concerns with the assessment’s reduction to Amtrak’s projected high-speed rail revenues in the Northeast Corridor. (A copy of the Board’s letter addressing their concerns with the assessment and the actions already taken is included as an appendix to the Summary Report.) We agree that marketing and promotion can play a significant role in the revenues realized from a new service such as high-speed rail, and hope
that the Board's view that such activities would mitigate our restatement proves to be accurate.

The Amtrak Reform and Accountability Act requires us to assess Amtrak's 1999 Strategic Business Plan. We have taken note of the Amtrak Board's observations and concerns, and will address their validity during the next phase of our congressional mandate. Our report on the 1999 plan will identify any risks associated with Amtrak's planned actions and, where appropriate, restate Amtrak's projected revenues and expenses. By the time of the 1999 assessment, there should be some early indications as to whether actions taken by the Board are having their desired effects on revenues and cost reduction. This report will be available in the spring of 1999.

Amtrak's ability to achieve its goal of self-sufficiency from Federal operating subsidies by 2003 will rest on the ability of Amtrak to respond when revenue projections and anticipated cost reductions do not materialize. We are encouraged that Amtrak exceeded its 1998 goals. We remain concerned, however, that Amtrak's operating loss grew by $61 million between 1997 and 1998 to $823 million.

Amtrak's projected funds available for capital investment in its March 1998 plan are less than all forecasts of its needs through 2003. Therefore, it is of vital importance that Amtrak address the high-risk elements of its plan that are identified in this report. For every dollar that Amtrak's loss is reduced, an additional dollar can be applied to Amtrak's capital investment needs.

We very much appreciate the cooperation received from Amtrak and the professionalism of Amtrak's senior staff throughout all phases of the assessment. If you have any questions concerning the enclosed report or the more detailed volumes describing the analyses, please call me, my Deputy, Raymond J. DeCarli, or the team leader of this project, Mark R. Dayton on (202) 366-1959.

Sincerely,

[Signature]
Kenneth M. Mead
Inspector General
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmittal Letter</td>
</tr>
<tr>
<td>Executive Summary ........................................................................ i</td>
</tr>
<tr>
<td>Summary and Conclusions ........................................................................... 1</td>
</tr>
<tr>
<td>Background ........................................................................... 1</td>
</tr>
<tr>
<td>Objectives and Scope........................................................................... 4</td>
</tr>
<tr>
<td>Part I  Amtrak’s Current Financial Status .................................................... 7</td>
</tr>
<tr>
<td>Objective ........................................................................... 7</td>
</tr>
<tr>
<td>Methodology ........................................................................... 7</td>
</tr>
<tr>
<td>Results in Brief ........................................................................... 8</td>
</tr>
<tr>
<td>Findings ........................................................................... 9</td>
</tr>
<tr>
<td>Part II  Amtrak’s Strategic Business Plan .................................................... 19</td>
</tr>
<tr>
<td>Objective ........................................................................... 19</td>
</tr>
<tr>
<td>Methodology ........................................................................... 19</td>
</tr>
<tr>
<td>Results in Brief ........................................................................... 20</td>
</tr>
<tr>
<td>Findings ........................................................................... 24</td>
</tr>
<tr>
<td>Part III  Amtrak’s Capital Investment Requirements ........................................ 39</td>
</tr>
<tr>
<td>Objective ........................................................................... 39</td>
</tr>
<tr>
<td>Methodology ........................................................................... 39</td>
</tr>
<tr>
<td>Results in Brief ........................................................................... 40</td>
</tr>
<tr>
<td>Findings ........................................................................... 44</td>
</tr>
<tr>
<td>Part IV  Amtrak’s Bidding Practices .................................................... 65</td>
</tr>
<tr>
<td>Objective ........................................................................... 65</td>
</tr>
<tr>
<td>Methodology ........................................................................... 65</td>
</tr>
<tr>
<td>Results in Brief ........................................................................... 65</td>
</tr>
<tr>
<td>Findings ........................................................................... 66</td>
</tr>
<tr>
<td>List of Acronyms ........................................................................... 71</td>
</tr>
<tr>
<td>Appendix ........................................................................... 73</td>
</tr>
<tr>
<td>Response from Amtrak Board of Directors ........................................ 73</td>
</tr>
</tbody>
</table>
Executive Summary

Independent Assessment of Amtrak’s Financial Needs Through FY 2002

In 1971, Congress created the National Railroad Passenger Corporation (Amtrak) to ensure that modern, efficient intercity passenger rail service would continue to be a part of the national transportation system. Since its creation, Amtrak has received $21.8 billion in Federal support, in the form of operating and capital subsidies.

In 1997, Congress passed the Amtrak Reform and Accountability Act (ARAA). In addition to providing Amtrak flexibility to operate more like a business, the law authorized $5.2 billion for both the operating and capital expenses of Amtrak through FY 2002. It also prohibited Amtrak from using any Federal funds for operating expenses after 2002 except for excess Railroad Retirement contributions. Section 202 of the ARAA requires that the Secretary of Transportation contract with an independent entity to perform an independent and objective assessment of Amtrak’s financial condition and requirements through FY 2002. The Office of Inspector General was directed to exercise oversight of the assessment.

In 1997, Congress also passed the Taxpayer Relief Act (TRA), which provided Amtrak with $2.2 billion in funds for capital investment expenditures. These funds were intended to provide Amtrak with a one-time infusion of funds that would enable it to make the capital investments necessary to reduce its reliance on Federal operating support. TRA funds, together with Amtrak’s actual 1998 and 1999 appropriations, and the Administration’s proposed funding for 2000 through 2002, total an amount slightly below Amtrak’s $5.2 billion authorization in ARAA.

Prior to ARAA, Amtrak established a plan (called a “glidepath”) to achieve operating self-sufficiency by the end of Fiscal Year 2002. This plan entailed numerous future business actions that, if successful, would gradually eliminate Amtrak’s cash loss from operations and thus its need for Federal operating subsidies. Amtrak has never interpreted its congressional mandate, nor does it believe it will ever be feasible, to eliminate its need for Federal funding for capital

1 Unless otherwise stated, all years are fiscal years based on Amtrak’s fiscal year of October 1 to September 30, the same as the Federal fiscal year.
2 Amtrak is required to participate in the railroad retirement and unemployment systems. Each participating railroad pays a portion of the costs for all retirement and unemployment benefits in the industry. Amtrak’s payments exceed the specific retirement and unemployment costs for its employees’ expected benefits, the amount of which is referred to as “Excess RRTA Contributions”.

Executive Summary
investment. However, Congress has not directly addressed the question of whether Amtrak would receive, or could count on receiving, long-term Federal funding for capital investment.

In May 1998, when the independent assessment required by ARAA began, Amtrak’s glidepath to self-sufficiency was spelled out in its 1998 Strategic Business Plan. This plan, developed in September 1997 and revised in March 1998 (the March SBP), projected Amtrak’s financial position for the 6 years between 1998 and 2003. The March SBP was the basis for this assessment.

Amtrak develops a new plan each fiscal year as part of its annual planning cycle. Amtrak adopted a new 1999 Strategic Business Plan in September 1998. While we have not yet reviewed the 1999 plan, Amtrak has indicated that it includes actions that address many of the concerns we identified in our review of the March SBP. In accordance with section 409 of ARAA, the Inspector General of the Department of Transportation (DOT) will perform an assessment on the 1999 SBP and report the results in the spring of 1999.

Objectives and Scope

The Executive Summary and Summary and Conclusions were prepared by the Office of the Inspector General and rely on work performed by the assessment contractor under the supervision of the Office of Inspector General. There is also a voluminous report prepared by the contractor that supports the findings, observations, and recommendations included in the Summary and Conclusions. The report, however, contains proprietary data and cannot be made available to the public. The full report and supporting appendices will be provided to the Secretary of Transportation; the Amtrak Reform Council; the Senate Committee on Commerce, Science, and Transportation; the House Committee on Transportation and Infrastructure; the House Committee on Appropriations; the Senate Committee on Appropriations; Amtrak Management; and the Amtrak Reform Board.

In accordance with the requirements of the ARAA, this assessment consists of four parts. The objective of each part is as follows.

1. Amtrak’s Current Financial Status. We assessed Amtrak’s current financial condition and the accounting methods and systems in place to support business decisions. The goal was to validate the financial information reported in Amtrak’s financial statements and reports, and to identify the trends in operating performance.
II. Amtrak’s Strategic Business Plan. We reviewed Amtrak’s March 1998 Strategic Business Plan to determine whether Amtrak’s projections for operating costs, revenues, and ridership were reasonable and consistent over time and across business units. We assessed the likelihood that Amtrak’s March SBP, without modification, would achieve its stated financial goals by the end of 2002. Where necessary, we revised estimates of costs and revenues to reflect what we believe to be more reasonable projections.

III. Amtrak’s Capital Investment Requirements. We assessed Amtrak’s current capital investment program, funding sources, and capital needs to determine Amtrak’s ability to meet business plan goals. One of Amtrak’s strategic capital goals is to invest in capital projects that will either increase revenues or decrease expenses in order to attain the goal of operational self-sufficiency by 2003. Amtrak also considers needs beyond 2003, and attempts to invest in ways that will deter or prevent deterioration of the infrastructure and maintain service reliability. Amtrak must balance these needs with mandatory spending requirements, life safety needs, and investment in new business projects that will yield future revenues. We identified Amtrak’s capital needs through 2003 and determined Amtrak’s ability to meet these needs. We also determined whether Amtrak has balanced investment across its system.

IV. Amtrak’s Bidding Practices. We evaluated Amtrak’s bidding practices to determine whether Amtrak’s bids on outside contracts accurately reflected the costs associated with fulfilling the contractual requirements. We determined whether Amtrak’s allocations of variable and fixed costs were reasonable and appropriate; whether any of the bids were below cost and if so, why and by approximately how much. We also reviewed Amtrak’s bidding practices and policies to determine whether Amtrak was using its Federal appropriations as a means of subsidizing contract services.

As noted above, the assessment used Amtrak’s March SBP as its basis for review. As this assessment was concluding, Amtrak’s unaudited, but final, financial results for 1998 became available. While it was not possible to incorporate the 1998 results into our calculations, we have identified the differences between the March SBP planned results for 1998, our restatement of certain elements of the plan at risk of not performing for that year, and the actual financial results for 1998. In 1999, as we fulfill our congressional mandate to perform a similar assessment, we will review Amtrak’s 1998 final results and assess their relationship to the new SBP projections. The assessment results for 1998 are presented in separate discussions, and restatements in the report are confined to the forecast years of 1999 to 2003.
The methodology used to address each of the objectives is described in the Summary and Conclusions section of this report.

Results

I. Amtrak’s Current Financial Status

Amtrak’s financial condition is reflected accurately in its financial statements and reports. Amtrak’s general ledger accounting system, the Financial Information System (FIS), is comprehensive and thoroughly captures the data required to generate accurate financial statements.

Operating Loss

Amtrak’s revenues and expenses increased between 1992 and 1998. Although revenue grew at a faster rate than expenses, the operating loss increased because the base of expenses to which the lower rate is applied is much larger than that of revenue. Amtrak’s unaudited operating loss for 1998 was $823 million.

Amtrak Operating Losses

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenues</th>
<th>Expenses</th>
<th>Profit/(Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>$-712</td>
<td>$-731</td>
<td>$-833</td>
</tr>
<tr>
<td>1993</td>
<td>$-808</td>
<td>$-763</td>
<td>$-762</td>
</tr>
<tr>
<td>1994</td>
<td>$0</td>
<td>$1,500</td>
<td>$-1,000</td>
</tr>
<tr>
<td>1995</td>
<td>$500</td>
<td>$1,000</td>
<td>$-500</td>
</tr>
<tr>
<td>1996</td>
<td>$1,000</td>
<td>$1,500</td>
<td>$0</td>
</tr>
<tr>
<td>1997</td>
<td>$1,500</td>
<td>$2,000</td>
<td>$-500</td>
</tr>
<tr>
<td>1998</td>
<td>$2,000</td>
<td>$2,500</td>
<td>$500</td>
</tr>
</tbody>
</table>

Amtrak’s statements of annual depreciation costs could be overstated because Amtrak may be using useful lives for track assets that are too short. Also, Amtrak does not use residual (salvage) values for its assets. Both conditions could inflate Amtrak’s operating loss, although the cash loss – the part Amtrak must cover each year to remain a viable concern – would not be affected since depreciation is a non-cash expense. For example, restating Amtrak’s 1997 depreciation by adopting track asset lives based on those used by Norfolk Southern would reduce Amtrak’s depreciation expenses by $27 million. Correspondingly, Amtrak’s
operating loss for 1997 would be reduced by $27 million to $735 million. A comprehensive depreciation study is needed to provide a more accurate picture of Amtrak’s annual consumption of track assets and its depreciation expenses.

Revenue and Ridership Trends

After 4 years of significant system-wide ridership decline between 1993 and 1996, ridership rose between 1996 and 1998. Nearly all of the increase in ridership between 1996 and 1997 came from Amtrak West, as Northeast Corridor ridership was flat and Intercity grew only slightly. System-wide passenger revenue was essentially flat or declining between 1990 and 1995. In 1995, Amtrak instituted a series of fare increases and service cutbacks which further reduced ridership; however, the loss of passengers was not enough to offset the revenues associated with the fare increases.

---

3 In 1995, Amtrak divided its operations among four Strategic Business Units (SBUs): Northeast Corridor (NEC), Intercity, Amtrak West, and Corporate.
Non-passenger revenues accounted for 28 percent of all revenues in 1992; by 1998, they accounted for 37 percent. In 1992, passenger revenues were $950 million and non-passenger revenues were $375 million; in 1998, these amounts were $1,083 million and $626 million, respectively. Much of this non-passenger revenue growth reflected a steady increase in commuter-related operations, as shown in the chart below.

**Expenses**

The largest area of expense growth between 1992 and 1997 was salaries, wages, and overtime, which grew from $746 million in 1992 to $893 million in 1997. Increases in the cost of employee benefits were also significant. Growth in labor-related expenses significantly affects Amtrak’s overall expense growth, as employee-related costs account for more than 60 percent of total Amtrak operating costs.

The second largest contributor to Amtrak expense increases over the past 6 years has been the growth of interest on debt and other financial expenses. Amtrak’s interest expenses increased from $32 million in 1994 to $76 million in 1997, and as illustrated in the figure on the following page, are projected by Amtrak to reach $139 million in 2003. Amtrak’s ability to lower its interest burden will have an important impact on its ability to control expenses.
Amtrak has invested heavily in replacing its fleet within the past few years, which has resulted in increased depreciation expenses. Depreciation expenses are likely to increase further as Amtrak acquires high-speed rail equipment, rolling stock, and maintenance facilities in the next few years. Although this will increase the operating loss, these are non-cash expenses that will not affect the annual cash loss.

Financial Reporting Systems

Amtrak’s capitalization and cost allocation procedures are reasonable. Amtrak’s Route Profitability System is a valuable tool for examining the profitability of specific routes or services, but it is not designed to provide the type of variable cost data necessary for management to make route and train service adjustment decisions. Amtrak needs, and is developing, a variable costing system to allow managers to assess the desirability of making important service changes in coming years.
II. Amtrak’s Strategic Business Plan

Amtrak’s Strategic Business Plan, revised in March 1998 (the “March SBP”), indicates that Amtrak will incur a cash loss\(^4\) of $368 million in 2003. Amtrak expects to fund the $89 million in projected expenses for its program of progressive overhauls of equipment with Federal funds.\(^5\) Amtrak also expects to fund $142 million related to Excess RRTA Contributions with Federal funds (for a total of $231 million). Amtrak must fund the remaining $137 million itself and believes that it can do so through short-term commercial borrowing, changes in working capital, or other sources.\(^6\)

Our analysis of the March SBP indicates that several of Amtrak’s financial projections are at risk of not being achieved, and thus threaten to increase Amtrak’s projected cash loss. We have restated these projections to indicate the magnitude of the potential risk they represent to Amtrak’s mandate for achieving operating self-sufficiency by 2003, and as an indication to Amtrak management and its Board of the areas that need to be addressed in subsequent Strategic Business Plans. *If the March SBP were followed, without any modifications, we project Amtrak would have a restated cash loss of $535 million in 2003.*

*Assuming that Amtrak could use Federal funds to pay for progressive overhauls of equipment, $231 million of this amount would be eligible for Federal funding, leaving $304 million that Amtrak would have to finance itself. This compares with the $137 million that the SBP assumed Amtrak could and would have to finance itself.*

---

\(^4\) The cash loss is the portion of the operating loss that must be covered with cash. The primary difference between this and Amtrak’s total operating loss is non-cash charges against revenue for depreciation of capital assets and for some post-retirement employee benefits. This cash loss includes the expenses associated with Amtrak’s new labor contracts, extrapolated to all unions, including those that have not yet signed new agreements.

\(^5\) Amtrak currently funds progressive overhauls of equipment from its Federal capital grants. Under generally accepted accounting principles, however, these expenses are considered operating costs and, therefore, could not be funded from Federal grants after 2002 according to the restrictions in ARAA. This annual program, however, substitutes for sporadic, heavy overhauls of equipment that are considered capital costs. If Amtrak is unable to fund its annual overhaul program from Federal funds after 2002, it may be forced to move to a heavy overhaul program. Amtrak believes that the annual approach keeps its equipment in a higher average state of good repair for its customers and is less expensive than if it were to allow several years of deterioration before performing a heavy overhaul. If this is so, forcing a change to heavy overhauls would be an unfortunate consequence of Amtrak’s current statutory mandate, and it may be desirable for Congress to address this issue in the future.

\(^6\) The March SBP shows $290 million of Federal funds being applied to operating costs, through the financing of capital maintenance, as well as the $89 million from TRA for overhauls. Therefore, Amtrak projects a positive budget result of $11 million. The restrictions in ARAA on the use of Federal funds in 2003, however, would permit only the $142 million to be so financed. The remaining $137 million in cash loss ($148 million less the $11 million cash balance) would have to be financed by Amtrak.
Over the 5-year period (1999 to 2003) in the March SBP, Amtrak’s projected cash losses total $2.1 billion, while our restatement of those losses totals $2.9 billion. The difference of $0.8 billion is the additional cash loss that Amtrak could face in this period if the risky elements of the March SBP were to perform as we expect (and if no corrective action were taken). Amtrak management is aware of this risk and has indicated that it has already implemented new actions it believes will mitigate this potential additional cash loss and achieve its goal of operational self-sufficiency by 2003.

Reasonable Projections in the March SBP

Our analysis of the plans, projections, and assumptions in the March SBP indicate that many of Amtrak’s projections were either reasonable or conservative, and did not require restatement. Following is a list of projected revenues and expenses that we found to be reasonable and required no or only minimal restatement:

- Costs associated with Amtrak’s new labor agreements;
- Commuter revenues and expenses for contracts held with regional transportation authorities to operate rail commuter services;
- Revenues and expenses for carrying mail under contract to the United States Postal Service;
- Reimbursable revenue and expenses for services provided to a client other than Amtrak. (i.e., maintenance of equipment performed for a commuter operator);
- Non-transportation revenue and expenses for providing freight railroads access to Amtrak’s facilities and for a mix of other activities including one-time revenue and expenses;
- Other Transportation revenues and expenses for supplying commuter and others access to Amtrak infrastructure, electric power, and other services;
- Commercial Development revenues and expenses for such items as parking, property sales and rents, and in-station vending machines;
- Amtrak West, Intercity, and NEC passenger service expenses; and
- Most Business Plan Actions – 202 of 296 were not restated (68 percent).

Projections in the March SBP That Need Restatement

Our analysis of the March SBP indicates that several of Amtrak’s financial projections are at risk of not being achieved, and thus threaten to increase Amtrak’s projected cash loss. We have restated these projections to indicate the magnitude of the potential risk they represent to Amtrak’s mandate for achieving
operating self-sufficiency by 2003, and as an indication to Amtrak management and its Board of the areas that need to be addressed in subsequent Strategic Business Plans. We grouped our restatements into five categories that we conclude represent overly optimistic projections and need to be addressed by Amtrak. The total restatement of $823 million is a net addition to the cash loss as forecast by Amtrak in the March SBP.

<table>
<thead>
<tr>
<th>Categories</th>
<th>March SBP</th>
<th>Restated SBP</th>
<th>Net Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEC Passenger Revenue</td>
<td>$3,719</td>
<td>$3,501</td>
<td>($219)</td>
</tr>
<tr>
<td>Intercity Passenger Revenue</td>
<td>2,269</td>
<td>2,186</td>
<td>(83)</td>
</tr>
<tr>
<td>West Passenger Revenue</td>
<td>702</td>
<td>658</td>
<td>(44)</td>
</tr>
<tr>
<td>Intercity Express Net Revenue</td>
<td>104</td>
<td>67</td>
<td>(37)</td>
</tr>
<tr>
<td>Business Plan Actions (other)</td>
<td>671</td>
<td>231</td>
<td>(440)</td>
</tr>
<tr>
<td><strong>TOTAL All Restatements</strong></td>
<td></td>
<td></td>
<td>(<strong>$823</strong>)</td>
</tr>
</tbody>
</table>

**NEC Passenger Revenue.** The primary adjustment to NEC passenger revenues reflects a revised projection in revenues associated with high-speed rail service in the Northeast Corridor. While we found that Amtrak’s revenues are likely to be significant from this service, they are not likely to achieve the levels projected by Amtrak, especially during the first few years of service. Our extended projection, however, indicates that the revenues are likely to correspond to Amtrak’s projections by 2006.

**Intercity Passenger Revenue.** Intercity passenger revenues are restated, in part, to reflect what we conclude is an overly optimistic annual 1 percent revenue growth projection from increased ridership. Amtrak’s projection is based on a forecasting model that assumes rail fares will grow more slowly than airfares. We believe fare parity (both modes grow fares at the same rate) is a more reasonable assumption.

**Amtrak West Passenger Revenue.** Amtrak West passenger revenue restatements reflect what we conclude is also an overly optimistic growth rate projection. While Amtrak West’s growth has been aggressive (about 10 percent) for the past 3 years, it is unclear whether this rate can be sustained throughout the plan period.

**Intercity Express Net Revenues.** Intercity Express net revenues are restated in our projection, primarily in 1999 and 2000 to reflect actual performance during 1998.
While we believe the express package market presents a real business opportunity for Amtrak, we anticipate that it will take several years before Amtrak will develop the experience and business necessary to generate the revenues it had projected during the early years of the March SBP.

**Other Business Plan Actions (BPAs).** We restated $440 million in BPAs projected to improve revenues and decrease expenses during the plan period. These are exclusive of the BPAs included in the restatements of passenger revenues in the Northeast Corridor, Intercity, and Amtrak West.

Our restatements primarily reflected actions Amtrak had already taken to withdraw, restate, or adjust projections for activities that were performing below expectations. This indicates that Amtrak was aware of the problems and the need to replace these actions with other plans. Restatements or withdrawals of BPAs initiated by the assessment ($68 million) accounted for only 15 percent of the restatements.

| Value of BPA Restatements by Reason for the Restatement, 1999 through 2003 |
|---|---|---|---|---|
| **AMTRAK ACTIONS** | Number of BPAs | Reduction to revenue increases (Dollars in Millions) | Reduction to expense savings | Total net impact on Amtrak cash loss |
| Withdrawn | 15 | $78 | $269 | $347 |
| Restated | 17 | 70 | (49) | 21 |
| Moved to capital | 3 | 0 | 5 | 5 |
| **AMTRAK ACTIONS TOTAL** | 35 | $147 | $224 | $372 |
| **ASSESSMENT ACTIONS** | | | | |
| Eliminated | 1 | 6 | 2 | 2 |
| Revised | 58 | 0 | 60 | 66 |
| **ASSESSMENT ACTIONS TOTAL** | 59 | $6 | $62 | $68 |
| **TOTAL ACTIONS** | 94 | $153 | $287 | $440 |

Of the $440 in total restated BPAs, $153 million (35 percent) are revenue related, and $287 million (65 percent) represent restatements to expense savings. The two largest revenue restatements relate to anticipated revenue from power sales and from equipment rentals that will not be realized. The Northeast Corridor was projecting $65 million in revenues from resale of electric power it had planned to purchase wholesale prior to the Federal Energy Regulatory Commission’s (FERC) decision precluding such an activity.

