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# *Office of Inspector General*

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*2000 Assessment of Amtrak's Financial  
Performance and Requirements*

*National Railroad Passenger Corporation*

*Report Number: CR-2000-121  
Date Issued: September 19, 2000*





**U.S. Department of  
Transportation**

Office of the Secretary  
of Transportation

The Inspector General

Office of Inspector General  
Washington, D.C. 20590

September 19, 2000

The Honorable Rodney E. Slater  
Secretary of Transportation  
Washington, DC 20490

Dear Mr. Secretary:

Please find enclosed the "Report on the 2000 Assessment of Amtrak's Financial Performance and Requirements." The report contains an Executive Summary followed by our analyses, findings, and recommendations.

In the Amtrak Reform and Accountability Act of 1997 (ARAA), the Office of Inspector General (OIG) was instructed to oversee an independent assessment of Amtrak's financial needs through 2002 and to conduct a similar assessment in every year thereafter in which Amtrak requests Federal assistance. Our first report, examining Amtrak's financial condition, business plan, capital needs, and bidding practices, was provided to you on November 23, 1998 (Report No. TR-1999-027). Pursuant to Amtrak's request in 1999 for \$609 million in Federal assistance, we updated our analysis and findings and provided that report to you on July 23, 1999 (Report No. CE-1999-116).

The Administration has requested \$521 million in Federal assistance for 2001 and, as ARAA directs, we plan to initiate a similar assessment of Amtrak's 2001 business plan and capital needs. This work will begin after Amtrak issues its 2001 Strategic Business Plan, and we anticipate providing our findings to you and the Congress in the spring of 2001.

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, please call me or my Acting Deputy, Todd J. Zinser, at (202) 366-1959, or the Amtrak project leader, Mark R. Dayton on (202) 366-9970.

Sincerely,

Kenneth M. Mead  
Inspector General

# Table of Contents

Page

**Transmittal Letter**

**Executive Summary..... i**

**Findings.....1**

Current Financial Status.....1

2000 Strategic Business Plan .....8

Market-Based Network Analysis.....30

Capital Investment Plans and Requirements.....35

**Exhibits .....48**

Exhibit A. Methodology.....48

Exhibit B. Contributors to This Report.....53

# Executive Summary

## 2000 Assessment of Amtrak's Financial Performance and Requirements

In 1997, Congress passed the Amtrak Reform and Accountability Act (ARAA), which established a deadline of 2002 for Amtrak to improve operations sufficiently to eliminate its need for further Federal operating subsidies.<sup>1</sup> After 2002, no funds authorized for Amtrak can be used for operating expenses,<sup>2</sup> except for expenses associated with liabilities for Amtrak's railroad retirement taxes that exceed the amount needed for the benefits of Amtrak retirees ("excess RRTA payments").

ARAA also established certain limits on Amtrak's liability exposure, revised the bargaining relationship between Amtrak and its employees with respect to contracting out and labor protection, and eliminated most statutory constraints on Amtrak's ability to restructure train routes. These changes eased constraints on Amtrak's ability to improve its financial condition and attain operating self-sufficiency.

Through 2002, the Administration has proposed funding Amtrak with only a capital appropriation even though it is clear that much needs to be done before Amtrak is operationally self-sufficient. Amtrak has acknowledged that it will require continuing operating assistance until it achieves operating self-sufficiency in 2003. In order to make capital-only appropriations available to cover operating losses, the Administration also proposed allowing the funding of maintenance of equipment and infrastructure (which are operating, not capital costs) from the capital appropriation.

Congress approved using the capital appropriation for both maintenance of equipment and maintenance of infrastructure in this fiscal year. This funding approach does not change the definition of what constitutes operating costs under generally accepted accounting principles. We have stated and Amtrak agrees that,

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<sup>1</sup> 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.

<sup>2</sup> 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. Congress, however, has not directly addressed the question of whether Amtrak would receive, or could count on receiving, long-term Federal funding for capital investment.

after 2002, Amtrak must fund directly all expenses for maintenance of equipment and infrastructure without using any Federal appropriations.

ARAA authorized \$5.2 billion for both the operating and capital expenses of Amtrak through 2002. Prior to the enactment of ARAA in 1997, Congress passed the Taxpayer Relief Act (TRA), which provided Amtrak with \$2.2 billion for capital expenditures with the goal of enabling Amtrak to make the investments necessary for it to reduce its reliance on Federal operating support and thus meet its mandate. TRA funds, together with Amtrak's actual 1998, 1999, and 2000 appropriations and the Administration's proposed funding for 2001 and 2002, total an amount slightly below Amtrak's \$5.2 billion authorization in ARAA.

In response to the congressional mandate for self-sufficiency, Amtrak developed a plan of operating improvements intended to phase out its dependence on Federal operating support by the end of 2002. The plan, which is revised each year, assumes that Federal assistance will be available in an amount consistent with the funds authorized under ARAA and provided annually during the appropriations cycle.

In ARAA, Congress directed the Secretary of Transportation to contract for an independent assessment of Amtrak's financial requirements through 2002. Congress directed the Office of Inspector General (OIG) to oversee this contract. The assessment was completed in November 1998, and we issued a report summarizing our findings and conclusions.<sup>3</sup>

Section 409 of ARAA requires the Inspector General to reassess Amtrak's financial performance and needs for every year after 1998 in which Amtrak requests Federal assistance. We conducted a new assessment in 1999<sup>4</sup> and, because Amtrak requested and received \$571 million in Federal funding in 2000, the Office of Inspector General initiated an assessment of Amtrak's current financial status and plans. This report details the findings of our review and provides an update on Amtrak's progress in 2000 towards meeting its goal of operating self-sufficiency.

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<sup>3</sup> Report No. TR-1999-027, November 23, 1998. *Summary Report on the Independent Assessment of Amtrak's Financial Needs through Fiscal Year 2002*, Office of Inspector General, U.S. Department of Transportation.

<sup>4</sup> Report No. CE-1999-116, July 21, 1999. *Report on the 1999 Assessment of Amtrak's Financial Needs through Fiscal Year 2002*, Office of Inspector General, U.S. Department of Transportation.

## Results in Brief

**Amtrak increased its ridership and revenue in 1999 and 2000, but must curtail its expense growth to achieve operating self-sufficiency in 2003.** Ridership and passenger revenue grew by 2 percent and 5.7 percent, respectively, in 1999 and by 3.5 percent and 7.5 percent in the first 9 months of 2000. The revenue growth that began in 1995 has brought Amtrak to the highest passenger revenue levels in its history and Amtrak expects that 2000 passenger revenues will exceed those of 1999. Overall operating revenues increased in 1999 by 7.4 percent, with non-passenger revenues showing a strong 9.7 percent growth.<sup>5</sup>

Although ridership and revenue trends are positive, increases in labor costs, depreciation, and train operation expenses have fueled continued growth in operating expenses, increasing by 6.9 percent in 1999 and by 7.3 percent in the first 9 months of 2000. This expense growth has kept Amtrak's cash loss from declining. Amtrak's cash loss remained relatively stable between 1989 and 1998, ranging from a low of \$500 million in 1989 to a high of \$578 million in 1994. It reached a 10-year high in 1999 at \$579 million, slightly surpassing the 1994 total. Although we project the cash loss in 2000 will be \$521 million, the lowest since 1992, Amtrak must reduce its cash loss to \$266 million in 2003 to reach operating self-sufficiency, a required improvement of \$255 million over 2000. Reducing the cash loss will depend heavily on limiting the growth in Amtrak's expenses over the next 3 years.

**Amtrak's 2000 Strategic Business Plan (Plan) will not achieve operating self-sufficiency in 2003.** Despite positive trends in revenue and Amtrak's financial results being close to goals over the last 2 years, the most significant and most difficult improvements in Amtrak's 2000 Plan occur in the next 3 years. Amtrak's cash loss must drop by an average of \$85 million per year to reach operating self-sufficiency in 2003.

Amtrak's Plan anticipates reaching operating self-sufficiency in 2002, 1 year ahead of Amtrak's mandate. However, our assessment of the Plan determined that a number of its elements are unlikely to perform as Amtrak expects. *If no corrective action were taken to compensate for them*, Amtrak's cash loss would be about \$1.4 billion more than it projects over the 5-year period, 2000 through 2004. Of this total, \$1.2 billion, or 85 percent, is concentrated in three elements of the Plan: \$737 million in undefined management actions, and \$304 million in Northeast Corridor passenger revenue and \$179 million in Mail and Express net

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<sup>5</sup> Non-passenger revenues include mail and express, commuter, reimbursable, commercial development, non-transportation, state reimbursement, and other transportation revenues.

revenue that are at risk of not materializing because of lower than projected growth in both.

If our projected losses were to occur, the situation would be untenable for Amtrak. In 2001 and 2002, Amtrak would have virtually no funds for capital investment, and in 2003, Amtrak would not achieve self-sufficiency because its cash losses would be \$351 million more than it could legally fund with its Federal appropriation.

**Without major corrective action Amtrak will not achieve operating self-sufficiency in 2003.** Amtrak's Plan projects operating self-sufficiency largely on the back of the \$737 million in undefined management actions. In essence, these undefined actions represent the gap between the cash loss improvements Amtrak needs and what it expects to get from actions it has already identified to reduce its cash losses. Time is running short to develop and put into place the meaningful actions needed to close the gaps we have identified.

The revenue problems facing Amtrak are less troublesome than the expense ones. If aviation system delays continue to worsen in the Northeast, and with Acela Express fare and schedule adjustments, much of our \$304 million restatement of Northeast Corridor revenue may be achievable. If Amtrak vigorously pursues the marketing of its Mail and Express business and secures the necessary agreements with the freight railroads, our Mail and Express restatements also could be greatly reduced. However, the \$737 million in undefined management actions are nearly all related to expense reductions. These must be well developed in the 2001 Strategic Business Plan. If they are not, we have strong doubts about Amtrak's ability to achieve self-sufficiency in 2003.

**Amtrak's capital outlook is grave.** In both our prior assessments, we projected that Amtrak would face serious capital shortfalls beginning in 2001. Our current review of Amtrak's capital needs shows that our predictions have come true. In 2001, assuming Amtrak's cash losses are no higher than it projects, Amtrak will face a minimum needs funding shortfall of \$91 million, and continued shortfalls through 2004 totaling \$298 million.<sup>6</sup>

Amtrak will be faced with some very difficult choices next year concerning how to best use its limited capital dollars. After covering its mandatory capital costs, Amtrak will have only \$179 million left to invest in its capital program. Amtrak would need *at least* an additional \$385 million in capital funding in 2001 if it were to cover all of its minimum needs, continue funding key projects in progress, and

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<sup>6</sup> Our definition of minimum needs includes only the capital investment necessary to maintain Amtrak's infrastructure and assets in a steady state *through 2003*. Thereafter, the condition of Amtrak's infrastructure and assets will begin to steadily decline.

fulfill its commitments to States for corridor development projects. If our projections for cash losses were to occur, Amtrak would need to use \$310 million more than planned of its Federal appropriation to cover them. Because every dollar consumed by operating losses is a dollar lost from capital spending, Amtrak would not have enough capital funds to cover even its debt payments, let alone any other mandatory capital costs.

Despite known minimum-needs shortfalls, Amtrak has pursued a growth-focused capital program. In our 1999 assessment, we recommended that Amtrak set aside funds to meet minimum needs in 2001 and 2002 by revising its spending plans for 2000. Although Amtrak agreed with our predictions, its 2000 Plan provided for continued investment in projects outside of minimum needs. Furthermore, Amtrak underspent on certain minimum needs in 1999 and 2000 to support a higher level of growth-related capital spending. For example, we estimate Amtrak's minimum operational reliability needs to be \$135 million each year. Amtrak's annual spending on operational reliability projects in the past 3 years has averaged only \$71 million.

If Amtrak continues to defer spending on operational reliability, service quality will suffer and its goals for revenue growth may not be met. We recommend that Amtrak reprogram any authorized, but unobligated, TRA funds that were approved for projects outside minimum needs to be used first to satisfy all minimum needs. Furthermore, Amtrak's Board of Directors, in approving the 2001 capital plan, should withhold approval on projects that are outside Amtrak's minimum capital needs until Amtrak can demonstrate that it has provided for all minimum needs.

Finally, Amtrak must develop a realistic plan for addressing long-term capital needs. Amtrak has historically prepared a 1-year capital plan that reflects a level of spending commensurate with its expected annual appropriation. Amtrak needs a well-developed long-term plan that identifies all capital needs, their costs, their timing, and priority.

## **Results**

### **Amtrak Increased Its Revenue in 1999 and 2000 But Must Curtail Expense Growth to Achieve Operating Self-Sufficiency in 2003**

Since our last assessment, Amtrak has generated improvements in its ridership and revenue, but its cash loss, the key to operating self-sufficiency, has worsened.



Amtrak's operating results for 1999 showed continued improvement in ridership and revenue. Systemwide ridership increased from 21.1 million passengers in 1998 to 21.5 million in 1999, and passenger revenue grew from \$1,001 million to \$1,058 million, a 5.7 percent increase. Systemwide ridership and passenger revenue continued their upward swing in the first 9 months of 2000, with ridership up by 3.5 percent and passenger revenue up by 7.5 percent. The revenue growth trend that began in 1995 has brought Amtrak to the highest passenger revenue levels in its history, and Amtrak expects that 2000 passenger revenues will exceed those of 1999.

Overall operating revenues increased in 1999 by 7.4 percent, from \$1,708 million to \$1,834 million,<sup>7</sup> with non-passenger revenues showing a strong 9.7 percent growth, increasing from \$707 million in 1998 to over \$775 million in 1999. Non-passenger revenue constituted an increasing share of Amtrak's total revenues between 1990 and 1999. The overall increase in non-passenger revenue for the last 10 years has been 105 percent, going from \$378 million in 1990 to almost \$776 million in 1999. Non-passenger activities now account for over 42 percent of Amtrak's total operating revenues.

The ridership and passenger revenue growth has occurred in the face of little change in either Amtrak's Customer Satisfaction Index or its on-time performance. In 1999, the Index decreased to 83 from 85 in 1998, and has rebounded to 85 for the first 9 months of 2000. On-time performance was constant at 79 percent in 1998 and 1999, and has risen slightly to 80 percent for the first 9 months of 2000. Both on-time performance and customer satisfaction have been affected by the service problems experienced by the freight railroads over the last 3 years.

To further bolster ridership, passenger retention, and revenue, Amtrak instituted a Customer Service Guarantee on July 4, 2000. The guarantee provides passengers who are not satisfied with Amtrak's service, for any reason, with vouchers for future travel equal to the value of the trip on which they were dissatisfied. Amtrak's goal for the Customer Service Guarantee is that no more than 1 passenger in 1,000 (a 99.9 percent satisfaction rate) will request a voucher. The issuance rate for July was about 2.8 per 1,000 passengers (99.7) and the estimate for August is about 5 per 1,000 passengers (99.5).

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<sup>7</sup> Amtrak's reported operating revenue in 1999 and 1998 included, as required by generally accepted accounting principles, \$191 million and \$542 million, respectively, of Federal payments received, including TRA funds, and \$58 million in interest earnings on temporarily invested TRA funds. Because the TRA funds and the interest earnings will be spent on capital investment, they have been excluded from our reporting of operating revenue.

Although ridership and revenue trends are positive, increases in labor costs, depreciation, and train operation expenses have fueled continued growth in operating expenses. Operating expenses increased in 1999 by nearly 7 percent, from \$2,568 million to \$2,745 million, when labor costs are adjusted for retroactive labor settlements, and by 7.3 percent in the first 9 months of 2000. As a result, Amtrak's operating loss in 1999 was \$916 million, \$56 million more than the 1998 loss.<sup>8</sup>

Amtrak's attainment of self-sufficiency, however, does not rest on the size of its operating loss. The operating loss includes depreciation, a non-cash charge, which Amtrak does not cover from its operating revenues. The capital investment required to replace depreciated equipment and infrastructure is either financed or funded with Federal capital appropriations. Therefore, the true indicator of operating self-sufficiency is Amtrak's cash loss. In 1999, its cash loss was \$579 million, \$54 million higher than in 1998. We project the cash loss in 2000 will be \$521 million. To reach operating self-sufficiency, Amtrak must reduce this cash loss to \$266 million in 2003, a required improvement of \$255 million.

Reducing the cash loss will depend heavily on reducing the growth in Amtrak's expenses over the next 3 years. This is doubly important in 2001 because of delays in the start-up of Acela Express passenger service and a slower ramp-up than planned for the Mail and Express business.

### **Amtrak's 2000 Strategic Business Plan Will Not Achieve Operating Self-Sufficiency in 2003**

Despite the positive trends in revenue and the fact that Amtrak's financial results over the last 2 years were close to its Plan goals, the most significant and most difficult improvements in Amtrak's 2000 Strategic Business Plan must occur in the next 3 years. Amtrak's cash loss must drop by an average of \$85 million per year to reach operating self-sufficiency in 2003.

Amtrak anticipates reaching operating self-sufficiency in 2002, 1 year ahead of its mandate. In both 2002 and 2003, the projected cash losses equal the sum of Amtrak's estimates of excess RRTA payments and capital overhauls of equipment, both of which can be funded with Federal appropriations. Table 1 presents Amtrak's projections for 2000 through 2004.<sup>9</sup>

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<sup>8</sup> Amtrak's reported operating loss for 1998 was \$930 million, which included the full amount of retroactive labor payments attributable to the years 1996 through 1998 (per newly settled labor agreements). After allocating these costs to the years in which they were incurred, the 1998 operating loss totals \$860 million.

<sup>9</sup> Numbers in the tables and figures throughout this report may not sum to totals due to rounding.

**Table 1 Amtrak's 2000 Strategic Business Plan Forecast**  
**(\$ in millions)**

| <b>Component</b>                        | <b>2000</b>  | <b>2001</b>  | <b>2002</b>  | <b>2003</b>  | <b>2004</b>  | <b>Total</b>   |
|---|--------------|--------------|--------------|--------------|--------------|----------------|
| Operating Revenues                      | \$2,124      | \$2,226      | \$2,368      | \$2,418      | \$2,464      | \$11,600       |
| Less Operating Expenses                 | 2,966        | 3,030        | 3,147        | 3,203        | 3,253        | 15,600         |
| Operating Profit (Operating Loss)       | (842)        | (805)        | (778)        | (785)        | (790)        | (4,000)        |
| Plus Non-Cash Items                     | 401          | 493          | 519          | 519          | 517          | 2,451          |
| <b>Cash Profit (Cash Loss)</b>          | <b>(441)</b> | <b>(311)</b> | <b>(259)</b> | <b>(266)</b> | <b>(272)</b> | <b>(1,550)</b> |
| Plus TRA Funds—Capital Overhauls        | 79           | 0            | 0            | 0            | 0            | 79             |
| Plus Federal Funds—Capital Maintenance* | 362          | 242          | 189          | 195          | 200          | 1,188          |
| Plus Federal Funds—Capital Overhauls    | 0            | 69           | 70           | 71           | 72           | 283            |
| <b>Unfunded Cash Loss</b>               | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>     |

\* The values in 2002 through 2004 are equal to Amtrak's estimates of excess RRTA payments.

Our assessment of this Plan, however, showed a number of its elements required restatement. Our restatements indicate the additional cash loss that Amtrak could face in the period 2000 to 2004 if the risky elements of the Plan were to perform as we expect and *if no corrective action were taken to compensate for them*. Table 2 shows our net restatements grouped by passenger revenue for each Strategic Business Unit, Mail and Express net revenue, and other Business Plan Actions.<sup>10</sup> The total restatement is \$1,440 million over the 5-year period.