Of the expense restatements, $273 million reflect BPA adjustments in the Northeast Corridor. The largest adjustments, $127 million, reflect the FERC
decision preventing Amtrak from purchasing electric power wholesale for use in its own operations.

**Impact of Restatements**

If Amtrak were to take no actions to revise its business plans but simply followed the March SBP in future years, and if external factors (such as economic growth and fuel price projections) occurred as projected, the $2.9 billion cash loss we project ($2.1 billion per Amtrak plus $0.8 billion in restatements) would consume all of the expected Federal appropriated funding ($2.8 billion) that Amtrak projected through 2003 in its March SBP. As a result, no funds would be available for capital investment after the TRA funds are spent. However, Amtrak’s capital needs are significant between now and 2003, and even without restating the SBP, they are likely to exceed available capital funds. To the extent the cash loss is greater than projected in the plan, it will constrain Amtrak’s ability to make the capital investment necessary for it to attain and maintain operating self-sufficiency. The **bottom line** is that the March SBP would not achieve Amtrak’s mandated goal of operating self-sufficiency by 2003.

**Mitigation**

The shortfall we predict is based on an assessment of Amtrak's ability to achieve the set of proposed projects and actions in its March SBP. However, Amtrak has 5 years remaining in the plan period, which may be enough time to respond to our concerns with alternative plans for achieving its financial goals. Amtrak has demonstrated its ability to compensate for non-performing business plan items in the past.

Our restated, projected cash loss for 1998 was $59 million more than the loss forecast by Amtrak in its March SBP. The majority of our restatement for 1998 was for Express package service revenue, Amtrak West passenger revenue, Intercity passenger revenue, NEC passenger revenue, and net savings from Business Plan Actions. Indeed, compared to the March SBP forecast, actual results for these elements of the plan were $74 million less than projected, that is, they produced $74 million in additional cash loss not forecast in the plan.\(^7\)

---

\(^7\)Amtrak’s unaudited financial results for 1998 only became available at the end of this assessment. As a result, an extensive examination of the results, particularly for the BPAs, could not be included in this assessment. Therefore, the numbers discussed here include the differences between the March SBP and reported 1998 results for Intercity Express package service, NEC passenger revenue, Intercity passenger revenue, and Amtrak West passenger revenue, but not the differences for all the BPAs. The only BPA results that can be included here are those BPAs that were withdrawn during 1998 by Amtrak and, therefore, are known to have not contributed to the 1998 financial results.
Nevertheless, Amtrak’s actual cash loss in 1998 was $525 million, $15 million less than the March SBP, rather than $74 million more.

Thus, while actual results for the items we identified and restated did not perform as Amtrak had expected, Amtrak finished the year under its forecasted cash loss, and exactly on target for its projected budget result.

As a note of caution, such statistics indicate that Amtrak is improving its ability to project accurately, if not conservatively. However, this accomplishment should not obscure the fact that Amtrak’s cash loss in 1998 -- however well it was projected -- was substantial. In fact, the operating loss of $823 million was the second largest in the last 10 years\(^8\). While we applaud Amtrak’s efforts to accurately reflect and project its financial condition, we believe that an evaluation of Amtrak’s year-end results should consider the amount of the loss, not just the accuracy of its projection.

A detailed comparison between the 1998 actual results and the restatements in this assessment will be part of the DOT Inspector General’s assessment of Amtrak’s 1999 SBP and 1999 capital plans. Exactly how Amtrak compensated for the non-performing parts of the plan and an assessment of the success of the BPAs will be included in that assessment. In addition, we will assess the long-term sustainability of the actions Amtrak took in 1998 to compensate for actions that fell short of projections.

**III. Amtrak’s Capital Investment Requirements**

*Amtrak has sufficient capital resources over the next 2 years to complete most of its 1998 Business Plan Actions and other key projects, including implementation of high-speed rail service in the Northeast Corridor. Depending on the level of capital investment needs assumed, anticipated Federal funds ($2.2 billion during the plan period) will fail to meet these needs by between $0.5 billion and $1.8 billion for the period 1999 through 2003. This shortfall emphasizes how critical it is for Amtrak to reduce its operating losses. Every dollar the loss is reduced frees another dollar for capital investment.*

**Capital Needs Estimates**

Amtrak has developed three internal estimates of its Federally funded capital investment requirements for the period 1999 through 2003. These estimates range from $3.9 billion to $4.7 billion. In our assessment, we have independently estimated three levels of Amtrak’s Federal capital investment needs over the

\(^8\) The operating loss in 1994 was $834 million.
5-year period 1999 through 2003. These estimates range from $2.7 billion to $4.0 billion.

<table>
<thead>
<tr>
<th>Amtrak’s Capital Needs Estimates ($Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBU Requests</td>
</tr>
<tr>
<td>SBP Capital Estimate</td>
</tr>
<tr>
<td>Minimum Needs</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment Capital Needs Estimates ($Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental</td>
</tr>
<tr>
<td>Sustainable</td>
</tr>
<tr>
<td>Minimum</td>
</tr>
</tbody>
</table>

**Minimum Capital Spending Requirements ($2.7 billion)**, as defined in our assessment estimate, can be described as capital spending required to meet legal obligations and to continue the safe, reliable operation of the national system over the short term. Our “minimum” is lower than Amtrak’s “minimum” because we do not include costs for on-going projects that do not contribute directly to the short-term goal of safe and reliable operations. Such projects include station improvements and facility upgrades. We believe Amtrak’s “minimum” budget most closely resembles what we term a “sustainable” needs budget as we describe below.

We believe our minimum budget supports a level of investment that would be sufficient to maintain schedule, performance, and service standards in a steady state through the end of 2003, but would ultimately result in reduced reliability and higher operating costs. This budget would not be sufficient to provide for longer-term rehabilitation, overhaul, or replacement of capital assets such as track, structures, or rolling stock. Some projects now underway or in the planning stage would not be funded, including certain improvements related to high-speed rail south of New York. While these projects, such as station improvements and

---

^9 Amtrak estimated its minimum capital needs only through 2002. For purposes of comparability, we extrapolated the 4-year estimate to 5 years, based on an average of the last 2 years of the estimate. The extrapolated amount through 2003 totals $3.871 million.

^10 This budget assumes $600 million available for the completion of high-speed rail work currently underway to provide full implementation of 150 mph service north of New York, and implementation of 135 mph service (2 hr., 45 min. schedules) south of New York. Implementation of 150 mph service south of New York (2 hr., 30 min. schedules) will require additional funding for catenary and track and signal upgrades.
facility upgrades, are important for Amtrak’s long-term survival, they are not
critical to sustain Amtrak through FY 2003.

We do not consider this capital spending budget to be an acceptable option if
Amtrak is to remain viable beyond 2003. While adequate to maintain the system
over the near term, this minimal spending level would not be sufficient to correct
deferred investment in rolling stock and the Northeast Corridor infrastructure,
particularly south of New York. The long-term implications of deferred
investment are serious and can impact both costs and revenues. For example, cars
and locomotives will become increasingly unreliable, leading to decreased
availability for service. Slow orders or permanent speed restrictions may be
placed on sections of Northeast Corridor track for safety reasons or due to
deteriorating ride quality. The appearance of coaches, stations, and other
infrastructure will become progressively worse, which would result in lower
customer satisfaction and, ultimately, lower revenues.

Our estimate of a **Sustainable Capital Spending Scenario** ($3.0 billion) would
provide for minimum needs, as defined above, but would also provide funds to
complete several key projects underway. These projects – included in Amtrak’s
Minimum capital scenario – would include the Seattle, Oakland, and Los Angeles
mechanical facility upgrades in Amtrak West, Auto Train and mail and express
facility construction for Intercity, and station upgrades in several locations. While
the minimum-needs level of funding appears sufficient for these projects and for
Amtrak to continue its heavy overhaul of equipment program through 2000,
additional funding would be necessary to continue these projects and the heavy
overhaul program past 2000. A sustainable needs budget would provide these
funds. Amtrak’s “minimum” needs scenario actually matches most closely with
our definition of “sustainable” needs.

Our estimate of a **Developmental Capital Spending Scenario** ($4.0 billion)
would provide all of the above, but would also provide funds for Amtrak to
develop new corridor services and other business that will provide positive
financial returns. Amtrak’s primary development needs include further
development of high-speed rail service south of New York to raise maximum
speeds from 135 mph to 150 mph, and partnering with states to upgrade corridor
services outside the NEC.
In addition to $2.2 billion in TRA funds available for capital investment, Amtrak expects to receive up to $2.8 billion in Federal funding through annual Federal appropriations\(^{11}\) between 1999 and 2003. The Administration has proposed that all of this funding be provided in the form of capital grants. Because Amtrak will have significant cash losses from operations that must be funded in this period, Amtrak is requesting that the permitted capital spending uses to which these appropriated funds can be applied include the more flexible definition of capital spending permitted in the transit industry. This “transit definition” of capital would allow the funds to be used for maintenance of rolling stock and infrastructure;\(^{12}\) in our report, we refer to this spending as “capital maintenance.”

Of the $2.4 billion in appropriated funds Amtrak expects to use between 1999 and 2003, Amtrak plans to use $1.9 billion for capital maintenance. This will leave $0.5 billion available for traditional capital investment over the 5-year period.

Of the $2.2 billion in funds Amtrak received from TRA, $0.6 billion has

---

\(^{11}\) Proposed voluntary spending limits on these funds by Amtrak may limit the outlays available during this period to $2.4 billion. This smaller amount is used in the text table above so as not to overstate Amtrak’s potential capital investment funds during the SBP period.

\(^{12}\) Amtrak did not receive the “transit definition” in its FY 1999 appropriation that would have allowed Amtrak to use Federal funds for maintenance of way and maintenance of equipment. Instead, Congress stipulated that the funds could be used only for maintenance of equipment. For purposes of this analysis, we assumed the full “transit definition,” as that was the assumption Amtrak made when developing its operating and capital plans in the March SBP.
been committed. The remaining $1.6 billion in TRA funds, combined with the
$0.5 billion available from appropriated Federal funding will result in an estimated
$2.2 billion in total Federal funding available for capital investment in the period
1999 to 2003.

The figure below shows the projected funding shortfalls under each of the
six capital scenarios (3 Amtrak estimates, 3 Assessment estimates).

Funding Shortfall by Capital Scenario
1999 through 2003 ($Billions)

| Source: Amtrak and Wilbur Smith Associates |

Funding Availability Further Constrained by Potentially Higher Operating
Losses

Even less than $2.2 billion would be available for capital investment purposes if
Amtrak’s annual Federal appropriations fall short of projections, or if Amtrak had
to use additional Federal funds to cover operating needs. For the plan period,
1999 through 2003, we project that Amtrak’s operating losses could be
significantly higher than Amtrak’s forecast. If so, Amtrak would need to use
Federal appropriations to cover this higher loss. The exact amount needed would
depend on Amtrak’s ability to avoid the operating losses projected in our
restatements through changes to its SBP and management actions over the next
5 years.

Other Sources of Capital Funding

Amtrak will continue to depend on Federal funding to meet its basic capital needs
related to the upkeep of the system. Other sources of capital include external
financing and state and local governments. However, because of Amtrak’s outstanding debt levels of $1.9 billion and its operating losses, Amtrak will have only limited ability to utilize external financing to provide for additional capital needs over the next 5 years.

State and local funds have become an increasingly important source of capital funding, and Amtrak is hoping to establish partnerships with states and private industry to maximize benefits to all parties. By matching funds with state and local entities, Amtrak can help direct those budgets to projects that benefit Amtrak. In many cases, without the Amtrak match, those projects would not happen at all or would be delayed.

**Safety**

We found no evidence suggesting Amtrak is neglecting safety investment needs in its system. At the same time, Amtrak must continue to advance life safety projects, particularly on the Northeast Corridor. Amtrak’s single largest long-term life safety need is the Penn Station-New York and New York Tunnels project. The total cost of completing all necessary work is estimated to be between $0.4 and $0.5 billion. Amtrak is seeking a dedicated funding source for these projects; without such a source, the projects will proceed only as funds are available in each capital budgeting cycle, likely extending implementation time by several years.

**Balanced Investment in Entire System**

Recent capital budgets and capital plans indicate Amtrak has not neglected its national system in order to fund Northeast Corridor needs. Amtrak’s West and Intercity Business Units have benefited from major investment in new rolling stock and other infrastructure-related projects. Amtrak’s estimate of long-term capital needs outside the Northeast Corridor is not yet fully developed and certain out-year projects lack sufficient detail for proper analysis of costs and benefits. Amtrak is beginning a market-based study that will recommend changes to services and route structure. This information should be used to refine and justify the future capital needs for Amtrak’s national system.

**IV. Amtrak’s Bidding Practices**

We found no evidence that Amtrak is systematically underbidding for work or failing to appropriately consider or incorporate the actual costs of performing the work when bidding on contracts.
Amtrak does not have a formal process that governs its bid preparation and submittal activities. Each SBU, however, uses a similar process which appears comprehensive and reasonable. Although it is not a formal organization-wide process, it is consistent with Federal guidelines, and in our estimation, is reasonable. Amtrak has indicated that it is in the process of developing uniform guidelines for preparing bid proposals, although they were not yet available at the completion of this assessment.

Amtrak applies Overhead and General and Administrative rates to labor costs in order to calculate appropriate cost recovery. New rates are supposed to be established each year based on actual costs incurred in the prior year. Amtrak’s latest published rates are 1996 rates that are based on 1995 actual costs. Amtrak has indicated that new rates will be published for 1999 reflecting 1998 actual costs.

Amtrak policy requires that it fully fund contract costs from contract revenues. It states that “funds used in financing a venture must come entirely from sources other than the Federal government’s appropriations to support Amtrak rail passenger service.” For the selected bids reviewed, we found that Amtrak is acting appropriately with regard to using Federal appropriations.
Summary and Conclusions

Independent Assessment of Amtrak’s Financial Needs Through Fiscal Year 2002

Background

In 1971, Congress created the National Railroad Passenger Corporation (Amtrak) to ensure that modern, efficient intercity passenger rail service would continue to be a part of the national transportation system. Despite Amtrak’s and Congress’ goal for Amtrak to eliminate dependence on Federal operating subsidies, Amtrak has continued to require significant Federal financial assistance.

In 1997, Amtrak established a plan (called a “glidepath”) to achieve this goal by the end of Fiscal Year 2002. This plan entailed numerous future business actions that, if successful, would gradually eliminate Amtrak’s cash operating loss and thus its need for Federal operating subsidies. Amtrak has never interpreted its congressional mandate, nor does it believe it will ever be feasible, to eliminate its need for Federal funding for capital investment. However, Congress has not directly addressed the question of whether Amtrak would receive, or could count on receiving, long-term Federal funding for capital investment.

Since 1997, Congress has attempted to provide Amtrak with additional flexibility to operate in a businesslike manner by allowing it to manage costs and maximize revenues. In 1997, Congress passed the Amtrak Reform and Accountability Act (ARAA). This act established limits on Amtrak’s liability exposure, included key provisions governing the bargaining relationship between Amtrak and its employees, and eliminated statutory constraints on Amtrak’s ability to restructure its train routes on its own initiative.

ARAA directed the appointment of a new Amtrak Board of Directors, the Amtrak Reform Board, which is charged with achieving the goals of the act. ARAA also created the Amtrak Reform Council (ARC) as an independent body to advise the Board and to determine whether Amtrak can achieve operating self-sufficiency. ARAA directed the Secretary of Transportation to contract for, and the Office of Inspector General to oversee, this independent assessment of Amtrak’s financial requirements through FY 2002. The assessment provides Amtrak, the ARC, and Congress with information on Amtrak’s current financial condition and a critique of its plans for eliminating the need for Federal operating subsidies.
ARAA authorized $5.2 billion for both the operating and capital expenses of Amtrak through FY 2002. It also codified Amtrak’s goal of operating self-sufficiency by prohibiting Amtrak from using any Federal funds for operating expenses after 2002 except for expenses associated with Amtrak’s tax liabilities for railroad retirement taxes that exceed the amount needed for the benefits of Amtrak retirees (“Excess RRTA Contribution”). Figure 1 depicts Amtrak’s operating and capital subsidies for the period 1993 through 1997. In the figure, operating subsidies include funding for Excess RRTA Contributions, and capital subsidies include both Amtrak’s capital grant and funding for the Northeast Corridor Improvement Program.

In 1997, Congress also passed the Taxpayer Relief Act (TRA), which provided Amtrak with $2.2 billion in funds for capital investment expenditures. Amtrak received the first half of these funds in 1998; therefore, TRA funds are not included in Figure 1. TRA provides Amtrak with a one-time infusion of funds whose purpose is to enable Amtrak to make the capital investments necessary for it to reduce its reliance on Federal operating support. TRA also permits Amtrak to use these capital funds for maintenance of equipment, the costs for which are operating expenses under generally accepted accounting principles (GAAP) and, thus, traditionally could not be funded from Amtrak’s Federal capital grants.

---

1 Unless otherwise stated, all years are fiscal years based on Amtrak’s fiscal year of October 1 to September 30, the same as the Federal fiscal year.
2 For example, capital investment can reduce operating costs by reducing maintenance costs on obsolete equipment or by automating functions that might save on wages or materials costs.
The Administration’s funding request for 1999 did not request separate operating and capital grants for Amtrak as it had in previous years, but instead proposed that all of Amtrak’s funding for 1999 be in the form of a capital grant. Because Amtrak has projected significant cash losses from operations\(^3\) that must be covered in 1999 and subsequent years through 2002, Amtrak will require Federal operating assistance in some form over this period. Amtrak has indicated that if it can use capital grants to fund a portion of its normal operating expenses, i.e., for maintenance of equipment, and for maintenance of infrastructure and facilities,\(^4\) then it can cover its cash operating losses from a capital-only grant without an explicit operating subsidy. In 1998, the Federal Transit Administration authorized this expanded definition of the uses to which transit capital grants can be put. The Administration sought the same authority for Amtrak in its 1999 budget. Amtrak’s enacted Federal appropriation for 1999 did not adopt this transit definition; rather, it permits the use of its capital grant for the same purposes as TRA funds, that is, for maintenance of equipment in addition to capital investment.

Neither the Administration’s proposed changes in the definition of the permitted uses of Federal capital grants, nor those adopted in the 1999 appropriation, change Amtrak’s accounting requirements for capital and operating expenses. Nor do they change the requirement (as mandated in ARAA) that Amtrak must fund all operating expenses (except for Excess RRTA Contributions) from sources other than Federal funds after 2002.

Amtrak’s glidepath to self-sufficiency is spelled out in Amtrak’s 1998 Strategic Business Plan (SBP) for 1998 through 2003. The 1998 SBP was adopted in September 1997. It was updated in March 1998 in response to the legislative mandates of ARAA and TRA, including the requirement for this independent assessment. Amtrak develops a new plan each fiscal year as part of its annual planning cycle. Because our assessment began in May 1998, the Strategic Business Plan revised in March 1998 (the “March SBP”) was the basis for the assessment. Amtrak’s March SBP assumes two conditions: that Federal appropriations will be consistent with the Administration’s planned funding levels through 2003, and that Amtrak will have flexibility in how it uses Federal capital funding to cover maintenance of way and maintenance of equipment expenses. Even though Amtrak is bound by the more limited TRA definition in the use of its 1999 Federal appropriation, Amtrak has indicated that it can meet its operating funding requirements in 1999.

\(^3\) Amtrak’s cash losses are Amtrak’s operating loss after non-cash charges have been subtracted. This cash loss must be financed each year if Amtrak is to continue as an on-going concern.

\(^4\) Amtrak applies the term *capital maintenance* as a general term for both maintenance of equipment and maintenance of infrastructure and facilities.
Amtrak adopted its 1999 Strategic Business Plan in September 1998. In accordance with section 409 of ARAA, the Inspector General of the Department of Transportation (DOT) will perform an assessment on the 1999 SBP and will issue a report on it in the spring of 1999.

**Objectives and Scope**

In accordance with Section 202 of ARAA, the Secretary of Transportation contracted with an independent entity to perform an objective assessment of Amtrak’s financial condition and requirements through FY 2002. The Office of Inspector General exercised oversight of the contractor’s assessment. This report is the result of the assessment. The assessment was organized into four tasks:

- Assess Amtrak’s current financial condition and accounting methods;
- Review Amtrak’s Revised Strategic Business Plan of March 10, 1998, determine the reasonableness of the March SBP, and restate the March SBP forecasts through 2003 if needed;
- Review Amtrak’s capital investment plans for 1998 through 2003, restate the necessary capital investment levels if needed, and identify available funding sources and determine their sufficiency; and
- Determine whether Amtrak’s bids for performing contract services or its reimbursement for those services were at levels below its costs, such that it might be unfairly competing with the private sector.

This assessment of Amtrak’s current financial condition and its ability to reach operational self-sufficiency by 2003 focused on Amtrak’s actual financial results for 1997 and prior years, and Amtrak’s March SBP. A primary objective of this assessment was to determine if any elements in this specific Strategic Business Plan may put Amtrak at risk of missing its congressional mandate of operating self-sufficiency or might threaten its long term survival due to a lack of capital investment resources.

As this assessment was concluding, Amtrak’s final but unaudited financial results for 1998 became available. It was not possible to incorporate 1998 results and redo the in-depth analyses in this assessment, which took place over a period of 6 months. However, we are able to identify the differences between the March SBP planned results for 1998, our restatement of certain elements of the plan at risk of not performing for that year, and the actual financial results for 1998. Therefore, assessment results for 1998 are presented in separate discussions, and restatements in the report are confined to the forecast years of 1999 to 2003.
This Summary Report is organized in the following manner.

- Part I describes the results of our assessment of Amtrak’s current financial condition and accounting methods. Where possible, we have included Amtrak’s financial results for 1998 in our discussion of the trends in Amtrak’s overall operating results.

- Part II reports the results of our assessment of the reasonableness of the March SBP and our restatements of those parts of the plan we concluded were optimistic or were at risk of not performing as projected over the 1999 through 2003 period. Included is a separate discussion of the differences among the SBP projections, our restatements of those projections, and actual results for 1998.

- Part III describes our assessment of Amtrak’s capital investment needs and plans for 1998 through 2003, and identifies available funding sources and their ability to meet Amtrak’s plans and needs.

- Part IV reflects our determination of whether Amtrak’s bids for performing contract services or its reimbursement for those services were at levels below its costs.

The Summary Report was prepared by the DOT Office of the Inspector General based on the analysis, modeling, and calculations done by our assessment contractor under our supervision.
Part I  Amtrak’s Current Financial Status

Objective

The objective of this task was to assess Amtrak’s current financial condition and the accounting methods and systems in place to support business decisions. The goal was to validate the financial information reported in Amtrak’s financial statements and reports, and to identify the trends in operating performance.

Methodology

The review team assessed Amtrak’s financial condition and accounting methods by collecting and reviewing Amtrak’s financial reports, business planning documents, and management consultant studies; evaluating U.S. Department of Transportation documents; interviewing Amtrak staff; comparing Amtrak procedures to accepted industry practice; and evaluating those procedures for reasonable compliance with GAAP. This assessment is based on accounting methods in place for 1997 and on historical financial data through 1997, the latest year for which complete, audited data were available at the time of this assessment.

In discussions of Amtrak’s financial condition, a number of key terms are used. Most of these terms are used exactly as Amtrak uses them, but some are not. The following paragraphs define our use of these terms and note our differences with how Amtrak reports its results.

- Amtrak’s operating loss is the difference between total operating revenues and total operating expenses (including depreciation.) We use this term exactly as does Amtrak.

- Amtrak’s net operating loss is the remainder of the operating loss after applying its Federal operating subsidy and the part of its capital subsidy attributable to progressive overhauls of equipment.^[Expenses for *progressive overhauls of equipment* are considered an operating expense under GAAP, but Amtrak is currently able to fund these expenditures from its Federal capital grants. ARAA mandates that these expenses can not be funded from any Federal financial assistance after 2002. Progressive overhauls of equipment are overhauls that Amtrak performs each year in lieu of allowing equipment to deteriorate for a number of years and then performing *heavy overhauls*, which are considered capital costs under GAAP. As such, this operating expense substitutes for a capital cost, and Amtrak believes that the annual approach keeps its equipment in a higher average state of good repair for its customers and is less expensive than if it were to allow several years of deterioration before performing a heavy overhaul.\(^5\)]
• Amtrak’s budget result is the net operating loss after subtraction of non-cash expense items, such as depreciation.

We wish to illustrate the portion of Amtrak’s operating loss that must be financed by Federal funds. We do this by applying Federal funding and non-cash items to the operating loss in a different order.

• Our cash loss (from operations) is Amtrak’s operating loss less the expenses for non-cash items (mainly depreciation).\(^6\) The cash loss indicates the amount of financing that Amtrak will need to continue operations and must be covered in some manner each year for Amtrak to continue as an on-going concern.

• Our unfunded cash loss is the remainder after Amtrak’s Federal funding is applied to the cash loss. This unfunded cash loss is the amount of Amtrak’s cash loss that must be financed by Amtrak itself from changes in working capital, short-term commercial borrowings, or other sources. Our unfunded cash loss is approximately the same as Amtrak’s budget result; the difference is changes in working capital.

In addition to the cash loss, there are mandatory capital investments that must be made. Outlays pertaining to the cash loss and to the mandatory capital investments cannot be deferred. They must either be covered by Amtrak’s Federal funding, through short-term commercial borrowing, or from other sources, such as State funding. The total of Amtrak’s cash loss and these mandatory expenditures equates to Amtrak’s minimum required financing in each year.

Results in Brief

Amtrak’s financial condition is reflected accurately in Amtrak’s financial statements and reports. Amtrak’s general ledger accounting system, the Financial Information System (FIS), is comprehensive and thoroughly captures the data required to generate accurate financial statements.

Amtrak’s financial statements indicate that Amtrak’s revenues grew by 26 percent between 1992 and 1997, while expenses increased by 19 percent. The overall operating loss, however, was 7 percent higher in 1997 than in 1992. The loss peaked at $834 million in 1994 and declined to $762 million in 1997. The loss

\(^6\) The difference between this cash loss and a cash operating loss are changes in working capital. Amtrak may be able to absorb part of its cash loss through changes in working capital.
increased even though revenues grew at a faster rate than expenses because expenses exceed revenues by a large margin. Therefore, applying a lower rate of growth to a larger base of expenses produces an increase in the amount of loss.

Amtrak’s unaudited financial results for 1998 show a 2 percent increase in operating revenues from 1997 to $1.7 billion, while also showing a 3.9 percent increase in operating expenses to $2.5 billion. As a result, the operating loss increased by 8 percent to $823 million.

Amtrak’s capitalization and cost allocation procedures are reasonable. Amtrak’s statements of annual depreciation costs, however, could be overstated because Amtrak may be using useful lives for track assets that are too short, a condition that would inflate Amtrak’s operating loss (but not its cash loss). For example, restating Amtrak’s 1997 depreciation by adopting track asset lives based on those used by Norfolk Southern would reduce Amtrak’s depreciation expenses by $27 million. Correspondingly, Amtrak’s operating loss for 1997 would be reduced by $27 million to $735 million. A comprehensive depreciation study would provide a more accurate picture of Amtrak’s annual consumption of track assets and its depreciation expenses.

Amtrak’s Route Profitability System (RPS) is a valuable tool for examining the profitability of specific routes or services, but it is not designed to provide the type of variable cost data necessary for management to make route and train service adjustment decisions. Amtrak needs, and is developing, a variable costing system to allow managers to assess the desirability of making important service changes in coming years.

Findings

Amtrak’s Accounting Methods are Sound

Amtrak’s general ledger accounting system, the Financial Information System, is comprehensive and thoroughly captures the data required to generate accurate financial statements. FIS accurately assigns costs to the appropriate operating areas without the use of allocations except for Corporate overhead expenses. Amtrak’s external auditors have given an unqualified opinion on Amtrak’s financial statements since 1992, the period covered by this assessment. Amtrak’s process for allocating Corporate overhead expenses among its intercity passenger activities is reasonable, as is its process for allocating these expenses to its non-intercity
passenger activities. Finally, Amtrak’s capitalization rules comply with generally accepted accounting principles (GAAP).

**Adjustments to Amtrak’s Depreciation Would Result in Lower Net Operating Loss**

The majority of Amtrak’s road property asset lives are those used by predecessor freight railroads from which Amtrak inherited the assets. Except for track ballast, useful lives for track and right-of-way accounts have remained unchanged since 1976. In 1994, PricewaterhouseCoopers recommended that Amtrak reevaluate the useful lives of right-of-way (road and track) assets. However, Amtrak has not conducted any engineering studies or other analysis to determine the useful lives over which those assets should be depreciated. Additionally, Amtrak does not apply any residual (salvage) values to assets when calculating depreciation costs.

Compared with the largest Class I freight railroads (Union Pacific Railroad, Burlington Northern Santa Fe, Norfolk Southern, CSXT and Conrail), Amtrak’s depreciation rates are higher (asset lives shorter) for track accounts, which include rail, ties, and ballast. While freight and passenger trains operate very differently, there is some indication that the high speed of passenger trains has a comparable impact on road property to the heavy axle weights of freight trains, which should make the asset lives comparable. If Amtrak’s road property, shop, and power plant machinery asset lives were increased to match those of Norfolk Southern, the restated depreciation expense for 1997 would be lower by $27 million. While this adjustment would reduce the reported loss on Amtrak’s 1997 income statement, it would have no effect on its cash loss because depreciation is a non-cash expense.

**Recommended Depreciation Study.** We recommend that a complete depreciation study be performed on the entire inventory of non-equipment physical assets currently owned by Amtrak. This study should employ engineering and other techniques, and should assess the current physical condition and remaining life of each asset category. The study should also develop realistic salvage values for each asset group and adjust the depreciation rates accordingly.
Amtrak Accurately States Its Financial Condition

Figure I-1 shows that Amtrak’s revenues and expenses have increased between 1992 and 1998. Revenues increased 29 percent from $1.33 billion to $1.71 billion, and annual expenses increased 24 percent from $2.04 billion to $2.53 billion. Amtrak’s operating loss, however, grew by $111 million (16 percent) during this period.

![Figure I-1. Amtrak Operating Losses 1992 through 1998](chart)

Although revenue grew at a faster rate than expenses, the operating loss increased because the base of expenses to which the lower rate is applied is much larger than that of revenue. From 1994 to 1997, the operating loss declined modestly, but steadily, from $833 million to $762 million, a decline of $71 million. Amtrak’s unaudited 1998 results indicate, however, that the operating loss increased by $61 million (8 percent) over 1997, with revenue increasing by 2 percent and expenses by 3.9 percent.

Figure I-2 shows the increasing share of non-passenger revenue in Amtrak’s total revenues between 1992 and 1998. Over this period, Amtrak increased its non-passenger revenues by winning commuter contracts and reimbursable maintenance-of-way contracts. Non-passenger revenues accounted for only 28 percent of all revenues in 1992; by 1998, they accounted for 37 percent.
In 1992 passenger revenues were $950 million and non-passenger revenues were $375 million; in 1998, these amounts were $1,083 million and $626 million, respectively (based on unaudited 1998 results). The largest increase in passenger-related revenue occurred between 1996 and 1997, principally due to an increase in Amtrak fares, supported by a strong economy and airfare increases. Figure I-3 provides a more detailed breakdown of Amtrak’s non-passenger revenues during the period 1992 through 1997.
**Cost Trends.** The largest area of expense growth between 1992 and 1997 was salaries, wages, and overtime, which grew from $746 million in 1992 to $893 million in 1997. Increases in the cost of employee benefits were also significant. Growth in labor-related expenses significantly affects Amtrak’s overall expense growth, as employee-related costs account for more than 60 percent of total Amtrak operating costs. The ability of Amtrak to control these costs varies. In 1995, Amtrak was successful in cutting $30 million in costs associated with management positions. Amtrak tried several times, though unsuccessfully until 1997, to negotiate productivity improvements with its nonmanagement workforce. Negotiations in November of 1997 resulted in Amtrak incurring higher wage expenses for maintenance of way employees. Agreements with three other unions were completed in 1998 for similar increases.\(^7\) Productivity improvements are part of these agreements, though specific means of achieving the productivity increases have yet to be implemented.

The second largest contributor to Amtrak expense increases over the past 6 years has been the growth of interest on debt and other financial expenses. Amtrak’s interest expenses increased from $32 million in 1994 to $76 million in 1997, and are projected by Amtrak to reach $139 million in 2003. Amtrak’s ability to lower its interest burden will have an important impact on its ability to control expenses.

Amtrak has invested heavily in replacing its fleet within the past few years, which has resulted in increased depreciation expenses. Depreciation expenses are likely to increase further as Amtrak acquires high-speed rail equipment, rolling stock, and maintenance facilities in the next few years. Although this will increase the operating loss, these are non-cash expenses that will not affect the annual cash loss.

**Ridership and Revenue Trends.** Figures I-4 and I-5 illustrate the relative contributions of ridership and revenue by each Strategic Business Unit (SBU) between 1995 and 1997.\(^8\) After 4 years of significant system-wide ridership decline between 1993 and 1996, ridership rose between 1996 and 1998. Nearly all of the increase in ridership from 1996 to 1997 came from Amtrak West, as NEC ridership was flat and Intercity grew only slightly. System-wide passenger revenue was essentially flat or declining between 1990 and 1995.

---

\(^7\) The three unions are the Transportation Communications International Union, the Brotherhood of Railroad Signalmen, and the Brotherhood of Locomotive Engineers.

\(^8\) In 1995, Amtrak divided its operations among four Strategic Business Units: Corporate, Amtrak West, Intercity, and Northeast Corridor (NEC). Amtrak West incorporates the West Coast routes in California and the Pacific Northwest and the routes in between. NEC includes all the routes in the Northeast between Boston and Washington. Intercity is the remainder of the system across the middle of the country including most long-distance trains.
In 1995, Amtrak instituted a series of fare increases and service cutbacks that reduced ridership; however, the loss of passengers was not enough to offset the revenues associated with the fare increases. As a result, passenger revenue increased system-wide between 1995 and 1996. The increase in system-wide passenger revenue accelerated in 1997 and continued to grow in 1998. Figure I-6 shows system-wide revenue and ridership numbers for 1988 to 1998. Figures I-7, I-8, and I-9 present the same information for the Amtrak West, Intercity, and NEC SBUs, respectively, for the years 1995 to 1997.
The West SBU has seen increasing ridership since 1995, accompanied by the highest percentage increases in revenue. However, the absolute dollar contribution to increased total revenue is not large because Amtrak West revenue accounts for only about 9 percent of total passenger revenue.

**Strategic Business Unit Performance.** Between 1995 and 1997, the SBUs have varied in their ability to improve operating performance. Revenue growth has outpaced expense growth during this period in Amtrak West and the Northeast Corridor, resulting in decreased operating ratios for both.\(^9\) Intercity, however, has

---

\(^9\) The operating ratio is the ratio of operating expenses to operating revenues, expressed as a percentage. Values over 100 percent indicate an operating loss, that is, there is more than one dollar in operating expenses
seen slight growth in its operating ratio. Figure I-10 shows the annual operating ratios of each Amtrak operating SBU for 1995 through 1997.

![Figure I-10 SBU Operating Ratios 1995 through 1997](image)

**Actual 1998 Financial Results.** Amtrak’s unaudited operating loss for 1998 was $823 million. Non-cash charges, consisting principally of depreciation, were $299 million. The resulting calculated cash loss was $525 million. Federal operating subsidies funded $342 million of the cash loss, capital grants covered $83 million, and Amtrak financed $99 million (Amtrak’s budget result). The difference between the unaudited, actual 1998 results and the March SBP 1998 forecast is -2.8 percent for revenues (actual revenues below plan), -2.7 percent for expenses (actual expenses below plan), and the budget result nearly exactly on plan.

**Amtrak’s Route Profitability System (RPS) Is Useful for Comparing Service Profitability**

The Route Profitability System (RPS) is the system Amtrak uses to allocate core business costs from the FIS among all routes and services. RPS is a complex system of allocations and assignments that employs appropriate allocation factors. Amtrak uses RPS results to compare route profitability, to determine state costs for

---

10 This is the amount expended on Amtrak’s program of *progressive overhauls of equipment*. These expenses are operating expenses under GAAP, but are financed by Amtrak from its capital grant.
403(b) services,\textsuperscript{11} and to involve line managers in efforts to reduce costs not directly within their control.

**RPS Is Not Appropriate for Assessing Changes in Specific Routes and Services**

While RPS is a useful tool for Amtrak to compare service profitability, its fully allocated costs are inappropriate for many decisions, including decisions involving route restructuring or service changes. For example, fully allocated costs for a particular train would assign to that train the costs of fuel, crews, and other train-specific costs, as well as a percentage of non-train-specific costs, such as station costs. If Amtrak decided to reduce the frequency of that train service, the train-specific costs would disappear, but Amtrak would still incur the station costs, which are constant. RPS cannot tell Amtrak which costs would change as a result of service changes, and thus is of limited value to help Amtrak decide whether it would be cost-effective to modify, expand, or discontinue a particular service.

Amtrak realizes the limitations of RPS for such decisions and uses a Delphi process\textsuperscript{12} for selecting and changing RPS allocation factors to better represent the true effects of service changes. Amtrak has no system-wide method for determining how service changes will affect costs and revenues; rather, business decisions are made at the SBU level using a customized, case-by-case analysis. This process is reasonable; but the appropriateness of allocation factors should be tested regularly using regression analyses because the relationships underlying the value of the factor may change over time.

Because of Amtrak’s stable route structure, it has had little need in the past to report variable costs. As Amtrak looks ahead, however, to making service adjustments, such a system would be beneficial. Within its mainframe system, Amtrak has all the data and statistics required to develop route-specific variabilities. We recommend that Amtrak modify RPS so it can report the type of variable cost data necessary to support management decision-making, or develop a separate system to report such data. Amtrak agrees with the need for this variable cost data to support such

\textsuperscript{11} 403(b) refers to the section of the original Rail Passenger Service Act that defined a cost-sharing arrangement between Amtrak and state or local governments that requested passenger services that were supplemental to those provided by Amtrak as part of the basic route structure. This section was later renumbered to 24704, then deleted entirely by ARAA. Amtrak is now free to negotiate any form of cost sharing arrangements it wishes (and in fact has been doing so for some time). The term 403(b) is still widely used to describe state or locally funded Amtrak services, even though the original code provision ceased to exist long ago.

\textsuperscript{12} A Delphi process is one in which a coordinator compiles comments from all parties in a group and attempts to reach consensus based on those comments.
analyses as route and train adjustments, and has indicated that such a system is currently under development.
Part II  Amtrak’s Strategic Business Plan

Objective

We reviewed Amtrak’s March SBP to determine whether Amtrak’s projections for operating costs, revenues, and ridership are reasonable and consistent over time and across business units. We revised estimates of costs and revenues as necessary, and assessed the likelihood that Amtrak’s March SBP, without modification, would achieve its stated financial goals by the end of 2002.

Methodology

In this part of the assessment, we focused on: Methods, Assumptions, and Reasonableness of Amtrak’s Projections; Cash Flow, Funding Sources, and Gaps; Labor Analysis; Revenue Analysis; and Funding of the Strategic Business Plan. The assessment team reviewed business plans, capital plans, and Business Plan Actions (BPAs); interviewed Amtrak personnel; and analyzed the BPAs using financial modeling to determine if the actions were achievable.

In order to evaluate Amtrak’s March SBP, we developed a comprehensive understanding of Amtrak’s “bottom up” method of financial budgeting and planning. This is the process of adding (or subtracting) incrementally from a baseline derived from historical experience. These incremental changes take three forms.

- Business Plan adjustments take place as adjustments to baseline estimates and include items such as extending mid-year fare increases to an annual basis and the exclusion of one-time revenue.

- Capital Plan adjustments are also made to the baseline for revenue increases or expense savings that will flow from the planned capital investment. An example of these would be the revenue and expense effects of re-equipping trains.

- Business Plan Action (BPA) adjustments are not made to the baseline. Instead BPA adjustments are incremental additions to the adjusted baseline’s projections for each year of the SBP to which the BPAs apply. However, existing (prior year’s) BPAs are subsumed into the baseline as the new planning cycle begins.
To evaluate labor costs, the assessment team developed a labor cost model using 1997 actual wage and fringe expense data. The model contains separate strata of data for the population of employees represented by each union and also separate data for non-union employees. Other expense analyses were based on financial modeling and industry benchmarking.

To assess the March SBP NEC ridership and passenger revenue forecasts, the team made a review of the model, data, and outputs used by a consulting firm hired by Amtrak to forecast ridership and passenger revenue resulting from the NEC SBU high-speed rail program. The team also performed other validation tasks, including replicating the forecasts, analyzing the forecasts, and restating the forecasts as necessary. Other passenger-revenue and non-passenger-revenue analyses were based on ridership modeling and industry benchmarking.

The overall findings of the assessment of the March SBP are focused on Amtrak’s projected cash losses from operations that our analysis and restatements of the March SBP predict. The cash loss indicates the amount of financing that Amtrak will need to continue operations and must be covered in some manner each year for Amtrak to continue as an on-going concern. In addition, there are mandatory capital investments that must be made, including capital spending for Amtrak to comply with environmental laws and the accessibility requirements of the Americans with Disabilities Act, and there are debt repayments that must be made. None of these outlays can be deferred. They must be covered by Amtrak’s Federal funding, through short-term borrowing, or from other sources, such as State funding.

Amtrak’s cash loss plus these mandatory expenditures equal Amtrak’s minimum required financing in each year. Beyond these amounts, Amtrak has minimum requirements for capital investment that must be made in order to maintain existing levels of service, and even higher levels of capital funding that will be required in order to bring its systems to a state of good repair and maintain them there. The analysis of Amtrak’s future operating results and cash losses are discussed in this part. Capital investment requirements are examined in Part III.

**Results in Brief**

Amtrak’s Strategic Business Plan, revised in March 1998 (the “March SBP”), presents a roadmap for achieving operating self-sufficiency by 2003, as mandated
by Congress. The March SBP indicates that Amtrak will incur a cash loss\(^{13}\) of $368 million in 2003. Amtrak expects to fund the $89 million in projected expenses for its program of progressive overhauls of equipment with Federal funds.\(^{14}\) Amtrak expects to fund $142 million related to Excess RRTA Contributions with Federal funds as well (for a total of $231 million). Amtrak must finance the remaining $137 million itself and believes that it can do so.\(^{15}\)

The analysis of the plans, projections, and assumptions in the March SPB indicate that several of its financial projections are at risk of not being achieved. The assessment team restated these projections to indicate the magnitude of the potential risk they represent to Amtrak’s mandate for achieving operating self-sufficiency by 2003, and as an indication to Amtrak management and its Board of the areas that need to be addressed in subsequent Strategic Business Plans. *If the March plan were followed, without any modifications, Amtrak would have a restated cash loss of $535 million in 2003. Assuming that Amtrak could use Federal funds to pay for progressive overhauls of equipment, $231 million of this amount would be eligible for Federal funding, leaving $304 million that Amtrak would have to finance itself. This compares with the $137 million that the March SBP assumed Amtrak could and would have to finance itself.*

Over the 5-year period (1999 to 2003) in the March SBP, Amtrak’s projected cash losses total $2.1 billion, while the restatement of those losses totals $2.9 billion. The difference of $0.8 billion is the additional cash loss that Amtrak *could* face in this period if the risky elements of the March SBP were to perform as we expect and *if no corrective action were taken*. Amtrak management must devise ways to reduce

\(^{13}\) The cash loss is the portion of the operating loss that must be covered with cash. The primary difference between this and Amtrak’s total operating loss is non-cash charges against revenue for depreciation of capital assets and for some post-retirement employee benefits. This cash loss includes the expenses associated with Amtrak’s new labor contracts, extrapolated to all unions, including those that have not yet signed new agreements.

\(^{14}\) Amtrak currently funds progressive overhauls of equipment from its Federal capital grants. Under GAAP, however, these expenses are considered operating costs and, therefore, could not be funded from Federal grants after 2002 according to the restrictions in ARAA. This annual program, however, substitutes for sporadic, heavy overhauls of equipment that are considered capital costs. If Amtrak is unable to fund its annual overhaul program from Federal funds after 2002, it may be forced to move to a heavy overhaul program. Amtrak believes that the annual approach keeps its equipment in a higher average state of good repair for its customers and is less expensive than if it were to allow several years of deterioration before performing a heavy overhaul. If this is so, forcing a change to heavy overhauls would be an unfortunate consequence of Amtrak’s current statutory mandate, and it may be desirable for Congress to address this issue in the future.

\(^{15}\) The March SBP shows $290 million of Federal funds being applied to operating costs, through the financing of capital maintenance, as well as the $89 million from TRA for overhauls. (See Table II-2.) Therefore, Amtrak projects a positive budget result of $11 million. The restrictions in ARAA on the use of Federal funds in 2003, however, would permit only the $142 million in Excess RRTA Contributions to be so financed. The remaining $137 million in cash loss ($148 million less the $11 million cash balance) would have to be financed by Amtrak.
this potential additional cash loss if Amtrak is to reach operational self-sufficiency by 2003.

Mitigation. The shortfall we predict is based on an assessment of Amtrak's ability to achieve the set of proposed projects and actions in its March SBP. However, Amtrak has 5 years remaining in the Plan period, which may be enough time to respond to our concerns with alternative plans for achieving its financial goals. Amtrak has shown its ability to compensate for non-performing or withdrawn items in its business plans in the past.

Our restated, projected cash loss for 1998 was $59 million more than the loss forecast by Amtrak in its March SBP. The majority of our restatement for 1998 was for Express package service revenue, Amtrak West passenger revenue, Intercity passenger revenue, NEC passenger revenue, and net savings from Business Plan Actions. Indeed, compared to the March forecast, actual results for these elements of the plan were $74 million less than projected, that is, they produced $74 million in additional cash loss not forecast in the plan. Nevertheless, Amtrak’s actual cash loss in 1998 was $525 million, $15 million less than the March SBP rather than $74 million more.

Thus, while actual results for the items we identified and restated did not perform as Amtrak had expected, Amtrak finished the year under its forecasted cash loss, and exactly on target for its projected budget result. It now must show that it can do as well in each of the next 5 years if it is to reach its mandated goal. To clarify the remaining analysis and restatements as forward-looking projections, the assessment results and restatements reported below are only for the years 1999 through 2003.