Three restatements account for 85 percent, \$1,220 million, of our total restatement. They are:

- \$737 million in undefined management actions that are to be developed for the 2001 Strategic Business Plan, including \$275 million in NEC, \$367 million in Intercity, and \$94 million in Corporate;
- \$304 million in NEC passenger revenue that is at risk of not materializing because of lower-than-forecasted diversion of passengers from air and automobile travel to the new Acela Express service;<sup>11</sup> and
- \$179 million in Mail and Express net revenue that is at risk because of slower growth in the Express business than Amtrak projects.

<sup>10</sup> Amtrak has three Strategic Business Units (SBUs): Northeast Corridor (NEC), Intercity, and Amtrak West, and a separate Corporate Business Unit that includes Business Service Centers. NEC includes all the routes in the Northeast between Virginia and Maine. Amtrak West incorporates the West Coast routes in California and the Pacific Northwest, extending to Vancouver, British Columbia, and the routes in between. Intercity is the rest of the system across the middle of the country, including most long-distance trains.

<sup>11</sup> Acela Express service has been delayed compared to the assumptions used in both Amtrak's and our projections. The results for 2001 may be somewhat lower than our projections (and the restatement, therefore, higher), but reliable estimates are not possible until a new train deployment schedule is established and Amtrak decides on its Acela Express fares and operating schedule.

**Table 2 OIG 2000 Net Restatements<sup>12</sup>**  
**(\$ in millions)**

|   | 2000        | 2001         | 2002         | 2003         | 2004         | Total          |
|---|-------------|--------------|--------------|--------------|--------------|----------------|
| Passenger Revenue                       |             |              |              |              |              |                |
| Northeast Corridor                      | \$0         | \$69         | \$78         | \$79         | \$79         | <b>\$304</b>   |
| Intercity                               | 6           | 5            | 2            | 3            | 4            | <b>21</b>      |
| Amtrak West                             | 2           | 5            | 3            | 4            | 3            | <b>17</b>      |
| Mail and Express                        | 35          | 36           | 56           | 38           | 14           | <b>179</b>     |
| Other Business Plan Actions             |             |              |              |              |              |                |
| Northeast Corridor                      | 29          | 94           | 93           | 82           | 70           | <b>368</b>     |
| Intercity                               | 3           | 73           | 89           | 103          | 119          | <b>386</b>     |
| Amtrak West                             | 4           | 6            | 4            | 4            | 4            | <b>21</b>      |
| Corporate                               | 1           | 22           | 35           | 40           | 47           | <b>144</b>     |
|   |             |              |              |              |              |                |
| <b>Increase (Decrease) in Cash Loss</b> | <b>\$80</b> | <b>\$310</b> | <b>\$359</b> | <b>\$351</b> | <b>\$339</b> | <b>\$1,440</b> |

Amtrak’s Strategic Business Plan projects operating self-sufficiency largely on the back of the undefined management actions. In essence, the undefined actions represent the gap between the cash loss improvements Amtrak expects from actions it has identified and the amount Amtrak needs to identify to eliminate its unfunded cash losses. Closing this gap is imperative. Table 3 shows our projections of Amtrak’s financial results based on our restatements.

**Table 3 OIG Restatement of Amtrak’s 2000 Plan Forecast**  
**(\$ in millions)**

| Component                              | 2000          | 2001           | 2002           | 2003           | 2004           | Total           |
|--|---------------|----------------|----------------|----------------|----------------|-----------------|
| Operating Revenues                     | \$2,030       | \$2,156        | \$2,305        | \$2,413        | \$2,539        | \$11,443        |
| Less Operating Expenses                | 2,952         | 3,272          | 3,442          | \$3,550        | 3,668          | 16,884          |
| Operating Profit (Operating Loss)      | (922)         | (1,115)        | (1,138)        | (1,137)        | (1,129)        | (5,441)         |
| Plus Non-Cash Items                    | 401           | 493            | 519            | 519            | 517            | 2,451           |
| <b>Cash Profit (Cash Loss)</b>         | <b>(521)</b>  | <b>(622)</b>   | <b>(619)</b>   | <b>(617)</b>   | <b>(612)</b>   | <b>(2,990)</b>  |
|  |               |                |                |                |                |                 |
| Plus TRA Funds—Capital Overhauls       | 79            | 0              | 0              | 0              | 0              | 79              |
| Plus Federal Funds—Capital Maintenance | 362           | 242            | 189            | 195            | 200            | 1,188           |
| Plus Federal Funds—Capital Overhauls   | 0             | 69             | 70             | 71             | 72             | 283             |
| <b>Unfunded Cash Loss</b>              | <b>(\$80)</b> | <b>(\$310)</b> | <b>(\$359)</b> | <b>(\$351)</b> | <b>(\$339)</b> | <b>(\$1440)</b> |

If our restatements were to occur, the situation would be untenable for Amtrak. In 2001 and 2002, Amtrak would need nearly all of its Federal appropriation to cover

<sup>12</sup> In Table 2, and throughout this report, the lines for the “increase (decrease) in cash loss” indicate the additional cash loss the restatements add to Amtrak’s projections in the 2000 Strategic Business Plan. Therefore, positive numbers indicate an increase in the cash loss compared to what Amtrak projected, and negative numbers indicate a reduction in the cash loss.

its cash losses and would not have enough money to cover even mandatory capital expenses, about \$120 million per year on average, let alone fund any other minimum capital needs. In 2003, Amtrak would not achieve operating self-sufficiency because it would have cash losses of \$351 million more than it could legally fund with its Federal appropriation. These restatements are not inevitable outcomes however. Amtrak must take actions that will compensate for the risks we have identified.

### **Without Major Corrective Action, Amtrak Will Not Achieve Operating Self-Sufficiency in 2003**

Amtrak must identify actions that will close the gap in its Plan within the next year, or operating self-sufficiency will not be achievable in 2003. Time is running short to develop and put into place the meaningful actions needed to close the gaps we have identified.

The revenue problems facing Amtrak are less troublesome than the expense ones. Our reductions in NEC passenger revenue and Mail and Express revenue are based on more conservative approaches to the forecasting of revenue growth than those used by Amtrak. If aviation system delays and congestion continue to worsen in the Northeast, and if Amtrak revises its proposed fare and schedule structure for Acela Express, much of our \$304 million restatement of NEC revenue may be achievable. Our restatement of Mail and Express reflects slower than projected growth that is based on recent experience. If Amtrak vigorously pursues the marketing of this business and secures the necessary agreements with the freight railroads, our Mail and Express restatements could also be greatly reduced.

However, as Table 4 illustrates, the \$737 million in management actions still to be determined are nearly all related to expense reductions. Although Amtrak was able to identify actions over the course of the year that closed the gap for 2000, the gap was only \$59 million. For each of the years 2001 through 2003, the average gap is about \$180 million or three times the 2000 amount. The NEC and Intercity bear the brunt of responsibility for identifying expense-saving actions. These must be well developed in the 2001 Plan. If they are not, we have strong doubts about Amtrak's ability to achieve operating self-sufficiency in 2003.

**Table 4 Revenue and Expense Forecasts and OIG Restatements of Undefined Management Actions (\$ in millions)**

|   | 2000         | 2001         | 2002         | 2003         | 2004         | Total        |
|---|--------------|--------------|--------------|--------------|--------------|--------------|
| Amtrak Revenue Increases                | \$18         | \$9          | \$17         | \$17         | \$17         | \$77         |
| OIG Revenue Increases                   | 24           | 17           | 17           | 19           | 21           | 98           |
| <b>Difference</b>                       | <b>(6)</b>   | <b>(8)</b>   | <b>(0)</b>   | <b>(2)</b>   | <b>(4)</b>   | <b>(21)</b>  |
|   |              |              |              |              |              |              |
| Amtrak Expense Savings                  | 41           | 192          | 180          | 188          | 202          | 802          |
| OIG Expense Savings                     | 35           | 2            | 2            | 2            | 2            | 44           |
| <b>Difference</b>                       | <b>6</b>     | <b>189</b>   | <b>177</b>   | <b>186</b>   | <b>199</b>   | <b>758</b>   |
|   |              |              |              |              |              |              |
| <b>Increase (Decrease) in Cash Loss</b> | <b>(\$0)</b> | <b>\$181</b> | <b>\$177</b> | <b>\$184</b> | <b>\$195</b> | <b>\$737</b> |

The average expense savings required each year for 2001 through 2003, as a percentage of cash operating expenses (excluding depreciation), is 6.3 percent. Although this may be difficult to achieve in a single year (2001), to reach operating self-sufficiency in 2003 would require about a 2.1 percent permanent reduction in expenses each year for 2001 through 2003 compared to our projections. This should not be impossible for Amtrak to accomplish, but it is likely to be difficult. That difficulty will only increase if further delays occur in identifying these savings.

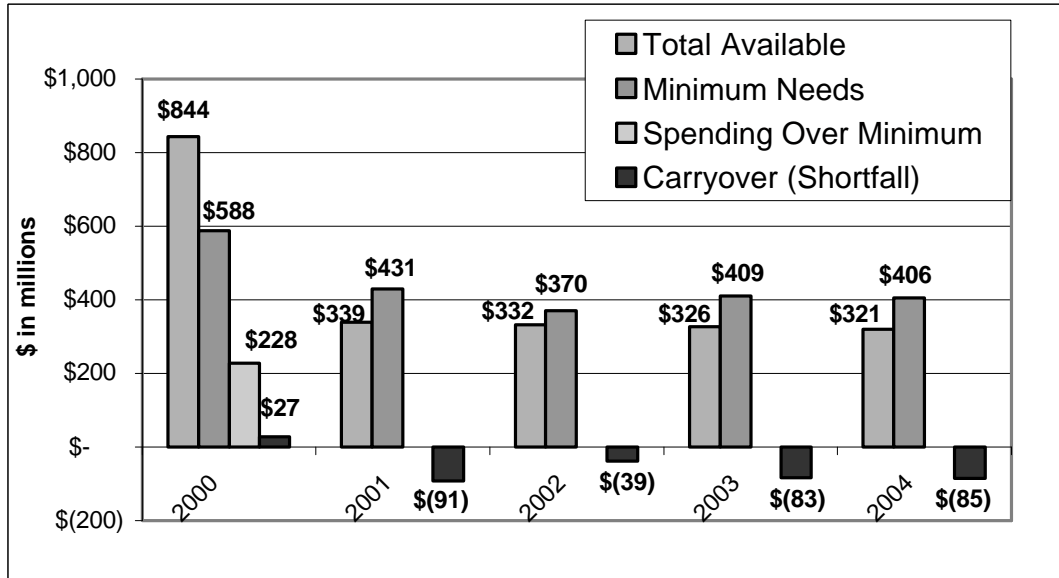
### **Amtrak Capital Outlook Is Grave**

In both our 1998 and 1999 assessments, we projected that Amtrak would face serious capital shortfalls beginning in 2001. *Our review of Amtrak's capital needs during our 2000 assessment shows that our predictions have come true.* In 2001, assuming Amtrak's cash losses are no higher than it projects, Amtrak will face a minimum needs funding shortfall of \$91 million, and will face continued shortfalls through 2004 totaling \$298 million.

By the end of 2000, nearly all of Amtrak's \$2.2 billion in Taxpayer Relief Act funds will have been committed except for the anticipated repayment of \$222 million in TRA funds borrowed in 1999. Over one-third of the funds have been invested in the high-speed rail program (\$759 million), another \$478 million was invested in rolling stock programs including both progressive and heavy overhauls, and \$205 million was invested in Amtrak-owned rail lines to improve reliability. Amtrak has also used \$46 million for debt reduction and \$24 million for capital maintenance.

The following figure illustrates Amtrak’s projected funding, minimum needs, and shortfalls through 2004.

**Amtrak’s Projected Capital Funding, Minimum Needs, and Shortfalls, 2000 through 2004**



**Funding Shortfalls in 2001 Will Mean Abandoned or Delayed Projects**

Amtrak will be faced with some very difficult choices next year concerning how it can best use its limited capital dollars. Assuming Amtrak meets its Plan projections, Amtrak’s available capital funds in 2001 will total \$339 million. After Amtrak covers its mandatory costs, including debt, contractual, legal, and environmental commitments, it will have only \$179 million left to invest in its capital program. Amtrak would need *at least* an additional \$385 million in capital funding in 2001, a total of \$564 million, if it were to cover all of its minimum needs, continue funding for many key projects in progress, and fulfill its commitments to States for corridor development projects. This would mean no new projects could be undertaken.

Amtrak’s ability to reach its goal of operating self-sufficiency will depend heavily on its ability to make capital investments that will pay off with increased revenues and reduced operating expenses. For example, Amtrak still needs an additional \$100 million for projects to complete the high-speed rail program. While none of the remaining projects are essential for Amtrak to begin operating Acela Express,

they include improvements in ride quality, speed, and appearance that are the basis for some of the revenues projected in the Strategic Business Plan.

The projected availability of funding to meet Amtrak's minimum capital needs is based on Amtrak's projected operating results. If Amtrak's losses are higher than it projects, it will need to use more of its Federal appropriation to cover its cash loss. This use of its funds would come at the direct expense of capital investment. If our cash loss projections were to occur, the funds remaining for capital investment in 2001 would not be enough to cover even mandatory capital expenses.

### **Despite Known Minimum-Needs Shortfalls, Amtrak Has Pursued a Growth-Focused Capital Program**

In our 1999 assessment, we recommended that Amtrak revise its spending plans in 2000 to set aside funds for 2001 and 2002 to meet minimum needs in those years. Although Amtrak agreed with our predictions for the shortfalls, its 2000 Plan provided for use of all but \$27 million in funding available to Amtrak in 2000. Examples of projects outside minimum needs include \$25 million for planning efforts on the Midwest Regional Rail Initiative, \$15 million for the future Las Vegas service, and \$9 million for the refurbishment of Heritage diner cars.

### **Amtrak Underspent on Certain Minimum Needs in 1999 and 2000 to Support a Higher Level of Growth-Related Spending**

Our assessment of Amtrak's 2000 capital plan and subsequent spending indicates that not only is Amtrak spending on projects that are outside minimum needs, it is not sufficiently addressing all its minimum needs. For example, we estimate Amtrak's minimum, operational reliability investment needs as \$135 million each year. However, Amtrak's annual spending on operational reliability projects in the past 3 years has averaged only \$71 million.

Amtrak's business objectives of increased ridership and revenue depend on reduced trip times, especially on the Northeast Corridor, and on high-quality service and excellent on-time performance. Although Amtrak's revenue and ridership have grown significantly in the past 3 years, Amtrak will begin to see these numbers erode if it continues to defer spending on operational reliability. If Amtrak cannot maintain service quality, Amtrak will incur increased expenses from more passengers invoking the Customer Service Guarantee, and will lose revenues from those who simply choose not to return.



## **Amtrak Must Develop a Realistic Plan for Addressing Long-Term Capital Needs**

Amtrak has historically prepared a 1-year capital plan that reflects a level of spending commensurate with its expected annual appropriation. The plan is a good indicator of short-term needs, but does not adequately establish the extent and timing of Amtrak's long-term capital needs. Amtrak completed an assessment of the long-term capital needs for the south end of the Northeast Corridor in spring 2000 that complements a similar assessment of the north-end requirements completed in 1994. However, the south-end plan does not delineate in a detailed manner the timing and priority for projects in the plan. Nor do these plans cover the equipment and other infrastructure needs outside the NEC. Amtrak needs a well-developed, long-term plan that identifies all capital needs, their costs, their timing, and priority across its entire system.

## **Recommendations**

*We recommend:*

- 1) Amtrak identify actions in the 2001 Strategic Business Plan that will close the \$737 million gap represented by the undefined management actions in the current Plan.*
- 2) Amtrak reprogram any authorized, but unobligated, TRA funds that were approved for projects outside minimum needs. The reprogrammed funds should be used first to satisfy all minimum needs before any remainder is used for other non-minimum purposes.*
- 3) The Board of Directors, in approving Amtrak's 2001 capital plan, withhold approval on projects that fall outside Amtrak's minimum capital needs until Amtrak can demonstrate that it has provided for all minimum needs.*
- 4) Amtrak, in preparing the long-term capital plan to present to its Board of Directors this fall, identify in a comprehensive manner all capital needs, their costs, their timing, and their priority.*

## **Objectives and Scope**

The assessment summarized in this report responds to our mandate as defined in Section 409 of ARRA. The report contains all of our findings concerning Amtrak's financial plans and summaries of the analyses underlying those findings.

This report relies on work performed by us and by our consultants who performed part of the analysis under our supervision. All analyses and supporting data that contain proprietary information have been omitted from this report. As required by Section 409, this report will be provided to the President of Amtrak; the Secretary of Transportation; the Senate Committee on Commerce, Science, and Transportation; the House Committee on Transportation and Infrastructure; the Senate Committee on Appropriations; and the House Committee on Appropriations. We will also provide copies to the Amtrak Reform Council.

This year's assessment has three components: an update of Amtrak's current financial status, an assessment of Amtrak's 2000 Strategic Business Plan, and an assessment of Amtrak's current capital investment plans and requirements. The specific objectives for each component are described below. Our methodology for addressing each of these objectives is described in Exhibit A.

**Amtrak's Current Financial Status.** The objective of this task was to assess Amtrak's current financial condition, incorporating final 1999 and first 9 months of 2000 operating and financial performance. We also compared 1999 operating results to operating trends for the last 10 years. The goal was to identify trends in performance and what these might suggest in terms of opportunities for Amtrak to improve its future financial condition.

**Amtrak's 2000 Strategic Business Plan.** The 2000 Strategic Business Plan includes new projections and Business Plan Actions geared toward achieving operating self-sufficiency in 2003. We reviewed the Plan to determine whether Amtrak's projections for operating costs, revenues, and ridership are reasonable and likely to improve Amtrak's financial condition sufficiently to eliminate Amtrak's need for operating support beyond 2002. We also examined the models that underlie the forecasts for net revenue growth resulting from Amtrak's Market-Based Network Analysis.

**Amtrak's Capital Investment Plans and Requirements.** Our objective was to assess Amtrak's current capital investment program, funding sources, and capital needs to determine Amtrak's ability to meet Strategic Business Plan goals and to maintain the integrity of its physical plant and equipment.

## Prior Assessment Findings and Recommendations

Based on our 1999 assessment, we concluded that if Amtrak followed its 1999 Strategic Business Plan without modification, an additional \$695 million in cash operating losses would be sustained over the period 1999 through 2002. More critically, we projected that Amtrak would have an *unfunded cash loss* – the portion of the operating loss that Amtrak would have to cover from sources other than Federal subsidies – of \$223 million in 2002, the year before mandated self-sufficiency. Amtrak projected a \$57 million cash profit, a difference of \$280 million. We also projected that Amtrak’s available Federal funding would likely fall short of meeting Amtrak’s minimum capital needs in 2001 and 2002 by \$244 million.

In both our 1998 and 1999 assessments, we made recommendations for actions that would help Amtrak strengthen its financial management and better identify and address its capital needs as it attempts to move toward operating self-sufficiency. Amtrak satisfactorily addressed all of our 1998 recommendations, which included conducting a depreciation study, developing a variable-cost model, revising its bidding practices, and completing the South End Transportation Plan and the Market-Based Network Analysis.

In our 1999 assessment, we made two recommendations that are still outstanding. The first was for Amtrak to develop a detailed long-range projection for mandatory spending needs and annual funding levels. Amtrak intends to present a business plan and a 20-year capital plan that will address these issues to the Amtrak Reform Board in September 2000. Our second recommendation was that Amtrak identify a means for covering minimum capital needs beyond 2000 before approving spending on projects that fall outside the minimum capital needs category. Despite acknowledging funding shortfalls beginning in 2001, Amtrak disagreed with this recommendation and in 2000, pursued capital investments outside of minimum needs.