Plan Elements Not Warranting Restatement. A number of the March SBP elements did not require restatement. We found these elements of the plan to be reasonable and achievable as Amtrak has forecast them. These elements include the projections for:

- Costs associated with Amtrak’s new labor agreements;

16 Amtrak’s unaudited financial results for 1998 only became available at the end of this assessment. As a result, an extensive examination of the results, particularly for the BPAs, could not be included in this assessment. Therefore, the numbers discussed here include the differences between the March SBP and reported 1998 results for Intercity Express package service, NEC passenger revenue, Intercity passenger revenue, and Amtrak West passenger revenue, but not the differences for all the BPAs. The only BPA results that can be included here are those BPAs that were withdrawn during 1998 by Amtrak and, therefore, are known to have not contributed to the 1998 financial results.

17 A detailed examination of the 1998 results in comparison to the March SBP and the restatements in this assessment will be part of the DOT Inspector General’s assessment of Amtrak’s 1999 SBP and 1999 capital plans. Exactly how Amtrak compensated for the non-performing parts of the plan and an assessment of the success of the BPAs will be included in that assessment.
Commuter revenues and expenses for contracts held with regional transportation authorities to operate rail commuter services;

- Revenues and expenses for carrying mail under contract to the United States Postal Service;
- Reimbursable revenue and expenses for services provided to a client other than Amtrak (i.e., maintenance of equipment performed for a commuter operator);
- Non-transportation revenue and expenses for providing freight railroad’s access to Amtrak’s facilities and for a mix of other activities including one-time revenue and expenses;
- Other transportation revenues and expenses for supplying commuter railroads and others access to Amtrak infrastructure, electric power, and other services;
- Commercial development revenues and expenses for such items as parking garage revenues, property sales and rents, and in-station vending machines;
- Amtrak West, Intercity, and NEC passenger service expenses; and
- Most BPAs – 202 of 296 were not restated (68 percent).

**Restatements.** A number of March SBP elements did require restatement. We have grouped the restatements into five categories that we believe represent optimistic projections and that need to be addressed by Amtrak in future SBPs. The total restatement is $823 million. This is a net addition to the cash loss of $2.1 billion as forecast by Amtrak in the March SBP.

**Table II-1 Restatement of Amtrak’s March SBP Cumulative 1999 through 2003**18 (Years are fiscal years; Dollars are in millions.)

<table>
<thead>
<tr>
<th></th>
<th>March SBP</th>
<th>Restated SBP</th>
<th>Net Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEC Passenger Revenue</td>
<td>$3,719</td>
<td>$3,501</td>
<td>($219)</td>
</tr>
<tr>
<td>Intercity Passenger Revenue</td>
<td>2,269</td>
<td>2,186</td>
<td>(83)</td>
</tr>
<tr>
<td>Amtrak West Pass. Revenue</td>
<td>720</td>
<td>676</td>
<td>(44)</td>
</tr>
<tr>
<td>Intercity Express Net Revenue</td>
<td>104</td>
<td>67</td>
<td>(37)</td>
</tr>
<tr>
<td>Business Plan Actions20</td>
<td>671</td>
<td>231</td>
<td>(440)</td>
</tr>
<tr>
<td><strong>Total—All Restatements</strong></td>
<td></td>
<td></td>
<td>($823)</td>
</tr>
</tbody>
</table>

Apart from the expenses reflected in the BPA restatements above, we found that projected baseline expenses, including labor costs and those associated with high-speed rail, were reasonable and did not merit restatement. However, because we reduced the inflationary growth in NEC revenue in our projections, we also reduced Amtrak’s projected baseline inflationary growth in expenses. This resulting expense

---

18 Numbers in this table, and others throughout this report, may not add to the totals shown due to rounding.
19 NEC includes $11 million in expense restatements that result from the revenue restatement.
20 Excludes BPAs that apply to NEC, Intercity, and Amtrak West passenger revenue. Their effects are included in the restatements for those categories.
reduction ($11 million) is included in the $219 million NEC passenger revenue restatements in Table II-1.

If Amtrak were to take no actions to revise its business plans but simply followed the March SBP in future years, and if external factors (such as economic growth and fuel price projections) occurred as projected, the $2.9 billion cash loss we project ($2.1 billion per Amtrak plus $0.8 billion in restatements) would consume all of the expected Federal appropriated funding ($2.8 billion) that Amtrak projected through 2003 in its March SBP. As a result, no funds would be available for capital investment after the TRA funds are spent. However, Amtrak’s capital needs are significant between now and 2003, and even without restating the SBP, they are likely to exceed available capital funds. To the extent the cash loss is greater than projected in the plan, it will constrain Amtrak’s ability to make the capital investment necessary for it to attain and maintain operating self-sufficiency.

The bottom line is that the March SBP would not achieve Amtrak’s mandated goal of operating self-sufficiency by 2003. Amtrak management and its Board must revise this plan in future years to address the high-risk elements identified in our restatements. Amtrak has indicated it has addressed a number of these high-risk elements in its 1999 SBP. The assessment of that plan in 1999 by the DOT Office of Inspector General, as mandated by ARAA, will assess how far Amtrak has gone, and how much farther it has to go, to eliminate the risks associated with the restated cash losses we have identified.

**Findings**

**Amtrak Forecasts Financial Improvements but Continuing Operating Loss Through 2003**

Amtrak’s Strategic Business Plan, revised in March 1998 (March SBP), establishes a plan for eliminating its need for Federal operating assistance by 2003, as mandated by ARAA. Amtrak’s SBP forecast anticipates closing the gap between revenues and expenses by 2003, although it still shows a cash loss of $368 million in 2003. Of this loss, Amtrak can use Federal funds to finance Excess RRTA Contributions of $142 million and may be able to finance its program of progressive overhauls of equipment ($89 million) from Federal funds as well. The remainder, $137 million, would have to be financed by Amtrak.

Our expense projections include the costs of Amtrak’s completed labor agreements, with terms similar to those agreements extended to all crafts still in negotiation.

---

21 This figure represents Amtrak’s total operating losses minus non-cash items, including depreciation and some post-retirement employee benefits.
They also include the results of expected productivity improvements negotiated as part of those agreements.\textsuperscript{22} The cash loss is the result prior to any operating support from Federal appropriated funds. The unfunded cash loss in each year is the portion of the cash loss that Amtrak must finance itself. In 1998, it did so through a combination of temporary borrowing from TRA ($100 million), short-term commercial borrowing, and changes in working capital.

Appropriated Federal funding in 1999 is $609 million though Amtrak has agreed that it will only use 40 percent of this amount in 1999. The other 60 percent will be available in 2000 as well as 40 percent of any additional Federal funding that might be appropriated in that year. Because of the restriction on how much of its 1999 appropriations Amtrak will use, Amtrak will need to finance an unusually large portion of its cash loss in 1999. Amtrak plans to do this by temporarily borrowing $317 million from its TRA funds. It plans to repay that borrowing (plus the $100 million borrowed in 1998) in 2000 ($217 million) and 2001 ($200 million) so that all of the TRA funds can ultimately be spent for capital investment.

The March SBP includes two major assumptions.

- Full funding of the Administration’s proposed Federal capital appropriations for Amtrak ($570 million in 2000, $523 million in 2001, $521 million in 2002, and $521 million in 2003) which will be used, in part, to cover the cash losses projected in the March SBP.

- Ability to apply the Federal Transit Administration’s capital definition, which permits the use of capital grant funds for specific capital maintenance activities such as maintenance of way and equipment. Otherwise, Amtrak would not be able to cover cash losses through 2002, given that no operating grants are proposed by the Administration over the 1999 through 2002 period.

These assumptions, along with the plans for the major revenue and expense categories, are the foundation of Amtrak’s approach to achieving the financial goals in the March SBP. Some of these assumptions, such as future Federal appropriations, are out of the direct control of Amtrak management, but are critical if the March SBP is to achieve its stated financial performance goals. If any of these assumptions are not realized, the potential success of the March SBP is questionable.

\textsuperscript{22} Amtrak’s March SBP included the net cost of the labor settlements in its cash flow analysis but not in its profit and loss statement (P&L). We have included these costs in our statement of the March SBP discussed in the text and shown in Tables II-2 and II-3. The only other difference between Amtrak’s March P&L and our tables is that we included changes in Amtrak’s projected interest costs (lower projections) due to changes in the planned timing of external financing. These financing changes were made in April 1998 and were available at the start of this assessment. Including them gives a more accurate projection of Amtrak’s plans in 1998.
unless Amtrak is able to identify and successfully implement alternative business actions that generate revenue or control costs. Table II-2 presents Amtrak’s forecast for 1999 through 2003. Table II-3 shows our restatement of that forecast, which is discussed in the next section. Table II-3 immediately follows Table II-2 for ease of comparison.

**Table II-2 Amtrak's March SBP Forecast**
(Year are fiscal years; Dollars are in millions.)

<table>
<thead>
<tr>
<th>Component</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total 99-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Revenues</td>
<td>$1,837</td>
<td>$2,063</td>
<td>$2,213</td>
<td>$2,250</td>
<td>$2,284</td>
<td>$10,647</td>
</tr>
<tr>
<td>less Operating Expenses</td>
<td>(2,757)</td>
<td>(2,839)</td>
<td>(2,936)</td>
<td>(2,985)</td>
<td>(3,025)</td>
<td>(14,542)</td>
</tr>
<tr>
<td>Operating Loss</td>
<td>(920)</td>
<td>(776)</td>
<td>(723)</td>
<td>(735)</td>
<td>(741)</td>
<td>(3,895)</td>
</tr>
<tr>
<td>plus Non-Cash Items</td>
<td>334</td>
<td>359</td>
<td>374</td>
<td>373</td>
<td>373</td>
<td>1,813</td>
</tr>
<tr>
<td>Cash Loss</td>
<td>($586)</td>
<td>($417)</td>
<td>($349)</td>
<td>($361)</td>
<td>($368)</td>
<td>($2,082)</td>
</tr>
<tr>
<td>plus TRA Funds—Overhauls</td>
<td>84</td>
<td>85</td>
<td>86</td>
<td>87</td>
<td>89</td>
<td>431</td>
</tr>
<tr>
<td>plus Federal Funds—Capital Maintenance</td>
<td>194</td>
<td>543</td>
<td>501</td>
<td>366</td>
<td>290</td>
<td>1,894</td>
</tr>
<tr>
<td>plus TRA Borrowing (Repayments)</td>
<td>317</td>
<td>(217)</td>
<td>(200)</td>
<td>0</td>
<td>0</td>
<td>(100)</td>
</tr>
<tr>
<td>Budget Result (Unfunded Cash Loss)</td>
<td>$8</td>
<td>($6)</td>
<td>$38</td>
<td>$92</td>
<td>$11</td>
<td>$143</td>
</tr>
</tbody>
</table>

**Table II-3 Assessment Restatement of Amtrak's March SBP Forecast**
(Year are fiscal years; Dollars are in millions.)

<table>
<thead>
<tr>
<th>Component</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total 99-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Revenues</td>
<td>$1,780</td>
<td>$1,932</td>
<td>$2,083</td>
<td>$2,127</td>
<td>$2,176</td>
<td>$10,097</td>
</tr>
<tr>
<td>less Operating Expenses</td>
<td>(2,785)</td>
<td>(2,867)</td>
<td>(2,958)</td>
<td>(3,010)</td>
<td>(3,047)</td>
<td>(14,667)</td>
</tr>
<tr>
<td>Operating Loss</td>
<td>(1,005)</td>
<td>(936)</td>
<td>(875)</td>
<td>(883)</td>
<td>(872)</td>
<td>(4,570)</td>
</tr>
<tr>
<td>plus Non-Cash Items</td>
<td>326</td>
<td>331</td>
<td>335</td>
<td>336</td>
<td>337</td>
<td>1,664</td>
</tr>
<tr>
<td>Cash Loss</td>
<td>($679)</td>
<td>($605)</td>
<td>($540)</td>
<td>($547)</td>
<td>($535)</td>
<td>($2,906)</td>
</tr>
<tr>
<td>plus TRA Funds—Overhauls</td>
<td>84</td>
<td>85</td>
<td>86</td>
<td>87</td>
<td>89</td>
<td>431</td>
</tr>
<tr>
<td>plus Federal Funds—Capital Maintenance</td>
<td>244</td>
<td>593</td>
<td>551</td>
<td>460</td>
<td>446</td>
<td>2,313</td>
</tr>
<tr>
<td>plus TRA Borrowing (Repayments)</td>
<td>317</td>
<td>(217)</td>
<td>(200)</td>
<td>0</td>
<td>0</td>
<td>(100)</td>
</tr>
<tr>
<td>Budget Result (Unfunded Cash Loss)</td>
<td>($35)</td>
<td>($144)</td>
<td>($103)</td>
<td>$0</td>
<td>$0</td>
<td>($281)</td>
</tr>
</tbody>
</table>

Amtrak expects to receive Federal funding of $609 million in 1999 (already appropriated), $570 million in 2000, $523 million in 2001, $521 million in 2002, and $521 million in 2003. Because of Amtrak’s voluntary outlay constraints, it will only use $244 million in 1999, $593 million in 2000, $551 million in 2001, $522 million in 2002, and $521 million in 2003. The difference between these last amounts and the amounts Amtrak intends to use for capital maintenance in Tables II-2 and II-3 is the amount that Amtrak will devote to traditional capital investment activities. For Table II-2 these capital amounts are: $50 million each in 1999 through 2001, $156 million in 2002, and $231 million in 2003. In Table II-3, capital maintenance amounts are higher and capital investment funds are lower because more Federal appropriated funds are needed to cover operating losses through the financing of capital maintenance. The amounts reserved for capital spending are $0 in 1999 through 2001, $62 million in 2002, and $75 million in 2003.
Amtrak’s March SBP Is Optimistic and Requires Restatement

The success of Amtrak’s March SBP depends on the cumulative results of hundreds of Business Plan Actions (BPAs) and the successful implementation of a few major business actions, such as high-speed rail in the Northeast Corridor. Our analysis of these plans indicates that a number of them are at risk for falling short of their goals and/or have already been withdrawn altogether by Amtrak. If Amtrak were to continue to pursue the March plan, with no modifications, our restatement of these actions would result in a forecasted cash loss of $535 million in 2003, which is $167 million higher than Amtrak’s forecast. The total restated cash loss for the 1999 through 2003 period is $2.9 billion compared to $2.1 billion in the March SBP.

Table II-3 presents our projections for Amtrak’s operating results, including restatements we believe are necessary to reflect a more reasonable outcome, given the planned business actions in the March SBP. This table represents what we project would be the outcome if Amtrak were to follow the March SBP through 2003, without making any adjustments or activity substitutions.

Several Major Activities Are Responsible for the Restatements

Amtrak’s March SBP projects that its cash loss will continue to shrink through 2003 as a result of actions to enhance revenues and reduce expenses. While most of the actions produce small incremental improvements to the bottom line, several represent large improvements that will significantly affect Amtrak’s performance. These major activity categories represent critical activities, and even small adjustments to them would noticeably affect Amtrak’s ability to meet its operating goals.

We identified five major categories of activity that required restatement: Northeast Corridor passenger revenues, Intercity passenger revenues, Amtrak West passenger revenues, Intercity Express package service revenue, and the cumulative effects of 94 Business Plan Actions incorporated in the March SBP. We analyzed the underlying assumptions for each of these categories, the methods used to project outcomes, and the reasonableness of each outcome. We also analyzed other major activities and plans that required little or no restatement. These include projections for commuter revenue, the cost of labor agreements, expenses for high-speed rail and the NEC, Amtrak West and Intercity expenses, and the majority of the Business Plan Actions (202 of 296). Our analysis and restatement of the five categories follows.
Northeast Corridor Passenger Revenues

In 2000, Amtrak plans to begin providing high-speed rail service between Boston and New York City and improved Metroliner service between New York City and Washington. These services are expected to reduce travel times from 4 hours and 45 minutes from Boston to New York to 3 hours and 10 minutes, reduce times from New York to Washington from 3 hours to 2 hours and 45 minutes, and to improve trip quality.24 As a result, high-speed service is projected by Amtrak to attract new riders and increase NEC passenger revenues from $529 million in 1999 to $840 million by 2003. Consequently, Amtrak projects that the NEC would produce an operating profit of about $200 million in 2003. In 1995, Amtrak contracted for a high-speed rail demand analysis, the results of which Amtrak used to develop these revenue forecasts for the NEC in the March SBP.

The assessment team’s evaluation of the proposed high-speed rail service found that the passenger revenue and ridership projections in the March SBP are somewhat optimistic. We determined the “high risk” component of the revenue projections to be $229 million, 6.2 percent of the total $3.7 billion in revenue over the 1999 through 2003 forecast period (see Table II-4).25 Even after adjusting the projections for the high-risk revenues, Northeast Corridor Passenger Revenues are still forecast to grow significantly – by 50 percent over the period. While it is beyond the scope of this review to restate forecasts beyond the plan period of 2003, our calculations indicate that by 2006, Amtrak’s projections and ours may converge.

Table II-4 NEC Passenger Revenue - Amtrak and Restated Forecasts
(Years are fiscal years; Dollars are in millions.)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total 99-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amtrak March SBP</td>
<td>$529</td>
<td>$701</td>
<td>$819</td>
<td>$831</td>
<td>$840</td>
<td>$3,719</td>
</tr>
<tr>
<td>Restated Forecast</td>
<td>536</td>
<td>632</td>
<td>746</td>
<td>774</td>
<td>803</td>
<td>3,491</td>
</tr>
<tr>
<td>Difference</td>
<td>$7</td>
<td>($69)</td>
<td>($73)</td>
<td>($57)</td>
<td>($37)</td>
<td>($229)</td>
</tr>
</tbody>
</table>

Note: Passenger Revenue includes Ticket Revenue and Food, Beverage, and Other Revenue

A part of the restatement was based on reducing the expected inflation rates applied to keep rail fares constant in real terms over the forecast period. The team viewed the rates applied in Amtrak’s forecast as too high, given current and forecasted inflation rates, so the inflation rates were reduced in the forecast restatements. However, to be consistent, we have reduced the rates Amtrak applied to its expense forecasts in the NEC as well. The resulting reduced expenses total $11 million over

24 Amtrak indicates that running times for some express trains from Boston to New York will be 3 hours.
25 An $11 million downward expense adjustment was required as well, for a net restatement of $219 million as shown in Table II-1.
the period and, when combined with the revenue restatement, they produce a net restatement for the NEC of $219 million.

Our analysis of Amtrak’s ridership projections for NEC passengers in the SBP also found that these projections are somewhat optimistic. Our restatement follows in Table II-5.

**Table II-5 NEC Ridership - Amtrak and Restated Forecasts**

(Millions of passengers)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>March SBP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metroliner/HSR</td>
<td>2,226</td>
<td>3,186</td>
<td>3,936</td>
<td>3,880</td>
<td>3,812</td>
</tr>
<tr>
<td>Non-HSR/Metroliner</td>
<td>9,895</td>
<td>10,110</td>
<td>10,515</td>
<td>10,344</td>
<td>10,141</td>
</tr>
<tr>
<td>Total</td>
<td>12,121</td>
<td>13,296</td>
<td>14,451</td>
<td>14,225</td>
<td>13,953</td>
</tr>
<tr>
<td>Restatement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metroliner/HSR</td>
<td>2,167</td>
<td>2,489</td>
<td>3,187</td>
<td>3,229</td>
<td>3,271</td>
</tr>
<tr>
<td>Non-HSR/Metroliner</td>
<td>10,049</td>
<td>10,838</td>
<td>10,784</td>
<td>10,909</td>
<td>11,035</td>
</tr>
<tr>
<td>Total</td>
<td>12,216</td>
<td>13,327</td>
<td>13,971</td>
<td>14,139</td>
<td>14,306</td>
</tr>
<tr>
<td>Difference</td>
<td>95</td>
<td>31</td>
<td>(480)</td>
<td>(86)</td>
<td>353</td>
</tr>
</tbody>
</table>

The restatements result in more passengers forecast in 2003 than in the March SBP. Because more of them are projected to ride conventional rail (at one-half the fare of high-speed rail service) and fewer of them to use the high-speed rail service, overall revenue is forecast to be $37 million lower in that year than in the March SBP. The restatements primarily reflect revisions to the forecasting methodology and inputs used in those forecasts. Below are descriptions of some of the assessment team’s primary concerns; revisions were prompted by these concerns and they form the primary basis for the restatements.

- The biggest contributor to Amtrak’s forecasted revenues is from passengers projected to switch (divert) from other transportation modes (air and auto) to improved conventional rail services and to the new high-speed rail service on the north end of the corridor. The forecasted trips diverted from other modes constitute about 70 percent of new rail riders (high-speed rail and regular rail combined) in the entire corridor between 1997 and 2001. For new high-speed

---

26 Amtrak’s March SBP contains revenue projections only. Ridership is deduced by applying to the restated revenues the same ridership/revenue relationship used by Amtrak in its projections.

27 Amtrak’s projected decline in passengers is the result of a downward adjustment to the revenue forecast applied by Amtrak as a conservative adjustment to the underlying forecast.

28 When the forecast was produced, 1997 was the base year for travel in the corridor before the start of high-speed rail service and 2001 is the year when service is fully in place and most of the diversion from other modes has taken place. Growth in passengers and revenue after 2001 is primarily from growth in overall travel consistent with growth in the economy.
rail riders alone, diversion from other modes constitutes 87 percent. We believe there are underlying problems in the calculation of diversion and that this diversion should be restated for the following reasons.

- The costs and times required for travelers to access rail stations from their trip origins and to travel from rail stations to their trip destinations are understated and need to be revised. (For example, the parking cost input for Penn Station-New York (PSNY) was $5.00 per day, which is significantly less than actual rates.) These costs and times to access rail service are parts of the overall cost of rail travel, just as access times and parking costs are for air travel, in addition to ticket costs. Understating them would understate the overall cost of rail travel relative to these other modes, and would thus overstate the number of riders expected to switch to rail service. For example, your choice between driving or taking the train may not be the same if parking at the rail station were $25 a day and access time from your home to the station were 60 minutes rather than $5 and 30 minutes.

- Diversion from auto travel is overestimated because the mathematical structure of the forecasting model causes high-speed rail riders to be drawn primarily from auto as a statistical artifact of the high existing mode share of auto travel between most cities in the NEC. As a consequence, the proportion of auto travelers forecasted by the model to be diverted to the improved rail services is too high.

- Diversion from auto travel is also overstated because the underlying forecast of future auto trips that would take place without improved rail service (that is, before diversion) is too high. As a consequence, the total number of travelers that are potentially divertable from auto to the improved rail services is too high. This is a result of the problems noted below in estimating current trip numbers. In short, one cannot get people to switch their mode of travel for trips that are not likely to take place.

- The proportion of air travelers forecasted by the model to be diverted to the improved rail service is too low. Rather than an intended result, this is, again, simply a statistical artifact caused by the mathematical structure of the model in combination with the currently low mode shares of air travel between most NEC cities.

- The mathematical structure of the mode share model for business travel artificially limits potential diversion of high-speed rail travelers to conventional rail service. Thus, the forecasts have not accounted fully for the competition that is likely to arise between the new high-speed service and the much-improved conventional rail service. For example, Amtrak plans to charge $109 each way for high-speed rail service between Boston and New York City; this service will take 3 hours and 10 minutes. This same trip on conventional rail (Northeast Direct) will take only 30 minutes longer, but will
be half the cost ($55). The value of time implied, representing the difference between the two fares and the two trip times, is $110/hour. This is a high value of time and as such the model underestimates diversion of potential high-speed rail riders to the improved, lower-fare Northeast Direct service between Boston and New York.

- The estimate of the current number of trips by all modes between individual Northeast Corridor city-pairs includes estimates of auto trips that are based on incomplete surveys and small sample sizes. In addition, both these estimated auto trip volumes and the airline trip volumes (drawn from carrier-reported survey data) were repeatedly adjusted upward in proportion to recent changes in conventional rail and Metroliner ridership. The original surveys were conducted in 1995. When rail ridership increased in 1996 and 1997, the percentage increase in rail travel was applied to air and auto travel, as well, in order to keep the market shares constant. Therefore, any mistakes made in the original estimates were further compounded. As a result, the estimated volumes of auto and air travel between city-pairs in the Boston-New York corridor are likely to be significantly overestimated.

- In calculating passenger revenue, the assumption of a constant 3 percent annual inflation rate between 1995 and 2003 appears too high, given other consensus forecasts for the period.

The projections in Amtrak’s March SBP assume several factors that could significantly affect Amtrak’s ridership and revenues if the assumptions do not hold true. Although no adjustments to the forecast were made for these risks, they are noted here to indicate their potential for negatively affecting both Amtrak’s and our forecasts. These assumptions are that:

- High-speed service starts on time in the first quarter of 2000;
- High-speed rail travel times are as stated; and
- Current strong economic growth is sustained.

While we have no reason to believe that the above assumptions will not be met, it is important to note that these are risks to Amtrak’s projected revenues. For instance, the forecast assumed that the high-speed service in the north end would have an end-to-end travel time of 3 hours and 5 minutes.\(^{29}\) In this market, the competition between high-speed rail and air is significant because air not only costs less, but also requires less travel time than high-speed rail. As a result, any degradation in high-speed rail travel time is likely to significantly affect its market share relative to air.\(^{30}\)

---

\(^{29}\) When the forecasts were made, Amtrak was projecting a running time of 3 hours and 5 minutes on the north end. Amtrak subsequently raised this to 3 hours and 10 minutes for most trains.

\(^{30}\) In origin/destination city pairs outside of New York-Boston (i.e., Stamford to Providence), where air service is much less frequent and local air fares are high, high-speed rail ridership, even with increased running times, is likely to be less divertable to air.
We calculate, for example, that if high-speed rail travel time between Boston and New York increases to 3 hours, 25 minutes (from the planned 3 hours and five minutes), Amtrak revenues from Boston-New York high-speed service would be reduced by about $20 million per year.

Intercity Passenger Revenues

Amtrak Intercity projects that its passenger revenues will increase from $437 million in 1999 to $467 million in 2003, a growth of 7 percent. Intercity expects this growth will occur as a result of several Business Plan Actions (BPAs), Business Programs, and Capital Programs that Amtrak projects will contribute $297 million of the $2.3 billion projected in total passenger revenues between 1999 and 2003. Table II-6 presents Amtrak’s March SBP forecast and our restatement for Intercity passenger revenue.

Table II-6 Intercity Passenger Revenue - Amtrak and Restated Forecasts
(Years are fiscal years; Dollars are in millions.)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total 99-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amtrak March SBP</td>
<td>$437</td>
<td>$448</td>
<td>$455</td>
<td>$463</td>
<td>$467</td>
<td>$2,269</td>
</tr>
<tr>
<td>Restated Forecast</td>
<td>429</td>
<td>435</td>
<td>438</td>
<td>441</td>
<td>444</td>
<td>2,186</td>
</tr>
<tr>
<td>Difference</td>
<td>($8)</td>
<td>($13)</td>
<td>($17)</td>
<td>($22)</td>
<td>($23)</td>
<td>($83)</td>
</tr>
</tbody>
</table>

Our assessment of the Intercity passenger revenue forecast is that the actions Amtrak is implementing to increase revenues will result in growth, but the growth will be less than projected in the March SBP. Of Amtrak’s projected passenger revenue growth, we are reducing it by $83 million between 1999 and 2003.

Our largest restatement occurs in one ridership growth BPA. Amtrak Intercity projects that ridership will grow at 1 percent annually for the life of the March SBP, and that this growth will translate into an additional $58 million in revenues over the life of the plan. The projected growth was based on the output of a system-wide revenue and ridership forecasting model developed at Amtrak-Corporate. Corporate management felt the results predicted by the model indicated that revenues would increase by 1 percent per year during the plan period.

After evaluating the projections, we have restated the value of the BPA to $0. We found that the model used to project this growth actually projects about a 0.6 percent increase in revenue in the first year of the plan, but then a downward trend in growth, showing only a 0.2 percent increase in 2000, and then a decrease of 0.3 percent in 2001. These estimates are based on the assumption that airfares will increase by 2 percent per year while rail fares would remain constant. With the assumption of fare parity – fares for both rail and air will grow at an equivalent rate.
– the model predicts a 0.35 percent increase in 1999, a 0.5 percent decrease in 2000, and a 1 percent decrease in 2001. The assessment team viewed fare parity as the more reasonable projection.

Although we have found Amtrak’s passenger revenue BPAs to be overly optimistic as a whole, in some cases we found that Amtrak’s projections were quite conservative. While we did not restate these projections, we acknowledge that for these BPAs, revenues may exceed projections. If this occurs, we would expect that these gains would offset some of the losses we project on other plan actions.

One example of such a projection is Amtrak’s BPA to increase revenues by $400,000 per year with the addition of van-carrying capacity on the Auto Train service. The BPA would increase the number of carriers from two to three on each train. Since implementation of the BPA in 1998, Intercity has indicated that demand for this service has been high and that even with the use of spare carriers – raising the train total to four – the additional capacity was sold out. Auto Train continues to experience sold-out conditions despite fare increases that have been implemented since the BPA revenue projection was developed. Amtrak’s projections assume a 35 percent load factor (an average of 35 percent of carrier space will be filled during the period for which expanded capacity is warranted), and assume the lowest available coach fare to calculate the revenue associated with the van passengers. We believe that given the demonstrated demand for this service, these projections are quite reasonable and likely to be conservative.

Amtrak West Passenger Revenues

Amtrak West is the smallest of Amtrak’s three SBUs. In 1997, Amtrak West accounted for 13 percent of Amtrak’s total passenger revenues ($130 million), but by 2003, Amtrak predicts this share will grow to 15 percent ($234 million). This represents an 80 percent growth in passenger-related revenues for Amtrak West. While this projected growth rate is aggressive, Amtrak West’s passenger revenue has been increasing in the past 3 years, at an annual rate of about 10.2 percent.

Our assessment of the Amtrak West passenger revenue forecast is that growth is expected to continue, but the growth rate projected in the March SBP is too optimistic. Amtrak projects that passenger-related revenues will grow by 13 percent per year over the life of the plan. These projections, in most cases, do not reflect detailed plans for increasing revenues, but revenue “targets.” This creates uncertainty as to whether the projected results will be realized.

Amtrak’s recent past history of revenue growth in the West SBU indicates a healthy prospect for future growth. However, it is unclear whether the expectation that growth can continue at the same rate is reasonable. Revenue growth in the West
SBU has reflected a healthy turn in the economy in this region, and it is uncertain
that the economy will continue to improve at the same rate as in recent years. We
believe that a more realistic average annual growth rate is about 8 percent; applying
this rate reduces total revenues by $87 million over the plan period. Some of the
reduction in revenue from our calculations of lower revenue, however, is offset by
our increased projection in state support (403(b) contributions) to compensate for
the lower revenue growth. The $87 million restatement is offset by $43 million in
such adjustments for a net restatement of $44 million.

**Intercity Express Package Service Pilot Program**

For many years, Amtrak has carried a modest amount of package express traffic.
This traffic has generated revenues ranging from $2.5 to $3.0 million per year. For
1998, however, Amtrak decided to substantially increase the scope of its Express
business. The company defined its new Express business, which it called “Express
Pilot,” as “a premium transportation service at premium rates---expedited regularly
scheduled train service provided at prices which are generally higher than freight
service---that is provided as an adjunct to Amtrak’s passenger service.”

Our examination of projections for Express Pilot revenues shows that revenues are
likely to fall short of expectations as expressed in the March SBP. Amtrak’s
projections in the March SBP already represented a significant reduction from
earlier projections stated in the original 1998 SBP developed in September 1997.
The adjustments to both revenue and expenses are summarized in Table II-7.

**Table II-7 Summary of Express Pilot Revisions**

(Year are fiscal years; Dollars are in millions.)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>March SBP Revenues</td>
<td>$55</td>
<td>$64</td>
<td>$65</td>
<td>$66</td>
<td>$67</td>
<td>$317</td>
</tr>
<tr>
<td>Restated Revenues</td>
<td>25</td>
<td>47</td>
<td>65</td>
<td>65</td>
<td>65</td>
<td>267</td>
</tr>
<tr>
<td>Reduced Revenues</td>
<td>($30)</td>
<td>($17)</td>
<td>($0)</td>
<td>($1)</td>
<td>($2)</td>
<td>($50)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>March SBP Operating Expenses</td>
<td>$39</td>
<td>$42</td>
<td>$43</td>
<td>$44</td>
<td>$45</td>
<td>$213</td>
</tr>
<tr>
<td>Restated Operating Expenses</td>
<td>30</td>
<td>38</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>200</td>
</tr>
<tr>
<td>Reduced Expenses</td>
<td>($9)</td>
<td>($4)</td>
<td>$1</td>
<td>($0)</td>
<td>($1)</td>
<td>($13)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Restatement</td>
<td>($22)</td>
<td>($13)</td>
<td>($1)</td>
<td>($1)</td>
<td>($1)</td>
<td>($37)</td>
</tr>
</tbody>
</table>

31 This 8 percent growth rate is the net result of a series of calculations of projected revenue growth based on
Amtrak’s ability to raise fares and increase ridership on Amtrak West routes in this period. The resulting
projections work out to an average annual growth rate of 7.8 percent for revenue.
Overall, the effect of these changes is to reduce the expected increase in Express Pilot revenues by $50 million between 1999 and 2003 and reduce expense increases by $13 million. The net effect is to reduce by $37 million the net contribution of Express Pilot to reducing Amtrak’s operating loss (from an operating profit of $104 million to $67 million).

The bulk of this effect will be registered in 1999 and 2000. In effect, Intercity SBU’s operating loss and cash loss will increase by $34 million in 1999 and 2000 as a consequence of Express Pilot changes. Subsequent to 2000, there is little effect from Express Pilot adjustments as the adjusted figures nearly conform to the March SBP.

Several factors have been at work in the progress of Express Pilot, each with potentially important consequences for the commercial success or failure of the venture and its ability to reach forecasted levels.

- **Lack of Historical Basis for Comparison.** Because this service is not comparable to the express service Amtrak has historically provided, and there is little comparable experience from other transportation modes, Amtrak cannot use past performance data to project the course Express Pilot might take.

- **Brokers.** Amtrak is relying primarily on third party brokers and agents to carry out its marketing and sales with shippers. While this limits the time and resources needed to initiate the service,\(^{32}\) it provides less opportunity for Amtrak to take the initiative to develop new business.

- **Competitor Reactions.** There is a risk that other carriers competing for the same client business might react competitively with price reductions.

- **Train Operations.** Amtrak Express Pilot service involves coupling numerous boxcars or Roadrailers with passenger cars and running them at passenger train speeds over Amtrak’s specific routes. Such plans involve technical uncertainties related to the new and different operating requirements.

- **Regulatory Issues.** Between September 1997 and May 1998, Amtrak was only permitted to offer limited express service while the Surface Transportation Board decided whether freight railroads would be required to allow Amtrak to access their tracks for this service. This may have deterred potential Express Pilot shippers from committing their traffic to Amtrak and further delayed the effective launching of the service.

---

\(^{32}\) This is a matter of recruiting and training appropriate personnel to perform those functions. These are both costly and time-consuming.
Such conditions place a heavy burden on the planning process. They also reinforce how critical it is to objectively analyze any plans for establishing even a “modest” presence in a market that is fiercely competitive, as is the small package express market.

**Business Plan Actions (BPAs)**

Business Plan Actions represent discreet activities projected to have a quantifiable bottom-line budget impact. The impacts may either result in improved revenues or decreased expenses. For example, a BPA to add train frequency would project increased passenger revenues, while a BPA to automate maintenance activities might project labor cost savings. Amtrak develops a baseline budget (see methodology for full description of budgeting process) and then makes changes to this baseline to reflect projections in the BPAs. Amtrak’s March SBP contains 296 BPAs that cumulatively account for $1.1 billion of net bottom line impact between 1999 and 2003.

Our review identified 94 of the 296 BPAs that merited closer review and possible restatement. The restatements varied from very minor adjustments (i.e., to reflect a month’s delay in start-up) to significant restatements (i.e., Amtrak’s withdrawal of a plan action resulting in no expense savings or revenue increases). Altogether, restatement of these BPAs would result in $153 million in reduced revenue increases and a $287 million reduction in expense savings. Together, these restatements of the 94 BPAs account for $440 million of the $823 million in projected restatements. Table II-8 shows the restatements by SBU.

<table>
<thead>
<tr>
<th>BPA Adjustments</th>
<th>Revenues</th>
<th>Decreases in Expense Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercity</td>
<td>$71</td>
<td>$13</td>
</tr>
<tr>
<td>Northeast Corridor</td>
<td>79</td>
<td>273</td>
</tr>
<tr>
<td>West</td>
<td>3</td>
<td>(8)</td>
</tr>
<tr>
<td>Corporate</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$153</strong></td>
<td><strong>$287</strong></td>
</tr>
</tbody>
</table>
The reasons for BPA restatement varied. In some cases, forces external to Amtrak precluded an activity that was projected to increase revenues. An example of this was the Federal Energy Regulatory Commission’s (FERC) decision that foiled Amtrak’s plans for the wholesale purchase and resale of power. Amtrak withdrew this BPA following FERC’s decision, reducing planned revenue increases and expense savings by $212 million over the plan period. In total, Amtrak withdrew 15 BPAs that resulted in a budget impact of $347 million between 1999 and 2003 (including the FERC decision).

Table II-9 summarizes the BPAs and shows the effect of the restatements either to reduce projected revenue increases or reduce projected expense savings. The numbers in the table indicate the additional cash loss the restatements add to Amtrak’s March SBP. The restatements are categorized by the reason for the restatements, i.e., actions taken by Amtrak, including withdrawal, revision, and shifting the BPA to the capital program, or actions of the assessment team, including elimination or revision.

Table II-9 Value of BPA Restatements by Reason for the Restatement, 1999 through 2003  (Years are fiscal years; Dollars in millions.)

<table>
<thead>
<tr>
<th></th>
<th>Number of BPAs</th>
<th>Reduction to Revenue Increases</th>
<th>Reduction to Expense Savings</th>
<th>Total Net Impact On Amtrak Cash Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMTRAK ACTIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withdrawn</td>
<td>15</td>
<td>$78</td>
<td>$269</td>
<td>$347</td>
</tr>
<tr>
<td>Restated</td>
<td>17</td>
<td>70</td>
<td>(49)</td>
<td>21</td>
</tr>
<tr>
<td>Moved to capital</td>
<td>3</td>
<td>-</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td><strong>AMTRAK TOTAL</strong></td>
<td><strong>35</strong></td>
<td><strong>$147</strong></td>
<td><strong>$224</strong></td>
<td><strong>$372</strong></td>
</tr>
<tr>
<td><strong>ASSESSMENT ACTIONS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eliminated</td>
<td>1</td>
<td>$0</td>
<td>$2</td>
<td>$2</td>
</tr>
<tr>
<td>Revised</td>
<td>58</td>
<td>6</td>
<td>60</td>
<td>66</td>
</tr>
<tr>
<td><strong>ASSESSMENT TOTAL</strong></td>
<td><strong>59</strong></td>
<td><strong>$6</strong></td>
<td><strong>$62</strong></td>
<td><strong>$68</strong></td>
</tr>
<tr>
<td><strong>TOTAL ACTIONS</strong></td>
<td><strong>94</strong></td>
<td><strong>$153</strong></td>
<td><strong>$287</strong></td>
<td><strong>$440</strong></td>
</tr>
</tbody>
</table>

Eighty-five percent of the net impact of BPA restatements is the result of Amtrak actions; however, some of those actions were forced by external circumstances such as the FERC decision.

It should be noted that, in most cases, Amtrak is aware of the performance shortfalls of the aforementioned BPAs, and has in many cases already instituted new actions...
or plans for the 1999 SBP to replace those that were withdrawn or are not performing as projected. Although an analysis of those “substitute” activities will be the subject of the DOT Inspector General’s assessment of the 1999 SBP, we take note of these remedial actions as a reminder that Amtrak’s ability to meet its stated financial goals, and thus remain on its path to operating self-sufficiency, will depend heavily on its ability to react quickly to deviations from planned outcomes.

Amtrak’s Restated Operating Loss Will Further Constrain Amtrak’s Ability to Address Capital Needs

Amtrak projects in its March SBP that its cash losses from 1999 through 2003 would be funded by part of its expected Federal appropriated funding in this period. It expects to need $1.9 billion of its expected $2.75 billion in Federal appropriated funding for this cash loss. Amtrak plans to use $540 million for capital investment. The remainder will not be available until after 2003 because of Amtrak’s voluntary outlay restraints ($300 million). When the $540 million is combined with TRA funds available after 1998 ($1.63 billion), Amtrak expects to have $2.2 billion for capital investment in the 1999 through 2003 period.

We have devised three estimates of Amtrak’s estimated capital investment needs, each embodying a different state of repair for the railroad. The Minimum Capital Spending scenario ($2.7 billion for 1999 through 2003) is the minimum investment needed to meet legal obligations and continue safe reliable operation of the national system over this period, but not thereafter. A Sustainable Capital Spending scenario ($3.0 billion) would add sufficient investment so that service deterioration would not be expected after 2003. A Developmental Capital Spending scenario has been estimated as $4.0 billion. The additional $1.0 billion in the 5-year period would allow Amtrak to develop new corridor services and other business that would provide positive financial returns. For additional discussion on Amtrak’s capital sources, needs, and proposed use of funds, see Part III.

Amtrak’s projected capital funds in the March SBP ($2.2 billion) are not sufficient to meet even minimum capital needs between 1999 and 2003. If, however, Amtrak’s cash loss were higher, as we project under the March SBP if no changes are made, Amtrak would need all of its Federal appropriated funding to cover its cash loss and would likely need to use some TRA funds as well. These issues are examined in detail in the section of Part III that projects Amtrak’s Federal funding requirements for each of the capital spending scenarios based on both Amtrak’s March SBP operating results projections and our restatements of them.

---

33 This does not include available TRA funds.
Part III. Amtrak’s Capital Investment Requirements

Objective

Our objective was to assess Amtrak’s current capital investment program, funding sources, and capital needs to determine Amtrak’s ability to meet business plan goals. One of Amtrak’s strategic capital goals is to invest in capital projects that will either increase revenues or decrease expenses in order to attain the goal of operational self-sufficiency by 2003. Amtrak also considers needs beyond 2003, and attempts to invest in ways that will deter or prevent deterioration of the infrastructure and maintain the operational reliability of services. Amtrak must balance these needs with mandatory spending requirements, life safety needs, and investment in new business projects that will yield future revenues. Our objective was to determine Amtrak’s capital needs through FY 2003 and determine Amtrak’s ability to meet these needs. We also determined whether Amtrak has balanced investment across its systems.

Methodology

The assessment of Amtrak’s capital investment requirements was developed by reviewing Amtrak’s two most recent capital programs, its 1997 capital budget (November 6, 1996) and the 1998 capital budget (November 5, 1997, revised March 10, 1998). We evaluated the intended uses of and restrictions on funding provided by the Taxpayer Relief Act of 1997; reviewed and compared several Amtrak capital investment plans; and reviewed the capital investment strategies for each of the three SBUs.

<table>
<thead>
<tr>
<th>Table III-1 Projected Federal Funding Available for Capital Investment 1999 through 2003 ($billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriated Funding</td>
</tr>
<tr>
<td>Less Spending Caps</td>
</tr>
<tr>
<td>Less Capital Maintenance</td>
</tr>
<tr>
<td><strong>Total Appropriated Funding Available for Investment</strong></td>
</tr>
<tr>
<td>TRA Funds</td>
</tr>
<tr>
<td>Less TRA Already Committed</td>
</tr>
<tr>
<td><strong>Total Available TRA Funds</strong></td>
</tr>
<tr>
<td><strong>Total TRA + Appropriated Funding</strong></td>
</tr>
</tbody>
</table>

Results in Brief

Amtrak has sufficient capital resources over the next 2 years to complete most of its 1998 Business Plan Actions and other key projects, including implementation of high-speed rail service in the Northeast Corridor. These projects will be funded (as shown in Table III-1) principally by Taxpayer Relief Act funds and through borrowing. However, for the period 2001 to 2003, Amtrak will have a shortfall in capital investment funds of between $0.5 billion and $1.8 billion depending on the estimate of needs.

In addition to $2.2 billion in TRA funds available for capital investment, Amtrak expects to receive up to $2.7 billion in Federal funding through annual Federal appropriations between 1999 and 2003. The Administration has proposed that all of this funding be provided in the form of capital grants. Because Amtrak will have significant cash losses from operations that must be funded in this period, Amtrak is requesting that the permitted capital spending uses to which these appropriated funds can be applied include the more flexible definition of capital spending permitted in the transit industry. This “transit definition” of capital would allow the funds to be used for maintenance of rolling stock and infrastructure; in our report, we refer to this spending as “capital maintenance.”

Of the $2.4 billion in appropriated funds Amtrak expects to receive between 1999 and 2003, Amtrak plans to use $1.9 billion for capital maintenance. This will leave $0.5 billion available for traditional capital investment over the 5-year period.

Of the $2.2 billion in funds Amtrak received from TRA, $0.6 billion has been committed. The remaining $1.6 billion in TRA funds, combined with the $0.5 billion available from appropriated Federal funding will result in an estimated $2.2 billion in total Federal funding available for capital investment in the period 1999 to 2003.

Even less than $2.2 billion would be available for capital investment purposes if Amtrak’s annual Federal appropriations fall short of projections, or if Amtrak had to use additional Federal funds to cover operating needs under the flexible definition of capital. For the plan period, 1999 through 2003, we project that Amtrak’s operating

35 Proposed spending limits on these funds may limit the outlays available during this period to $2.4 billion. This smaller amount is used in the Table III-1 above to avoid overstating Amtrak’s potential capital investment funds during the SBP period.

36 Amtrak did not receive the “transit definition” in its FY 1999 appropriation that would have allowed Amtrak to use Federal funds for maintenance of way and maintenance of equipment. Instead, Congress stipulated that the funds could be used only for maintenance of equipment. For purposes of this analysis, we assumed the full “transit definition,” as that was the assumption Amtrak made when developing its operating and capital plans.
losses could be significantly higher than Amtrak’s forecast. If this is true, and
Amtrak needs to use Federal appropriations to cover this higher loss, then the
amount available for traditional capital investment would be reduced or even
eliminated. The exact amount available would depend on Amtrak’s ability to avoid
the operating losses projected in our restatements through changes to its SBP and
management actions over the next 5 years. Part II of this report addresses the issue
of Amtrak’s operating losses in more detail.

Amtrak has developed three internal estimates of its Federally funded capital
investment requirements for the period 1999 through 2003. These estimates range
from $3.9 billion to $4.7 billion. For purposes of discussion, we will refer to these
estimates as:

1. **Strategic Business Plan Capital Needs** $4.1 billion
2. **SBU Requests** $4.7 billion
3. **Amtrak’s Estimate of Minimum Needs** $3.9 billion

Amtrak refers to its lowest estimate as “minimum”; however, we believe it more
closely resembles what we believe are “sustainable” needs as we describe below.

In our assessment, we independently estimated three levels of Amtrak’s Federal
capital investment needs over the 5-year period 1999 through 2003. These
estimates, defined below, will be referred to as assessment estimates of Capital
Spending Needs.

1. **Minimum Capital Spending Needs** $2.7 billion
2. **Sustainable Capital Spending Needs** $3.0 billion
3. **Developmental Capital Spending Needs** $4.0 billion.