# Findings: Current Financial Status

## Amtrak Increased Revenue in 1999 But Cash Losses Remained High

Although Amtrak's operating results for 1999 showed continued improvement in revenue, increases in labor costs, depreciation, and train operations expenses resulted in an operating loss of \$916 million. This loss was \$56 million more than the 1998 loss and the largest in Amtrak's history.<sup>1</sup> Amtrak's 1999 cash loss was \$579 million, \$54 million higher than its 1998 cash loss.

Systemwide ridership increased by 2 percent from 1998 levels, led by growth of better than 3 percent in both the Northeast Corridor and Amtrak West business units. Intercity ridership decreased by 1.6 percent, due in part to fare increases and reservation system glitches. Operating revenues increased in 1999 by 7.4 percent over 1998, from \$1,708 million to \$1,834 million. This growth stemmed from a 5.7 percent growth in passenger revenue, from \$1,001 million to \$1,058 million, and a 9.7 percent growth in non-passenger revenue, increasing from \$707 million in 1998 to nearly \$776 million in 1999.

Operating expenses increased by 6.9 percent, from \$2,568 million to \$2,745 million, when 1998 labor costs are adjusted for retroactive labor settlements. The largest sources of growth in operating expenses in 1999 were labor, \$78 million (5.7 percent higher); depreciation, \$35 million (11.9 percent higher); and train operations, \$26 million (7.4 percent higher). The growth in labor costs is mainly attributable to wage increases resulting from new labor contracts. The increase in depreciation expense is directly related to Amtrak's ongoing program of capital investments that is designed to improve revenue-generating ability in the long term. Higher train operations expenses reflect, in part, nationwide increases in fuel costs.

Amtrak's attainment of self-sufficiency, however, does not rest on the size of its operating loss. The operating loss includes depreciation, a non-cash charge, which Amtrak does not cover from its operating revenues. The capital investment required to replace depreciated equipment and infrastructure is either financed or funded with Federal capital appropriations. Therefore, the true indicator of operating self-sufficiency is Amtrak's cash loss. As noted, Amtrak's cash loss in

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<sup>1</sup> Amtrak's reported operating loss for 1998 was \$930 million, which included the full amount of retroactive labor payments attributable to the years 1996 through 1998 (per newly settled labor agreements). After allocating these costs to the years in which they were incurred, the 1998 operating loss totals \$860 million.

1999 was \$579 million and we project the 2000 cash loss to be \$521 million. To reach operating self-sufficiency, Amtrak must reduce this cash loss to \$266 million in 2003, a required improvement of \$255 million.

## **Despite Strong Revenue Growth, Operating Results for the First 9 Months of 2000 Are Behind Amtrak's Business Plan**

For the 9 months ended June 2000, systemwide passenger revenue and ridership improved from last year, continuing the upward swing of the past few years. Passenger revenue was up by 7.5 percent and ridership was up by 3.5 percent. Northeast Corridor (NEC) passenger revenues grew a strong 10.6 percent from a 3.8 percent ridership increase, and Amtrak West passenger revenue increased 9.6 percent from a 7.3 percent ridership increase. Amtrak Intercity passenger revenues improved moderately over last year, but fell short of planned targets by \$21 million.

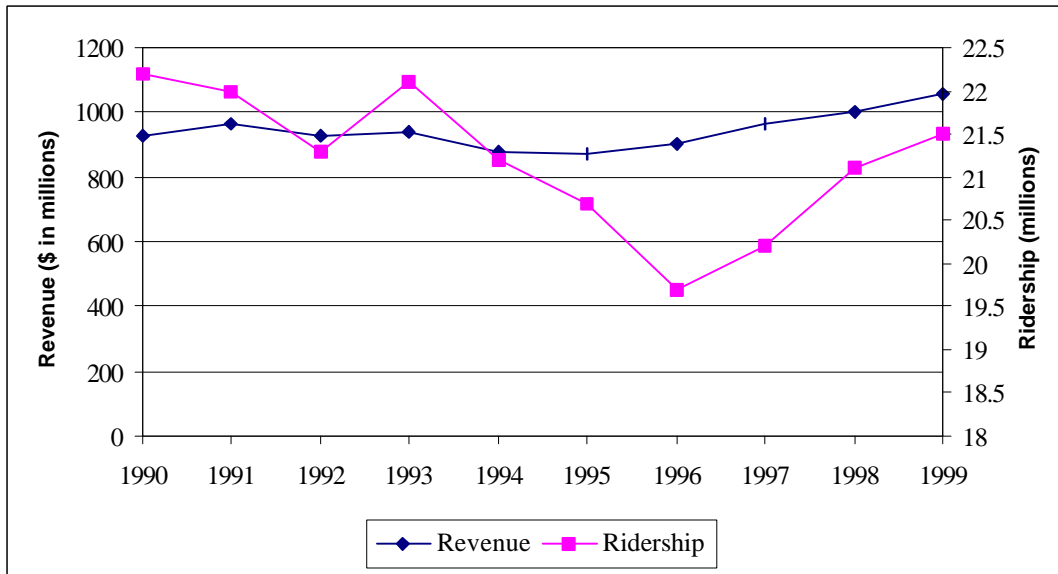
Total operating revenues were up 10.8 percent, and operating expenses grew by 7.3 percent. However, Amtrak recorded an operating loss of \$711 million, \$6 million greater than for the same period last year and \$16 million worse than its Plan goal of \$695 million. Amtrak's cash loss in the first 9 months was \$428 million, \$22 million worse than planned.

Operating losses and expense increases in 2000 are being driven by the same underlying factors as in 1999: train operations expenses are up sharply due to spikes in fuel costs, labor costs are increasing due to higher wage rates from the labor settlements, and depreciation expenses are rising. At this point in time, Amtrak is projecting that it will not meet the Plan targets for 2000 because of delays in the start-up of Acela Express passenger service and a slower ramp-up than planned for the Express shipping business.

## **Revenue and Ridership Trends for 1990 Through 1999**

Amtrak's passenger revenue and ridership continued their upward swing in 1999 as seen in Figure 1, which shows systemwide passenger revenue and ridership numbers for 1990 through 1999.

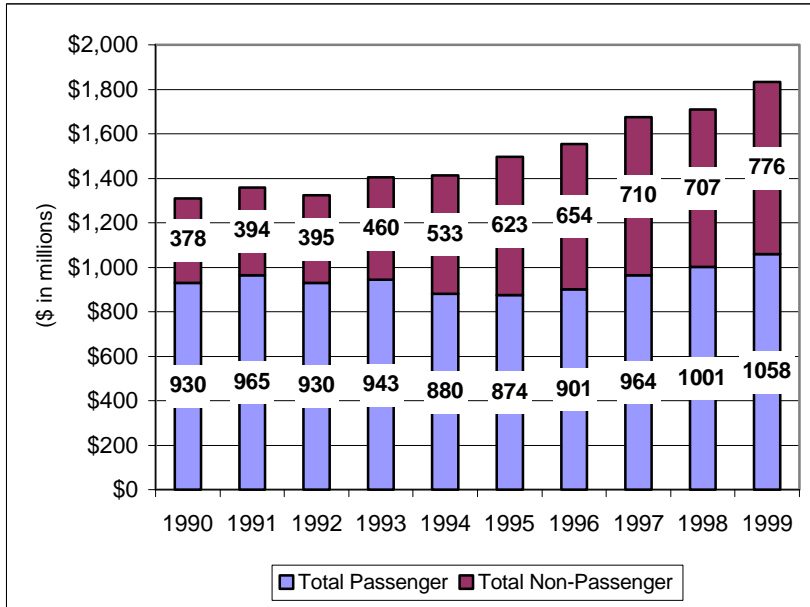
**Figure 1 Systemwide Passenger Revenue & Ridership Trends, 1990 Through 1999**



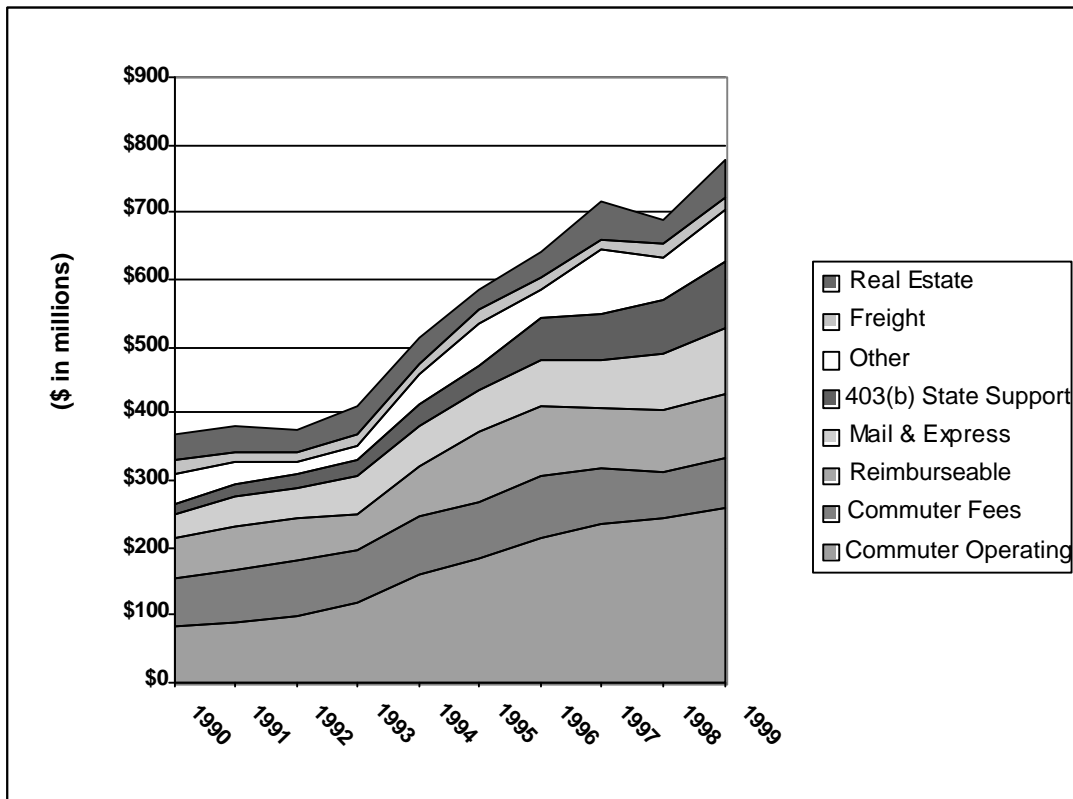
After 3 years of significant systemwide ridership decline between 1993 and 1996, ridership rose between 1996 and 1999. Systemwide ridership has grown over this time from 19.7 million to 21.5 million, an increase of 9.1 percent. Systemwide passenger revenue declined between 1991 and 1995. This trend reversed itself after a series of fare increases in 1995 and later years, resulting in a 21 percent growth in passenger revenue between 1995 and 1999. The revenue growth trend that began in 1995 has brought Amtrak to the highest passenger revenue levels in its history, and Amtrak expects that 2000 passenger revenues will exceed those of 1999 due to its efforts toward better yield management.

Non-passenger revenue has become an increasing share of Amtrak's total revenues between 1990 and 1999, as shown by Figure 2. The overall increase in non-passenger revenue for the last 10 years has been 105 percent, going from \$378 million in 1990 to almost \$776 million in 1999. Non-passenger activities now account for over 42 percent of Amtrak's total operating revenues. Figure 3 breaks out the non-passenger revenue into its components. These include revenue from operating commuter services, commuter fees, Mail and Express, reimbursable work, freight fees, state support for train services, real estate operations, and other revenue.

**Figure 2 Composition of Amtrak Revenues, 1990 Through 1999**



**Figure 3 Amtrak's Non-Passenger Revenue Categories 1990 Through 1999**



As shown in Figure 3, the trend in non-passenger revenues is largely attributable to revenues gained through commuter and reimbursable maintenance-of-way contracts. Commuter operations alone have nearly tripled since 1990 and accounted for revenues of \$261 million in 1999. (Amtrak has management and operating contracts with seven State and local authorities and transported over 58 million commuter riders in 1999.)

An increasingly important source of non-passenger revenue is projected to come from the growth of Mail and Express shipments. Amtrak's 1999 Mail and Express revenues increased 18 percent over 1998, and Amtrak projects that the Mail and Express business will more than triple between 1999 and 2004. We also expect non-passenger revenue to continue to increase in importance over time, especially if Amtrak is able to capitalize on the opportunity presented by its Mail and Express business. Indeed, this growth is a critical factor in Amtrak's ability to meet its financial goals.

## **Key Expense Factors Contributing to Amtrak's Losses**

As Amtrak works toward its goal of operating self-sufficiency, its operating and cash losses have been consistently high and will remain so in 2000 and 2001. Labor settlements have increased wage rates and, therefore, the cost of labor. Other factors include growth in depreciation and interest expenses, and the operating expenses that Amtrak is incurring to improve its future financial performance. This makes it crucial for Amtrak to further identify expense-saving opportunities in its next Strategic Business Plan.

### **Labor Costs**

Labor costs are Amtrak's largest operating cost. In 1999, labor costs, which include salaries, wages, overtime, and benefits, accounted for 53 percent of Amtrak's total operating costs. In early 2000, Amtrak completed lengthy negotiations with its 22,500 agreement-covered employees, representing about 90 percent of its workforce. As a result of these negotiations, Amtrak estimated that wage payments for these employees increased by about \$248 million over the cost-of-living increases paid for the period 1996 to 2000.

In order to reduce the growth in labor costs and help meet its Plan objectives, Amtrak included in the new contracts work rule changes and productivity improvements, which were estimated to save about 20 percent (\$49 million) of the incremental costs of the contracts. For 1998 and 1999, Amtrak estimated it achieved savings of about \$23 million. In the first 9 months of 2000, Amtrak estimates additional savings of \$19 million. It appears that Amtrak is on track to



achieve its work rule savings targets by the end of 2000. Amtrak has recently initiated a new round of collective bargaining with its agreement-covered employees. In order to hold down future cost growth, it is imperative that Amtrak negotiate even more aggressive productivity increases.

## Depreciation Expenses

Depreciation expenses will continue to grow over the next 5 years as the new capital investments financed by Taxpayer Relief Act (TRA) funds, Federal appropriations, and private borrowing increase the value of Amtrak’s capital assets. Table 1 shows actual depreciation levels from 1993 through 1999 and projected levels for 2000 through 2004. As shown, Amtrak projects depreciation expenses to increase to \$485 million in 2001 and peak at about \$510 million in 2002 and 2003, more than double the levels of the mid-1990s.

**Table 1 Amtrak’s Depreciation Expenses (\$ in millions)**

| 1993  | 1994  | 1995  | 1996  | 1997  | 1998  | 1999  | 2000  | 2001  | 2002  | 2003  | 2004  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| \$206 | \$245 | \$230 | \$238 | \$242 | \$294 | \$329 | \$390 | \$485 | \$510 | \$510 | \$509 |

Amtrak began a program of relecting its Intercity passenger trains in 1994. The increase in depreciation from \$206 million in 1993 to an annual average of about \$240 million over the following 4 years reflects this fleet renewal program. The increase in 1998 and the continued high rate of growth to 2002 reflect the acquisition of high-speed rail equipment and related maintenance facilities in the NEC as well as the completion and capitalization of NEC infrastructure projects.

The growth in depreciation expenses will increase Amtrak’s reported operating losses, but because these are non-cash expenses, they will not affect annual cash losses.<sup>2</sup> Depreciation expenses are projected to constitute an increasing proportion of the overall operating loss over the next 5 years because of the large number of capital purchases that Amtrak has made or plans to make in this period.

## Interest Expenses

The large majority of Amtrak’s interest expense is for interest on equipment that has been financed, although some interest expense reflects the financing of stations and other facility improvements. Table 2 shows Amtrak’s actual interest

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<sup>2</sup> The cash loss is the part of overall losses that must be covered each year in order for Amtrak to remain a viable concern. Depreciation is a non-cash expense and is therefore not included in the cash loss calculations.

expenses from 1993 through 1999 and projections through 2004.<sup>3</sup> The jump in interest costs in 1995 reflects the equipment financing for the Intercity and Amtrak West reeleting programs. The equipment financed included locomotives in all three Strategic Business Units, passenger cars for Intercity and Amtrak West for the reeleting program, and material handling cars and Roadrailleurs (for Mail and Express) in Intercity.

**Table 2 Amtrak’s Interest Expenses (\$ in millions)**

| 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001  | 2002  | 2003  | 2004  |
|------|------|------|------|------|------|------|------|-------|-------|-------|-------|
| \$20 | \$24 | \$43 | \$63 | \$74 | \$85 | \$85 | \$86 | \$128 | \$158 | \$151 | \$144 |

Because of the low levels of Federal capital support throughout the 1980s and early 1990s, Amtrak needed to secure outside financing for its reeleting and high-speed rail programs. The interest costs on this financing are adding about \$100 million more to cash losses *per year* in the Plan period than in the period before these programs.

Although Amtrak’s losses are growing as it strives to achieve operating self-sufficiency, this is explained, in part, by the non-capital investments that Amtrak is making to improve financial performance. Just as capital investments involve large up-front commitments of resources with a payback over a number of years, Amtrak has undertaken numerous actions that involve up-front operating costs whose payback is expected to occur over the Plan period. These “operating expense investments” include such things as service standards training, marketing and branding program development, the Market-Based Network Analysis and other strategic planning, severance payments, and start-up costs for the Express shipping program.

If these efforts are successful, they will start to repay Amtrak with increased revenues and expense savings over the long term. Many of these expenses are part of Business Plan Actions (BPAs) that we have analyzed in this Plan and will continue to scrutinize in the 2001 Strategic Business Plan.

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<sup>3</sup> The interest expenses shown in Table 2 are on a cash interest basis, not on an accrual basis.

# Findings: 2000 Strategic Business Plan

## Amtrak's 2000 Strategic Business Plan Projects Operating Self-Sufficiency in 2003

Amtrak's 2000 Strategic Business Plan anticipates reducing its cash loss to \$266 million in 2003. Of this amount, \$71 million is for equipment overhauls that Amtrak intends to fund with its capital subsidy, and the remaining \$195 million is equal to its estimates of railroad retirement taxes beyond the amounts needed for the benefits of Amtrak retirees ("excess RRTA payments"), which by law can also be funded from its Federal appropriation. As a result, the Plan anticipates Amtrak reaching operating self-sufficiency in 2003. In fact, the Plan projects operating self-sufficiency in 2002, 1 year ahead of Amtrak's mandate.

The Plan assumes that annual Federal appropriations will be equal to those proposed by the Administration: \$571 million in 2000, \$521 million in 2001, and \$521 million in 2002. It assumes Federal capital appropriations in 2003 and 2004 will be at least equal to the sum of its capital overhaul and excess RRTA expenses, \$266 million and \$272 million, respectively.<sup>4</sup> It also assumes Amtrak's continued ability to use its Federal capital subsidy for maintenance of both equipment and infrastructure. These assumptions, along with a continued strong economy, underpin both Amtrak's and our forecasts of revenue and financial results.

Table 3 presents Amtrak's projections for 2000 through 2004. Amtrak projects an operating loss that declines from \$930 million in 1999 to \$785 million in 2003. Amtrak's results for its cash loss improve to a greater degree because of the increases in depreciation (non-cash charges) that are incorporated in the operating loss. After subtracting non-cash operating charges, the cash loss is projected to decrease from \$441 million in 2000 to \$266 million in 2003, a \$175 million improvement, and a \$313 million improvement over the actual cash loss in 1999 of \$579 million.