**Minimum Capital Spending Needs ($2.7 billion)**, as defined in our estimate, can
be described as capital spending required to meet legal obligations and to continue
the safe, reliable operation of the national system over the short term. We believe
this level of investment would be sufficient to maintain schedule, performance, and
service standards in a steady state through the end of 2003, but would ultimately
result in lessened reliability and higher operating costs. This budget would not be
sufficient to provide for longer-term rehabilitation, overhaul, or replacement of
capital assets such as track, structures, or rolling stock. Some projects now
underway or in the planning stage would not be funded, including certain

---

37 Amtrak estimated its minimum capital needs only through 2002. For purposes of comparability, we
extrapolated the 4-year estimate to 5 years, based on an average of the 2 last years of the estimate. The
extrapolated amount through 2003 totals $3,871 million.
improvements related to high-speed rail south of New York. While these projects, such as station improvements and facility upgrades, are important for Amtrak’s long-term survival, they are not critical to sustain Amtrak through 2003. This is not the preferred alternative because of its adverse long-term impact on operations.

Our estimate of **Sustainable Capital Spending Needs** ($3.0 billion) would provide for minimum needs, as defined above, but would also provide funds to complete several key projects underway. These would include the Seattle, Oakland, and Los Angeles mechanical facility upgrades in Amtrak West; Auto Train and mail and express facility construction for Intercity; and station upgrades in several locations. While the minimum-needs level of funding appears sufficient for these projects and for Amtrak to continue its heavy overhaul-of-equipment program through 2000, additional funding would be necessary to continue these projects and the heavy overhaul program past 2000. A sustainable needs budget would provide these funds. Amtrak’s “minimum needs” scenario actually matches most closely with our definition of “sustainable needs.”

Our estimate of **Developmental Capital Spending Needs** ($4.0 billion) would provide all of the above, but would also provide funds for Amtrak to develop new corridor services and other business that will provide positive financial returns. Amtrak’s primary development needs include further development of high-speed rail service south of New York to raise maximum speeds from 135 mph to 150 mph, and partnering with states to upgrade corridor services outside the NEC.

*Depending on the level of investment, anticipated Federal funds will fail to meet these needs by between $0.5 billion and $1.8 billion. The shortfall would further increase if Amtrak’s cash losses are higher than projected in the March SBP.*

Amtrak will continue to depend on Federal funding to meet its basic capital needs related to the upkeep of the system. Other sources of capital include external financing and state and local governments. However, because of Amtrak’s outstanding debt levels of $1.9 billion, Amtrak will have only limited ability to use external financing to provide for additional capital needs over the next 5 years.

By matching funds with state and local entities, Amtrak can help direct those budgets to projects that benefit Amtrak. In many cases, without the Amtrak match, those projects would not happen at all or would not happen for many years. One

---

38 This budget assumes $600 million available for the completion of high-speed rail work currently underway to provide full implementation of 150 miles per hour (mph) service north of New York, and implementation of 135 mph service (2 hr., 45 min. schedules) south of New York. Implementation of 150 mph service south of New York (2 hr., 30 min. schedules) will require additional funding for catenary and track and signal upgrades.
example is the 90-year old catenary along a section of Connecticut-owned track between New York and Boston. Connecticut is planning to replace the aging system, but plans to spread the $250 million project out over 8 years. *This is an excellent example of the impact that capital investment can have on operating results.* If Amtrak were able to devote funds to this project, it could be completed much more quickly. *In addition to hurting the reliability of Amtrak’s service if the catenary is not replaced, replacement would actually improve Amtrak’s service. Amtrak could increase speed and improve running times between Boston and New York beyond those currently planned.*

We found no evidence of Amtrak neglecting safety investment needs in its system. At the same time, Amtrak must continue to advance life safety projects, particularly on the Northeast Corridor. Amtrak’s single largest, long-term life safety investment need is the Penn Station-New York and New York Tunnels project, which is estimated to cost between $0.4 and $0.5 billion. Amtrak is seeking a dedicated funding source for these projects; without such a source, the projects will proceed only as funds are available in each capital budgeting cycle, likely extending implementation time by several years.

Recent capital budgets and capital plans indicate Amtrak has not neglected its national system in order to fund Northeast Corridor needs. Amtrak’s West and Intercity Business Units have benefited from major investment in new rolling stock and other infrastructure-related projects. As in the NEC, Amtrak’s estimate of long-term capital needs outside the Northeast Corridor is not yet fully developed and certain out-year projects lack sufficient detail for proper analysis of costs and benefits. Amtrak is beginning a market-based study that will recommend changes to services and route structure. This information should be used to refine and justify the future capital needs for Amtrak’s national system.

**Recommendations:**

- Amtrak should use the results of its market-based study to refine and justify the future capital needs for Amtrak’s national system.

- Amtrak should expeditiously complete its comprehensive plan for addressing both short-term (5 years) and long-term (20 years) corridor needs to provide better justification for future estimates of NEC capital investment requirements.
FINDINGS

Amtrak’s Available Capital Funds Total $2.2 Billion Between 1999 and 2003.

Besides the $2.2 billion in net TRA funds available for capital investment, Amtrak expects to receive up to $2.8 billion\(^{39}\) in Federal appropriations between 1999 and 2003. (See Table III-2.) This level of funding is based on an Administration proposal, and would have to be appropriated by Congress. The Administration’s proposal would provide this funding as an annual capital grant, and not request a separate operating subsidy. Because Amtrak will have cash losses from operations between 1999 and 2002, Amtrak is requesting that it be permitted to spend these capital funds according to the more flexible definition of capital spending permitted in the transit industry. This “transit definition” of capital would allow the funds to be used for maintenance of rolling stock and infrastructure. Such expenses are considered operating expenses under generally accepted accounting principles and Amtrak will continue to account for them as operating expenses, regardless of how its Federal funding is classified between now and 2003.

Amtrak projects that a total of $1.9 billion would be used for operating costs as permitted under the “transit definition” of capital. This would leave $0.5 billion available from Federal appropriations for capital investment over the 5-year SBP period.

Of the total $2.2 billion Amtrak received in TRA funds, Amtrak has already committed $0.6 billion in the 1998 capital budget, leaving $1.6 billion available. Added together, these two sources provide an estimated total of $2.2 billion available for traditional capital investment for the period 1999 through 2003.

**Effect of Operating Loss on Capital Investment Program**

Even less than $2.2 billion would be available for capital investment purposes if Congress approves lower appropriations, or if Amtrak had to divert additional

\(^{39}\) Voluntary spending limits by Amtrak may limit the availability of these capital appropriations to $2.43 billion during the period 1999 through 2003.
Federal funds to cover operating needs under the flexible definition of capital. This assessment’s restatement of Amtrak’s Strategic Business Plan indicates cash losses over the period 1999 through 2003 that could be significantly higher than Amtrak’s forecast if Amtrak were to take no corrective actions to compensate for deficiencies in the March SBP. If Federal appropriations were needed to cover a portion, or all, of these increased losses, then the amount available for capital investment would be reduced or eliminated. The exact amount depends on Amtrak’s ability to avoid the operating losses projected in our restatements through changes to its SBP and management actions over the next 5 years.

Amtrak has stated its intent to use TRA funds only for high rate-of-return capital projects; therefore, to the extent possible, Amtrak will use only Federal appropriated funds, subject to capital maintenance restrictions, to cover operating losses. The $1.6 billion in remaining TRA funds would continue to be available for capital investment in the period 1999 through 2003.

**Capital Needs Requirements**

Amtrak has developed three internal estimates of its Federally funded capital investment requirements for the period 1999 through 2003. These needs, discussed in detail below, range from $3.9 billion to $4.8 billion. Regardless of the forecast used, the $2.2 billion estimated to be available for capital investment purposes would be insufficient. The funding shortfall during this period would range from $1.7 billion to $2.6 billion.

The assessment team has independently estimated Amtrak’s Federal capital investment needs over the 5-year period 1999 through 2003. We developed three capital-needs scenarios (Assessment Estimates), discussed in detail below, which range from $2.7 billion to $4.0 billion. Depending on the forecast used, the $2.2 billion estimated to be available for capital investment purposes in this period would result in a funding shortfall of between $0.5 billion and $1.8 billion. Our estimate of minimum needs is lower than Amtrak’s, because Amtrak’s estimate includes costs for the continuation of certain ongoing projects, like $165 million for completing station and customer service improvements. We believe these projects are important for Amtrak’s long-term survival, but do not consider them critical to keeping Amtrak operational through 2003. Amtrak’s “minimum” needs scenario aligns more closely with our “sustainable” needs scenario, where we include funding for projects necessary to sustain Amtrak beyond 2003.

---

40 Some investment requirements, especially those related to state-supported Amtrak services or associated with commuter services, will be financed with state funds.
All capital needs discussed in this section are those that would normally be covered from Federal capital sources. State and local capital funding sources are increasingly important to Amtrak in the development of new services, and our conversations with state and local transportation officials indicate that the level of spending on projects of benefit to Amtrak is likely to be substantial through 2003. However, since the priorities of those entities may not align with Amtrak’s basic needs, state and local contributions are not generally a substitute for Federal funding. Amtrak also may be able to borrow funds to finance certain improvements such as the purchase of rolling stock. However, Amtrak’s existing debt load ($1.9 billion) will limit the degree to which this option will be available to Amtrak in the future.

Figure III-1 illustrates the degree of variability between the three Amtrak estimates of needs and our three estimates of needs. It also shows the resulting projected funding shortfalls. Higher operating losses, as we project during this period if Amtrak does not take corrective actions, would further constrain available capital, resulting in an even greater shortfall. The capital needs scenarios are described in the two sections to follow.


Section II  The Assessment’s Estimates of Amtrak’s Capital Needs.

![Figure III-1 Funding Shortfall by Capital Scenario](image-url)
Section I. Amtrak’s Estimates of Federal Capital Needs

Amtrak proposes three estimates of capital spending for the 5-year period under review (1999 through 2003). Amtrak’s estimate of future needs has changed over the past few months as estimates have been refined and new projects developed. They are:

- **Strategic Business Plan (SBP) Estimate (9/97)** $4.1 billion
- **Strategic Business Unit (SBU) 5-Year Requests (6/98)** $4.7 billion
- **Minimum Federal Capital Requirements (4/98)** $3.9 billion

1. **Strategic Business Plan Estimate (September 1997) $4.1 Billion**

When the 1997-2002 Strategic Capital Plan was developed in February 1997, Amtrak based its projections of capital spending on the proposed availability of a dedicated source of Federal capital funding equivalent to one-half cent of the Federal gasoline tax. That funding source did not materialize.

Amtrak’s projection of multi-year capital needs as expressed in the September 1997 Strategic Business Plan continue to be at levels close to the original February 1997 plan, despite the fact that the dedicated Federal capital source is not available as originally anticipated. Amtrak feels that these proposed capital budgets represent a reasonable statement of what it needs to maintain its national system and to develop new business opportunities. Amtrak considers the proposed spending level of $4.1 billion to fall within the mid-range of possible capital budget options. That is, it is higher than the minimum amounts required to operate the system safely, but lower than the amount required to completely recapitalize the Northeast Corridor infrastructure and correct years of deferred investment.

2. **SBU 5-Year Requests (June 1998) $4.7 Billion**

Each of Amtrak’s Strategic Business Units has developed a capital spending strategy to support its capital budget requests. The major difference between these estimates and the September 1997 plan discussed above is a substantial growth in

---

41 Amtrak estimated its minimum capital needs only through 2002. For comparability, we extrapolated the 4-year estimate to 5 years, based on an average of the last 2 years of the estimate. The extrapolated amount through 2003 totals $3,871 million.

42 Equivalent to 0.5 cents per gallon of gasoline sold.

43 Amtrak’s SBUs consist of Amtrak West, Intercity, and Northeast Corridor.
requests for operational reliability funding, primarily from the Northeast Corridor, and in the overhaul budget, primarily an Intercity request. Table III-3 presents the capital priorities by SBU, the funding requested by each for the SBP period, and the percentage each represents of the total plan amount.

Table III-3 Funding Priorities Represented in Strategic Business Unit Capital Needs Estimate

<table>
<thead>
<tr>
<th>SBU</th>
<th>Funding Priorities</th>
</tr>
</thead>
</table>
| **Northeast Corridor** | • Life safety and mandatory projects: Life safety projects are primarily investments in the New York North and East River tunnels, and mandatory capital projects include environmental cleanup, ADA compliance, and debt principal payments.  
  • Completion of the high-speed rail project. Work to achieve a 2-hour, 30-minute schedule between New York and Washington must also be fully funded and completed, but is not included here.  
  • Funding of commercially viable projects based on Amtrak’s ownership of Northeast Corridor assets, such as development of air rights and parking, or fiber optic leases.  
  • Providing investments to bring corridor infrastructure to a state of good repair. Amtrak would like to focus on operational reliability projects following completion of most high-speed rail projects in 2000.  
  • Funding an ongoing rolling stock overhaul program.                                                                                                                                                                                                                                         |
| **Intercity** | • State of good repair is considered the top priority. Stations, maintenance facilities, information systems, and the Michigan mainline trackage require ongoing attention to provide safe, reliable passenger service.  
  • Development of high-speed corridors, including the Midwest Rail Initiative that proposes investments in several corridors radiating from Chicago, including lines to Cincinnati, St. Louis, Detroit, and Minneapolis/St. Paul.  
  • Service expansion on existing routes. A key component of this strategy is to develop the mail and carload express business. Investment will also be required to provide new cars and locomotives, or to restore older, out-of-service equipment for these additional trains.                                                                                                                                                                                                 |
| **Amtrak West** | • Leverage state investment in track, stations, and rolling stock to encourage the growth in corridor services. Washington and Oregon are working jointly with Amtrak and freight railroad track owners to develop funding and implementation plans for major speed and capacity upgrades on the Pacific Northwest Corridor between Eugene, OR; Portland, OR; Seattle, WA; and Vancouver, BC.  
  • Replace or upgrade stations, rolling stock, and servicing facilities for improved customer service and greater operating efficiency.                                                                                                                                                                                                                           |
3. Minimum Federal Capital Requirements (April 1998) $3.9 Billion

In general, Amtrak strategic capital plans are based on needs rather than available funding. In response to the possibility that capital funding is likely to become constrained following expenditure of most of the TRA funds in 2000, the Amtrak Corporate Planning Department estimated a minimum level of federally funded capital investment required over the next 4 years. (See Table III-4.)\(^{45}\) It includes $666 million for key projects in progress and $854 million for future key projects proposed by the SBUs but not yet adopted. This capital scenario, which continues projects in progress, most closely resembles the “sustainable” budget developed in our assessment.

Table III-4 Amtrak’s Estimate of Minimum Federal Capital Needs for FY 1999 through 2002 (Years are fiscal years; Dollars are in billions.)

<table>
<thead>
<tr>
<th>Projects</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>Total through 2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-Speed Rail</td>
<td>$257</td>
<td>$181</td>
<td>$119</td>
<td>$84</td>
<td>$641</td>
</tr>
<tr>
<td>Mandatory (includes debt service)</td>
<td>79</td>
<td>73</td>
<td>88</td>
<td>83</td>
<td>323</td>
</tr>
<tr>
<td>Overhauls</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>400</td>
</tr>
<tr>
<td>Operational Reliability/Life Safety</td>
<td>140</td>
<td>140</td>
<td>140</td>
<td>140</td>
<td>560</td>
</tr>
<tr>
<td>Key Projects in Progress</td>
<td>269</td>
<td>121</td>
<td>97</td>
<td>87</td>
<td>574</td>
</tr>
<tr>
<td>Other Needs</td>
<td>436</td>
<td>159</td>
<td>101</td>
<td>72</td>
<td>768</td>
</tr>
<tr>
<td><strong>Total Estimated Federal Capital Needs</strong></td>
<td><strong>$1,281</strong></td>
<td><strong>$774</strong></td>
<td><strong>$645</strong></td>
<td><strong>$566</strong></td>
<td><strong>$3,266</strong></td>
</tr>
</tbody>
</table>

Note: Amtrak estimated its minimum capital needs only through 2002. For purposes of comparability, we extrapolated the 4-year estimate to 5 years, based on an average of the 2 last years of the estimate. The extrapolated amount through 2003 totals $3.871 million.

Section II. Assessment’s Estimates of Amtrak’s Capital Needs

After review of Amtrak’s proposed capital plans and an assessment of Amtrak’s capital needs, we believe that the following alternative budget scenarios more accurately reflect Amtrak’s needs at the respective budget levels.

1. **Minimum Capital Spending Needs** $2.7 billion
2. **Sustainable Capital Spending Needs** $3.0 billion
3. **Developmental Capital Spending Needs** $4.0 billion

1. Minimum Capital Spending Needs $2.7 Billion

We define Amtrak’s minimum Federal capital funding requirements as capital spending required to meet legal obligations such as repayment of debt, and to continue the safe, reliable operation of the national system over the short term. A capital budget incorporating these minimum needs would probably be sufficient to maintain schedule performance and service standards in a steady state through the end of 2003, particularly considering the large recent investment in rolling stock and infrastructure. However, this budget would ultimately result in diminished reliability and higher operating costs, since it would not be sufficient to provide for longer term rehabilitation, overhaul, or replacement of capital assets such as track, structures, or rolling stock. Table III-5 presents the projected minimum capital spending needs in each of the major capital spending categories through 2003.

Table III-5 Assessment Estimate of Minimum Capital Spending Requirements 1999 through 2003
(Years are fiscal years; Dollars are in millions)

<table>
<thead>
<tr>
<th>Spending Category</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Principal Payments</td>
<td>$52</td>
<td>$54</td>
<td>$57</td>
<td>$68</td>
<td>$100</td>
<td>$331</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>281</td>
<td>259</td>
<td>187</td>
<td>192</td>
<td>197</td>
<td>1,116</td>
</tr>
<tr>
<td>Rolling Stock</td>
<td>142</td>
<td>88</td>
<td>90</td>
<td>93</td>
<td>96</td>
<td>509</td>
</tr>
<tr>
<td>Technology</td>
<td>33</td>
<td>17</td>
<td>16</td>
<td>16</td>
<td>17</td>
<td>99</td>
</tr>
<tr>
<td>High-Speed Rail</td>
<td>300</td>
<td>300</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>600</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$808</strong></td>
<td><strong>$718</strong></td>
<td><strong>$350</strong></td>
<td><strong>$369</strong></td>
<td><strong>$410</strong></td>
<td><strong>$2,655</strong></td>
</tr>
</tbody>
</table>

Source: Wilbur Smith Associates

Table III-6 shows that taken together, estimated minimum capital spending requirements in 1999 and 2000 are matched by the estimated available capital, assuming no additional Federal appropriated funds are needed to cover higher-than-projected operating losses. However, for the three budget years 2001 through 2003 when TRA funds have been depleted, estimated Federal funds available for capital investment fail to meet even minimum needs by $492 million.

Table III-6 Difference Between Minimum Capital Spending Requirements and Available Capital Funds 1999 through 2003
(Years are fiscal years; Dollars are in millions)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Capital</td>
<td>$808</td>
<td>$718</td>
<td>$350</td>
<td>$369</td>
<td>$410</td>
<td>$2,655</td>
</tr>
<tr>
<td>Spending Requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available Capital</td>
<td>900</td>
<td>626</td>
<td>250</td>
<td>156</td>
<td>231</td>
<td>2,163</td>
</tr>
<tr>
<td><strong>Difference</strong></td>
<td><strong>$92</strong></td>
<td><strong>($92)</strong></td>
<td><strong>($100)</strong></td>
<td><strong>($213)</strong></td>
<td><strong>($179)</strong></td>
<td><strong>($492)</strong></td>
</tr>
</tbody>
</table>
The spending categories identified in Table III-5 address a variety of capital needs. For instance, Infrastructure costs ($1,116 million for 1999 through 2003) address the following needs: Operational Reliability, Life Safety, and Mandatory (i.e., ADA improvements). Below is a list of these needs with their estimated annual costs. Below each cost is an annotation identifying the corresponding spending category/s contained in Table III-5. The **Minimum Needs** total of $2.7 billion represents the sum of these annual costs, inflated annually, plus an additional $183 million in 1999 and $82 million in 2000 for capital projects initiated in previous years.

<table>
<thead>
<tr>
<th>Annual Needs($)</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>$135 million</td>
<td><strong>Operational Reliability.</strong> The majority of Amtrak’s infrastructure is in the Northeast Corridor, and a large percentage of Amtrak’s capital priorities are related to preserving a safe, reliable operating environment for NEC service. We estimate that Amtrak’s minimum operational reliability needs through 2003 total $675 million, with $500 million of those in the Northeast Corridor. The operational reliability needs in the NEC are primarily for in-kind replacement of life-expired assets (such as rail, ties, cables, and electric traction hardware) and for repairs to buildings and other structures. Operational reliability needs outside the Northeast Corridor relate largely to repairs required to keep Amtrak-owned facilities in serviceable condition. These facilities include rolling stock maintenance yards and shops, Amtrak Michigan trackage, and stations owned or used by Amtrak.</td>
</tr>
<tr>
<td>$30 million</td>
<td><strong>Life Safety.</strong> The life safety component of the capital budget is for Northeast Corridor needs, primarily upgrades to ventilation, lighting, fire protection, and emergency evacuation systems in the New York North and East River tunnels.</td>
</tr>
<tr>
<td>$76 million*</td>
<td><strong>Mandatory.</strong> Includes principal payments on long-term debt and certain legally mandated projects, such as environmental cleanup and ADA accessibility projects. Scheduled principal payments on debt are the major component, ranging from $52 million in 1999 to $100 million in 2003.</td>
</tr>
</tbody>
</table>

---

* Average annual mandatory costs total $76 million, but actual needs vary significantly. Debt principal repayment, which is the largest mandatory cost, will grow each year as follows: 1999, $52 million; 2000, $54 million; 2001, $57 million; 2002, $68 million; 2003, $100 million.
$85 million Progressive Overhauls. Rather than provide heavy overhauls on a 4- or 6-year cycle, Amtrak has been moving toward a “progressive overhaul” system on a portion of its rolling stock fleet where incremental overhaul work is done on an annual basis. This budget would allow for continuation of the progressive overhaul program, but would cause deferrals of most heavy overhaul work on rolling stock not covered by the progressive overhaul program (such as NEC locomotives).

$15 million Information Technology. We estimate minimum information technology requirements at $15 million annually for upgrades to existing systems.

$300 million High-Speed Rail. In our assessment of minimum Federal capital needs, we have assumed completion of high-speed rail work currently under way. Our estimates assume full implementation of 150 mph service north of New York, and implementation of 135 mph service south of New York. Implementation of 150 mph service south of New York will require additional funding for constant-tension catenary, and track and signal upgrades.

The assessment’s minimum capital requirements budget will cover Amtrak’s immediate short-term needs, but may have long-term implications. Missing from our minimum needs budget are the following.

- Reflecting Needs. No refleting needs are met under this constrained budget. Reflecting includes purchase of new rolling stock or reconfiguration or remanufacture of existing equipment. Because Amtrak has engaged in a major refleting program during the last 8 years, it could defer most needs in this category if it has to operate under a constrained capital budget.

- Corridor or New Business Development. The elimination of funding for corridor development or new business development may be counterproductive because it will deny Amtrak the ability to develop new, profitable businesses or to leverage certain state and local funds, both of which may reduce Amtrak’s cash losses from operations in the future.\(^47\)

---

\(^47\) Amtrak is hoping to increase state and local participation in capital improvements by agreeing to “partner” or share costs with these entities on projects that are mutually beneficial. Amtrak refers to this as “leveraging” investment, and is primarily using TRA funds for these new business development projects. An example is the short-haul corridors planned in Intercity and Amtrak West. Amtrak proposes to use Federal capital to pay a portion of the cost of new rolling stock and other facilities for the emerging corridors, and by doing so, expects that the states will provide the majority of the funding.
Funding for Projects in Progress. This budget would mean that some projects now just under way or in the planning stage would not be funded, including certain improvements related to high-speed rail south of New York.

While adequate to maintain the system over the near term, this minimal spending level would not be sufficient to correct past deferred maintenance of older rolling stock and the Northeast Corridor infrastructure, particularly south of New York. The full effect of these deferrals may not negatively affect Amtrak operations over the next 5 years. Long-term implications are serious, however, and can impact both costs and revenues. For example, cars and locomotives will become increasingly unreliable, leading to decreased availability for service. Slow orders or permanent speed restrictions may be placed on sections of Northeast Corridor track for safety reasons or due to deteriorating ride quality. The appearance of coaches, stations, and other infrastructure will become progressively worse, which would result in lower customer satisfaction and, ultimately, lower revenues.

2. Sustainable Capital Spending Needs $3.0 billion

A Sustainable Needs capital funding scenario would, in addition to the Minimum Needs discussed above, provide enough funds to avoid deferral of key capital projects and to continue the heavy overhaul program.

Our Minimum Needs budget does not include a provision for continuation of funding for certain capital projects begun prior to 2000. While we believe these projects are important for Amtrak’s long-term survival, we do not believe they are essential to keep Amtrak operational through the SBP period. In our Minimum Needs scenario, funding for these projects would be suspended, and the projects would be deferred or cancelled.48

The projects at risk include the Seattle, Oakland, and Los Angeles mechanical facility upgrades in Amtrak West; Auto Train and mail and express facility construction for the Intercity SBU; and station upgrade projects in several locations. We believe Amtrak will have sufficient funds available through 2000 to cover the costs of these projects, largely because of the availability of TRA funds. All TRA funds, however, will be committed by the end of 2000.

48 This would not affect Amtrak’s current high-speed rail efforts that will, for the most part, be completed by the end of 2000.
Our Minimum Needs estimate also assumes a suspension of much of the rolling stock heavy overhaul program after 2000.\textsuperscript{49} The end result of such actions will probably be to drive up operating costs due to equipment failure, and to increase the cost of overhauls when they are finally performed. While a heavy overhaul program is not essential to Amtrak surviving until 2003, it is critical to maintain Amtrak’s sustainability beyond that year. Again, we believe Amtrak will have enough funding available to continue its heavy overhaul program through 2000 because of the availability of TRA funds. Once these are depleted, however, Amtrak will need to find additional funds to continue the program.

Table III-7 presents our estimates of the costs involved with continuing the ongoing projects noted above, and continuing the heavy overhaul program beyond 2000.\textsuperscript{50} The table shows the total Sustainable capital requirements scenario when these costs are added to our estimates of minimum costs.

Table III-7 Assessment Estimate of Sustainable Capital Spending Needs through 2003  
(\textit{Years are fiscal years; Dollars are in millions.})

<table>
<thead>
<tr>
<th>Projects</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total through 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment Estimate of Minimum Needs</td>
<td>$808</td>
<td>$718</td>
<td>$350</td>
<td>$369</td>
<td>$410</td>
<td>$2,655</td>
</tr>
<tr>
<td>Funds to Continue Ongoing Projects After 2000</td>
<td>-</td>
<td>-</td>
<td>70</td>
<td>60</td>
<td>70</td>
<td>200</td>
</tr>
<tr>
<td>Funds for Heavy Overhauls Beyond 2000\textsuperscript{51}</td>
<td>-</td>
<td>-</td>
<td>53</td>
<td>55</td>
<td>56</td>
<td>164</td>
</tr>
<tr>
<td>\textit{Total Estimated Federal Capital Needs}</td>
<td>\textit{$808$}</td>
<td>\textit{$718$}</td>
<td>\textit{$473$}</td>
<td>\textit{$484$}</td>
<td>\textit{$536$}</td>
<td>\textit{$3,019$}</td>
</tr>
</tbody>
</table>

If these programs are added to our estimated Minimum Needs, Amtrak’s Federal capital needs over the 5-year period rise to $3.0 billion. This is $0.8 billion greater than the $2.2 billion in Federal funding we estimate to be available for capital investment purposes in this period.\textsuperscript{52}

\textsuperscript{49} Overhauls are improvements made to existing equipment and rolling stock that lead to improved operations and lower maintenance costs. Heavy overhauls, which are suspended in our Minimum Needs budget, differ from progressive overhauls, which are not suspended. Heavy overhauls involve an extensive overhaul performed every 3 to 4 years. Under the progressive overhaul program, Amtrak performs heavy maintenance whenever a car breaks down and also a limited overhaul each year on every car.

\textsuperscript{50} Totals have been adjusted to delete projects already covered under budget categories discussed earlier, such as $25 million annually for New York Tunnel life safety work.

\textsuperscript{51} $50 million in 1999 dollars adjusted annually for inflation.

\textsuperscript{52} Estimate based on Amtrak’s projections in March SBP, prior to our restatement.
3. Developmental Capital Spending Needs $4.0 Billion

The third capital scenario represents all of the aforementioned Minimum Needs ($2.7 billion) and additional Sustainable Needs ($364 million), and includes Amtrak’s third priority: the development of new corridor services and other businesses that will provide positive financial returns, such as mail and express package service ($984 million). The combined total of these three, $4.0 billion, constitutes our estimate of Amtrak’s Developmental Needs. Amtrak’s primary corridor developmental needs include further development of high-speed rail service south of New York to raise maximum speeds from 135 mph to 150 mph, and partnering with states to upgrade corridor services outside the NEC.

None of these developmental needs are met by the minimum Federal funding levels discussed above for years beyond 2000. We estimate these needs at $300 million annually, adjusted for inflation, as follows.

- FY 2001: $318 million
- FY 2002: $328 million
- FY 2003: $338 million

**TOTAL $984 million**

This estimate is based on an allocation of approximately $200 million annually for the Northeast Corridor, and $100 million for corridor and new business development elsewhere in the system. The Northeast Corridor allocation primarily represents the cost estimate of completing improvements related to high-speed rail service south of New York, and to a lesser extent, investment needed on sections of track in the NEC SBU that are not directly on the corridor between Washington and Boston. These funds will contribute toward state of good repair needs, though this level of spending is insufficient to accommodate all long-term needs in that category. The estimate of $100 million per year for non-NEC is an estimate of the necessary matching funds Amtrak will need to leverage state and local spending at levels commensurate with a realistic estimate of opportunities. If current experience holds true in the future, this investment could result in significant spending by state and local agencies on projects that will address a portion of Amtrak’s capital needs.

---

53 Amtrak’s Draft FY 1999 Capital Budget (9/29/98) assumes over $300 million in leveraged state and local capital funding.
When added to the Sustainable Needs funding level, the additional projects in the Developmental Needs budget increase Amtrak’s 1999 through 2003 Federal capital needs to $4.0 billion. This is $1.8 billion more than the Federal capital funding estimated to be available during this period. This shortfall occurs principally in 2001 through 2003.

This developmental level of Federal capital requirements represents, in the context of the past few years, a normalized Amtrak capital spending level. It allows for maintenance of infrastructure and avoids deferral of normal capital overhaul or rebuilding needs into future years. It also permits Amtrak to engage in further development of high-speed rail service on the Northeast Corridor, as well as partner with state and local governments for development of other corridor services around the country. However, in order to justify this level of spending, the assessment team believes Amtrak must provide greater detail regarding the cost and scope of Northeast Corridor state-of-good-repair needs and proposed new corridor developmental needs beyond those specifically included in the draft 1999 budget.

**Federal Funding Requirements Based on Capital Spending Scenarios**

If Amtrak’s March SBP were to occur as Amtrak projected, Amtrak’s required Federal funding for it to meet minimum capital spending requirements would be $500 million more over the 1999 through 2000 period than the Administration’s proposed, available funding levels of $2.4 billion. This *funding gap* grows to $800 million under the sustainable capital spending scenario, and to $1.8 billion to meet developmental capital spending requirements. Table III-8 shows the year-by-year additional Federal appropriated funding required for each capital spending scenario, as well as the total Federal appropriated funding required each year.
Table III-8 Federal Appropriated Funding Requirements Under March SBP With Capital Spending  (Years are fiscal years; Dollars are in millions.)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>99-03</td>
</tr>
<tr>
<td><strong>Projected Available Capital Funds</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Expected Federal Appropriated Funds</td>
<td>$244</td>
<td>$593</td>
<td>$551</td>
<td>$522</td>
<td>$521</td>
<td>$2,431</td>
</tr>
<tr>
<td>Less Federal Funds-Capital Maintenance 54</td>
<td>194</td>
<td>543</td>
<td>501</td>
<td>366</td>
<td>290</td>
<td>1,894</td>
</tr>
<tr>
<td>Federal Funds-Capital Investment</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>156</td>
<td>231</td>
<td>537</td>
</tr>
<tr>
<td>Plus TRA</td>
<td>850</td>
<td>576</td>
<td>200</td>
<td>-</td>
<td>-</td>
<td>1,626</td>
</tr>
<tr>
<td>Plus Budget Result</td>
<td>8</td>
<td>(6)</td>
<td>38</td>
<td>92</td>
<td>11</td>
<td>143</td>
</tr>
<tr>
<td><strong>Total Capital Funds Available</strong></td>
<td>$908</td>
<td>$620</td>
<td>$288</td>
<td>$248</td>
<td>$242</td>
<td>$2,306</td>
</tr>
</tbody>
</table>

**ASSESSMENT CAPITAL SPENDING SCENARIOS**

**Minimum Capital Spending**

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>99-03</td>
</tr>
<tr>
<td>Total Capital Funds Available</td>
<td>$908</td>
<td>$620</td>
<td>$288</td>
<td>$248</td>
<td>$242</td>
<td>$2,306</td>
</tr>
<tr>
<td>Less Minimum Capital Spending</td>
<td>808</td>
<td>718</td>
<td>350</td>
<td>369</td>
<td>410</td>
<td>2,655</td>
</tr>
<tr>
<td>Additional Federal Funds Required (Carry-over)</td>
<td>(100)</td>
<td>(2)</td>
<td>60</td>
<td>121</td>
<td>168</td>
<td>349</td>
</tr>
<tr>
<td>Total Expected Federal Appropriated Funds</td>
<td>244</td>
<td>593</td>
<td>551</td>
<td>522</td>
<td>521</td>
<td>2,431</td>
</tr>
<tr>
<td>Total Federal Funds Required</td>
<td>$244</td>
<td>$593</td>
<td>$611</td>
<td>$643</td>
<td>$689</td>
<td>$2,780</td>
</tr>
</tbody>
</table>

**Sustainable Capital Spending**

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>99-03</td>
</tr>
<tr>
<td>Total Capital Funds Available</td>
<td>$908</td>
<td>$620</td>
<td>$288</td>
<td>$248</td>
<td>$242</td>
<td>$2,306</td>
</tr>
<tr>
<td>Less Sustainable Capital Spending</td>
<td>808</td>
<td>718</td>
<td>473</td>
<td>484</td>
<td>536</td>
<td>3,019</td>
</tr>
<tr>
<td>Additional Federal Funds Required (Carry-over)</td>
<td>(100)</td>
<td>(2)</td>
<td>183</td>
<td>236</td>
<td>294</td>
<td>713</td>
</tr>
<tr>
<td>Total Expected Federal Appropriated Funds</td>
<td>244</td>
<td>593</td>
<td>551</td>
<td>522</td>
<td>521</td>
<td>2,431</td>
</tr>
<tr>
<td>Total Federal Funds Required</td>
<td>$244</td>
<td>$593</td>
<td>$734</td>
<td>$758</td>
<td>$815</td>
<td>$3,144</td>
</tr>
</tbody>
</table>

**Developmental Capital Spending**

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>99-03</td>
</tr>
<tr>
<td>Total Capital Funds Available</td>
<td>$908</td>
<td>$620</td>
<td>$288</td>
<td>$248</td>
<td>$242</td>
<td>$2,306</td>
</tr>
<tr>
<td>Less Developmental Capital Spending</td>
<td>808</td>
<td>718</td>
<td>791</td>
<td>812</td>
<td>874</td>
<td>4,003</td>
</tr>
<tr>
<td>Additional Federal Funds Required (Carry-over)</td>
<td>(100)</td>
<td>(2)</td>
<td>501</td>
<td>564</td>
<td>632</td>
<td>1,697</td>
</tr>
<tr>
<td>Total Expected Federal Appropriated Funds</td>
<td>244</td>
<td>593</td>
<td>1,052</td>
<td>1,086</td>
<td>$1,153</td>
<td>$4,128</td>
</tr>
<tr>
<td>Total Federal Funds Required</td>
<td>$244</td>
<td>$593</td>
<td>$1,052</td>
<td>$1,086</td>
<td>$1,153</td>
<td>$4,128</td>
</tr>
</tbody>
</table>

Table III-9 presents Federal appropriated funding requirements under our restatement projections. We believe the restated March SBP is a worst case scenario. It shows what we believe would occur if Amtrak were to take no actions.

---

54 This is Amtrak’s March SBP projected use of Federal appropriated funds for capital maintenance, which assumes the “transit definition” of capital.
Table III-9 Restated Appropriated Federal Funding Requirements Under Worst Case Scenario With Capital Spending
(Years are fiscal years; Dollars are in millions)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total 99-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Available Capital Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Expected Federal Appropriated Funds</td>
<td>$244</td>
<td>$593</td>
<td>$551</td>
<td>$522</td>
<td>$521</td>
<td>$2,431</td>
</tr>
<tr>
<td>Less Federal Funds-Capital Maintenance</td>
<td>244</td>
<td>593</td>
<td>551</td>
<td>460</td>
<td>446</td>
<td>2,294</td>
</tr>
<tr>
<td>Federal Funds-Capital Investment</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>62</td>
<td>75</td>
<td>137</td>
</tr>
<tr>
<td>Plus TRA</td>
<td>850</td>
<td>576</td>
<td>200</td>
<td>-</td>
<td>-</td>
<td>1,626</td>
</tr>
<tr>
<td>Plus Budget Result</td>
<td>(35)</td>
<td>(144)</td>
<td>(103)</td>
<td>0</td>
<td>0</td>
<td>(281)</td>
</tr>
<tr>
<td>Total Capital Funds Available</td>
<td>$815</td>
<td>$432</td>
<td>$97</td>
<td>$62</td>
<td>$75</td>
<td>$1,482</td>
</tr>
</tbody>
</table>

ASSESSMENT CAPITAL SPENDING SCENARIOS

Minimum Capital Spending

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total 99-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Capital Funds Available</td>
<td>$815</td>
<td>$432</td>
<td>$97</td>
<td>$62</td>
<td>$75</td>
<td>$1,482</td>
</tr>
<tr>
<td>Less Minimum Capital Spending</td>
<td>808</td>
<td>718</td>
<td>350</td>
<td>369</td>
<td>410</td>
<td>2,655</td>
</tr>
<tr>
<td>Additional Federal Funds Required (Carry-over)</td>
<td>(7)</td>
<td>279</td>
<td>253</td>
<td>307</td>
<td>335</td>
<td>1,174</td>
</tr>
<tr>
<td>Total Expected Federal Appropriated Funds</td>
<td>244</td>
<td>593</td>
<td>551</td>
<td>522</td>
<td>521</td>
<td>2,431</td>
</tr>
<tr>
<td>Total Federal Appropriated Funds Required</td>
<td>$244</td>
<td>$872</td>
<td>$804</td>
<td>$829</td>
<td>$865</td>
<td>$3,614</td>
</tr>
</tbody>
</table>

Sustainable Capital Spending

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total 99-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Capital Funds Available</td>
<td>$815</td>
<td>$432</td>
<td>$97</td>
<td>$62</td>
<td>$75</td>
<td>$1,482</td>
</tr>
<tr>
<td>Less Sustainable Capital Spending</td>
<td>808</td>
<td>718</td>
<td>473</td>
<td>484</td>
<td>536</td>
<td>3,019</td>
</tr>
<tr>
<td>Additional Federal Funds Required (Carry-over)</td>
<td>(7)</td>
<td>279</td>
<td>376</td>
<td>422</td>
<td>461</td>
<td>1,537</td>
</tr>
<tr>
<td>Total Expected Federal Appropriated Funds</td>
<td>244</td>
<td>593</td>
<td>551</td>
<td>522</td>
<td>521</td>
<td>2,431</td>
</tr>
<tr>
<td>Total Federal Appropriated Funds Required</td>
<td>$244</td>
<td>$872</td>
<td>$927</td>
<td>$944</td>
<td>$982</td>
<td>$3,968</td>
</tr>
</tbody>
</table>

Developmental Capital Spending

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>Total 99-03</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Capital Funds Available</td>
<td>$815</td>
<td>$432</td>
<td>$97</td>
<td>$62</td>
<td>$75</td>
<td>$1,482</td>
</tr>
<tr>
<td>Less Developmental Capital Spending</td>
<td>808</td>
<td>718</td>
<td>791</td>
<td>812</td>
<td>874</td>
<td>4,003</td>
</tr>
<tr>
<td>Additional Federal Funds Required (Carry-over)</td>
<td>(7)</td>
<td>279</td>
<td>794</td>
<td>750</td>
<td>799</td>
<td>2,521</td>
</tr>
<tr>
<td>Total Expected Federal Appropriated Funds</td>
<td>244</td>
<td>593</td>
<td>551</td>
<td>522</td>
<td>521</td>
<td>2,431</td>
</tr>
<tr>
<td>Total Federal Appropriated Funds Required</td>
<td>$244</td>
<td>$872</td>
<td>$1,245</td>
<td>$1,272</td>
<td>$1,320</td>
<td>$4,952</td>
</tr>
</tbody>
</table>

55 Because the restatements project large, additional cash losses, the Federal appropriated funds applied to capital maintenance exceed those in Amtrak’s March SBP. The amounts shown for 1999 through 2001 would consume all of Amtrak’s expected appropriated funds and nearly all in 2002 and 2003.

56 The difference between Total Capital Funds Available here and that in Table II-8 is the amount of the total restatement in each year, $823 million for the entire 1999 to 2003 period.
to adjust its SBP or to adopt alternative actions for parts of the plan that are not occurring or are unlikely to be achieved. We do not expect the restated plan to actually occur, because Amtrak has already indicated that it has made adjustments in the 1999 SBP and will make additional changes in future years. Under this worst case scenario, the funding gap increases by $0.8 billion from the total numbers in Table III-8.

**Other Sources of Funding Could Offset Federal Funding Shortfalls**

Amtrak will continue to depend on Federal capital funding to meet its basic capital needs related to the upkeep of the system. However, other sources of capital are becoming increasingly important to Amtrak as supplements to this funding. These primarily include external financing and state and local governments.

**External Financing**

During the past few years, Amtrak has increased its reliance on outside lenders to finance the purchase of high-speed rail equipment in the Northeast Corridor and to re-equip its rolling stock fleet. In 1998, Amtrak had more than $1.9 billion in outstanding long-term debt. The service on this debt, especially in the next few years, will correspondingly grow, requiring significant capital and operating funds. Amtrak treats principal payments on debt as a capital cost and interest on debt as an operating expense. Figure III-2 illustrates the projected growth in principal and interest between 1999 and 2003.

![Figure III-2 Debt Service Growth: 1998-2003](source: Financial Model Calculations, Vanness Brackenridge)
Amtrak’s ability to obtain future financing will be based on its ability to service the debt. Amtrak’s projected future operating losses and its need for Federal funds to cover them make it questionable whether Amtrak could take on more debt and still cover its other operating needs, including labor costs, maintenance, and train operations. Amtrak projects that its interest payments on debt will total $95 million in 1999, which will represent 3 percent of its operating costs; but it predicts that by 2003, the interest payments will total $139 million (5 percent of operating costs). Amtrak’s 1999 principal payments, which are considered capital expenses, are projected to equal $52 million and account for 5 percent of available capital funding. By 2003, principal payments on debt will total $100 million, 41 percent of Amtrak’s available $242 million in capital funding. Because of these constraints, Amtrak’s ability to use external financing to provide for additional capital needs over the next 5 years will be limited.

State and Local Funding

State and commuter agency capital funding has been an increasingly important source of capital funding for Amtrak, and it appears this trend will continue in coming years. State and local entities spent $116 million in 1997 and $107 million in 1998 for projects undertaken jointly with Amtrak. In addition, states and local entities invest in capital projects benefiting Amtrak for which there is no Amtrak match and thus do not appear in Amtrak’s capital budget, Amtrak’s statement of its capital needs, or under any of our three capital spending scenarios. The State of California, for example, has committed almost $1 billion in capital for rail projects over the last 8 years. In many cases where Amtrak shared costs, state and local funds comprised the majority of the total project costs. For example, California is contributing $30 million for upgrades of the Oakland Maintenance Facility, and Amtrak is contributing $7 million, or about 20 percent. Amtrak and the State of Washington are sharing 50-50 the cost of the new Seattle King Street Maintenance Facility, estimated at $48 million.

In considering its priorities for the use of Federal capital, Amtrak attaches great importance to the use of Federal dollars to leverage state and local dollars. In effect, by providing matching funds, Amtrak is able to direct state investment to projects Amtrak really wants, and can accelerate the project’s completion. Many of these projects would not happen at all without the Amtrak match, or would not happen for many years. Amtrak can often leverage significant state or local investment by providing between one-fifth and one-third of the total project cost from Federal

See Table III-6 for a breakdown of funds available by year. These totals are a combination of TRA funds and annual Federal appropriations after funds needed to cover operating losses are subtracted.
funds. Accordingly, the amount of Federal funding available to Amtrak can influence the level of funding from these other sources.

At the same time, there are certain limitations to state and local agency capital funding that should be noted. First, with a few exceptions, there can be no assurance that this funding will materialize. Most state and local agencies are funded on an annual cycle, and the amount of future funding can be heavily influenced by a variety of factors, including political considerations and the fiscal condition of the agency. On balance, it appears that state and local capital funding will become increasingly important to Amtrak, but the timing and amount of this assistance cannot be predicted with a high degree of certainty.

The second important limitation is that many of the proposed projects, while helpful to Amtrak, do not necessarily meet Amtrak’s stated needs. Unlike the situation with unrestricted Federal grants, Amtrak has only limited power to direct or prioritize state and local funding. An example of the conflicts this can create is the aging catenary in the Northeast Corridor north of New Haven.

The Connecticut Department of Transportation (ConnDOT) owns the Northeast Corridor track from the western Connecticut state line to New Haven. The overhead electrical lines – the catenary—along a section of this track are 80 to 90 years old. Last year, the aging lines were downed at least 39 times, causing delays to Amtrak and commuter passengers. ConnDOT estimates that replacing this catenary will cost $250 million. This is a project it plans to complete over 8 years. This timeframe is adequate for ConnDOT, but for Amtrak, this project is critical. With high-speed rail scheduled to begin in 2000, if delays like those experienced in 1997 continue to occur, the performance of this service will suffer. Amtrak cannot afford to wait 8 years for ConnDOT to fix the problem, but short of funding the project itself, Amtrak cannot tell ConnDOT how to allocate its limited transportation budget.

The ConnDOT catenary is an excellent example of the impact that capital investment can have on operating results. If Amtrak were able to devote funds to this project, it could be completed much more quickly. In addition to hurting the reliability of Amtrak’s service if the catenary is not replaced, replacement would actually improve Amtrak’s service. Train speed is limited in this section because of the aging wires; if they were replaced, Amtrak could increase speed and improve running times between Boston and New York beyond those currently planned.