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<sup>4</sup> We have assumed that the expected 2002 appropriation of \$521 million will continue in 2003 and 2004.

**Table 3 Amtrak's 2000 Plan Forecast (\$ in millions)**

| <b>Component</b>                          | <b>2000</b>  | <b>2001</b>  | <b>2002</b>  | <b>2003</b>  | <b>2004</b>  | <b>Total</b>   |
|---|--------------|--------------|--------------|--------------|--------------|----------------|
| Operating Revenues                        | \$2,124      | \$2,226      | \$2,368      | \$2,418      | \$2,464      | \$11,600       |
| Less Operating Expenses                   | 2,966        | 3,030        | 3,147        | 3,203        | 3,253        | 15,600         |
| Operating Profit (Operating Loss)         | (842)        | (805)        | (778)        | (785)        | (790)        | (4,000)        |
| Plus Non-Cash Items                       | 401          | 493          | 519          | 519          | 517          | 2,451          |
| <b>Cash Profit (Cash Loss)</b>            | <b>(441)</b> | <b>(311)</b> | <b>(259)</b> | <b>(266)</b> | <b>(272)</b> | <b>(1,550)</b> |
| Plus TRA Funds—Capital Overhauls          | 79           | 0            | 0            | 0            | 0            | 79             |
| Plus Federal Funds—Capital Maintenance*   | 362          | 242          | 189          | 195          | 200          | 1,188          |
| Plus Federal Funds—Capital Overhauls      | 0            | 69           | 70           | 71           | 72           | 283            |
| <b>Budget Result (Unfunded Cash Loss)</b> | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>     |

\* The values in 2002 through 2004 are equal to Amtrak's estimates of excess RRTA payments.

Amtrak intends to finance its cash losses by using its annual Federal appropriation for capital maintenance, and by using TRA funds in 2000 and its Federal appropriation thereafter for its equipment overhaul expenses. Table 4 shows how Amtrak's annual capital appropriations will be used.

A portion of the appropriations in 2000 (\$190 million) and 2001 (\$222 million) will be used to repay TRA borrowings. These borrowings were made necessary by Amtrak's agreement to limit outlays from its Federal appropriation in 1999 to only 40 percent of the appropriation. To cover the shortfall, Amtrak borrowed from TRA funds with the understanding that when the Federal appropriations became available, they would be repaid. The remainder of the appropriations will be used to cover operating losses greater than excess RRTA in 2000 and 2001, to cover excess RRTA in 2002 through 2004, and to fund capital overhauls of equipment in 2001 through 2004.

**Table 4 Amtrak's Uses of Federal Appropriated Funds in the 2000 Plan Forecast, 2000 through 2004 (\$ in millions)**

| <b>Use of Federal Appropriated Funds</b> | <b>2000</b>  | <b>2001</b>  | <b>2002</b>  | <b>2003</b>  | <b>2004</b>  | <b>Total</b>   |
|--|--------------|--------------|--------------|--------------|--------------|----------------|
| Capital Maintenance                      | \$362        | \$242        | \$189        | \$195        | \$200        | \$1,188        |
| Repayment of TRA Borrowing               | 190          | 222          | 0            | 0            | 0            | 412            |
| <b>Subtotal—Operating and Repayments</b> | <b>552</b>   | <b>464</b>   | <b>189</b>   | <b>195</b>   | <b>200</b>   | <b>1,600</b>   |
| Capital Overhauls                        | 0            | 69           | 70           | 71           | 72           | 283            |
| Capital Investment                       | 42           | 18           | 262          | 255          | 249          | 825            |
| <b>Subtotal—Capital</b>                  | <b>42</b>    | <b>87</b>    | <b>332</b>   | <b>326</b>   | <b>321</b>   | <b>1,108</b>   |
| <b>Total</b>                             | <b>\$594</b> | <b>\$551</b> | <b>\$521</b> | <b>\$521</b> | <b>\$521</b> | <b>\$2,708</b> |

## Amtrak's 2000 Strategic Business Plan Will Not Achieve Operating Self-Sufficiency in 2003

A number of the elements of Amtrak's Business Plan required restatement, principally because Amtrak has yet to define specific actions to sufficiently increase revenues and reduce expenses. Our restatements indicate the additional cash loss that Amtrak could face in the period 2000 to 2004 if the risky elements of the Plan were to perform as we expect and *if no corrective action were taken to compensate for them*. Table 5 shows our net restatements grouped into eight categories: passenger revenue for each of the operating Strategic Business Units (Northeast Corridor, Intercity, and Amtrak West); Mail and Express net revenue; and other BPA restatements for each of the Strategic Business Units and Corporate.

Amtrak has had good revenue growth in the first 9 months of 2000, but delays in Acela Express and Acela Regional combined with a slower ramp-up than projected for the Mail and Express business will negatively affect revenue in the fourth quarter. This is reflected in our \$80 million restatement for 2000. The total restatement is \$1,440 million over the 5-year period.

**Table 5 OIG 2000 Net Restatements of Amtrak's Revenue and Expense Forecasts (\$ in millions)**

|   | 2000        | 2001         | 2002         | 2003         | 2004         | Total          |
|---|-------------|--------------|--------------|--------------|--------------|----------------|
| <b>Passenger Revenue</b>                |             |              |              |              |              |                |
| Northeast Corridor                      | \$0         | \$69         | \$78         | \$79         | \$79         | <b>\$304</b>   |
| Intercity                               | 6           | 5            | 2            | 3            | 4            | <b>21</b>      |
| Amtrak West                             | 2           | 5            | 3            | 4            | 3            | <b>17</b>      |
| <b>Mail and Express</b>                 | 35          | 36           | 56           | 38           | 14           | <b>179</b>     |
| <b>Other Business Plan Actions</b>      |             |              |              |              |              |                |
| Northeast Corridor                      | 29          | 94           | 93           | 82           | 70           | <b>368</b>     |
| Intercity                               | 3           | 73           | 89           | 103          | 119          | <b>386</b>     |
| Amtrak West                             | 4           | 6            | 4            | 4            | 4            | <b>21</b>      |
| Corporate                               | 1           | 22           | 35           | 40           | 47           | <b>144</b>     |
|   |             |              |              |              |              |                |
| <b>Increase (Decrease) in Cash Loss</b> | <b>\$80</b> | <b>\$310</b> | <b>\$359</b> | <b>\$351</b> | <b>\$339</b> | <b>\$1,440</b> |

There are a number of key restatements that account for 85 percent (\$1,220 million) of our \$1,440 million restatement for the entire Plan period. They are:

- \$737 million in unidentified management actions that are to be developed for the 2001 Strategic Business Plan including \$275 million for NEC, \$367 million for Intercity, and \$94 million for Corporate;

- \$304 million in NEC passenger revenue that is at risk of not materializing because of lower-than-forecasted diversion of passengers from air and automobile travel to the new Acela Express service; and
- \$179 million in Mail and Express revenue that is at risk because of slower growth in the Express business than Amtrak projects.

Table 6 shows Amtrak's financial projections from Table 3 that have been adjusted for our restatements of Amtrak revenues and expenses. Our restatements result in increases in the operating, cash, and unfunded cash losses of \$1,440 million.

**Table 6 OIG Restatement of Amtrak's 2000 Plan Forecast  
(\$ in millions)**

| <b>Component</b>                          | <b>2000</b>   | <b>2001</b>    | <b>2002</b>    | <b>2003</b>    | <b>2004</b>    | <b>Total</b>     |
|---|---------------|----------------|----------------|----------------|----------------|------------------|
| Operating Revenues                        | \$2,030       | \$2,156        | \$2,305        | \$2,413        | \$2,539        | \$11,443         |
| Less Operating Expenses                   | 2,952         | 3,272          | 3,442          | \$3,550        | 3,668          | 16,884           |
| Operating Profit (Operating Loss)         | (922)         | (1,115)        | (1,138)        | (1,137)        | (1,129)        | (5,441)          |
| Plus Non-Cash Items                       | 401           | 493            | 519            | 519            | 517            | 2,451            |
| <b>Cash Profit (Cash Loss)</b>            | <b>(521)</b>  | <b>(622)</b>   | <b>(619)</b>   | <b>(617)</b>   | <b>(612)</b>   | <b>(2,990)</b>   |
| Plus TRA Funds—Capital Overhauls          | 79            | 0              | 0              | 0              | 0              | 79               |
| Plus Federal Funds—Capital Maintenance    | 362           | 242            | 189            | 195            | 200            | 1,188            |
| Plus Federal Funds—Capital Overhauls      | 0             | 69             | 70             | 71             | 72             | 283              |
| <b>Budget Result (Unfunded Cash Loss)</b> | <b>(\$80)</b> | <b>(\$310)</b> | <b>(\$359)</b> | <b>(\$351)</b> | <b>(\$339)</b> | <b>(\$1,440)</b> |

If our restatements were to occur, the situation would be untenable for Amtrak. In 2001 and 2002, Amtrak would need nearly all of its Federal appropriation to cover its cash losses and would not have enough money to cover even mandatory capital expenses that average about \$120 million per year. Also, the revenue forecasts depend on maintaining service quality and reliability, both of which would suffer without any capital spending on overhauls and fleet renewal, and maintenance expenses would rise. The result would be even greater losses than those shown in Table 6.

In 2003, Amtrak would not achieve operating self-sufficiency because it would have cash losses of \$351 million more than it can fund with its Federal appropriation. These restatements are not inevitable outcomes however. Amtrak must take actions that will compensate for the risks we have identified.

## Without Major Corrective Actions, Amtrak Will Not Achieve Operating Self-Sufficiency in 2003

Amtrak must identify actions that will close the gap in its 2000 Plan within the next year, or operating self-sufficiency will not be achievable in 2003. Although Amtrak has 3 years left to reach operating self-sufficiency, most improvements must be in place by the end of 2002. Significant changes in 2003, the year of self-sufficiency, may not be possible or may not yield the bottom-line result that Amtrak is mandated to achieve. Time is running short for Amtrak to develop and put into place the meaningful actions needed to close the gaps we have identified.

Of the roughly \$1.4 billion in restatements we have made to Amtrak's projections, over 51 percent represent undefined management actions that have yet to be determined, nearly all related to expense reductions. Essentially, this is the gap that Amtrak has to close over the 5-year period, assuming all other defined actions are fully achieved, in order to meet the financial targets necessary for Amtrak to achieve and maintain operating self-sufficiency. As Table 7 shows, this gap is \$737 million.

**Table 7 Amtrak Forecasts and OIG Restatements of Undefined Management Actions (\$ in millions)**

|                                 | 2000         | 2001         | 2002         | 2003         | 2004         | Total        |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Amtrak NEC Net Projection       | \$50         | \$119        | \$89         | \$80         | \$70         | \$409        |
| OIG NEC Net Projection          | 51           | 19           | 19           | 21           | 23           | 133          |
| <b>Difference</b>               | <b>(1)</b>   | <b>100</b>   | <b>70</b>    | <b>58</b>    | <b>47</b>    | <b>275</b>   |
| Amtrak Intercity Net Projection | 5            | 69           | 84           | 99           | 115          | 372          |
| OIG Intercity Net Projection    | 5            | 0            | 0            | 0            | 0            | 5            |
| <b>Difference</b>               | <b>0</b>     | <b>69</b>    | <b>84</b>    | <b>99</b>    | <b>115</b>   | <b>367</b>   |
| Amtrak West Net Projection      | 0            | 0            | 0            | 0            | 0            | 1            |
| OIG West Net Projection         | 0            | 0            | 0            | 0            | 0            | 1            |
| <b>Difference</b>               | <b>0</b>     | <b>0</b>     | <b>0</b>     | <b>0</b>     | <b>0</b>     | <b>0</b>     |
| Amtrak Corporate Net Projection | 4            | 12           | 23           | 26           | 33           | 98           |
| OIG Corporate Net Projection    | 4            | 0            | 0            | 0            | 0            | 4            |
| <b>Difference</b>               | <b>0</b>     | <b>12</b>    | <b>23</b>    | <b>26</b>    | <b>33</b>    | <b>94</b>    |
| <b>Net Impact on Cash Loss</b>  | <b>(\$0)</b> | <b>\$181</b> | <b>\$177</b> | <b>\$184</b> | <b>\$195</b> | <b>\$737</b> |

Although Amtrak was able to identify actions over the course of the year that closed the gap for 2000, that gap was only \$59 million. For each of the years 2001

through 2003, the average gap is about \$180 million or three times the 2000 amount. The NEC and Intercity bear the brunt of responsibility for identifying expense-saving actions. These must be well developed in the 2001 Plan. If they are not, we have strong doubts about Amtrak's ability to achieve operating self-sufficiency in 2003.

The revenue problems facing Amtrak are less troublesome than the expense problems. Our reductions in NEC passenger revenue and Mail and Express revenue are based on more conservative approaches to the forecasting of revenue growth than those used by Amtrak. If aviation system delays and congestion continue to worsen in the Northeast, and if Amtrak revises its proposed fare and schedule structure for Acela Express, much of our \$304 million restatement of NEC revenue may be achievable. Our restatement of Mail and Express reflects slower than projected growth that is based on recent experience. If Amtrak vigorously pursues the marketing of this business and secures the necessary agreements with the freight railroads, our Mail and Express restatements also could be greatly reduced.

## **Restatements Were Necessary for Business Plan Projections in All Strategic Business Units**

### **Northeast Corridor Strategic Business Unit**

#### **Passenger Revenues**

The Northeast Corridor is projecting passenger-related revenues of \$4.1 billion over the Plan period (2000 through 2004). These revenues reflect Amtrak's baseline projections for the Acela program (Metroliner/Acela Express and Northeast Direct/Acela Regional) and three related BPAs including food and beverage revenue growth, special trains, and incremental ticket revenue associated with economic growth.<sup>5</sup> Amtrak projected that revenue would grow considerably following the introduction of Amtrak's new services – with \$615 million in revenues projected in 2000 growing to \$925 million in 2004.

Based on our assessment of the reasonableness and consistency of Amtrak's projections of NEC passenger revenues, we project that passenger revenues will be lower than those forecast in the Plan by \$304 million (7.4 percent) over the 5-year

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<sup>5</sup> Acela Express is the service that will be provided by the 20 new high-speed trainsets and is the successor to current Metroliner service, extended to Boston. Acela Regional service is the successor to current Northeast Direct service. There is a third Acela service, Acela Commuter, which will replace the current Clocker service. Acela Commuter ridership and revenue are included in our Acela Regional forecast.



Plan period. In 2003, we project revenues will be lower by \$79 million (8.8 percent). *We emphasize that this restatement indicates the portion of Amtrak's revenue forecast that is at risk of not materializing.* Forecasts of a new service such as Acela Express entail much more uncertainty than forecasts of changes made to existing services such as those in Intercity and Amtrak West.

We used the same assumptions that Amtrak used concerning start-up dates, operating plans, and fare levels for Acela service when doing our projections. Acela Express service had been expected to start with one trainset in July, followed by approximately three additional trainsets, on average, each month over the following 6 months. However, Acela Express services have been delayed relative to those assumptions. As a result, Amtrak's actual results for 2001 may be somewhat lower than our projections (and the restatement, therefore, higher), but exact estimates are not possible until a new train deployment schedule is established and Amtrak decides on its Acela Express fares and operating schedule.

Our ridership forecast in 2002, after full implementation of Acela Express and Acela Regional service, indicates that Acela Express ridership will be 15 percent less than Amtrak's projection, but that Acela Regional ridership will exceed Amtrak's projection by 2.5 percent. With both services combined, we project that ridership in 2002 will be 2.3 percent less than Amtrak projected.<sup>6</sup> The following tables present Amtrak's projections and our restatements, Table 8 for passenger revenue and Table 9 for ridership.

In Table 8, and throughout this report, the lines showing the difference between Amtrak's projections and ours, and the lines for the impact on Amtrak's cash loss indicate the additional cash loss the restatements add to Amtrak's 2000 Plan. Therefore, positive numbers indicate an increase in the cash loss compared to what Amtrak projected, and negative numbers indicate a reduction in the cash loss.

**Table 8 Amtrak's NEC Passenger Revenue Forecasts and OIG Restatements (\$ in millions)**

|   | 2000       | 2001      | 2002        | 2003        | 2004        | Total        |
|---|------------|-----------|-------------|-------------|-------------|--------------|
| Amtrak's Forecast                       | \$615      | \$805     | \$865       | \$895       | \$925       | \$4,106      |
| OIG Restated Forecast                   | 615        | 736       | 788         | 817         | 847         | 3,802        |
| <b>Increase (Decrease) in Cash Loss</b> | <b>\$0</b> | <b>69</b> | <b>\$78</b> | <b>\$79</b> | <b>\$79</b> | <b>\$304</b> |
| Percent Difference                      | 0          | 8.6       | 9.0         | 8.8         | 8.5         | 7.4          |

<sup>6</sup> Amtrak did not estimate ridership for each year of the Plan period. Rather, estimates were made for 2000 through 2002, the year when both Acela Express and Acela Regional services will be fully implemented.

**Table 9 Amtrak's NEC Ridership Forecast and OIG Restatement (Passengers in thousands)**

|                                 | Actual<br>1999 | 2002       |
|---------------------------------|----------------|------------|
| Metroliner/Acela Express        |                |            |
| Amtrak                          | 2,241          | 3,874      |
| OIG Restatement                 |                | 3,291      |
| Difference                      |                | 583        |
| Northeast Direct/Acela Regional |                |            |
| Amtrak                          | 9,975          | 10,405     |
| OIG Restatement                 |                | 10,662     |
| Difference                      |                | (257)      |
| <b>Total Difference</b>         |                | <b>325</b> |
| Percent Difference              |                | 2.3        |

The reduction in revenue in our restated projections reflects a lower forecast of Acela Express passengers, which is partially offset by our higher forecast for Acela Regional passengers. In 2002, we project ticket revenues from Acela Express will be \$74 million (17 percent) less than Amtrak's forecast and Acela Regional ticket revenues will be \$21 million (5 percent) higher than Amtrak's forecast.

This revenue shift reflects our lower projections for diversion of passengers from air and automobile to Acela Express and higher projections of diversion to Acela Regional. Our forecast estimates that some passengers will prefer to take the improved conventional service (Acela Regional) on the north end from New York to Boston rather than the faster Acela Express service because the time savings (50 minutes) will not compensate for the fare differential. Amtrak's projected ridership increase is almost entirely on Acela Express, even though Acela Regional travel times are improved significantly in the north end.

We reduced Amtrak's three NEC Business Plan Actions by \$69 million and Acela food and beverage revenue by \$9 million. These reductions are included in the restatements in Table 8. Of the \$69 million in BPA reductions, \$68.7 million is for ticket revenue growth based on economic growth. We concluded that our restated passenger ticket revenue forecasts already include the economic growth measured by this BPA, and to add the impacts projected in it would constitute double counting of economic growth benefits.

Amtrak operating plans for Acela Express in the 2000 Plan differ from those in the 1999 Strategic Business Plan. Trip times have increased and the frequency of stops in Connecticut has been reduced. For example, between Boston and New York, average trip times for both Acela Express and Acela Regional have increased by 5 minutes and the number of stops in New Haven have been cut

about in half. As a result, our forecast for revenue in 2002 is over \$20 million less than in the last assessment. Amtrak's forecast in the Plan, however, is over \$13 million higher than last year. Therefore, our restatement in 2002 is \$34 million more than in the last assessment (\$78 million versus \$44 million).

Our analysis indicates that it would be preferable, from a revenue point of view, to operate with higher frequencies in Connecticut and longer travel times. The increase in travel times (about 4 minutes per additional stop) has a much lower impact on ridership and revenue between New York and Boston than does cutting the frequency to intermediate stations.

We also performed an extensive, detailed revenue-maximization analysis of the NEC fare policy used in Amtrak's Plan forecast to determine whether a different set of fares for Acela Express and Acela Regional could mitigate some of our restatement, resulting in increased NEC passenger revenue. Because the results of this analysis contain proprietary information, only a summary of the results is presented here. The full analysis has been shared with Amtrak staff to assist them in formulating their Acela operating and fare strategies.

Our analysis indicates that proposed Acela Regional fares are set at the right levels, but that Acela Express fares (projected to be about twice the Acela Regional fares) are likely to be too high to maximize revenue. However, we did not analyze the expense impacts of our alternative, lower fare structure. Because lower fares on Acela Express will generate more passengers and expenses for that service, the profit-maximizing fares are higher than those produced in our analysis. Nevertheless, the profit maximizing fares are still likely to be lower than those envisioned in the 2000 Plan. It is likely that Amtrak could mitigate at least one-third of our \$79 million restatement in 2003 by adopting revised operating and fare plans for the Acela Express service. Amtrak informed us that it is continuing to analyze its operating and fare plans for Acela Express and would assess the results of our analysis for potential incorporation in those plans.

## **Non-Passenger Business Plan Actions**

In addition to passenger revenue initiatives, the NEC developed 26 Plan actions that are projected to improve bottom-line results by \$651 million over the 5-year Plan period. Amtrak estimated these actions would increase revenues by \$66 million and produce expense savings of \$585 million. We increased NEC revenue projections to \$139 million, an increase of about \$74 million, and reduced expense savings to \$143 million, a reduction of \$442 million. Overall, we projected the NEC BPAs will result in \$282 million in improvements to Amtrak's bottom line for the 5-year Plan period, \$368 million less than Amtrak's projection. Table 10 summarizes our restatements.

**Table 10** OIG Restatements of NEC’s Non-Passenger Business Plan Actions (\$ in millions)

|   | 2000        | 2001        | 2002        | 2003        | 2004        | Total        |
|---|-------------|-------------|-------------|-------------|-------------|--------------|
| Amtrak Revenue Increases                | \$48        | (\$2)       | \$7         | \$6         | \$6         | \$66         |
| OIG Revenue Increases                   | 28          | 45          | 20          | 22          | 24          | 139          |
| <b>Difference</b>                       | <b>20</b>   | <b>(46)</b> | <b>(14)</b> | <b>(16)</b> | <b>(18)</b> | <b>(74)</b>  |
| Amtrak Expense Savings                  | 42          | 156         | 128         | 131         | 128         | 585          |
| OIG Expense Savings                     | 33          | 15          | 21          | 34          | 40          | 143          |
| <b>Difference</b>                       | <b>9</b>    | <b>141</b>  | <b>107</b>  | <b>97</b>   | <b>88</b>   | <b>442</b>   |
| <b>Increase (Decrease) in Cash Loss</b> | <b>\$29</b> | <b>\$94</b> | <b>\$93</b> | <b>\$82</b> | <b>\$70</b> | <b>\$368</b> |

We concluded that the revenue estimates in two Plan actions were understated as a result of events that occurred subsequent to the submission of the actions. Our largest revenue restatement reflects the recent 3-year extension of the mechanical services portion of the contract with the Massachusetts Bay Transportation Authority (MBTA). NEC had reduced its revenue projections in the Plan by \$48 million over the 5-year period to recognize the loss.

We also increased the revenue portion of NEC’s BPA on management actions. NEC included revenue estimates of \$70.3 million in its Plan. Due, in part, to significant one-time insurance recoveries, higher-than-projected commercial development revenues, increases in reimbursable equipment billing rates, and the successful negotiation of a contract renewal with the MBTA, we credited NEC revenues with \$96.9 million for the Plan period. Our only other revenue adjustments reflected a deferral of \$25 million in lease income from 2000 to 2001 to reflect delays in equipment delivery and a small reduction in 2000 for rail access fees that were not realized.

Based on our discussions with NEC officials and analysis of supporting documentation, we concluded that several expense-reduction actions were overly optimistic or were based on assumed benefits from capital projects that have either been delayed or not been funded. Additionally, NEC’s two largest expense BPAs assume Amtrak management and regulatory authority actions yet to be determined. A summary of our three largest expense restatements follows.

First, NEC’s largest Plan action to reduce expenses is valued at over \$338 million. This action is a placeholder that Amtrak plans to address with future initiatives. In essence, this is the gap that NEC has to close over the 5-year Plan period, assuming all other Business Plan Actions are fully achieved, in order to meet the financial targets necessary for Amtrak to achieve operating self-sufficiency. At the time of our assessment, Amtrak provided support for \$36.6 million in expense

savings. However, NEC had not developed any specific plans to make up the remainder of the deficiency, resulting in a net restatement of \$302 million.

Second, Amtrak’s BPAs related to power consumption projected savings of \$68 million over the Plan period by purchasing power at wholesale prices. As we reported in our last assessment, the power purchase initiative requires Federal action to overturn a Federal Energy Regulatory Commission decision in order for Amtrak to realize the projected savings. Because Amtrak still has many legal and technical hurdles to overcome in order to secure the authority necessary to purchase power at wholesale prices, we restated the value to zero. Third, we eliminated the expense savings NEC had projected because of the anticipated loss of the mechanical portion of the MBTA contract.

## Intercity Strategic Business Unit

### Passenger Revenues

Amtrak’s revenue and expense Business Plan Actions projected a net improvement of \$105 million from the baseline performance anticipated for Intercity over the 2000 through 2004 period (\$145 million in increased revenues minus \$40 million in increased expenses).<sup>7</sup> In contrast, our revised forecasts for these BPAs project a net contribution to improved bottom-line financial performance for Intercity of \$84 million over the same period, a difference of \$21 million (20 percent). Table 11 compares our passenger revenue and expense projections to Amtrak’s projections over the Plan period.

**Table 11 Amtrak’s Intercity Passenger Revenue and Expense Projections and OIG Restatements (\$ in millions)**

|   | 2000       | 2001       | 2002       | 2003       | 2004       | Total       |
|---|------------|------------|------------|------------|------------|-------------|
| Amtrak Revenue Increases                | \$21       | \$25       | \$29       | \$33       | \$37       | \$145       |
| OIG Revenue Increases                   | 11         | 20         | 27         | 30         | 34         | 121         |
| <b>Difference</b>                       | <b>10</b>  | <b>5</b>   | <b>2</b>   | <b>3</b>   | <b>3</b>   | <b>24</b>   |
| Amtrak Expense Increases                | 7          | 7          | 8          | 9          | 9          | 40          |
| OIG Expense Increases                   | 3          | 7          | 8          | 9          | 10         | 37          |
| <b>Difference</b>                       | <b>(4)</b> | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>0</b>   | <b>(3)</b>  |
| <b>Increase (Decrease) in Cash Loss</b> | <b>\$6</b> | <b>\$5</b> | <b>\$2</b> | <b>\$3</b> | <b>\$4</b> | <b>\$21</b> |

<sup>7</sup> In our discussion of the Intercity Business Plan Actions, we have removed the projections associated with the Market-Based Network Analysis BPA. These projections are discussed in the MBNA section of the report.

Our largest restatement was to Amtrak's forecast of expected net revenue contributions from the Economic Growth Business Plan Action, which we reduced by \$9 million. This revision reflects our forecast of slightly slower passenger growth from population and income increases in the corridors that Intercity serves.

Most of our other restatements reflect actions that have been postponed or canceled, or our conclusion that some projections were overly optimistic. For example, a minor delay in implementing the Marketing Initiative, combined with our conclusion that its full revenue-generating potential is slightly lower than anticipated by Amtrak, led us to reduce its projected contribution to net revenues by nearly \$4 million over the 5-year period.

Similarly, the delayed implementation of the Service Standards BPA, combined with our assumption that its service quality improvements will require a longer time period to produce the ridership increase anticipated by Amtrak, caused us to reduce its expected net revenue contribution by nearly \$2 million over the period. Finally, evidence from Amtrak's early experience with the Telemarketing of Sleepers BPA caused us to reduce its expected net revenues by about \$1 million over the period, and Amtrak's cancellation of the Kids' Half-Price Policy Change action resulted in our elimination of its expected \$4 million contribution to net revenues.

## **Non-Passenger Business Plan Actions**

Intercity developed 16 Business Plan Actions that do not relate to passenger revenue, such as revenue increases and expense savings associated with the modernization of Chicago Union Station and the related expansion of its commercial retail space. Amtrak expected these actions to improve bottom-line results by almost \$408 million over the 5-year Plan period. Amtrak estimated these actions would increase revenues by \$22 million and produce expense savings of \$386 million.

Overall, we reduced Intercity's projections of revenue increases by \$2 million (9 percent) and reduced projections of expense savings by \$384 million (99 percent). Our total restatement is a \$386 million reduction of Amtrak's total projected impact from these BPAs. Rather than the \$408 million Amtrak projected in improvements over the 5-year Plan period, we projected improvements of \$22 million. Table 12 summarizes the effect of the restatements on Amtrak's projections of revenue increases or expense savings.

**Table 12 OIG Restatements of Intercity’s Business Plan Actions  
(\$ in millions)**

|   | 2000       | 2001        | 2002        | 2003         | 2004         | Total        |
|---|------------|-------------|-------------|--------------|--------------|--------------|
| Amtrak Revenue Increases                | \$8        | \$4         | \$4         | \$4          | \$4          | \$22         |
| OIG Revenue Increases                   | 7          | 3           | 3           | 3            | 4            | 20           |
| <b>Difference</b>                       | <b>0</b>   | <b>1</b>    | <b>0</b>    | <b>0</b>     | <b>0</b>     | <b>2</b>     |
| Amtrak Expense Savings                  | 6          | 71          | 88          | 103          | 119          | 386          |
| OIG Expense Savings                     | 4          | (2)         | (1)         | 0            | 0            | 2            |
| <b>Difference</b>                       | <b>2</b>   | <b>72</b>   | <b>88</b>   | <b>103</b>   | <b>119</b>   | <b>384</b>   |
| <b>Increase (Decrease) in Cash Loss</b> | <b>\$3</b> | <b>\$73</b> | <b>\$89</b> | <b>\$103</b> | <b>\$119</b> | <b>\$386</b> |

Our two largest restatements (totaling \$380 million) reflect adjustments of expense savings due to lack of data linking the actions to improvements in the bottom line. The largest single Plan action restatement was related to management actions to be determined, which we restated from \$367 million to zero. At the time of our assessment, Amtrak had not yet developed concrete efforts that could reasonably result in the projected expense savings. The other large restatement related to presenteeism, which is an action to reduce overtime and increase employee productivity through better management and employee incentives. Because Amtrak has not developed financial measures of the impacts that can be attributed to presenteeism, we restated the Plan action value to zero from \$12 million in expense savings.

### **Market-Based Network Analysis and Mail and Express**

In addition to operating passenger service over its extensive route network, Amtrak provides mail carriage service to the United States Postal Service (USPS), carries express cargo shipments, and offers limited package express service on some passenger routes.

Amtrak’s 2000 Strategic Business Plan includes baseline amounts for continuation of its current Mail and Express service, as well as the traditional package express services. We found the forecasts for these baseline amounts to be reasonable in our last two assessments and continue to hold this view. The 2000 Plan also includes projections for specific Mail and Express actions that would result in incremental revenue and expense projections for Mail and Express services. In our 1999 assessment, we found no reason to restate the Mail Business Plan Actions. We did restate the projections for Express based on a slower-than-expected ramp-up in 1999 and on the fact that Amtrak was projecting the operation of greater numbers of Express cars on existing routes than was allowed

by current constraints resulting from a 1998 Surface Transportation Board (STB) decision.<sup>8</sup>

In addition to the plans for Mail and Express expansion, the 2000 Plan also includes projections for increases in Mail and Express and passenger revenue due to the Market-Based Network Analysis (MBNA) restructuring. The projections for the MBNA and for Mail and Express are inextricably linked, in that many of the route changes that have resulted from the MBNA prove profitable to Amtrak due to additional Mail and Express business on the route. This makes it almost impossible to separate the two forecasts, and we have thus treated them in a combined analysis.

Amtrak included projections for the MBNA Plan actions in its 1999 Strategic Business Plan that were placeholders for anticipated benefits of the analysis. During the 1999 Plan Period, the analysis was begun, but it was not completed before issuance of the 2000 Plan. As such, these Plan projections were placeholders for the expected results of the MBNA. Subsequent to the issuance of the Plan, Amtrak has completed the MBNA, and our review was based on the final MBNA results.

The placeholders in the Plan included very small revenue dollars and large expense savings, while the final MBNA results indicated large revenue increases. Amtrak now projects a bottom-line impact from all Mail and Express and MBNA actions of \$534 million over the 5-year Plan period, composed of \$1,028 million in revenue increases and \$494 million in expense increases. Our restated forecast provides for a bottom-line impact of \$356 million, with revenue increased to \$1,260 million, but with expenses increased to \$904 million. This results in a net restatement of \$179 million. Table 13 shows our MBNA and Mail and Express restatements for 2000 through 2004.

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<sup>8</sup> STB Finance Docket No. 33469, May 28, 1998, Application of the National Railroad Passenger Corporation under 49 U.S.C. 24308(a) – Union Pacific Railroad Company and Southern Pacific Transportation Company. In its decision, STB indicated that Amtrak could operate trains as long as 30 cars, including passenger cars, over the tracks of freight railroads, with the limitation that “(t)he prime purpose of Amtrak must be passenger service, and the service must be genuine.”



**Table 13 MBNA and Mail and Express Revenue and Expense Forecasts and OIG Restatements (\$ in millions)**

|   | 2000        | 2001        | 2002        | 2003        | 2004         | Total        |
|---|-------------|-------------|-------------|-------------|--------------|--------------|
| Amtrak Revenue Increases                | \$172       | \$188       | \$223       | \$223       | \$223        | \$1,028      |
| OIG Revenue Increases                   | 122         | 171         | 257         | 316         | 395          | 1,260        |
| <b>Difference</b>                       | <b>50</b>   | <b>17</b>   | <b>(34)</b> | <b>(93)</b> | <b>(172)</b> | <b>(232)</b> |
|   |             |             |             |             |              |              |
| Amtrak Expense Increases                | 100         | 96          | 99          | 99          | 99           | 494          |
| OIG Expense Increases                   | 85          | 116         | 188         | 230         | 285          | 904          |
| <b>Difference</b>                       | <b>(15)</b> | <b>19</b>   | <b>89</b>   | <b>131</b>  | <b>186</b>   | <b>411</b>   |
|   |             |             |             |             |              |              |
| <b>Increase (Decrease) in Cash Loss</b> | <b>\$35</b> | <b>\$36</b> | <b>\$56</b> | <b>\$38</b> | <b>\$14</b>  | <b>\$179</b> |

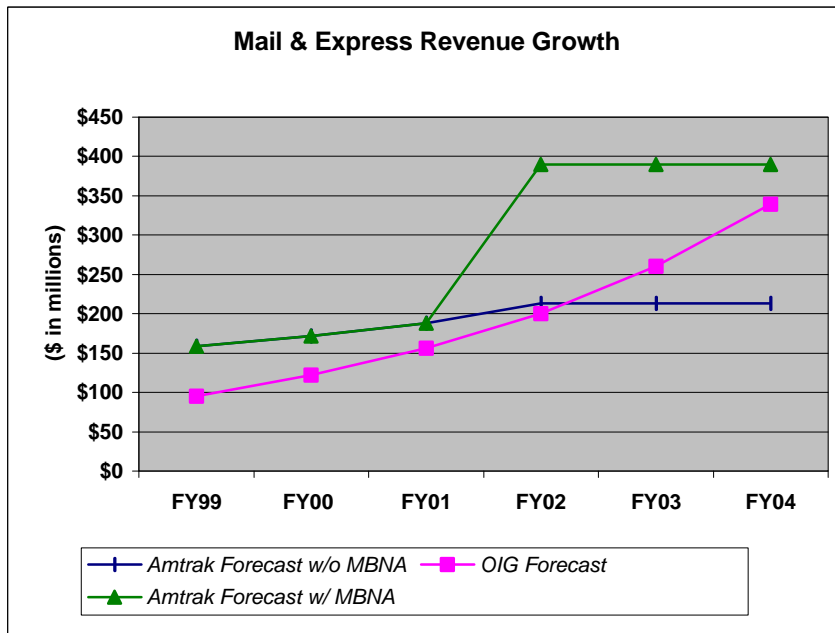
Our analysis of the MBNA models led to our acceptance of the passenger projections from MBNA. (See the section on the MBNA model later in this report.) In our analysis of the Mail and Express business, we concluded that it is unlikely to ramp up as quickly as Amtrak projects, which is reflected in our restatement. The growth stemming from MBNA-derived Mail and Express actions is reflected in Amtrak's projections of a rapid ramp-up of revenue through 2002. Amtrak's projections then remain steady at this level for 2003 and 2004. In contrast, our analysis indicates that the business will grow at a slower pace without as steep a jump by 2002 but with continued growth will approach Amtrak's forecast by 2004.

Many of the assumptions used in our analysis of the Mail and Express business stem from the MBNA projections. For example, Amtrak is aggressively pursuing negotiations with freight railroads for permission to operate trains longer than 30 cars, and we are optimistic that these agreements will be completed within Amtrak's projected timeframe. These agreements will be essential to the growth of Mail and Express capacity. They will also be important to the proposed route restructuring that will allow Amtrak to take advantage of business that is currently outside its network. Additionally, the MBNA projections include increased usage of 350 refrigerated cars that will give Amtrak the ability to ship perishable goods and will have a higher profit margin than the existing Express business. Amtrak took delivery of test units in late spring, and preliminary indications are that the cars are meeting Amtrak's performance expectations.

These factors will reasonably produce a continued growth of the Mail and Express business. However, we feel that Amtrak's projections between 2000 and 2002 are overly ambitious, given its historical rate of growth in these businesses. In our analysis of the Mail and Express business, we have combined the projections for

the MBNA expansion with the base growth projections, to arrive at a total forecast for Mail and Express. In our restatements, we have calculated the rate of growth experienced by both lines of business in 1999 and 2000, and applied that same rate of growth to the Plan's out years. Figure 4 illustrates the rates of revenue growth projected by Amtrak, with and without MBNA, along with our restated forecast.

**Figure 4 Mail and Express Revenue Growth, 1999 to 2004**



As the figure illustrates, we agree with Amtrak that the Mail and Express business has a good deal of potential. However, based on current growth rates, we concluded that the ramp-up of business will be slower than Amtrak projects, although our revenue projections approach Amtrak's in 2004. Our projections are somewhat more conservative than Amtrak's because Amtrak has historically projected growth rates that are higher than it has been able to realize.

## Amtrak West Strategic Business Unit

### Passenger Revenues

In the 2000 Plan, Amtrak West included 16 passenger-related Business Plan Actions projecting a total of \$160 million in additional revenue over the Plan period. These additional revenues result from a mix of pricing changes (accounting for 21 percent of projected additional revenues), demand-related actions (39 percent), marketing initiatives (1 percent), and new service actions (38 percent). The projected revenue increases included additional transportation

revenues from sales of passenger tickets, food and beverages aboard trains, as well as increases in reimbursements for operating losses on State-supported routes.

While projections of additional Business Plan Action revenues have been scaled back from previous Strategic Business Plans, we concluded that some of Amtrak’s projections were still overstated because of likely delays in implementing new services. Over the 5-year Plan period, Amtrak West projected net passenger revenue increases of \$124 million (\$160 million in increased revenues minus \$36 million in increased expenses). Our revised forecasts of additional passenger revenues and incremental expenses project a net contribution to bottom-line financial performance for Amtrak West of \$107 million over the period. As Table 14 shows, our restatements reduced Amtrak West’s projections by \$17 million for the 5-year period, which is 16 percent of the overall net benefit Amtrak expected to gain from these actions.