State and local funding should not necessarily be considered a replacement for Federal capital, but primarily an adjunct. Regardless, these contributions are playing an increasingly important role as a source of developmental capital.
Amtrak’s policy is to use Federal capital to encourage and leverage state and local investment in corridor development. A future source of Federal funding dedicated to this capital purpose would, in the assessment team’s opinion, be productive in helping Amtrak develop alternative capital sources.

**Safety**

We found no evidence of Amtrak neglecting safety investment needs in its system. At the same time, Amtrak must continue to advance life safety projects, particularly on the Northeast Corridor. Amtrak’s long-term, life safety needs reside in the Northeast Corridor, principally the PSNY and NY Tunnels complex, which Amtrak owns. This complex is important because it is a critical operations link for Amtrak, New Jersey Transit (NJT), and Long Island Railroad (LIRR) in the New York metropolitan area. Life safety project needs in the PSNY and NY Tunnels are currently estimated at between $0.4 and $0.5 billion.

Amtrak, in coordination with LIRR and NJT, continues to plan for the eventual investment in these life safety projects, and Amtrak’s NEC draft 1999 capital plans include specific projects that address identified, short-term life safety needs in the PSNY/NY Tunnels. However, the planning, design, staging, and other logistics related to all projects, particularly the need to maintain service while the projects are in progress, indicate that an extended time period (probably 5 to 15 years) will be required to complete all of the identified, long-term life safety projects.

NJT and LIRR will contribute capital funds to these programs and Amtrak plans to seek a dedicated funding source to raise its required funds. However, at this time, no adequate and reliable source of funds has been identified to fully support these life safety projects on a near-term basis. Without a dedicated source of funding, these projects will proceed only as funds are available in each capital budgeting cycle, likely extending implementation time by several years.

Other life safety issues impacting Amtrak include the development and installation of positive train separation technology on freight lines used by Amtrak, and the continued elimination of grade crossings on these lines. These projects are normally funded outside Amtrak’s budget. However, Amtrak passengers and employees will benefit from continued Federal, state, and local efforts to advance these projects.

**Amtrak Has Made Substantial Investments Throughout its System**

Recent capital budgets and capital plans indicate Amtrak has not neglected its national system in order to fund Northeast Corridor needs. Amtrak’s West and Intercity SBUs have benefited from major investment in new rolling stock and other infrastructure-related projects. Given the backlog of state-of-good-repair needs,
however, Amtrak must make significant investments in the NEC infrastructure in future years. At the same time, the principal Amtrak West and Intercity capital priorities of new business development should not be neglected.

**Northeast Corridor Needs State-of-Good-Repair Investment**

The assessment team’s inspection of the Northeast Corridor confirms Amtrak’s position that major infrastructure repairs will be necessary in the future to maintain a state of good repair. The corridor is already one of the world’s most heavily used railroads and will get busier with the growth of high-speed rail, commuter, mail and express, and freight traffic. While infrastructure improvements have been made in many areas in recent years, there is no doubt that there is still a lot of work to do. For example, 14,000 railway structures are located on the corridor, most of which date from the 1920s or earlier.

All of the underway projects we examined in our inspection were necessary. In many cases, project costs have not been fully developed, and we are not able to comment on the cost of each. There is no doubt, however, that the annual capital budgeting process with which Amtrak has to live adds to the cost of improvements. For example, the bridge decks at Chester, PA, have deteriorated to the extent that bridge ties had to be inserted to make conditions safe at selected locations. If Amtrak had sufficient funds, it could have made a wholesale replacement at the time those repairs were made. This would have been cheaper than a piecemeal approach, which will require returning again and again for spot emergency repairs.

The inspection demonstrated that a large amount of work is still left to be performed. The amount of dated equipment and facilities was much more prevalent than anticipated. In addition, many of the needs will require significant expenditures and an ongoing source of capital over a period of many years. This will include the upgrade or replacement of major components, including bridges, tunnels and the electric traction system. Amtrak’s estimates of Northeast Corridor state-of-good-repair needs are not yet fully defined. Amtrak’s current capital strategy is to complete the initial phase of the high-speed rail project by 2001, then focus on upgrades, state-of-good-repair investments, and operational reliability projects, principally on the south end of the corridor. Amtrak should expeditiously complete its comprehensive plan for addressing both short-term (5 years) and long-term (20 years) corridor needs. This will provide better justification for future NEC capital needs estimates than presently exists.

Amtrak’s estimate of future, long-term capital needs outside the Northeast Corridor is not yet fully developed either, and certain out-year projects lack sufficient detail for proper analysis of costs and benefits. Amtrak is beginning a market-based study
that will recommend changes to services and route structure. This information should be used to refine and justify the future capital needs for Amtrak’s national system.

**Recommendations**

Throughout this section on Amtrak’s capital needs, we have identified a number of areas where Amtrak could take action that would aid both itself and the Congress in assessing and addressing Amtrak’s capital needs. These recommendations have been presented in the relevant sections and are also presented below.

- **Amtrak’s estimate of capital needs outside the Northeast Corridor** is not yet fully developed and certain out-year projects lack sufficient detail for proper analysis of costs and benefits. Amtrak is beginning a market-based study that will recommend changes to services and route structure. This information should be used to refine and justify the future capital needs for Amtrak’s national system.

- **Amtrak’s estimates of Northeast Corridor state-of-good-repair needs** are not yet fully defined. Amtrak should quickly complete its comprehensive plan for addressing both short-term (5 years) and long-term (20 years) corridor needs. This will provide better justification for future NEC capital needs estimates than presently exists.
Part IV. Amtrak’s Bidding Practices

Objective

Our objective was to evaluate Amtrak’s bidding practices to determine whether Amtrak has been reimbursed for certain contract services at rates below the costs of performing those services as a result of Amtrak’s accounting methods or bidding practices during the period 1992 to 1997. The evaluation determined whether Amtrak’s allocations of variable and fixed costs were reasonable and appropriate; whether any of the bids were below cost; and if so, why and by approximately how much. We also reviewed Amtrak’s bidding practices to determine whether Amtrak was using its Federal appropriations as a means of subsidizing contract services.

Methodology

This assessment involved identifying bids for examination, collecting the selected documentation and financial data, and reviewing and analyzing the bidding practices and compensation for services. The process of identifying prospective bids for analysis involved direct contact with financial managers in each Strategic Business Unit. Based on the information received from the SBUs, a comprehensive list of bids for service was developed. From this list, we identified a sample for analysis.

Results in Brief

We found no evidence that Amtrak is systematically underbidding for work or failing to appropriately consider or incorporate the actual costs of performing the work when bidding on contracts.

Amtrak does not have a formal process that governs its bid preparation and submittal activities. Each SBU, however, uses a similar process which appears comprehensive and reasonable. Although it is not a formal organization-wide process, it is consistent with Federal guidelines, and in our estimation, is reasonable. Amtrak has indicated that it is in the process of developing uniform guidelines for preparing bid proposals, although they were not yet available at the completion of this assessment.

Amtrak applies Overhead and General and Administrative rates to labor costs in order to calculate appropriate cost recovery. New rates are supposed to be
established each year based on actual costs incurred in the prior year. Amtrak’s latest published rates are 1996 rates that are based on 1995 actual costs. Amtrak has indicated that new rates will be published for 1999 reflecting 1998 actual costs.

Amtrak policy requires that it fully fund contract costs from contract revenues. It states that “funds used in financing a venture must come entirely from sources other than the Federal government’s appropriations to support Amtrak rail passenger service.” For the selected bids reviewed, we found that Amtrak is acting appropriately with regard to using Federal appropriations.

Findings

**Amtrak’s Bidding Procedures Are Reasonable**

Each Amtrak SBU uses a similar process for bidding that is comprehensive and reasonable. The process typically starts and stops with the Business Development group. It is the responsibility of this group to evaluate the requests for proposal (RFP) received by Amtrak and make a determination as to which (if any) will be pursued. This is referred to as the bid/no-bid decision. Factors that enter this decision include:

- Amtrak’s capabilities in the particular area of interest: *Does Amtrak have direct, credible experience in performing the proposed work?*

- Amount of work to be performed: *Is there sufficient revenue potential from the proposed work to warrant expenditure of Amtrak resources to prepare and submit a proposal?*

- Budgetary Constraints: *Does it make sense to do this work, given current budgetary requirements and constraints?*

- Familiarity with the proposed client: *What was Amtrak’s relationship with this client in the past?*

Once the decision is made to bid, copies of the RFP are distributed to the relevant Administrative (Risk, Legal, Finance, and Audit) and Technical (Mechanical, Maintenance of Way, Materials and Operations) groups within Amtrak. Administrative reviews focus on the terms and conditions, identify any legal concerns, establish the applicable overhead rates, and analyze financing rates and/or payment provisions included within the terms and conditions of the proposed agreement. The technical review identifies: labor and personnel requirements, crew requirements, estimates of purchased materials and services, and start-up costs such as training personnel, and construction and/or modification of special facilities. The resulting bid “package” is then recirculated to each of the divisions for a
“reasonableness check.” A competitive cost comparison is done at this point to
determine whether the bid gives Amtrak a fair opportunity to win the work.
Adjustments, if necessary, are made before the bid is finalized and submitted.

This process is similar to a Federal “should-cost” review, which is defined as a
“multifunctional team evaluation of the economy and efficiency of the…methods,
materials, facilities, operating systems, and management.” Although it is not a
formal organizational process, it appears to adhere to Federal guidelines, and in our
estimation, is reasonable. Amtrak indicates that it is in the process of developing
uniform guidelines for preparing bid proposals. These guidelines, however, were
not yet available at the completion of this assessment.

**Amtrak Generally Captures All Costs When Bidding To Perform
Services Under Contract**

Amtrak relies on historical cost data to determine actual costs. Where historical
data are not available, Amtrak evaluates the costs based on the contract
requirements. In two cases reviewed, Amtrak’s estimated costs were found to be
within, or above, the range of its competitors, an indication that Amtrak was not
attempting to understate costs in order to win the contract. For one of the three bids
reviewed, Amtrak’s bid did not fully reflect its costs. We could not determine
whether Amtrak knowingly underbid the fixed price contract or simply erred due to
a lack of experience by those developing the bid.

In reviewing the bids, we noted that Amtrak applies Overhead and General and
Administrative rates to direct costs to calculate total cost recovery. New rates are
supposed to be established each year based on actual cost incurred in the prior year.
Amtrak’s latest published rates are 1996 rates that are based on 1995 actual cost.
Amtrak has indicated that new rates will be published for 1999 based on 1998 actual
costs.

A brief description of the three bids reviewed follows.

**New Jersey Comet II Overhaul**

The New Jersey Comet II Overhaul Bid (Comet II) was a competitive procurement
issued by the New Jersey Transit Corporation. The general scope was to completely
rework and rebuild 97 Comet trailers and 19 Comet Cab cars. The bid was prepared
by the Northeast Corridor SBU consistent with the procedures listed above. Amtrak
hired two independent consultants to assist in the preparation of the bid because of
their experience in bidding similar projects with the Metropolitan Transit Authority
of New York City. They were also tasked with ensuring that Amtrak’s bid captured all costs likely to be incurred. The proposal was submitted in May 1998 with at least four other proposals from other bidders. According to Amtrak, its bid, along with one other, was significantly higher than the other two. At the time this report was written, no final selection had been made.

**Metrolink Equipment Maintenance**

Amtrak was first awarded a contract with the Southern California Regional Rail Authority (SCARRA) for Metrolink activities in October 1992. At that time, its contract covered three “functional” areas: (1) track and signal work; (2) train operations, engine crews, and dispatch; and (3) maintenance of equipment. In 1995, SCARRA decided to solicit competitive bids and issue three separate contracts for this work. Amtrak lost the track and signal contract to another bidder, and then negotiated directly with SCARRA as the sole qualified bidder on the contract for train operations, engine crews, and dispatch. The maintenance of equipment contract involved a more rigorous RFP process. Amtrak’s philosophy for both the technical and cost proposal, was to bring SCARRA the same team that had been performing this service for them since 1992. Where the activities specified in the RFP were the same as those being performed under the existing contract, Amtrak used historical costs as the basis for its cost estimate. For new work required under the RFP, Amtrak used the operational information provided, such as the number of special trains, limitations on fringe and overtime rates, and the expected growth of the system. Amtrak’s technical proposal was ranked superior to the other bidder, but its cost proposal was approximately 14 percent higher. As a result, Amtrak lost the bid. Because Amtrak’s bid was largely based on historical costs, by definition the bid included consideration for all costs incurred.

**Caltrain/Peninsula Corridor Joint Powers Board (JPB) Tie Removal/Replacement and Resurfacing**

Amtrak’s bid was successful for this contract with the JPB for the removal and replacement of 16,480 cross ties and resurfacing of 109,824 feet of track. The engineering group within the Amtrak West SBU was in charge of this effort and had primary responsibility for assembling the Amtrak bid.

The main reason for looking into the fixed price contract as part of this assessment was the contractual problems that arose and which resulted in an eventual negotiated settlement. In November 1995, Amtrak filed a claim for reimbursement of unanticipated costs. Amtrak claimed that the actual costs incurred in the performance of this contract were 73 percent higher than originally anticipated.
Amtrak and JPB eventually settled the claim, but the settlement resulted in Amtrak recovering only 63 percent of its total incurred costs.

We cannot ascertain whether Amtrak knowingly underbid this contract or simply erred due to lack of experience, although it is apparent from JPB’s characterization of the claims that it blamed inexperience.

**Amtrak Policy Requires Funding Contract Costs From Contract Revenues**

Amtrak policy clearly states “...funds used in financing a venture must come entirely from sources other than the federal government’s appropriations to support Amtrak rail passenger service.” For the selected bids reviewed, we found that Amtrak is acting appropriately with regard to using Federal appropriations. As part of the bid evaluation process for the Caltrain/JPB contract discussed previously, the JPB requested information on how Amtrak prevented the use of Federal subsidies as an unfair bidding practice. Amtrak responded that “... as a matter of policy, [Amtrak] adheres to a set of principles with respect to competitive bids to ensure that we do not compete unfairly.” The principles cited were as follows.

- The cost and revenue generated by a venture must be completely segregated.
- To ensure that Amtrak competes fairly and on an equal basis with its competitors, funds used in financing a venture must come entirely from sources other than the Federal government’s appropriations to support Amtrak rail passenger service.
- Amtrak must be fully reimbursed for any costs imposed as a result of a revenue enhancement venture.

**Conclusions and Recommendations**

**Reasonable Bidding Process.** Amtrak does not have a formal process that governs its bid preparation and submittal activities. Although there is no corporate standard, the SBUs follow a similar procedure to develop proposals for third-party contracts. We did not identify any specific situation where Amtrak failed to include costs due to a lack of this process, but we recommend that Amtrak establish a formal bidding process to avoid this in the future. Work was underway within the NEC SBU to document and formalize the bidding practice, but nothing was completed at the time of this assessment.

**Reasonable Overhead Rates.** Overhead rates are used to allocate costs between SBUs, routes, product lines and trains as well as to determine bid and contract
additives. These ratios are reasonable but should be kept up to date to ensure appropriate cost allocations. *We recommend that overhead rates be periodically updated.*
**List of Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA</td>
<td>Americans with Disabilities Act</td>
</tr>
<tr>
<td>ARAA</td>
<td>Amtrak Reform and Accountability Act</td>
</tr>
<tr>
<td>ARC</td>
<td>Amtrak Reform Council</td>
</tr>
<tr>
<td>BPA</td>
<td>Business Plan Action</td>
</tr>
<tr>
<td>ConnDot</td>
<td>Connecticut Department of Transportation</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>FERC</td>
<td>Federal Energy Regulatory Commission</td>
</tr>
<tr>
<td>FIS</td>
<td>Financial Information System</td>
</tr>
<tr>
<td>FY</td>
<td>Fiscal year</td>
</tr>
<tr>
<td>GAAP</td>
<td>Generally accepted accounting principles</td>
</tr>
<tr>
<td>HSR</td>
<td>High-speed rail</td>
</tr>
<tr>
<td>JPB</td>
<td>Joint Powers Board</td>
</tr>
<tr>
<td>LIRR</td>
<td>Long Island Railroad</td>
</tr>
<tr>
<td>MBTA</td>
<td>Massachusetts Bay Transportation Authority</td>
</tr>
<tr>
<td>NEC</td>
<td>Northeast Corridor</td>
</tr>
<tr>
<td>NJT</td>
<td>New Jersey Transit</td>
</tr>
<tr>
<td>P&amp;L</td>
<td>Profit and loss</td>
</tr>
<tr>
<td>PSNY</td>
<td>Penn Station-New York</td>
</tr>
<tr>
<td>RFP</td>
<td>Request for Proposal</td>
</tr>
<tr>
<td>RPS</td>
<td>Route Profitability System</td>
</tr>
<tr>
<td>RRTA</td>
<td>Railroad Retirement Tax Act</td>
</tr>
<tr>
<td>SBU</td>
<td>Strategic Business Unit</td>
</tr>
<tr>
<td>SBP</td>
<td>Strategic Business Plan</td>
</tr>
<tr>
<td>SCRRRA</td>
<td>Southern California Regional Rail Authority</td>
</tr>
<tr>
<td>TRA</td>
<td>Taxpayer Relief Act</td>
</tr>
<tr>
<td>VRE</td>
<td>Virginia Railway Express</td>
</tr>
</tbody>
</table>
November 20, 1998

Honorable Ken Mead  
Inspector General  
Department of Transportation  
400 Seventh Street, SW  
Room 9212  
Washington, DC  20590

Dear Mr. Mead:

Thank you for the briefing regarding the independent assessment of Amtrak’s financial systems, business plan and bidding practices. We appreciate the extraordinary amount of work that has been done and the professionalism exhibited by your staff.

The Board is pleased that the assessment has found:

Amtrak’s accounting methods to be sound;  
Financial conditions are as stated in Amtrak’s financial reports;  
No evidence of Amtrak neglecting life safety investments;  
Recent capital budgets and plans have not neglected the national system to fund Northeast Corridor needs;  
The market-based network analysis should be used to refine and justify future capital needs;  
Amtrak is not systematically underbidding or seeking work at any cost; and  
Forecasts for high-speed rail costs as well as other transportation, non-transportation, commuter, and commercial revenue are reasonable.

Amtrak management has:

Already begun a study of depreciation values with its external auditor, PriceWaterhouseCoopers, and recognizes that reduced depreciation expenses would result in a smaller operating loss than is currently projected;  
Begun the development of a variable cost model to improve the corporation’s ability to analyze route and train profitability under varying scenarios;
Completed an update of all overhead rates and has set in motion an
annual process to update overhead rates as part of the budget cycle;
and
Made a commitment to formalize written policies and procedures to better
govern the corporate-wide process for bids and contracts.

The Board understands that the report reflects a "point-in-time" assessment of
business plan actions that are at risk over a five-year period (FY99-FY03). If no
actions were to take place after the adoption of the last year's FY98 business
plan, the value of this cumulative risk would be approximately $823 million.

Since the adoption of the FY98 business plan, however, this Board has taken a
series of actions to both improve FY98 performance and establish a new set of
business plan initiatives that have been incorporated in the FY99 Strategic
Business Plan. FY98 financial results show that those new actions were
successful as the corporation ended the year $4.3 million better than budget and
$9.3 million better than forecasted in the third quarter. Record passenger related
revenues of over $1 billion were accompanied by ridership growth of 4.5%, the
highest growth rate in a decade.

Given the legal requirements of the assessment, none of the actions taken since
the adoption of the FY98 budget have been included in the assessment’s risk
analysis. Based on the limited information provided at the briefing, at least $390
million of the $823 million variance is attributable to new plan actions not
included in the assessment’s risk analysis. Actions taken during the FY98 fiscal
year to achieve and improve upon budget targets include:

An aggressive program to increase the already profitable commuter,
reimbursable and commercial business lines that yielded an additional
$9 million of revenue;
A $10 million reduction in back office corporate costs;
A new focus on claim recoveries and audits that generated an incremental
$8 million;
The leasing of additional excess locomotives to gain $3 million in lease
revenue; and
The reduction of professional fees and building maintenance, utility and
merchandising costs amounting to more than $8 million.
Additionally, the FY99 business plan included new plan actions that impact FY99 through FY03 such as:

- Passenger related revenue increases from service expansions, policy changes and program revisions (i.e., fifth San Joaquin frequency, Carolinian car extension, Minneapolis/St Paul additional cars, Three Rivers sleeping cars, new auto carriers, Club class service initiation, Explore America and VIP programs, discount policy);
- Increased revenue and decreased expenses from technological improvements such as fare collection, food and beverage point-of-sale system, new payment processes, and automated track inspection vehicles;
- Increased access fees generated from a growing volume of freight traffic on the Northeast Corridor;
- Expense savings from the elimination of in-house warehousing and commissary services related to food and beverage operations and an incremental reduction in corporate reservations, sales, mechanical, information technology and legal costs;
- Reduction of labor and materials costs from locomotive maintenance planning, on-time performance and safety improvements; and
- Further expansion of commercial retail, real estate, parking and telecommunications enterprises.

The assessment's risk analysis also forecasts a 6% variance in high-speed passenger related revenue. Management disagrees with the demand modeling methodology used in the assessment and questions some of the key assumptions and conclusions such as the:

- Inclusion of 12 months of expenses and 3 months of revenue;
- Inclusion of only 18 of the 20 high-speed trainsets;
- Conclusion that no new high-speed passengers will be diverted from auto for trips of less than 75 miles;
- Conclusion that ridership growth will be largely diverted to conventional rail rather than high-speed rail due to the reduced travel times for conventional rail; and
- Neglect to take into consideration available pricing and yield management options.
Actual experience tells us otherwise:

The highest priced fares, for Club service, often filled with shorter-distance riders and sold out, suggest that increased comfort and shorter trip times are in demand;
The current trip time differential between Metroliner and conventional service on the south-end is 30 minutes. The advent of high-speed rail will increase the trip time differential to 40-45 minutes, increasing the demand for the faster high-speed service rather than diverting the demand to conventional service;
Similarly on the northend, the travel time differential between high-speed and conventional service will be 40-60 minutes, further creating an increased demand for high-speed service (even if the travel time differential was reduced to the same 30 minute differential that currently exists on the south-end, the strength of current Metroliner revenue performance and ridership growth indicates that there would be significant diversion to high-speed service);
There will be more high-speed service options than conventional rail options offered on the north-end, attracting more ridership to high-speed trains due to service frequency benefits; and
In markets of 75 miles or less there is no air competition. Given the population densities along the Northeast Corridor, there are numerous city pairs that are less than 75 miles that currently contribute to significant Metroliner revenue (Trenton-NY, Metro Park-NY, BWI-DC, Wilmington-Baltimore,...).

The assessment methodology also excludes the valuation of the positive financial impact of marketing campaigns, class of service offerings, new trainsets, service standards program, station improvement programs and reservation and fare collection re-engineering. Based on the briefing that you provided as well as a general understanding of the assessment methodology, we believe that the assessment has underestimated high-speed revenues by at least $280 million due to analytical omissions and inaccurate assumptions, as noted above.

With regard to the findings concerning capital funding, the Board continues to support a request for $571 million of federal capital funding for FY2000. The Board will review the details of the assessment findings for out-year capital needs and will direct management to develop a detailed capital plan for FY00-03 that is linked with the market-based network analysis conclusions.
Upon receipt of the full report, Management will review the details of the assessment so it can provide the Board, ARC, Congress and the DOT-IG with a more informed response to the full findings and recommendations.

We look forward to working with you in your ongoing annual review of Amtrak's business plans and again thank you for your hard work and critical eye.

Sincerely,

Tommy G. Thompson
Chairman
Amtrak Board of Directors

Michael S. Dukakis
Vice Chairman
Amtrak Board of Directors