**Table 14 Amtrak West Passenger Revenue and Expense Forecasts and OIG Restatements (\$ in millions)**

|   | 2000       | 2001       | 2002       | 2003       | 2004       | Total       |
|---|------------|------------|------------|------------|------------|-------------|
| Amtrak Revenue Increases                | \$6        | \$26       | \$35       | \$44       | \$51       | \$160       |
| OIG Revenue Increases                   | 5          | 21         | 32         | 41         | 48         | 147         |
| <b>Difference</b>                       | <b>1</b>   | <b>5</b>   | <b>3</b>   | <b>2</b>   | <b>2</b>   | <b>13</b>   |
| Amtrak Expense Increases                | (2)        | 8          | 10         | 10         | 11         | 36          |
| OIG Expense Increases                   | 0          | 8          | 10         | 11         | 12         | 40          |
| <b>Difference</b>                       | <b>2</b>   | <b>0</b>   | <b>0</b>   | <b>1</b>   | <b>1</b>   | <b>4</b>    |
| <b>Increase (Decrease) in Cash Loss</b> | <b>\$2</b> | <b>\$5</b> | <b>\$3</b> | <b>\$4</b> | <b>\$3</b> | <b>\$17</b> |

We accepted Amtrak’s revenue and expense projections for seven Plan actions, but revised those for nine others. The unchanged actions consisted of marketing for special trains, the Las Vegas<sup>9</sup> new service proposal and the Sound Transit initiative (which does not impact passenger use). The action associated with the Auto Train would not have been restated except for the impact of anticipated delays in initiating this new service. Recognition of anticipated delays also impacted the financial projections for the Monterey County service. On most services, restatements to demand-related revenues have been offset to reflect anticipated reimbursements for State-supported services.

<sup>9</sup> In contrast to our assessment of the 1999 Strategic Business Plan, we concluded the current financial projections for the Las Vegas service were viable. The major reason for this reversal is a significant reduction (about 40%) from last year’s Plan in projected operating expenses for this service.

We have also restated Amtrak’s projected expenses related to these passenger-related Plan actions. Some of these revisions reflect anticipated operating cost reductions related to lower passenger volumes on certain routes where we have restated revenues downward. Others are the result of delays in starting new services. However, the majority of expense adjustments is for cost savings associated with implementing Service Standards.

Amtrak’s projected expense increase related to passenger actions is \$36 million. This figure is the net result of anticipated additional expenses totaling \$44 million associated with new services, demand, and pricing actions, partly offset by \$8 million in expected expense savings from the Service Standards Plan action. We have restated these additional expenses upward by \$8 million to reflect our conclusion that Service Standards actions are more likely to cost Amtrak money than to result in expense savings.

### **Non-Passenger Business Plan Actions**

Amtrak West developed 56 Business Plan Actions that do not relate to passenger revenue and which Amtrak expects will improve bottom-line results by \$107 million over the 5-year Plan period. Amtrak estimated these actions would increase revenues by \$36 million and produce expense savings of \$71 million. Overall, we reduced Amtrak West’s projections of revenue increases to about \$32 million, a reduction of \$5 million, and expense savings to \$55 million, a reduction of about \$17 million. The result is a bottom-line benefit from Business Plan Actions of \$86 million for the 5-year Plan period. Table 15 summarizes the effect of the restatements to reduce projected revenue increases or expense savings.

**Table 15 OIG Restatements of Amtrak West’s Business Plan Actions (\$ in millions)**

|   | <b>2000</b> | <b>2001</b> | <b>2002</b> | <b>2003</b> | <b>2004</b> | <b>Total</b> |
|---|-------------|-------------|-------------|-------------|-------------|--------------|
| Amtrak Revenue Increases                | \$2         | \$8         | \$9         | \$9         | \$9         | \$36         |
| OIG Revenue Increases                   | 1           | 7           | 8           | 8           | 8           | 32           |
| <b>Difference</b>                       | <b>1</b>    | <b>1</b>    | <b>1</b>    | <b>1</b>    | <b>1</b>    | <b>5</b>     |
| Amtrak Expense Savings                  | 9           | 15          | 16          | 16          | 16          | 71           |
| OIG Expense Savings                     | 6           | 10          | 13          | 13          | 13          | 55           |
| <b>Difference</b>                       | <b>4</b>    | <b>5</b>    | <b>3</b>    | <b>3</b>    | <b>3</b>    | <b>17</b>    |
| <b>Increase (Decrease) in Cash Loss</b> | <b>\$4</b>  | <b>\$6</b>  | <b>\$4</b>  | <b>\$4</b>  | <b>\$4</b>  | <b>\$21</b>  |

Based on our analysis of Amtrak West’s assumptions and supporting documents, we restated the estimates for 34 BPAs. Two of these actions—one for perfect

employee attendance measures and one to implement savings in work rule changes—account for \$8 million of our expense restatements. We restated the Presenteeism Plan action, Amtrak’s perfect attendance program, given that Amtrak is still developing a system to determine an accurate financial measure of this action. We restated the Work Rule Savings action because some of the value associated with the expense savings appeared to overlap other related Plan actions. Additionally, Amtrak stated that it was receiving about half the benefits associated with this action. Consequently, we restated Work Rule Savings by half the original projected amount.

We also restated the projected expense savings related to the San Diegan Equipment BPA by about \$2 million. This Plan action requires the entire refueling of the trains (40 new cars), which would reduce the number of different types of equipment used to operate the service, resulting in a decrease in maintenance expenses. We restated the San Diegan Equipment action because we projected that the new equipment would be incorporated into the fleet over a period of 2 years. In contrast, Amtrak projected the refueling to begin without delay. The rest of the restated expense savings BPAs only required minor adjustments to reflect schedule slips in project implementation and completion, delays in eliminating employees, or the lack of capital funding. As a result, we reduced Amtrak’s expense savings estimates of \$71.2 million by \$16.6 million.

We restated 10 Plan actions that projected increased revenues. Our largest restatement is associated with the San Diegan Equipment action. Amtrak estimated that revenues would increase by \$24 million over the Plan period because the refueling is expected to reduce scheduled travel time and improve reliability. We restated the San Diegan Equipment revenue increases to approximately \$21 million, a \$3 million reduction. We projected that the new equipment would gradually enter the fleet over a 2-year period, while Amtrak based revenue increases on the immediate replacement of the entire San Diegan fleet.

The rest of the restated revenue increases can be attributed to the lack of point-of-sale technology (which tracks the sales of food onboard trains), delays in project implementation and vendor selection, and slower revenue growth from ticket vending machines for Amtrak San Diegan tickets and Metrolink tickets. Our total revenue increases are about \$5 million less than Amtrak’s estimated revenue increases of \$36.3 million.

## Corporate Service Centers

Amtrak's fourth business unit – the Corporate Service Centers – includes those business centers that serve or affect the corporation as a whole. These centers include Marketing, Chief Financial Officer, Human Resources, Customer Relations, Chief Mechanical Office, Labor Relations, Government Affairs, and Procurement and Administration.

The Corporate Service Centers projected a net bottom-line improvement of \$148 million between 2000 and 2004.<sup>10</sup> The improvements were projected in both passenger and non-passenger revenues and expenses. Of the 33 BPAs that were included in the Corporate Service Centers, we accepted 19 and restated 14. We reduced Amtrak's projected revenue increases to \$62 million, a reduction of \$114 million, and increased Amtrak's projections of expense increases to \$58 million, an increase of \$30 million. The result is a bottom-line benefit from Business Plan Actions of \$4 million over the 5-year Plan period. Table 16 shows our restatements of Amtrak's Corporate BPAs categorized by revenue increases and expense savings.

**Table 16 OIG Restatements of Corporate Business Plan Actions  
(\$ in millions)**

|   | 2000        | 2001        | 2002        | 2003        | 2004        | Total        |
|---|-------------|-------------|-------------|-------------|-------------|--------------|
| Amtrak Revenue Increases                | \$40        | \$24        | \$36        | \$38        | \$38        | \$176        |
| OIG Revenue Increases                   | 27          | 7           | 9           | 9           | 9           | 62           |
| <b>Difference</b>                       | <b>13</b>   | <b>17</b>   | <b>27</b>   | <b>29</b>   | <b>29</b>   | <b>114</b>   |
| Amtrak Expense Savings                  | (34)        | (9)         | 1           | 4           | 11          | (28)         |
| OIG Expense Savings                     | (22)        | (14)        | (7)         | (7)         | (7)         | (58)         |
| <b>Difference</b>                       | <b>(12)</b> | <b>5</b>    | <b>8</b>    | <b>11</b>   | <b>18</b>   | <b>30</b>    |
| <b>Increase (Decrease) in Cash Loss</b> | <b>\$1</b>  | <b>\$22</b> | <b>\$35</b> | <b>\$40</b> | <b>\$47</b> | <b>\$144</b> |

Two restatements account for \$114 million (78 percent) of our total restatement of Corporate Business Plan Actions. They are Productivity Enhancements, valued at \$91 million, restated to \$2 million, and Service Standards, valued at \$25 million, restated to zero. These two Plan actions account for more than three-fourths of Amtrak's total projected net improvement over the Plan period.

<sup>10</sup> Excluding the MBNA BPA, which is discussed in greater detail elsewhere in the report.

## **Productivity Enhancements**

The largest Plan action to reduce expenses is valued at over \$91 million. This action is a placeholder that Amtrak plans to address with future initiatives. In essence, this is the gap that the Corporate Service Centers have to close over the 5-year Plan period, assuming all other Plan actions are fully achieved, in order to meet the financial targets necessary for Amtrak to achieve operating self-sufficiency. At the time of our assessment, Amtrak had not provided any support linked to specific actions designed to provide these expense savings; therefore, we cannot accept the reasonableness of Amtrak's projections. However, we accepted the \$2 million projected for 2000, since actual results through the third quarter show that the Corporate Service Centers are ahead of the Business Plan in salaries and employee benefits.

## **Service Standards**

Amtrak is developing service standards to ensure high-quality service is provided consistently. Service standards represent a combination of initiatives to increase amenity levels offered to passengers and to otherwise improve on-board services, including increased on-board staffing, service training, pre-departure train inspections, and incentives for on-board personnel to take actions to improve passenger service.

The Corporate Service Centers projected revenue growth of \$94 million and expense increases of \$69 million, for a net impact of \$25 million. The Corporate Service Standards Plan action is essentially a placeholder whose value will have to be allocated to the Strategic Business Units (SBUs) that operate passenger service. However, we have already credited Amtrak West and Intercity with about \$9 million in net revenues from this initiative. Furthermore, consistent high-quality service is already the benchmark of the new Acela service in the Northeast Corridor and is reflected to a large degree in its revenue projections.

In its projections, Corporate has assumed that additional fare increases and the retention of at least 1-percent more of its ridership would yield substantial additional revenue. However, based on discussions with Amtrak officials and our review of the limited supporting documentation provided, we noted that fare increases would be offset to some extent by the costs of the additional amenities and staffing required, and that Amtrak's promise to provide bonuses to its employees for meeting Service Standards goals will fully offset the assumed ridership retention benefits. Moreover, potential future revenues may be diluted by the redemption of thousands of service guarantee certificates that Amtrak has

been issuing in response to its service satisfaction guarantee. Consequently, we have restated the value of the Corporate Plan action to zero.

In addition to improved service quality that is part of the Service Standards action, Amtrak's presenteeism initiative seeks to "raise the bar" by rewarding agreement-covered employees for perfect attendance. Currently, Amtrak's agreement-covered employees are absent an average of 8 to 9 days a year, while the industry average is 5 days. Amtrak has estimated a 1-day decrease in the average will equate to an expense savings of \$6 million per year. The Plan includes corporate-wide net impacts for presenteeism of \$30 million over the 5-year period, with \$3 million in the Corporate Service Centers. At the time of our assessment, Amtrak was unable to provide a way of measuring how the presenteeism initiative will translate into the projected dollar value of expense savings. Until these links are better documented, we cannot accept the reasonableness of Amtrak's projections. Therefore, we restated presenteeism actions in all four SBUs to zero.



## **Findings: Market-Based Network Analysis**

This past year Amtrak completed the development of its Market-Based Network Analysis. The MBNA consists of a set of models used to forecast changes in ridership and revenues likely to result from changes in Amtrak services, and to estimate the changes in train operating expenses and capital investment levels associated with these service changes. Amtrak's purpose for developing the MBNA was to improve its capability to identify changes in its route network, train schedules, ticket pricing, and train operating procedures that will contribute to improving its short- and long-term financial performance. By implementing actions identified through the MBNA, Amtrak expects to match its route network, fare structure, and service offerings more closely to passengers' demands, as well as to improve the efficiency of its train operations.

Amtrak's 2000 Strategic Business Plan does not reflect the results of the MBNA. However, Amtrak fully expects the MBNA to provide more sophisticated projections that will be incorporated in its 2001 Strategic Business Plan. Based on our evaluation, we are recommending additional refinements to the MBNA models that we believe will enhance the projections it produces.

### **The MBNA Improves Amtrak's Ability to Forecast the Effects of Service Changes**

The MBNA improves Amtrak's ability to identify changes in its operations that could make positive contributions toward the railroad's operating self-sufficiency. The MBNA models will generate more accurate projections of the revenue and expense impacts from fare and service changes than have previously been available to support Amtrak's decision-making. This greater accuracy improves Amtrak's ability to tailor its service offerings and fare structures to more closely match passenger demands and to increase the efficiency of its train operations.

This improved accuracy derives from two aspects of the models. First, the empirical relationships incorporated in the models are based partly on Amtrak's recent experience with the effects of changes in service levels and fares, making the resulting projections more robust. Second, forecasts prepared using the MBNA models reflect consistent assumptions about economic conditions likely to affect passenger demand and Amtrak's operating expenses. Choosing among proposed actions whose revenue and expense estimates are based on comparable assumptions will improve Amtrak management's ability to select the actions that offer the most realistic potential to improve financial performance.

The MBNA approach also gives Amtrak the ability to examine the potential financial risks and benefits associated with alternative changes to its train services or fare levels. Amtrak can use MBNA models to assess the sensitivity of projected revenues and expenses to different assumptions about future economic conditions, passenger demand, or cost factors. As a result, Amtrak can identify actions that are most likely to generate positive financial impacts in spite of uncertain future economic environments.

## **Structure of the Market-Based Network Analysis**

The MBNA is composed of three main modules for forecasting revenue, expenses, and investment requirements. The revenue component is comprised of statistical demand models that can be used to forecast changes in ridership and ticket revenues in response to changes in travel times, fare structures, train departure frequencies, and the stations served by each route. Separate ridership and revenue forecasting models have been developed for “corridors,” defined as regional networks of short-distance routes (up to 300 miles) on which frequent, higher speed services are offered, and for long-distance routes (typically at least 500 miles in length) on which less frequent, lower speed services are offered. The demand relationships in these models are based on a combination of three inputs: (1) survey research conducted in Amtrak’s current markets to explore how travelers value different features of Amtrak’s services, (2) the response of ridership to recent variations in fares and service levels, and (3) previous studies of potential demand for rail service in major U.S. travel corridors.

The expense module is comprised of two components. The first uses the results from the analysis in the revenue module to determine the modifications in Amtrak’s operating plans required to provide the service identified, such as changes in the frequency or timing of departures, train layover times, or on-board staffing standards. Then a complex spreadsheet-based model determines the changes in operational variables, such as the number of crew-hours and train-miles, which result from these modifications. The second component estimates the changes in Amtrak’s operating expenses that are likely to result from the changes in the operational variables by applying unit cost factors to the changes in each operating variable.

The investment module also has two components. The first is a model that calculates the rolling stock and other equipment and facilities necessary to operate route extensions, service frequency increases, or new corridor services. The second is an equipment cost model that estimates the additional capital investment Amtrak would be required to make to purchase or finance the calculated increases

in rolling stock, other equipment, and fixed facilities necessary to provide the new or expanded services.

## **The Initial Application of MBNA Forecasts Was Limited**

Amtrak's initial application of the MBNA was limited to changes that can be accomplished with minimal capital investment because capital funding for investments in new services is tightly constrained in the short term. These actions include (1) extending and restructuring existing routes to serve new markets, (2) improving service in those markets Amtrak already serves, (3) tailoring train capacity to better match geographic and seasonal demand variations, and (4) changing train consists (amount and types of equipment) or making other operational adjustments to reduce train operating expenses. Amtrak plans to adopt only those actions that have the potential to generate incremental revenues in excess of additional expenses, or to reduce current operating expenses.

Based on our review of the MBNA models, we believe that the forecasts of incremental revenue and expenses produced using the MBNA should be reliable for the actions proposed in the Network Growth Strategy.<sup>11</sup> The detailed revenue and expense forecasts for the route restructuring actions, train capacity adjustments, and improvements in operating efficiency developed in the Network Growth Strategy are preferable to the preliminary revenue and expense estimates for the MBNA Business Plan Action included in the 2000 Business Plan. Therefore, we used the estimates of incremental passenger revenues and expenses from the route restructuring and efficiency actions that were developed in the Network Growth Strategy to restate Amtrak's Plan forecasts for the Market-Based Network Analysis BPA. These restatements are discussed in the Intercity SBU section of the report.

## **The Market-Based Network Analysis Can Be Improved**

The MBNA represents an important step in Amtrak's ability to identify near-term actions and long-term strategies to improve its financial performance. However, we believe opportunities remain to improve and refine some components of the MBNA. Thus, we recommend that Amtrak continue to refine the structure and performance of the individual models comprising the overall system, as well as to assess their reliability in forecasting revenue and expense impacts of service improvements and operating changes that are implemented as part of the Network

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<sup>11</sup> The Network Growth Strategy is the set of actions that Amtrak has adopted based on its MBNA.

Growth Strategy. The refinements we recommend that Amtrak pursue are outlined below. A more detailed discussion of these findings involves proprietary information and, thus, will be provided directly to Amtrak in a separate report.

## Revenue Module

**Corridor Models.** Because trip distance plays a dominant role in the corridor mode-share model,<sup>12</sup> the model predicts significantly different market shares for Amtrak service for trips above and below 150 miles. In addition, the influence of unmeasured attributes, such as station access times,<sup>13</sup> on passengers' choices among the different modes appears to be quite strong. The distance variable may be capturing the effects of both these factors. Improving the accuracy with which each mode's service levels and attributes are measured should improve the model's ability to predict the response of Amtrak ridership to the introduction of planned corridor-type services.

In addition, some effort should be devoted to developing and refining the total market demand model for each corridor. Forecasts of ridership on improved corridor rail services depend on the total volume of corridor travel as well as the growth in Amtrak's market share (from the mode-share model). Therefore, reliable projections of total corridor travel volumes are as important as accurate estimates of rail's share of that total travel.

**Long-Distance Models.** The long-distance component is comprised of two models. The first, the total rail-demand model, forecasts the total demand for rail service in each market on a long-distance route. The second, the class-choice model, predicts which service class rail passengers are likely to choose.<sup>14</sup> Improvements could be made to each of the models.

First, the class-choice model includes certain variables (such as train frequency) that are unlikely to differ significantly among service classes and, thus, could more logically be included in the total rail-demand model. Second, class-specific attributes in the class-choice model appear to have very large effects on its estimates of the market shares of sleeper and coach service, and these effects seem illogical in some cases. Finally, the mathematical structure of the class-choice model may artificially restrict the degree of competition between the proposed new classes of service (economy sleeper and premium coach), which in practice seem likely to offer closely competing alternatives to many passengers.

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<sup>12</sup> Mode-share models estimate the share of each mode (i.e., air, rail, and automobile) in the total passenger market between two cities.

<sup>13</sup> Station access times measure the average time it takes passengers to get to or from an airport or train station from their homes or offices.

<sup>14</sup> Service classes include coach, premium coach, economy sleeper, and sleeper.

Amtrak should review the long-distance models—particularly the class-choice model—to verify that their mathematical structures accurately represent travelers’ decision-making processes. In addition, tests of the models’ ability to replicate existing passenger volumes and shares of passengers using coach and sleeper-class service on existing Amtrak long-distance trains should be conducted. Amtrak should also examine the effects of variations in the model structure and the variables included in the class-choice model on its accuracy in replicating existing service-class shares.

## **Expense Module**

The model used to translate changes in service frequency, operating characteristics, and on-board staffing levels for individual train services into resulting changes in operational variables, such as the number of train-miles, gallons of fuel, and train crew labor-hours, appears to be well-designed and reliable. However, the accuracy of the model used to translate these effects into predicted variations in train operating expenses is limited by its reliance on unit cost factors estimated at the SBU or system level, rather than at the individual train level. These highly aggregated unit cost factors obscure potential variation in unit costs among individual routes. Furthermore, the correlations between the unit costs and operational variables that are used to compute expenses are low in many cases.

Amtrak should explore the feasibility of conducting detailed analyses of its accounting data that would be necessary to support re-estimation of the financial model’s unit cost factors at more disaggregated levels. Ideally, the level of disaggregation used to compute each unit cost factor should match that of the operational variable to which it is applied. Although this is likely to be a costly and time-consuming process, the resulting improvement in the model’s accuracy in estimating changes in variable costs is potentially significant.

The operating expense model’s procedures for allocating attributable fixed and overhead costs to specific routes also warrant review by Amtrak. Since the purpose of the operating expense model is to estimate changes in expenses that result from changes in operating plans, the specific fixed and overhead cost elements it includes should be reviewed to assess their theoretical and historical sensitivity to such changes. The model’s procedures for allocating these costs should also be reviewed to verify that the procedures do not combine changes in costs that can be directly attributed to specific train services with reallocations among routes of costs that are likely to remain unaffected by operating changes.

# Findings: Capital Investment Plans and Requirements

## Amtrak's Capital Funds Are Likely to Fall Severely Short of Needs Through 2004

Amtrak owns substantial infrastructure and equipment requiring hundreds of millions of dollars in reinvestment and maintenance annually. With a limited amount of capital funding balanced against a mandate to reach self-sufficiency, Amtrak's goal of investing sufficiently to preserve the physical integrity of the system is often at odds with making the kinds of investments necessary to improve ridership and revenues. Even with the infusion of TRA capital funds in 1998 and 1999, Amtrak's projected funding between 1998 and 2004 will not provide sufficient funds for Amtrak to address even minimum capital needs,<sup>15</sup> let alone make the kinds of investments necessary to grow its business.

## Amtrak Will Face Significant Capital Shortfalls Starting in 2001

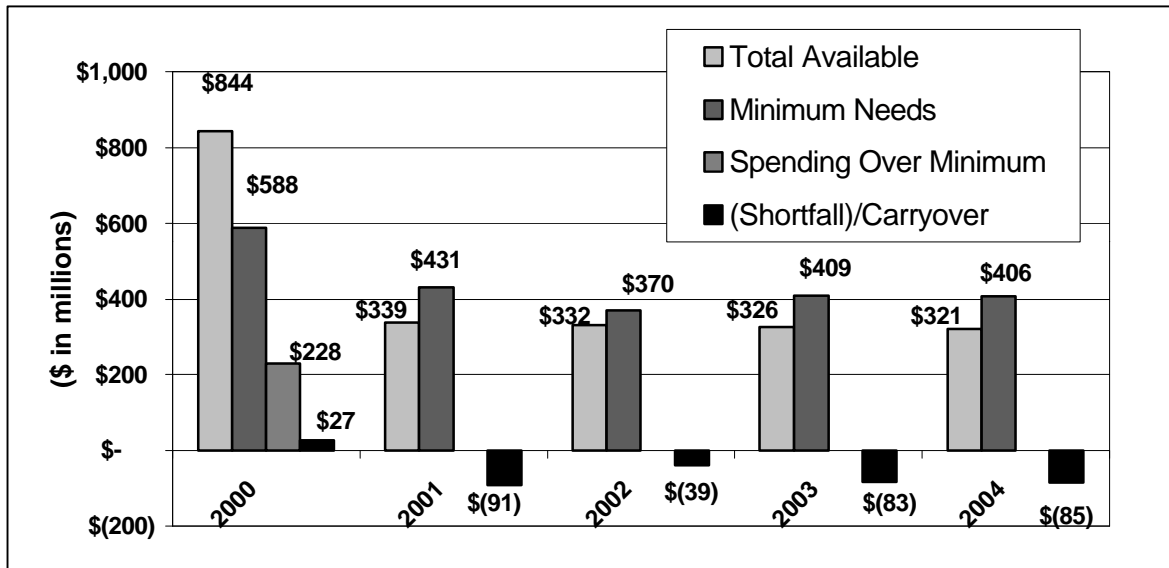
In both our 1998 and 1999 assessments, we projected that if Amtrak was unsuccessful in securing significant additional funding and did not set aside funding that was available during 1999 and 2000, Amtrak would face serious capital shortfalls beginning in 2001. *Our review of Amtrak's capital needs during our 2000 assessment shows that our predictions have come true.* In 2001, Amtrak will face a minimum needs funding shortfall of \$91 million, and will face continued shortfalls through 2004 totaling \$298 million. Figure 5 illustrates Amtrak's projected funding, minimum needs, and shortfalls through 2004.<sup>16</sup>

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<sup>15</sup> We define minimum capital needs as the minimum spending necessary to maintain the railroad in a steady state *through 2003*, after which time continued spending at this level will result in a steady deterioration of assets and infrastructure.

<sup>16</sup> Some charts may not add due to rounding.

**Figure 5 Amtrak’s Projected Capital Funding, Minimum Needs, and Shortfalls, 2000 through 2004**



**Funding Shortfalls in 2001 Will Mean Abandoned or Delayed Projects**

In 2001, Amtrak’s available capital funds will total \$339 million. After Amtrak covers its mandatory costs, including debt, contractual, legal, and environmental commitments, it will have only \$179 million left to invest in its capital program. Some of the projects competing for this \$179 million include:

- Amtrak’s remaining minimum needs \$270 million
- Completion of key projects in progress \$239 million
- New corridor development \$ 56 million

Amtrak’s ability to reach its goal of operating self-sufficiency will depend heavily on its ability to make capital investments that will pay off with increased revenues and reduced operating expenses. Amtrak has started to make some of these investments, but many have not been funded yet or require additional funding to complete. Some of these projects, including savings related to an automated fare collection system and completion of the Las Vegas service, are reflected in Amtrak’s business plan. Others represent near-term investments expected to result in long-term benefits, including planning and engineering costs for new high-speed rail corridors.

Table 17 identifies Amtrak’s available funding for capital projects after mandatory needs are addressed and the projects that will compete for these funds.

**Table 17 Amtrak’s Capital Funds and Needs in 2001  
(\$ in millions)**

|  |                |
|--|----------------|
| <b>Total Funds Available in 2001</b>                             | <b>\$339</b>   |
| <b>Mandatory Needs</b>   |                |
| Debt   | \$71           |
| Information Technology-Mandatory                                 | 13             |
| Environmental  | 8              |
| Other  | 69             |
| <b>Total Mandatory Needs</b>                                     | <b>\$161</b>   |
| <b>Total Capital Remaining After Mandatory Spending</b>          | <b>\$179</b>   |
| <b>Other Minimum Needs</b>                                       |                |
| Rolling Stock  | \$90           |
| Operational Reliability  | 135            |
| Life Safety  | 30             |
| Yards, Shops, and Stations                                       | 12             |
| Information Technology   | 3              |
| <b>Total Minimum Needs</b>                                       | <b>\$270</b>   |
| <b>Total Capital Remaining After Minimum Needs</b>               | <b>(\$91)</b>  |
| <b>Select Projects That Would Have to Be Delayed or Canceled</b> |                |
| • <b>Key Projects in Progress</b>                                |                |
| High-Speed Rail Infrastructure Projects                          | \$100          |
| Automated Fare Collection  | 12             |
| Las Vegas Service  | 13             |
| MBNA – Florida East Coast Re-route                               | 4              |
| Heritage Diner Refurbishment                                     | 12             |
| Mail and Express Information Technology                          | 5              |
| Metro North Infrastructure Improvements                          | 25             |
| Capstone Interiors   | 42             |
| Other Transformation   | 26             |
| <b>Total Key Projects in Progress</b>                            | <b>\$239</b>   |
| • <b>New Corridors</b>   |                |
| New York State   | \$23           |
| Keystone – Pennsylvania  | 13             |
| California   | 19             |
| <b>Total New Corridors</b>                                       | <b>\$56</b>    |
| <b>Shortfall if All Above Projects Were Pursued</b>              | <b>(\$385)</b> |



## Jointly Shared Capital Projects at Risk

In the face of Amtrak's projected Federal capital funding shortfall, Amtrak has increasingly pursued funding for its capital program from non-Federal sources such as States and commuter railroad agencies. Amtrak's 2000 capital plan identifies \$219 million in funding from State and local agencies.<sup>17</sup> This represents investments made as part of agreements between Amtrak and its partners to invest in projects that are of mutual benefit.

As Amtrak's capital funding becomes scarce, it will be more difficult to find the funds required to leverage State spending. This is true even for projects where Amtrak's share is comparatively small. In most cases, it is unlikely that the States will choose to take the entire costs on themselves, and the result will be delay or cancellation of the project.

Amtrak's Plan anticipates significant benefits from some of these projects, and if projects are canceled, the foregone revenues will make Amtrak's efforts to reach self-sufficiency that much greater. In the longer term, Amtrak is depending on State-matched development of new corridors to translate into opportunities for significant sources of revenue. If Amtrak cannot participate in their *development*, the risk increases that Amtrak will not be a participant in their *operation*.

## Larger-Than-Projected Operating Losses Would Further Widen the Gap

The projected availability of funding to meet Amtrak's minimum capital needs is based on Amtrak's projected operating results. If Amtrak's operating losses are higher than projected, Amtrak will need to use more of its funding to cover maintenance costs. For example, in 2001, if our projections were to occur, Amtrak's cash loss would be \$310 million larger than Amtrak projected. If this were the case, Amtrak would need to cover this loss from its general appropriation, making only \$29 million available for capital investment. This would mean that Amtrak would not even be able to pay its mandatory costs. *This outcome is not inevitable, but it underscores how critical it is for Amtrak to aggressively pursue ways to fill the "to-be-determined" gaps in its Plan.*

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<sup>17</sup> State and local funds are not included in the calculation of Amtrak's available funding because the portion of the projects they pay for are not included in Amtrak's calculation of needs. Amtrak's portion of the projects are included in the needs estimate.

## Funding Will Fall Short of Meeting Amtrak's Minimum Capital Needs

Amtrak relies mainly on Federal grants for its capital spending. Although Amtrak also relies on external financing and receives capital assistance from States and commuter agencies, the Federal Government continues to play the largest role in supporting Amtrak's capital program. The Amtrak Reform and Accountability Act (ARAA) authorized \$5.2 billion for both the operating and capital expenses of Amtrak through 2002. TRA funds, together with Amtrak's actual 1998, 1999, and 2000 appropriations and the Administration's proposed funding for 2001 and 2002, total slightly less than Amtrak's \$5.2 billion authorization in ARAA.

Cash received from the sale-leaseback of Superliner and Amfleet equipment added \$77 million to Amtrak's capital funding in 2000. Almost one-half of these funds (\$36 million) were used for equipment overhauls. Other uses of the funding included further investment in high-speed rail (\$22 million), infrastructure improvements (\$15 million), and information technology (\$4 million).

Under the current projected funding scenario, Amtrak's available funds to be used towards addressing minimum needs are \$2.16 billion between 2000 and 2004. Table 18 identifies the funding that is likely to be available from all sources between 2000 and 2004.

**Table 18 Projected Available Capital Funding, 2000 Through 2004 (\$in millions)**

|   | 2000         | 2001         | 2002         | 2003         | 2004         | Total          |
|---|--------------|--------------|--------------|--------------|--------------|----------------|
| <b>Taxpayer Relief Act Funds</b>                  |              |              |              |              |              |                |
| TRA Capital                                       | \$512        | \$27         | \$0          | \$0          | \$0          | \$540          |
| TRA Interest                                      | 12           | 3            | 0            | 0            | 0            | 15             |
| Repayment of Borrowed TRA                         | 190          | 222          | 0            | 0            | 0            | 412            |
| <b>Total TRA Available</b>                        | <b>\$714</b> | <b>\$252</b> | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$967</b>   |
| <b>Federal Appropriation</b>                      |              |              |              |              |              |                |
| Federal Appropriation                             | \$594        | \$551        | \$521        | \$521        | \$521        | \$2,708        |
| Misc. Federal Capital Grant                       | 2            | 0            | 0            | 0            | 0            | 2              |
| Capital for Operating (Maintenance/Excess RRTA)   | (362)        | (242)        | (189)        | (195)        | (200)        | (1,188)        |
| Repayment of Borrowed TRA                         | (190)        | (222)        | 0            | 0            | 0            | (412)          |
| <b>Total Federal Appropriation Available</b>      | <b>\$44</b>  | <b>\$87</b>  | <b>\$332</b> | <b>\$326</b> | <b>\$321</b> | <b>\$1,110</b> |
| <b>Internally Generated Funds</b>                 |              |              |              |              |              |                |
| Sale-Leaseback of Equipment                       | \$77         | \$0          | \$0          | \$0          | \$0          | \$77           |
| Cash Management                                   | 8            | 0            | 0            | 0            | 0            | 8              |
| <b>Total Internally Generated Funds Available</b> | <b>\$85</b>  | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$0</b>   | <b>\$85</b>    |
| <b>Total Capital Available From All Sources</b>   | <b>\$844</b> | <b>\$339</b> | <b>\$332</b> | <b>\$326</b> | <b>\$321</b> | <b>\$2,162</b> |

## **Borrowed Taxpayer Relief Act Funds May Not Be Available for High-Return Capital Investment**

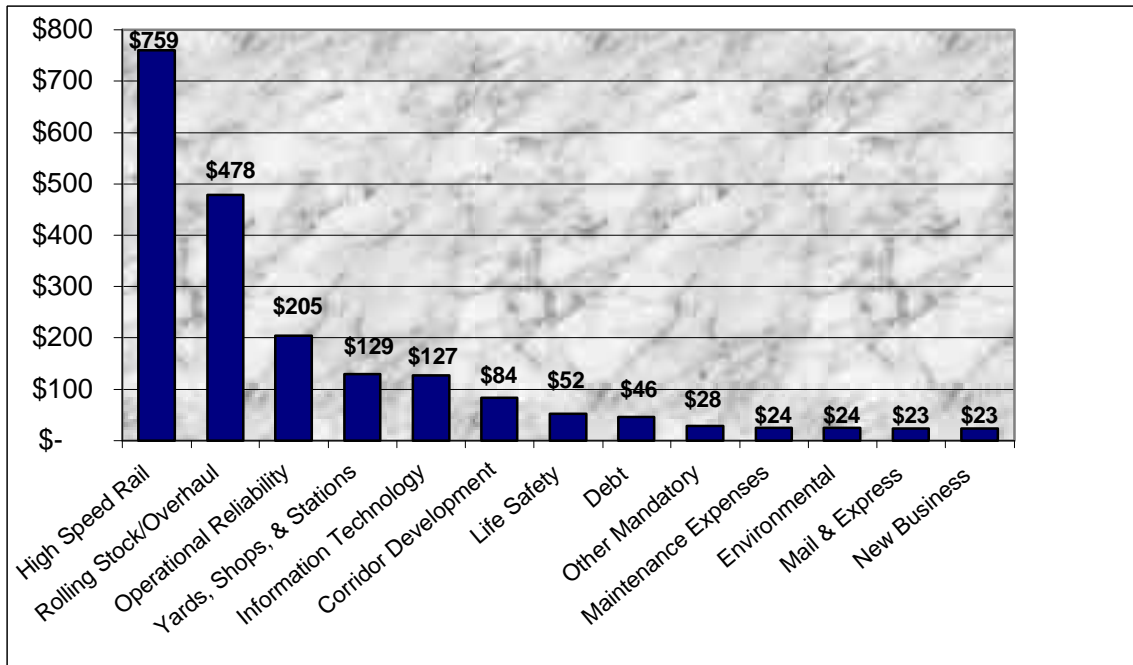
In November 1997, in conjunction with the passage of Amtrak's reauthorization legislation, \$2.2 billion was made available to Amtrak under TRA for capital investment.<sup>18</sup> TRA funds can legally be used for equipment overhauls and certain categories of maintenance, although Amtrak has made an internal commitment to reserve TRA funds for high-rate-of-return capital projects. In 1998 and 1999, Amtrak borrowed a total of \$412 million from TRA to fund maintenance and overhauls, although it could have used TRA funds outright for such purposes. Amtrak, however, in keeping with its internal commitment, plans to reinstate these funds in 2000 and 2001 with the intent of using them in those years for high-rate-of-return projects. Amtrak has repaid \$100 million of the \$190 million in TRA funds it projected to repay in 2000 and indicates that it intends to repay the balance by the end of the fiscal year. The remaining \$222 million is scheduled for repayment in 2001.

In 2001, however, if Amtrak's operating losses are higher than projected, it may not be able to repay the remaining \$222 million in borrowed TRA funds, but may need to use the funds for capital maintenance instead of the high-rate-of-return projects for which Amtrak had originally earmarked them. This is a legal use of the funds, but they would not then be available for any of the projects identified in Table 17 that are at risk for delay or cancellation. Figure 6 illustrates how TRA funds have been committed to date.

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<sup>18</sup> TRA funds were authorized in November 1997 with half scheduled for disbursement in April 1998 and the other half in April 1999.

**Figure 6 Taxpayer Relief Act Funds Spent To Date (\$ in millions)**



Our analysis of Amtrak’s 2000 Plan indicates it is likely that Amtrak’s losses would be higher than projected in 2001 if Amtrak is not able to make appropriate adjustments in its next business plan. We project that Amtrak’s operating losses could be \$310 million greater than Amtrak projected for 2001 and these losses would need to be covered through Amtrak’s annual Federal appropriation. As a result, Amtrak would have only \$29 million for capital spending, which is insufficient to cover even mandatory capital costs including debt and environmental remediation.

**Minimum Needs Estimates**

We have defined minimum capital needs as the capital spending required to meet legal obligations and to continue the safe, reliable operation of the national system over the short term. Our “minimum” needs estimate does not include costs for projects beyond 2000 that do not contribute directly to the short-term goal of safe, reliable operations. Examples of “non-minimum” projects include station improvements, corridor development, and facility upgrades.

Amtrak’s projected minimum needs shortfall for 2001 and 2002 is less this year than what we predicted last year. This is a result of eliminating the funds needed to complete high-speed rail from our estimate of minimum needs. The remaining \$100 million in projects were included in our estimates for high-speed rail last year, but are not essential to the start-up and operation of Acela Express. For

example, still remaining are construction of sidings alongside existing track to reduce interference with freight and commuter traffic, and installation of switch heaters to eliminate the manual clearing of ice and snow from switches, thus reducing operating expenses and improving reliability. If these costs were included, Amtrak's shortfall in 2001 would total \$191 million, which is actually \$52 million higher than we projected would be the 2001 shortfall in our last assessment.

Although we have included the high-speed rail project in our minimum needs estimates in past assessments, Amtrak's available funding in 2001 will be insufficient to provide for the basic operation of the railroad. Investments in any growth-oriented projects, including the projects remaining in the high-speed rail program, must become secondary to meeting those needs.

Last year, we projected Amtrak's minimum needs would total \$1.58 billion between 2000 and 2002. This year, we estimate Amtrak's minimum needs between 2000 and 2002 to be \$1.39 billion, a difference of \$195 million. The difference primarily reflects eliminating high-speed rail costs from our estimate of minimum needs. Table 19 identifies Amtrak's minimum capital needs between 2001 and 2004.

**Table 19 Amtrak's Minimum Needs, 2000 Through 2004  
(\$ in millions)**

| <b>Spending Category</b>         | <b>2000</b>  | <b>2001</b>  | <b>2002</b>  | <b>2003</b>  | <b>2004</b>  |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|
| <b>Mandatory</b>                 |              |              |              |              |              |
| Debt                             | \$49         | \$71         | \$74         | \$113        | \$110        |
| Information Technology           | 0            | 13           | 0            | 0            | 0            |
| Environmental                    | 8            | 8            | 8            | 8            | 8            |
| Other                            | 2            | 69           | 2            | 2            | 2            |
| <b>Total Mandatory</b>           | <b>\$59</b>  | <b>\$161</b> | <b>\$84</b>  | <b>\$123</b> | <b>\$120</b> |
| <b>Other Minimum Needs</b>       |              |              |              |              |              |
| Rolling Stock                    | \$88         | \$90         | \$93         | \$93         | \$93         |
| Operational Reliability          | 135          | 135          | 135          | 135          | 135          |
| Life Safety                      | 30           | 30           | 30           | 30           | 30           |
| Yards, Shops, Stations           | 12           | 12           | 12           | 12           | 12           |
| Information Technology           | 17           | 3            | 16           | 16           | 16           |
| High-Speed Rail                  | 247          | 0            | 0            | 0            | 0            |
| <b>Total Other Minimum Needs</b> | <b>\$529</b> | <b>\$270</b> | <b>\$286</b> | <b>\$286</b> | <b>\$286</b> |
| <b>Total Minimum Needs</b>       | <b>\$588</b> | <b>\$431</b> | <b>\$370</b> | <b>\$409</b> | <b>\$406</b> |

Amtrak will be faced with some very difficult choices next year concerning how it can best use its limited capital dollars. Amtrak will only have \$179 million

available to fund its entire capital program after meeting its mandatory financial, legal, environmental, and safety commitments. Competing for these funds are \$270 million in minimum information technology, life safety, operational reliability, and rolling stock needs, as well as other ongoing projects that will require funding to complete, including the remainder of the high-speed rail program. Many of the revenue growth and expense reduction projections in the Plan are contingent on these projects being completed. On top of that are Amtrak's plans to invest in new corridor development projects totaling \$56 million. Amtrak will not have enough to fund basic reinvestment in its capital system. As such, all other projects that do not directly address these minimum needs, including projects still remaining in the high-speed rail program, should be considered a lower priority.

### **Meeting Only Minimum Needs Is Insufficient to Ensure Long-Term Sustainability of Railroad**

Our minimum budget supports a level of investment that would be sufficient to maintain schedule, performance, and service in a steady state through 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; and would not address the backlog of state-of-good-repair needs on the south end of the Northeast Corridor. Amtrak has developed a plan for recapitalizing the south end that calls for \$12 billion in funding over the next 25 years. While Amtrak expects to share these costs with other Corridor users, Amtrak's share will still require funding that is significantly greater than a funding level consistent with a minimum needs level of spending.

### **Despite Known Minimum-Needs Shortfalls, Amtrak Has Pursued a Growth-Focused Capital Program**

In our 1999 assessment, we predicted that Amtrak's available funding would fall short of its minimum needs in 2001 and 2002 and recommended that Amtrak revise its spending plans in 2000 to set aside funds for those years. Although Amtrak agreed with our predictions for the shortfalls, its 2000 plan provided for use of all but \$27 million in funding available to Amtrak in 2000. Examples of projects outside the minimum needs range include \$25 million for planning efforts on the Midwest Regional Rail Initiative, \$15 million for the future Las Vegas service, and \$9 million for the refurbishment of Heritage car diners.

Amtrak's capital approval process favors projects that carry high-return-on-investment potential. Although these investments fall outside the scope of what Amtrak needs, minimally, to continue operations through 2003, Amtrak believes

that without such investments, it will not be able to generate sufficient revenues to survive beyond 2002 when it must, by law, operate without Federal operating assistance. We agree that these projects are important to Amtrak's financial growth, but do not believe they should be funded at the expense of the minimum investments necessary to maintain the safe, reliable operation of the railroad.

### **Although Amtrak Had Enough Capital to Cover Both Minimum Needs and Growth-Related Projects in 1999 and 2000, Amtrak Underspent on Certain Minimum Needs in Order to Support a Higher Level of Growth-Related Spending**

Both our 1998 and 1999 assessments predicted that Amtrak would have enough capital to cover all of its minimum needs through 2000, and largely because of TRA, would be able to make investments in other, non-critical needs during those years. We did, however, question the *wisdom* of doing so in light of projected future shortfalls. Our assessment of Amtrak's 2000 capital plan and subsequent spending indicates that not only is Amtrak spending on projects that are outside minimum needs, it is not sufficiently addressing all its minimum needs.

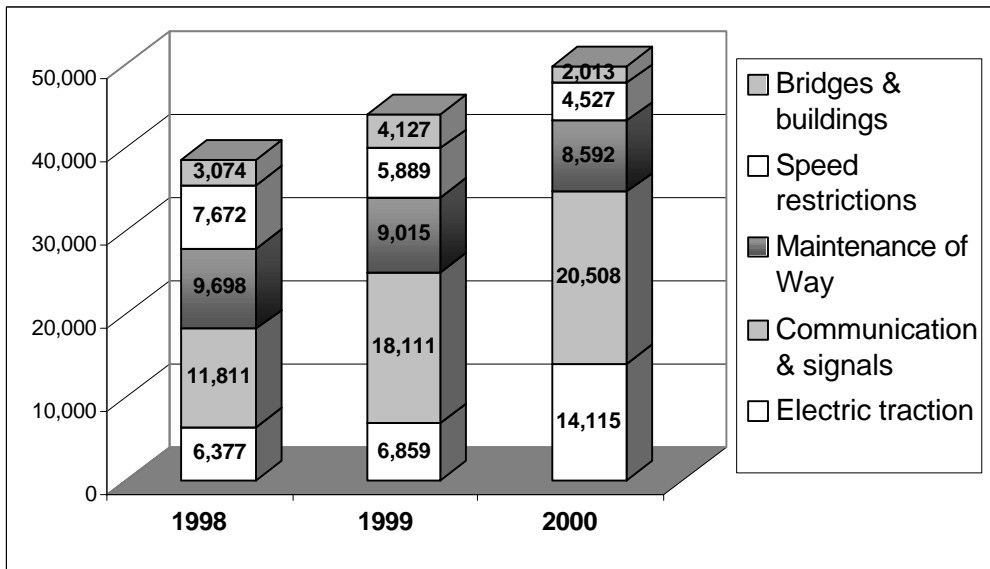
For example, we estimate Amtrak's minimum, operational reliability investment needs as \$135 million each year. Amtrak's annual spending on operational reliability projects in the past 3 years has averaged only \$71 million. Amtrak's business objectives of increased ridership and reduced trip times, especially on the Northeast Corridor depend on high-quality service at higher speeds and excellent on-time performance. Although Amtrak's revenue and ridership have grown significantly in the past 3 years, Amtrak will begin to see these numbers erode if it continues to defer spending on operational reliability.

### **Deferred Investment Is Beginning to Take Its Toll**

The effects of underspending on operational reliability needs are already beginning to surface. Some sections of the Northeast Corridor south-end electric traction system are over 60 years old, and despite spending for in-kind replacement and maintenance under the Northeast Corridor Improvement Project (NECIP), the system is comprised of many components that are prone to failure. Most often it is the overhead catenary wire that is unable to adjust to the extreme temperature swings in the region. Very hot weather in the summer and very cold weather in the winter result in the wire expanding or contracting creating stresses in the wire that can cause it to break when trains run under it. The result can be hundreds of feet of wire being torn down.

Another reliability problem on the Northeast Corridor is communications and signaling. The south end contains 8 million feet of cable. Age, electrical faults, and weather affect the ability of this cable to perform adequately. Wiring insulation is deteriorated and connections are corroded. As wiring ages, current and signal leakage increasingly become problems until, eventually, the wire is no longer able to perform. Figure 7 illustrates the growth in minutes of delay related to electric traction and communications and signaling problems.

**Figure 7 Growth in Minutes of Delay Related to NEC Infrastructure (2000 estimated)**



In Amtrak’s South End Transportation Plan for the Northeast Corridor released in January 2000, Amtrak states that a basic program of operational reliability averaging \$203 million per year will be necessary through 2015 to return the corridor to a steady state condition. If Amtrak fails to sustain such a program, the plan predicts that the result will be “a steady deterioration of the infrastructure, reduced on-time performance, lower operating speeds, and poor customer service and quality....”

Amtrak recently implemented a new service guarantee that promises Amtrak will do everything in its power to satisfy a customer, and if it is unsuccessful will provide a voucher for future travel equal to the fare paid for that trip. Amtrak is hoping that this program will improve customer retention, which will translate into improved revenues. Amtrak’s goal is that less than 1/10<sup>th</sup> of 1 percent of its passengers carried in a given month will invoke the guarantee. Amtrak has come close but so far has not met its target. Intercity passengers are responsible for 60 percent of the recent claims, 27 percent came from Northeast Corridor



passengers, and West passengers made up the remaining 13 percent. Table 20 illustrates the service guarantee performance to date.

**Table 20 Service Guarantee Claims in July and August**

| <b>Month (Dates)</b> | <b>Claims</b> | <b>Value</b>       | <b>Average Value</b> | <b>Passengers</b> | <b>Claims Rate (Goal = 1/1000)</b> |
|----------------------|---------------|--------------------|----------------------|-------------------|------------------------------------|
| July (4-31)          | 5,557         | \$444,049          | \$79.90              | 1,981,542         | 3/1000                             |
| August (1-31) *      | 10,815        | 936,615            | 86.60                | 2,186,959         | 5/1000                             |
| <b>Total</b>         | <b>16,372</b> | <b>\$1,380,664</b> | <b>\$84.33</b>       | <b>4,168,501</b>  | <b>4/1000</b>                      |

\* August totals subject to revision following Amtrak final tabulation.

In order for the guarantee to be successful, Amtrak acknowledges that it must provide superior service. If it cannot maintain that level of service, Amtrak will incur increased expenses if more passengers invoke the guarantee, and will lose revenues from those who simply choose not to return.

## **Amtrak Must Develop a Realistic Plan for Addressing Long-Term Capital Needs**

Amtrak has historically prepared a 1-year capital plan that reflects a level of spending commensurate with its expected annual appropriation. The plan is a good indicator of short-term needs, but does not adequately establish the extent and timing of Amtrak’s long-term capital needs.

Amtrak’s own estimates have varied for the long-term, steady-state capital funding stream necessary to eliminate the backlog of investment on the NEC and throughout its system, and to invest in projects that will enable Amtrak to grow its business into operating self-sufficiency and remain there. In January, Amtrak issued a long-term capital plan for the south end of the Northeast Corridor that identifies \$12 billion in projects, their costs, and the timing of needs in that section of the Corridor. This is a good start, but Amtrak’s needs go well beyond the south end. A similar plan that reflects Amtrak’s long-term systemwide needs is a necessary precursor to identifying the extent of funding Amtrak will need to sustain its assets and infrastructure.

## Recommendations

*In 1999 and 2000, Amtrak's capital funding has been sufficient to meet its minimum needs, but it has still neglected certain categories of needs, most notably operational reliability, in order to invest in projects that are expected to contribute to Amtrak's plans for self-sufficiency. While we do not consider any of Amtrak's capital projects to be frivolous investments, we believe that Amtrak's strategy has been shortsighted in its failure to set aside funds when they were available in 1999 and 2000 to accommodate known funding shortfalls beyond 2000.*

*We recommend:*

- 1) Amtrak reprogram any authorized, but unobligated, TRA funds that were approved for projects outside minimum needs. The reprogrammed funds should be used first to satisfy all minimum needs before any remainder is used for other non-minimum purposes.*
- 2) The Board of Directors, in approving Amtrak's 2001 capital plan, withhold approval on projects that fall outside Amtrak's minimum capital needs until Amtrak can demonstrate that it has provided for all minimum needs.*
- 3) Amtrak, in preparing the long-term capital plan to present to its Board of Directors this fall, identify in a comprehensive manner all capital needs, their costs, their timing, and their priority.*

## Methodology

The methodology employed in the analysis of each of the components of this assessment is detailed below.

### Amtrak's Current Financial Status

We assessed Amtrak's financial condition by collecting and reviewing Amtrak's financial reports and business planning documents and by interviewing Amtrak staff. This assessment is based on historical financial data through 1999, and where available, information through the third quarter of 2000.<sup>19</sup>

Our descriptions and analyses of Amtrak's financial condition use a number of key financial terms. Amtrak reports its financial results on the basis of *operating loss*, *net operating loss*, and *budget result*. Amtrak's definition of operating loss, the difference between total operating revenues and total operating expenses (including depreciation) is standard and we use it as well. However, because we wish to illustrate the portion of Amtrak's operating loss that must be financed by Federal funds, we apply Federal funding and non-cash items in a different order than does Amtrak in arriving at its net operating loss and budget result. The following definitions distinguish our approach from Amtrak's.

- Amtrak's *net operating loss* is Amtrak's operating loss minus Federal funds used for capital maintenance, overhauls of equipment,<sup>20</sup> and excess RRTA.
- Amtrak's *budget result* is the net operating loss after subtraction of non-cash expense items (mainly depreciation).
- Our *cash loss* (from operations) is Amtrak's operating loss less the expenses for non-cash items. The cash loss indicates the amount of financing that

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<sup>19</sup> 1999 results have been reviewed and accepted by Amtrak's external auditors. Year-to-date 2000 data have not been audited.

<sup>20</sup> Expenses for *overhauls of equipment* are considered an operating expense under generally accepted accounting principles, but Amtrak is currently able to fund these expenditures from its Federal capital grants. Amtrak performs these overhauls periodically in lieu of allowing equipment to deteriorate for a number of years and then performing *heavy overhauls*, which are considered capital costs under generally accepted accounting principles. As such, this operating expense substitutes for a capital cost, and Amtrak believes that its approach keeps 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.

Amtrak will need to continue operations and must be covered in some manner each year for Amtrak to continue as an ongoing concern.

- Our *unfunded cash loss* is the remainder after Amtrak's annual 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.

### **Amtrak's 2000 Strategic Business Plan**

In assessing Amtrak's 2000 Strategic Business Plan, we focused on the methods and assumptions used, and the reasonableness of: Amtrak's revenue and expense projections, its cash flow, and the funding sources for the Strategic Business Plan. We reviewed business plans, capital plans, and BPAs; interviewed Amtrak personnel; and analyzed the BPAs using financial and economic modeling to determine if the actions were achievable.

We applied our knowledge from prior assessments 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 are adjustments to baseline estimates and include items such as extension of mid-year fare increases to an annual basis and exclusion of one-time revenue.
- Capital Plan and Baseline Project 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 Actions are not included in the baseline. Instead, BPAs are incremental changes to the adjusted baseline's projections for each year of the Plan to which the BPAs apply. However, existing (prior year's) BPAs are incorporated into the baseline as the new planning cycle begins.

Our assessment of Amtrak's Plan included reviewing Amtrak's baseline forecasts and adjustments made to it through Capital Plans, Baseline Projects, or BPAs. For each SBU, we assessed the reasonableness of Amtrak's passenger and non-passenger revenue forecasts as well as expense projections for each category. Based on the complexity of forecasts, our methodology varied by category of revenue and expense.

To assess **NEC ridership and passenger revenue** forecasts, we reviewed the model, data, inputs, 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. We also performed sensitivity analyses and other validation tasks to determine the likely reactions of passengers to changes in service elements such as fare and trip-time. These analyses included 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. This year we also conducted a fare maximization study to identify the fare levels that maximize revenue on both the Acela Regional and Acela Express services.

To assess **Intercity and Amtrak West ridership and passenger revenue** forecasts, we analyzed Amtrak's projections of incremental revenues generated by pricing and other passenger-related actions. Our conclusions about the reasonableness of these forecasts were based on analyses similar to those used in the NEC evaluation, which entailed determining the sensitivity of passenger travel demand to changes in fare levels and general economic trends on each type of route operated by Intercity and Amtrak West.

The values employed in this analysis were derived from a statistical model that we developed to analyze ridership on individual Amtrak routes using data from each year of the period 1992 to 1999. Separate estimates were developed for short- and long-distance routes (defined as those below and above 500 miles between route endpoints), routes having frequent (more than two daily departures in each direction) and infrequent service, and routes operated by each of the SBUs.

We assessed the reasonableness of Amtrak's revenue forecasts for the **Mail and Express initiatives** by examining (1) actual revenue performance during the current year, (2) the compatibility of the forecast volume of express movements with Amtrak's passenger service operations and the availability of express equipment, and (3) the actual rates of growth in 1999 and 2000 to date.

To analyze **Business Plan Actions not related to passenger revenues**, we examined Amtrak's documentation of the actions needed to achieve the results of the BPAs. We examined the rationale, assumptions, and methodology used to project expense savings or revenue increases. Where the causal links between the actions and benefits were not well documented, we had additional discussions with the Amtrak staff responsible for developing the BPAs. Our overall findings on Amtrak's BPAs focus on the effect that our restatements have on Amtrak's projected cash losses from operations.

### **Amtrak's Capital Investment Plans and Requirements**

We developed our assessment of Amtrak's capital investment by reviewing Amtrak's three most recent capital programs, its 1998 capital budget (November 1997, revised March 1998), its 1999 capital budget (October 1998), and its 2000 capital budget (December 1999).

To assess Amtrak's minimum capital funding needs and its ability to meet those needs through projected Federal funding sources, we reviewed Amtrak's Commitment Authorization Request documents for each project in the 2000 capital budget and the identified funding requirements in future years.

We interviewed managers of capital programs, including the Chief Mechanical Officer and Chief Information Officer, to identify needs specific to their departments. We made site visits to several major shops and stations, including the Beech Grove maintenance facility in Beech Grove, Indiana. We also toured several large capital projects including the electrification project interface with the Central Artery/Ted Williams Tunnel in Boston, Massachusetts; the tunnels below Penn Station-New York, in New York, New York; and the King Street intermodal station and coach yard in Seattle, Washington. We also conducted several interviews with States and commuter agencies that have capital funding agreements with Amtrak.

To better understand the needs of the Northeast Corridor—the largest component of Amtrak's capital investment program—we reviewed capital planning documents, such as the Northeast Corridor Transportation Plan, and participated in engineering inspection tours of the Corridor to identify and assess the extent and immediacy of existing needs.

We identified any changes in Amtrak's capital planning, funding, and investments since our 1999 assessment and determined their impacts on Amtrak's ability to meet its capital needs through 2004. We also compared Amtrak's projected operating performance to its capital plan to determine the potential impact that deviations from projected performance would have on Amtrak's ability to fund its capital program.

## Contributors to This Report

The following is a list of OIG contributors to the 2000 Assessment of Amtrak's Financial Performance and Requirements.

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